EXAMINATIONS, ETC.

University of Oxford.

The following Degrees have been conferred :

B.M.—Jenkins, J. E., Robertson, J. R.

University of Cambridge.

The following Degrees have been conferred :

M.D.—Ainsworth-Davis, J. C.
M.B.—Masina, M. H.
B.Chir.—Bradbury, E., Mandow, G. A., Morrell, F. H., Pawson, E. B., Roper, R. D., Shepherd, F. W., Wedd, G. D.

Royal College of Physicians.

The following have been admitted **Members** :

Kersley, G. D., Prowse, C. B., Scott, R. B., Varley, J. F.

Royal College of Surgeons.

The Diploma of **Fellow** has been conferred on the following :

Allinson, S. W., d'Abreu, A. L., Bastow, J., Bharucha, D. R., Dalal, R. P., Forrester-Wood, W. R., Gissane, W. C., Harrison, J. O., Hollis, G. J., Jones, P., Keogh, C. A., Knight, G. C., MacMahon, J. S., Money, R. A., Morgan, F. P., Patel, C. S., Pinker, H. G., Roberts, N. W., Ross, L. N., Strong, E. C. N., Trevor, D., Vartan, C. K.

The following were successful at the Examination for the **Primary Fellowship** :

Davies, H. L. G., Kelsall, A. R., Marr, J. A. S., Radcliffe, F., Rodgers, H. W., Tubbs, O. S.

Royal Colleges of Physicians and Surgeons.

The following Diplomas have been granted :

D.P.H.—Brunyate, W. D. T., Willoughby, H. M.
D.T.M. &H.—Lakshmanan, C. K.
D.P.M.—Gilsenan, B. M. C.

British College of Obstetricians and Gynæcologists.

The following has been admitted a **Fellow** : Lane-Roberts, C.

Conjoint Examination Board.

Pre-Medical Examination, January, 1933.

Chemistry.—Cane, C. S., MacKelvie, K. C., Richards, G. A., Schenker, A. W., Stoker, G. E.
Physics.—Clunies-Ross, W. G. F., Joyce, J. B., MacKelvie, K. C., Richards, G. A., Schenker, A. W., Stoker, G. E., Taylor, L. R., Williams, W. R.
Biology.—Cane, C. S., Hall, W. S., Richards, G. A.

First Professional Examination, January, 1933.

Anatomy.—Beizer, L. S., Cole, M. J., Hopkins, I. T., Hughes, T. E., Jonescu, P., Jopling, W. H., Mundy, R., Prewer, K. R., Schiller, M.
Physiology.—Jonescu, P., Jopling, W. H., Mundy, R., Ottley, M. F. B., Prewer, R. R., Weston, C.
Pharmacology.—Jonescu, P., Libertson, W., Mullick, S., Waks, W., Wolfe, H. L.

Final Examination, January, 1933.

The following Students have completed the Examinations for the Diplomas of **M.R.C.S., L.R.C.P.** :

Bennett, R., Bentley, J. G., Chakravarty, N. P., Dawson, D. J., Harvey, P. G. F., Hilmy, A., Kettlewell, H. B. D., Lawn, J. A. E., Lown, J. F., McOwan, B. M., Morgan, G. R., Morrison, R. J. G., Norsworthy, L. R., Pawson, E. B., Ransome, G. A., Robertson, J. R., Roper, R. D., Shepherd, F. W., Turner, R. E. S., Winslow, V. F. F.

L.M.S.S.A.

Primary Examination, January, 1933.

Anatomy and Physiology.—Kennedy, A. B.

Final Examination, December, 1932.

Forensic Medicine.—Van Rooyen, J. A.

CHANGES OF ADDRESS.

DEIGHTON, T. D., 13, Royal Crescent, Cheltenham, Gloucestershire. (Tel. 4515.)
RICHARDSON, G. B., "The Hollies", Alverton, Penzance.

APPOINTMENTS.

DEIGHTON, T. D., M.S., appointed Surgeon in Charge of Ear, Nose and Throat Department, Cheltenham Hospital.
VISICK, A. H., M.B., B.S., F.R.C.S., appointed Surgical Specialist, Military Hospital, York.

BIRTHS.

FORD.—On February 8th, 1933, at 1, The Golfs, Eastbourne, to Audrey and Dr. J. Norman C. Ford—a daughter.
FRANKLIN.—On February 26th, 1933, to Ethel Alice Franklin (*née* Adamson), wife of Dr. K. J. Franklin, 13, Banbury Road, Oxford—a son (Robert Lester) (survived only three hours).
HATTERSLEY.—On January 28th, 1933, at Farnham, Surrey, to Vera, wife of Major S. M. Hattersley, R.A.M.C.—a son.
HEATH.—On February 17th, 1933, to Peggy (*née* Allan), wife of Dr. W. Heath, of The Beeches, Longton, Staffs—a son.
HORNIBROOK.—On February 12th, 1933, at Gerrard's Cross, to Margaret, wife of H. Nevill Hornibrook, M.B.—a son.
HOSFORD.—On January 28th, 1933, at "Cairnton", Stormont Road, Highgate, to Nora (*née* Randall), wife of R. W. P. Hosford, F.R.C.S.—a son.
LLOYD.—On January 25th, 1933, at 19, Dentinck Street, W. 1, to Olive, wife of W. Ernest Lloyd, M.D.—a son.
LYNN.—On January 25th, 1933, in London, to Margery, wife of Lieut.-Col. Rigby Lynn, D.S.O., I.M.S.—a son.
RADCLIFFE.—On February 23rd, 1933, at Wivenhoe, to Muriel, wife of Walter Radcliffe, M.B.—a son.
WELLS.—On February 1st, 1933, at Havenfield, Great Missenden, to Rhona, wife of Dr. Arthur Q. Wells—a son.

MARRIAGES.

CORBETT—ROBINSON.—On February 22nd, 1933, at St. Mark's Church, North Audley Street, W., Rupert Shelton Corbett, M.Chir., F.R.C.S., to Olive Gordon Robinson.
HODGKINSON—KNOX.—On February 9th, 1933, at Wolborough Church, Newton Abbot, Hubert Lloyd Hodgkinson, only son of the Rev. and Mrs. Hodgkinson, to Mary Stuart, eldest daughter of Lieut.-Col. Sir Hamish Knox, O.B.E., and the late Mrs. Knox.
KERSLEY—YEOMANS.—On February 1st, 1933, at Woolbeding Church, Midhurst, Dr. George Durant Kersley, M.R.C.P., son of the late Mr. H. G. Kersley, J.P., and of Mrs. Kersley, of Bath, to Mary Ada Roper Yeomans, of Midhurst, Sussex.

DEATHS.

BLACK JONES.—On January 27th, 1933, at Penderi, Creigiau, Cardiff, William Black Jones, M.D., J.P., formerly of Builth Wells, aged 68.
CURRIE.—On January 28th, 1933, John Currie, M.D., J.P., of The Cleave, Cawsand, near Plymouth, eldest son of the late John Currie, M.D., of Totnes and Taunton.
EICHHOLZ.—On February 6th, 1933, at 26, North End House, W. 14, Alfred Eichholz, C.B.E., M.D., aged 63.
MARTIN.—On January 28th, 1933, at 30, George Road, Edgbaston Birmingham, Christopher Martin, M.B., C.M., F.R.C.S., elder son of the late Christopher Martin and Harriet Martin, of Stockton-on-Tees.
SIMPSON.—On February 11th, 1933, at Southend-on-Sea, after a short illness, Harry Ernest Simpson, L.M.S.S.A.

NOTICE.

All Communications, Articles, Letters, Notices, or Books for review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, *St. Bartholomew's Hospital, E.C.* 1.

The Annual Subscription to the Journal is 7s. 6d., including postage. Subscriptions should be sent to the MANAGER, Mr. G. J. WILLANS, M.B.E., B.A., *at the Hospital.*

All Communications, financial or otherwise, relative to Advertisements ONLY should be addressed to ADVERTISEMENT MANAGER, *The Journal Office, St. Bartholomew's Hospital, E.C.* 1. *Telephone : National* 4444.

St. Bartholomew's Hospital Journal.

"Æquam memento rebus in arduis
Servare mentem."
—*Horace*, Book ii, Ode iii.

VOL. XL.—No. 7.] APRIL 1ST, 1933. PRICE NINEPENCE.

CALENDAR.

Tues., April 4.—Dr. Hinds Howell and Mr. Harold Wilson on duty.
Fri., ,, 7.—Dr. Gow and Mr. Girling Ball on duty.
Sat. ,, 8.—**Inter-Firm Seven-Aside Tournament at Winchmore Hill.**
Tues., ,, 11.—Dr. Graham and Mr. Roberts on duty.
Fri., ,, 14.—Prof. Fraser and Prof. Gask on duty.
Sun., ,, 16.—**Easter Day.**
Mon., ,, 17.—**Bank Holiday.**
Tues., ,, 18.—Rugby match *v.* Bristol. Away
Lord Horder and Sir C. Gordon Watson on duty.
Wed., ,, 19.—**Last day for receiving matter for the May issue of the Journal.**
Fri., ,, 21. Dr. Hinds Howell and Mr. Harold Wilson on duty.
Mon., ,, 24.—Special subjects : Clinical Lecture by Dr. Cumberbatch.
Tues., ,, 25.—Dr. Gow and Mr. Girling Ball on duty.
Wed., ,, 26.—Surgery : Clinical Lecture by Mr. Vick.
Fri., ,, 28.—Dr. Graham and Mr. Roberts on duty.

EDITORIAL.

THE origin of the Hospital Arms has been found to be far from clear, and the suggestion put forward in Sir Norman Moore's *History of the Hospital*, that they were adopted from the private Arms of John Wakeryng, Master of the Hospital in the second quarter of the fifteenth century, is incorrect. It seems a great pity, moreover, that the Hospital a Royal foundation—should use Arms of which the origin is so unsatisfactory and obscure, when for four hundred years the Hospital and Priory of St. Bartholomew were under one head, the Prior. Futhermore, while Rahere's tomb has an angel carved at his feet holding up prominently a shield of the Priory Arms, *i.e.* two royal leopards and golden crowns with scarlet background, there is no representation of the present Hospital Arms on it. The assumption is that both institutions had the same Arms originally, and that it was not till some later date that the Hospital adopted separate Bearings.

From the translations of some of the early documents of the Hospital it is obvious that the Master had on appointment to swear fidelity to the Prior, and one early Prior laid a solemn curse on anyone who should try to separate the Hospital from the Priory. In view of all this it has been proposed that the Hospital should have a Coat of Arms which would do more justice to its ancient history; the new Arms would quarter the Priory and present Hospital Arms as shown on the coloured reproduction enclosed, and supporters, *e.g.* a nun and monk, have been added. The scarlet and gold of the first and fourth quarters contrast admirably with the silver and black of the second and third, and the whole design is a delightful synthesis of the history of the Hospital.

To alter the present Arms is an undertaking which should be performed with forethought and caution; it will no doubt meet opposition, but there are many points in the light of recent findings which would favour such an alteration.

The interest which has been stimulated in this subject has been largely due to Dr. Mervyn Gordon and the Rouge Croix; we are deeply grateful to them both for pointing out these new facts, which have been so long overlooked. The expense incurred in reproducing the coloured plate has been met by private subscribers, who desire to remain anonymous, and we have to thank them for making this reproduction possible.

We should like to point out that before the proposed design can be adopted by the Hospital a certain sum of money would have to be paid to the College of Arms for its registration.

MY DEAR MR. EDITOR,

All who have the welfare of our College at heart will be interested to know that we have now come to terms with the Merchant Taylors' Company, and that within a very short time we shall be in possession of the site in Charterhouse Square.

I take this opportunity of thanking all those who have already so generously supported us with donations, and I should like at the same time to stimulate those others who have not yet subscribed to our fund. Every old Bart.'s man will in the near future receive from me a letter explaining the facts, and what we have still to do. To put it shortly, we have now to collect something like £60,000 to complete the purchase of the site. With this in view we are about to launch a public appeal.

The immediate point is that we want £15,000 to enable us to effect such alterations in the Merchant Taylors' School as are necessary to meet our requirements. We should very much like to have the School in working order by next October, and we hope, therefore, that every Bart.'s man will do his best to help us to get this money.

I take this opportunity also of expressing my particular thanks to the Students for all they are doing. I refer not only to the personal subscriptions which they have given, but also to their united efforts, past, present and future. I hope to be able next month to announce that the School site is available for athletic purposes. This will be a great addition to the amenities of our College.

I hope you will be able to publish the enclosed list (amended to date) of subscriptions. The first column of bracketed figures shows the number of Bart.'s subscribers in each county, the second column shows the full number of Bart.'s men in the county.

Yours sincerely,
W. GIRLING BALL,
Dean of the Medical College.

* * *

COLLEGE APPEAL FUND.

	£	s.	d.		†
Staff	11,884	5	9	(65)	
Demonstrators	1,503	0	0	(64)	
Students	346	14	7	(242)	
Old Bart.'s men:					†
Bedfordshire	5	10	6	(2)	(26)
Berkshire	73	14	0	(9)	(38)
Buckinghamshire	45	13	0	(7)	(31)
Carried forward	£13,858	19	10		

	£	s.	d.		†
Brought forward	£13,858	19	10		
Cambridgeshire	149	14	0	(9)	(43)
Cheshire	1	1	0	(1)	(26)
Cornwall	20	0	0	(4)	(37)
Cumberland	5	0	0	(1)	(6)
Derbyshire	2	2	0	(1)	(16)
Devonshire	347	1	0	(30)	(116)
Dorset	9	4	0	(4)	(31)
Durham	15	5	0	(2)	(11)
Essex	215	16	6	(9)	(68)
Gloucestershire	108	13	0	(6)	(66)
Hampshire	295	4	0	(23)	(134)
Herefordshire	5	0	0	(1)	(11)
Hertfordshire	27	0	0	(5)	(73)
Huntingdonshire					(1)
Isle of Wight	122	2	0	(3)	(25)
Kent	331	17	0	(24)	(142)
Lancashire	16	11	0	(5)	(83)
Leicestershire	73	2	0	(3)	(29)
Lincolnshire	25	4	0	(5)	(25)
Middlesex	264	1	0	(7)	(66)
Norfolk	118	13	0	(11)	(60)
Northamptonshire	53	3	0	(3)	(17)
Northumberland	101	1	0	(2)	(11)
Nottinghamshire					(28)
Oxfordshire	159	3	0	(10)	(29)
Rutland					(2)
Shropshire	23	2	0	(5)	(22)
Somersetshire	330	3	0	(16)	(43)
Staffordshire	61	11	0	(3)	(37)
Suffolk	257	1	0	(14)	(46)
Surrey	311	9	0	(25)	(178)
Sussex	192	15	0	(25)	(174)
Warwickshire	146	9	0	(10)	(56)
Westmorland					(4)
Wiltshire	87	6	0	(9)	(26)
Worcestershire	119	3	0	(12)	(27)
Yorkshire	212	13	0	(8)	(100)
Wales	62	12	0	(4)	(151)
London	2,164	4	8	(83)	(976)
Channel Islands	10	0	0	(1)	(9)
Abroad	37	4	0	(6)	
South Africa	208	2	6	(7)	
Canada	75	0	0	(3)	
East Africa	4	4	0	(2)	
West Africa	140	5	0	(4)	
India	100	0	0	(1)	
Syria	2	2	0	(1)	
U.S.A.	5	0	0	(1)	
Ireland	13	13	0	(2)	
North Africa	1	0	0	(1)	
Malay States	6	0	0	(2)	
China	12	2	0	(2)	
France	50	0	0	(1)	
Trinidad	20	0	0	(1)	
West Indies	2	0	0	(1)	
Services	452	1	0	(21)	
*Others	15,078	10	6	(90)	
	£37,410	10	0		

*These figures include:	£	s.	d.
University of London	5000	0	0
Unilever Bros.	500	0	0
League of St. Bartholomew's Nurses	25	0	0
The Executors of the late Alfred de Rothschild, Esq.	2000	0	0
Rahere Lodge	105	0	0
Corporation of the City	1000	0	0
Fishmongers' Company	262	10	0
Mercers' Company	1000	0	0
Ironmongers' Company	100	0	0
St. Bartholomew's Hospital Reports	250	0	0
The Haberdashers' Company	50	0	0

† Number of Bart.'s men in County.

POST-GRADUATE COURSE.

We have been asked to announce that a Post-Graduate Course will be held at this Hospital on June 23rd and 24th next. The subjects have been selected mainly on the requests of old Bart.'s men who have attended previous courses. The fee for the course is two guineas, or one guinea to old Bart.'s men. Further information can be had from the Sub-Dean.

The programme is as follows:

Friday, June 23rd.

10–10.45 a.m.	Toxic goitre (Physician)	Prof. Fraser.
11–11.45 a.m.	,, ,, (Surgeon)	Mr. J. B. Hume.
	,, ,, (X-Ray)	Dr. N. S. Finzi.
12–12.45 p.m.	Neuritis, Fibrositis and Rheumatism	Dr. A. E. Gow.
1–1.45 p.m.	Lunch.	
1.45–2.30 p.m.	Skin Diseases: Diagnosis and Treatment, with cases	Dr. A. C. Roxburgh.
2.45–3.30 p.m.	Common Conditions of Eye, with cases	Mr. R. Foster Moore.
3.45–4 p.m.	Tea.	
4–4.45 p.m.	Painful Feet	Mr. S. L. Higgs.

Saturday, June 24th.

10–10.45 a.m.	Diet in Dyspepsia, Gastric and Intestinal	Dr. G. Evans.
11–11.45 a.m.	Heart Attacks	Dr. G. Bourne.
12–12.45 p.m.	Artificial Pneumothorax	Dr. F. G. Chandler.
1–1.45 p.m.	Lunch.	
1.45–2.30 p.m.	Functional Dysmenorrhœa	Dr. W. Shaw.
2.45–3.30 p.m.	Labour: Its Management, with Special Reference to Anæsthesia and Analgesia	John Beattie, Esq.
3.45–4 p.m.	Tea.	
4–4.45 p.m.	Common Fractures of Lower Limb	Mr. J. F. Hosford.

* * *

ST. BARTHOLOMEW'S HOSPITAL WOMEN'S GUILD.

A Fair and Jumble Sale will be held within the Hospital on May 18th and 19th, by kind permission of the Treasurer and Almoners.

Last year the result of a similar sale was most successful, and great efforts are being made to achieve an even larger measure of success this year. The Jumble Sale will be held in Old Sandhurst Ward and the Fair in Old President Ward. In connection with the latter, there will be several new features on this occasion. There will, as last year, be a monster Tombola, for which it is hoped to obtain as many as one thousand prizes. There will also be a Fortune Teller, a Caricaturist, a Produce Stall, a Flower and Plant Stall, and other attractions.

A new feature this year is a Knitting Competition, with prizes for successful competitors. The garments will be on sale, and pullovers, socks, stockings, berets and scarves, etc., will be obtainable at very moderate prices.

A Café for lunches and teas (1*s.* each) will be available. In addition to this, it is proposed to have a Variety Entertainment, two performances daily in Stanley Ward at which the Nurses will give a sketch (by permission of the Matron), and other talented members of the Hospital have kindly promised to give their services.

It is hoped that the Fair and Variety Entertainment will be well attended by all those interested in the Hospital, particularly as the Women's Guild hope to make a handsome contribution to the fund for the acquisition of the Merchant Taylors' site.

* * *

THE EIGHTH DECENNIAL CLUB.

The Annual Dinner of the Eighth Decennial Club will be held on June 28th. Further information may be had from the Secretaries, Dr. MORLEY FLETCHER and Sir HOLBURT WARING.

* * *

THE TENTH DECENNIAL CLUB.

The Annual Dinner will be held on Friday, May 5th, at the Café Royal and not at the Langham Hotel as announced in last month's issue.

* * *

THE ELEVENTH DECENNIAL CLUB.

The Fifth Annual Dinner of the Eleventh Decennial Club will be held on Friday, May 5th, at the Café Royal, with Prof. R. J. Brocklehurst in the Chair. Will those who have not received notices communicate with the Honorary Secretaries, WILFRED SHAW, 31, Weymouth Street, and F. C. W. CAPPS, 99, Harley Street?

* * *

We would like to offer our hearty congratulations to Dr. Kenneth J. Franklin, Fellow of Oriel College, Oxford, on being awarded the Radcliffe Prize for the Furtherance of Medical Science in the University of Oxford; also to Frank Hawking, B.A., B.M., on being elected to the Radcliffe Travelling Fellowship in the same University.

* * *

RUGGER SEVEN-ASIDE TOURNAMENT.

We are informed that the afternoon of Saturday, April 8th, will be given up to great festivity at Winchmore Hill, in aid of the College Appeal. The fare for the afternoon will take the form of a *Seven-Aside Inter-Firm Rugby Tournament*; all the leading medical and surgical Firms have already entered their sides for the conflict, and the betting is feverishly developing as to their various chances. We have also been promised a match between the Chief Assistants and the Resident Staff as an *hors d'œuvres*.

The occasion will need the support of everybody possible to make it a thorough success, and we hope that, given a fine afternoon, there will be a record attendance. The modest sum of one shilling is being charged for entrance to the ground.

Please come and bring your friends!

HOUSE APPOINTMENTS.

The following gentlemen have been nominated to House Appointments from May 1st, 1933:

Junior House Physicians—	
Lord Horder	A. W. D. Leishman.
Prof. F. R. Fraser	C. S. Hall-Smith.
Dr. C. M. Hinds Howell	L. O. Roberts.
Dr. A. E. Gow	A. E. Francis.
Dr. G. Graham	H. A. Magnus.
Junior House Surgeons—	
Prof. G. E. Gask	V. C. Snell.
Sir Charles Gordon-Watson	F. J. Bellby.
Mr. Harold Wilson	M. D. C. Hosford.
Mr. W. Girling Ball	W. M. Capper.
Mr. J. E. H. Roberts	S. E. Birdsall.
Intern Midwifery Assistant (Resident)	B. C. Murless.
Intern Midwifery Assistant (Non-Resident)	O. S. Tubbs.
Extern Midwifery Assistants	R. Bennett.* J. N. Groves.†
H.S. to Throat and Ear Departments	W. D. Bell.
H.S. to Ophthalmic Department	R. G. Orr.
H.S. to Skin and Venereal Departments (Non-Resident)	J. N. Groves.* G. A. Ransome.†
H.S. to Orthopædic Department	J. H. B. Beal.
H.P. to Children's Department	C. H. S. Harris.
Senior Resident Anæsthetist	B. Rait-Smith.‡
Junior Resident Anæsthetists	J. B. Bamford. B. S. Lewis.
Non-Resident Anæsthetist	J. W. Cope.
Casualty House Physicians	G. D. Wedd.* H. B. D. Kettlewell.* R. J. G. Morrison.* E. B. Pawson† E. Bradbury.† G. A. Mandow.†
Casualty House Surgeons	H. M. Williams.* R. D. Roper.†

* 3 months, May. † 3 months, August. ‡ 12 months. Others for 6 months.

THE HISTORY OF THE HOSPITAL ARMS.

THE Arms both of the Priory of St. Bartholomew's, Smithfield, and of the Hospital, date from a time when actual Patents granting Armorial Bearings were very scarce. It is therefore only to be expected that no record of how these two Religious Foundations obtained their Coat of Arms can be traced.

It seems likely that the earliest definite record of the use of a Coat of Arms in this connection is the two small shields either side of the Figure in the Hospital Seal, used from 1308–1534. The Arms shown are nothing more or less than the Lions of England. The Figure presumably represents one of the Kings or Queens of England, which would account for this.

The earliest use I can find of the present Arms of the Hospital is on the Seal attached to the Agreement between the Master of the Hospital and the Prior of St. Helen's, dated June 14th, 1423.

This Seal conforms to the usual practice of Ecclesiastical Seals, being mainly occupied by a Saintly figure, in this case a Crucifix, with an Armorial Shield in a subordinate position.

The common practice was for the Head of the Community to display his own Coat of Arms on the Shield. One would therefore expect the Arms to be those of JOHN WAKERYNG, who was Master of the Hospital at the time, but the design is so entirely unlike the Arms of the WAKERYNG family that it seems hardly possible that they can have been intended to be those of JOHN. This makes it seem probable that the design—Per Pale Argent and Sable, a Chevron Counter-changed—was already accepted as the Arms of the Hospital, or else JOHN WAKERYNG would almost certainly have displayed his own.

The earliest mention of the Hospital Arms to be found in the Books of the College of Arms is an entry in a sixteenth century MS. setting out the Armorial Bearings of Sees, Abbeys, Priories and other Ecclesiastical Foundations. This exemplifies the Black and White Chevron, under the description "Arma Hospic Sant Barthi", and the two Lions and Crowns, as "Arma Priorat Saint Bartholoi in London". The same book also shows the personal Arms of ROBERT FULLER, Prior of Waltham Abbey and Commendator of the Priory of St. Bartholomew from 1532–1539, impaled with those of the Priory.

I think there is little doubt that the Arms of the Priory were evolved from the Lions of England, used for so many years on the Seal.

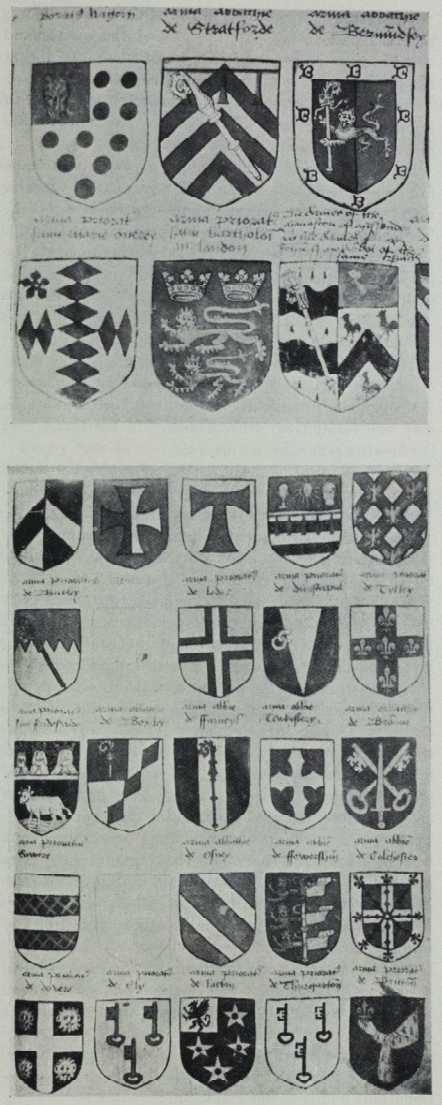
The origin of the Arms of the Hospital is much more difficult to arrive at. They have all the general appearance of being the Arms of a family, rather than those of a Corporate Body, and as they are clearly not those of the WAKERYNG family, whose are they? Arms of the same design belong to the Venetian family of RENIER and the English family of LAWSON of Osworth, Co. Durham. There does not seem to have been a Master of the Hospital or a noted Benefactor of either of these names. It seems, therefore, that until some fresh evidence is discovered, their origin will have to remain a mystery.

It is strange that the Hospital, when they assumed separate Arms, included no reference either to their Royal Foundation or to their intimate connection with the Priory. After all, the Hospital owed its origin to the Priory, and the Master swore Fidelity to the Prior on appointment. It seems a pity, therefore, that the association between the two bodies is not indicated in the Armorial Bearings of the survivor.

A proposal has recently been under discussion, whereby the Lions of the Priory shall be incorporated with the Black and White Chevron of the Hospital. Pictorially this makes an effective and dignified Coat of Arms. The memory of the Founder could be further perpetuated by adopting him, or an Augustinian Friar, as a Supporter to the Shield, in the same way that distinguished soldiers frequently take a private soldier of their regiment.

PHILIP W. KERR,
Rouge Croix.

[We have to thank Miss Vaughan for photographing the manuscript at the College of Arms.]



REPRODUCTIONS OF THE HOSPITAL AND PRIORY ARMS AS SET OUT IN SIXTEENTH CENTURY MANUSCRIPT AT COLLEGE OF ARMS.

SOME NOTES ON CARDIAC SYMPTOMS WITHOUT HEART DISEASE.

A LARGE percentage of all patients who come for advice for their cardiac condition are not suffering from disease of the heart. Some of them are subjects of a grave physical abnormality whose symptoms and signs simulate those of an advanced cardiac lesion; others have some relatively minor organic disability whose manifestations have drawn attention to the heart, and in these patients a fear that true heart disease is present is thus produced.

In the latter group, provided the non-cardiac disability can be discovered and removed, a return to normal health is generally the result. In these cases, therefore, the prognosis is good, and the interest in the diagnosis and treatment correspondingly great.

GROUP I.

Physical Signs Suggesting Failure are Present.

The signs most constantly found in advanced heart failure are œdema of the feet and legs, ascites and cyanosis; the commonest symptoms of organic heart disease are dyspnœa, palpitation and præcordial pain. In the presence of any of these it is necessary that the following questions be put to one's self:

Is there heart disease?
Is there a cardiac lesion?
Is there heart failure?

The difference between heart disease and a cardiac lesion is that in the former an active progressive lesion exists, or a chronic myocardial or valvular deficiency is present, which is producing symptoms. A cardiac lesion, congenital or acquired, is often present without any threat to life or to health.

It may be stated dogmatically—and with the usual reservations inherent in dogmatism—that *if there is no cardiac enlargement there is no heart disease, and no heart failure.*

The necessity therefore for exactly recording the size of the heart, by palpation of the apex-beat, by percussion, and, if necessary, by a six-foot X-ray plate, is the first essential step in all cardiac diagnosis. Careful clinical examination is adequate in nearly every case; denial of this fact raises suspicions of lack of clinical ability.

If there is no enlargement, heart failure and disease are both absent. The symptoms must then be ascribed to another cause.

CASE 1: *Œdema of the legs and feet without heart disease.*—A man, æt. 68, had for some months been suffering from slowly progressive fatigue, loss of strength, and slight dyspnœa on exertion. There had also been some dyspepsia of an indefinite type. Soon after the onset of symptoms swelling of the feet and legs had been noticed. This had progressed without intermission.

On examination the salient features were: There was no orthopnœa and no cyanosis.

The apex-beat was displaced to the left. There was no displacement of the heart. The liver was generally enlarged, and unusually hard to the touch. There were no irregularities upon its surface. The urine contained no albumen.

Since the heart was not enlarged, heart failure was excluded. The absence of albuminuria and of hyperpiesis eliminated renal disease. The size and hardness of the liver suggested new growth; and this was thought to be causing pressure upon the inferior vena cava, and so œdema of the feet and legs. The diagnosis was confirmed by an exploratory laparotomy later.

CASE 2: *Ascites and œdema of the legs and feet.*—A woman, æt. 30, thought to be suffering from heart failure, gave the following history:

She had received superficial injuries in a motor accident five months previously. Shortly afterwards she began to notice some enlargement of the abdomen, with slight malaise and dyspnœa; these symptoms had since progressively increased in intensity.

When examined she was found to be lying flat in bed. There was no fever. She looked pale. Marked pulsation was visible in the veins of the neck. The heart was enlarged, the apex-beat being 4¼ in. to the left in the fifth space. A systolic murmur was heard at the apex; it was only conducted into the axilla during inspiration and was also conducted to the pulmonary base. In the chest nothing further abnormal was found. The abdomen was distended, and gave the usual physical signs of free fluid. Œdema of the feet and legs was present.

The fact which excluded heart failure definitely was that the patient lay flat, in spite of the ascites and œdema, and indeed on being questioned stated that she preferred that position and disliked sitting up.

When marked œdema is present, which is due to heart failure, orthopnœa also is invariable. The same statement is true of ascites.

Having excluded cardiac failure, a search was made for some other cause. The pallor and cardio-vascular signs suggested an anæmia, and examination of the hæmoglobin showed that this was present (Sahli, 30%). The underlying lesion was subsequently found to be carcinoma of the rectum, with secondary invasion of the peritoneal cavity.

GROUP II.

The second group of cases referred to previously consists of patients who suffer from symptoms which are commonly present in early heart failure, but which may also result from other causes. In the latter case the heart is generally not diseased.

It is to this type of case that the rule applies with the greatest force, "*If the heart is not enlarged, the symptoms are not due to organic myocardial disease*".

The symptoms commonly found in this group which raise suspicion of morbus cordis are dyspnœa, palpitation, fainting, sighing, præcordial pain.

Dyspnœa.—The dyspnœa of true heart failure is in its early stages hardly noticed by the patient, provided the disease be not of sudden onset. Later, however, it is often the predominant symptom complained of.

Its importance to the patient relative to other symptoms is a point of considerable diagnostic value. Where dyspnœa is due to vasomotor causes, to "neuro-circulatory asthenia", irritable heart, D.A.H., or whatever synonym may be chosen, it is less marked than the sense of fatigue. "Are you more short of breath, or are you more tired?" is a useful question. "Does walking tire you more than standing, or standing than walking"? is also helpful. The patient with early myocardial failure suffers more from dyspnœa and from exertion; the patient with a so-called "functional" heart lesion suffers more from lassitude, and intensely dislikes standing.

Palpitation is a symptom found most commonly in those cases of organic heart disease who have mitral stenosis, auricular fibrillation, paroxysmal tachycardia and flutter.

It is very frequently ound in patients with cardiac neuroses. From the point of view of the history the important points to determine are:

1. Is the palpitation generally associated by the patient with excitement, nervousness or fright, and if in association with exercise does it accompany or follow this?

Palpitation which is associated with mental excitement is generally vasomotor or nervous; palpitation which is noticed after rather than with exertion is of the same type.

2. Is the palpitation of gradual or of abrupt onset? The latter characteristic suggests a true ectopic tachycardia.

The more phlegmatic the mentality, the more likely is palpitation to have an organic basis.

Fainting is a symptom which is almost invariably ascribed by the lay mind to a cardiac cause. Fainting, on the contrary, is rarely present with organic heart disease. The rare causes of syncope due to organic cardiac disease are aortic incompetence, auricular flutter with a sudden reversion to a 1:1 auriculo-ventricular ratio, and the Stokes' Adams syndrome. All other cardio-vascular cases of fainting are due to vasomotor causes.

People with heart disease do not faint. Fainting individuals have normal hearts. These two statements are true in 95% of cases.

Sighing is another symptom commonly and wrongly thought to be cardiac. It is, on the other hand, frequently found in the "irritable heart" type of patient. Paul White* has analyzed a large series of patients who manifested this phenomenon. His conclusion is chiefly that it is almost invariably of nervous, not of cardiac origin. As a diagnostic point, it suggests the absence of organic heart disease.

Pain of a "cardiac" distribution and radiation is present in both organic and non-organic cardiac disorders. In the former case it is felt during exercise, is increased by more exercise and is diminished by rest. In the latter case it is of a more prolonged character, and has no such quantitative relationship with exertion. It is felt at the end of a period of exertion rather than during exercise. Of the type of pain which comes on as a sudden attack, seizing the patient suddenly and incapacitating him, it is less easy to generalize. Only one clear indication has been observed by the writer. Should a sudden attack of cardiac pain be accompanied by fainting, the underlying cause is more likely to be neurocirculatory than cardiac.

In conclusion it should be remembered that the two common conditions which most frequently simulate organic cardiac disease are circulatory neurasthenia, frequently secondary to local sepsis, and anæmia.

GEOFFREY BOURNE.

* White, P. D., and Hahn, R. G., "The Symptom of Sighing in Cardiovascular Diagnosis," *Amer. Journ. Med. Sci.*, 1929, clxxvii, p. 179.

FIRE . . . !

IT has always been considered the privilege of the elderly to offer counsel to the young, though it is a matter of grave doubt if the young ever accept such advice.

In my time at Bart.'s there was no more respected nor more feared member of the Staff than C. B. Lockwood. A brilliant surgeon and an inspired teacher, he possessed a caustic wit and a tongue as sharp as his scalpel. Although by no means old he thoroughly enjoyed giving advice to students, particularly to those rash enough to confess that they intended entering into general practice.

On one occasion during his rounds a dresser, in answer to Lockwood's inquiry, replied he was going into general practice. Says Lockwood: "My poor friend, your whole life will be spent hurrying from one threepenny piece to another". Among his dressers was an enthusiastic golfer who admitted one day that he meant to go into practice; Lockwood assured him he would never succeed, for he would be going off to play golf at the week-ends, and would lose all his practice to a Scotch doctor; for, he added, "There is always a Scotch doctor round the corner, who won't leave his house for an hour at the week-ends, and will collar all the accidents, and sooner or later, all your patients".

One piece of advice which I got before going into country practice, though not from Lockwood, was to enter into the village life, to join all the clubs, societies and other social assemblies.

Whether this was sound advice I am by no means sure; there is a lot to be said for a country doctor keeping well out of it all.

Anyhow I took the advice and joined everything, including the Ancient Order of Buffaloes and the Free Foresters, with both of which, after being admitted a member, I took part in tedious meals of warm beef and boiled cabbage during hot afternoons.

I also joined the cricket club, the miniature rifle club, and last, but by no means least, the village fire brigade. The latter was far and away the most exclusive of all these coteries.

The President and chief subscriber was no other than the Lord of the Manor, Lord Bewley. Mr. Dwiggins, the grocer, was chairman of the committee, while the writer was appointed honorary surgeon.

When the brigade was formed and a fire-engine had been purchased, suitable quarters were generously offered by Mr. Peacock, the host of the "Bewley Arms," consisting of a large barn or shed opening on to the inn yard. There the firemen practised on three evenings

a week, and very soon became such dabs at darts as to be able to meet in contest and defeat most of the neighbouring village teams.

The host of the "Arms" did not lose by his munificence, for he had no better customers than the fire brigade.

Conflagrations were not frequent at Bewley, and only two broke out during my residence in the village.

The first, by great good fortune, was reported at about one o'clock on a Saturday afternoon, so that the breathless messenger found the entire brigade assembled in the first place he called at—the tap-room of the "Bewley Arms", where they were wont to gather after work.

In a moment all was excitement and hurry, the engine was run out, while the wives or children brought the fire-fighters their brass helmets, tunics and axes. A little delay was unavoidable because no one had remembered to get the horses, but this omission was rectified in due time. At last, the horses harnessed up, the men in their places, looking very businesslike and brave in their brass helmets and blue tunics with shining buttons, the fire-engine drew out of the yard amid the cheers of the assembled crowd. Nothing could have been smarter nor more workmanlike. As the fire was at the stables of the President himself, this was all the more gratifying.

After galloping out of the village, they slowed down when out of sight round the corner, reserving the horses for the final and spectacular dash up the long straight drive to the Big House.

Entering the lodge gates at a trot the horses were whipped up to a gallop. As the engine drew in sight of the house there were to be seen Lord and Lady Bewley standing with their week-end guests from London. Close by were the stables, with thick smoke pouring out of the windows and oozing between the slates of the roof.

The fire-engine drew up sharply, and the men leaped quickly down and each ran to his appointed post. Nothing could have been better done. Water from the main was close at hand. Lord and Lady Bewley and the house party gathered at a safe distance, to watch.

But why this delay? Why did not the fire-fighters begin? Hurried and anxious whispering was going on among the men of the brigade. Something had happened! Someone had blundered! The fire-hose had been forgotten!!

It was a subdued and crestfallen fire brigade that returned at walking pace to the village.

The next call did not come for a year or more later. Although no one was to blame, it was not really a complete success—that is to say, not so complete as one would have wished.

To begin with the call came at a most inconvenient time, in the middle of one summer afternoon, when everybody was out at work. Owing to this it was more than an hour before all the team could be collected.

The horses were quickly on the spot, but the horse collars were missing and could not be found anywhere. Search was made high and low, until suddenly Joe Renyard remembered that he had left them a few weeks before with Mr. Snell, the village saddler, to be repaired. However, all's well that ends well, the collars were sent for, and it was ascertained for certain the hose was on board, when one of Jim Kitcher's children came running up to say that his father had mislaid his tin hat. Some were for going without Jim, others for taking Jim without his helmet, but the majority agreed with the Captain in maintaining it would be unfair to go without Jim and that Jim must have his helmet. A good deal of argument went on over this point, which was brought to a close by the arrival of Jim's helmet, which had been found beneath his bed, hidden from sight behind some china.

All this had delayed the start, and it was a good two hours after the first alarm that the fire-engine dashed off. It was a long pull to the scene of the fire—a country gentleman's house. On arrival there some surprise was felt at the lack of excitement or evidence of the conflagration. All was quiet, nobody to be seen, no flames, no smoke even.

The captain rang the front door bell. In due time a maid opened the front door and inquired what he wanted. The Captain hurriedly explained that he had brought the fire-brigade to extinguish the fire. "Oh, that", said the maid, "why, cook put it out an hour ago".

PHILIP GOSSE.

A COWARD:

OR WHAT YOU DO UNTO OTHERS YOU MAY NOT BE ABLE TO DO UNTO YOURSELF.

SO much depends upon the point of view. My dentist declares that when it comes to bearing a little pain doctors are the worst cowards he has to deal with. He would like me to draw the inference that none is so cowardly as I. I, as a self-esteemed expert in local anæsthesia, take every opportunity of telling him that he should cause no pain whatever.

I foresaw another argument on this point the other

day when in the midst of a mouthful of my supper omelette I recognized the entire filling of one of my much-excavated lower molars. Surveying the ruin in my shaving mirror I concluded that the dental expert's verdict would be "past repair".

As I took up the telephone to open hostilities with him the germ of a plot entered my head. Should I show this plier of drills and forceps what true analgesia was? A block of the mandibular nerve at the inferior dental foramen should be possible with the aid of a mirror and a long needle. I pictured myself dropping in at his place, waylaying his nurse, and asking her to slip me in between two of his appointments. He would begin his usual harangue about people who sweat blood before he has even touched their darned teeth, and I would cut him short with something like this: "Yank this derelict out for me old bird, will you? Cold steel will do. Haven't time for you to be monkeying about with your infernal syringes with all this 'flu about". His jaw would drop, but he would remain incredulous till the job was over. The *exposé* could come later on at the club . . . perhaps.

The next afternoon beholds me furtively collecting the materiale. Not even my nurse must be in on this. In the privacy of my consulting-room I boil my novocain and add the adrenalin. Perhaps I was a little careless not to count the drops. Finding the mandibular nerve on oneself proves not so easy as expected. However the stuff is in at last. What is this shaking of the hands which makes the syringe rattle in the dish as I lay it down? Nerves? This bumping in the carotids? Am I unduly sensitive to adrenalin? Have I ever had any before? Can't remember. Must have had, of course, in dentist's injections, but never felt like this. Can I have pumped the stuff directly into a vein? Nonsense. It will all pass off in a few moments. I lie down on my couch. The abdominal aorta is bumping painfully now. I find I can't lie flat; must sit up. The symptoms increase. I feel my back hair rising and tingling sensations in my limbs. Is this going to be serious? That syringe lying on the table . . . it will look like suicide. The insurance companies will refuse to pay on my life policies. My widow and children will be left practically penniless. Must put that syringe away at all costs. . . . Can I do it? I try, but find my knees giving way. Suddenly I realize there is no one else in the house. Panic seizes me. Must write a line to explain the whole silly business before it is too late. I start on a page of my prescription book, but it is no good . . . hand shakes too much. I give it up. What's done's done. Anyway, I shall be finished with scurrying about like a scalded cat after panel patients with the 'flu. No more getting up on frosty nights to treat hysterical women for windy spasms. No night bell penetrates the tomb. Nothing but the Archangel's trump. Odd if when roused by that one turned over and said, "Yes, what is it?" I find myself smiling, and yes, there's no doubt the throbbing is less. Nasty cold sweat on the brow though. And what about this anæsthesia? Where is it? Half the tongue is numb certainly. I find a tooth-pick and prod the gum. No anæsthesia there. I look at my watch. Half-past two—half an hour since I made the injection. Curse it; I've hit the lingual and missed the mandibular! . . .

By three o'clock I am able to totter about my consulting-room and put away the tell-tale syringe. By half-past I can take a look at my visiting list and decide how many I can miss. But I haven't finished with that injection yet. When the anæsthesia passes off in the evening swallowing is very painful, and I cannot open my mouth wide enough to admit more than a teaspoon. My wife says I really must go and see the dentist about that tooth. During the night I can scarcely swallow saliva. Next morning glands are enlarged below the jaw. I realize that my asepsis must have been sketchy. . . .

It is now a week since I made my experiment in self-induced analgesia. I have just come back from the dentist's. It's really astonishing how little he hurt me. I did not intend of course to say a word about mandibular analgesia, but he wondered why I could not open my mouth widely, and he must have seen something suspicious at the back of my mouth, for he put on his head-lamp and prodded the still-tender area. My sense of humour got the better of me and I told him the whole story. When he had had his laugh out he began as usual, "Well, I have always said that of all the cowards I see in this chair ——" "Cowards be hanged", I cut him off; "tell me this: dare you give yourself a mandibular analgesia?" And before he had finished explaining exactly why he would not, I left him.

F.

ACKNOWLEDGMENTS.

The British Journal of Nursing—The Nursing Times—The Guy's Hospital Gazette—The Cambridge University Medical Society Magazine—The London Hospital Gazette—The Royal Dental Hospital Magazine—St. Thomas's Hospital Gazette—The Student—The University College Hospital Magazine—The General Practitioner—Bulletins et Mémoires de la Société de Médecine de Paris—L'Echo Médicale du Nord—The Post-Graduate Medical Journal—The Quarterly Journal of the Research Defence Society—Reale Società Italiana D'Igiene—The Birmingham General Hospital Annual Report—The Clinical Journal—Archives Hospitalières.

THE AMATEUR DRAMATIC CLUB: FIFTY YEARS.

AS the Hospital Amateur Dramatic Club is now in its fiftieth year, it is thought that the following notes may be of interest.

It was the late Mr. Stephen Townesend, then a dresser, who was chiefly instrumental in founding the Club. With the aid of Mr. Owen Lankester, Mr. H. W. Gell and others he negotiated successfully the whims and objections of those in authority, with the result that permission was granted for him to produce an entertainment in the Hospital on January 3rd, 1883, just fifty years before *The Crooked Billet* was produced last January.

The choice of plays apparently proved a difficult matter. After a week of argument discussion still ran high on the relative merits of two plays, one of which was entitled *A Regular Fix*. Yet another meeting was convened, and it was determined that it would not be adjourned until a decision was made. History does not relate the hour at which the meeting commenced, but it is known that at 11 p.m. one member, being disinterested, was allowed to retire to bed. And it is known also that at 2 a.m. this member was disturbed in his slumber and brought to the meeting in his nightgown. He was told that his was the casting-vote. Sleepily he replied: "O! hang you. Play *A Regular Fix* and let me get to bed." Such was the inauguration of the Club. Two plays, *Little Toddlekins* and *A Regular Fix*, were presented, under the producership of Mr. Oswald Browne, whose assistance to the Club in those early days was invaluable.

The Club was formally constituted in October of that year, and in the following January a successful performance of Act II of *The Critic* was staged. The Club tried vainly to indulge in the study of drama by play-reading meetings, but these were soon given up as the members were bored by the plays, and the meetings rapidly became social, beer and tobacco overruling the literary activities of the members. The histrionic interests, however, remained, and a tradition soon rose up, despite the constant changes in the personnel of the Club. Plays were given every year after this until the war, with the single exception of 1904. The plays were given in the Inquest Room of the Hospital, and later in the Great Hall. The accounts of stage difficulties and lighting of those days would make those who have acted on our present stage and with our modern first-class lighting shudder. At the first performance the lighting was accomplished by means of a row of candles as footlights! But the Club sought to overcome these manifold difficulties, which in time it did. From time to time outside performances were given, including at St. George's Hall, Swanley, and other convalescent homes. In 1908 the Club journeyed to Oakham, where two plays were produced. The annual production, as now, usually took place in January. Added to this were "nurses' meetings", which took place about twice a year until 1894. At these meetings a programme of one or two sketches was supported by musical items and recitations. All productions were looked upon as being primarily for the entertainment of the nurses and others resident in Hospital.

The Club, from its inception, has argued the "pros" and "cons" of including ladies in the cast, and the vote has wavered from one side to the other year after year. The arguments were many on both sides, but one of these must have caused much heated discussion: It runs thus: "That the amusement of nurses can best be achieved by such incongruities as dressing up men as women". In recent years, however, discussion has been less rife on the matter, and it has now become realized that the inclusion of ladies is for the benefit of the play and of the audience.

Following the war the Club successfully blossomed out again with a concert at the Cripplegate Institute, in aid of the new Nurses' Home. Since then the Club has confined its activities to the annual performance in the Great Hall. In 1932 financial stress proved a bar against a performance, but this year the Club's activities were successfully continued.

The financial state of the Club has usually been somewhat precarious, but owing to the generous outlook of the Treasurer and Almoners in "footing the bills" the Club now enjoys ample opportunities for good productions.

The first President of the Club was Mr. W. H. Cross, Clerk to the Governors; his help and interest in the Club for many years was always a source of encouragement. The present President is Mr. Reginald Vick, who, like his immediate predecessors, Mr. Elmslie and Dr. Geoffrey Evans, follows in Mr. Cross's footsteps in being anything but a nominal President. To such as these the Club owes a great debt.

From its earliest days the Club has enjoyed the assistance of the members of the Hospital Musical Society, who have entertained the audiences during the intervals of scene-shifting. That their efforts are appreciated was shown by the outcry against a certain mechanized instrument that took their places in the performances of *The Fourth Wall* in 1931.

For these notes the writer is largely indebted to Mr. Townesend, the Founder of the Club, who compiled its early history in a book which he had printed. It is due to him and his colleagues that the members, during fifty years, have derived a pleasant recreation, and the many audiences, it is hoped, enjoyment. S. J. H.

ABERNETHIAN SOCIETY.

A meeting of the Society was held in the Morbid Histology Room on Thursday, February 9th, the President, Mr. J. M. Jackson, in the Chair.

Dr. Nabarro gave a lecture on "Congenital Syphilis," illustrated with specimens and lantern-slides. The lecturer dealt with the many aspects of the subject, and received a warm welcome from the large and appreciative audience. The vote of thanks was proposed by Dr. CHARLES HARRIS and seconded by Dr. J. H. HUNT.

A Sessional Meeting was held in the Medical and Surgical Theatre on Thursday, February 23rd, when Dr. Robert Hutchison delivered an address entitled "Medicine in Horace Walpole's Letters".

The PRESIDENT, in introducing Dr. Hutchison, said he had had the privilege of being one of the lecturer's clerks at the Hospital for Sick Children, and was particularly proud to welcome him to Bart.'s that night.

"Much information," said Dr. HUTCHISON, "regarding the state of medicine in the eighteenth century could be obtained by studying the lay literature of that period, and in the nine volumes of the letters of Horace Walpole, which he had himself read, there were countless interesting references to the art and practice of medicine at that time".

The letters showed that Horace Walpole did not like doctors, and he expressed himself without restraint regarding their shortcomings, but in fairness to the profession it must be added that he wrote with equal scorn of clergy and lawyers.

Gout, a disease which had increased mysteriously during that century, was a constant topic, for Walpole himself was a victim, as is shown by his picturesque descriptions, such as "my finger discharged a volley of chalk", or "I was delivered of a large chalk stone". Regarding this condition he had some peculiar views of his own; nearly every possible ailment was to be regarded as "irregular gout", and it was essential to expel the gout from the internal organs to the extremities; for this purpose steel powders could not be bettered.

Inoculation for smallpox was introduced during this century, and Walpole acclaimed it with enthusiasm, but the fact that Society had taken it up may have weighed with him, for he was a great snob.

The eighteenth century was an age of quackery in medicine, but Horace Walpole disliked quacks even as much as he disliked doctors, and he derided Parliament for voting £5000 to a certain Joanna Stephens for her cure of stone which turned out to be composed of equal parts of calcined egg-shell, decoction of snail and soap. "Taken as a whole," said Dr. Hutchison, "the picture Walpole paints of medicine during his lifetime was a melancholy one, and gives some justification for his attacks on the profession."

Dr. GEOFFREY BOURNE, proposing a vote of thanks in an amusing speech, drew the attention of the audience to the similarity between the lecturer and the portrait of Horace Walpole, whom he had depicted as a tall lean man with a face full of sardonic humour; he then delicately dwelt on the possibility of reincarnation. Mr. M. WESTWOOD seconded the vote of thanks, which was passed by acclamation. After Dr. Hutchison had briefly replied the meeting was adjourned.

STUDENTS' UNION.

RUGBY CLUB.

At the Annual General Meeting of the R.U.P.C. the following were elected officers for the season 1933–34:

President: Mr. J. D. Barris.

Vice-Presidents: Mr. W. Girling Ball, Mr. H. E. G. Boyle, Mr. F. C. W. Capps, Mr. J. P. Hosford, Prof. E. H. Kettle, Dr. W. Shaw, Sir C. Gordon-Watson, Mr. G. Keynes, Dr. C. F. Harris, Mr. J. B. Hume.

Captain: E. M. Darmady.
Vice-Captain: J. M. Jackson.
Hon. Sec.: J. D. Wilson.
Hon. Treas.: J. R. R. Jenkins.
Capt. "A" XV: E. Harris.
Hon. Sec. "A" XV: C. M. Dransfield.
Hon. Secs.:
Extra "A" XV: R. Hanbury-Webber.
"B" XV: J. M. MacDonald.
Extra "B" XV: A. M. Jack.
"C" XV: H. N. Rees.
Extra "C" XV: C. J. Longland.

Hospital Cup. Semi-final.

ST. BARTHOLOMEW'S HOSPITAL *v.* LONDON HOSPITAL.

Played at Richmond on February 28th.

It was realized before the start that our chances of success in this game depended on whether our reorganized pack could hold the London forwards, who by their splendid display in the replay with St. George's had stamped themselves as a really fine eight. Perhaps February 28th was London's "off-day", but rather would I ascribe our success to the magnificent work of the Bart.'s forwards, who stood up to their task in great style, never wilted under the heaviest pressure, and in the last twenty minutes were complete masters of the situation. All this is not to say that our backs played a minor part in the victory, for they also performed manfully, but had the forwards wavered, it is doubtful whether Bart.'s would have had an active interest in the final.

This was not a game which lends itself to a detailed description of the play, for incidents of note were relatively few, long periods of hard scrummaging, interspersed with rapid kicks to touch, being the order of the day. Rush and counter-rush filled the first few minutes and, after two good saves by C. R. Morison and a sparkling run by J. G. Nel, J. R. Kingdon cut through well, only to be brought down just short of the London line. A good kick by Law put the latter on the attack, and very soon afterwards they lost their first really good chance of scoring. McDonald reached Morison with Hannay unmarked on his left, but unaccountably hesitated, hung on, and ended by kicking weakly into touch. Nel hereabouts relieved the tension for Bart.'s on several occasions with some superb long kicks down the touch-line, and it was from one of these, following a weak clearance by Tooley, that Bart.'s gained a footing in the London half, which was not lost until the lead had been gained. A penalty was awarded against the London for obstruction, and Morison landed a lovely goal from 40 yards out.

Half-time: Bart.'s, 3; London, 0.

For the first twenty minutes of the second half play consisted of a series of scrums in the vicinity of the Bart.'s line. From these London secured a very good share of the ball for their backs, but they could not score, firstly because their attacks were poorly directed, and secondly because the defence of Kingdon, Blusger and Pirie was so sound. When their forwards tried to break away themselves they found the serried ranks of the Bart.'s scrummagers wellnigh impassable, while J. T. C. Taylor was ever on the alert to bring off a smart pick-up and return the ball 20 yards or so into touch, and thus to negative their exhaustive efforts in the twinkling of an eye. One felt that could Bart.'s only sustain this magnificent defence for a few moments longer, the tide would turn and London be swept back. And so it came about, though not before London had been given two fairly simple opportunities of kicking penalty goals, but Law, hero of six goals from six tries *v.* George's, unaccountably failed on each occasion. From this point until the end, save for one instance when three London forwards with the ball were faced only by Morison six yards from our line, our opponents never looked like scoring again.

Twelve minutes from the end E. M. Darmady headed a dribble and took the ball past the full-back; R. Mundy carried it on well and scored far out. The kick failed (6—0). Four minutes later the manœuvre was repeated, but this time Mundy was not awarded a try. From the next three line-outs W. M. Capper secured the ball each time, broke away and put in a good kick to touch, while the rest of the time Taylor and Nel used skilful touch-kicking to keep the game safe for Bart.'s. To mention individuals where all strove so hard is almost unfair; the whole pack was splendid, and the new second row of Gray and Capper brought much-needed solidity and pushing power. The only phase of the game at which we were beaten was at the line-outs (except in the last ten minutes), but here

we did lose ground time and again. At the base of the scrum Taylor played a great defensive game, and, as so often in past years, was one of the chief factors in preventing a London triumph. Nel's display was easily his best in a cup-tie, while Kingdon, Blusger and Pirie all tackled well. Morison played an invaluable game at full-back. No account would be complete which did not mention the splendid work of Pete Reidy, and, to a lesser degree, of E. Braithwaite and A. J. P. Coetzee for London. It is a further tribute to the Bart.'s forwards that these players were so efficiently marked.

Result: St. Bartholomew's Hospital, 1 penalty goal, 1 try (6 pts.); London Hospital, *nil*.

Team.—C. R. Morison (*back*); J. G. Nel, I. N. Blusger, A. H. Pirie, J. G. Youngman (*three-quarters*); J. R. Kingdon, J. T. C. Taylor (*halves*); W. M. Capper (capt.), E. M. Darmady, B. S. Lewis, J. M. Jackson, R. Mundy, G. Gray, R. S. Hunt, D. W. Moynagh (*forwards*).

Hospital Cup. Final.

ST. BARTHOLOMEW'S HOSPITAL *v.* GUY'S HOSPITAL.

This game, played on March 15th, in excellent weather, ended in Guy's gaining the Cup for the twenty-sixth time. Guy's deserved their victory, although the game was fairly even all through. At half-time there was no score. The play in the first half had been good—unusually good for such a match. One side would attack strongly and then the other, but the tackling on both sides was wonderfully accurate, and rarely did anyone get away into a scoring position, though L. M. Curtiss put in a clever run down the wing a quarter of an hour after the start, and only a wild inside pass to Wilson, who, as usual, had backed up well, ruined an excellent opportunity of taking the lead. For a long time Bart.'s quite held their own and were more frequently in a likelier position than their opponents, but in the second half, with our pack rather disorganized by an injury to Gray which necessitated a re-arrangement of the positions in the tight scrums, Guy's began to gain the upper hand, and repeatedly heeled the ball from the scrummage to their backs; but the defence of Bart.'s was always sound, and there were few chances to get through. Finally, as though despairing of ever piercing so resolute an array of tacklers, J. E. Geisen, taking a pass in mid-field, sent the ball soaring over the pinnacle of the far goal-post—a beautiful drop-kick, but one which must have made the referee's task a difficult one (0—4). Previous to this, J. G. Nel had brought off an almost incredible piece of defensive work when, following a well-placed diagonal kick by I. K. Thomas, A. G. Johnson gathered the ball two yards from the Bart.'s line with no defender near him. But to everyone's amazement, before Johnson could ground the ball, Nel had raced up, seized the Guy's wing and dragged him 15 yards and into touch at the corner flag. Bart.'s attacked again strongly and looked once or twice like scoring, but from now until the end the Guy's forwards dominated the game, even to the extent of taking scrums for line-outs when it was their throw. All praise is due to Jerry O'Shea, who hooked so well and proved such a good leader. Twelve minutes from the end Guy's went further ahead. Bart.'s forwards were a little slow in getting on to the man with the ball following a line-out. Thomas got away on the blind side just beyond half-way; Darke, who played a particularly good game throughout, was up to take his pass and he quickly gave the ball to Johnson, who made off at a great pace down the touch-line and, brushing off several defenders, slipped over for a good try. The kick failed. After that the game was won and Bart.'s showed few signs of recovering, though one characteristic burst by J. T. C. Taylor gave us a man over, but our centres passed too slowly, and by the time Nel got the ball he was surrounded by Guy's men.

The outstanding player in the match was C. R. Morison, the Bart.'s full-back, who, apart from a tendency on a couple of occasions to allow the ball to bounce, gave a splendid display. A. H. Pirie played one of his best games in the centre, while I. N. Blusger never faltered in defence, once performing the feat of tackling both Guy's centres and Johnson one after another during a passing movement. Nel had few chances in attack, but two of his defensive efforts were very fine. Curtiss put in one good run, but was woefully unsteady in fielding the ball. Kingdon and Taylor were both good in defence, but had scarcely any opportunities to open out attacks after the first ten minutes of the second half. The forwards, until the point just mentioned, more than held their own; it was refreshing to see them using their feet with such splendid vigour; where all strove so hard it would be invidious to mention names.

Result: Guy's, 1 dropped goal, 1 try (7 pts.); Bart.'s, *nil*.

Team.—C. R. Morison (*back*); J. G. Nel, I. N. Blusger, A. H. Pirie, L. M. Curtiss (*three-quarters*); J. R. Kingdon, J. T. C. Taylor (*halves*); W. M. Capper (capt.), E. M. Darmady, B. S. Lewis, J. M. Jackson, R. Mundy, J. D. Wilson, R. S. Hunt, G. Gray (*forwards*).

J. R. R. JENKINS.

ASSOCIATION FOOTBALL CLUB.

ST. BARTHOLOMEW'S HOSPITAL *v.* LONDON WELSH.

Played on Saturday, March 11th, at Acton. Lost, 1—4.

A fine day and a dry ground was responsible for a fast game. The Hospital were slow to adapt themselves to the unaccustomed conditions, and the London Welsh quickly snapped up a good chance of scoring. Our forwards combined well, and their passes were more accurate than those of the London Welsh, but they were not so fast in beginning or in carrying out their movements. Dolly put in one splendid centre, which Wheeler, in his enthusiasm, headed over the bar. Play was kept in the opposition's half of the field, and Brownlees, following up well, scored from a rebound from a shot by Wheeler. At half time the score still stood at 1—1, Wenger having had considerably less to do than the London Welsh goal-keeper.

In the second half we were playing into the wind, and did not fare so well. The London Welsh twice broke away up the middle of the field and scored on each occasion. However, play soon became more even, and Shackman and Langford both just failed to score with good and bad shots respectively. Shields played a stirling game of spoiling tactics, yet the London Welsh again got clear and scrambled another goal.

Team.—R. A. L. Wenger (*goal*); J. Shields, A. H. Hunt (*backs*); J. D. Ogilvie, D. R. S. Howell, W. M. Maidlow (*halves*); A. W. Langford, F. E. Wheeler, P. Brownlees, R. Shackman, R. C. Dolly (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* GLYN MILLS BANK.

Played at Winchmore Hill on Saturday, March 18th. Won, 5—3.

After twenty minutes' even play Bart.'s forwards broke through down the middle of the field, and Brownlees scored the goal with a well-judged shot. For a brief period we kept our opponents hemmed in their own half, during which time the weakness of our inside forwards in front of goal kept the score down.

The opposition then scored in a bout of attacking, and, but for Wenger's good work in goal, would certainly have repeated the process. Shortly before half-time they did do so through a temporary lapse in our defence.

After half-time the team played a good deal better. Dolly went through on his own and, shooting hard, hit the upright. Brown, following up, tapped the ball into the net. Again our opponents retaliated with another goal, thus taking the lead for the second time. Our half backs at last began to show some enterprise and grasped the value of kicking first time. First Maidlow and then Howell scored. Then, ten minutes before time, Brown added another from a breakaway down the middle.

Team. R. A. L. Wenger (*goal*); P. J. Hardie, G. Herbert (*backs*); G. H. Darke, D. R. S. Howell, W. M. Maidlow (*halves*); E. E. Brown, F. E. Wheeler, P. Brownlees, R. Shackman, R. C. Dolly (*forwards*).

CRICKET CLUB.

The Annual General Meeting of the Cricket Club was held in October, when the following were elected to office:

President: H. E. G. Boyle, Esq., O.B.E.
Vice-Presidents: Dr. Geoffrey Bourne, Dr. C. M. Hinds-Howell, Dr. Wilfred Shaw.
Captain 1st XI: J. A. Nunn.
Vice-Captain: W. H. Gabb.
Hon. Sec.: R. Mundy.
Committee: A. R. Boney, G. I. Hindley.
Captain and Hon. Sec. 2nd XI: C. M. Dransfield.
Captain and Hon. Sec. 3rd XI: J. V. Hopkins.

The season 1932 marked the close of Mr. L. Dathe Rawling's presidency; appropriately enough, therefore, it was the most gloriously successful season in the Club's history. One might summarize a monumental period of results, that would tend to eliminate the arithmetical glamour of such performances as the 448 1st innings score of the 1st XI in its Cup-final victory over St. Thomas's, or the five centuries recorded during the season, or the new opening partnership record of 146 runs in 2nd XI cricket, and obscure the splendid consistency of the bowling and fielding which approximated to these in performance.

Epic, indeed, is the fact that for the first time in our history we won both Senior and Junior Cups—eloquent enough of the latency of talent in our cricketing sphere. The 2nd XI afforded a complete backing to the 1st XI that is surely indicative of our possibilities.

This year we have a new President in H. E. G. Boyle, Esq., O.B.E., and we can but anticipate that this, his premier year, will emulate its immediate precursor. Indeed, we hope to improve even on that, and accordingly the fixture lists have been strengthened and extended; they are appended below.

The gaps left from last year are few, but any new talent is assured of good sporting cricket in any of the three XI's. This is particularly emphasized in the cases of the 2nd and 3rd XI's.

We will assume, then, that by the time the season starts on April 29th those cricketers as yet unknown will have duly presented themselves to the secretaries.

A last word: might we express a hope that this season will witness an increased match and practice attendance in all cases, particularly so in respect of some of our more senior members?

Good luck, then, attend our "pursuit of the little red ball".

R. M. }
C. M. D. } *Hon. Secs.*

1st XI Fixtures.

Wed.,	May	3.	Wanderers	Home.
Sat.,	,,	6.	Bickley Park	,,
Sat.,	,,	13.	Winchmore Hill	,,
Sat.,	,,	20.	Metropolitan Police	Away.
Thurs.,	,,	25.	M.C.C.	Home.
Sat.,	,,	27.	St. John's College, Cambridge	Away.
Sat.,	June	3.	St. George's Hospital	Home.
Mon., (Whit-Mon.)	,,	5.	Croydon	Away.
Sat.,	,,	10.	Past *v.* Present	Home.
Wed.,	,,	14.	Guy's Hospital	,,
Sat.,	,,	17.	Hampstead C.C.	,,
Wed.,	,,	21.	Times C.C.	Away.
Sat.,	,,	24.	R.N.C.	,,
Sat.,	July	1.	Old Paulines	,,
Wed.,	,,	5.	R.N.C.	Home.
Sat.,	,,	15.	Shoeburyness Garrison	Away.
Wed.,	,,	19.	St. Anne's	,,
Thurs.,	,,	20.	Midhurst C.C.	,,

2nd XI Fixtures.

Sat.,	April	29.	K.E.B.	Away.
Sat.,	May	6.	R.A.F. (Northolt)	,,
Wed.,	,,	10.	Times Midweek C.C.	,,
Sat.,	,,	13.	Architectural Association	,,
Sat.,	,,	20.	Old Paulines	Home.
Wed.,	,,	24.	Imperial College	Away.
Sat.,	,,	27.	Old Paulines	,,
Sat.,	June	3.	Downing College, Cambridge	,,
Wed.,	,,	7.	Horlicks	,,
Sat.,	,,	10.	Southgate	,,
Sat.,	,,	17.	Artists' Rifles	,,
Wed.,	,,	21.	University College	Home.
Sat.,	,,	24.	Guy's Hospital	,,
Sat.,	July	1.	Woodcutters	,,
Wed.,	,,	12.	R.A.F. (Northolt)	,,
Sat.,	,,	15.	K.E.B.	,,
Sat.,	,,	22.	Hornsey Grange	Home.

RIFLE CLUB.

Inter-Hospitals League.

The League is now completed, and Bart.'s have met and beaten every hospital in the League. In the third round we had a bye, while in the fourth London Hospital was unable to raise a team. The Lloyd Cup therefore remains in the Library, where it has been since 1911, when it was last competed for.

5th Round.

ST. BARTHOLOMEW'S HOSPITAL *v.* ST. MARY'S HOSPITAL.

Shot on February 17th. Away. Won by 10 points.

This match was a great event in the history of the Miniature Rifle Club, for it was the first away match on the records; it was shot on the Marylebone Rifle Range. The range was cool—a welcome change from the over-heated atmosphere of our own range—and the lighting excellent. Under these improved conditions we put up the best score yet recorded in the League. Scores were remarkably even, and when the last pair went down we were only one point ahead.

Scores:

ST. BARTHOLOMEW'S.		ST. MARY'S.	
P. G. F. Harvey	100	K. B. Rogers	98
D. O. Davies	99	J. G. Jefferiss	97
J. Shackleton Bailey	98	R. N. B. Cridland	96
W. H. Cartwright	96	R. J. C. Hutchinson	96
B. P. Armstrong	96	I. G. Griffin	95
G. C. Brentnall	93	A. N. Bury	90
Totals	582		572

6th Round.

ST. BARTHOLOMEW'S HOSPITAL *v.* ST. THOMAS'S HOSPITAL.

Shot on March 7th. Away. Won by 13 points.

For this match we were entertained by St. Thomas's on their new 25-yard range, and succeeded in beating the previous record score in the League by one point. We were all square on the first pair's scores, but then gained a lead, and increased it to win finally by 13 points.

Scores:

ST. BARTHOLOMEW'S.		ST. THOMAS'S.	
J. F. Underwood	94	R. Bevan	94
B. P. Armstrong	98	F. J. Dennison	96
W. H. Cartwright	98	C. W. C. Karran	95
D. O. Davies	98	R. B. Morton	93
P. G. F. Harvey	96	A. G. Palin	97
J. Shackleton Bailey	99	A. E. Wilson	95
Totals	583		570

The final League Table is as follows:

	Shot.	Won.	Lost.	Points.	Average score.
St. Bartholomew's Hospital	5	5	0	10	581
St. Mary's Hospital	5	4	1	8	573
St. Thomas's Hospital	5	3	2	6	567
Guy's Hospital	5	2	3	4	544·6
St. George's Hospital	5	1	4	2	551·3
London Hospital	5	0	5	0	509

UNITED ENGINEERING CUP LEAGUE.

The Club has joined the newly formed United Engineering Cup League, open to teams of four from the colleges and hospitals of London University. Five matches have been shot, resulting in two wins, one tie and two losses.

Matches.

February 2nd *v.* King's College. Lost. Bart.'s, 386; King's College, 393.

February 9th *v.* St. Mary's Hospital. Won. Bart.'s, 392; St. Mary's, 386.

February 16th *v.* Chelsea Polytechnic. Lost. Bart.'s, 385; Chelsea Polytechnic, 394.

February 23rd *v.* Imperial College. Tie. Bart.'s, 392; Imperial College, 392.

March 2nd *v.* University College. Won. Bart.'s, 389; University College, 372.

City of London Rifle League.

Scores in this League have been very much better this half of the season and results have been correspondingly satisfactory. Possibles were scored for us in four matches in succession. We now have the following record: Shot 18, won 7, tied 2, lost 9.

Matches.

January 16th *v.* L.G.O.C. Streatham. Walk-over. Bart.'s, 584 (J. E. Underwood, 100); L.G.O.C. Streatham, scratched.

January 23rd *v.* Corn Exchange. Tie. Bart.'s, 583 (P. G. F. Harvey, 100); Corn Exchange, 583.

January 30th *v.* L.E.D. (Post Office). Walk-over. Bart.'s, 585 (W. H. Cartwright, 100); L.E.D., scratched.

February 6th *v.* Cornwall House. Won. Bart.'s, 583 (J. Shackleton Bailey, 100); Cornwall House, 579.

February 13th *v.* G.W.R. Lost. Bart.'s, 585; G.W.R., 586.

February 27th *v.* Britannia. Won. Bart.'s, 581; Britannia, 571.

March 6th *v.* "T" Div. Police. Walk-over. Bart.'s, 584; "T" Div. Police, scratched.

The City of London Rifle League also held a handicap knock-out competition, in which St. Bartholomew's beat Lee "A" by 595·75 to 578 in the first round, but were knocked out in the second round by King's College by 596·23 to 594·75.

"B" TEAM MATCHES.

January 23rd *v.* Swansea "B", Lost. Bart.'s "B", 570; Swansea "B", 583.

January 30th *v.* Horsham "A". Lost. Bart.'s "B", 564, Horsham "A", 589.

February 6th *v.* Slinfold "B". Tie. Bart.'s "B", 569; Slinfold "B", 569.

February 13th *v.* Dinas Powis "B". Lost. Bart.'s "B", 564; Dinas Powis "B", 569.

February 27th *v.* Aquarius "B". Won. Bart.'s "B", 577; Aquarius "B", 563.

D. O. D.

ATHLETIC CLUB.

A General Meeting of the Athletic Club was held on Friday, March 17th. Three proposals were heard for the purpose of awarding "Honours" for the ensuing seasons. The new systems suggested were thought unsatisfactory by the majority of the Club, and the old scheme of awarding athletic "honours" was voted for by a clear majority of 8, viz. "that Honours be awarded only to those who gain at least one point for the Hospital in the Inter-Hospital Sports".

It was agreed to arrange a definite day each week with Mr. Guy Butler, in which the Club would turn out regularly for organized training and coaching at the White City Stadium.

Apart from the usual United Hospital fixtures against the L.A.C., South London Harriers and Oxford University Centipedes, seven Bart.'s fixtures have been arranged. The first of these is a Four sided match at Winchmore Hill on Saturday, April 29th, between Caius, Queen's, and Emmanuel Colleges and ourselves. The Hospital Sports are on Saturday, May 20th, and the Inter Hospital Sports on Thursday, June 8th. The London Inter Collegiate Sports are on Saturday, May 6th, and this year we are entering a representative side, which should give a good account of itself. It is absolutely essential, however, that every member of the Club turns out on one evening a week for training at the White City.

Other fixtures are:

Wednesday, May 17th: Triangular match *v.* St. Thomas's Hospital and Barclays Bank, at Norbury.

Wednesday, May 24th: Triangular match *v.* Lensbury A.C. and Southgate Harriers, at Teddington.

Tuesday, June 20th: Triangular match *v.* Reading University and Lensbury A.C., at Winchmore Hill

J. W. P.

REVIEWS.

THE BIOCHEMISTRY OF MEDICINE. By A. T. CAMERON, M.D., D.Sc., F.I.C., F.R.S.C., and C. R. GILMOUR, M.D., C.M., F.R.C.P.(C.). (London: J. & A. Churchill.) Pp. x + 506. 31 illustrations. Price 21s.

Both the physician who has had little training in biochemistry, and the modern student, will find this outline of physiological and pathological chemistry in one volume most useful. Apart from a few footnotes on qualitative tests, laboratory technique is omitted. The first section (Chaps. III to IX) deals with carbohydrates and fats. The contents of the second section (Chaps. X to XII), on proteins, may be given to illustrate the general plan of the book; the proteins of urine; normal protein metabolism—nature of proteins and amino-acids, digestion of proteins, synthesis of tissue proteins, autolysis, derivatives of amino-acids, nucleoproteins, correct protein of diet, specific dynamic action; abnormal metabolism of proteins and derivatives—abnormal protein products formed in the gut, detoxication, excretion of endogenous abnormal products (Bence Jones's protein, diamines, alkaptonuria, melanogenuria, ochronosis), abnormal excretion of normal metabolites (albuminuria, proteosuria and peptonuria, amino-acids, cystinuria). The subsequent sections include water metabolism, œdema, kidney function; salt metabolism; respiration, hæmoglobin and derivatives; endocrines; vitamins; gastric and hepatic efficiency.

The subject-matter is well arranged and is easy to read. It is doubtful whether an "increased glucose tolerance" exists; certainly there is no significant difference between the blood-sugars of Cases 1 and 3 on p. 52. Surely there is no doubt of the existence of sulphæmoglobinæmia (p. 372); we have read the authority cited, but find only a statement of the well-recognized fact that the inhalation of H_2S does not cause sulphæmoglobinæmia. Mushrooms are generally regarded as of "no food value"; we would not consider them, or any other vegetable, as "excellent sources" of diet proteins (p. 204). Strictly alkaptonuria is not a "harmless anomaly" (pp. 235, 239); in fact the authors refer later to the arthritis which may occur (p. 241). "Creatorrhœa" (pp. 180, 193) is treated too summarily, and "steatorrhœa" (p. 179) requires fuller definition. References in the index to diseases are very incomplete; many readers would probably welcome an "index of diseases" in preference to the "author index". These are but a few points in a volume into which has been compressed an enormous amount of valuable information. The printing, paper and paragraphing are good, and each chapter is concluded by a useful list of references. The book is excellent.

BAILEY'S TEXTBOOK OF HISTOLOGY. Eighth edition. Revised by ADOLPH ELWYN, A.M., and OLIVER S. STRONG, A.M., Ph.D. (Baillière, Tindall & Cox.) Pp. xvi + 746. Figs. 529. Price 31s. 6d. net.

This edition completes the revision that has entirely changed the book from the original Bailey's *Histology*. In their work the revisers have been assisted by an imposing array of American anatomists.

The addition of a chapter on the technique and results of Tissue Culture, including the use of the cinematograph in recording experiments, so ably carried out here at St. Bartholomew's, together with the deletion of a large section on the architectonics of the central nervous system, comprise the main alterations from the previous edition.

The relegation to different individuals of various subjects has produced surprisingly little lack of cohesion. They have each kept in mind the necessity of interpreting function by structure, and their aim unites them.

The fullness of the text makes the book too much for the average medical student, and its tendency to deal with histology as a science complete in itself would make it difficult for him to discover "which to indulge in and which be afraid of".

The Transatlantic element is emphasized in the style of production and general aroma. The table of contents and index are full and adequate. The illustrations by their multiplicity almost atone for their inferiority in comparison with several other of the well-known books; several of the diagrams are original and very useful indeed. The text is well arranged, classified in systems; descriptions rather fuller than the sketchy paragraphs on Development would enhance the value of the book.

The work is unlikely to take the place of our excellent British textbooks, but it would be useful as an "extra" to the advanced (and, in these times, wealthy) student.

POT POURRI. A Book of Poems. By H. S. GASKELL, M.B., B.Ch. (Stowmarket: J. Newby.) Pp. 112. Price, leather, 3s. 6d.; paper 2s.

In spite of her many opportunities and in spite of the wealth of material that must constantly pass through her hands, Medicine has seldom time enough to add her quota to Poetry's treasure-house. It is therefore a real pleasure to examine such a collection of gems as this "Pot pourri". And a pot-pourri it is, for here we see the good physician in many moods with varied interests, in fact anything that might attract from the routine of the consulting room——

"When, sick of sickness, bored with dull complaints,
Whelmed in an avalanche of dirty tongues,
Foul breaths, hot hands and coughs from wheezy lungs,
I struggle through them, though my spirit faints,
For there behind me, just outside the door,
Loud bronchial murmurs hint of dozens more——

"Then, when I feel a pulse, or wait till time
Pronounce the slim thermometer's decree,
I turn my eyes, pure hyacinth, to thee.
Stand there, my Soldier! Blue, aloof, sublime,
Thou hast the power to refresh a mind
Obsessed by humans, weary of its kind."

It is in this mood that he seems to turn to Nature and find there the recreation he needs.

The open fields, "cool whispering silences, chequered in sunlight and shade", running waters and trees——

"In the winds of the Uplands a-chase for the sea,
Five Poplars, Five Landmarks, Five Sisters we'll be"—

evening skies and the night wind, all reveal the poet in him. The humorist is introduced by a hiccuping housemaid, the world's heaviest lady, the sentimental lover, a wart on a bald gentleman's head—"wee, lone, forlorn, unwanted creature!" a child gambolling on his daddy's bed "At Seven A.M." and many others. Yet Comedy is not alone in inspiring him and often much more serious thought is seen, such as anger at a modern tendency to condone idleness—"Shall Britain wither at a Wastrel's frown?"—a love of beauty in shade, form and music, in "June night" and "Schön Rosmarin", and a sense of the hopeless tragedy of a murderer's last thoughts, "The Interim".

The versification is faultless and the poet's instruments are skilfully used. We find gentle satire, some real nonsense, several clever parodies, a few excellent examples of dialect (Suffolk, Irish, gypsy, cockney) and none of the faults of the minor poet—forced rhymes and false rhythm.

All of it is very engaging and entertaining, well worth the trifling cost, and our sole regret is that some of the best poems are so short and their number all too few.

A SHORT HISTORY OF SURGERY. By Sir D'ARCY POWER, K.B.E., F.R.C.S.(Eng.). (London: John Bale, Sons and Danielsson.) Pp. 91. Price 3s.

The Chinese have a saying, "To spend one evening with a Master is better than ten years with the books of lesser men".

Many books, large and small, have been written on the History of Medicine, but few can be trusted to give the main facts in the minimum of time. Here is a book for the man who only wishes to add to the art and science of his profession the touch of antiquity and the experience of centuries.

The author, a master both in his profession and in his study of history, can have no equal for such a work as this. How many must have been led into those pleasant byways by this kindly, expert guide, ostensibly for a moment, actually for a lifetime!

The little book introduces all the main facts in the history of Surgery in order of time. In spite of the necessity for summarizing, there is a wealth of interesting detail, and the style is always kept free from being a mere succession of lists and dates.

However slight his interest in the past, he would be indeed a foolish physician who would not have at least such a readable book as this in his library.

THE THEORY AND PRACTICE OF MASSAGE AND MEDICAL GYMNASTICS. By B. M. GOODALL-COPESTAKE. Fifth edition. (London: H. K. Lewis & Co., Ltd.) Pp. 332. Figs. 96. Plates 22. Price 12s. 6d. net.

"A physician must be experienced in many things, but assuredly also in rubbing . . . for rubbing can bind a joint that is too loose, and loosen a joint which is too tight".—*Hippocrates.*

The science of massage has been considered one of the additions to medicine. It is because of this, perhaps, that it has been left to the specialists to understand its principles and practice. Nevertheless, every practitioner must often need the knowledge of the appropriate times and methods of supplementing his own treatment.

The book has been written for the student masseuse, but would repay any time spent in its study by medical men. It deals with general principles and the medical and surgical conditions requiring massage, movements and remedial exercises. Fractures, dislocations, deformities, diseases of the respiratory, circulatory, alimentary, and, especially, nervous systems are each methodically and fully dealt with. The work is illustrated by a large number of excellent photographs and diagrams; especially noteworthy are a series of photographs new to this edition, demonstrating remedial exercises.

The alterations in this edition are only those needed to bring the book up to date in a rapidly advancing subject.

For its clarity and conciseness the book is to be recommended to all who will not have at their disposal the trained masseuse.

ACIDOSIS AND ALKALOSIS. By STANLEY GRAHAM, M.D., F.R.F.P.S., and NOAH MORRIS, M.D., B.Sc., D.P.H., F.R.F.P.S. (Edinburgh: E. & S. Livingstone.) Pp. xii + 203. Price 7s. 6d.

With the advent of more scientific methods of investigation, biochemistry is becoming an increasingly important subject in the knowledge of the physician. So quickly are the days of the physiology laboratory forgotten that it is usually regarded as one of the more difficult aspects of medicine. It is therefore a welcome study to read a book dealing faithfully with that simplest and yet most complex of all fundamentals, the acid-base equilibrium of the body, and which manages "to steer between the Scylla of simple formulæ and the Charybdis of higher mathematics", as the authors describe their endeavour.

A third of the book summarizes the theoretical side of the question; the remainder deals with the changes in acid-base equilibrium observed in disease and their treatment. The conditions considered include diabetes, nephritis, cyclical vomiting, tetany, anæsthetic acidosis, salicylate poisoning, many with special reference to the diseases of childhood.

There are a large number of excellent tables and three useful appendices. The description of the uses of ketogenic and anti-ketogenic diets is clear and helpful.

The authors have succeeded ably in the very difficult task of compressing all the results of modern research into a small and very readable book, keeping clear of unnecessary detail but omitting nothing of value.

The book is warmly recommended to the student both of physiology and of clinical medicine, and also to the qualified practitioner.

RECENT BOOKS AND PAPERS BY ST. BARTHOLOMEW'S MEN.

BROWN, W. LANGDON, M.D., F.R.C.P. "On Allergy and Some Allergic Diseases." *Practitioner*, December, 1932.

CHOPRA, R. N., M.A., M.D., I.M.S. (and DE, PREMANKUR and DE, NRIPENDRA NATH). *Moringa pterygosperma* (*N. O. Moringæ*). *Indian Journal Medical Research*, October, 1932.

——— (and CHOPRA, G. S., and GREWAL, K. S.). "Opium Habit in the Punjab," Part I. *Indian Journal Medical Research*, October, 1932.

CHRISTOPHERSON, J. D., C.B.E., M.D., F.R.C.P. "The Anatomy of Asthma as Disclosed by Lipiodol Investigations." *Lancet*, January 7th, 1933.

——— "Encysted Pedunculated Hæmatoma in the Pleural Cavity in Artificial Pneumothorax." *British Journal of Surgery*, January, 1933.

COCKAYNE, E. A., M.D., F.R.C.P. (and LANDER, T. P. LEE, M.R.C.P.). "Rickets Following an Attack of Acute Nephritis." *Archives of Disease in Childhood*, December, 1932.

DALE, Sir HENRY H., C.B.E., M.D., F.R.C.P., F.R.S. "The Relation of Physiology to Medicine in Research and Education." *British Medical Journal*, December 10th, 1932.

DUNHILL, T. P., C.M.G., M.D. *See* Elmslie, Fraser, Dunhill, Vick, Harris and Dauphinee.

ELMSLIE, R. C., O.B.E., M.S., F.R.C.S. "Ætiological Factors in Osteo-Arthritis of the Hip-Joint." *British Medical Journal*, January 7th, 1933.

——— and FRASER, F. R., DUNHILL, T. P., VICK, R. M., HARRIS, C. F., and DAUPHINEE, J. A. "The Diagnosis and Treatment of Generalized Osteitis Fibrosa with Hyper-parathyroidism." *British Journal of Surgery*, January, 1933.

FLETCHER, H. MORLEY, M.D., F.R.C.P. "Influenza." *Practitioner*, January, 1933.
FRASER, FRANCIS R., M.D., F.R.C.P. See Elmslie, Fraser, Dunhill, Vick, Harris and Dauphinee.
GROVES, ERNEST W. HEY, M.D., F.R.C.S. "Surgical Treatment of Osteo-Arthritis of the Hip." *British Medical Journal*, January 7th, 1933.
HARRIS, C. F., M.D., F.R.C.P. *See* Elmslie, Fraser, Dunhill, Vick, Harris and Dauphinee.
HOSFORD, JOHN P., M.S., F.R.C.S. "Prognosis in Fractures of the Carpal Scaphoid." *Proceedings of the Royal Society of Medicine*, May, 1931.
——— "Fractures in the Region of the Ankle-Joint." *Proceedings of the Royal Society of Medicine*, May, 1932.
——— "Simple Orthopædic Appliance." *Pharmaceutical Journal and Pharmacist*, April 30th, 1932.
MANSELL, R. A., M.B.E., R.A.M.C. "Some Cases of Malaria." *Journal Royal Army Medical Corps*, January, 1933.
MAXWELL, J. PRESTON, M.D., F.R.C.S., F.C.O.G. "Vitamin Deficiency in the Ante-Natal Period, its Effects on the Mother and the Infant." *Journal Obstetrics and Gynæcology British Empire*, Winter No., 1932.
MYERS, BERNARD. "Infantile Scurvy." *Proceedings of the Royal Society of Medicine*, November, 1932.
——— "Cephalhæmatoma Externum and Meningocele." *Proceedings of the Royal Society of Medicine*, November, 1932.
NICOL, W. D., M.B., M.R.C.P., D.P.M. "A Review of Seven Years' Malaria Therapy in General Paralysis." *Journal of Mental Science*, October, 1932.
——— "A Study of Induced Malignant Tertian Malaria." (Jointly with S. P. JAMES and P. G. SHUTE.) *Proceedings of the Royal Society of Medicine*, June, 1932, *25*.
NIXON, J. A., C.M.G., M.D., F.R.C.P. "Provincial Medical Journals." *Bristol Medico-Chirurgical Journal*, Winter, 1932.
PARAMORE, R. H., M.D., F.R.C.S. "The Hepatic Lesions." *Journal Obstetrics and Gynæcology British Empire*, Winter No., 1932.
POWER, Sir D'ARCY, K.B.E., F.R.C.S. "Some Bygone Operations in Surgery XI: The Removal of a Sebaceous Cyst from King George IV." *British Journal of Surgery*, January, 1933.
ROSS, J. PATERSON, M.S., F.R.C.S. "The Anatomy of the Spino-thalamic Tract in Relation to Cordotomy." *Proceedings of the Royal Society of Medicine*, May, 1931.
ROXBURGH, A. C., M.D., F.R.C.P. "A Note on Thallium Acetate." *Clinical Journal*, December 28th, 1932.
SHARP, B. BUCKLEY. "Tabes not Prevented by Naturally Acquired Malaria." *British Medical Journal*, December 24th, 1932.
SHAW, WILFRED, M.D., F.R.C.S., F.C.O.G. "Ovarian Carcinomata." *Journal Obstetrics and Gynæcology British Empire*, Winter No., 1932.
SPARKS, J. V., M.R.C.S., D.M.R.E. (and WOOD, F. G., M.B., D.M.R.E.). "Radiographic Appearances of the Lungs in Chronic Bronchitis and in Emphysema." *Lancet*, December 31st, 1932.
SPENCE, A. W., M.D., M.R.C.P. "The Effect of Vitamin Deficiency on the Structure of the Thyroid and Thymus Glands." *British Journal of Experimental Pathology*, 1932, *13*.
——— "The Basal Oxygen Consumption of Goitrous and Non-Goitrous Rats." *British Journal of Experimental Pathology*, 1932, *13*.
——— "Further Studies on the Ætiology of Simple Goitre, with Particular Reference to the Action of Cyanides." (Jointly with D. Marine, E. J. Baumann and A. Copra.) *Proceedings of the Society of Experimental Biology and Medicine*, 1932, *29*.
——— "Production of Goitre and Exophthalmos in Rabbits by the Administration of Cyanide." (Jointly with D. Marine and A. Cipra.) *Proceedings of the Society of Experimental Biology and Medicine*, 1932, *29*.
——— "Production of Thyroid Hyperplasia in Rats and Mice by the Administration of Methyl Cyanide." (Jointly with D. Marine.) *Proceedings of the Society of Experimental Biology and Medicine*, 1932, *29*.
THEOBALD, G. W., M.D., M.R.C.P., F.R.C.S.(Edin.). "The Incidence of Albumin and Sugar in the Urine of Normal Women." *Lancet*, December 24th, 1932.
——— "The Intraperitoneal Pressure and its Changes during Pregnancy." *Journal Obstetrics and Gynæcology British Empire*, Winter No., 1932.
VICK, REGINALD M., O.B.E., F.R.C.S. *See* Elmslie, Fraser, Dunhill, Vick, Harris and Dauphinee.

CHANGES OF ADDRESS.

BROWN, REGINALD, Fair Ways, Buckingham Road, Shoreham-by-Sea, Sussex.
GOODWIN, T. S., Church Missionary Society Hospital, Hangchow, Chekiang, China.
MASTERMAN, E. W. G., 2, De Crespigny Park, Denmark Hill, S.E. 5. (Tel. Rodney 2437.)
PRICE, R. K., 28, Montpelier Crescent, Brighton.
THOMPSON, V. C., 114, Harley Street, W. 1.
VAUGHAN, A. L., Manscross, Great Yeldham, Essex.

APPOINTMENTS.

BELL, ARTHUR C., F.R.C.S., M.C.O.G., appointed Junior Out-Patient Surgeon, Queen Charlotte's Maternity Hospital.
VARTAN, C. K., F.R.C.S., appointed Registrar to the Chelsea Hospital for Women.

BIRTHS.

BATEMAN.—On March 13th, 1933, at Park House, Leigh, Kent, to Joan (*née* Wilson), wife of Dr. Henry F. Bateman—a daughter.
BOLTON.—On January 14th, 1933, at the Methodist General Hospital, Hankow, Central China, to Eileen Margaret, wife of Ralph Bolton, M.R.C.S., L.R.C.P.—a son.
GONIN.—On March 14th, 1933, at 236, Felixstowe Road, Ipswich, to Ohna, wife of Dr. M. Willett Gonin—a son.
GREGSON WILLIAMS.—On March 24th, 1933, at Queen's Road, Hertford, to Patience, wife of Dr. A. Gregson Williams—a daughter.
HUME.—On March 7th, 1933, at 13, Wildwood Road, N.W. 11, to Marjorie, wife of J. Basil Hume, M.S., F.R.C.S.—a daughter.
JORY.—On March 24th, 1933, at 116, Hornsey Lane, Highgate, to Daphne, wife of Norman Jory, F.R.C.S.—a son.
LLEWELLYN.—On March 1st, 1933, at 27, Welbeck Street, to Irene, wife of E. E. Llewellyn, M.D., The Corner House, Virginia Water—a son.
MCKINSTRY.—On March 13th, 1933, to Sibyl Mildred (*née* Holman), wife of Dr. W. K. McKinstry, of 3, Gwendwr Road, W. 14—a daughter.
WALKER.—On February 23rd, 1933, at the Louise Margaret Hospital, Aldershot, to Maureen, wife of Mr. Harry Norman Walker, Lieut. R.A.M.C., of Outwood, Birch Avenue, Fleet, Hants—a daughter (Pamela), premature. Survived eight hours.
WEAKLEY.—On February 26th, 1933, at Alexandria, Egypt, to Honora (*née* Ruffer), wife of Dr. A. Leonard Weakley—a son.

MARRIAGES.

GREEN—HODDER.—On March 22nd, 1933, at All Souls' Church, Harlesden, Leslie Ernest Green, eldest son of Mr. and Mrs. Ernest C. Green, of Stoke Newington, to Ethel Sheila Hodder, elder daughter of Mr. and Mrs. H. R. Hodder, of Harlesden.
JENKYN-THOMAS—MELLOR.—On March 15th, 1933, at St. Barnabas' Church, Golders Green, John Edwin Jenkyn-Thomas, B.A. (Cantab.), M.R.C.S., L.R.C.P., younger son of Mr. and Mrs. W. Jenkyn-Thomas, Finchley, N. 3, to Frances, only daughter of Mr. and Mrs. Richard Mellor, 14, Cranbourne Gardens, Golders Green, N.W. 11. Future address: 179, Green Lane, Morden, Surrey.

DEATHS.

LOMAX.—On March 17th, 1933, at Windlesham House, Shoreham-by-Sea, Sussex, Montagu Lomax, M.R.C.S., L.R.C.P., late of the Council for Lunacy Reform.
SOWRY.—On March 12th, 1933, at King Street, Newcastle, Staffs, George Herbert Sowry, M.D., F.R.C.S., M.R.C.P., aged 62.

NOTICE.

All Communications, Articles, Letters, Notices, or Books for review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, *St. Bartholomew's Hospital, E.C. 1.*

The Annual Subscription to the Journal is 7s. 6d., including postage. Subscriptions should be sent to the MANAGER, MR. G. J. WILLANS, M.B.E., B.A., *at the Hospital.*

All Communications, financial or otherwise, relative to Advertisements ONLY should be addressed to ADVERTISEMENT MANAGER, *The Journal Office, St. Bartholomew's Hospital, E.C. 1. Telephone: National 4444.*

St. Bartholomew's Hospital Journal.

"Æquam memento rebus in arduis
Servare mentem."
—*Horace*, Book II, Ode iii.

VOL. XL.—No. 8.] MAY 1ST, 1933. PRICE NINEPENCE.

CALENDAR.

Mon., May 1.—Special Subjects: Clinical Lecture by Mr. Sydney Scott.
Tues., ,, 2.—Prof. Fraser and Prof. Gask on duty.
Wed., ,, 3.—Surgery: Clinical Lecture by Sir C. Gordon-Watson.
Fri., ,, 5.—Medicine: Clinical Lecture by Lord Horder. Lord Horder and Sir C. Gordon-Watson on duty.
Sat., ,, 6. Cricket Match *v.* Bickley Park. Home.
Mon., ,, 8.—Special Subjects: Clinical Lecture by Mr. Bedford Russell.
Tues., ,, 9.—Dr. Hinds Howell and Mr. Harold Wilson on duty.
Wed., ,, 10.—**View Day.**
Fri., ,, 12.—Medicine: Clinical Lecture by Dr. Hinds Howell. Dr. Gow and Mr. Girling Ball on duty.
Sat., ,, 13.—**Annual Sports,** Winchmore Hill. Cricket Match *v.* Winchmore Hill. Away.
Mon., ,, 15.—Special Subjects: Clinical Lecture by Mr. Elmslie.
Tues., ,, 16.—Dr. Graham and Mr. Vick on duty.
Wed., ,, 17.—Surgery: Clinical Lecture by Mr. Girling Ball.
Fri., ,, 19.—Medicine: Clinical Lecture by Dr. Graham. Prof. Fraser and Prof. Gask on duty.
Last day for receiving matter for the June issue of the Journal.
Sat., ,, 20.—Cricket Match *v.* Metropolitan Police. Away.
Mon., ,, 22.—Special Subjects: Clinical Lecture by Mr. Just.
Tues., ,, 23. Lord Horder and Sir C. Gordon-Watson on duty.
Wed., ,, 24.—Surgery: Clinical Lecture by Mr. Harold Wilson.
Thurs., ,, 25.—Cricket Match *v.* M.C.C. Home.
Fri., ,, 26.—Medicine: Clinical Lecture by Lord Horder. Dr. Hinds Howell and Mr. Harold Wilson on duty.
Sat., ,, 27.—Cricket Match *v.* St. John's College, Cambridge. Away.
Mon., ,, 29.—Special Subject: Clinical Lecture by Mr. Bedford Russell.
Tues., ,, 30.—Dr. Gow and Mr. Girling Ball on duty.
Wed., ,, 31.—Surgery: Clinical Lecture by Mr. Girling Ball.

EDITORIAL.

THE introduction of goldfish (we are told by experts that they are really golden carp) into the Fountain has brought even greater beauty than before to the Square, and fresh interest for those leisurely ones who frequent the Fountain's edge as a *rendezvous* for hospital gossip. There are some who would have wished that a more ferocious species of fish had been chosen for the benefit of those celebrities who occasionally bathe in these sacred waters involuntarily. Further additions will, no doubt, follow, and we would suggest that other mammals, reptiles and fish be introduced into their appropriate places after careful consultation with the Biology Department. The subterranean recesses of Casualty, already known as the "Warren", might prove a happy habitation for conies, or the roof of Elizabeth as a nesting-place for storks.

Sir Francis Bacon tells us in his *History of Life and Death* that a carp's life is usually ten years, but we have already had reason to doubt this, and wonder how many survivors there will be to show our friends on View Day. For the benefit of those who are not conversant with the laws of Ichthyology we have turned up our Walton to gain advice as to the proper feeding and bait for these fish, and we find, "The carp bites either at worms or at paste, and of worms I think the blewish Marsh or Meadow worm is best, but possibly another worm not too big may do as well, and so may a green Gentle; and as for pastes, there are almost as many sorts as there are Medicines for the Toothache, but doubtless sweet pastes are best".

* * *

The Dean has kindly furnished us with a list of recent subscriptions to the College Appeal, and writes as follows:

DEAR MR. EDITOR,

I send you an up-to-date list of subscriptions, and you will see that it has lengthened considerably since my last letter. My surmise was evidently correct. Many Bart.'s men were waiting until it was known that we had got the site. But, as you will agree, the figure is still a long way below what it ought to be. I do most sincerely hope that the publicity afforded by your columns will result in an increase in the number of Bart.'s subscribers, no matter what the size of their donations may be. I am only anxious to get every man's name down, so that in generations to come it may be known that in these times of difficulty Bart.'s men found themselves able to support their old School.

I am sorry that we cannot yet begin to make any arrangements with a view to the use of the ground for athletic purposes. It is possible, however, that before the next issue of the JOURNAL something in this direction may be done.

The Women's Guild of St. Bartholomew's Hospital is holding a Fair on May 18th and 19th, and I am given to understand that a very large part, if not the whole, of their takings will be given to the College Appeal Fund. I hope, therefore, that the Students will do their best to help the Guild, not only by attending the Fair themselves but by getting their friends to come.

I take this opportunity of thanking most heartily the members of the Rugby Football Club and their friends who arranged and supported the "seven-a-side" programme at Winchmore Hill and the Dance held in the evening. Their efforts added a very considerable sum of money to our Funds. So grateful am I, indeed, that I hope they may be able to organize other attractions on similar lines during the course of the year.

We have got to buck up and collect the whole of the money, which has now become a debt. You cannot do too much in the way of stimulating your friends. The appeal, as soon as the contract is signed, will be extended on a much wider basis, for we intend to ask the public for help. Any suggestions which may come from the Students themselves will be most sympathetically considered by the College Council and myself.

Yours sincerely,

W. GIRLING BALL,

Dean of the Medical College.

COLLEGE APPEAL FUND.

	£	s.	d.			†
Staff	11,964	15	9	(68)		
Demonstrators	1,504	1	0	(65)		
Students	394	19	7	(447)		
Old Bart.'s men:						†
Bedfordshire	5	10	6	(2)	.	(26)
Berkshire	80	0	0	(11)	.	(37)
Carried forward	£13,909	6	10			
Brought forward	£13,909	6	10			†
Buckinghamshire	63	13	0	(7)	.	(29)
Cambridgeshire	149	13	0	(10)	.	(42)
Cheshire	1	1	0	(1)	.	(26)
Cornwall	22	2	0	(5)	.	(36)
Cumberland	5	0	0	(1)	.	(6)
Derbyshire	17	12	0	(3)	.	(17)
Devonshire	389	13	0	(37)	.	(117)
Dorset	16	8	0	(8)	.	(30)
Durham	16	6	0	(3)	.	(11)
Essex	225	15	6	(15)	.	(69)
Gloucestershire	108	13	0	(6)	.	(66)
Hampshire	320	19	0	(31)	.	(134)
Herefordshire	7	2	0	(2)	.	(11)
Hertfordshire	52	5	0	(8)	.	(73)
Huntingdonshire						(1)
Isle of Wight	132	5	0	(7)	.	(25)
Kent	420	13	0	(35)	.	(146)
Lancashire	30	4	0	(8)	.	(82)
Leicestershire	123	2	0	(4)	.	(28)
Lincolnshire	29	8	0	(9)	.	(25)
Middlesex	350	12	0	(13)	.	(68)
Norfolk	149	7	6	(17)	.	(60)
Northamptonshire	54	4	0	(4)	.	(17)
Northumberland	101	1	0	(2)	.	(11)
Nottinghamshire						(28)
Oxfordshire	164	8	0	(13)	.	(29)
Rutland						(2)
Shropshire	25	4	0	(6)	.	(22)
Somersetshire	447	4	0	(21)	.	(43)
Staffordshire	62	12	0	(4)	.	(37)
Suffolk	257	1	0	(14)	.	(46)
Surrey	392	4	0	(35)	.	(180)
Sussex	197	9	0	(31)	.	(170)
Warwickshire	172	14	0	(14)	.	(56)
Westmorland	1	0	0	(1)	.	(5)
Wiltshire	92	11	0	(10)	.	(26)
Worcestershire	142	8	6	(17)	.	(27)
Yorkshire	254	19	6	(19)	.	(101)
Wales	24	3	0	(6)	.	(130)
London	2,369	16	8	(122)	.	(971)
Channel Islands	10	0	0	(1)	.	(9)
Scotland	12	2	0	(3)		
Abroad	37	4	0	(6)		
South Africa	209	3	6	(8)		
Canada	75	0	0	(3)		
East Africa	4	4	0	(2)		
West Africa	140	5	0	(4)		
India	102	0	0	(9)		
Syria	2	2	0	(1)		
U.S.A.	5	0	0	(1)		
Ireland	14	14	0	(3)		
North Africa	1	0	0	(1)		
Malay States	6	0	0	(2)		
China	17	2	0	(3)		
France	50	0	0	(1)		
Trinidad	20	0	0	(1)		
West Indies	2	0	0	(1)		
Services	478	2	0	(23)		
*Others	16,645	13	4	(101)		
	£39,131	12	4			

*These figures include:	£	s.	d.
University of London	5000	0	0
Unilever Bros.	500	0	0
League of St. Bartholomew's Nurses	25	0	0
The Executors of the late Alfred de Rothschild, Esq.	2000	0	0
Rahere Lodge	105	0	0
Corporation of the City	1000	0	0
Fishmongers' Company	262	10	0
Mercers' Company	1000	0	0
Ironmongers' Company	100	0	0
St. Bartholomew's Hospital Reports	250	0	0
The Haberdashers' Company	50	0	0
The Goldsmiths' Company	500	0	0

† Number of Bart.'s men in County.

THE SEVENTH DECENNIAL CLUB.

The Annual Dinner of this Club will be held on Wednesday, July 5th, at the Trocadero Restaurant, Regent Street, at 6.45 for 7.15 p.m. The Hon. Secretaries are Sir James Berry and Dr. Owen Lankester.

* * *

ST. BARTHOLOMEW'S HOSPITAL WOMEN'S GUILD.

We would remind readers that the Women's Guild will hold a Fair and Jumble Sale on May 18th and 19th in the old Medical Block as announced in our last issue. A large proportion of the takings will be handed to the College Appeal Fund, so it is hoped that everybody will support the occasion.

* * *

PAST *v.* PRESENT MATCH.

The annual cricket match between the Past and Present will be played at Winchmore Hill on Saturday, June 10th. Will any old Bart.'s man wishing to play please communicate with Dr. Geoffrey Bourne?

* * *

The Hospital Athletic Sports will be held at Winchmore Hill on Saturday, May 13th.

OBITUARY.

THE LATE SISTER HOPE.

THE sudden and lamented death of Miss N. W. Powell, Sister Hope, acquires an additional touch of pathos from the fact that all arrangements had been made for the presentation to her, only a few days later, of a gift expressive of the warm friendship and high esteem of a number of those who had been associated with her in her work as Sister of Luke, Mark and Hope Wards.

Only as recently as in the September number of this Journal, at the time of her retirement, there appeared appreciations from members of the active and consulting staffs, and an obituary notice after so short an interval must needs contain some repetitions. Nevertheless a few supplementary words may not be out of place from another who, as a Physician to the Hospital, and for a time as Director of the Medical Unit, learnt to know her well and to appreciate her high qualities.

Miss Powell was a woman of conspicuous ability and of forceful personality. Strangers often found her difficult of approach. She had strong likes and dislikes, and those with whom she came into contact seemed to fall into one or other class. To those whom she liked, whether patients, students or members of the staff, she was a most valued and loyal friend, but those who did not fall into that group may find it difficult to understand the warmth with which others speak of her and of her work.

Undoubtedly there are Bartholomew's men in many parts of the world who will cherish the memory of Sister Hope, and will recall with gratitude her sympathy, and the helpful hints and valued bits of teaching which they had from her. Many patients who were under her care will cherish memories of kindly acts and help, of devoted nursing and of timely encouragement. I retain a vivid memory of the day and night vigil at the bedside of a poor boy whose respiratory muscles were involved by diphtheritic paralysis. In that case House Physician and Sister fought tooth and nail for the patient's life, as long as any hope remained.

As a nurse she excelled, not only in carrying out routine, but also in the devising of new and better methods. Many of these are embodied in her little book for nurses, which has achieved well-merited success, and they were taught by her to successive generations of students and nurses.

Miss Powell possessed a truly scientific mind. She wanted to find out and not merely to learn; and her meticulous care, accuracy and understanding co-operation were invaluable aids in any investigations carried out in the wards. The charts which she made, in inks of various colours, were masterpieces of their kind, and in some cases brought out important points which, without them, might have been overlooked.

But devoted as she was to her work she had many outside interests. Amongst these a love of travel, and a knowledge of languages, revealed when foreign visitors came to the ward. Nor must mention be omitted of her devotion to her various pets, amongst which the starling "Shadrach" was in recent years a familiar figure.

She did not live to enjoy her well-earned leisure, but leaves behind her a cherished memory, and a record of work well and truly done.

A. E. G.

TWO NOTES ON THE ACUTE ABDOMEN.

1. ATYPICAL DIFFUSE PERITONITIS.

"IN whatever light we consider an inflammation of the peritoneum that is capable of producing suppuration, it is one of the most dangerous diseases we can meet with. How far in such cases it might appear desirable to make an opening in the abdomen and to throw in warm water repeatedly to wash out the matter I will not undertake at present to determine." (*John Hunter.*)

§

Under two entirely different conditions acute diffuse peritonitis may occasionally lead to a somewhat paradoxical clinical picture differing markedly from the classical type. The first occurs when peritonitis develops in a patient who is already suffering from some serious acute or chronic debilitating disease; and the second as a post-operative infection following some intraperitoneal operation. The diagnosis of spreading peritonitis arising in either of these two cases is frequently a matter of great difficulty, and to be fully aware that the "peritoneal reaction" in these instances may be highly atypical is a step in the right direction. Both in the debilitated patient and in the post-operative type peritonitis is always of grave import, but nevertheless, a timely diagnosis may save the patient's life. Where the post-operative type leads to a fatal termination, the patient only too often comes to post mortem without any suggestion that all was not well with the peritoneum Such cases are often regarded clinically as being due to post-operative cardiac failure.

At the outset I would make it clear that peritonitis in both the debilitated and in the post-operative groups may give rise to a clinical picture which leads to no diagnostic difficulty. With such cases I am not here concerned. Although in the two groups the clinical background is so different, they are here considered together because they both present great similarities in their response to peritoneal infection and in the resulting clinical picture.

Post-operative Group.

In this group there is a recent history of an intraperitoneal operation—generally some operation which has involved a part of the alimentary tract, but by no means always so. In about the first thirty-six hours or more any untoward symptoms are frequently attributed to the immediate effect of the operation or the anæsthesia. Following this, there is a period in which it is apparent that all is not well with the patient, but it is difficult to say exactly what is wrong. There is moderate increase in the pulse-rate, and there may be a mild degree of irregular fever and the respirations are increased. A little nausea or vomiting may be present, but frequently the patient is reported as taking his food fairly well. There is practically no spontaneous abdominal pain, and on examination rigidity and tenderness are absent, but some distension, abnormal dullness of the flanks or pelvis may be present.

Debilitated Group.

Under this heading are classified cases of peritonitis occurring in old age or during the course of some serious disease such as pulmonary tubercle, diabetes, advanced renal or malignant disease, typhoid or other prolonged fever. In this group also, the symptoms of onset of peritonitis and its physical signs may be highly atypical.

Physical Signs.

In what we regard as health the body reacts in certain characteristic fashion to bacterial insult of the peritoneum, and with a condition in which there is sudden onset of abdominal pain, associated with rigidity and tenderness, we recognize the picture of an "acute abdominal emergency." This picture, which in its characteristic form represents such a sharply defined clinical type, may, in the post-operative patient or in the presence of debilitating disease, be seriously distorted. Although there are certain points of difference in the peritonitis occurring respectively in these two types, the points of resemblance are greater.

1. *Pain.*—Post-operative diffuse peritonitis may at times run an almost entirely painless course, and careful questioning of the patient may elicit nothing more than perhaps an admission of occasional abdominal discomfort.

In the debilitated group peritonitis may similarly be largely free from pain, whether the condition starts as an infection of some intraperitoneal viscus, or whether as the result of some gross visceral perforation. As an example of the latter may be quoted cases of typhoid perforation. In such patients, whose sensory system is seriously blunted by the profound toxæmia of the typhoid, perforation of the small intestine may occur without any change in the abdominal picture or the patient's subjective sensations.

2. *Rigidity.*—Reflex rigidity of the abdominal wall has been so stressed as the most important physical sign in peritoneal infection that the fact that such infection can, in certain circumstances, occur in the absence of rigidity is often overlooked, and a post mortem demonstration of a clinically unsuspected diffuse peritonitis countered with the remark, "Well, there was never any rigidity at all". That rigidity of the abdominal wall is a pathognomonic physical sign of peritoneal infection is true, but we must not be led from this to postulate that peritonitis cannot occur in the absence of rigidity. In many cases of peritonitis in the post-operative period and in the debilitated rigidity may be entirely absent, or be present for so short a time as almost to escape detection.

3. *Tenderness.*—In both groups of patients the sensory mechanism may be seriously depressed, and just as spontaneous subjective pain is frequently absent or slight, so also is tenderness on abdominal examination.

With the general diagnosis of acute peritonitis I am not here concerned. There are such a variety of factors which may affect the clinical picture, and the only object of this note is to stress a few points which are often lost sight of. Peritonitis in the debilitated and in the post-operative patient may certainly give rise to the classical clinical picture which is easily recognized, but since the resulting picture is frequently so different in its symptoms and signs, and occurs sufficiently often to be of importance, a knowledge of the above points in its clinical recognition is valuable.

2. SHIFTING DULLNESS AND THE SURGEON.

Tradition and the text-book die hard, and the evil that men do lives after them. Nowhere is this truer than in the inherent dogmatism of all sound undergraduate medical and surgical teaching. An example of this kind is to be found in the frequency with which, both amongst students and practitioners, the physical sign of shifting dullness in the flanks is considered to be a valuable indication of intraperitoneal fluid in acute abdominal conditions. There are, however, very grave objections to any attempt being made to demonstrate this sign in acute abdominal disease; the necessary manipulations are very painful to the patient; the demonstration of the shifting nature of the fluid rarely succeeds; and if the demonstration does succeed it certainly spreads the inflammatory exudate to all parts of the peritoneum.

Firstly, as regards the patient. An acute inflammatory intraperitoneal lesion is extremely painful, and conscious avoidance of movement assists abdominal rigidity in an attempt to diminish pain. The manipulations necessary to elicit the physical sign of shifting dullness are a source of unnecessary distress and pain to the patient.

Secondly, in acute abdominal disease the procedure rarely succeeds. The reason for this is that in acute diffuse peritonitis the resulting exudate is rarely entirely "free", as is the transudate in cardiac or renal disease, or in portal obstruction, and it may be partly localized by inflammatory adhesions, partly by the associated distension of coils of intestine, and it is partly held in position by the rigidity of the abdominal muscles. With all these mechanical factors mitigating against the successful elucidation of shifting dullness, it is no wonder that even in the presence of large amounts of intraperitoneal fluid, the most persistent and painful attempts to make it shift are so often doomed to failure from the very nature of the conditions inside the peritoneal cavity.

Thirdly, if fluid is present in the peritoneal cavity, and if it can be made to shift by the usual manœuvres, it certainly cannot be regarded as a sound surgical procedure to carry infectious material to remote and possibly uninfected portions of the peritoneum.

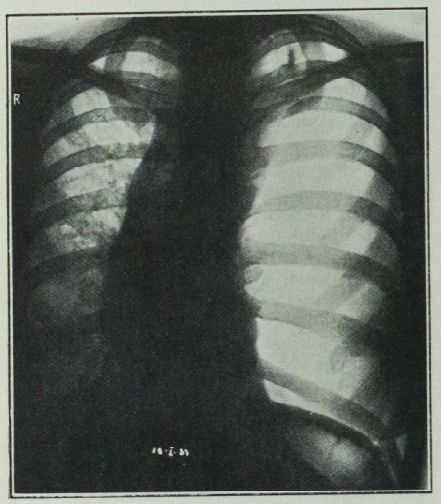
For these three reasons any attempt to elicit shifting dullness in the case of the acute abdomen should be relegated to the past, on account of its painfulness, its uncertainty, and its risks. On the other hand, in medical diseases the method provides a most valuable sign of intraperitoneal free fluid, but in these cases the fluid is invariably more watery, it is not held in position by adhesions, distended intestines and a rigid abdominal wall, its shifting does no harm to other parts of the peritoneum, and acute abdominal pain is not usually present.

REGINALD T. PAYNE.

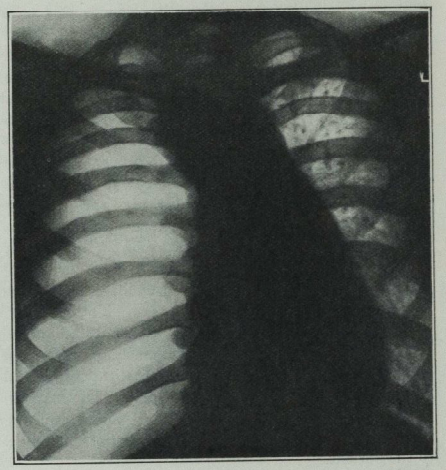
THE IMPORTANCE OF X-RAY CONTROL IN PNEUMOTHORAX CASES.

IT is impossible to emphasize too greatly the importance of adequate X-ray control during the course of treatment of a case of pulmonary tuberculosis by artificial pneumothorax. We have no hesitation in laying down as a general principle that all patients should be screened, if possible, before and after each filling, and at any rate always before each filling. It must be remembered that cases differ very much indeed according to the age of the patient, the type of disease present, the natural elasticity, or the reverse, of the tissues, and whether or not there has been an effusion. In a young person, with an elastic mobile mediastinum, it is very easy indeed to overfill the pneumothorax without being aware of it. In such a case a great deal of gas may be introduced without the pressure in the manometer rising very much; in fact, a reading of the manometer alone may give one quite a false idea as to what is really happening. When tissues are young and elastic, the whole mediastinum, together with the heart, may be pushed right over, leaving the spinal column bare, and even showing an air-space between it and the mediastinum, on the uncollapsed side. We have met with several such cases during our many years' experience of pneumothorax work, and below we append three radiographs showing the occurrence of this possibility. In all three cases it is seen that the mediastinum is pushed over. In one case (Case 2) the pneumothorax was on the right side, but the whole mediastinum was so dislocated over to the left that the left recurrent laryngeal nerve became completely paralyzed. All three cases were young people. Case 1 is a woman, æt. 23, Case 2 a young man, æt. 26, and Case 3 a woman, æt. 27. In the first two cases

fillings had been carried out without due X-ray control. On arrival in Davos the expansion of the gas, which occurred on coming up to a height of 5000 ft., made matters worse; both patients became extremely short of breath, could not lie down in bed, and both had to be decompressed at once. Case 2 (referred to above) was almost aphonic owing to paralysis of the left recurrent laryngeal nerve. He has now almost recovered his voice, but only owing to the fact that the right vocal cord has moved across to meet the left one, which occurrence has, in some measure, compensated for the



CASE 1.



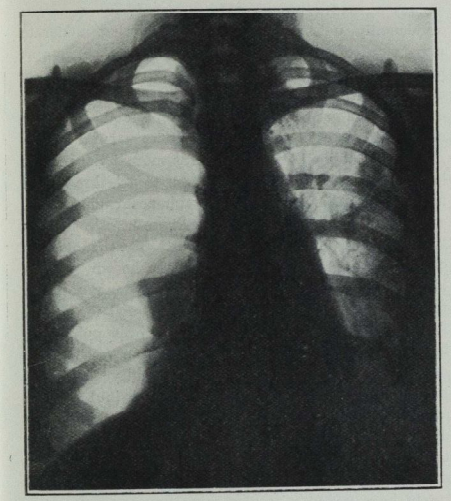
CASE 2.

paralysis of the left cord. This paralysis, however, is still present. In cases where the tissues are more resistant, and especially where there has been an effusion, this danger of overfilling does not exist to the same extent. The mediastinum is much more rigid and not easily displaced, and as a result much less air is required to raise the pressure in the manometer. In such a case the manometer reading is a much more reliable indication of what is happening. When the tissues are very elastic, one might compare the pneumothorax fillings to what happens on blowing up a child's toy balloon and where they are more resistant, to the blowing up of a football. We have tried to make it clear that there exists a real danger in carrying out indiscriminate pneumothorax fillings, relying on the manometer alone, and not controlling the procedure by frequent screen and radiographic examinations.

Case 3, female, æt. 27, early pneumothorax on right side, illustrates very plainly the need for constant X-ray control, especially in early pneumothorax cases (at the commencement of treatment). With only a few small initial fillings, the lung, in this instance, collapsed completely, and retracted with extraordinary rapidity, causing quite unpleasant symptoms, such as giddiness, sickness and tachycardia. It was only revealed by X-ray examination that the collapse had quickly become quite complete, the heart and mediastinum being displaced, in spite of the smallness of the initial fillings. The manometer in this instance always showed a marked negative pressure, and was therefore quite misleading. If the ordinary routine had been followed in this case much damage might have been done, especially to the heart, by dislocating it. It was only X-rays which really revealed the state of the pneumothorax, and showed the necessity for great care.

It is very necessary to exercise frequent X-ray control during the course of an effusion in artificial pneumothorax. These effusions vary very much. Sometimes they remain for a long period, and are absorbed slowly, but occasionally they disappear with unexpected rapidity. Unless a gas replacement is performed in time, the lung may rapidly re-expand and become adherent to the chest-wall, and therefore there would be a danger of losing the artificial pneumothorax. We have seen this happen more than once. Such an occurrence is easily obviated by the judicious employment of X-ray control.

Another important matter is the following: When considering the advisability of discontinuing treatment, and letting out a pneumothorax, it is necessary to employ careful radiographic observation. The lung should be let out, say, to about half-way, and a radiograph then taken. If there is any reason to suppose from the appearance of the radiograph, or the reappearance of symptoms, that activity is recommencing, or that a cavity, for which the pneumothorax was performed, is not yet closed, the lung must be re-collapsed and the treatment continued for a further period. We regard this question of X-ray observation, when allowing the lung to re-expand, of the very greatest importance. The whole treatment of two or three years may be rendered ineffective, unless careful control is exercised. In short, the lung must not be allowed to re-expand completely without periodical X-ray control.



CASE 3.

There is yet another point to be considered, and that is the extreme value of stereoscopic radiography in pneumothorax cases, especially in those which are incomplete, owing to the presence of adhesions. In many cases the pneumothorax is rendered ineffective and inefficient owing to the fact that there is a cavity in the lung, which is still uncollapsed because of the presence of an adhesion or adhesions, which keep it open. When considering the possibility and advisability of dividing these adhesions, in order to obtain a complete and effective collapse of the lung, the value of stereoscopic radiography cannot be over-estimated. It shows, in a very graphic manner, the position and number of the adhesions present, and acts as a very valuable guide to the operator.

CONCLUSIONS.

(1) Very careful X-ray control is essential in pneumothorax work.

(2) This is insufficiently realized, as shown by Cases 1 and 2.

(3) It is advisable to screen every case before and after each filling.

(4) The chief value of X-ray control is to obviate the occurrence of undue displacement of the heart and mediastinum, with its dangerous sequels, although other valuable information is also gained, such as the presence, absence or disappearance of fluid.

(5) In cases with "resistant mediastina" (which condition usually follows an effusion), the danger of dislocation of the heart and mediastinum is much less marked, and the manometer readings are more dependable.

(6) X-ray observation is very necessary when discontinuing treatment in pneumothorax cases.

(7) Stereoscopic radiography is of great value in localizing adhesions in pneumothorax cases, especially when division of these is contemplated.

B. HUDSON.
P. G. SUTTON.

Davos-Platz;
April, 1933.

VITAMINS AND ALL THAT.

NO one can have failed to observe that advertising during the past ten years has enormously increased in extent and ingenuity. A rather less striking but equally noteworthy change has been an enlargement of its scope, particularly in what may be called a semi-medical direction. We are still, of course, plagued with the most fraudulent and audacious patent medicine advertising of any civilized country, but for that we have only the imperfection of our laws to thank; there is little new in this except a prompt exploitation of the latest orthodox medical discoveries or fashions.

What is new, at least on its present scale, is the anxiety of the great world of commerce to safeguard our health; the "preventive ideal" seems almost to have made greater strides in Mincing Lane than in Whitehall. In a few instances this has involved breaking new ground: "Feminine hygiene", for instance, would have been considered too indelicate a subject for public advertising until recent years (it may be remarked here that the attempt now being made to persuade ignorant and perfectly healthy women and girls to douche themselves is grossly unscrupulous); the recent onslaught on "halitosis" and pyorrhœa is another new line which has been pursued in a peculiarly insidious and disgusting way. But in the main this health campaign has consisted rather in claiming medical virtues for products of other kinds, usually foods or drinks. This is evidently a consequence of increasingly fierce competition, the manufacturer being able to make headway only by claiming for his product some new property which is really outside its sphere, all the capital in popularity which can be made of its legitimate advantages being exhausted. This movement has quite recently attained such proportions that it must either greatly mislead and confuse the public, or stultify itself by its sheer profusion and absurdity, or by mutual contradiction. A brief examination of its main features may be of some interest.

To point to the origins of this form of propaganda is no easy matter. They are probably to be found more than anywhere else in the miserable process of degradation which has afflicted our bread. The almost tasteless substance which goes by this name nowadays is prepared from flour which, for reasons known only to millers, consists of very little but starch. Hence it became profitable to market flours for which it was claimed that the constituents removed or destroyed by the new processes of milling and bleaching were retained, or even added to; the eventual result is a welter of proprietary breads all claiming peculiar nutritive and health-giving properties. The same early era saw the rise of "breakfast foods"; anyone who has not observed for himself the obsessional state which can be produced by reading the literature of these products may read of it to his profit and amusement in "Saki's" story, *Filboid Studge*. The advertising of such products was also satirized admirably by H. G. Wells in *Tono-Bungay*; a large hoarding in an otherwise attractive spot bore a placard in the following terms:

> "Why are birds so bright?
> Because they digest their food properly.
> Why do they digest their food properly?
> Because they have a gizzard.
> Why hasn't Man a gizzard?
> Because he can buy PONDEREVO'S FRIABLE TRITURATED BISCUITS, which are better."

It is in this sphere more than in any other that the discovery of vitamins has been such a godsend to the enterprising manufacturer; the first tentative use of the vitamin stunt in publicity, when the general public was hardly aware that such things existed, has swollen now to an almost deafening chorus. It need hardly be said here (*a*) that the average sensible mixed diet contains adequate amounts of all the known vitamins; (*b*) that an attempt to compensate for a deficiency of any one of them in a poor diet can only be made with expert knowledge; (*c*) that there is at least one extremely grave condition produced by excessive vitamin consumption, and although this is not likely to occur accidentally, it is by no means unlikely that moderate unbalanced overdosage may have deleterious effects at present unidentified. This is perhaps taking these things rather too seriously; with the exception of certain yeast preparations most patent foods probably contain no more vitamins than ordinary natural foods.

Another landmark was the "Eat more" slogan. It began with fruit, and extended itself to fish, bread and milk. One almost hoped for a good honest counterblast, quite regardless of the interests of mere health, such as "DRINK MORE BEER". It has come. Yet the interests of health are still invoked. First, the hoardings were black with glasses accompanied by an announcement that the beverage they contained "is good for you". A paler rival, not to be outdone, has been publishing long and reasoned statements of the why and wherefore of its health-giving virtues. Its malt and yeast are all that is required to promote perfect health (but is there any actual yeast or vitamin B in beer?); it assists digestion, fortifies the system and increases its resistance to disease; it stimulates the body to action, yet never dulls the brain (the dosage of which this is true should surely be specified); it also contains water, which is good for the stomach and liver (so does the domestic tap). Well, most of us will concede that beer has its virtues, but we had evidently not recognized by any means all of them. Most people would find it hard to furnish a good medical reason for drinking gin (unless as a diuretic), but we are told that it "keeps you slim". Doubtless this is true, under certain conditions of dosage, until the advent of ascites, when the figure is apt to deteriorate.

Successive epidemics of influenza, and in particular the last, have furnished an exceptional opportunity for ebullitions of this kind. Everything conceivable has claimed the power of protecting against this disease; meat extracts, breads, meat, milk, beer, rum, whisky, fruit and various vitamin foods are only some of them. In advertisements to be seen in profusion not far from the Hospital we were assured that three rashers of bacon (provided that they came from a certain country), eaten daily for breakfast, conferred immunity. A placard appeared in fruiterers' windows which kills two birds with one stone:

> "What keeps you slim and safeguards you from 'flu?
> THE ANSWER'S A LEMON."

It certainly is, but they don't mean it that way. This announcement has gone with the influenza, and has been succeeded by another of considerable interest to the Eye Department:

> "When spots arise before your eyes
> EAT MORE FRUIT."

Among other symptoms of this disease of publicity are the efforts to persuade you that beverages somewhat resembling cocoa promote the digestion of other foods, furnish necessary vitamins, or act as sedatives, and, to take a less prominent, but perhaps more astonishing example, the claim that adding a certain relish to your diet will assist you in slimming. Tea occasionally claims positive virtues which should leave you incredulous; more often it contents itself, in the company of coffee and tobacco, with the suggestion that its harmful ingredients have been removed; you may be sure that if they really have it will be very dull stuff. Although strictly this is an effort of a different kind—a patent medicine masquerading as a food, instead of the reverse mention must be made of an advertising campaign now in full blast to "put over" a laxative chocolate. This product contains phenolphthalein, by no means as "gentle" and beneficent a drug as you are led to believe, and the property of tastelessness, which doubtless dictated its choice, is a two-edged weapon. What is to prevent a child from eating a whole box, and what may happen if it does? A temporary effacement by purging may seem perhaps appropriate if rather severe punishment, but the result recorded by Cleeves (*Journ. Amer. Med. Assoc.*, 1932, xcix, p. 654), who was enabled to study at autopsy the features of phenolphthalein poisoning in a previously healthy boy of 10, is another thing altogether. There could not be a better example of the abominable results which may follow when one trade tries to appropriate the selling advantages of another; in this case the better the chocolate the worse for the unsuspecting child who will consequently go on eating it.

If we are to accept the evidence of present-day advertisements, it would appear to have been decided at endless meetings of directors, or in the sanctums of most publicity experts, that foods and drinks must have a health feature among their selling points, and a choice is presumably made from the following more or less according to the general properties of the product:

1. It slims.
2. It is "body-building".
3. It confers refreshing sleep.
4. It wakes you up.
5. It is easily digestible.
6. It assists the digestion of other food.
7. It is full of vitamins.
8. It is free from all sorts of things which it need not contain.
9. It regulates your bowels.
10. It confers protection against various ailments (influenza especially, when in season).
11. It improves your complexion (or brightens your eyes).
12. It lengthens your life.

Is there a man or woman who can altogether resist these blandishments? Yet what of him who falls for them all? He must "eat more" of almost everything, and specifically consume certain forms of bacon, bread and beer, take gin for his figure, "X" for his complexion, "Y" for his nerves, "Z" for roughage in his bowels, and a hot and much too nourishing drink of Whatnot before he goes to sleep. Over his tomb one might write:

> "Here lies a Man who Did what he was Told."

It is difficult for anyone not in practice fully to appreciate the effects of public inquisitiveness about medical matters, and of the superficial acquaintance with them which is certainly becoming almost universal. It must lead sometimes to very awkward, if not unanswerable questions, and the number of times that Dr. B flatly though innocently contradicts the advice or opinions of Dr. A must be increasing daily, usually with the consequence that the profession is said not to know its job. In the sphere of dietetics this is unfortunately not far from the truth. Doctors ought to know more about the science of nutrition, or, to put it on a broader basis, about how to keep people well. Apart from thus putting themselves in a position to overrule all the miscellaneous advice of laymen, their only hope of preventing a serious usurpation of their functions is to persuade their patients to believe nothing which they see in print—a policy which on all grounds has a good deal to recommend it.

QUESTIONS AND ANSWERS.

WHEN I first read his letter I thought that for once the Editor had blundered. After admitting how helpful certain contributions from my pen had been to the newly qualified men at Bart.'s, he asked me to write something about my experiences with college examiners and examinations, with a view to the help and guidance of students.

As I say, at first I thought the Editor had made a

mistake, for my experiences with examiners were nothing like so felicitous as were those, let us say, of the present members of the Staff at Bart.'s. They, it seemed to me, were far better qualified than I to discuss this momentous question and to offer sage advice.

But on second thoughts I came to the conclusion that the Editor was right, as editors usually are, for no member of the Staff, with one notable exception,* and certainly no other living Bart.'s man, ever met in single combat so many College examiners as I did.

A whisper has reached me that certain readers have expressed the opinion that some of my previous contributions to the JOURNAL, although dealing with matters serious to the rising generation, have not always been treated in so sedate or wholly grave a manner as became the subjects.

The hint has not been disregarded, and the inquiry into the question under review shall be conducted in an earnest, simple and straightforward way.

In case any doubt remains as to my qualification to discuss this matter of examinations, I will add that in my day I faced and fought all sorts of examiners, wrestled and wrangled with some, was hoodwinked, insulted, threatened, snubbed, trampled upon, hectored and bluffed by others; but, let it be said in all fairness, most kindly and gently treated by not a few.

Throughout the eight or nine years during which hostilities lasted I took particular care to observe and study the genus, *College examiner*.

Personally I was seldom taken in by him—nor for that matter was he by me, for I saw through his wiles from the very first opening skirmish in Biology.

The word "wiles"—I apologize for what might be taken for a pun—brings to mind the name of Wilde.

Now Oscar Wilde knew what he was talking about, and much comfort did I derive in many a black hour by calling to mind his definition of an examination. "At examinations", he wrote, "the foolish ask questions which the wise cannot answer". There you have it in a nutshell, and how concise, what succinctity; the whole thing summed up in a sentence!

Another great writer, one wiser even than Wilde, understood a thing or two about college examiners, and teachers of medicine as well.

This was old Omar Khayyám, the astronomer-poet of Persia. What else can he have had in his mind when he sang:

> "Myself when young did eagerly frequent
> Doctor and Saint, and heard great argument
> About it, and about, but ever more
> Came out by the same door as in I went."

* Any reader wishing to learn the name of this gentleman should apply in writing to the Editor.—P. G.

Now if that does not refer to medical out-patients as well as college examiners, what in Heaven does it refer to?

Before presenting himself before the examiners the candidate goes through a certain period, long or short, of preparation.

There are several schools or methods for doing this, the one favoured by myself being that known as the Axillary Absorption System.

To derive the full benefit of this process, the essential essence, gist or pith of the subject should be written by the candidate in a note-book, which is then placed firmly and high up in the left axilla, and there left for time and Nature to do the rest.

Nothing was left to chance, nor did we hesitate to call to our aid Thaumaturgy or the Black Arts.

When the great and awful day arrived, we gathered in the Square and set off in a body to the College of Surgeons by the *Lucky Way*.

This was considered to be most important. I am not certain that I remember all the various twists and turnings now, but I do remember that after passing through Henry VIII's gate, we walked past Old Bailey, where we turned sharply to the right down a squalid winding alley called Sea Coal Lane.

This brought us to the Ludgate Circus, and from there we marched to the Embankment.

Here certain solemn rites were performed.

Each supplicant came provided with a small silver coin, and, standing at the brink of the river, he offered up a silent prayer for strength and guidance to Father Thames, and at the same time cast into the murky stream his silver offering. Having done this he turned towards Savoy House morally fortified to face the ordeal before him.

Perhaps I may be allowed to pause a moment here to speak of certain earlier experiences with examiners, before getting down to the subject of the College ones.

The first examination I ever stood for took place at my preparatory school, which still flourishes at Ormes' Square, Bayswater.

I must have been eight or nine years old, and shared with my little friend Henry the distinction of being the dunce of the school.

At the end of the term examinations were held, but these were beyond the scope of Henry or myself, for whom a special and more simple test was arranged.

In the middle of the large schoolroom stood a blackboard, within a square formed by the desks of the bigger and more learned pupils. The examination was taken by the headmaster, who wrote some simple words on the blackboard, which Henry and I were to read aloud. Fortunately I forget how I myself did, but I remember

as vividly as if it had all happened yesterday how little Henry got on.

First the headmaster wrote a word which Henry could not spell out. He then tried another, and yet another, but all in vain. He was a good, kind and patient man, who wished to help the backward boy, so at last said to him, "Now Henry, I am going to write on the board the name of something you are very, very fond of, and if you read it correctly, I will give you some to take home with you".

Henry, a minute boy with a huge head, and a solemn, learned expression, brightened up appreciably on hearing this. Then the headmaster, taking in his hand a fresh piece of chalk, slowly spelled out in bold, clear capitals, "CHOCOLATE".

A deathly hush fell over the room while little Henry, with head slightly on one side, studied the word with wrinkled brow. The excitement among the watchers grew intense, and if will-power could have penetrated Henry's big head, he would quickly have won the prize.

Still we waited, still Henry puckered his brow and gazed at the tantalizing letters. Then all of a sudden it was seen that something was at work in Henry's mind, and a moment later, in a high piping voice, in which could be detected the recklessness of the gambler who risks all on a throw of the dice or a turn of a card, little Henry cried out, "Sausages"!

As an example of the luck as well as the futility of examinations the following can hardly be beaten. When I was 17 years old I left the farming school in Lincolnshire, where, for very high fees, backward or wayward boys were left to pick up the rudiments of ferreting, rabbit-coursing and other wholesome English blood-sports, and went to South America as Naturalist to the Fitzgerald Expedition, to climb Aconcagua, in the Andes.

When I returned to England it was settled that I should become a doctor, but first I had to pass the necessary examination of the College of Preceptors. I sat for this and blundered along until I came to the geography paper, which offered a choice of several questions.

Naturally the one I selected was, "Give the height of Mount Aconcagua and describe its appearance, and the kinds of animal and plant life you would expect to find there".

Thanks to this absurdly unfair question I bagged the unheard of score of 100% marks—a record never approached by half during the whole of my scholastic career.

In discussing the question of the College examinations I will not do more than refer to the written portion, for that part is dull, commonplace and quite beneath our notice.

It is the oral examination I have in mind, the "Viva", where one man's wits are set in opposition to another's in single, if shamefully one-sided combat.

The written part may be all very well for the dull and earnest worker—or for that matter for the bright and skilful cribber but for the bold, the brave and the mettlesome, give me the "Viva".

Now there are almost as many patterns of examiners as there are of motor cars or postage stamps, and the student will do well to study each with vigilance.

There is the tricky one, but he is apt to be caught in his own snare; or the browbeating, truculent type; but far more dangerous than these is the bluff, boisterous kind—the "I was a student myself once" variety; of him my advice is be very, very wary not to be taken in by his assumed air of good-fellowship. Then there is the lugubrious sort, bored and tired before ever your turn comes to be cross-questioned. This kind gives no sign nor hint to tell you whether your last answer was correct or fatal to your chances, but leaves you in ignorance whether you are swimming along famously, or really only wallowing deeper and deeper in the mire of ruin.

Although I always hated exams. as much as any other normal-minded person, I did appreciate the sporting side of a "Viva".

There was the excitement of heading the questions into channels in which you felt safe or fairly safe, or of leading the questioner back to those channels if he showed signs of wandering into less safe waters.

Perhaps I may be forgiven if I describe one such encounter, since it seems to demonstrate the importance of recognizing an opportunity and seizing upon it.

I was up for Surgery, or it may have been Pathology, and had not failed to make my usual inquiries beforehand about the examiners.

Having ascertained their names, and how to recognize them, I had discovered all I could about any little weaknesses, foibles or hobbies they were subject to.

Generally by the time I passed any examination the examiners and I were pretty well known to one another, or at least on nodding terms; indeed one of them once greeted me with "Hullo, you here again?"

The examiner in the case I am going to tell of was Clinton Dent, of Saint George's Hospital.

I did not know him personally, but had found out that he was a very keen Alpine climber and a prominent member of the Alpine Club. He had the reputation of being formidable to frightened candidates, from his abrupt questions and his habit of shooting out his long chin at them. He was easily recognized by his pale,

aristocratic-looking face and small white beard, which suggested an ambassador.

All this might not appear at first sight to promise much help at an examination in surgery, and even less in pathology, but you will see.

One glance at the objects spread out on the table in front of him was enough to warn me of trouble brewing, and to be on my guard.

There he had all ready as ammunition for my undoing a collection of strangely diseased and deformed bones. After inviting me to be seated, Dent opened hostilities by the discharge of a trench mortar in the shape of a horrible-looking skull, covered with lumps and depressions.

This he pressed into my unwilling hands, and leaning back asked, "Well, what do you make of that?" In order to gain time I replied it was a human skull. "Oh, *quite* right!" says Dent, "but don't you notice anything peculiar about it?"

Of course anybody could see there was something peculiar about it, but the question was, what? I thought it was probably some form of syphilis, but feared to say anything so definite at that early stage.

After a while Dent asked, "Ever seen a man with a head like that?" Of course I had not, but his question gave me a possible loophole to escape from the trouble looming.

"Yes," I lied, "but only once."

"Have you indeed?" answered Dent, "then you have been more fortunate than I; and where, pray, did you see a living man with a skull like that one?"

"In Pernambuco," I replied.

That made him sit up, and even the slumbering marker by his side opened his eyes and gripped his pencil.

"Oh," says Dent, "and may I ask what you were doing in Brazil?"

"I only went ashore there," I told him, "on my way to the Andes—climbing."

The trick was done. No more nonsense about skulls with holes in them. The talk was now all of treacherous snow, ice-axes, avalanches, the effects of camping at an altitude of 18,000 ft.; sensible talk, to be cut short at last by the *ping* of the bell.

"Dear me," exclaimed Dent, "this is dreadful; here we have been talking about mountain climbing all the while and now I can't ask you any questions. Well, good-bye; glad to have met you"—and I was through.

This little relation I give for two reasons, firstly for my own glorification, secondly to accentuate how important it is for the candidate to make himself familiar with the identity, opinions and even pastimes of his examiners, and by these means get *them* to do the talking.

A short while back I described the "Viva" as being a contest of wits, though a one-sided one, where all the advantages are on the side of the examiner and the odds against the honest examinee. But, where it seems to me lies the superiority of the oral over the written examination, is that the former tests the candidate's ability to think and make up his mind quickly; to detect any possible loophole by which to escape the pitfalls so carefully laid for him; and all crowded into the space of fifteen minutes.

In this short while the candidate is faced with as many problems as might perplex a busy practitioner during a long working day.

For is not general practice largely a test of wits?

Do not imagine I mean anything derogatory by this, but the general practitioner must be quick to see what is at the back of his patient's mind, and be ever ready to deal instantly with each new problem as it arises.

The client allows his lawyer to turn to books of reference when he is at a loss, but no patient will permit his doctor to do so.

For centuries the layman believed in the infallibility of doctors—a belief cherished and handed down through the ages, from priestly workers of miracles to the witch-doctor with his charms and mumbo-jumbo; but the public—or the more intelligent of it—is no longer to be gulled, nor does the wise doctor wish to gull him.

The doctor must be as truthful as possible, so long as the truth is best for his patient. Sometimes situations arise when the plain unvarnished truth would not only be unwise but unkind.

In glancing back over what I have written, I fancy that perhaps I have been unfair to our College examiners. Perhaps I still retain a vestige of the old belief that the examiner was our natural enemy, who was out to plough us if he could. Of course that is ridiculous, for any humane examiner must prefer to pass the shivering wretch before him, if he can. And in most cases he tries patiently to worm out of the candidate the correct answer, which he often knows is there, but which nervousness, suspicion and terror prevent him saying.

When you come to think of it, how astonishing it is that there are people willing to take on such a soul-destroying task as that of examining medical students. It is a source of unending amazement to me to see how men are to be found to undertake some of the more unpleasant though necessary duties for the well-being of mankind. How glad and how grateful we all should be that there are people who are ready to become, not only College Examiners in Medicine, but public hangmen, schoolmasters, bank clerks or butchers.

PHILIP GOSSE.

THE HISTORY OF THE HEDGEHOG'S ROSARY.*

HÆMATOLOGY is regarded by many as one of the youngest of Mother Medicine's children, but in reality the importance of the blood and its relation to disease is one of the oldest of clinical studies, and it would seem to be regarded with especial favour by the gods (for its devotees are for the most part young men, and if they are faithful to it, die young). Passing over the ritualistic and magical status of blood, we must consider very briefly the early biological theories as to its uses and formation.

When Cain shed Abel's blood on the ground he established the primitive physiological axiom that the blood is the life; it was manifest that warmth was inherent in the living body, and that when warmth left the body life departed also; and that in some way or other life was dependent on the food we consume and the air we breathe. In sacrifice, the steam of the blood appeared to early peoples as the exhalation of the animal's soul.

Aristotle (1) regarded the heart as the central organ, the seat of vitality and the sourse of the blood; he had founded this on his embryological studies on the chick. But the heart was also a sort of furnace, the seat of innate animal heat. From the heart the blood-vessels carrying nutriment passed to the organs which are formed of them, and the nutriment oozes through invisible pores in the vessels like water in unbaked pottery. There was no movement from the heart to the vessels, but a constant ebb and flow, the blood being drawn upon by the substance of the body and as increasingly renewed by absorption of the products of digestion, the mesenteric vessels taking up nutriment from the food in the intestine. From the lungs was absorbed the pneuma which acted in part in cooling the heart, but also had more subtle and transcendental functions. In the Galenic (2) theory the concept was more complex and attempted to align most of the previous ideas. The basic principle of life is the spirit or pneuma drawn from the general world soul in the act of respiration. It enters the body through the trachea, then to the lungs, and then through the pulmonary vein to the left ventricle, where we will leave it for the time being. Ingested food is absorbed from the alimentary tract as chyle, collected by the portal vessels, and conveyed to the liver. The liver was the source of animal heat, and had the power of converting the chyle into venous blood and imbuing it with natural spirits. Charged with this and nutriment derived from the food, the blood was distributed through the veins which arise from the liver to all parts of the body, and ebbed and flowed continuously during life. There also arose from the liver a great vessel which entered the right side of the heart; the blood that it conveyed to the heart had two possible fates. The greater part remained in the ventricle, losing its impurities, which were carried by the pulmonary vein to the lung, where they were exhaled into the air. A smaller portion passed through minute pores in the septum to the left side, and there, still charged with the natural spirits, it encountered the external pneuma and became converted into a higher form—the vital spirits, which were distributed together with the blood to various parts of the body. Here again it ebbed and flowed and could be felt to pulsate. But certain arteries charged with vital spirits went to the brain, and here they became converted into a still higher form of spirit, the animal spirit, an airy substance transmitted to the various organs by the nerves, which were believed to be hollow. Intertwined with this was the theory of the humours, which outlasted it, and that of plethora.

This was first clearly propounded by Erasistratus (3) (B.C. 300) and was regarded as the chief cause of disease. In these plethoric disorders the blood rushed into the arteries by way of hypothetical anastomosing channels between themselves and the veins, so flooding the arteries and causing red face, heat, acceleration of breathing, cardiac excitement and so forth. It was usually caused by over-feeding and should be treated by starvation, not bleeding, though it was on this theory that the whole foundation of phlebotomy was based.

In later times plethora was divided into three main types:

(1) Plethora vera, the type I have just described.

(2) Plethora apocoptica, in which there was a local diminution of blood, causing a plethora in the rest of the body.

(3) Plethora serosa—increase in the volume of the blood, but a relative dilution.

Another disorder which we know now to be essentially a disease of the blood, though it was not then recognized as such, is chlorosis. There are descriptions of varying clarity of this green sickness, or *morbus virgineus*, in almost all the great compilations, but one of the most pleasant is that of John Lange (4), a sixteenth century Silesian physician, who was physician to the Electors of the Palatinate. It is written in the form of a consilium, that is to say, a letter of advice written to an imaginary patient or else to real pupils or country doctors who had appealed to his superior knowledge as a consultant. It was the favourite vehicle for medical subjects at that time.

* Read at the Osler Club, April 20th, 1933.

DE MORBO VIRGINEO.

Epistola XXI.

You will have complained to me, your faithful companion, that your first born daughter, Anna, and now sad, is desired in marriage by many suitors, of great excellency and illustrious birth, and also with an abundance of wealth, descended by ancestry from your forebears not from your inferiors; whom you are compelled to refuse because of the weakness of your daughter. Neither is this as obnoxious to you, as that thus far none of the Doctors have been able to explain the internal cause and essence of her disease, and at the same time prescribe the treatment. For one says it is cardalgia, another throbbing of the heart, this one indeed dyspnœa, that one suffocation of the womb: nor are those wanting, who suspect a loathing of the stomach from disease of the liver, the differing judgment of them concerning the illness of you daughter, you say proves that you are quite perplexed, nor are you able to tell what indeed should be done.

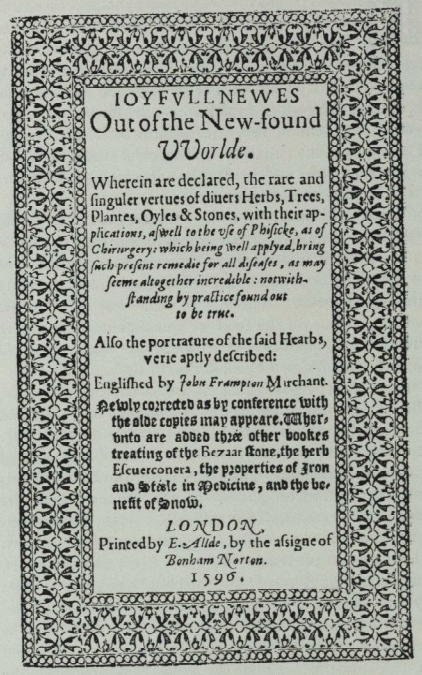
Since you demand this opinion of the disease of the girl, and dependable advice concerning marriage, because of our old friendship, and at the same time you rightly ask with what kind of disease is she afflicted: since the qualities of her face, which in the past year was distinguished by rosiness of cheeks and redness of lips, is somehow as if exsanguinated, sadly paled, the heart trembles with every movement of her body, and the arteries of her temples pulsate, and she is seized with dyspnœa in dancing or climbing the stairs, her stomach loathes food and particularly meat, and the legs, especially at the ankles, become edematous at night. From these accidents indeed, and from the pathognomonic signs of the disease, which betray the cause and nature of the disease, point out its treatment, I marvel that old physicians do not know the cause and nature of the disease. Although indeed they have not mentioned its name, which moreover contributes nothing to its treatment, that is nothing of importance.

There are many illnesses in the catalogue of diseases, lacking a name and not a treatment. Nor has this disease a proper name, as much as it is peculiar to virgins, might indeed be called "virgineus", which it is the custom of the matrons of Brabont to call white fever, or pale face and the fever of love: since every lover becomes pale, and this color is proper for a lover, although a fever very rarely is present. But this disease frequently attacks virgins, when now mature they pass from youth to virility. For at this time, by nature, the menstrual blood flows from the liver to the small spaces and veins of the womb: which when from the narrow mouths, which are not yet distended, also obstructed by thick and crude humors, and finally from the thickness of the blood, cannot escape: then carried backwards through the vena cava and the large arteries flows to the heart, liver, diaphragm and veins of the diaphragm: also a good part is distributed to the head, and grave accidents appear in the viscera, dyspnœa, a tremulous throbbing of the heart, inflation of the liver, nausea of the stomach, cardalgia: not rarely epilepsy with loss of senses, and delirium.

Finally, whether your daughter ill with this affection ought to marry, and what should be the treatment of it, see I shall communicate the trusty advice from the rich store of the medicine of Hippocrates, who says in his book on diseases of virgins: The cure of this disease is venesection if nothing hinders. I therefore say, I instruct, virgins afflicted with this disease, that as soon as possible they live with men and copulate, if they conceive they recover, if indeed they be not attacked by this disease in puberty, then it attacks a little later unless they have been married. Moreover indeed, of the married, very many are sterile. With this most wholesome advice of the divine Hippocrates, if medicines produce menses and loosening up obstructions, if you produce a thinning of the thick blood, you can discover and devise nothing more powerful than this. In the treatment of this disease of virgins I have never been deceived or my hopes frustrated. Wherefore, be of good courage, you shall give away your daughter: also I shall be present at the nuptials with pleasure.

The use of iron as a therapeutic agent for this disorder was first suggested by Nicholas Monardes, (5) a Spaniard in a work on the medicinal plants of the West Indies. It was translated into English in 1580 with the pleasant title of *Joyful Newes out of the New-found Worlde.*

The only other fact which I can cull from the medieval period is that a layman, one Cardinal Cusanus (6), suggested in 1450 that it might well be of value to weigh the blood and urine in disease and compare it with that in health, but we hear nothing more of this until the nineteenth century.


IOYFVLL NEWES
Out of the New-found
VVorlde.

Wherein are declared, the rare and singuler vertues of diuers Herbs, Trees, Plantes, Oyles & Stones, with their applications, aswell to the vse of Phisicke, as of Chirurgery: which being well applyed, bring such present remedie for all diseases, as may seeme altogether incredible: notwithstanding by practice found out to be true.

Also the portrature of the said Herbs, verie aptly described:

Englished by John Frampton Marchant.

Newly corrected as by conference with the olde copies may appeare. Wherunto are added three other bookes treating of the Bezaar stone, the herb Escuerconera, the properties of Iron and Steele in Medicine, and the benefit of Snow.

LONDON.

Printed by E. Allde, by the assigne of Bonham Norton.

1596.

With the commencement of the seventeenth century there appears the first of the three great aids to the elucidation of the blood and its disorders—the microscope. As to who first invented it, whether it was Galileo or Athanasius Kircher, does not concern us in the least, but by the middle of the seventeenth century men were peering at this and that and could scarce believe their eyes.

Jan Swammerdam (7) was probably the first man to observe a corpuscle in the blood of a frog in 1658. Then Malpighi (8), the founder of histology, who was born in the same year that Harvey published his account of the circulation, while looking at the mesentery of a hedgehog saw in a blood-vessel "fat-globules looking like a rosary of coral", but it is not until 1674 that we

get an accurate description of them, and this was from the little Dutch grocer Antony Leuwonhoeck (9).

It always astonished me to think of the detail that was seen by these early microscopists, for you must remember that at this time most of the microscopes had only a single lens, and the highest magnification of Leuwonhoeck's—and he ground the lenses all himself—was probably only about 200 diameters (rather less than a modern $\frac{1}{6}$th combination). This instrument he never allowed anyone to use but himself, and when Thomas Molyneux, a young Irish doctor, visited him on behalf of the Royal Society in 1685, he showed him all manner of fine things, and Molyneux tried to buy one and praised them mightily, but he refused, adding, "How I wish, Sir, that I could show you my best lens with my special way of observing, but I keep that only to myself and do not show it to anyone, not even to my family."

He described the red cells as globules, and showed that they were circular in mammals and oval in birds and fishes, and that the red colour of blood was due to the corpuscles and not to the fluid. He even measured their diameters and did it surprisingly accurately. His methods were as follows: He calculated that 100 diameters of a red blood-corpuscle amounted to something less than that of a coarse grain of sand, which he had already assessed at $\frac{1}{50}$ in., therefore each measured rather less than $\frac{1}{3000}$ in., which is about 8·5 μ. He also regarded the blood as a valuable indication of his own health, and examined it each day. A darker colour than usual he ascribed to an excessive congregation of the globules; if this were so, he drank four cups of coffee for breakfast instead of two, and six of tea in the afternoon instead of three. He discovered this thickness usually after he had supped too freely of an evening and found it an admirable method of treatment.

Here we must leave the microscope, for it is not going to be used intelligently for another century, and return to 1628 when Harvey (10) published *De Motu Cordis*, and having discovered the circulation neither he nor anyone else could think why the blood circulated, and still more, why it circulated so fast. Having been brought up on the Galenic idea that the blood nourished the tissues by gentle ebb and flow, it seemed impossible that it gave any nourishment when the fluid whirled past at such a speed. At first he held to the view that the heart was the seat of the innate heat and that the soul was in the blood; but later, after his embryological studies, he thought he perceived a residual flicker of movement in the blood after the substance of the heart was dead.

As to the reason for the respiration, he regarded the lungs purely as cooling fans, which hindered the innate heat of the heart from causing its own destruction, and rejected the Galenic theory that in addition to the cooling, some of the air inspired is retained in the blood and performs useful functions. In later years he rejected the cooling theory as well, and was frankly at a loss to explain the purpose of respiration. Nowhere does Harvey offer his own explanation for the need for the circulation, but Sir Kenelm Digby (11) explains it thus with an inference that it is Harvey's own view: "The heart driveth the blood (which is warmed and spiritualised by being boyled in this Furnace) through due passages into the arteries from whence it goeth on warming the flesh until it arrive to some of the extremities of the body, and by then it is grown so cool (by long absence from the fountain of its heat and by evaporating its own stock of spirits) that it hath need of being warmed again". But with the Cromwellian Revolution came a scientific revolution, the formation of the Royal Society and the rise of the Oxford Experimental School.

Boyle (12) is the first to produce matter of note. He took infinite pains to show that respiration cannot cool the blood. He does not see how it can apply to animals which, respiring by lungs, live in cold water, or to cold-blooded animals which respire by the lungs. Further, he suggests that it is against the economy of nature to make the blood of so excessive a heat that it needs to be perpetually cooled. Again, to his touch the heat of the heart of an animal does not feel burning but gentle, and finally he noted tha the systole and diastole of the heart were not synchronical with those of respiration, the fact which had eluded Aristotle and misled everyone up to this time so that even Harvey did not realize the great importance of this.

From his air-pump experiments he knew that under ordinary circumstances water contained air. By this mixture he suggested an explanation of the axiom which he attributes to "our English Democritus, Dr Harvey, 'That the blood of the fœtus is renewed *in utero*'. Now in the womb the fluids of the mother may contain air, for even in the closest and most ponderous liquors there lurk indiscernible parcels of air which bubble out at low pressures".

However, he felt that there was more in respiration than ventilation and depuration of blood, and thought that "there is a little vital quintessence (if I may call it so) which serves to the refreshment and restauration of our vital spirits".

It is to Willis (13), Lower (14), Hooke (15), and Mayou (16) that a clear understanding of this vital quintessence is due. The first three showed that blood changes in colour in passing through the lungs, and that this could be done by artificial respiration without any movement of the lung, or even by admitting and excluding air.

John Mayou found in saltpetre a "*spiritus nitro-ærius*" necessary for respiration and fermentation. He writes, "Breathing brings the air into contact with the blood to which it gives up its nitro-aerian constituent and from which it carries off the vapour produced by the heating of the blood". Thus we are on the verge of the discovery of oxygen, but it was not to be for another hundred years till the time of Priestley, Black, and Lavoisier, and this setting back of the scientific clock was largely due to the fact that in 1697 a Strasburg chemist, Stahl (17), gave birth to the monster Phlogiston. He maintained that the heat of the body was merely due to the friction of the blood in circulation, and that the purpose of the respiration, so far from having a cooling effect on the blood, was rather to heat it, the friction engendered by the passage of blood through the lungs being one of the chief sources of the heat of the body.

Thus we find an excellent physiologist like Stephen Hales (18) taking great trouble to prove this with a multitude of mathematics of rather doubtful vintage, and concluding that if one were put in a very hot stove, one would become even hotter than the stove because of the friction of the corpuscles in the lung capillaries with no cool air to refrigerate them. He even suggests that the chief function of the red blood-cells is to develop this frictional heat, and that they are of an ideal shape for that purpose.

It may have seemed irrevelant to have discussed in such detail what is in essentials a matter of pure physiology, but it was that aspect of the blood which was interesting to the seventeenth century physician, just as in the eighteenth the reason why the blood clotted was the matter of moment. A. H. T. R.-S.

(*To be continued.*)

STUDENTS' UNION.

STUDENTS' UNION.

At the Annual General Meeting of the Students' Union the following were elected to serve on the Council:

President: Prof. E. H. Kettle.
Vice-President: Mr. A. J. Owston.
Treasurers: Dr. Wilfred Shaw, Mr. Paterson Ross.
Senior Secretary: Mr. S. E. Furber.
Constituency A: Mr. K. A. Latter, Mr. J. R. Kingdon, Mr. A. Hunt, Mr. L. H. Buckland, Mr. J. G. Youngman.
Constituency B: Mr. L. L. Alexander, Mr. Fairlie Clarke.
Constituency C: Mr. M. D. C. Hosford.

At a Council Meeting of the Students' Union held on April 28th Mr. Youngman was elected as Junior Secretary and Mr. Latter as Financial Secretary for the ensuing year. It was decided to hold Council Meetings on the first Friday of every month. It was also decided that the Union should make a grant of £30 to the Sailing Club towards the £50 they required for the building of the new premises of the United Hospitals' Sailing Club at Burnham. It was announced that in future the fee for hiring of P.M. gloves and aprons should be 7*s.* 6*d.* per month instead of 12*s.* 6*d.* as previously.

RUGBY CLUB.

DEVON-CORNWALL TOUR.

Glorious weather and good football combined to make this year's tour, if not the most successful from the point of view of results, at any rate one of the most enjoyable that Bart.'s have undertaken. On the Saturday (March 25th) we played Torquay Athletic, who at that time had lost only one match on their own ground. For the first twenty-five minutes Bart.'s gave a splendid exhibition of open football, and J. D. Wilson, deputizing ably for Taylor at scrum-half, sent out some very good passes, which the rest of the outsides, who at this stage showed sparkling form, made good use of, though the Torquay defence stood firm. Meanwhile E. M. Darmady was indulging in several 30-yard dashes on his own, while Capper, Mundy and Gray were often prominent in the open. At the end of a quarter of an hour, excellent combination between backs and forwards ended in B. S. Lewis scoring a fine try. C. R. Morison's conversion was a good one. (5—0.) Bart.'s continued to attack until 10 minutes from half-time, when most of our old failings suddenly and inexplicably reappeared. One instance will sufice: A Hospital wing three-quarter received the ball on his own "25" line near touch and ambled gently straight across the field all along the "25", and on nearing the other touch-line hurled the ball behind the other wing three-quarter, and Delahay was able to stroll over the line for a try. During the second half Torquay were definitely on top, though Bart.'s strove hard with Morison playing a very good game, and Kingdon, Wilson, Darmady and Capper also doing well. G. Gray deserves a sentence to himself: he played far and away his best game for the Hospital and spared neither self nor opponents. Torquay's combined play was brilliant, but our task was not made any easier by two of our forwards (and neither of them wing forwards, either!) ambling about offside for most of the last twenty minutes. Mr. Sanders, of Plymouth, was really very lenient towards us in that respect. Result: Torquay, 15 pts.; Bart.'s, 5 pts. Any regrets at this result were soon forgotten on encountering the Redruth team at Newton Abbot Station on our way to St. Ives.

On Monday evening we played Redruth on a terribly hard ground. Five minutes from the start B. S. Lewis unfortunately damaged his knee and took no further part in the game. This was far and away the most spectacular game Bart.'s have taken part in this season; both sides took every opportunity of opening up the play, and the appreciative crowd were given a fine exhibition of football. No one on either side had an "off-day". It was unfortunate from our point of view that both the first two Redruth tries were made possible by Bart.'s defenders fumbling or passing wildly, but it would be churlish to grumble at these blemishes when so many good things were being done. To pick out individuals for praise in such a game is almost unfair, but if we mention W. M. Capper for his line-out work and L. M. Curtiss for hard determined running, let it be understood that in each instance it is almost a case of "*primus inter pares*". Robins, Rule and Curnow scored tries for Redruth, Jennings converting two, while Pirie scored for Bart.'s. Result: Redruth, 13 pts.; Bart.'s, 3 pts. After the match the Bart.'s team were hospitably entertained by the Redruth Club.

Our final match was played at Falmouth on Tuesday evening. Owing to injuries we were hard put to raise a team, for Kingdon, Lewis and Pirie were all incapacitated after the previous day's game. However, the services of R. Jennings were secured, and he proved a veritable tower of strength, though he was playing in an unaccustomed position at fly-half. He made the opening for Curtiss to score our one try, while the fact which struck the onlooker most was the way in which he held his passes at whatsoever angle they reached him. In direct contrast to Redruth, Falmouth made no effort to open up the game, but kept the ball close, with the result that the game as a spectacle was, to put it mildly, scrappy. Their only score was a penalty goal, inexplicably allowed to be retaken after the first kick had touched a player in flight. With the scores level and Bart.'s mainly defending towards the end the second half began, from the point of view of minutes played, to resemble a 45 minutes each way "soccer" match rather than a normal Rugby half, but nightfall came with the scores still level. Result: Falmouth, 3 pts.; Bart.'s, 3 pts. P. Swinstead and C. M. Dransfield particularly deserve mention for their promising displays in this match. It was, however, unfortunate that Smith was quite off form, for this prevented our wings from getting many chances.

The following players took part in the tour: C. R. Morison, J. G. Nel, I. N. Blusger, A. H. Pirie, L. M. Curtiss, P. L. M. Armstrong, R. M. Kirkwood, R. Jennings, J. R. Kingdon, J. D. Wilson, W. M. Capper, E. M. Darmady, B. S. Lewis, J. M. Jackson, R. Mundy, R. S. Hunt, D. W. Moynagh, P. Swinstead, C. McNeil, C. M. Dransfield and G. Gray.

ST. BARTHOLOMEW'S HOSPITAL *v.* BRISTOL.

Played at Bristol on Easter Tuesday, April 18th. Though the Easter holidays, combined with injuries, prevented the Hospital from fielding their regular XV for this match, yet for the third year in succession the policy of having this late fixture was completely justified, for a most enjoyable and spectacular game resulted once more. Bristol, who were also by no means fully represented, kicked off, but Taylor's return kick failed to find touch and Dowling fielded it and punted ahead; Morison fumbled and the Bart.'s line was immediately in jeopardy. An exciting series of loose scrummages on our line followed, and the home pack heeled repeatedly to their backs, but the latter found the Hospital defenders in excellent form, with Kingdon, Taylor, Powell and Kirkwood especially prominent. Good play by Capper, Reidy and Mundy and a long kick by Kirkwood relieved the tension, and the ball was taken into the Bristol half of the field for the first time. However, Hobbs, coming quickly round after Bart.'s had heeled, dribbled the ball back to our "25", where Capper saved an awkward situation by making a mark off Baynam's cross-kick.

Bristol continued to heel from the tight scrums, but the passing of their three-quarters was unusually unenterprising, and this fact, coupled with the speed with which Kirkwood and Powell got up to tackle their opposite numbers, rather negatived their forwards' superiority. However, the home team took the lead after a quarter of an hour, when Woodward scored following a blind-side movement. Patten failed to convert. (0—3.) Bart.'s were now much better together in the tight scrums, and Hunt was able to obtain more of the ball, while Mundy, Reidy and Capper were holding their own in great style at the line-out.

Now followed a most amazing five minutes of football, which brought those of the crowd who were sitting down to their feet, and filled those who were standing up with a fine frenzy of delight. Bart.'s heeled from a scrum at half way and Taylor cut through well, before sending the ball on *vid* Kingdon and Kirkwood to Powell; the left wing, being hemmed in, side-stepped and ran hard before putting in a well-judged cross-kick. Capper gathered this and passed out to Kingdon, who transferred the attack to the other wing, and from Nel the ball travelled through several hands back towards the middle again, where Patten intercepted and made tracks for the Bart.'s line, with Dowling in support, but when a score looked imminent the final pass went astray. However, neither side looked sorry for this stoppage after such a long spell of top-speed rugby with the ball continually in play. Shortly afterwards Bart.'s were penalized near the touch-line and T. W. Brown kicked a good goal. For the rest of the first half Bart.'s were attacking and Nel put in two good bursts down the wing, only to be pushed into touch on each occasion.

Half-time: Bristol, 6 pts.; Bart.'s, 0.

Rain fell heavily when the game re-started, and after a clever movement between Davies and Dowling had just failed to bring a try, a kick by Patten was finely gathered by J. D. Powell, who raced over the Bristol line in fine style. Morison's excellent kick from the touch-line passed a foot outside the upright. (6—3.) Following this success, Bart.'s played very poorly for five minutes or so, and after several narrow escapes, which included Brown missing a penalty kick in front of the posts, Baynam kicked ahead for Murphy to dash past Morison and score. Brown converted. (11—3.) From now until the end, however, Bart.'s kept play in the home half, and a fine dribble of over half the length of the field by J. D. Wilson was only checked a few yards from the Bristol line. Bart.'s continued to throw the ball about delightfully in attack, and twice had the hardest of luck in not being awarded a try, first when Capper and next when Mundy grounded the ball over the line. A splendid game ended with Bart.'s attacking strongly. As to personalities, our three-quarters, three of them from the "A" XV, combined splendidly, and backed up the good work of Taylor and Kingdon very well. Morison, however, was not at his best and was often caught out of position. Among the forwards, all of whom did quite well, a special word of praise must be given to J. P. Reidy, who throughout was a tower of strength, his line out work being admirable, while Darmady, Capper and Mundy were all very good, and R. S. Hunt deserves credit for his hooking in the second half.

Result: Bristol, 2 goals (1 penalty), 1 try (11 pts.): St. Bartholomew's Hospital, 1 try (3 pts.).

Team.—C. R. Morison (*back*); J. G. Nel, G. A. Fairlie-Clarke, R. M. Kirkwood, J. D. Powell (*three-quarters*); J. R. Kingdon, J. T. C. Taylor (*halves*); W. M. Capper (capt.), E. M. Darmady, R. Mundy, J. D. Wilson, J. P. Reidy, R. S. Hunt, D. W. Moynagh, C. McNeil (*forwards.*)

Final record: Played 37, won 16, drawn 2, lost 19; points for, 301; points against, 298.

Scorers.—Tries: Nel 16, Wilson 10, Curtiss 9, Youngman 4, Darmady, Mundy, Lewis, Powell, Kingdon, Armstrong, 3 each; Pirie, Harvey, Taylor, Blusger, 2 each; Harris, Capper, Masina, Moynagh, Fairlie-Clarke, Beilby, Prothero, 1 each. Total, 72.

Placed and penalty goals: Capper 23, Morison 7, Darmady 3, Pirie, 2. Total, 37.

Dropped goals: Fairlie-Clarke 1.

The following representative honours were gained during the season:

Middlesex: W. M. Capper, B. S. Lewis, J. G. Youngman.
Eastern Counties: J. T. C. Taylor, J. R. Kingdon.
Sussex: A. H. Pirie.
United Hospitals: W. M. Capper, B. S. Lewis, L. M. Curtiss, J. M. Jackson, R. Mundy, J. D. Wilson, J. G. Nel, C. R. Morison, P. D. Swinstead.
Dominion Students: R. Mundy. J. R. R. JENKINS.

SEVEN-ASIDE TOURNAMENT AT WINCHMORE HILL.

Well may the essayist describe Clio as the missing muse; her mantle is fallen upon me and I have sought her, but she is not there; who will, then, assist me to describe an occasion as rare as it was pleasant, as exciting as it was eventful?

Such an occasion was the afternoon of Saturday, April 8th, when a seven-aside Rugger Tournament between the five Surgical Firms, the combined Medical Firms, the Soccer Club and the Preclinicals took place; incorporated in the programme was a match, 15-aside, between the Residents and the Chief Assistants; this function was organized by the Rugger Club in aid of the Medical College Appeal.

The sun shone brilliantly upon a gathering which included the Dean and many other members of the Senior Staff; seldom, indeed, can such an array of cars have been seen at Winchmore Hill, the magnificent automobiles of the Teaching Staff mingling with the more humble contraptions of their disciples.

The ground itself was, they tell me, rather harder than concrete, and considerable admiration must be aroused for those who allowed themselves to be butchered to make a Roman holiday; none the less, the programme went through without notable injury.

In a gathering which included so many of the frailer sex, it is not remarkable that interest in the clothes of the players should be a feature of the occasion. Some of the clothes were indeed remarkable, the neat sashes of the Light Blues contrasting with the Pink side, who wore hats and jerseys of varying shades (Pirie going so far as to wear a pair of horrible pink "knee caps"—also let it be whispered, we saw one pair of pink shorts! The Green firm also were undecided as to the correct shade, and the Preclinicals testified to youth by wearing large white bonnets. The greatest admiration, however, was reserved for the Yellow Firm, who wore uniform yellow jerseys and yellow bobbles on their black shorts.

This, indeed, was only right in a side who were favourites for the "championship", and if I dismiss the early rounds in a few words it is not because they were lacking in interest, but because they were overshadowed by the far greater excitement of the final.

In the first match the Surgical Professorial Unit accounted for the Medical Firms by a try to nothing, the dash of Prothero and the ubiquitousness of Savage (at the price of large acres of skin) being insufficient to offset the handicap of playing one short throughout.

The next match, between Sir Charles Gordon-Watson's Firm and the Preclinicals, provided one of the closest games of the series, the Light Blues winning by a try to *nil* only after extra time had been played: for the losers Armstrong, Taylor and Fairlie Clarke distinguished themselves.

The match between Mr. Roberts's Firm and Mr. Harold Wilson's was also close; the unusual appearance of Darmady at the base of the Pink scrum being insufficient to defeat the Greens by a greater margin than a try to nothing, Kingdon's efforts for the Greens going unrewarded.

In the next game Mr. Girling Ball's Firm outclassed the Soccer Club to the tune of 18 pts. to *nil*, in spite of the activities of Hunt and Howell for the losers. In this game, as in their semi-final against the Pink Firm, which they won by 13 pts. to *nil*, in spite of

the energy displayed by Harvey and Hadfield on the Pink side, the Yellows pursued a mistaken policy in using their star performer Nel to such an extent, especially on a hot afternoon. Their scores, however, might have been even heavier had Dransfield not been so intent on trying to prove that he could run as fast and as snakily as Nel.

In the other semi-final the Light Blues accounted for the Dark Blues by 11 pts. to *nil* without much difficulty, although the Unit, with a young and inexperienced side, put up a surprisingly good show.

The next event on the programme was the match between the Chief Assistants and the Resident Staff, and there can be no doubt as to the sympathies of the crowd, though the cries for the "Asses" must have given the stranger a poor idea of the respect with which we regard our junior teachers. The game, though we missed seeing Prof. Woollard taking his pulse after a long run, proved as interesting as any of its predecessors, and the magnificent spectacle of the Dean kicking off and then, together with his photographer, Dr. Canti,. leaping from the field in terror for his life, must have added materially to the enjoyment of the afternoon.

In the first half Marshall ran very fast to score for the Residents, and Capper also scored a try, and converted both. A try for the Chief Assistants by Stallard, who seemed in almost as good training as in his Olympic days, was one of the few occasions during the whole afternoon when one of the younger referees allowed himself to be shaken in his obvious determination not to be swayed by the yells of the mob. During the interval beer was served to the contestants.

The second half, which showed a slight falling off in speed and energy, was more evenly contested, the only score being an unconverted try by Marshall, who ran a long way at a fast pace; the match resulted in a win for the Residents by 13 pts. to 3.

In a game where all distinguished themselves a few names, however, obtrude upon the memory. Beyond those mentioned already, Philips, Hancock and Thompson displayed energy throughout, Underwood showed unimpaired ability to stoop at the base of the scrum, and Rogers and Norrish spent a lot of time prone upon the ground.

For the Residents one remembers Fraser, because he seemed to find little to do at the back, Scott because he nearly scored a try from forty yards offside, Capper for his exhortations (though he is not a born scrum-half), and Blair because he was so very tough.

If a slight stiffness of the gait was in evidence on Monday morning, the reason was not far to seek, and we are glad that those who anticipated a terrifying ordeal were disappointed in the realization.

The final of the seven-aside Tournament between the Light Blues and the Yellows provided a keen, close match, with much good play on both sides. Neither side held a definite territorial advantage, the game going from end to end of the field. The only score in the first half came from a try by Youngman after a clever change of direction in attack by Powell. Mundy converted from a fairly easy position. Nel got away a little later for the Yellows, only to be magnificently tackled by Curtiss had Nel been less exhausted he must have scored. There was no further score in the first half.

In the second half over eagerness among the Light Blue forwards led to a good penalty goal by Nel from near the touchline, followed a little later by an unconverted try by Blusger, after good work by Wilson and Dransfield. The Yellows thus took the lead at 6—5, only to lose it again a moment later, when, after a loose scrum, the ball came to Curtiss, who swerved and side-stepped his way past several opponents to score under the posts. Mundy added the goal points. Renewed efforts on the part of the Yellows availed them nought, since the Light Blues kept them out without much difficulty, the tactical kicking of John being of great value.

The Light Blues thus came out worthy winners by 10 pts. to 6, a triumph for experience, since it was clear that they knew just those little points in tactics which mean so much in the third game of a strenuous afternoon.

For the winners, their forwards played energetically and skilfully throughout, the captaincy of Lewis left nothing to be desired, Harris displayed a surprising turn of speed, and Mundy's height proved a great advantage in the line-outs. John played a sterling game at scrum-half, especially in defence, and Powell, at stand-off, played brilliantly, his knowledge of the game standing him in good stead. Youngman and Curtiss combined well, and their tackling, especially that of Youngman, was a feature of the match.

For the losers, Jackson, Kirkwood and Swinton Hunt played hard as forwards; Wilson, at the base of the scrum, was indefatigable if somewhat slow in getting the ball out. Dransfield, as stand-off, was fast and elusive, and opened the game out better than in the previous rounds. Blusger ran well and tackled hard, but seemed to lack ideas, while Nel, at full-back, was too exhausted to do himself justice after his many sparkling runs in the previous rounds.

The refereeing of Maley, Taylor, Jenkins and Capper maintained a high standard throughout.

In the evening a Rugger Dance was held at 16, Bruton Street, where the excitements of the day were only exceeded by the pleasures of the night. This function proved a triumph for organization, the dancing, the bar and the side-shows all being well patronized and working smoothly. Congratulations to Darmady and Lewis, upon whom much of the enjoyment of the evening—together with its profitable results for the College Appeal—depended.

GEORGE.

ASSOCIATION FOOTBALL CLUB.

ST. BARTHOLOMEW'S HOSPITAL *v.* BRIGHTON OLD GRAMMARIANS.

Played on Saturday, March 25th, at Winchmore Hill. Lost, 1—3.

Poor finishing has, throughout the season, accounted for the throwing away of many chances of scoring. It was again, in this game, responsible for an undeserved defeat. Both sides failed to combine at all well in the opening stages, but we soon took play well into the opponents' half. The forwards were very badly fed by the halves, who again were passing blindly and erratically up the field with no idea of starting constructive movements. However, some good through passes came from the inside forwards, but the wings, by centring too late, spoiled otherwise quick and well-judged runs. At half-time there was no score, Wheeler having toyed with a gift goal, and the other forwards having contributed generously to a plentiful bag of misses.

The second half was better, except for two lapses on the part of the defence. From a goal-kick the ball travelled through both the halves and the backs, who grossly misjudged the bounce on the hard ground and failed to cover each other. The opposing forwards went clean through and scored with ease. Their second goal was very similar.

Meanwhile our forwards were playing much better and appeared a formidable line. Shackman scored a very worthy goal, but the Old Grammarians' defence managed to prevent further score.

Team.—R. A. L. Wenger (*goal*); J. Shields, G. Herbert (*backs*); J. D. Ogilvie, D. R. S. Howell, W. M. Maidlow (*halves*); A. W. Langford, F. E. Wheeler, A. H. Hunt, R. Shackman, R. C. Dolly (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* CENTRAL TELEGRAPH OFFICE.

Played on Wednesday, April 5th, at Chiswick, for the Aldwych Cup. Drawn, 1 1.

The parade ground condition of the ground made ball-control very difficult. Brusque movements, lacking in all the finer points of football, were carried out at top speed, first by one side and then the other, with neither appearing very likely to score. Brown, at centre-forward and trying hard, did nothing to get the forwards moving as a line, and robbed Wheeler of an almost certain goal. We scored first from a free-kick taken by Shackman outside the penalty area. The goal-keeper had no chance of saving, especially as his sight of the ball was well obscured by Dolly. Shields and Hardie played well, and were responsible for maintaining the lead of 1—0 till half-time.

An admirable goal by Langford was disallowed through Brown and Wheeler running blatantly off-side; and then Brown, in his enthusiasm, basted the ball far over the railings where a gentle nudge could hardly have failed to score. The Centels succeeded in one of their better rushes, and would have scored again but for a good save at full length by Wenger.

At the end of extra time the score was still 1—1, and it was decided to share the Cup.

Team.—R. A. L. Wenger (*goal*); J. Shields, P. J. Hardie (*backs*); J. D. Ogilvie, D. R. S. Howell, A. H. Hunt (*halves*); A. W. Langford, F. E. Wheeler, E. E. Brown, R. Shackman, R. C. Dolly (*forwards*).

ATHLETIC CLUB.

An exceedingly enjoyable match against Monkton Combe School was contested on April 1st. The visiting team was largely composed of Bart.'s men, although two London University "purples" competed in the Long Jump, Hurdles and 880 Yards.

The scratch "Hospital team" won an excellent match by 5 events to 4, having conceded the following handicaps: 20 yds. per lap (440 yds.) in the track events, 10 yds. and one hurdle in the 120 Yards Hurdles, 5 yds. in the 100 Yards, 7 ft. in the "Weight", 3 in. in the High Jump, and 2 ft. in the Long Jump.

J. R. Hill won the "Hundred" for us in spite of a slow start, and E. Reilley followed this up with an excellent victory in the "Quarter" by about 2 yds. R. M. Page (London Hospital) won the Mile as he liked, and showed excellent form although he had not performed on the track since last year.

Unfortunately the handicap proved too great for us in all the field events except in the "Weight". Here G. D. Wedd obliged with a put of 40 ft. in spite of the slippery condition of the "circle". If it had not been for the unfortunate fact that E. D. Vane (London University) crashed at the second hurdle we should undoubtedly have won the 120 Yards Hurdles. As it was he pluckily continued hurdling, and, beating the School second string, just failed to catch the first string on the tape.

ANNUAL SPORTS.

The Annual Sports will take place at Winchmore Hill on Saturday, May 13th. Please note that the date announced in last month's JOURNAL is incorrect.

Tickets of admission will be sold this year, price 1s. each, in aid of the College Appeal Fund. Tickets can be obtained on application to the Hon. Secretary.

Sports will commence at 2.15 p.m., and entries must be sent in by Saturday, May 6th.

BOXING CLUB.

The United Hospitals' Boxing Competition was held at Blackfriar's Ring on Monday, March 6th. There was a very large entry from all the hospitals, who had apparently, like ourselves, decided that "Tommies" had held the Cup for long enough.

Now, after a lapse of three years, the United Hospitals' Boxing Cup has come back to Bart.'s by an overwhelming victory, in which we won four out of eight weights and were runners-up in the fifth. This achievement is all the more noteworthy in the face of an unusually large entry and a marked improvement in the general standard of boxing.

We have been fortunate this year in acquiring some much needed new talent in the Club in A. Butt and J. J. Slowe. The latter was the welter-weight in the U.H. competition, and the former, who is the Inter-Universities' Fly-weight champion, won both Fly- and Bantam-weights, and so contributed largely towards our success.

J. Perrot had a hard fight in the preliminary round of the middle-weights, and though giving away a lot of weight, was unfortunate to lose. Slowe beat Philips of London Hospital in the preliminary round of the welters. Philips is a hard man to beat, but failed to last out the three rounds. Blair and Ward both had easy fights in the semi-finals, but Blair lost in the final to Bevan of Mary's. He was giving away a lot of weight to an experienced boxer, and his duties as house surgeon had seriously curtailed his opportunities for training. As it was, he put up a really good fight and only lost narrowly on points. In the semi-final of the welters, Slowe had to meet last year's winner in Lytle of St. Thomas's, but the latter was disqualified for hitting with an open glove. Butt won his fly-weight semi-final without extending himself, but in the bantams, Griffiths, of St. Thomas's, put up a good fight, though Butt's left leads were too quick for him. In the finals, Butt knocked out Hitchins of St. Thomas's early in the first round, and then went on to defeat Reese of Guy's by a polished display of ringcraft, in which the issue was never in doubt.

Ward had a good fight with Mayer in the final of the light-weights; the first two rounds were very closely contested, but Ward drew ahead in the final round to win on points. Slowe had the measure of Lemden in the welter-weight final, and knocked him out with a fine right to the solar plexus in the third round.

The following is a list of winners and runners-up in the competition:

Fly-weight: Winner, A. Butt (Bart.'s); runner-up, R. E. Hitchens (St. Thomas's).

Bantam: Winner, A. Butt (Bart.'s); runner-up, D. H. Reese (Guy's).

Feather: Winner, R. G. Reese (St. Thomas's); runner-up, H. I. Samuel (Middx.).

Light: Winner, F. G. Ward (Bart.'s); runner-up, R. O. Mayer (London).

Welter: Winner, J. J. Slowe (Bart.'s); runner-up, N. A. Lemden (Middx.).

Middle: Winner, P. C. Ross (Mary's); runner-up, R. A. Warren (London).

Light Heavy: Winner, T. G. Revan (Mary's); runner-up, A. T. Blair (Bart.'s).

Heavy: Winner, R. T. Clarkson (Guy's); runner-up, C. J. Bevan (London).

F. G. WARD,
Hon. Sec.

CORRESPONDENCE.

HISTORY OF THE HOSPITAL ARMS.

To the Editor, 'St. Bartholomew's Hospital Journal'.

DEAR SIR,—Whatever may be the opinions of your readers on changing the arms of the Hospital, I think that there can be no two views as to the beauty and significance of the shield proposed. We all owe a debt of thanks to the generous provider of this attractive plate. Two points, however, rather interest me, about which your Heraldic advisers can no doubt inform us. The first is, are we, in strict heraldic law, entitled to supporters? I had thought that these were usually the subject of a special grant. The second point—may we, without special permission, put the Royal lions on our shield? I think if we *do* have supporters, that it would be pleasanter to have a representation of a modern nursing sister in place of the rather sad-looking nun.

Yours truly,
D. A. H. MOSES.

10, Kildare Terrace, W. 2;
April 10th, 1933.

To the Editor, 'St. Bartholomew's Hospital Journal'.

DEAR SIR,—The article in the current issue of the JOURNAL on the Hospital's coat of arms prompts me to mention a rather interesting discovery I made at St. Cross Hospital, Winchester, in September last.

In the south-east aisle of the Church of St. Cross there is a window to the memory of a Major Lawson, killed in the Great War, and on this window there is the unmistakable "Bart.'s" shield. Later I wrote to the Master of the Hospital asking whether he knew of any connection between St. Bartholomew's and St. Cross, but I could obtain no further information from him.

Having read the account by "Rouge Croix", it would now appear that this shield at St. Cross was borne by a member of the Lawson family of Durham, whose coat of arms was apparently the same as that of the early Hospital of St. Bartholomew.

Yours faithfully,
G. K. HORNER.

The Clerk's Office,
St. Bartholomew's Hospital,
London, E.C. 1;
April 21st, 1933.

To the Editor, 'St. Bartholomew's Hospital Journal'.

DEAR SIR,—When I opened my April JOURNAL, what a horrid shock I received! There was the familiar "Bart.'s" crest tangled up between a mass of crowns and leopards and things, and supported by a monk and a nun. No wonder the nun is looking sadly away as though such a sight was painful and unpleasant in the extreme.

How I hope this travesty will not replace the simple and dignified crest so familiar and beloved by us all.

Suppose, Sir, that such a regrettable occurrence did take place, think of the complications it would lead to. Black and white ("kill or cure!") have been the colours dear to old Bart.'s men for generations. Now we have got to countenance scarlet and gold as well! May I suggest that if Bart.'s undergoes these changes, black and white remains the colours of OLD BART.'S men, whereas the PRESENT men take scarlet and gold for their colours (if black and white represent "kill or cure", scarlet and gold might represent "plough or pass"). Furthermore, it would be interesting to know what colour suits or sports coats the present men would select in order to tone with their ties.

No, Sir, let us stick to our honoured crest, and not seek to change what has been the honoured symbol of our *Alma Mater* for many generations.

Yours faithfully,
J. L. CYRIL DOYLE.

The Square,
Fakenham, Norfolk;
April 13th, 1933.

To the Editor, 'St. Bartholomew's Hospital Journal'.

DEAR SIR,—Much of the interest of medicine lies in following up our cases. May I therefore appeal through your columns for the satisfaction of my curiosity with respect to the subsequent progress of the anonymous telephonist (he said he was a Bart.'s man, and the voice sounded consistent with that diagnosis) who recently sought my advice as to his health.

I satisfied him as well as I could, and he finally offered to reveal his name, but this I declined, saying, however, that I should like to hear how he got on. His failure to report I consider rather as taking advantage of my respect for his original desire for anonymity, which he might well maintain, and yet tell me whether the measures proposed over the telephone were successful, or whether he "dyed Gram-negative".

Yours very sincerely,

ALEX. E. ROCHE.

140, Harley Street, W. 1;
April 3rd, 1933.

REVIEW.

INHERITED ABNORMALITIES OF THE SKIN AND ITS APPENDAGES. By E. A. COCKAYNE, F.R.C.P. (Oxford University Press, 1933.) Pp. 388. Price 32s. net.

In the study of "inherited" abnormalities, it is useful to the investigator if the defects are such as can be recognized at a glance, so that it is not too laborious to discover the condition of great-aunts, of cousins variously removed, etc. In choosing deformities of the skin, therefore, Dr. Cockayne has chosen specially suitable defects, because they are usually very striking, and, when present, do not often vary much from the typical. Nevertheless, the amount of work which has been put into the preparation of this book is very great indeed.

A large proportion of the conditions described will be quite unknown to most readers: they are conditions of great rarity. But the book is not intended for reading, but for reference, and as such will prove invaluable, not only to dermatologists, but to anyone meeting a hereditary deformity which has to be explained to the parents.

The study of genetics does not yet form a part of the medical curriculum, therefore the average person is likely to be bewildered when faced with the following type of sentence (p. 264): "The descent is matrilineal, and it may be a true example of hologynic descent due to non-disjunction of two X-chromosomes, the gene for the defect being sex-linked".

One must, therefore, master the language of genetics before reading the general matter, and for this purpose Dr. Cockayne has written a concise introduction of some forty pages which sets forth the general principles of heredity—a subject with which one cannot very well remain unacquainted to-day. Dr. Cockayne's book serves also a number of minor purposes, and though less than 400 pages in length, is the concentrated product of very great industry.

EXAMINATIONS, ETC.

University of London.

Second Examination for Medical Degrees, March, 1933.

Part I.—Acharya, B. S. S., Armstrong, B. P., Bateman, A. D., Blakelock, L. H., Brooker, A. E. W., Carpenter, M. A., Cobb, W. A., Cochrane, J. W. C., Darke, G. H., Ellis, B. H., Foster, L., Gillett, J. R., Harrison, R. J., Herbert, G., Hoadley, J., Jackson, H., Longland, C. J., McKane, T. O., Mountjoy, E. R., Pearce, H. A., Ronalle, H. L. M., Rutherford, S. T., Simmons, G. H. A., Stevenson, R. Y., Sugden, W. G., Thomson, R. W., Tongbai, B., White, R. A.

Part II.—Beeley, F. J. L., Bickford, B. J., Blomfield, D. M., Bostock, T. F., Bradley-Watson, I. D., Brentnall, G. C., Clarke, E. P., Cochrane, J. W. C., Dale, L. F., Fairlie-Clarke, G. A., Fisk, K. H., Gibson, R. E., Grundy, T. N., Harper, K. H., Henig, L., Hollands, F. G., Kinnear, A. I., Lavy, R. E., Leask, L. R., Lockett, J. M., McGladdery, J. P., Moore, F. T., Ogilvie, J. D., Oliver, W. A., Roberts, J. L. D., Rogers, K. G., Rotter, K. G., Samuel, D. M., Sandell, L. J., Stoddart, W., Underwood, J. E.

L.M.S.S.A.

Final Examination, March, 1933.

Medicine.—Van Rooyen, J. A.

Primary Examination, April, 1933.

Physiology. Anderson, J. D., Evans, A. H.

CHANGES OF ADDRESS.

GALLOP, E., Cubert, Newquay, Cornwall.
GIBBINS, H. D., Chalkway, Kemsing, near Sevenoaks.
GRANGE, C. D'OYLY, 2, Lancaster Road, Harrogate.
HUGGINS, S. P., Hughenden Cottage, High Wycombe. (Tel. 995.)
JEAFFRESON, B. L., 32, Park Square, Leeds.
LANDON, J., 9, Tamworth Street, Fulham, S.W. 6.
MORTON, J. E. C., 63, East Street, Kingston, Jamaica, British West Indies.

BIRTHS.

ABERCROMBIE.—On April 3rd, 1933, at 59, Belsize Park, Hampstead, to Marie, wife of George Francis Abercrombie, M.A., M.B.—a daughter.

ARTHUR.—On April 10th, 1933, at "The Oaks", Fakenham, Norfolk, to Violet, wife of G. Kilpatrick Arthur, M.R.C.S., L.R.C.P.—a daughter.

HARRISON.—On April 14th, 1933, at Beckenham, to Mirabel Grace (*née* Davis), wife of Dr. W. R. E. Harrison, of "Grasmere", Swanley, Kent—a son.

HOSFORD.—On April 9th, 1933, at 2, Cholmeley Crescent, N. 6, to Millicent (*née* Vaughan Edwards), wife of John Hosford—a son.

KNIGHT.—On April 9th, 1933, at "The Grange", Crawley, to Helen, wife of Dr. Ronald Knight—a son (stillborn).

MACVICKER.—On April 18th, 1933, at "Holt", Kingskerswell, S. Devon, to Joan (*née* Buttery), wife of Dr. Colin MacVicker—a daughter.

MORGAN.—On March 31st, 1933, at 175, Chepstow Road, Newport, Mon., to Nancy, wife of Glyn Morgan, M.C.—a son.

NICHOLLS.—On April 15th, 1933, to Florence Mary (*née* Webb), wife of Hubert A. Nicholls, M.R.C.S., L.R.C.P., of Caradon, Rayleigh, Essex—a daughter (Susan Ann).

PAGAN.—On April 11th, 1933, at 104, St. James Road, Southampton, to Betty (*née* Watkins), wife of Dr. A. T. Pagan—a son.

PENTREATH.—On April 8th, 1933, at The Livingstone Hospital, Dartford, Kent, to Marjorie, wife of E. U. H. Pentreath, M.R.C.S., L.R.C.P.—a daughter.

MARRIAGES.

BARON—JACOB.—On April 20th, 1933, at the Bayswater Synagogue, Dr. Cyril F. J. Baron, second son of Mr. and Mrs. John Baron, of 94, Holden Road, Finchley, to Kathleen, daughter of Mr. and Mrs. Henry M. Jacob, of "Denewood", Daleham Gardens, Hampstead.

FENTON—TREWARTHA-JAMES.—On April 8th, 1933, Thomas G. Fenton, of Torquay, to Iris, daughter of Mr. and Mrs. Trewartha-James, 5, Chester Place, W. 2.

GALLOP—GWATKIN.—On April 3rd, 1933, at the West London Synagogue, Upper Berkeley Street, W., Edward youngest son of Mr. and Mrs. F. Gallop, of 12, Eton Avenue, N.W. 3, to Doris Muriel Ruth, youngest daughter of the late Mr. A. J. C. Gwatkin, of Rugby, and Mrs. Gwatkin.

LEAVER—ROBINSON.—On April 22nd, 1933, at St. Peter's Church, Ealing, by the Rev. J. B. Kite, M.A., Vicar, assisted by the Rev. Canon G. Birchenough, M.A., Robert Henry Leaver, M.R.C.S., L.R.C.P., only son of Mr. and Mrs. Henry Leaver, of 35, Palace Court, W. 2, to Audrey, younger daughter of Major R. A. Robinson, T.D., and Mrs. Robinson, of 32, Corfton Road, Ealing, W. 5.

DEATHS.

BENSON.—On April 2nd, 1933, at his residence, Santosha, St. Aubins, Jersey, Surgeon-General P. H. Benson, late Indian Medical Service, aged 81.

HOGAN.—On April 20th, 1933, suddenly, Dr. C. Evelyn Hogan, of Baron's Court.

STEVENS.—On March 31st, 1933, at a nursing home, Arthur Blundell Stevens, M.B., of Hazelwood, Wimbledon Hill, aged 81.

NOTICE.

All Communications, Articles, Letters, Notices, or Books for review should be forwarded, accompanied by the name of the sender, to the Editor. ST. BARTHOLOMEW'S HOSPITAL JOURNAL, *St. Bartholomew's Hospital, E.C. 1.*

The Annual Subscription to the Journal is 7s. 6d., including postage. Subscriptions should be sent to the MANAGER, Mr. G. J. WILLANS, M.B.E., B.A., *at the Hospital.*

All Communications, financial or otherwise, relative to Advertisements ONLY should be addressed to ADVERTISEMENT MANAGER, *The Journal Office, St. Bartholomew's Hospital, E.C. 1. Telephone: National 4444.*

St. Bartholomew's Hospital JOURNAL.

"Æquam memento rebus in arduis
Servare mentem."
—*Horace*, Book ii, Ode iii.

VOL. XL.—No. 9.] JUNE 1ST, 1933. PRICE NINEPENCE.

CALENDAR.

Fri., June 2. Medicine: Clinical Lecture by Dr. Hinds Howell. Dr. Graham and Mr. Vick on duty.
Sat., ,, 3.—Cricket match *v.* St. George's Hospital. Home.
Sun., ,, 4.—Whit-Sunday.
Mon., ,, 5.—**Bank Holiday.**
Tues., ,, 6.—Prof. Fraser and Prof. Gask on duty.
Wed., ,, 7.—Surgery: Clinical Lecture by Sir C. Gordon-Watson.
Fri., ,, 9.—Medicine: Clinical Lecture by Dr. Gow. Lord Horder and Sir C. Gordon-Watson on duty.
Sat., ,, 10.—Cricket match, Past *v.* Present. Home.
Mon., ,, 12.—Special Subjects: Clinical Lecture by Mr. Elmslie.
Tues., ,, 13.—Dr. Hinds Howell and Mr. Harold Wilson on duty.
Wed., ,, 14.—Surgery: Clinical Lecture by Mr. Harold Wilson. Cricket match *v.* Guy's Hospital. Home.
Thurs., ,, 15.—**Abernethian Society: Summer Sessional Address by Prof. Burgess on "Stonecutters and Stonecrushers".**
Fri., ,, 16.—Medicine: Clinical Lecture by Dr. Gow. Dr. Gow and Mr. Girling Ball on duty.
Sat., ,, 17.—Cricket match *v.* Hampstead. Home.
Mon., ,, 19.—Special Subjects: Clinical Lecture by Mr. Bedford Russell.

Last day for receiving matter for the July issue of the Journal.

Tues., ,, 20.—Dr. Graham and Mr. Vick on duty.
Wed., ,, 21.—Surgery: Clinical Lecture by Mr. Vick. Cricket match *v.* Times Club. Away.
Fri., ,, 23.—Medicine: Clinical Lecture by Dr. Graham. Prof. Fraser and Prof. Gask on duty.
Sat., ,, 24.—Cricket match *v.* R.N.C. Away.
Mon., ,, 26.—Special Subjects: Clinical Lecture by Mr. Higgs.
Tues., ,, 27.—Lord Horder and Sir C. Gordon-Watson on duty.
Thurs., ,, 29.—**Abernethian Society: Cinematographic Demonstration by Dr. Canti on "Tissue Culture".**

EDITORIAL.

WE are happy to be able to announce this month news of vital interest to all our readers.

The Dean writes:

29th May, 1933.

DEAR MR. EDITOR,

The great day has arrived. The Medical College of St. Bartholomew's Hospital has bought the site of the old Merchant Taylors' School, and the future development of the College is assured. That is, indeed, an achievement of which we of this generation may be justly proud, and for which later generations will be grateful to us.

There can be no doubt that, when we have carried through the whole of our scheme, the site, buildings and equipment of our College will be the finest in this country, if not in the world.

Now that the purchase has been effected, let me record once more the pleasure I derive from the fact that a very large part of the money which has enabled us to effect it has been provided by Bart.'s men. I thank them again.

We are about to issue an appeal to the public, and I feel sure that, when they realize what Bart.'s men have done for themselves, they will come to our aid and help us to meet the rather heavy liability which we have incurred. We have to collect, and quickly, the sum of £65,000. Is that impossible? It was said by some a year ago that the whole scheme was beyond our capacity, and that we should never acquire the site. Few things in this world are impossible if only we have the will. It is now up to us to use every endeavour to get this money. I have running through my head the plain fact that only 13,000 £5 notes are required, and my past experience suggests to me that therein lies a hint of our best way to tackle it. Small sums are

given much more readily than large. I cannot, personally, understand why Bart.'s men find it difficult to collect money from their friends, for during the past year I have myself collected something like £1000 in small sums. I would again urge each one of you to make himself responsible for collecting five "fivers", so that our new "Fiver Scheme" may bear fruit.

Another point: I am told that many Bart.'s men believe that the main objective of our scheme is a Residential College. That is very far from true. Our chief purpose, as has been clearly stated in our previous communications, is the housing of the Pre-Clinical Departments. It is true that we wish eventually to have a Residential College, but its provision will be the last, rather than the first, of our tasks. No part of the money for which we are now appealing will be expended on the building of a Residential College.

Once again I thank the Students for the great assistance thay have given and are giving. The sum they have raised is approaching £500 a noble effort indeed. Also, I must not fail to express our gratitude to the Women's Guild, for by their recent Jumble Sale and Fair they raised for us no less than £600. The whole fraternity of Bart.'s has one object in view. Let it not be said that, having got so far, we have lost our energy. Join the Bart.'s "Fiver Scheme" and do your best!

Having embarked on the next stage of our appeal for funds, we have now to consider how best the buildings on the Charterhouse Square site can be altered to meet our needs. Until recently it was thought that we should have to build a new Anatomical School as well as a Residential College. But it is now considered that, of the buildings already on the site, one will take Physics, another Chemistry, and a third Anatomy and Biology. A fourth has room for the Physiology and Pharmacology Departments, a Dining Hall, Cloak Rooms, a Students' Common Room and a Common Room for old Bart.'s Men. The whole of the alterations to these buildings will cost about £30,000. This is less by at least £10,000 than the figure which we previously had in mind, viz. £25,000–£35,000 for a new Anatomical Department and £15,000–£20,000 for alterations.

When the necessary arrangements have been made with the Students' Union, the College proposes to hand over to them the playing-field, the rifle range, the gymnasium, the two fives courts and the two racquet courts. We hope to be able to do this very soon, but it must await a suitable arrangement with the Students' Union. The building alterations we also hope to begin soon, but the progress of these must depend very largely on the rate at which funds come in, and on the financial arrangements we may be able to make. In this direction those Old Bart.'s men who have not yet subscribed can give us valuable and timely help. The number of Bart.'s men on the subscribers' list is still not more than a third of the total of our old students. What can I say that may persuade the others to lend us a hand? Will they not send something, however small?

Yours sincerely,
W. GIRLING BALL,
Dean of the Medical College.

* * *

COLLEGE APPEAL FUND.

	£	s.	d.		†
Staff	11,984	15	9	(68)	
Demonstrators	1,504	1	0	(65)	
Students	436	17	3	(248)	
Old Bart.'s men:					
Bedfordshire	5	10	6	(2)	(26)
Berkshire	86	1	0	(13)	(37)
Buckinghamshire	64	14	0	(8)	(29)
Cambridgeshire	149	13	0	(10)	(42)
Cheshire	1	1	0	(1)	(26)
Cornwall	22	2	0	(5)	(36)
Cumberland	5	0	0	(1)	(6)
Derbyshire	19	14	0	(4)	(17)
Devonshire	419	18	0	(39)	(117)
Dorset	16	8	0	(8)	(30)
Durham	16	6	0	(3)	(11)
Essex	225	15	6	(15)	(69)
Gloucestershire	108	13	0	(6)	(66)
Hampshire	388	19	0	(35)	(134)
Herefordshire	12	7	0	(3)	(11)
Hertfordshire	57	10	0	(9)	(73)
Huntingdonshire					(1)
Isle of Wight	135	8	0	(9)	(25)
Kent	518	5	0	(57)	(149)
Lancashire	33	7	0	(10)	(82)
Leicestershire	133	12	0	(6)	(28)
Lincolnshire	42	3	0	(12)	(25)
Middlesex	371	13	0	(15)	(68)
Norfolk	149	7	6	(17)	(60)
Northamptonshire	54	4	0	(4)	(17)
Northumberland	101	1	0	(2)	(11)
Nottinghamshire	13	13	0	(2)	(28)
Oxfordshire	166	10	0	(14)	(29)
Rutland					(2)
Shropshire	25	4	0	(6)	(22)
Somersetshire	449	6	0	(22)	(43)
Staffordshire	63	13	0	(5)	(37)
Suffolk	262	1	0	(15)	(46)
Surrey	398	10	0	(37)	(180)
Sussex	227	8	0	(38)	(170)
Warwickshire	176	18	0	(16)	(56)
Westmorland	1	0	0	(1)	(5)
Wiltshire	92	11	0	(10)	(26)
Worcestershire	142	8	6	(17)	(77)
Yorkshire	254	19	6	(19)	(101)
Wales	32	11	0	(8)	(150)
London	2,410	10	8	(139)	(971)
Channel Islands	10	0	0	(1)	(9)
Scotland	12	2	0	(3)	
Abroad	38	5	0	(7)	
South Africa	239	3	6	(9)	
Canada	87	2	0	(5)	
East Africa	54	4	0	(3)	
West Africa	140	5	0	(4)	
India	102	0	0	(2)	
Syria	2	2	0	(1)	
U.S.A.	5	0	0	(1)	
Ireland	14	14	0	(3)	
North Africa	1	0	0	(1)	
Carried forward	£22,488	7	8		

	£	s.	d.	
Brought forward	22,488	7	8	
Malay States	6	0	0	(2)
China	33	0	4	(5)
France	50	0	0	(1)
Trinidad	20	0	0	(1)
British West Indies	23	1	0	(3)
Services	478	2	0	(23)
*Others	16,842	6	10	(115)
	£39,940	17	10	

*These figures include:	£	s.	d.
University of London	5000	0	0
Unilever Bros.	500	0	0
League of St. Bartholomew's Nurses	25	0	0
The Executors of the late Alfred de Rothschild, Esq.	2000	0	0
Rahere Lodge	105	0	0
Corporation of the City	1000	0	0
Fishmongers' Company	262	10	0
Mercers' Company	1000	0	0
Ironmongers' Company	100	0	0
St. Bartholomew's Hospital Reports	250	0	0
The Haberdashers' Company	50	0	0
The Goldsmiths' Company	500	0	0

† Number of Bart.'s men in County.

* * *

The custom of inviting distinguished surgeons from both provincial and American medical schools to this Hospital during the summer months seems to have become established, and the Surgical Professorial Unit have been extremely wise in securing Prof. Burgess, of Manchester, for a brief period during the present month. In extending our hearty welcome to him we hope that he will enjoy his visit as much as we have enjoyed those of his predecessors, Prof. Cabot, Lord Moynihan, Prof. Grey Turner and Prof. Wilkie.

Those who do not have the chance of meeting Prof. Burgess in the ward or theatre will be able to hear him lecture to the **Abernethian Society on Thursday, June 15th, at 8.30 p.m.**, when he will deliver the **Summer Sessional Address on "Stonecutters and Stonecrushers".**

* * *

At the Annual Representative Meeting of the British Medical Association to be held in Dublin, beginning on July 21st, the following St. Bartholomew's men, amongst others, hold office or will be taking part:

Medicine.—Discussion: Sir Humphry Rolleston.

Surgery.—Discussion: W. M. Levitt, M.B., M.R.C.P.

Radiology.—President: G. Harrison Orton, M.D., D.M.R.E. Hon. Secretary: L. V. Sparks, M.R.C.S., D.M.R.E. Discussion: W. M. Levitt, M.B., M.R.C.P.

Neurology and Psychological Medicine.—Vice-President: J. G. Porter Phillips, M.D., F.R.C.P. Discussion: J. G. Porter Phillips, M.D., F.R.C.P.

Orthopædics.—Hon. Secretary: H. J. Seddon, M.B., F.R.C.S. Discussion: R. C. Elmslie, O.B.E., M.S., F.R.C.S.

History of Medicine.—Vice-President: K. R. Hay, O.B.E., M.B. Hon. Secretary: A. W. Franklin, M.B., M.R.C.P.

Medical Sociology.—Vice-President: Harry Campbell, M.D., F.R.C.P.

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THE EIGHTH DECENNIAL CLUB.

We would remind readers that the Annual Dinner will be held on June 28th as announced in the April issue.

* * *

THE NINTH DECENNIAL CLUB.

The Dinner of the Ninth Decennial Contemporary Club will take place at the Langham Hotel on Wednesday, July 5th, at 7.30 p.m. The Secretaries for this Club are: R. C. Elmslie, C. M. Hinds Howell.

* * *

Congratulations to Prof. I. de Burgh Daly on being appointed to the Chair of Physiology in the University of Edinburgh and to Prof. Hadfield who has accepted an invitation to fill the Chair of Pathology in the University of Bristol.

* * *

THE UNITED HOSPITALS AND UNIVERSITY OF LONDON MOTOR CLUB.

This Club has recently been formed under the presidency of Dr. Benjafield. Its object is the furtherance of all forms of motor sport which do not entail damage to either car or driver, and is open to all members of the London Hospitals and University. Those interested in the club should apply to Dr. A. H. Robb-Smith, who is the representative of the club at this Hospital.

* * *

STOP PRESS. BIRTHDAY HONOURS.

Our heartiest congratulations to Sir Thomas Dunhill.

EX APPEAL.

(Pour encourager les autres.)

Much have I laboured since I left the fold
And many comely circulars have seen
Cajoling alms from out that living lean
We doctors earn in copper, silver, gold.

Oft of that eloquence had I been told
Whereby Lord K* coaxed cash from Aberdeen,
Yet did I never lap the Hippocrene
Till I heard Girling bawl out loud and bold.

Then felt I like some Bradman at the crease
When a dread Larwood swims into his ken,
Or like stout conies when, in heart's surcease,
They stare upon a stoat . . . I took my pen,
Ducked low (like Don), my duty did (like Reece†),
And wrote a cheque for fifty there and then.

T. PANDY.

* Of the "London". † Of the "Mantelpiece".

AIMS AND METHODS OF MEDICAL EDUCATION.

I. AIMS.

ACTS of Parliament are commonly introduced by a preamble which explains their purpose what evils they are intended to correct, what good end they are designed to further.

To the medical curriculum there is no preamble, and this, at least from the critic's point of view, is a pity, since, if he attack it for failing to achieve its aim, its defenders can reply that the said aim is, in fact, far other than he supposes. Actually its defenders, if any, do not do this, for, curiously enough, though medical education and the medical curriculum have lately been subjected to much critical discussion (sufficient to show that something must be radically wrong), the fundamental question of its aim and purpose is scarcely, if at all, debated. Yet, after all, may not this radical something be the most radical thing possible, namely, that the present curriculum has no clearly envisaged or well-defined aim at all, but has "come to be", and is now regarded as an established institution which may be ornamented and added to or even reverently amended, but which it would be sacrilege to take to pieces and re-build?

If anyone doubt that this is so, let him try to devise an explanatory preface to the existing curriculum, briefly indicating its purpose and *raison d'être* such as would carry conviction to an intelligent layman.

Such a preamble might begin thus: "Whereas it has been decreed that those who desire to practise medicine with the privilege of signing death certificates and prescribing certain drugs shall first be subjected to tests; Now WE, having diligently considered the matter, have devised certain tests, easy of application, to discriminate between man and man, and a course of instruction leading thereto hereinafter to be known as 'The Curriculum'".

Or thus: "Whereas the art of medicine, having its inception in magic and witchcraft and until lately not wholly divorced from empiricism and faith-healing, now rests secure upon the sure foundation of the physical sciences, and whereas the first care of the practitioner should be always to comprehend the mechanisms alike of diseases and remedies and without such comprehension to do nothing, Now WE do deem it expedient that the intending practitioner shall, for the space of five or six years, occupy himself with the study of the sciences and mechanisms aforesaid to the end that, being well primed with knowledge and well assured of the paramount importance of these subjects, he may be fitted to become, in due time, a scientific practitioner worthy of an enlightened age. Moreover, that he be not idle, he shall frequently submit himself to the wholesome discipline of examinations whereby, etc., etc.".

Or (lastly), thus: "Whereas it is expedient that there should be at the service of the people a body of humane, intelligent and thoughtful men, so trained and instructed as to be able both to give advice in matters of health and to minister to the afflicted, whether by counsel, medicines or surgical intervention; Now WE, having long and earnestly considered, etc., do propound the course of study and scheme of examinations hereto subjoined in confidence that, being wisely administered and diligently pursued, it will achieve its high purpose, and minister alike to the honour of the profession and to the good of the public".

Shedding the fancy dresses, the first preamble describes the curriculum as a scheme for producing qualified as opposed to unqualified practitioners, the second as a course of instruction in medical and ancillary sciences, and the third as a plan for making good doctors.

That the first of these adequately described either the curriculum or its purpose we should doubtless blush to admit, yet it is hard to avoid the conclusion that a great part of what is so laboriously learned and taught has little purpose but to facilitate the task of the examiner. The examiner is required to separate, not sheep from goats, but sheep from sheep (or, perhaps, goats from goats), and he deserves our sympathy; but it is, to say the least, unfortunate that generation after generation of examiners have chosen the written memory test as their principal instrument of discrimination, so that the methods of examination are now governed by an extremely powerful convention almost impossible to break, and both examiners and examinees would be profoundly shocked if reasoning power, manual dexterity or evidence of original thought were allowed as great or greater weight in examinations as retention of knowledge.

The apotheosis of the memory test is, of course, the examination known as "The Primary". This examination, if it were questioned as to its purpose, would probably reply that it was engaged in assuring that candidates for the higher walks of surgery had a good knowledge of anatomy and physiology; but since it is notorious that the minutiæ of anatomy and of laboratory physiology studied for it are not only quickly forgotten, but would be of no great assistance to the surgeon if he remembered them, this avowal would clearly be what the psychologists call "a rationalization". Deeper analysis would undoubtedly reveal that the examination, being required, like Gideon of old, to eliminate

the great majority of the candidates, had fallen into the habit of subjecting them to a competition in reeling off memorized facts against time in circumstances conducive to stage fright, and had chosen the minutiæ aforesaid as the material for the competition. What other explanation can be offered of this extraordinary device which must infallibly eliminate a student lacking the faculty of rapid evacuation of the memory, no matter how well endowed with intelligence, imagination, dexterity and power of observation? Not even knowledge can save him. It is depressing to contemplate, even for a moment, the tale of man-years (and young man-years at that) wasted in endeavours to prepare for this ordeal by memory.*

True, "The Primary" has no place in the ordinary curriculum, but it may fairly be used to illustrate one of the chief troubles in medical education. The insistence on written examinations at every stage and the convention by which (especially, but not solely, in the pre-clinical phase) they deal almost exclusively with the recitation of things learned by rote, heaps on both student and teacher burdens grievous to bear. The student's mind is confused by the mass of detail, his memory is worn out, his other faculties languish from neglect. In passing, it may be noted that the same evil has invaded the nursing curriculum, with results widely deplored. It is hard to see how any reform worthy of the name is possible unless the methods of examination are radically changed and the importance of examinations materially diminished. The aim of the curriculum is emphatically not to produce successful medical examinees, or even "duly qualified medical practitioners".

So far the argument may well carry conviction, at least to students, and it is even possible that if the matter were debated in high quarters, "a large measure of agreement in principle" might be obtained, but the questions raised by preambles 2 and 3 are very much harder to dispose of.

What is the place of science in medical education and, for that matter, in medical practice? Could the personified curriculum protest that it had no responsibility for the kind of doctor it produced? "I have taught him what he needs to know of Medicine and its ancillary sciences; what he makes of it is not my affair". Or, if its purpose is to train men to become good doctors, can the means now in use be justified?

That medicine, not less than surgery, is, and must always remain an art, not a science, seems to the writer an axiom not susceptible to argument or requiring proof. If painting, sculpture or, to come nearer home, gardening are sciences, or, through increase of knowledge, could become sciences, then, but not otherwise, is medicine a science or a larval science. Science is concerned with the pursuit of truth, a particular science with the pursuit of a particular aspect or province of truth, and the pursuit must be single-hearted, fearless, regardless of consequences, applications or mis-applications, and strictly limited in aim and scope. Medicine is concerned with the prevention, diagnosis and treatment of disease, with the alleviation of suffering, with health, personal and public, and the unit with which it deals is an individual human being—a unit too big and too complex for any physical science.

Between scientist and physician there is a great gulf fixed. They may regard each other from its margins with admiration and interest, they may interchange ideas and information; they cannot cross it without losing their identity.

More than this. Medicine, though it is moving slowly from pure empiricism, is still, and must long remain, largely empirical. Of the ætiology and pathology of many of the commonest diseases, of the *modus operandi* of many most useful drugs and therapeutic measures our ignorance is complete, and the whole sum of our knowledge of vital processes, whether physiological or pathological, is a mere scratch on the surface of the ultimate truth. Even in terms of our physical sciences, we can completely explain no vital process, and of the nature of the mind (with which we daily have to do), and by what means it is related to brain and body, we know nothing at all. We have specific remedies for few diseases, and those not the commonest, and these same remedies are frequently empirical, theories of their mode of action following tardily on the established fact that they work.

Our surgery, though brilliant in its technique, and, within its limits, effective enough, depends to a very limited extent on any biological or physical science.

All this is not to say that we are clinically impotent. We are not. But we are not scientists and, further, the art we practise is, to a great extent, independent of the related sciences. No one would wish to underrate the debt of medicine in recent times to laboratory research, but clinical medicine existed long before the laboratory, and probably its greatest advances were made when, following Sydenham, it broke loose from the tradition of acting upon supposed scientific principles, and progressed by unbiased clinical observation. No doubt the science from which it then broke loose was false science, but would it not be quite possible to maintain the thesis that medicine has been led seriously astray by bowing down to bacteriology and histology

* The writer need hardly say that he twice attempted this examination and was handsomely ploughed, especially in physiology, also that he does not delude himself with the belief that the College lost thereby a promising surgeon.

in the last generation, and to endocrinology and biochemistry in this?

Corvisart, who, we are told, had the distinction of being for many years the trusted medical adviser of Napoleon, remarked that "the doctor ought to be on his guard against the itch to explain everything. He ought to know that Nature, hidden in most of her works, is especially so in diseases". Surely this is as true as ever it was. It is right that the doctor should endeavour to puzzle out the meanings and causes of what he observes, he should think while he works, but he should know that for the most part he cannot explain, and he should not be ashamed to confess it.

Our clinical teachers know this well enough. Exhortations to rely on clinical observation, not on laboratory findings, to study the patient rather than the disease, not to despise the work of the great clinicians of the past, are constantly on their lips, and it is not the fashion to decry Hippocrates; but there is no hint of this sentiment in the curriculum. More and more the sciences are exalted, and it seems to be implied not only that everything can be (or very soon will be) explained, but that an industrious student ought himself to be able to explain everything by the time he goes up for his finals. Time and again theories, already exploded or known to be untenable, are thrust upon the student's notice, instead of the far more significant and stimulating fact that "Nobody knows". "What is the cause of . . . ?", says the examiner. "No one knows, sir", replies the truthful and well-informed student. "No, no; no doubt", says the examiner, "but what theories are advanced?"

It is mechanisms, mechanisms all the way. Mechanisms and assorted facts relating to not less than twelve-ologies (readily increased to sixteen by a little subdivision), each one a vast subject probably boasting a professor. Moreover, these facts and mechanisms are learnt rather than studied, and are not seldom accepted on what proves an inadequate basis of fact.

The preponderance of time and mental energy devoted to the sciences extends well into the clinical phase (which is already relatively short), and morbid histology, bacteriology, parasitology, chemico-pathology, pharmacology and the rest jostle one another in their efforts to crowd out the study of living patients and the acquisition of skill in the arts of diagnosis, prognosis and treatment. What is the probable result of all this? Is not the mental attitude induced likely to be that of a credulous materialist, ready to accept any mechanistic explanation of what he does not understand, and to pass it on to others, disinclined to think and ashamed to confess to an honest, reverent and scientific agnosticism? And, further, since the art of medicine is only very partially dependent on these ancillary sciences, is it not inevitable that the student will fail to bridge the unbridgeable gulf, and will either despise and neglect the clinical arts which he has been taught to think "unscientific", or, adopting them, will turn once for all from the sciences with a "Good-bye to all that", since they have boasted so much and, as he sees it, let him down so badly?

Is it too much to say that preamble No. 2 describes the curriculum as it exists well enough, but rests on false premises, and is largely incompatible with preamble No. 3?

But perhaps it is not meant to be compatible; perhaps, in sober earnest, the curriculum is not intended to be a training for those intending to practise medicine, but only an exposition of the medical and related sciences, regardless of any application the student may secretly be intending to make of what he learns. As to this, it must be said that the vast majority of medical students are in fact intending to practise, and that if a man wishes to practise medicine within the profession he has no alternative but to take the curriculum. If it be said that the curriculum is but a preliminary exercise, it may still be urged that it should fit a man for what follows, and that for a mere preliminary it is rather long. Again, if it is not a training for practice, why does it include the actual giving of anæsthetics and attendance on women in childbirth? The position cannot be seriously maintained. The curriculum must have as its fundamental aim the training of men to become practitioners. No one expects it to do the Cadmus trick and send up practitioners fully armed, experienced and perfect in their art, but it may fairly be asked that the end should be kept consistently in view from the beginning, and that the scheme of study should contain as many as possible of such things as are likely to make a good doctor, and nothing that is likely to make a bad one.

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DEVELOPMENT OF THE MUSCLES OF THE LOWER CHEST AND ABDOMEN IN RELATION TO THE TREATMENT OF CERTAIN AFFECTIONS OF THE SPEECH, CHEST AND ABDOMEN.

THE importance of the development of the muscles of the lower chest and abdomen is a subject to which I have devoted myself for many years. These muscles play such an important part with regard to the treatment of various affections of voice and speech, and also as regards the general health and various functions of the body, that I hope some details as to their trained application will be considered worthy of consideration.

AFFECTIONS OF VOICE AND SPEECH.

Long before the war, one could not help noticing the remarkable improvement in the health of many patients who were being treated for affections of the voice and speech. Practically all such patients have to be taught lower costal breathing and a steady contraction of the abdominal muscles as the voice is produced. In a great number of cases the general health was much improved, and in patients of poor physique the body-weight went up to a most impressive degree. One of the best results was a boy with a stammer, sent to me by Dr. Still. The stammer was cured in seven treatments. I saw him afterwards at intervals; the weight was 6 st. 12 lb. in November, 7 st. 6¾ lb. on January 15th, and 8 st. 9¼ lb. on the following October 8th. Incidentally the boy passed first into the Navy. Other patients, sent only for voice or speech troubles, have remarked on the improved condition of their general health, and often of the necessity of the constant use of aperient medicines being overcome. One cannot over-emphasize the importance of the perfect development of the lower chest and abdomen in every form of speech defect and voice affection with the one exception of laryngectomy cases. In these cases, of course, the lungs do not help the voice. I hope some day to describe the way in which patients without a larynx are able to produce a voice. I have the privilege of working with Mr. Lionel Colledge on such cases, and I think it may be interesting to describe how quite a useful voice is acquired with two or three treatments in some of these cases.

The greater part of the successful treatment of stammering consists of a perfect act of breathing, and the correct use of a contraction of the abdominal muscles as the voice is used. Other technique is essential, but it cannot succeed unless the breathing is correct. Any breath that raises the upper chest to the smallest degree is extremely dangerous, and the advice almost invariably given to stammerers to take a big breath is one of the most definite causes of severe stammering (1).

The education of cleft palate cases is another important matter, and correct breathing is necessary in such cases. If the subject is of interest to anyone reading this article, a very full description of my treatment appears in Sir Arbuthnot Lane's book, *Cleft Palate and Hare Lip*. Another description appears in Cheyne and Burghard's *Manual of Surgical Treatment*, vol. iii, and a third in the *British Dental Journal* of September 15th, 1920, which is a very short article giving full instructions for the use of patients on what should be done for the speech in cleft palate cases.

During the war I treated several cases of voice and speech affections, and in 1918 the Ministry of Pensions invited me to undertake the treatment in London of ex-soldiers afflicted in their speech and voice, and I gladly accepted what I considered was a great honour and privilege. I found that these shell-shocked men responded wonderfully to perfected breathing as regards emotional control, and it helped enormously in the restoration of the speech and voice for the men who were aphasic and aphonic, and others who were sadly afflicted with severe stammering (2, 3, 4).

I worked for the Ministry until 1926, when all available patients had been treated, and I hope and believe the work was successful. Sir Lisle Webb wrote to me on March 13th, 1926, an extremely kind letter in which he said: "I should like to take this opportunity of expressing to you the thanks of the Medical Services Department for the excellent work you have done on behalf of the pensioners in whose treatment you have assisted". I feel I may here refer to this appointment, as I always consider that I was asked to take it up because of the post I hold at St. Bartholomew's Hospital.

In thyroidectomy cases it is sometimes quite difficult to avoid injury—either temporary or permanent—to the recurrent laryngeal nerve. This results in an abductor paralysis of the cords. The voice then becomes more or less seriously impaired, and in addition the breathing is difficult and on exertion very exhausting.

Mr. Dunhill has most kindly given me permission to use his name with reference to several cases in which this condition has occurred, and wishes me to say that the improvement in these cases has been of extreme value to the patient, and a great relief to him personally, in that patients who had obvious disability have been improved to an extent that has made them unconscious of the fact that an injury had occurred, and the voice made practically normal.

CHEST AFFECTIONS.

The experience which I had in the war on gunshot wounds of the chest (1) was very helpful in the development of other treatments; I refer especially to the treatment of visceroptosis (5, 6, 7, 8). In the war the average time for beginning exercises was ten to twelve days after rib-resection.

Sir Alfred Rice Oxley wrote to me in connection with some cases as follows:

"I am fully satisfied of the very valuable results you have obtained for us by your treatment. Lung collapse and pleural adhesions have been thereby prevented and the patient's general condition also greatly improved. I am particularly struck by the fact that it is quite possible and safe to begin such exercises as yours at a quite early stage of lung injury, as was done, you will remember, in several of the cases you treated here. I am thoroughly convinced that in cases of lung injury resulting in pleurisy, pneumothorax, etc., early breathing and general exercises, such as you give, are of the utmost value, and constitute a most important item of treatment".

And Sir Alfred Fripp, in returning a note of a case, wrote:

"I am glad you are publishing some of your cases, for, in common with many physicians and surgeons who have watched the effect of your treatment, I feel greatly indebted to your work on behalf of many of my patients recovering from gunshot wounds of the thorax and think the work cannot be too widely known."

(I have published these two letters in a previous article, but as I think they are of importance I have set them out again here.)

Prof. G. E. Gask kindly wrote to me in April last:

"I am of the opinion that early movements in cases of empyema and rib-resection combined with breathing exercises are most beneficial and that they hasten the recovery of the patient by encouraging expansion of the lung".

Mr. A. Tudor Edwards, whose drainage tube with a flange has brought such great comfort to empyema patients, kindly sent the following note to me on the 12th instant:

"I should like to state that I have had very considerable help from you in several empyema cases during the last three years, particularly those in younger subjects, in whom one occasionally finds that rapid collapse of the chest-wall occurs, following drainage of the pleural cavity and often associated with scoliosis. I am quite convinced that exercises such as you are using, especially if carefully controlled, are of great value in restoring the chest-wall and the lung function as near as possible to the normal".

In relation to Mr. Tudor Edwards's opinion the two cases herein set out apply to young patients. In Dr. Morley Fletcher's case please note that the empyema was of two years' duration.

"Mrs. B—'s son, æt. 14. Patient of Dr. P. F. Barton and Dr. J. J. Perkins. Empyema following pneumonia. This case was very severe as to lung and chest collapse. There was a remarkable appearance when the boy stood up, the body being bent over to the left to an almost incredible extent. Breathing exercises were commenced four weeks after resection of rib. The progress was continually good and the empyema wound soon healed. The lung and chest-wall recovered a practically normal condition, and the boy was looking and feeling perfectly well at the end of his treatment. Breathing exercises commenced August 4th, 1916, and continued to November 21st. Seen twelve times. Weight increased during treatment from 6 st. 9 lb. to 7 st. 13½ lb."

Dr. Barton has kindly supplied the following details as to the patient:

"The arm was held tightly to the side, any movement of it producing great pain. There was a strong nervous element in this case in addition to the extreme physical disability. Nothing could be done until the boy's confidence was re-established. The exercises had a very marked effect on this, as the boy at once felt the benefit of them. He is now, November, 1918, very fit and well, and would have got a commission quite easily.

"A. B—. Patient of Dr. H. Morley Fletcher at St. Bartholomew's Hospital. The patient was a little boy. Empyema of two years' standing. Left lung and chest severely collapsed. Large drainage-tube and much discharge when exercises commenced. Body bent over very severely and head almost resting on shoulder. Came into hospital November, 1915. Exercises commenced December 9th, and continued until end of February, 1916. The patient made excellent progress. The empyema wound was soundly healed, and the lung and chest-wall and body posture restored to a very large extent".

Dr. Morley Fletcher has kindly added the following note on this case:

"The thoracic deformity was very marked, and the result obtained by Mr. MacMahon's treatment of exercises was extremely good; in fact far better than I had anticipated or should have believed possible. When I last saw the boy he was in good condition and showed comparatively little deformity".

Dr. F. H. Young has kindly sent me the following note on chronic pulmonary catarrh, and on a certain type of asthma:

"In the treatment of chronic non-tuberculous peri-bronchial inflammatory conditions in children, so called 'chronic pulmonary catarrh', adequate pulmonary ventilation plays a prominent part. The danger is that secretion will remain in the bronchi owing to the fact that the expansion of the bases of the lungs is interfered with by the inflammatory condition. The failure in the respiratory movements is not so much that of inspiration as of expiration. Diaphragmatic breathing as opposed to costal breathing has to be encouraged, and the result to be aimed at is to allow the diaphragm to rise in the thoracic cage. This effect is best produced by the training of the abdominal muscles to play an increased part in respiration, and at the same time to allow the lower ribs to move adequately. This is best achieved by breathing exercises designed specifically for the purpose.

"A type of asthma which is secondary to this peri-bronchial infection is also markedly benefited, especially if at the same time exercises to deal with the secondary forward curvature of the upper part of the dorsal spine are given".

The following is an instance of quick improvement in a girl, æt. 11, who was sent to me in October, 1928. Earlier in the year she had pneumonia, and was left with a patch at the base of the right lung. She developed a mild asthma in August. Seen three times only in October, and exercises were carried out at her home in Devonshire. Her mother wrote to me in February, 1929: "I feel I must just write a line to tell you how wonderfully your treatment has answered. She has put on nearly two stone in weight and is in every way a different child; I cannot say how grateful we are".

VISCEROPTOSIS.

The treatment of visceroptosis is a matter of great interest and importance. What I wrote in a previous article (9) I still believe absolutely, and I now set out the important part of it again:

"In observing a patient with visceroptosis one invariably sees a marked protrusion of the abdominal wall, and during inspiration a further advance occurs. The muscles are often so weak that they feel like a child's half-inflated air-balloon. Nearly always—and there are exceptions—the lower ribs will have fallen in to a degree corresponding with the advance of the abdominal wall. The costal angle will be seen to be very acute. Tenderness is marked all over the abdomen. Severe constipation is nearly always present, and the complexion generally bad. All patients complain of headache, and many of a bad pain at the back of the neck. Vomiting occurs in some cases, and practically all are conscious of great impairment of the memory and the power of concentration. The acute case has no bright days. Life is one long misery and the outlook to the patient seems hopeless.

"The above is no exaggerated description of numbers of cases of visceroptosis. I know that it is often thought that the ptosis is the result of neurasthenia, and no doubt this is true in many cases, but it is also true that very often the ptosis is the cause of the neurasthenia. The keen desire to get well and the extraordinary and successful efforts put up to do so in several cases do, I think, prove this; also the ptosis following childbirth is, of course, quite out of the first category.

"The exercises set out (*i.e.* in the article referred to) explain themselves, and it will be seen that the lower ribs are expanded very carefully. The expansion is increased until the lower costal region is in a vertical line with the axilla. This expansion automatically supplies an adequate accommodation for the large viscera, and accommodation must necessarily have become very restricted as the ribs fell in, with the advance of the abdominal wall, during the progress of the ptosis. Nor can the original accommodation possibly be regained without a deliberate development of the lower costal region. As this development occurs the costal angle will be seen to be disappearing as an angle and will take on a marked domed appearance. The abdominal muscles are eventually made to contract almost to the spinal column, and with the aid of the operator's hand the organs are pressed upwards. The rectus, transverse and oblique muscles of the abdomen become extremely powerful by the daily exercises, and are well able to support the viscera, which gradually begin to resume their normal functions.

"Each treatment with an operator lasts for forty minutes, with plenty of rest between the series of exercises. Once a good position of the viscera is established no operator is required, and the exercises are reduced to about ten minutes daily".

Mr. A. H. Richardson has kindly sent me the following note:

"I am very glad indeed to hear that you are going to write something for the Medical Journal, as I have been tremendously impressed by the result of your exercises, particularly in cases of visceroptosis. I know of several women whose lives have become entirely different as the result of your treatment".

Here is a typical case: Lady, æt. 36, described by her doctor to me as "suffering from all the conditions of a very pronounced and aggravated visceroptosis, the transverse colon being right down in front of the cæcum". Seen eight times in two months of treatment. At the end of treatment her doctor wrote to me: "A delicate type of woman of great intelligence, but more or less a chronic invalid from auto-intoxication and drugging from visceroptosis. Since the treatment finished I have only seen her once and she is in almost robust health".

Another physician on the staff of one of the London teaching hospitals wrote to me about his patient who had visceroptosis: "You have made her into a new woman and she is more than grateful. It is a most satisfactory result".

Dr. William Byam has kindly written as follows:

"Mr. Cortlandt MacMahon has treated successfully many cases of visceroptosis and colonic stasis for me. Many patients returning from the tropics, suffering from digestive disturbances secondary to colonic stasis, have markedly improved as a result of a course of breathing exercises under the direction of Mr. MacMahon".

Dr. R. Pierret, of Paris, wrote to me at the beginning of May:

"I read with great interest your paper about visceroptosis. Your opinion is very near our French ones, but some of your exercises are new to me. I will have an abstract of your article printed in some of our French medical journals".

In this treatment the patient is helping himself or herself to get well by daily exercises (10, 11, 12). The moral effect is very great. Belts may be necessary in severe cases for a time, but if exercises are not carried out surely the abdominal muscles must become weaker than ever. I think it worth considering whether the wearing of a belt is not, after a time, a daily suggestion of chronic invalidism.

POST-OPERATIVE BREATHING EXERCISES.

In cases of laparotomy, especially when the incision is a long one, it is of the utmost importance that the severed muscles should unite firmly. Contracting exercises for this purpose are applied quite early after operation—sometimes within ten days or earlier. This use of exercises at a very early stage after operation must, I need hardly say, be applied with the utmost care and delicacy.

Mr. Tyrrell-Gray has kindly written the following note with regard to this post-operative treatment of major operation cases of the abdomen:

"The period of convalescence from major abdominal operations should be employed in the preparation of the patient, and his organs, for a resumption of normal activity. Though this period varies with individual surgeons, the writer believes that there is nothing to be gained by being precipitate, provided that the time is occupied with the necessary educational exercises and treatment.

"*The following points are generally insufficiently emphasized:*

"1. During the operation the lower lobes of the lungs are practically thrown "out of commission", while the resulting danger of post-operative pulmonary complications is enhanced by—

"2. The diaphragmatic inhibition which follows. This is commensurate with the type of operation, and is most marked in *major operations in the upper abdomen.*

"3. The resulting defective circulation is especially to be emphasized in :

"(*a*) *The abdominal muscles.* The importance of the efficiency of these on resuming the upright position needs no emphasis.

"(*b*) *The intestinal musculature.* No muscle is efficient with a defective circulation; and, in this belief, the writer has advocated and practised frequent applications of radiant heat in the first week, as the 'sheet anchor' against post-operative ileus.

"Without going into details it is evident that, on all counts, the additional strain on the mechanisms involved by the assumption of the upright position, after a period of recumbency, is liable to lead to varying degrees of breakdown. This is particularly true of subjects of visceroptosis.

"From these considerations alone it is evident that there are good grounds for the advocacy of routine post-operative radiant heat in the early stages, followed by properly conducted breathing exercises afterwards.

"For many years the latter have been directed by Mr. Cortlandt MacMahon in a great number of the writer's patients; and it is impossible to overrate the value of this adjunct to post-operative treatment, particularly in cases of visceroptosis".

The first seven exercises used in this treatment are set out below. They are the most important ones.

Each exercise should be carried out eighteen times, with a rest after each six movements of the exercise. All the exercises should be carried out in a recumbent position, with the head and shoulders slightly raised. It is most important that the act of inspiration and expiration should be silent.

1. The operator places his hands on the side of the lower ribs, level with the bottom of the breast-bone. The patient should breathe in through the nose, and the lower ribs should be felt to be expanding strongly. There should be as little movement as possible of the upper chest. When the fullest inferior lateral costal expansion is acquired, the patient should breathe out through the open mouth, and the ribs should be felt to regain their normal position.

2. The patient should breathe in in three distinct movements, and the lower ribs should be felt to expand with each breath. By degrees the expansions are increased to five movements.

3. The abdominal wall should be contracted inwards, and then allowed to recover its normal position so that an in-and-out movement is made. The operator helps this contraction by pressure on the lower portion of the abdomen. (This is a physical and not a breathing exercise. It should be carried out in series of ten contractions until fifty contractions in all have been made.)

4. The same movement as in No. 3 exercise, but the contractions are made in 1—2—3 movements instead of one movement. On each contraction the operator presses upwards with his hand, increasing the amount of pressure on each contraction.

5. Combine exercises 1 and 3, *i.e.* the patient breathes in through the nose, and the lower ribs are felt to be strongly expanding. The mouth is then opened, and the abdominal muscles slowly and strongly contracted so that the air is driven from the lungs.

6. The same inspiratory movement, but the breath should be held and the abdominal muscles contracted in three to five deliberate movements before breathing out. The operator helps the contraction as before.

7. The patient should breathe in deeply, the breath should be held and two more breaths taken in through the nose and, as air is inspired, two simultaneous contractions of the abdominal muscles should be made. (*N.B.*—This exercise is somewhat severe, and at first should only be carried out six times.)

In conclusion I want to add that these exercises are learnt very thoroughly by the masseuses at the Hospital, who carry out treatment most efficiently. It gives me the greatest pleasure to say I have had invaluable help from the Massage Department.

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CORTLANDT MACMAHON.

THE HISTORY OF THE HEDGEHOG'S ROSARY.

(*Continued from p.* 152.)

MALPIGHI (19) in 1666 had observed that a mass of white fibres remained after washing a blood-clot, and Ruysch, in 1707 (20), showed that a very similar substance could be obtained from blood by whipping it with twigs, and that this largely prevented the clotting of the blood. Leeuwenhoek and many others considered that the clotting of the blood was merely due to the conglomeration of the corpuscles, and it was not until the time of Hewson that this was definitely disproved.

In venesection it was observed that normal blood clotted, forming a red clot, the crassamentum, which after a time contracted and exuded a pale yellowish fluid, the serum. Sometimes, instead of the red clot, a fawn-coloured semitransluscent layer would form on the top of the bleeding bowl. The blood was then termed to be sizzy, and the clot was termed the buffy coat, or crusta phlogista, and was regarded as an indication of an inflamed blood. That this was in a sense correct we must recognize to-day, for the significance of the buffy coat was merely that the blood had a rapid sedimentation rate.

William Hewson (21), who may, I think, be regarded as the first of the hæmatologists, was born in 1739, the son of a Northumbrian apothecary. He was apprenticed to his father, and then, after studying in Newcastle, Edinburgh and Paris, came to London in 1759. He lodged with

John Hunter, and attended William Hunter's anatomy lectures, and studied medicine at Guy's and Thomas's. He soon showed such skill and diligence that in 1761, when John Hunter went abroad with the army, he left him in charge of his dissecting-rooms. In 1762 he went into partnership with William Hunter, and lived over the Titchfield Street rooms, and later assisted him at the Great Windmill Street rooms. Each summer he went for a brain dusting to Paris or Brussels, or up to Edinburgh. In 1767 appeared his first paper, "On the Operation of Perforating the Pleura in Case of Air in that Sac". This is the first description of tapping of

WILLIAM HEWSON, F.R.S.

the chest in spontaneous pneumothorax (all the cases were due to trauma), and he was one of the earliest persons to perform the operation. The paper is well written, and the deductions drawn from animal experiments and post-mortem appearances.

In 1769 he published his paper on the existence of lymphatics in birds, reptiles and fishes, which gained him the Copley Medal of the Royal Society, of which he was made a Fellow the following year. This paper was considered of great importance at the time, for the Hunters maintained that absorption is an exclusive function of lymphatics, and until Hewson's paper it was argued that there were animals that have neither lymphatics nor lacteals. However, Magendie's demonstration that the blood-vessels have an absorbent function threw this into the shade. Another reason for considerable attention being paid to this work was that it raised one of those eternal priority wrangles between Monro Secundus and Hewson. In actual fact neither of them were right, because the lacteals of fishes were described in 1652 by Thomas Bartolin (22).

In the same year that he became a Fellow of the Society he married Mary Stevenson, a highly intelligent woman and a great friend of Benjamin Franklin. However, Hunter had no liking for married men, and broke off his partnership in 1772. Accordingly he started a course of lectures in a theatre which he had built in Craven Street, and it is said that he commenced his lectures with great applause, and before the end of the course succeeded so well that he had more than half the number of pupils that he and Dr. Hunter had when in partnership. However, his success was short-lived, for in 1774 at the age of 35 he died of a dissecting-room wound.

The really important work of Hewson's is his "Experimental Inquiry into the Properties of the blood" (1771). In this he established the essential features of coagulation and discovered the leucocytes in the circulating blood.

The first accurate interpretation of the method of coagulation was made by a French surgeon, Petit (23), who is better known for having performed the first mastoid operation. In a paper read before the Royal Academy of Sciences in 1735, he states that all the parts of the blood are not susceptible of coagulation; further, that the red portion forms no clot without the containing or enveloping white lymph; and finally adds that were it possible for the blood to be fluid until all the lymph rose to the surface this would form the only clot, while the globules and serum would remain fluid. This was only theory, but it is good theorizing, and it remained for Hewson to add the experimental proof. He showed that coagulation could be delayed by cold and neutral salts, etc., indefinitely, and that if it were diluted it would clot once more. Further, that the coagulable plasma can be separated off from the corpuscles, and that this plasma contains an insoluble substance which he called coagulable lymph, and could be precipitated and removed at a temperature a little over 50° C. Coagulation was due in Hewson's opinion to the formation in the plasma of this coagulable lymph, which we now know to be fibrinogen.

This theory did not fit in at all well with John Hunter's (24) view, who considered that the blood was alive and that it was conscious of its being a useful part of the body. Further, that solidification of the fibrin was a vital act analogous to the contraction of muscular fibres.

In 1804 Fourcroy (25), Hewson's work having been forgotten, maintained that fibrin existed in the plasma,

and that clotting was due to spontaneous solidification. This was contested by Andrew Buchanan (26), who showed that if leucocytes or serum were added to a serous fluid it produced clotting; he compared it to the action of rennin on milk.

However, all these well-founded facts were not known on the Continent, and were forgotten for the most part here, so that absurd theories became once more rife. Amongst the most popular was that of Dr. Richardson (27), who maintained that the fluidity of the blood depends upon a certain amount of free ammonia holding the fibrin in solution, and that coagulation of the blood is due to the escape of the volatile alkali on exposure to the air. To refute this, Joseph Lister (28), in 1863, in his Croonian, performed innumerable careful experiments, and showed that in the blood-vessels it depends upon their injury. About the same time Schmidt (29) repeated all Buchanan's work, and together with Hammerstein (30) and Howell (31) established the current ideas on this subject.

Hewson's other great discovery was that of the leucocytes, and certain points in connection with the red corpuscles.

First he proved that the corpuscles are not globules as Leuwonhoeck had stated, but biconcave discs, and that they consist of a small solid particle at the centre with a vesicle around it. No doubt he had seen the nucleus of the non-mammalian corpuscle, and considered that the central pallor of the mammalian corpuscle was the same thing; he also observed that their shape differed whether they were in hyper- or hypotonic saline. He also examined the glands and spleen, and was the first to observe the lymphocyte in these organs and also in the blood. He imagined that the central particle of the corpuscle was formed by the lymphocyte, which arose in the spleen and glands, and that the red vesicle around it was supplied by the lymph; and so by the end of the eighteenth century we have arrived at a recognition of two elements of the blood—a theory of erythropoiesis, and a very clear understanding of blood coagulation.

The next factor which was going to enable us to advance further was supplied by a London wine merchant, Joseph Jackson Lister, the father of Lord Lister, who spent his leisure in studying optics, and in 1830 devised an achromatic objective which immediately opened up enormous possibilities of accurate microscopical observation.

In 1838 Weber (32) observed a nucleated red blood-cell in a human twelve weeks' fœtus.

Two years later Reichert (33) showed that there were nucleated red cells in the embryonic liver, and suggested that this might be the site of blood-cell formation—a return to the Galenic theory, but on a sounder foundation.

While these great advances were being made on the Continent, there were many strange whimsies circulating in England.

Martin Barry (34), who was the first to see a spermatozoon entering an ovum, failed to recognize the difference between the red and colourless corpuscles, and believed that all the tissues were formed of them!

William Addison (35), not to be confused with Thomas, to whom we will refer later, was the first person to observe diapedesis, over which, on a frog's cornea, such a battle raged a few years later between Cohnheim, Virchow, Recklinghausen and Strecker. Though it is a fascinating story, it cannot be described here. Addison also observed that there was a leucocytosis in the region of an inflammatory process, the credit for which is usually given to Virchow (36).

In 1846 Thomas Wharton Jones (37), of Charing Cross, read some papers on the blood-corpuscles to the Royal Society, and by the addition of dilute acetic acid he showed that there were three types of cells—the granule cell, which on maturation became the nucleated cell, and finally this developed into its phase of the free cellæform nucleus, which phase only occurred in man and the highest animals. In addition he recognized the constant destruction and formation of new cells, following Hewson as to their glandular origin. He regarded the function of the corpuscles as that of floating glandular cells, their especial office being to convert albumen into fibrin. He also observed the amœboid movement of the leucocytes, which was more clearly demonstrated by Davaine (38), who observed it both *in vitro* and *vivo*.

A. H. T. R.-S.

(To be continued.)

THE ADVENTURE OF THE PLATINUM BLONDE.

(With apologies to the late Sir Arthur Conan Doyle.)

I HAVE often been assured by people of no mean education that they believe in the virtue or evil attributed to certain days, and I have usually been inclined to decry them. But several curious coincidences led me to revise my opinion, and after much thought and a long and careful perusal of my journals I have come more nearly to agree that there is perhaps something in their contention.

What particularly impressed me was that Wednesday and Friday particularly are the days on which I have met with incidents memorable enough to remain for ever fresh in my memory. It was on Wednesday the 12th of April, 19—, that I happened upon one such affair which even now is still as vividly imprinted upon my mind as on the day when it occurred.

For some reason a dearth of criminal work had given Sherlock Holmes that leisure which he has such a faculty for using, but instead of working at his research or his records he had been obliged to devote his time to psychology, the scope of which had been recently enlarged in the medical curriculum. He had been working hard and alone, struggling with one of those theoretical treatises which his somewhat material mind found so uncongenial, when I invaded his rooms uninvited for breakfast one morning in order to give him the relief of my companionship in his continued solitude. He looked pale and drawn. I could see he was sleeping badly, but he greeted me with a smile.

"Good morning, Watson," he said; "you have not yet breakfasted I see."

"How do you know?"

"Well, firstly by the way you looked at the sideboard as you came in, and secondly there is no egg on your moustache. Your moustache always reminds me of a bird's nest; however, let us see what Mrs. Hudson has given us this morning. Ah! here we have a menu for all appetites—rolls and butter, eggs and bacon, gorgonzola cheese, porridge, cream buns, pork pie, stewed rhubarb, fried haggis, coffee and stout. Which will you have?"

I chose the traditional bacon and eggs and coffee. Holmes sandwiched three rashers of fat bacon between two thick slabs of pork pie and ate avidly, with an occasional deep draught of stout, scanning the morning papers meanwhile with his keen eyes. He threw them aside with disgust, and turned to me:

"Nothing for me," he cried; "crime as a high-class profession seems to be dead."

"You have your examination soon," I ventured.

"True, but that is not until the thirtieth."

"However, you will be stale if you don't get a change. Why not have a few days off and refresh your mind with the best triad I can recommend—the countryside and sunshine, good music and fair hair?"

"Dark hair," he corrected me.

"I prefer fair," I said; whereat we fell into an argument in which Holmes grew more and more heated, until the veins stood out on his forehead and he was shouting at the top of his voice. I started with the present day, and we enumerated famous beauties alternately dark and fair throughout the age still finally I reached ancient Rome.

"What about Annia Galeria Faustina the Younger, wife of Marcus Aurelius, who died in 130 B.C.?" I asked. I had seen her bust the previous day in the British Museum and admired her style of hair-dressing, which I considered would have been most effective had she chanced to be a blonde—whether she was is not recorded.

Holmes was silent and bit his nails; his knowledge of the classics has its weak patches. We were interrupted here by a ring at the front door, and shortly after in came Mrs. Hudson with a card.

"A lady to see you, sir," she said.

Holmes glanced at the card through a thick haze of tobacco-smoke.

"Ask her to wait. Now Watson, what do you make of this card—who and what is she?"

"She is Lade Yvonne Cecily Shirley-Brook."

"Go on—is she old or young?"

"She is young, has a large hand-bag, is rather careless, has fair hair, and this name is probably an assumed one: she is also fond of 'Lily of the Valley' as a perfume."

"Balderdash," retorted Holmes.

"Well, the card is badly printed on indifferent material; presumably she had a few printed for her purpose. She had this one loose in her handbag, where it has come in contact with her lipstick at this corner."

"That's blood from Mrs. Hudson's thumb—she's preparing a rabbit for lunch; did you notice her thumb?"

"No, but I saw the rabbit on the hall table as I came in; this is not blood; in addition the bag is so capacious that her powder-box came open inside it and here is some, and also a wavy fair hair adhering to it; it is scented with 'Lily of the Valley'."

"She is some doddering impoverished dowager who has lost a Pekingese in the traffic and is too fat to follow it so has come to me for help."

"From the rate at which she is bounding upstairs I should imagine she is something of an athlete."

"Come in," called Holmes, and he sat speechless as there walked gracefully into the room a young girl of consummate beauty from her perfectly waved fair hair, the sort called "platinum blonde," to her shapely feet. She was exquisitely groomed and stylishly dressed; her eyes sparkled beneath carefully plucked eyebrows, and her voice was a delight to hear—low, musical and perfectly modulated.

"Good morning, gentlemen," she said.

"Good morning," we replied simultaneously.

"My name is Holmes," began my friend, "and this is my friend, Dr. Watson."

I bowed low and shook her hand warmly.

"Don't let me keep you, Watson. I know how busy you medical men are."

"Not a bit, Holmes," I replied, "things are very slack at present."

"I know you are anxious to see that patient with herpes ——."

"That's done with; she died this morning at three—I was there. I think it must have been smallpox after all."

"Don't go, please, Dr. Watson," pleaded Lady Yvonne; "I *adore* doctors, they are so marvellous—so clever and kind. Do please give me a piece of that pie; I *love* pork pies."

I cut her a huge wedge and gave her a cup of coffee; I refilled my own, lit my pipe and sank down in an arm-chair; she sat on the arm with her pie in her fingers.

"Mr. Holmes, I am in a bad fix."

"Debt, I suppose," said he.

"No—worse than that; blackmail. You see I have been an acrobatic dancer, and also I did what is called 'point-dancing' in the Russian Ballet. At that time I was attracted by a man named George Curtis. I wrote him some letters in affectionate terms, but soon learned that he is an unscrupulous villain, a dishonest share-dealer and blackmailer who has preyed on other girls before and, in fact, makes his living by it. Naturally I broke our association and asked for my letters to be returned. He has offered them to me at a price which I cannot pay—the alternative is disgrace. The name I gave you is partly inaccurate, but I am indeed a person of title with a high position in society. I went on the stage for a little amusement. Fortunately there is no address on the letters, but they are signed by a nickname by which I am familiarly known by my intimate friends, and the writing is unmistakably mine."

"Where does he keep these letters?"

"In a metal case, soldered all round and sewn into the lining of his trousers. He always carries it with him."

"Rather a delicate business," said my friend. "Will you please call on me this afternoon at five and I will suggest a scheme of action?"

"Thank you," she said as she went out, "I hope you will—I need help so badly."

Shortly after I left and during my round I completely forgot Lady Yvonne. My evening surgery was unusually heavy, but was uninterrupted except by a telephone call from Holmes.

"Oh, Watson, about that blonde girl," he said, "I cannot possibly take it on. I looked up the examination date and found I had misread it owing to the bad printing; it is not on the thirtieth, but twentieth. You see I don't know much about tuning-forks and hydraulic engines. I was leaving them to the last. I may be able to give a little help for a day or two in the most difficult negotiations which you could not do, but apart from that I have handed over the whole matter to you."

"Good Heavens," I said, "you fool."

"What?"

"Weather's cool," I remarked.

"Never mind that; this business will probably be simpler than I thought, and in any case she has fair hair, which I dislike."

"What about Annia Galeria the Younger, wife of Marcus Aurelius?" I shouted, but he slammed down his receiver.

And sure enough, after dinner a visitor was announced. I went through to find Lady Yvonne looking a trifle perturbed.

"That man Holmes is a fool" she began ——

"No," I interrupted, "you may call him anything you like, but I won't hear him called a fool."

"Well he has some other business to do, so has turned it on to you excepting a small part. I have drawn up an agreement where for your services whenever necessary until this is over I pay you the sum of two hundred and fifty guineas. Will you sign it?"

"Very well," I said, "and who keeps this document?"

"I do," she replied.

"But ——"

"That is all right. I keep my word if you do yours. I have thought out a good plan. We must get Curtis to spend a day or two with Mr. Holmes at Baker Street with a view to selling some shares. You must be Holmes's envoy. Curtis spends every week-end golfing in the country. I will act as your chauffeur and drive you out, where we will pick him up, then drive back past Aylsford, where we pick up Sherlock; after that we go through Belgravia Park, Lord Southport's estate (he is away at present), and after a circuitous drive we come out on the south side, where we head for London. Once there, your friend has promised to let me have the letters within forty-eight hours."

"What happens to me?"

"Oh, you fade out in the park," she said.

"Eh?"

"Don't say 'eh'."

"I beg your pardon."

"That's better; we must have a rehearsal or two together and confer when necessary."

"What about to-morrow evening?" I suggested.

"Very well—I shall probably be hungry and tired."

"So may I; we could have dinner at Leonie's and then refresh our jaded selves at the Russian Ballet."

"Done!" she cried; "Good night, doctor."

The conference went off splendidly, her ladyship was in great form, dazzling and charming. She was a brilliant conversationalist. When we parted she suggested a rehearsal the following morning.

At four-thirty, however, I received a hoarse summons up the speaking-tube to come and see Mrs. Miller's baby at once; it had had a "pain in its inside for a week"; the messenger would take me now in his car. After a somewhat angry conversation, ending in a torrent of lurid language from the other party, who threatened to come up and break every bone in my body if I was not quick, I threw down the tube, dressed with many yawns and emerged at my front door to find Lady Yvonne sitting serenely on the door step smoking a cigarette; a large touring car was standing by.

"Well I'm dashed," I said.

"Good morning; come on Watson you lazy beast," she replied; "if I were as late as this for a rehearsal I should be sacked. Why don't you emulate the fire-brigade and learn to dress in ten seconds and not argue about it? We are late now, and I shall have to drive like stink; jump in."

I know nothing of the particular type of driving she mentioned, but her ladyship drove like the wind. In a few minutes we were leaving the houses behind and were roaring out into the country. I held my hat on with both hands; her little one was laid on the seat; her hair was streaming behind like a Valkyrie's. On turning a corner at top speed, as I clutched the side with both hands my hat flew off and sailed away to disappear from view. Hearing my cry of distress she looked at me and laughed. After a hair-raising drive of over fifty miles we stopped. I had lost my bearings completely; trees and fences appeared ghost-like in the early morning mist. It was chilly and I was in an evil humour.

"This is our destination," she said; "the golf course is quite near and you have to find Curtis and bring him along. I will drive away meanwhile and bring another car so you must allow me at least twenty minutes before I can get back. We pick up Mr. Holmes about twenty miles further south and then make for London."

We drove back and stopped at what had once been a great coaching inn, where we had a large breakfast. Somewhat cheered, we both waxed conversational and spent an enjoyable time smoking and chatting over the huge fire, after which she left me within easy reach of my house by cab.

The next two days I heard nothing from Holmes or my associate. The following morning, however, a voice implored me to come to the aid of Mr. Postlesnitch, who had had a fit. Looking at my watch I saw it was nearly three. I guessed who it was, and after a few questions succeeded in driving her into a hole, whereupon I made a diagnosis of hysteria and told her to go back and smack Mr. Postlesnitch on his fat head with a wet towel, preferably with a knot on the end.

"Dr. Watson, its Yvonne," came in reply.

"Yvonne, begone," I said, and buried my head beneath the bed-clothes. In a few seconds a volley of stones rattled against the window, which I ignored until, after a short pause and a scrambling on the wall, I received a terrific blow on the vault of the skull which nearly broke my neck. I peeped out, and framed in the open window was the lively face of her ladyship, who had climbed up the creeper and hurled a mighty sod at me.

"Come on, lazybones," she said, "the car's waiting."

"Go away; why are you not asleep?"

"I never sleep," she replied, "and if you don't appear in a few minutes I'll play the garden hose on you."

I lingered a few minutes; then going to the window I saw her dragging the hose out of the tool-shed. I dressed hurriedly, went out and joined her. Once more I endured the torture of a furious drive. We went by a different route from before, and eventually drew up outside Belgravia Park. I had to get out and open the huge iron gates. After driving for nearly a mile she stopped and produced a parcel from under the seat.

"These are for you," she said; "you must have a disguise, and I chose a parson's outfit for you."

"Really, my lady," I began.

"You might put on the hat and jacket now," she answered firmly.

The fit was execrable—the jacket too small, the hat too big. When I turned round for her approval my companion collapsed in the driving seat and peals of laughter echoed through the trees.

"Holy smoke!" she said, "you look like Guy Fawkes. Come on."

A little later we approached a bridge spanning a wide stream.

"This is where you throw Curtis over the parapet," she remarked.

"Eh?" I exclaimed.

Lady Yvonne put on her brakes, stopped dead and looked at me severely.

"If you say 'eh' again I'll hit you," she said.

"I beg your pardon."

"Granted. We all stop here to admire the view. Mr. Holmes looks over one side of the bridge, you and Curtis over the other. I stay in the car. You distract his attention and throw him overboard when the time is ripe. Holmes rescues him drenched through, which will make him all the more ready to hasten to London.

I am taking no chances you see. You, of course, disappear through the bushes as fast as you can and make for home in top gear. I thought that plan out all by myself."

"Yes," I replied, "it sounds like it."

"This is the last chance we shall have for a rehearsal. I am rehearsing some point-dancing myself to-morrow."

"Thank Heaven for that."

By now the darkness had disappeared, and turning the nose of her car she drove back to the hostelry, and after an early breakfast we parted as before. Holmes rang me up later in the morning.

"I have rung up Curtis," he informed me, "and arranged for you to call for him at his golf club on Wednesday. I told him I was one of your old parishioners."

Two days later, according to our arrangements, I took my clerical outfit to a thickly wooded spot, and after changing, put my clothes in a parcel under my arm and waited. Soon a noise like a distant aeroplane together with an occasional ear-splitting hoot heralded the approach of Lady Shirley-Brook, driving as usual "like stink". I stepped out of my hiding-place and she stopped her car. It was about two p.m.; she leaned over the side and laid her hand on my arm.

"Doctor, you are a dear," she said; "I was so worried all last night in case you wouldn't be here."

"That's very kind of you to say so," I replied; "here I am," and jumping in beside her we started.

She was certainly a remarkable and accomplished driver. In less than two hours she dropped me near the golf course and sped on to change her car.

Pressing my hat well over my eyes I walked boldly over the course towards the club-house. Many people were playing and I was hit by a ball more than once, but went on undeterred. The players shouted after me, but I had no time for their apologies, and did not stop. At length I reached the club-house, walked up the steps and into the refreshment room. Following my inquiry a kind hearted member piloted me to a huge man in golfing kit arguing with another over their game. My quarry was a powerfully built man with a flushed face and a loud voice—I concluded that he had made the best use of his time in the bar before it closed.

"Mr. Curtis?" I asked.

"Well?"

"My name is Jeremy Hattrap, and an old parishioner of mine, Mr. Augustus Bloomfield, asked me to call for you; we shall meet him on our way to London."

Curtis began his argument all over again, and it was only after fifteen minutes that I could drag him away. He was markedly unsteady and his speech indistinct. After another perilous and zig-zag journey across the course we arrived at a lane, at the bottom of which was a dark saloon car. I shoved my passenger into the back, put in his bag and climbed in myself. The chauffeur I noticed was dressed in a heavy coat with deep collar turned up, a cap drawn well down, goggles and gloves. Curtis began to improve a trifle and take an interest in me. This I counteracted by developing a gradually increasing deafness until he desisted with an imprecation. After about thirty miles had passed we drew up outside the "Goat in Boots", but no sign of Holmes was there. However, after prolonged hooting the door opened and out he came, most excellently disguised as a prosperous business man. I got out and introduced him to Curtis. Holmes rubbed his hands with delight as he surveyed his formidable opponent.

"Let me see," he said, "you had better sit in front—er—vicar."

"Rat-trap," bawled Curtis from inside.

I opened the door and climbed in.

"You idiot, why were you so long in the club-house?" hissed the driver, "I nearly gave you up as lost."

"Never mind," I said, raising my voice, "drive home, and be more careful than you were coming out, you great clumsy clodhopping oaf!"

The only retort was a well-aimed kick which confined my attention to my shin for some time; we were fortunately separated from the other two by glass panels covered with blinds. Lady Yvonne gradually slowed down and turned towards me, "Good luck", she said, and smiled.

Curtis, Holmes and I got out.

"A little-known beauty spot," my friend was saying, "you must see it."

We all approached the centre of the bridge and looked into the water; it was twenty feet below the arch and about fifteen feet deep. Holmes moved to the other side and left us.

"Look!" I shouted, "a salmon with two heads!"

Curtis leaned dangerously over and stared hard at the water.

"Where is it?"

"Just going under the bridge," I said, and with that he leaned over further, standing only on one leg. I leapt at that leg, seized it with both hands and hoisted it perpendicularly into the air. My victim gave a yell and went over, clutching one of the great stones of the parapet to his bosom. There was a magnificent splash, which nearly soaked me, and thankful that my part was done, I began to run; as I passed the car her ladyship's arm stopped me—

"Well done, my dear Watson," she said in her lovely voice; "go straight through those woods till you cross the fence, then down to the right and you will be all right. Here are your clothes. Bye-bye."

I tore along with my ears strained for sounds of pursuit. All went well and I reached my house a trifle weary, but in time for a good dinner. F. W. J. W.

(To be concluded.)

STUDENTS' UNION.

CRICKET CLUB.

The imposing list of aspirant cricketers which greeted us at the start of our present season might have prepared us for the unexpected; the results to hand reassure us that all our teams will maintain their standards and that we shall be successful.

The inhospitality of the weather prevented the 1st XI's opening game against the Wanderers from taking place. This would seem to be the usual fate of our opening fixture; it is three years since this fixture was completed.

Against Bickley Park on Saturday, May 6th, an XI containing only one newcomer proved successful in an entertaining game at Winchmore Hill. In this new fixture it was very gratifying to dismiss the opposition for 98 runs, and to pass that total with but 4 wickets down. Morison's 57 not out, contributing largely to our final total of 164 for 5 wickets, was very commendable in this, his first game with the 1st XI.

On Saturday, May 13th, we met our neighbours, Winchmore Hill, on foreign soil. The inclement weather prevented anything but a very dull drawn game, but this was counterbalanced by a measure of individual success, particularly by Wheeler's knock of 53 runs, scored in an opening partnership of 71 runs. The Bart.'s total was 173 for 6 wickets (declared); that of our opponents, 98 for 5.

Another drawn game resulted on Saturday, May 20th, *versus* the Metropolitan Police, played at Imber Court. Batting first on a fast, firm wicket the Police accumulated some 187 runs for 9 wickets (declared); of these Howard made 75 in a typical left-hander's free-hitting manner, and he was to some degree responsible for our excellent, active fielding. Of the bowlers, Mundy bowled with most consistency. On batting we started badly against fast bowling, and 6 wickets were down for 70 runs. However, Wilson (39) and Dransfield (25 not out) then came together and added 50 runs whilst playing out time. A late start prevented what most certainly would have been a fine finish.

The 2nd XI opened their season on April 29th at Chiswick against K.E.B. This was an addition to our fixture list, and we proved just too strong for the opposition. K.E.B. batted first and made 91 runs, Dolly taking 5 wickets for 20 runs, while we knocked off the necessary runs with 4 wickets to spare. Of the newcomers to the side, Nicoll, Hayes and Cochrane showed a welcome orthodoxy.

Fielding a somewhat weaker side the 2nd XI managed to defeat the R.A.F. (Northolt) XI on Saturday, May 6th. The side was captained by J. R. R. Jenkins, a former skipper, and included a useful proportion of new talent. Of the latter, Evans made 33 of the ultimate total of 132 runs, while Nicoll made 25. The opposition totalled only 82 runs, Cochrane being our most successful bowler.

The game arranged for Wednesday, May 10th, was postponed by the Architectural Association until July 8th.

On Wednesday, May 17th, we met new opponents in the Times C.C. at Ravensbourne. It seemed a great pity that in this, one of our few all-day games, such a weak side should be fielded. We batted first and seemed set for a fine score when the first wicket fell at 31, but a series of "first-balls" altered the total to one of 44 for 7 wickets. Ultimately Jones-Roberts and Hayes, by dint of good driving, enabled us to compile a total of 86. Perhaps we were unlucky in that our more dependable batsmen failed us, but even so the bowling was never superlative. Of course, our opponents soon passed our total, and eventually reached 222 for 8 wickets, three men approximating to 50 runs. A solitary crumb was the all-round display of Jones-Roberts—he should add to the nucleus of a strong side—but this was offset by such rank fielding.

On Saturday, May 20th, we met Old Paulines II at Thames Ditton. The wicket was deplorable enough to be prohibitive of almost any kind of medium-fast bowling; even so Wedd, who was skippering the side, made his century, Mundy (M. L.) and Ross reached the 40's, and the total was one of 251 (for 7 wickets declared). This century, the first of the season, was a characteristic display of driving and hitting from Wedd's battery of strokes. The bowling of Jones-Roberts, Wedd and Mundy proved too good for the Paulines, who totalled only 81 runs. A very comfortable victory!

C. M. D.

ATHLETIC CLUB.

BART.'S *v.* EMMANUEL *v.* QUEENS' *v.* CAIUS COLLEGES, CAMBRIDGE.

This quadrangular fixture took place at Winchmore Hill on Saturday, April 29th, and resulted in the narrowest of victories for us by a single point over Emmanuel, Caius and Queens' being third and fourth respectively.

The weather was perfect, but the track was not as firm as it might have been owing to some heavy rain overnight. Nevertheless the Bart.'s team performed brilliantly to beat the "Emma" side, containing five Blues, and which had been in the Final of the 1st Division Inter-Collegiate Championship at Cambridge for the past two years.

Although we only secured three clear victories (440 Yds., 880 Yds., and Putting the Weight) to Emmanuel's five, we were placed in every event, and this indicates our all-round strength, which is encouraging for the Inter-Hospital Cup.

As expected, we saw some brilliant performances from the Blues. E. I. Davies, the Inter-Varsity winner, won the "Hundred" with the greatest of ease in some time inside "evens". The track, however, was found later to be quite a yard short! R. W. Bevans's long jump of 22 ft. 10 in. was almost beyond the jumping pit, which had to be lengthened! O. Sutermeister, the American, soared over 12 ft. in the Pole Vault, while J. O. Fielding secured a "double" for Queens' by winning the High Jump and Hurdles.

No account would be complete without a word of praise for the really magnificent running of C. P. C. Reilly in the 440 Yards for Bart.'s. He not only won this race with the greatest of ease in 53⅘ secs., beating J. C. Stothard, the Blue, by 6 yards, but also gave such an exhibition of fine striding and ease of action that cannot have been seen at Winchmore Hill since the days of H. B. Stallard. His effort to catch R. M. Marsh in the 880 Yds. Medley Relay was almost successful, although he had some 15 yds. to make up.

J. W. P.

RESULTS.

100 Yards: 1, E. I. Davis (Emmanuel); 2, W. M. Greenway (Caius); 3, J. G. Nel (Bart.'s). Time, 9⅗ sec.

440 Yards: 1, C. P. C. Reilly (Bart.'s); 2, J. C. Stothard (Caius); 3, J. W. S. Edmundson (Emmanuel). Time, 53⅘ sec.

880 Yards: 1, J. W. Perrott (Bart.'s); 2, A. H. Pardhy (Caius); 3, R. J. Todd (Emmanuel). Time, 2 min. 8 sec.

1 Mile: 1, E. I. Akeroyd (Emmanuel); 2, J. R. Strong (Bart.'s); 3, K. O. Black (Bart.'s). Time, 4 min. 43⅗ sec.

Long Jump: 1, R. W. Bevans (Emmanuel); 2, W. M. Greenway (Caius); 3, J. G. Youngman (Bart.'s). Distance 22 ft. 10 in.

Pole Vault: 1, O. Sutermeister (Emmanuel); 2, K. W. Martin (Bart.'s); 3, J. A. Gordon (Queens'). Height, 12 ft.

High Jump: 1, J. Fielding (Queens'); 2, J. Smart (Bart.'s); 3, R. W. Bevans (Emmanuel). Height, 5 ft. 6 in.

Putting the Weight: 1, G. D. Wedd (Bart.'s); 2, P. Lacren (Caius); 3, O. Sutermeister (Emmanuel). Distance, 34 ft. 4 in.

120 Yards Hurdles: 1, J. O. Fielding (Queens'); 2, W. D. Coltart (Bart.'s); 3, E. I. Davis (Emmanuel). Time, 17⅕ sec.

Medley Relay: 1, Emmanuel; 2, Bart.'s; 3, Queens'.

Final Points: 1, Bart.'s, 35 pts.; 2, Emmanuel, 34 pts.; 3, Caius 15 pts.; 4, Queens', 14 pts.

ANNUAL HOSPITAL SPORTS.

Of all the sporting fixtures in the year, perhaps an athletic meeting demands the most careful organization—an organization which often calls for continual worry. It is therefore all the more pleasing when the event is a success in every way. Not only may the Hospital Sports this year be said to be a social success from a financial point of view, but more important still were the outstanding athletic

successes which were achieved, for no fewer than five Hospital "records" were broken. It was also good to see that almost a hundred athletically-minded students travelled up to Winchmore Hill to watch "the Games" on Saturday, May 13th. Most of them were accompanied by equally athletically-minded sisters, mothers and other members of the fair sex, all enraptured by feats of strength and skill. What particular event interested them most we do not know (we dare not ask): perhaps it was Nel's sprinting, or Martin's pole-vaulting, or Dransfield's javelin-hurling, or perhaps even Harris's effort in the 120 yards handicap; at any rate we were assured of their profound interest, and therein lay the social success of the Sports.

Particularly pleasing this year was the intense interest taken in the Sports by the Rugger Club. No fewer than ten entered for almost every event with practically no training; nevertheless they derived enough enjoyment to repay them for their efforts. Two Rugger men had an intensely exciting private Olympiad, and the 1st XV concluded their day by winning the Inter-Club Relay Cup.

J. G. Nel started the afternoon's events by winning the "Hundred" in "evens", only to find later that the "record" could not be allowed since the track was found to be over a yard short. C. M. Dransfield then succeeded in hurling a javelin 131 ft. 3 in. to beat his previous "record" of 123 ft. E. E. Harris was only 2 ft. behind him. In the heats of the 120 Yards Handicap so many distinguished themselves that it is impossible to mention names. The 880 Yards provided another Perrott-Strong duel from scratch, but not without some very formidable opposition from J. D. Wilson and R. Mundy, both running extremely well.

In the Pole Vault K. W. Martin, clearing 10 ft. 9 in., improved his own "record" by 6 in. The 220 Yards final produced the best finish of the day, and also, by the way, the best performance. Nel, as usual, got away quickly, and was well into his running before Reilly, yet the latter, with a truly magnificent effort 50 yards from the tape, started to gain on Nel. In the last 20 yards Reilly was going up rapidly on Nel, but the two breasted the tape together in the phenomenal time of 22½ seconds—a Hospital record not likely to be broken for some time. Reilly and Nel had another excellent duel in the "Quarter", but here exactly the opposite happened. Nel gained rapidly on Reilly in the last 80 yards, but failed to catch him by about 1½ yards. Reilly's time of 52½ sec. was extraordinarily good for the Winchmore track.

K. O. Black created something of a surprise by completely outpacing J. R. Strong at the end of the Mile. Black had previously won the 3 Miles in record time at the White City. In the High Jump J. Smart quite excelled himself by clearing 5 ft. 8 in. with a perfect "scissors" action. This was another Hospital record. As expected, G. D. Wedd and J. G. Youngman won the Weight and the Long Jump respectively, and in the latter event G. A. Akeroyd, a freshman, showed distinct promise. Youngman achieved a "double" by also winning the Hurdles in 17¼ sec.

At the conclusion of the events we were very much indebted to Lady Gordon-Watson for presenting the Challenge Cups and Medals to the winners. We are also extremely grateful to all those members of the Staff who acted as officials in the capacity of judges, starters, timekeepers or announcers, and also to many others who helped to make our Sports the success that they were. Mr. T. H. Just, the President of the Club, closed the proceedings by proposing a vote of thanks to Lady Gordon-Watson for presenting the Cups.

J. W. P.

RESULTS.

100 Yards: 1, J. G. Nel (holder); 2, C. P. Reilly; 3, J. G. Youngman. Won by 2 ft. Time, 10 sec. (Record disallowed.)

Throwing the Javelin: 1, C. M. Dransfield (holder); 2, E. E. Harris; 3, J. G. Youngman. Distance, 131 ft. 3 in. (Hospital record.)

120 Yards Handicap: 1, B. A. Thomas (2 yards); 2, K. A. Butler (3 yards), 3, I. P. Story (5 yards). Won by inches. Time, 12⅘ sec.

880 Yards Handicap: 1, J. R. Strong (scr.); 2, J. W. Perrott (scr.); 3, J. D. Wilson (40 yds.). Won by 4 yards. Time, 2 min. 7⅘ sec.

Pole Vault: 1, K. W. Martin (holder); 2, J. Shields. Height, 10 ft. 9 in. (Hospital record.)

Putting the Weight: 1, G. D. Wedd; 2, C. M. Dransfield and J. Shields. Distance 34 ft. 10 in.

220 Yards: 1, J. G. Nel (holder), C. P. Reilly; 3, W. M. Jopling. Won by 6 yards. Time 22½ sec. (Hospital record.)

Mile: 1, K. O. Black; 2, J. R. Strong (holder); 3, M. B. Lea. Won by 10 yards. Time, 4 min. 30⅘ sec.

Long Jump: 1, J. G. Youngman; 2, G. A. Akeroyd; 3, J. G. Nel. Distance, 20 ft. 5 in.

High Jump: 1, J. Smart (holder); 2, K. W. Martin; 3, R. Mundy. Height, 5 ft. 8 in. (Hospital record.)

120 Yards Hurdles: 1, J. G. Youngman; 2, W. D. Coltart (holder); 3, J. R. Kingdon. Won by 3 yards. Time, 17½ sec.

440 Yards: 1, C. P. Reilly; 2, J. G. Nel; 3, W. M. Jopling (holder). Won by 1½ yards. Time, 52⅘ sec.

Inter-Club Relay Cup (4 × 220 Yards): 1, Rugger 1st XV; 2, Rugger "B" XV; 3, Rugger "A" XV. Time, 1 min. 40 sec.

Housemen's Race (100 Yards): 1, A. T. Blair; 2, F. J. Beilby.

REVIEWS.

CLINICAL OPHTHALMOLOGY FOR HOUSE SURGEONS AND STUDENTS. By J. MYLES BICKERTON and L. H. SAVIN. (London: H. K. Lewis & Co., Ltd., 1933.) Pp. vii + 158. With 92 illustrations (including 6 plates). Price 7s. 6d. net.

This is one of the most useful books for the student in the Eye Department that we have seen. For its composition the authors have studied the examination papers of many years, and have succeeded in presenting the necessary facts in a remarkably small space.

The text is well arranged, the type being conducive to quick learning and easy reference. The illustrations are excellent, particularly the plates showing fundus conditions.

The clinical point of view is adhered to throughout. Particularly valuable are the chapters on case examination, sight-testing and ophthalmoscopic appearances, where the authors' sympathy with the puzzled beginner is well shown. One chapter is devoted to ophthalmic formulæ and there is an invaluable appendix on the instruments used in operations, with six pages of illustrations. All recent advances are included and, besides being simple enough for the dullest beginner, the book contains sufficient to pass the strictest examiner.

It is to be recommended to every student, especially those who are appalled by the complexity, size and price of the bigger text-books on the subject.

GETTING QUALIFIED. By DAVID SCOTT, M.R.C.S., L.R.C.P. (London: John Bale, Sons & Danielsson, Ltd., 1933.) Pp. xi + 219. Price 7s. 6d. net.

If one of the men of Brobdingnag were to return Gulliver's call and visit our land to-day, he would write perhaps just such a book as this, if he cared to mention a modern medical school at all. For it is the work of a superior being watching strange, inferior people doing strange, sometimes interesting things.

Ostensibly the book is written to inform a sadly unenlightened public that the physician's lot is not altogether a happy one. Yet we find much written that would seem very repulsive to any but the least squeamish "lay" mind. It is, in fact, a "running commentary", compiled from a diary, on pre-war medical studies and the life of a general practitioner. It contains much fatherly advice to the would-be medico on various subjects, such as how to pass examinations, to choose a practice or treat his patients, socially and medically.

When one has painfully acquired an immunity to the many grammatical and literary errors, the irritating, critical superiority of the ill-considered judgments on everything from Religion to Politics, the frequent monotonous "Well do I remember", the book becomes interesting in its way. It deals with the author's experiences and opinions as medical student, *locum tenens*, ship's doctor and general practitioner. The anecdotes are generally less entertaining than those in the stock of the average student and the "adventures" are singularly prosaic.

A large part of the book is devoted to a medical school life, a part to the work of the doctor, and the remainder to personal opinions on such well-worn themes as etiquette, quackery, homœopathy (of which a full, interesting and highly arithmetical account is given), maternal mortality, a State medical service, the future of medicine and "the Destiny of Man".

The book might be useful as a gift, perhaps, to a freshman who has no idea at all of what lies before him.

HYGIENE FOR NURSES. By JOHN GUY, M.D., D.P.H.(Camb.), F.R.F.P.&S.(Glas.), F.R.C.P.(Edin.), and G. S. I. LINKLATER, O.B.E., M.D., D.P.H., D.T.M.&H., M.R.C.P.(Edin.). Second edition. (Edinburgh: E. & S. Livingstone, 1933.) Pp. xi + 210. Figs. 22. Price 5s. net.

This small handbook summarizes the knowledge of hygiene covered by the syllabus of the General Nursing Council. It stresses principally the health of the individual as opposed to the community. The table of contents would give the best idea of the scope of the work. Part I:—Personal hygiene: food and metabolism; vegetable and animal foods; internal and external parasites; communicable diseases. Part II:—The house: ventilation, heating, lighting, water, sewage disposal; the nurse in relation to public health. There are some valuable tables and appendices. The figures are clear and instructive.

The interesting manner in which the subject is treated and the information so well imparted serve to make the book a most useful one.

ELEMENTARY HANDBOOK ON RADIUM AND ITS CLINICAL USE. By D. F. CLEPHAN and H. M. HILL. (Oxford University Press, 1933.) Pp. 164. Figs. 16. Price 7s. 6d. net.

There has been present for some time a need for a convenient book that would explain the essentials of radium treatment. This handbook adequately meets this need. Everything that is necessary for the student to understand the reactions and precautions in radium therapy is clearly set forth.

After a history of the subject the preparation and physical properties of the radio-active elements are given. Then follow practical chapters on the use and care of radium, the types of containers, methods of application and principles of treatment. The authors summarize the present opinion of radium therapy in the various sites, including, we notice, synopses of the work of Sir Charles Gordon Watson on the rectum and Mr. Geoffrey Keynes on the breast.

A comparison of the methods used in the treatment of cancer of the uterus at Stockholm, Paris and Munich is gone into very fully, with tables of their results. The book closes with a review of the present position of radium in the treatment of malignant disease.

The illustrations are excellent, and the production up to the publisher's usual high standard.

The author's original mark—to supply a handbook for nurses and technical assistants—has been overshot purposely, and the book is now "elementary" only from an expert point of view. It can be recommended to every medical student as being the best and most convenient source of information on a subject that is becoming increasingly important.

RECENT BOOKS AND PAPERS BY ST. BARTHOLOMEW'S MEN.

BOURNE, GEOFFREY, M.D., F.R.C.P. "Paroxysmal Auricular Flutter." *Lancet*, April 1st, 1933.

BROWN, W. LANGDON, M.A., M.D., F.R.C.P. "Diseases of Adrenal Glands." *The Medical Annual*, 1933.

——— "Insulin and Non-diabetic States." *The Medical Annual*, 1933.

——— "Obesity." *The Medical Annual*, 1933.

——— "Ovarian Hormones." *The Medical Annual*, 1933.

——— "Disorders of Parathyroid Glands." *The Medical Annual*, 1933.

——— "Disorders of Pituitary Body." *The Medical Annual*, 1933.

——— "Testicular Hormone." *The Medical Annual*, 1933.

——— "Diseases of Thyroid Gland." *The Medical Annual*, 1933.

COCKAYNE, E. A., D.M., F.R.C.P. *Inherited Abnormalities of the Skin and its Appendages.* London: Oxford University Press, 1933.

DAVIES, IVOR J., M.D., F.R.C.P. "British Pharmacopœia, 1932." *The Medical Annual*, 1933.

——— "Pharmacology and Therapeutics." *The Medical Annual*, 1933.

DONALDSON, MALCOLM, M.B., F.R.C.S. "Antenatal Problems in General Practice." *Clinical Journal*, February, 1933.

DUNDAS GRANT, Sir JAMES, K.B.E., M.D., F.R.C.S. "Forcible Nasal Inspiration." *British Medical Journal*, February 4th, 1933.

FISHER, A. G. TIMBRELL, *M.C.*, F.R.C.S. *Internal Derangements of the Knee-joint.* 2nd edition. London: H. K. Lewis & Co., Ltd., 1933.

GAUVAIN, Sir HENRY J., M.D., *M.C.* "Open-air Country Hospitals for Children." *Lancet*, February 11th, 1933.

GILLIES, Sir HAROLD, C.B.E., F.R.C.S. "Design of Direct Pedicle Flaps." *British Medical Journal*, December 3rd, 1932.

——— and KILNER, T. POMFRET, F.R.C.S. "Hare-lip Operations for the Correction of Secondary Deformities." *Lancet*, December 24th, 1932.

GORDON, M. H., D.M., F.R.S. "Remarks on Hodgkin's Disease: A Pathogenic Agent in the Glands and its Application in Diagnosis." *British Medical Journal*, April 15th, 1933.

GORDON-WATSON, Sir CHARLES, K.B.E., C.M.G., F.R.C.S. "The Early Diagnosis of Malignant Disease of the Rectum." *Practitioner*, February, 1933.

GROVES, ERNEST W. HEY, M.S., M.D., B.Sc., F.R.C.S. "A Surgical Adventure: An Autobiographical Sketch." *Bristol Medico-Chirurgical Journal*, Spring, 1933.

——— "Diagnosis and Treatment of Bone Tumours." *The Medical Annual*, 1933.

——— "Fractures." *The Medical Annual*, 1933.

——— "Surgery of Joints." *The Medical Annual*, 1933.

——— "Osteomyelitis." *The Medical Annual*, 1933.

——— "Spinal Disease and Deformity." *The Medical Annual*, 1933.

——— "Talipes." *The Medical Annual*, 1933.

HADFIELD, C. F., M.B.E., M.D. "Modern Aids to Anæsthesia." *British Journal of Anæsthesia*, January, 1933.

——— "The Choice of an Anæsthetic from the Point of View of the Anæsthetist." *Medical Press and Circular*, April 5th, 1933.

HUBBLE, DOUGLAS, M.B. *See* LESCHER and HUBBLE.

JAMESON, G. D., M.R.C.S., D.P.H., R.A.M.C. "An Experiment to Exterminate Bugs from Infected Buildings." *Journal Royal Army Medical Corps*, February, 1933.

KEYNES, GEOFFREY, M.D., F.R.C.S. "The Early Diagnosis of Malignant Disease of the Breast." *Practitioner*, February, 1933.

KILNER, T. POMFRET, F.R.C.S. *See* Gillies and Kilner.

LESCHER, F. GRAHAM, *M.C.*, M.A., M.D., and HUBBLE, DOUGLAS, M.B. "Idiopathic Aplastic Anæmia." *Lancet*, February 4th, 1933.

LINDEMAN, S. J. L., *M.C.*, R.A.M.C. "Two Cases of Tropical Typhus and Other Fevers." *Journal Royal Army Medical Corps*, February, 1933.

LLOYD, ERIC I., M.B., F.R.C.S. "Clicking Knee in Childhood." *Lancet*, March 11th, 1933.

MAXWELL, JAMES, M.D., M.R.C.P. "Further Reports on the Tuberculin Treatment of Anthrax." *British Medical Journal*, December 31st, 1932.

OSMOND, T. E., M.B. "Serum Reactions in Early Syphilis." *British Medical Journal*, February 11th, 1933.

PARSONS, F. B., M.A., M.D. "Some Recent Developments in Anæsthesia." *Practitioner*, April, 1933.

PAYNE, REGINALD T., M.B., F.R.C.S. "Recurrent Pyogenic Parotitis." *Lancet*, February 18th, 1933.

POWER, Sir D'ARCY, K.B.E., F.R.C.S. *A Short History of Surgery.* London: John Bale, Sons & Danielsson, 1933.

ROCHE, ALEX E., M.A., M.D., M.Ch., F.R.C.S. "The Early Diagnosis of Malignant Disease of the Bladder." *Practitioner*, February, 1933.

——— "Urethral Catheters and Catheterization." *Clinical Journal*, February, 1933.

——— "Atrophy of the Testicle." *Clinical Journal*, April, 1933.

ROLLESTON, Sir HUMPHRY, Bart., G.C.V.O., K.C.B., M.D., F.R.C.P. "Changes in the Character of Disease." *British Medical Journal*, March 25th, 1933.

ROXBURGH, A. C., M.D., F.R.C.P. "Acute Disseminated Lupus Erythematosus: Five Fatal Cases." *British Journal of Dermatology and Syphilis*, March, 1933.

SHARP, B. BUCKLEY, M.D., M.R.C.P. *Neurological Effects of Syphilis: Diagnosis and Treatment.* London: Oxford University Press, 1933.

SHAW, WILFRED, M.D., F.R.C.S., F.C.O.G. "The Pathology of Ovarian Tumours." *Journal of Obstetrics and Gynæcology British Empire*, April, 1933.

SHORE, T. H. G., M.D., F.R.C.P. "Isolated Dextrocardia." *British Medical Journal*, February 11th, 1933.

STALLARD, H. B., M.B., F.R.C.S. "Injuries of the Eye." *Practitioner*, March, 1933.

THEOBALD, G. W., M.D., M.R.C.P., F.R.C.S.(Edin.). "Relationship of Albuminuria of Pregnancy to Chronic Nephritis." *Lancet*, March 25th, 1933.

WALKER, KENNETH M., O.B.E., F.R.C.S. "Periurethral Operations on the Prostate." *British Medical Journal*, March 4th, 1933.

WARING, Sir HOLBURT, M.S., F.R.C.S. "The Early Diagnosis of Malignant Disease." *Practitioner*, February, 1933.
WATKYN-THOMAS, F. W., B.Ch., F.R.C.S. "Malignant Disease of Air-Passages, Upper, and Post-Cricoid Region." *The Medical Annual*, 1933.
——— "Affections of Ear." *The Medical Annual*, 1933.
——— "Diseases of Larynx." *The Medical Annual*, 1933.
——— "Affections of Nose and Nasal Sinuses." *The Medical Annual*, 1933.
——— "Diseases of Œsophagus." *The Medical Annual*, 1933.
——— "Pseudo-membranous Pneumococcal Pharyngitis." *The Medical Annual*, 1933.
——— "Diseases of Tonsils." *The Medical Annual*, 1933.
WEBER, F. PARKES, M.D., F.R.C.P. "A Case of Erythræmia with Jaundice, Hepatic Cirrhosis and Hæmatemesis." *Lancet*, April 15th, 1933.
WOOD, W. BURTON, M.A., M.D., M.R.C.P. "Phthisis in Adolescence and Early Adult Life." *British Medical Journal*, March 25th, 1933.

EXAMINATIONS, ETC.

University of Oxford.

The following Degree has been conferred:

B.M.—Edelsten, G. G. M.

University of Cambridge.

The following Degrees have been conferred:

M.D.—Armstrong, J. R., Pearce, R.
M.B., B.Chir.—Franklin, A. W., Price, L. R. W.
M.B.—Graetz, G. H. A.
B.Chir.—Birdsall, S. E., Dahne, S. F. L.

Royal Colleges of Physicians and Surgeons.

The following Diploma has been conferred:

D.O.M.S.—Evans, L. P. J.

Conjoint Examination Board.

Pre-Medical Examination, April, 1933.

Chemistry.—Brown, E. E., Clunies-Ross, W. G. F., Hall, W. S., Knowles, H., Taylor, L. R., Webber, R. H.
Physics.—Hall, W. S., Rushby, F. W., Stewart, E. F. G., Storey, T. P., Webber, R. H.
Biology.—Billimoria, B. R., Grant, D. S., Huddlestone, C., Kumar, A. M., Redman, V. L., Rushby, F. W., Schenker, A. W., Taylor, L. R., Webber, R. H.

First Examination, April, 1933.

Anatomy.—Alexander, L. L., Clarke, S. H. C., Gomez, A., Gray, G., Heasman, L., Maidlow, W. M., Mills, P. J. W., Ottley, M. F. B., Rosten, B. M. D., Salmon, J. K., Weiner, H., Weston, C.
Physiology.—Anderson, J. D., Clarke, S. H. C., Gomez, A., Gray, G., Heasman, L., Hughes, T. E., Mills, P. J. W., Rosten, B. M. D., Salmon, J. K., Weiner, H.
Pharmacology.—Barbour, A. B., Curtiss, L. M., Force-Jones, R. J., Kelnar, I., Knight, W. C., Mankin, E. M., Merriman, B. M., Nel, J. G., Paget, W. O. G., Palmer, T. I., Sansom, H. V., Tooth, G. C.

The following Students have completed the Examinations for the Diplomas of **M.R.C.S., L.R.C.P.**:

Ashton, D. R., Barasi, G., Berry, W. T. C., Briggs, G. O. A., Brownlees, T. J. K., Carpenter, R. H., Cohen, E. L., Cuthbert, T. M., Darmady, E. M., Dipple, P. E., Ghey, P. H. R., Higginson, H. C. H., Hole, E. K., John, C. W., Jones, N. H., Langenberg, E. R., Lee, H. B., Macfarlane, R. G., Mansi, R. L., Morel, M. P., Orpwood, R. M. M. C., Simcox, R. T., Stephens, D., Thomas, B. A., Trubshaw, W. H. D., Ware, C. E. M., Weddell, A. G. M., Williams, R. H. H., Wilson, J., Woodforde, A. R., Woodham, C. W. B.

CHANGES OF ADDRESS.

ANDERSON, R. G., 86, Harley Street, W. 1. (Tel. Langham 1742.)
GRAETZ, G. H. A., 32, Beaumont Park Road, Huddersfield, Yorkshire.
GREEN, L. E., 22, Romsey Road, Eastleigh, Hants.
HARRIS, A. G. JEAFFRESON, Hill House, Sherborne, Dorset.
HOLDSWORTH, W., Mayfield, Trentham Road, Longton, Stoke-on-Trent.
JENKINSON, Surg.-Lieut. S., R.N., H.M.S. "Alecto", 5th Submarine Flotilla, c/o General Post Office, E.C. 1.
KENDALL, N. F., Honeyway, Highclere, Newbury, Berkshire.
NICHOLSON, J. C., 17, North Road, Highgate Village, N. 6. (Tel. Mountview 5967.)
RAWLING, L. BATHE, Lavender Corner, Littlestone-on-Sea, Kent. (Tel. Littlestone 45.)
ROBINSON, V. P., The Cottage, Diss, Norfolk.
SMITH, W., 44, Deaconsfield Road, Westcombe Park, S.E. 3.
VINTER, N. S. B., 57, Soundwell Road, Kingswood, Bristol. (Tel. Kingswood 73630.)

APPOINTMENT.

ROBINSON, V. P., B.M., B.Ch.(Oxon.), appointed Certifying Factory Surgeon for Diss District.

BIRTH.

BARNES.—On May 11, 1933, at 8, Holywell, Oxford, to Florence and David Barnes—a daughter.

MARRIAGES.

HOBDAY RADFORD. On April 22nd, 1933, at St. James's Church, Chilton Cantelo, Yeovil, by the Rev. O. P. Fisher, assisted by the Rev. C. I. Radford, uncles of the bride, Dr. F. T. J. Hobday, only son of Sir Frederick Hobday, C.M.G., F.R.C.V.S., F.R.S.E., and Lady Hobday, of 31, Argyll Road, W. 8, to Sezerina Naomi, only daughter of Mr. Daniel Radford and the late Mrs. Radford, of Kojonup, Western Australia.
KNOX—EAST.—On April 27th, 1933, at St. Bartholomew the Great, Dr John Stuart Knox, eldest surviving son of Lieut. Col. Sir Hamish and Mrs. Knox, to Joan Norwood East, only child of Dr. and Mrs. East.
PARSONS—ATTFIELD.—On April 25th, 1933, at All Souls', Langham Place, London, W., Christopher T. E. Parsons, M.R.C.S., L.R.C.P., of Mildenhall, Suffolk, younger son of Ernest Parsons, 49, Queen Anne Street, W., to Pauline, elder daughter of Mr. and Mrs. Arthur J. Attfield, of Mildenhall, Suffolk.
WILLIAMS—LAUDER.—On April 29th, 1933, at St. Mary's Church, Lydney, Ralph Norman Haile Williams, eldest son of Mr. and Mrs. R. Williams, of Lydney, Gloucestershire, to Mary, third daughter of Mr. and Mrs. James Lauder, of Old Park, Lydney. Future address: Hazelwood, Nailsworth, Gloucestershire.

DEATHS.

COOK. On May 11th, 1933, of septicæmia, at Kaduna, Norman E. Cook, of C.M.S. Hospital, Zaria, N. Nigeria, husband of Clarice Cook, and second son of Dr. and Mrs. J. Howard Cook, of West Hampstead.
GIBBINS.—On May 10th, 1933, at Kemsing, Kent, Herbert Bowly, third son of the late Frederick Joseph Gibbins, of Neath, aged 59.
LITTLE.—On May 14th, 1933, at Monte Carlo, Col. Stephen Little, late I.M.S., aged 77.
LLOYD.—On April 24th, 1933, after an operation, Rickard William Lloyd, M.R.C.S.(Eng.), L.R.C.P.(Edin.), of 103, Oakwood Court, W. 14, son of the late Major Edward Lloyd, late 6th (Royal Warwickshire) Regiment, and grandson of the late Sir Robert Stanford, aged 74.
SHEEHY.—On April 27th, 1933, at a London nursing home, after a long illness, William Henry Patmore Sheehy, M.R.C.S., L.R.C.P., Governor of St. Bartholomew's and Christ's Hospitals, late of Montebello, Totteridge.

NOTICE.

All Communications, Articles, Letters, Notices, or Books for review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, *St. Bartholomew's Hospital, E.C. 1.*

The Annual Subscription to the Journal is 7s. 6d., including postage. Subscriptions should be sent to the MANAGER, Mr. G. J. WILLANS, M.B.E., B.A., *at the Hospital.*

All Communications, financial or otherwise, relative to Advertisements ONLY should be addressed to ADVERTISEMENT MANAGER, *The Journal Office, St. Bartholomew's Hospital, E.C.1. Telephone: National 4444.*

St. Bartholomew's Hospital Journal.

"Æquam memento rebus in arduis
Servare mentem"
—*Horace*, Book ii, Ode iii.

VOL. XL.—No. 10.] JULY 1ST, 1933. PRICE NINEPENCE.

CALENDAR.

Sat.,	July	1.	—Cricket Match *v.* Old Paulines. Away.
Mon.,	,,	3.	—Medicine: Clinical Lecture by Dr. Graham.
Tues.,	,,	4.	—Dr. Gow and Mr. Girling Ball on duty.
Wed.,	,,	5.	—Cricket Match *v.* R.N.C. Greenwich. Away.
Fri.,	,,	7.	—Dr. Graham and Mr. Vick on duty.
Tues.,	,,	11.	—Prof. Fraser and Prof. Gask on duty.
Fri.,	,,	14.	—Lord Horder and Sir C. Gordon-Watson on duty.
Sat.,	,,	15.	—Cricket Match *v.* Shoeburyness Garrison. Away.
Tues.,	,,	18.	—Dr. Hinds Howell and Mr. Harold Wilson on duty.
Wed.,	,,	19.	—Cricket Match *v.* St. Anne's. Away.

Last day for receiving matter for the August issue of the Journal.

Thurs.,	,,	20.	—Cricket Match *v.* Midhurst C.C. Away.
Fri.,	,,	21.	—Dr. Gow and Mr. Girling Ball on duty.
Tues.,	,,	25.	—Dr. Graham and Mr. Vick on duty.
Fri.,	,,	28.	—Prof. Fraser and Prof. Gask on duty.

EDITORIAL.

AT such an important time in the life of our Medical College, it seems appropriate, though perhaps impertinent, if we ask what precisely is the object of the future Medical School, equipped with costly laboratories, and possessing an efficient staff of lecturers and professors? Does it hope to produce men who will be good doctors, or does it set out to teach no more than the principles of the many sciences and "'ologies" which form material for the examinations through which students have to pass to become "registered medical practitioners"?

The object of medical education is clearly to give students an adequate knowledge of disease and its treatment which will enable them to practise the art of Medicine efficiently and successfully. The present curriculum does not appear to have such a definite object in view; certainly it produces "registered practitioners", but the equipment of the practitioner does not seem to be sufficiently catered for.

The dissatisfaction among teachers and students with the curriculum has long been obvious. The late Sir William Osler, when writing on medical education over twenty years ago, said: "Perfect happiness for student and teacher will come with the abolition of examinations, which are stumbling-blocks and rocks of offence in the pathway of the true student". At a meeting of the St. Mary's Hospital Medical Society, held last year, the following resolution was passed: "That the present system of medical education does not produce an efficient practitioner". In Edinburgh, at a meeting of the Students' Union, a resolution was passed unanimously that "The present system of medical education in this country is unsatisfactory". Dr. Graham Little, in a recent letter to the *British Medical Journal*, points out how it is hoped to improve the curriculum, and he concludes by saying: "Whatever may be the solution ultimately adopted, I hope I have made it clear that it is high time, in the interests both of the public and of the profession, to overhaul our present practice".

Dr. Lindsey Batten in our last issue contributed an article on the "Aims of Medical Education"; in the present issue he has expressed his views on the methods which should be adopted in the future. We would like to congratulate Dr. Batten for suggesting such revolutionary ideas, and hope that they will bear fruit in the ideal curriculum which is now so much under discussion.

COLLEGE APPEAL.

The Dean writes:

28th June, 1933.

DEAR MR. EDITOR,

Since my last letter to you on the subject of the Appeal, nothing has occurred which would especially interest your readers. Our funds are slowly increasing, but there has been no such influx of subscriptions from old Bart.'s men as I had hoped for. I am very disappointed, for there are still a considerable number who have not yet subscribed.

It is well that old Bart.'s men should be informed of what is happening.

At the moment we are considering how the present buildings can best be utilized for our purposes. This will naturally require very careful investigation. In the meantime we are making a determined effort to get money from other sources, and we hope soon to be able to report that we have met with substantial success.

I am afraid I have nothing else to say on this occasion.

Yours sincerely,

W. GIRLING BALL,

Dean of the Medical College.

* * *

COLLEGE APPEAL FUND.

	£	s.	d.		
Staff	12,134	13	9	(68)	
Demonstrators	1,504	1	0	(65)	
Students	449	14	9	(251)	
Old Bart.'s men:					†
Bedfordshire	3	10	6	(2)	(26)
Berkshire	86	1	0	(13)	(37)
Buckinghamshire	64	14	0	(8)	(29)
Cambridgeshire	154	13	0	(11)	(42)
Cheshire	1	1	0	(1)	(26)
Cornwall	22	2	0	(5)	(36)
Cumberland	5	0	0	(1)	(6)
Derbyshire	19	14	0	(4)	(17)
Devonshire	449	19	0	(41)	(117)
Dorset	16	8	0	(8)	(30)
Durham	16	6	0	(3)	(11)
Essex	225	15	6	(15)	(69)
Gloucestershire	123	4	0	(8)	(66)
Hampshire	303	1	0	(37)	(134)
Herefordshire	12	7	0	(3)	(11)
Hertfordshire	62	10	0	(10)	(73)
Huntingdonshire					(1)
Isle of Wight	135	8	0	(9)	(25)
Kent	526	13	0	(60)	(146)
Lancashire	33	7	0	(10)	(82)
Leicestershire	133	12	0	(6)	(28)
Lincolnshire	42	3	0	(12)	(25)
Middlesex	371	13	0	(15)	(68)
Norfolk	159	7	6	(18)	(60)
Northamptonshire	54	4	0	(4)	(17)
Northumberland	101	1	0	(2)	(11)
Nottinghamshire	13	13	0	(2)	(28)
Oxfordshire	166	10	0	(14)	(29)
Rutland					(2)
Shropshire	30	4	0	(7)	(22)
Somersetshire	449	6	0	(22)	(43)
Staffordshire	63	13	0	(5)	(37)
Suffolk	262	1	0	(15)	(46)
Carried forward	£18,289	13	0		

	£	s.	d.		
Brought forward	18,289	13	0		
Surrey	409	11	0	(30)	(180)
Sussex	229	10	0	(30)	(170)
Warwickshire	176	18	0	(16)	(56)
Westmorland	1	0	0	(1)	(5)
Wiltshire	92	11	0	(10)	(26)
Worcestershire	142	8	6	(17)	(27)
Yorkshire	254	19	6	(19)	(101)
Wales	32	11	0	(8)	(150)
London	2,439	15	8	(147)	(971)
Channel Islands	10	0	0	(1)	(9)
Scotland	12	2	0	(3)	
Abroad	38	5	0	(7)	
South Africa	268	15	6	(15)	
Canada	90	2	10	(6)	
East Africa	61	6	0	(5)	
West Africa	145	10	0	(4)	
India	122	0	0	(3)	
Syria	2	2	0	(1)	
U.S.A.	5	0	0	(1)	
Ireland	14	14	0	(3)	
North Africa	1	0	0	(1)	
North Borneo	5	5	0	(1)	
Australia	1	1	0	(1)	
Egypt	2	2	0	(1)	
Malay States	6	0	0	(2)	
China	35	2	4	(6)	
France	30	0	0	(1)	
Trinidad	20	0	0	(1)	
British West Indies	23	1	0	(3)	
Services	493	14	0	(25)	
*Others	18,079	3	7	(167)	
	£41,555	5	11		

*These figures include:	£	s.	d.
University of London	5000	0	0
Unilever Bros.	500	0	0
League of St. Bartholomew's Nurses	25	0	0
The Executors of the late Alfred de Rothschild, Esq.	2000	0	0
Rahere Lodge	105	0	0
Corporation of the City	1000	0	0
Fishmongers' Company	262	10	0
Mercers' Company	1000	0	0
Ironmongers' Company	100	0	0
St. Bartholomew's Hospital Reports	250	0	0
The Haberdashers' Company	50	0	0
The Goldsmiths' Company	500	0	0
St. Bartholomew's Hospital Women's Guild	627	10	9
St. Bartholomew's Hospital Governors	469	7	0

† Number of Bart.'s men in County.

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OLD STUDENTS' DINNER.

The Old Students' Dinner will be held this year on Monday, October 2nd, in the Great Hall of the Hospital. Lord Horder of Ashford will be the Chairman, and it is hoped that as many old Bart.'s men as possible will be present.

A large and representative attendance is specially desired, for the occasion will provide an opportunity to celebrate the acquisition of the Charterhouse Square site and the beginning of a new era in the history of the College.

The site will be open for inspection by any who desire to see it.

* * *

We offer congratulations to G. W. Thomas on being awarded the British Medical Association's prize in Group 12 of the annual competition. We have been informed that the Council of the British Medical Association has decided to offer for award in June, 1934, prizes for short clinical papers by fourth and subsequent year students under the heading, "Describe Three Cases you have seen of Acute Intestinal Obstruction, discussing Diagnosis and Treatment". The medical schools of the British Empire have been divided into groups, and a prize of £10 is offered for each group. Further details can be obtained from the British Medical Association, Tavistock Square, W.C. 1.

* * *

We congratulate the Athletic Club on their magnificent success in the Inter-Hospital Sports.

OBITUARIES.

SIR WALTER MORLEY FLETCHER, K.B.E., C.B., M.D., D.Sc., F.R.C.P., F.R.S.

THE loss to medical science through the death of Walter Morley Fletcher, before he had completed his sixtieth year, will be felt far beyond the limits of this country. Until the middle of 1914, a month or two before the outbreak of war, Fletcher had seemed to be fixed in his academic career at Cambridge, where his only contact with medicine had been through his work on fundamental problems of the contractile metabolism of muscle, on the borderland between physiology and biochemistry. He had, indeed, completed a medical course and qualification some fourteen years earlier, taking the clinical part of it at Bart.'s in the years from 1897 to 1900. We may be sure that he gave to these clinical studies that concentration of a fine and critical intelligence, which he could so rapidly bring to bear on any problem. Any ideas, however, which he may have entertained of practice in medicine or surgery were early put aside, in favour of a return to Cambridge and physiology. Even during his Bart.'s period, therefore, his interests were still largely in Cambridge, and when he returned there in 1900, to take up the life of a resident Fellow and College Lecturer at Trinity, becoming a Tutor in 1904, it seemed that the brief contact with practical medicine would give him, at the most, a stimulating memory and a wider background of experience for the pursuit of academic physiology, by his own researches, and later, in those also of the distinguished pupils whom he inspired. But though his personal contact with clinical work was thus brief, it widened his horizon and gave him a definitely medical outlook; and Bart.'s claimed thereafter a place, second only to that held by Cambridge and Trinity, in the affectionate loyalty which Fletcher so readily gave to the homes of great and venerable traditions.

The opportunity which came to him in 1914, just as his ten years of College tutorship were coming to an end, transformed at the same time Walter Fletcher's career and the whole aspect of medical research in this country. It is of but little interest now to discuss how far the opportunity discovered the man, or the man made the opportunity. We may, in any case, be thankful that the two came together at the right time. The Medical Research Fund, then a new by-product of the National Health Insurance scheme, and the creation of the late Sir Robert Morant more than of any other man, might have found another secretary with knowledge of men and of affairs, and, perhaps, with more conventional ideas of administrative routine than Fletcher had, or, indeed, than he ever acquired. But in Fletcher the natural *flair* for organization and control by personal influence and enthusiasm rather than by machinery was found in a rare, even in a unique association with a first-hand knowledge of the real meaning of research, and of the psychological as well as the material needs of the research worker, whether in the University laboratories or the Hospital clinics.

To Fletcher his new secretarial duties provided not so much an office as a mission. He had only just taken them up when the war broke out, and immediately put his powers of organization, of initiative and of brilliant improvisation to the most exacting test. It would have been so easy, and so wrong, to suppose that research could be put aside to wait till the war had been won. Few, if any, but Fletcher would have grasped so immediately the new and urgent needs for research which the war created. By the time it ended, the Medical Research Fund had won recognition as one of the indispensable factors of national recovery and reconstruction. The only questions concerning it were of its enlargement, and its reconstitution on a more stable basis under the Privy Council. The name of Fletcher, as the chief organizer of its successful application, was on the lips of all the men who knew. He had nearly lost his life in the achievement. Pneumonia struck him in 1916, after a period of reckless overwork. An empyema followed, and though it healed, and his magnificent physique seemed to have triumphed, there was left in the scar a lurking danger, to which, after these many years of further brilliant activity, he has at last succumbed.

Fletcher, after the war, became not merely the organizer of medical research for the service of peace; he became its apostle. He appeared as the effective

champion of the needs of the research workers and of their claims to recognition. He was the fervent and tireless exponent of the meaning of medical research, and, widening his scope, of biological research, for the health and the happiness of mankind.

Fletcher's death will be mourned, and his life and personality held in affectionate memory, in many circles—in official circles, where he moved with a still growing distinction and influence; among friends with whom he shared intellectual and artistic interests of remarkable range and variety; among other friends with whom his common ground was that of athletics, or of the pleasures and sports of country life. Among none, however, will there be a deeper sense of a loss beyond repair than among the men and women working in the field of medical research. To practically every one of these this brilliant and distinguished man was a close friend, always ready to spare time from public duties or social demands, more than enough to fill an ordinary life, for critical appreciation and generous encouragement of the humblest genuine and single-minded effort to add to the knowledge on which medicine is built. A driving force, a missionary zeal, has gone before its due time from the great cause of the advancement of medical science; and I believe that Walter Fletcher would like to be remembered at Bart.'s, as one whose equipment, for the great work of his mature life, was completed by the brief years during which the old Hospital was his second *Alma Mater*. H. H. D.

Dr. NORMAN E. COOK.

It is with deep regret that we heard of the death of Norman Cook on May 11th from septicæmia, after a brief illness. To those of us who knew him and remember his unique personality it comes with a sense of great loss.

He was educated at Highgate School, and entered St. Bartholomew's Hospital in October, 1922. He qualified M.B., B.S. in December, 1928, and took a house appointment at the Mildmay Hospital. As he had always wished to go abroad as a missionary he took the D.T.M.&H. in 1929.

Naturally good at all games, he excelled at cricket—he captained the Hospital side for two years and played for the United Hospitals and London University. He was also captain of the Fives Club, and was in the first pair during the whole of his time at the Hospital.

In 1930 he went to Zaria, Northern Nigeria, under the C.M.S. and built a hospital there, where the work has recently been most encouraging in every way. He had recently established a further dispensary up country, and his work was held in high esteem both by the natives and the Government officials.

His unfailing courtesy and genial good humour remain with us as among his outstanding characteristics. But there was more than that—he was a very fine Christian gentleman, and we may say of him, as Chaucer wrote, "First he wroghte and afterwards he taughte".

RONDEAU.

On a/c.

HIS tailor's bill, as I've heard say,
Man's wont to cast unscanned away—
Discharging first, whate'er their size,
His other liabilities—
A quaint, withal a callous, trait!

The check in black or brown or grey
He dons, but to some distant day
Defers the cheque that satisfies
His tailor's bill.

Thus Man. And Woman also? Yea,
She's sinner double-dyed. But stay!
One dame, demure, devoted, wise,
Exception to the rule supplies:
Our kindly Ma would fain defray
Before sartorial display
Her Taylors' bill.* C. ap Peele.

* We understand that the Dean is not unwilling to receive cheques on the lady's behalf.—ED.

ACKNOWLEDGMENTS.

The British Journal of Nursing—The Nursery Times—Charing Cross Hospital Gazette—Guy's Hospital Gazette—Magazine of the London Royal Free Hospital—Middlesex Hospital Journal—Queen's Medical Magazine—Royal Dental Hospital Magazine—St. Mary's Hospital Gazette—St. Thomas's Hospital Gazette—The Student—University College Hospital Magazine—University of Leeds Medical Society Magazine—University of Toronto Medical Journal—Sydney University Medical Journal—Clinical Journal—East African Medical Journal—The General Practitioner—The Hospital—Bulletins et Mémoires de la Société de Médecine de Paris—L'Echo Médicale du Nord—The Medical Forum—The Medical Press and Circular—Medical Times and Long Island Medical Journal—Post-graduate Medical Journal—Reale Società Italiana D'Igiene—Revue Belge des Sciences Médicales—Archives Hospitalières—The Bombay Medical Journal—The Quarterly Journal of the Research Defence Society—The Keijo Journal of Medicine.

AIMS AND METHODS OF MEDICAL EDUCATION.

II. METHODS.

IF a committee of enlightened men were appointed to devise a new curriculum, having as its single aim the training of men to become good doctors, can we guess how it would set to work and what it would recommend? It is at least entertaining to try. We will suppose it a committee of five: a physician, a surgeon, a general practitioner, an intelligent layman to represent patients, and an experienced schoolmaster, or the tutor of a college to represent education, each one of them a clear-sighted man of independent mind.

Having met and chosen their chairman, they sit down to discuss, as a necessary preliminary, the functions of a doctor and the qualities and attainments which make him a good one.

What is required of the doctor?

First he is required both by public bodies and by private individuals to give advice about health and its maintenance. Public bodies make him a medical officer of health, set him to inspect school-children or candidates for the Services, to advise mothers, actual or expectant, insurance companies demand his opinion as to expectation of life; private patients bring their children or come themselves for overhaul and for advice on matters of personal hygiene. Work of this type is increasing, and must increase, for, taken as a whole, it is probably more successful than most branches of curative medicine. The time is long past when the doctor could assert or suppose that his concern was only with the sick.

There is a hoary myth that in sickness the patient is concerned only about his treatment. This is not so. The patient, rich or poor, wishes to know the diagnosis and the ætiology—what is wrong and how it came about. If he does not ask it is from politeness, shyness, or fear of being snubbed (this especially in hospitals), or from fear of learning the truth, which, even so, he wishes to know. As to prognosis, the patient is less insistent than might be expected, but treatment he very properly demands, though his ideas of good treatment may differ widely from his doctor's. It seems likely that some two generations ago diseases were widely regarded as inevitable, if not actually "sent"—things to be endured with patience, and whose outcome was not in human hands. At that same period the doctor, in the dawn of modern science, preached the specific cause, and hoped confidently for the specific remedy based thereon. Now the position is almost reversed. The patient believes implicitly in a specific cause for every phenomenon, and is inclined to think that if it has not yet been found it cannot have been seriously looked for. He has faith in remedies, but sadly little in the "*vis medicatrix Naturæ*", which he is apt to regard as the superstition of a bygone age. The doctor, watching both diseases and theories run their course under his eyes, finds reason to distrust both specific causes and specific remedies, but to believe in the human organism's power of recovery, given a reasonable chance. The result of all this is that if patients are to be treated as they ought to be and the doctor is not to be led into false courses, he must be ready to give convincing reasons, both for what he does and for what he declines to do.

Briefly, then, the doctor's functions are to advise the healthy on the maintenance of health and the prevention of disease, and to adjudicate between health and not-health, to advise the sick as to the nature and, when possible, the cause of their maladies, and to set them on the best and nearest way to recovery, interfering or not as may be best for them.

What does he require to perform these functions well?

First, of course, he must be a good man, and here the curriculum can have little to say. Next he must have a clear head, and here it can do much, for better or for worse. If, for example, it insists that at the age of sixteen the intending medical student shall abandon general education for the acquisition of technical knowledge, it powerfully discourages clearness of thought and expression, to say nothing of breadth of view, in the finished medical man.

The temptation to confused thinking is almost overwhelming. As if the problems set by Nature were not enough, the doctor is invited daily by patients, by commercial firms, by little periodicals and pamphlets from unknown quarters to accept false analogies, uncontrolled experiments, muddled reasoning, dogma, and even gross misstatement as substitutes for observation and thought. The love of accuracy which comes of good scholarship would by itself go far to protect him. A wide but shallow acquaintance with many sciences and an unreasoning acceptance of facts for examination purposes strip his armour from him.

Next he must have a philosophy—of life in general, and of medicine in particular. He cannot practise without one. For example, if he has the clear head already postulated, he will soon find that he must decide whether he believes in "Man, a machine" or in "Man, not a machine". In one of these two faiths he must work, and in case after case, not only his treatment, but his diagnosis will be determined accordingly.

To supply him with a philosophy ready-made is not the province of the curriculum, but it has the duty of

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supplying the facts on which to build one, and that without reserve and without bias.

It is sometimes thought that the doctor is primarily concerned with disease, but, outside the laboratory, this is not so. From first to last the practising doctor, specialist or no, is concerned with human beings either in or out of health. Pneumonia and appendicitis exist as tangible entities no more than anxiety neuroses. What exists, and what must be treated, is a patient suffering from one of these conditions. Tumours come nearer to independence, but, thank heaven, we do not yet speak of "tumour specialists". It seems but right, therefore, that the doctor should have something more than an anatomical acquaintance with the human material in which he is to work. A "vet." whose knowledge of horses was confined to their internal anatomy and physiology, their pathology and the medicaments suited to their ailments, but who knew nothing of horsemastership or of horses "in the round", would be an unusual and probably an unsuccessful kind of horse-doctor. Should not the human doctor, entering practice, be conversant with the common physical and physiological types of men, with the phenomena of growth, puberty and age, with the influence of diet, habits, occupation and environment on ordinary men, women and children, with the power and limitations of inheritance, and above all with the extent of individual variation and the limits of the normal? Should he not, in fact, have a reasonably thorough knowledge of human biology and of clinical anatomy and physiology?

Apart from this a fairly extensive knowledge of the structure and mechanisms of the human body, that is of anatomy and physiology in the accepted sense, is obviously necessary. That the details of these subjects will soon be forgotten is, in itself, no reason for not learning them if they are essential to a good understanding of structure and function; but there are some facts in both subjects which appear to be almost barren, not only of clinical application, but also of vital significance, and these, until and unless they come to have such significance, it would surely be better not to learn. To have been able, once, to name all the structures in the human body, to have been able to map the cerebral convolutions, or to identify every carpal bone and phalanx, to enumerate the branches of the internal maxillary artery, to give an exact account of the reflexions of the pericardium or of the minute structure of striped muscle or of peripheral nerves, to have been able to recite the list of the purin bodies in the urine or of the pigments of bile, urine and fæces—these and other such accomplishments assist a man to be a good physician scarcely more than to have been a fine performer with the yo-yo. They neither help him to understand what he is dealing with nor inspire him to think. For the anatomist or physiologist the facts concerned have some significance, for the clinician or future clinician they have none, or next to none.

Rather less unprofitable are such occupations as following (at a distance) the pursuit of the urinary creatinin back through the mazes of metabolism to its obscure first origin, or critical examination of the ingenious theories of colour vision. Such exercises, whether for giving some idea of the mechanisms of the body or for pressing home the lesson of the 38th chapter of the Book of Job, are not without value for the future doctor, yet, for a young man with a short life trying to learn a long art (at his father's expense) and pressed for time, they are something of a luxury, and it is possible to become a most excellent practitioner without either knowing or having known anything whatever about them.

To have taken part in one small but genuine research would be of infinitely greater value.

Pathology is in the same position. The doctor should have a sufficient grasp of its principles to be able to think out a clinical problem in pathological terms. He should know enough of the specific pathology of diseases to picture intelligently what is going on beneath the surface; he should understand the use of the microscope as a first aid in diagnosis. But the niceties of bacteriology and morbid histology have no significance for him, and the "spotting" of sections and cultures or the memorizing of sugar reactions are, for the future doctor, vain and irrelevant exercises, and a most lamentable waste of time.

But in this matter of the accessory sciences the crux is chemistry. A knowledge of elementary physics is obviously essential, and no clamour to extend it is audible at the moment.

The position of biology seems to the writer unassailable. Apart from its obvious claim to a place in the education of anyone who is to deal with living beings and with vital processes, it is a science comprehensible by ordinary intellects, it stimulates imagination and thought, and in learning it the student takes the first steps to acquiring surgical technique. Again, there is no talk of extending the course in biology, but rather of curtailing it. It is otherwise with chemistry.

Here is the science which has made, in the last generation, the most prodigious advances. It has linked itself to physics, and it pauses not for an instant; it explains vital processes, it dissects and compounds drugs, it devises new therapies and rationalizes old ones; it can almost be heard proclaiming that it is about to revolutionize medicine. How far is a study of this science essential to the making of a good doctor? How much chemistry should the student learn?

Not very long ago the answer would have been easy. "The student must learn enough chemistry to give him a clear insight into metabolic processes, normal or deranged, and a knowledge of the nature and properties of the chemical bodies employed as drugs".

This still sounds very reasonable. The trouble is that knowledge has advanced so fast and so far, and the synthetic and manufacturing chemists have evinced such ingenuity and enterprise, that the connotation of the word "enough" in this context has completely changed. A generation ago the knowledge of these subjects which could be imparted to and absorbed by ordinary medical students in the time available did bear some kind of proportion to the sum of such knowledge then existing; now it bears none, so that a more intelligent answer to the question might well be "either a great deal or very little", with the corollary that the first alternative is for the few with a natural aptitude for the subject, the second for the many; (for it will probably be conceded that the kind of man who is attracted to medicine has, as a rule, little aptitude either for mathematics, or for the formulæ and equations of the physical sciences). The time may come when one sufficiently expert in the science will be able to picture accurately the biochemical basis of a given clinical picture, and by skilful chemical intervention to re-establish disordered balance or favourably deflect the course of events. Occasionally it can already be done, but not often, and, if the rate of progress towards effective specific therapy based on bacteriology and cellular pathology may be taken as a guide, "the time" need not be expected just yet. If and when it comes, both the curriculum and the intellectual bent of those entering the profession will have to change. Meantime is there really any need for more than a few "biochemical doctors"? May not the average medical man, without loss of self-respect, confess that "such knowledge is too wonderful and excellent for him; he cannot attain to it".

This will be much better, both for him and for his patients, than to attempt to be clever with a smattering. What the doctor needs in this connexion is not technical knowledge, but an understanding of the nature of scientific evidence, and a faculty for assessing the worth of different sources of information.

The recent, and widely accepted promotion of the transient biochemical state of acidosis to the status of a chronic disease of childhood, to be diagnosed without chemical evidence on a symptomatology which would put Proteus to shame should make both biochemists and clinicians pause and think before they endeavour to popularize biochemistry among the profession.

But this thesis is, alas, the very reverse of that of the President of the General Medical Council, who sees it as the duty of that body "to press for the very thorough grounding of the student in chemistry, and, more particularly, in biochemistry, as a part of his professional curriculum". There is no space to pursue the argument, but the prospect of the whole body of medical men trying to think biochemically induces in the writer only a sinking of the heart, a sinking like that induced by the picture (also held up for his admiration) of a brave new world whose citizens, having worked three hours a day, devote eight or ten to the Cultivation of the Mind and the Pursuit of Higher Things. Moreover, even if the ideal be accepted, is it not certain that in practice it will be attained at the expense of general education (for there is no hint of sacrificing any other of the accessory sciences), so that before long what was once a learned profession will become an association of uncultured and half-educated technicians? Put it that it will become almost impossible for any schoolboy to pursue his classical studies up to sixth form standard or to become even moderately proficient in Greek if he wishes ever to practise medicine: is that a light matter for the profession?

But to return to our committee and their doctor. They will easily agree that he must be able to examine his patients, and they may well think that even at the outset of his career he should be able to inspect (with a suitable "scope"), the eye, ear, nose, larynx, rectum and cervix uteri, and to tell if what he sees there is normal or no; they may think he should know something of the teeth, both clinically and radiographically, and that though he need know nothing of radiology, he must be able to read radiograms. But when they inquire they may find that a student would feel himself very ill-used if, despite a fine knowledge of acid-base equilibrium, he found himself handsomely ploughed in his finals for total inability to see what was going on in the tympanic membrane, the larynx or the cervix.

When they turn to diagnosis they will find a subtle difference existing between the meaning this word has for the student and for the practitioner. For the student (and, very largely, for the teaching hospital) it means fitting a name to the patient's disease—"this is a case of aleukæmic leukæmia". For the practitioner (and for his patient) it means discovering the nature and cause of the trouble—"this patient, who complains of cough, loss of weight, anorexia and extreme fatigue, is suffering in part from infection of the left antrum, in part from fear of tuberculosis, and in part from an over-anxious mother who has prevented her from growing up".

When practitioners complain that they are not well prepared as students to recognize these nameless complaints, answer is made that the student must walk

before he can run, and that he is not in fact ready for such instruction. No doubt to diagnose such a case, greater maturity of judgment is needed than to diagnose, say, subacute combined degeneration, but suppose the student does encounter it (and the patient *might* have gained admission to a medical ward), is it right that he should be taught to regard as complete the diagnosis of "maxillary sinusitis, with a large functional element"? Is it well that he should never encounter such cases in his finals, and that if he did the word "functional" should be his full and sufficient discharge from the obligation of investigating the patient's state of mind?

A recently published paper, read to general practitioners by a consulting physician, begins thus: "About half the patients who are sent to me for anæmia have a normal blood-count. They are not suffering from anæmia, but from debility, very often psychological in origin. An unhappy love affair does not require treatment with liver extract, but I have seen it prescribed in more than one such case on a mistaken interpretation of the symptoms as anæmia". Why should it be common for practitioners to make such a mistake? Is it not because, first, they have been inculcated with a materialistic conception of medicine; second, they have not been encouraged to reason clearly, and to use words accurately; and third, they have not been taught to examine their patients completely. They would not have made the wrong diagnosis if, in their ward clerking, they had been made to use a hæmoglobinometer in the routine investigation of all their patients; and they would have made the right one if the power of emotional disturbances to cause physical symptoms had been consistently pointed out to them in their clinical work. No special course in psychology would have been needed. More instruction in chemistry or in any other accessory science would have helped them not a whit.

Why did they prescribe liver extract instead of iron on a diagnosis of "anæmia" (*tout court*)? Partly, it may be, from a desire to be "modern", partly from having listened too long to the siren songs of the manufacturers, but at bottom from lack of clear thinking.

Turning to treatment the lay members of the committee will point out with surprise how very small a place it occupies in the curriculum, and on inquiry it may be found that the young man's ideas on this subject when he leaves his hospital are both sketchy and confused, and that he has no conception of its importance, so that while some of his patients are confusedly over-treated, others are sadly neglected. In particular the gentle contempt shown in hospital education for that wide and important field of treatment which it dubs "merely palliative" may seem almost tragically misplaced, for while "cures" are few and far between and the word "cure" might well be forgotten by the doctor, there are very few conditions in which he can do nothing either to assist recovery or to alleviate suffering. Further, our committee may be distressed to observe that it is quite possible for the doctor to go out into the world unable and, indeed, afraid to use his hands in the practice of his art, so that, for want of a timely myringotomy, his patients go on to mastoiditis, and he may be sorely tempted to call in the village bonesetter to "unstick" a lumbo-sacral strain.

What, then, will be our committee's positive recommendations?

They will first point out that the curriculum they propound has but one purpose; it will be designed to enable medical men, whether in public or private, special or general practice, to render the maximum of good service to their fellow citizens. It will not be intended for the medical scientist, for whom, though it might give him breadth of view, it will be in many ways unsuitable. It will be based on the principle that for any kind of practitioner ability in thought and action are of more value than knowledge, and that the two great essentials for him are general education and clinical training. It will follow that since the available time and the capacity of the student's mind are limited, there must be excised from the sum of facts which he is compelled to learn all such as merely burden the memory and do not assist understanding or thought. Away will go the details of chemical manufacture, a host of anatomical names, some details of botany, numbers and percentages wherever they occur almost without exception, the most part of morphology, whether cellular or microbic, and a certain amount of morbid anatomy. Further than this, some facts, such as those of biochemistry, whose theoretic importance is indisputable, but which can be grasped only after prolonged special study, and are then not easily retained, will, as a matter of common sense and reasonable compromise, give up their place to other subjects of greater practical value. The minimum requirement in chemistry will therefore be small, but it might be made compulsory for the "First M.B." candidate to offer either additional chemistry, a language or mathematics as alternative subjects. In the final examination, at least for the higher degrees, a question in biochemistry would be set as an alternative to one in psychology, and the candidate would have the chance of taking a course in one of these two subjects in the clinical stage of his work, when the application of what he was learning would be apparent to him.

The schoolboy and his teachers would thus be given their freedom to carry his general education to its natural fruition, and the student could begin his professional studies equipped perhaps with one or more modern languages, with the trained mind of the classical or mathematical scholar, with an unspecialized education in science if his aptitude lay clearly in that direction or, at the least, with some general culture.

The clinical aspects and applications of anatomy and physiology will be kept clearly before the student while he is studying these subjects, and the line between the clinical and preclinical phase will be partly obliterated. He will study radiographic anatomy stage by stage with that of the dissecting-room; and will study the normal intestinal movements with the help of the fluorescent screen; he will go from the anatomy to the post-mortem room to correct his distorted impressions of the viscera; he will learn the arts of physical examination during his physiology course, and will be made to observe and describe selected abnormalities in the fundus, heart, larynx, urine, and so forth partly to give significance to what must otherwise appear a dull and empty exercise, partly to introduce him to his life-long task of defining the limiting boundary of the normal. It should be possible at this stage to give him a share in some small piece of research into clinical physiology, and to bring home to him the evasiveness of truth, the necessity for controls, and the relation of the unknown to the known. He should enter the wards with a good knowledge of normal human beings in their physical aspect, and should not be shocked to find that they do not behave like machines, or like laboratory animals; he will have learnt to use eyes, hands, ears and diagnostic instruments, and will be already familiar with some of the physical signs of disease. In the wards the conception of the patient as an indivisible whole, as a sentient being and as the unit in clinical work will be diligently taught until the expression "he is a case of" is heard no more. Any tendency in the student to specialize will be rigidly suppressed; he will be taught that he is engaged upon a general training, that if he seriously wishes to take up a special branch of work he must postpone it until well after qualification, and that even then he is likely to make a very much better specialist if he first engages in general practice. The cult of the rare will also be coldly regarded, and examinations will be so framed and conducted as to discourage it. Evidence of thought and of original observation will, on the other hand, be marked high, and it is probable that an essay will be demanded of the candidate at least in his final examination.

Much of the time now spent in operating theatres and in lecture-rooms and some of that spent in laboratories will be transferred to the special departments, where the student will learn both to diagnose and, more particularly, to treat the common regional diseases and disorders. The student's connexion with and responsibility for his "case" will not, as now, cease at diagnosis, but will continue at least during the period of active specific treatment, he will be expected to know its details and, where possible, to carry it out himself. He will thus see fewer conditions, but will know far more about them and about the details and limitations of therapy and, it is to be hoped, he will learn to use his hands.

Education in psychology will probably be given better by keeping constantly before him the fact that his patient is human than by any course of lectures, but instruction and practice in investigating the state of the mind (and the sane mind at that) should be perfectly possible to give, and might well take the place of instruction in the classification of the psychoses; also it should be possible to give to every student at least one convincing demonstration of the origin of bodily symptoms in emotional conflict and of their disappearance when the conflict is resolved. It is deplorable that he should go into practice unequipped to handle this daily problem.

At the end there should emerge a practitioner, inexperienced no doubt, but competent to examine his patients completely, familiar with a large number of common clinical pictures, alert in mind and ready to learn, conscious that his knowledge is small, but confident of his ability to help his patients, having at least the makings of a good doctor. L. W. BATTEN.

THE MEDICAL SEMI-DEMI-MONDE.

THE passage of time provides a double instruction; confirmation of the truth of earlier observations is obtained, and fresh material becomes available to the student of human social pathology. The stork-shooter, having barely escaped the game-keepers, has changed his profession for that of gooseberry-stealer. The dichotomist still flourishes, but the chiropractor communes no longer in Egyptian with Æsculapius.

Juvenal satirized the credulous folly of his times; Benvenuto Cellini describes how a quack physician came to Rome with a cure for the French evil, treated many wealthy ecclesiastics and went off with his fees, "which was as well for him as the symptoms returned soon after his departure."

Human nature never changes; the proportion of fools was never greater in a population than it is to-day in ours, and their influence, thanks to democracy and the modern newspaper, is stronger than ever. Where the fools are there shall the rogues be gathered together,

and rogues, or gentlemen whose desire for money is stronger than their consciences, are numerous inside the profession, especially where the orbits of medicine and flash society intersect.

Flash society eats and drinks too much, and loves irresponsibility. It must have mud-baths, weight-reducing electricians, beauty parlours, abortionists, venereal experts, and a pleasantly variable selection of quacks for its fads and boredoms; nor does orthodox medicine entirely scorn its fees for treatment of imaginary ills.

Not long since did there appear, by a process of presumably emergent evolution, a new therapeutic sect the Orificialists. Every bodily port, whether of exit or of entrance, was their professed study; for what could be of importance to the human organism except those things which entered it or those that were dispersed from it?

Many and various are the votaries who subscribe to the common cult of orificialism.

A benign and rubicund old gentleman once accosted the writer at a scientific meeting. "Young man", said he, "do you know anything about diabetes?" "Well," was the reply, "I am interested in it". "I can cure it," quoth he. "I am writing a book on it. And by every post, from California, Australia, India all parts of the world—come letters in confirmation of my discovery." "Oh, and what do you do for it?" "Potassium permanganate into the rectum," came the proud rejoinder.

A vision of purple streams, north, south, east and west, advancing rectally to their beneficent work, caused a momentary failure of critical judgment. After the vision had become a little dimmed: "What evidence have you?" "Well"—proudly and dogmatically —"I have had three patients, all of whom have been cured." "Oh, and what were their blood-sugars?" A pause, largely filled with scorn at the superfluity of such a question, was completed by a fear, quickly suppressed, that the criticism might be legitimate, and was followed proudly by—"Well, anyway, two of them saw the best man in London, and he said that they had diabetes". Many are the other complaints for which similar colonic blessings have been promulgated. The results are harmless, for of course the superabundance of reducing substances in the colon causes an immediate and complete local fixation of the permanganate.

This ancient orificial proselyte was a qualified medical man—and no doubt a commercial success. He believed in his nostrum, and resented and feared logical criticism. Another such, but possibly more malignant, is the gentleman who "disperses" gall-stones. This rather messy and profuse word is generally employed; its vagueness is readily accepted by the general public. There is, too, a suggestion of scattered battalions fleeing before a cavalry charge, which is flattering both to the doctor and to the patient's gut. The trick is to insist on the ingestion of enormous quantities of olive oil. After a period a dose of castor oil is administered and the "stones" collected and shown to the patient. The latter naturally prefers sight to touch, which is as well, for the stones are composed of soaps, tinted with bile and looking very like real gall-stones. For the sake of a fine climax to the treatment, this is frequently terminated by an enema. Instructions might be as follows: The patient should be placed in a nursing home—the importance of the occasion alone will demand this. At the end of the week he is transferred to a theatre; a surgical sister, nurses and an assistant are in attendance; the soap solution is tendered in a plated bowl; the enema nozzle is carefully inserted—it has previously presumably been carefully sterilized, for rubber gloves are worn. The "gall-stones" are meticulously saved and shown, and a fee of at least thirty guineas should be collected before the dramatic effect has cooled. Everyone is pleased—and if the patient's symptoms were not previously due to gall-stones he may never have another attack.

Another artistic manner of removing gall stones is the use of canary-seed—though the identity of the remedy is not disclosed to the patient, there is a fitting suggestion of sympathetic magic about the association between both nostrum and disease and yellowness.

The patient is well starved for several days. Opaque capsules containing canary seed are given. During their intestinal pilgrimage they become aggregated into firm masses, closely simulating gall-stones, whose identity remains obscure until they are cut into.

Proceeding to other orifices we come to the mouth. In the neighbourhood of North London there practises a herbal specialist whose methods combine impressiveness with simplicity. All ills are due, so he says, to poisons which are intimately but widely disseminated throughout the body-tissues. According to their *rendezvous* so will the disease be localized.

If only they could be withdrawn into one place and expelled *en masse!* And this is what the clever fellow does. He concocts a brew of leaves of the Lesser Hag's Beard, Pimple-wort, Striped Dug-bane, Raddlesweet and Pimeny flowers. A quantity of this is swallowed by the patient on a full stomach. These potent herbs course through the veins and arteries, and like terriers dislodge and chase the poisons from their lurking places, shepherding them carefully into the stomach.

After giving sufficient time for this to have been effected, a second brew, this time nauseous, is drained. The result is energetically emetic, and in his little curtained alcove the patient, urged to greater efforts by the vocalities of his fellows, is scoured of his ills. There can be no form of treatment more impressive, and the practitioner numbers among his clients, as is most appropriate, famous musicians.

There practises in a North Country town a trim lady, who cures and prevents colds. Her system is one that needs a lengthy explanation. An appointment is made, a general history of the patient is taken, and a commencement is made with the explanation of the treatment fee three guineas. The patient comes a second time; the explanation is continued in detail—fee three guineas. A third appointment is made, and if the patient can afford it, he or she turns up. The explanation is concluded. Stripped of its many trappings the full treatment has two main essentials: snuff must be taken morning and night, and the patient must learn to blow the nose *à la* navvy.

In addition to her lucrative private practice, she keeps a number of children's schools free from colds. In these chosen institutions pupils may be seen periodically to hold up their hands. At a nod from the mistress they rise, tip-toe to the open window, take the nose delicately between finger and thumb, and, hey presto, the deed is done. People who are in the habit of passing in the street below wonder why they catch so many colds.

It would be possible to linger over the man with electric fingers, who puts cantharides on his horny skin; or to describe the "rack", valued property of its osteopathic owner, and the only one of its size and kind in Britain; or to tell of the magic blue flame that draws poisons from the tissues. But time presses.

Let us finish with the stalking horses.

There exist, on the border-land of the demi-monde, a number of well qualified medical men. Money soothes their consciences, and in any event they keep just within the law. Their source of income is the abortionist, the osteopath, and the quack of large calibre.

Should a curettage go wrong, they are ready to intervene with an ante-mortem legal operation. The osteopath is adequately covered if he has a tame but otherwise reputable surgeon or physician to whom he may send on those patients who have not responded to a reasonably long and expensive course of treatment. This enables him to take on as patients all and sundry without risk. It also ensures a reasonable overflow for his hack confederate of easy virtue. The stalking-horse is thus a valuable adjunct to quackery; and while he feeds from the stall he manures the field.

G. B.

SURGICAL APHORISMS.

1.

HIPPOCRATES, Gee, Horder—these are the names which the word "aphorism" recalls to the mind of any St. Bartholomew's man. The bias of these writers was mainly medical, but was based on a wide outlook, and no attempt to emulate them in the more restricted field of surgery is likely to be successful.

2.

An aphorism, if it is not to be merely platitudinous, must spring from individual experience and conviction. Surgical aphorisms must, therefore, be subject to the same limitations as the writer's experience, and will blossom most where his experience and interest is greatest.

3.

An aphorism is not merely a condensation of known facts. It must have something of originality, but depends for its virtue on manner as well as matter. Messrs. Wheeler and Jack were not writers of aphorisms.

4.

Surgery has often been proclaimed as an art, but it has in it nothing of creation, nothing of imagination, and it should be reckoned as one of the noblest of the crafts.

5.

Surgery demands qualities of mind which are not to be found in men of real artistic genius. Swift decisions, a certain ruthlessness, an assumption of responsibility for the persons and lives of other people—these have repelled the artist, whose means of self-expression require isolation and absence of responsibility.

6.

Surgery as a craft demands the practical hand and mind for its accomplishment. Seeing, touching, doing, are the three essentials for the education of the surgeon at every stage of his career.

7.

The craft of surgery may be developed up to the highest level of skill of which the human hands are capable, and therefore can satisfy to the utmost the skill-hunger felt by so many human beings.

8.

It is possible to make a fetish of surgical technique at the expense of judgment—a factor of enormous importance in determining the patient's safety. Yet every surgeon, without exaggerating its ultimate value, should never cease to strive after improvement of his technique. It will never be perfect.

9.

Dexterity and gentleness are two of the essentials in good surgical technique, and these may be acquired by hands that have the natural aptitude in a comparatively short time. But technique without judgment is naught, and judgment can only be acquired slowly and with infinite pains.

10.

Speed in a surgical operation depends, not on quick movements, but on the absence of unnecessary movements.

11.

A surgeon's movements should seldom be quick and never be jerky. He should never take his assistant by surprise.

12.

No suffering after an operation should ever be taken as a matter of course. If constant thought be taken how to minimize suffering, surgical technique will be steadily improved.

(To be continued.)

GEOFFREY KEYNES.

REMARKS ON SIMPLE GOITRE AND GRAVES' DISEASE.

THE PATHOLOGY OF SIMPLE GOITRE.

THE confusion which has existed, and in some circles still exists, in connection with the relation of the structural alterations of the thyroid gland to disease is due to a failure to appreciate the physiological responses and the labile nature of the gland-tissue. To meet the changing needs of the body for the iodine-containing hormone of the thyroid, there are rapid variations in the activity of the gland. Within a short period the histological picture may change from the resting phase, in which the vesicles are lined by cubical cells and contain abundant colloid, to one of activity—that is, hyperplasia, in which the gland is hyperæmic, the epithelial cells are columnar and the vesicles contain little or no colloid. Within a similarly short period, when the requirements of the organism for the thyroid hormone have decreased, the gland will return to the resting phase.

Marine (1) has shown that increased thyroid activity is associated with a decrease in the iodine store of the gland, provided the intake of iodine at such times is not correspondingly increased. The morphologically normal thyroid contains on an average about 0·2% of iodine (measured in terms of dried gland). When the iodine requirements of the organism for the iodine-containing hormone increase, the iodine store of the thyroid diminishes. If the iodine store falls below 0·1% of dried gland, the gland will become hyperplastic. As the iodine store progressively decreases the degree of hyperplasia increases, so that in the most marked hyperplasia, iodine is usually absent or present only in traces. Thus the iodine store varies inversely with the degree of hyperplasia.

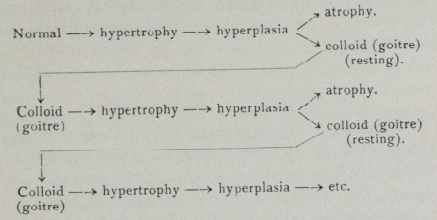
A gland which thus becomes hyperplastic is enlarged for three reasons: (1) The increased blood-supply, (2) the increased number of cells in each vesicle, so that in many cases there may be infoldings of the epithelium into the lumen, and (3) the formation of fresh vesicles by budding from already existing ones; this third cause is not accepted by some observers. The immediate stimulus for the occurrence of hyperplasia is always a decrease in the iodine content below the normal minimum of 0·1% of dried gland. This is true both for simple goitre and for the thyroid of Graves' disease. The hyperplasia is the same, no matter what the stimulus which brings about this preliminary depletion of the gland's iodine content, so that without taking into account the clinical findings, it is impossible to say from the section whether it is from a case of simple goitre or of Graves' disease.

If the stimulus persists, the hyperplastic gland eventually becomes exhausted and atrophy results, giving rise to myxœdema. This is also true both for simple goitre and for Graves' disease. It has been said that the occurrence of thyroid hyperplasia is the first step towards myxœdema. If, however, the stimulus is removed, or if iodine is given, the thyroid will involute; the iodine store will increase, the blood-supply will be diminished, colloid will be retained in the vesicles and the epithelium become flattened. Because of the previous increase in the number of cells in each vesicle, the vesicles will be larger than those of the normal gland, and because of the considerably increased volume of gland-tissue to supply the body's needs, there will be passive distension of the vesicles with colloid. In this manner a colloid goitre is produced. Such a gland has an iodine store of 0·1%, or more, of dried gland, and is the nearest approach to normal that a gland which has

previously been hyperplastic can attain. The development of a colloid goitre from a normal gland by passive distension of the vesicles with colloid without previous hyperplasia is impossible. Virchow pointed out, in 1863, that the primary phase of all true goitres is active hyperplasia.

The process of involution may be arrested at any stage, and active hperplasia begin again, but not, however, until the iodine store has fallen below the normal minimal level. When hyperplasia occurs in a colloid gland in this way, the vesicles may still contain abundant colloid material, which, however, is poor in iodine (Marine, 1). Through alternating hyperplasia and involution large colloid goitres are formed. Further enlargement is also frequently produced by hæmorrhages into the gland. It is well known that appearances similar to those of a simple colloid goitre may be produced in the thyroid of Graves' disease by the administration of iodine. Thus, again, the histological appearances fail to tell one whether the section is one from a simple goitre or from Graves' disease.

Marine (2) has particularly emphasized the cycle of essential cell changes in the production of goitre, and has reduced it to the following scheme:



In the formation of nodular goitre (the so-called thyroid adenomata) the stimulus for growth is the same as that for diffuse goitre. There is no fundamental difference between a diffuse goitre and a nodular goitre, since all nodular goitres were in the beginning diffuse goitres. Nodules do not occur in glands which are not, or have not been, the seat of a universal hyperplasia (Virchow). Fully differentiated nodules, which may be of the hyperplastic or of the colloid type, usually arise through the two processes of repeated hyperplasia and involution occurring throughout the whole gland (Marine (3), Rienhoff (4)). These two processes, by eventually bringing about increase of stroma on the one hand and endarteritis on the other, lead to differences in blood-supply, whereby colloid retention cysts are formed. Between the cysts there may be islands to which the blood-supply is unimpaired, and which therefore may be hyperplastic. By continued growth these hyperplastic areas enlarge and assume a false capsule by pressure on the adjacent thyroid tissue. The enlargement of these areas is not necessarily due to any biological abnormality of the cells, but because a large amount of gland-tissue in the shape of colloid retention cysts is, as it were, out of action.

The less differentiated nodules (the so-called trabecular, tubular and microfollicular adenomata) arise by budding from a vesicle as a result of the general stimulation (Hitzig (5), Michaud (6)), but the epithelium has not the power to form normal vesicles in the usual manner. In this case there must be some biological abnormality of the cells; it is probably an exhaustion phenomenon following the prolonged stimulation. Occasionally fully differentiated hyperplastic nodules may arise in the same way, and by their enlargement acquire a false capsule by compression of the surrounding thyroid tissue. I have seen several sections showing gradations of the early stages of this budding. It is thought by some that the nodules may arise from interacinar fœtal thyroid rests, but in my opinion this is very doubtful. These nodules are not true tumours in the pathological sense, but occasionally they may approach being true tumours in that they sometimes continue to grow after growth of the rest of the thyroid has ceased.

The longer the individual has had a goitre, the more likely is the goitre to be colloid than one of simple hyperplasia. Similarly, the more long-standing the goitre, the more likely is it to be nodular. A congenital goitre is almost always hyperplastic, because it has not had the chance to involute. The occurrence of a pyramidal lobe in an individual indicates that the mother had some iodine deficiency, though some authorities dispute this. Nodules are very rarely found in the thyroid of an individual under the age of 10 years, because they have not had time to form. For this reason the existence of "congenital adenomata" is extremely doubtful. Prof. Wegelin, at the Berne Institute, in his great experience has never seen one.

THE ÆTIOLOGY OF SIMPLE GOITRE.

The fundamental cause of simple goitre is unknown. It is considered that simple goitre is a secondary compensatory hypertrophy brought about by a variety of stimuli which lead to functional activity of the thyroid and so deplete its iodine store. Thus the immediate cause is an iodine deficiency, which is amply proved by the fact that iodine will prevent its occurrence, no matter what the goitrogenic agent. (Iodine will not prevent the condition which has been termed by Williamson and Pearse lymphadenoid goitre, because this is a

chronic inflammation, a thyroiditis, which bears no relation to iodine metabolism.) Iodine deficiency may be either (*a*) an absolute deficiency, that is, a deficient amount in the food and water ingested, or (*b*) a relative deficiency, that is, the tissues for some reason require more iodine in the shape of thyroid hormone than the thyroid can normally supply without enlarging. Factors which may produce a relative iodine deficiency are infections, where the thyroid plays a part in bringing about an increased metabolism, puberty, pregnancy, lactation and the menopause. The large number of agents which will produce goitre experimentally in animals, such as cabbage, methyl cyanide, diets rich in fat and diets deficient in vitamins, do so by bringing about a relative iodine deficiency.

The question has occasionally been asked, if an absolute iodine deficiency causes a hyperplastic goitre, why should so many of the inhabitants of Switzerland, where the food and water is deficient in iodine, have colloid goitres, *i. e.* hyperplastic glands which have involuted? The answer is that an absolute iodine deficiency is not the only factor which accounts for endemic goitre in Switzerland. During the periods of growth, puberty and pregnancy the iodine requirements of an individual are greater than at other periods of life. It is well known amongst experimenters that goitre can be produced much more easily in a young growing animal than in an adult. Not all Swiss natives have visible goitres, although most of them are probably taking similar food. Hence the deficiency of iodine in the diet is not severe enough to give rise to any marked thyroid enlargement by itself. During those periods, however, when the organism's iodine requirements are increased, then the amount of ingested iodine is far from adequate, and there results in a large percentage of the population a hyperplastic goitre, which involutes to the colloid stage when the individual's iodine requirements are later diminished. In regions where there is no endemic goitre, the amount of ingested iodine is sufficient in most cases to tide the gland over these periods of increased iodine requirement. Thus, an absolute iodine deficiency does not explain the whole story in these endemic zones; some other endogenous factor, producing a relative iodine deficiency, is essential. This view is also held by Wegelin and the Swiss workers.

The Pathology of Graves' Disease.

In Graves' disease the thyroid gland undergoes the same cycle of changes as in simple goitre. It is thought by some observers that a hyperplastic gland signifies Graves' disease, but, as has been shown above, this appearance also occurs in simple goitre. In the same way it is thought that the occurrence of hyperplastic areas in a colloid gland signifies toxicity, but this appearance, too, occurs in simple goitre. However, as a general rule, it may be said that a hyperplastic gland in a child is more likely to be a simple goitre, whereas a hyperplastic gland in an adult is more likely to be one of Graves' disease. The fallacies, however, of such a generalization are obvious.

A prominent and fairly frequent finding in Graves' disease is a varying degree of lymphoid hyperplasia, which is seen most often in enlargement of the tonsils and pharyngeal lymphoid tissue, enlargement of the thymus and of the Malpighian bodies in the spleen, localized accumulations of lymphocytes in the thyroid and an absolute lymphocytosis. The occurrence of localized accumulations of lymphocytes in the thyroid weighs heavily in favour of a diagnosis of Graves' disease, but this, too, is not specific for the syndrome, as they may also occur in Addison's disease, *status lymphaticus* and occasionally in simple goitre. The removal of infected tonsils is an important measure in the treatment of Graves' disease, but in view of tonsillar enlargement being often merely a manifestation of the lymphoid hyperplasia associated with the condition, and not necessarily due to chronic infection, the wholesale removal of enlarged tonsils is to be deprecated.

The Ætiology of Graves' Disease.

In contrast to simple goitre, almost nothing is known of the ætiology of Graves' disease. The hypotheses which have been advanced to explain the condition are legion. One which has received considerable attention is that originally enunciated by Moebius in 1896 and recently revived by Plummer (7). In order to explain the nervous manifestations and the asthenia, which occur in Graves' disease, but not in pure hyperthyroidism produced by the thyroid hormone, the hypothesis postulates a dysthyroidism in this condition—that is, the production by the thyroid of an abnormal secretion deficient in iodine which is responsible for the various symptoms. The beneficial effect of iodine in treatment is supposed to be due to its converting this "incomplete thyroxine" into the normal product. The theory is purely speculative and without any foundation in fact. "The direct study of derivatives of thyroxine, particularly of those deficient in iodine, has afforded no justification for the assumption on which it is based, and the correctness of this assumption is, in any case, denied by the limited period during which iodine therapy exercises its good effect" (Harrington (8))

A more rational view, and one favoured by many observers, is that Graves' disease is not primarily a thyroid disease, but that the thyroid produces an increased amount of thyroid hormone secondarily to some powerful stimulation. Whether this stimulation is through the sympathetic nervous system, or due to an over-production of the thyrotropic hormone of the anterior pituitary, or due to a deficient secretion of the suprarenal cortex, which Marine (9) has suggested may control the thyroid, is unknown. Underlying the condition there is a constitutional defect, which may be congenital or acquired, associated with deranged function of the visceral nervous system.

The beneficial effect of iodine in cases with marked hyperplasia has been attributed by some to the rapid involution which its administration brings about, wherein the vesicles become distended with colloid and cause a pressure retention, which temporarily blocks excretion until the thyroid cells have accommodated themselves to the increased tension (Marine (10), Rienhoff (4)); but this question is not yet settled. The frequent failure of iodine to cause any marked improvement in cases of Graves' disease associated with nodules in the thyroid has been clearly shown by Marine (11) to be due to the fact that these nodules often do not react to iodine in the usual manner, although they are functioning thyroid tissue.

When Graves' disease occurs in individuals who already have a simple diffuse goitre or a simple nodular goitre, it is spoken of as secondary Graves' disease. The ætiology is the same as that of primary Graves' disease. The terms "toxic adenoma" and "adenomatous goitre with hyperthyroidism" used to be applied, and still occasionally are, to those cases in which there are toxic symptoms associated with one or more nodules in the thyroid. As in these conditions the cardiac manifestations outweigh the nervous, they are considered to be separate entities from Graves' disease. There is no justification for this distinction. Nodular goitre, as shown above, is commoner in older individuals. These are more likely to have previous damage to their heart muscle, which is, consequently, unable to stand up to even slightly increased amounts of thyroid hormone. The belief that in the so-called "toxic adenoma" the nodule alone, and not the thyroid gland as a whole, gives rise to the toxic symptoms is untenable, as it is inconceivable that only one portion of a gland should respond to a generalized stimulation. The benefit which the patient derives from enucleation of the nodule is ascribable to removal of functioning thyroid tissue, and it is highly probable that the same benefit would accrue were the nodule left intact and a portion of the surrounding thyroid tissue removed instead. As, however, the removal of the nodule is also by way of being a cosmetic measure, we shall have to await conclusive proof until a *rara avis* is found who is willing to sacrifice her appearance for the cause of medical science.

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A. W. SPENCE.

THE WOODPECKER.

I SHALL never forget that perfect June morning. After breakfast, while strolling round the garden, I found a whitethroat's nest in a gooseberry bush, and in its frail cup of grass stems lay one mottled egg.

While admiring this I was called to the telephone.

A man's voice, the respectful modulated voice of a butler, requested me to call that morning on Mrs.—— at the Big House. This was a piece of good news, for funds were low, and all visitors to the Big House were charged, and paid, a guinea fee.

The whitethroat had brought me good luck.

These summer migrants—human summer migrants—were a useful, if unreliable, source of income to me. They supplied the jam to go with the local bread.

Most of the visitors came from London or other large cities, and rented houses or cottages for the summer months.

They would arrive in perfect health and spirits, but—fortunately for me—this state of things did not always last for long. Sooner or later many of them had to come to me, or I had to go to them.

The moment they arrived in the country they did

extraordinary things which undermined their health. Middle-aged and even elderly fathers of families, accustomed to regular lives, regular hours for meals and office seemed, when on holiday, to loose all sense of prudence. I have known one of these to arise at dawn on his first morning at Bewley, and to go forth barefooted into the dew-drenched meadows in search of mushrooms.

From his bed this individual confided to me that he did not think the air of Bewley suited him; it was too damp and relaxing.

Then the horseflies, mosquitoes and midges were stout allies of us forest doctors. We, the residents, seemed to possess an immunity against their poison, while the visitors, the tasty foreigners, fell easy victims.

Their faces swelled, they ran high temperatures, felt thoroughly miserable, but at last gained blessed relief through my cooling draughts and soothing lotions.

But to return to the butler's telephone message. The Big House belonged to Lord Bewley, and stood high up in a wood, surrounded by oaks, pines and silver birches.

Each year, as soon as the swallows and the rich Americans reached our shores—I am speaking of those piping days of plenty before the war, when there were rich Americans to be spoiled by impoverished English noblemen—his lordship would rent his house in the woods and move with his family into a small house he had built on the sea-shore.

But this summer the Americans were forestalled or outbid by a wealthy whisky magnate, and it was his wife whom I set off to visit on that never-to-be-forgotten June morning.

One puts on one's best suit of clothes for a guinea patient, and wearing mine, I duly arrived at the Big House and was ushered into the best bedroom. One glance at the washing-stand prepared me for what was in store, for there, row upon row, stood medicine bottles, jars, pill-boxes, and all the other paraphernalia so dear to the hypochondriac.

And such the lady sitting up in the bed proved to be. She lost no time telling me her sorry tale. How Dr So-and-So had said this, while Dr. Someone-else had told her the exact opposite. Of course, she did not have much faith in doctors, and perhaps who knows—she was justified. A typical *malade imaginaire* with nothing to do, great wealth, her whole interests had become centred on herself and her health. She wondered if I had much experience in such cases as hers, for she had her doubts, owing to my youthful appearance. To reassure her, I protested I was much older than I looked, and endeavoured to hint that I had been successful in several somewhat similar, though not quite identical to hers.

And the dreary recitation of symptoms began, and continued, on and on, while I stood beside her bed longing for her to cease, so that I should be free to go out into the open air and the sunshine, and drive slowly back through the woods.

Then suddenly, through the open window, I heard quite distinctly and quite nearby the drumming mating call of a Greater Spotted Woodpecker. Leaning out through the window I looked towards a great oak tree which stood almost directly opposite. At first I could not see the bird, but all at once the sonorous drumming began again, and there, sure enough, was the gallant little bird, his scarlet-capped head vibrating against a hollow bough. What a glorious sight and sound! I had seen and heard the same before, but only from the ground and a long way off, but here it was happening only a few yards away, at the same level as myself. Again and again did that woodpecker drum. I could have spent an hour as audience to such a concert.

Then all at once the spell was broken. A moment before, the world had contained nothing but that woodpecker and me. Now our intimacy was being spoiled by an intruder—an outsider.

I could not see the intruder from where I stood, half out of the bedroom window, but I knew she was behind and watching me.

I tried to be calm and collect my thoughts. Whatever was I to do? What could I say to her to excuse such an unprofessional lapse?

I even attempted to reconstruct the scene of my progress from her bedside to the open window. I remembered the first note of the bird, and simultaneously, it seemed to me, I was leaning out of the window. All memory of those intervening seconds was lost.

Some instinct told me she was no lover of birds. Useless, then, to throw myself on her kind mercy and plead my weakness, and excuse my offence by confessing to her how the spotted woodpecker was my sweetheart of all our English birds.

She would never understand and never forgive. The position I had got myself into was not an easy one to get out of with dignity or self-respect. All the same, I could not go on for ever hanging out of her bedroom window; she and the situation had to be faced, so turning away from the woodpecker, the oak tree and the sunshine, I confronted my patient and—received my dismissal.

I had no excuse to offer. It was an ignominious retreat, and though I try to forget what she said, her words still smart.

My friend and rival, Dr. Bairn, of Hythe, was called in in my place. He was not likely to commit such a lapse as I had, and in any case, he did not know the call of a spotted woodpecker from the noise made by a threshing machine, nor the difference between a woodlark and a tree pipit. But he was a sound practitioner and a level-headed doctor, not the sort to interrupt the flow of symptoms from a guinea patient.

I do not want it to be thought for one moment that I have, or ever had any feeling of grievance towards Mrs.—— for her treatment of me. On the contrary, I consider she acted well within her rights, for, after all, a patient is entitled to a decent hearing, from a country doctor, for a guinea.

All the same, my dismissal inflicted a sore wound to my self-esteem, which was not mollified by seeing Dr. Bairn pass my house each morning on his way to listen, not to a woodpecker's mating call, but to my late patient's song of woe; for which he was being paid, each session, just one golden guinea, which might have been mine.

But all this happened long ago, and time does heal mental sores. After all, if I had earned fifty guineas, they would have been spent years gone by, leaving nothing to show now, while instead I have the vivid memory of that woodpecker, drumming, drumming, with the green oak leaves and the blue sky of a June day for a background—a picture which I will never forget, and one which all the gold in New York could never buy.

PHILIP GOSSE.

STUDENTS' UNION.

CRICKET CLUB.

1ST XI.

ST. BARTHOLOMEW'S HOSPITAL *v.* M.C.C.

Played at Winchmore Hill on Thursday, May 25th.

The wicket was perfect, but batting first, we could only muster a total of 68 runs. Of these, Dolly and Morison collected over half between them. There was no excuse for such a lamentably poor batsmanship.

The M.C.C. opening pair, Fordham and Clover-Brown, compiled 102 for the first wicket; the former was in great form—in his previous match against Oxford University he had made two centuries. Their eventual total was one of 273 runs. Dolly was our most successful bowler with 4 for 53.

ST. BARTHOLOMEW'S HOSPITAL *v.* ST. JOHN'S COLLEGE.

Played at Cambridge on Saturday, May 27th.

The form shown by our team was a revelation after the previous display against the M.C.C., and showed our true strength in a better aspect.

John's, by careful but somewhat tedious cricket totalled 178 for 5 wickets declared in 2¾ hours. We were left with 2¼ hours in which to make the runs. The response was magnificent: Wheeler (43) and Morrison (78) put on 100 runs for the second wicket partnership in 70 minutes, Wedd (47 not out) replaced Wheeler, and the run-getting continued at 2 per minute until victory came by 7 wickets with 20 minutes to spare.

Assuredly such a display is compatible with the interests of brighter cricket, and our men are to be congratulated.

The game arranged for Saturday, June 3rd, *v.* St. George's Hospital was scratched by them.

ST. BARTHOLOMEW'S HOSPITAL *v.* CROYDON.

Played on Monday, June 5th. Away.

The team was under strength for this game and we were defeated by 9 wickets. Boney (48) and Wedd (32) alone reached double figures in a total of 114.

ST. BARTHOLOMEW'S HOSPITAL *v.* PAST XII.

Played at Winchmore Hill on Saturday, June 10th.

On this, a glorious day, we must congratulate the Past, captained by Dr. Bourne, on their first victory over the Hospital since, I think, 1908.

The day was kind and the wicket appeared magnificent. The Past, batting first, made a promising start, he first wicket falling at 41. After that, each man scored consistently until a total of 177 for 10 wickets was reached. The finish was superb, in that Hunt and Parrish put on 100 runs for the last wicket. The total was the commendable one of 277 runs—on that wicket, however, not an impossible task to pass. Cochrane, whose bowling possessed more than average venom, took 4 wickets for 9 runs, his best performance to date.

Our start was disastrous, for 3 wickets were down for 20 runs. Improvement ensued until we had reached 101 for 5 wickets, but another relapse resulted in the eighth wicket falling at 128. Then Mundy and Anderson provided contrast in individual styles when they realized 60 runs for the ninth wicket; of these the latter, in a happy bout of hitting, made 52, including 3 sixes. We had but 11 men, but Gabb's decision to bat again did not increase the Bart.'s total, and we ultimately made 191 all out.

The Past thus won by 86 runs. The scores are appended.

PAST.		PRESENT.	
Sinclair, b Gabb	30	A. R. Boney, b Maley	24
Gilbert, b Wade	13	F. E. Wheeler, b Hay-Shunker	0
Capper, c and b Morison	35	C. R. Morison, lbw, b Hay-Shunker	32
Oldershaw, c Wheeler, b Wade	19	J. C. Cochrane, b Hay-Shunker	0
Wedd, lbw, b Wade	28	G. V. H. Wade, c Wedd, b Parrish	18
Hay-Shunker, b Wade	2	W. H. Gabb, run out	23
Maley, c Dolly, b Cochrane	13	R. C. Dolly, c Hay-Shunker, b Maley	10
Bourne, c Anderson, b Cochrane	8	J. D. Wilson, b Parrish	9
Parrish, b Cochrane	34	J. D. Anderson, c Spencer, b Wedd	32
Spencer, c Dolly, b Cochrane	0	R. Mundy, c Spencer, b Wedd	7
Theobald, run out	1	W. T. Ross, not out	0
Hunt, not out	49	W. H. Gabb, b Maley	0
Extras	45	Extras	16
Total	277	Total	191

Bowling: Mundy, 0 for 55; Dolly, 0 for 30; Gabb, 1 for 53; Wade, 4 for 43; Morison, 0 for 27; Anderson, 0 for 20; Cochrane 4 for 9.

Bowling: Maley, 3 for 31; Hay-Shunker, 3 for 68; Wedd, 2 for 25; Sinclair, 0 for 13; Parrish, 2 for 37.

ST. BARTHOLOMEW'S HOSPITAL *v.* HAMPSTEAD.

Played at Winchmore Hill on Saturday, June 17th. Drawn game.

Winning the toss, Hampstead put us in as the pitch appeared sticky after the early morning rain and the hot sun.

Because of a fifth wicket stand of 141 runs by Wade (48) and Wedd (102) we were able to declare at the tea interval with a score of 243 for 7. Wedd's second century of the season included two magnificent sixes, one, a superlative drive, easily clearing the pavilion.

With 2½ hours to get the runs, Hampstead deprived the game of all interest by pottering around for a total of 115 for 6 at the close.

2ND XI.

The games arranged for both Wednesday, May 24th, and Saturday, May 27th, against Imperial College and the Old Paulines respectively were scratched by our opponents.

ST. BARTHOLOMEW'S HOSPITAL *v.* DOWNING COLLEGE.

Played at Cambridge on Saturday, June 3rd.

Downing opened on the most fiery wicket we had encountered during the season, and were definitely on top when 4 wickets had fallen for 33 runs. However, a timely stand for the fifth wicket was largely responsible for a total of 148. Wedd (5 wickets) and Dransfield (4 wickets) shared the bowling honours.

Naturally we anticipated an easy victory, but sensations were rife and 4 wickets were down for 5 runs. M. I. Mundy and Wedd took the score to 61 for 5 wickets; in all we made 77 runs, of which Wedd made more than half. Our batsmen seemed quite incapable of coping with good, fast bowling—a very lamentable confession.

ST. BARTHOLOMEW'S HOSPITAL *v.* HORLICK'S.

Played at Slough on Wednesday, June 7th.

After lunching regally and touring the factory our team might have been excused had play resolved itself into a comatose event; instead, a very exciting game resulted, in which we proved victorious by a matter of 18 runs.

We batted first, but Lund—a Buckinghamshire player—proved a deadly obstacle to our right-handed batsmen, his deliveries having a very late inswing which no one seemed able to combat; he took 6 for 42. We did well to make 135, the credit for these being due to Wedd, Wade and Ross.

When Horlick's batted, Dolly bowled a perfect length and maintained a magnificent consistency for some 14 overs, to take 7 for 52, 6 clean bowled. To dismiss the opposition for 117 after the first wicket fell at 46 was first class.

ST. BARTHOLOMEW'S HOSPITAL *v.* SOUTHGATE.

Played on Saturday, June 10th. Away.

Our total of 179 was noteworthy because both Maidlow and Burnett made their first 50's of the season. However, Southgate made the runs for 9 wickets. Altogether an even game between old foes.

ST. BARTHOLOMEW'S HOSPITAL *v.* OTTERSHAW COLLEGE.

Played at Chertsey on Wednesday, June 14th.

In the most delightfully sylvan surroundings imaginable, the 2nd XI defeated Ottershaw by an innings.

Though the opposition was hardly formidable, the gaiety of the day's cricket eclipsed all else. We made 218 runs on a rain-softened wicket; hectic enough was the ninth-wicket stand of 50 runs compiled by truly agricultural cricket.

The College totalled 32 and 60-odd runs in their two innings. Finally, enlivened by Morison's clothed entry into the swimming-bath, the teams indulged in aquatic sports.

ST. BARTHOLOMEW'S HOSPITAL *v.* ARTISTS' RIFLES.

Played at Putney on Saturday, June 17th. Lost by 4 wickets.

The rain spoilt this fixture. Our declaration of 86 for 6 wickets gave our opponents a good chance, and with a wet ball we did well to dismiss 6 men for 44 runs. They eventually reached 109 for 6.

LAWN TENNIS CLUB.

The results of the first few matches played this term were inadvertently omitted from the June issue of the JOURNAL.

As is often the case, it was found necessary to cancel the first three matches of the season, chiefly due to the ground being unfit. Great disappointment was caused by our match against Queen's Club having to be scratched, as they had been asked to stage the Davis Cup match against Finland on the same day. On May 6th a team went up to Oxford to play Balliol College, but after playing only one match rain set in for the day and no further play was possible. On May 10th we played Worcester College, Oxford, at Oxford; our team was very weak, and we unfortunately lost by the odd match after quite an exciting finish.

Mention should be made of the trial matches which were held at Winchmore on Saturday, April 29th. These all went off quite satisfactorily, and although no outstanding talent was disclosed, there were many who might well be described as definitely good players. This season there is great competition for inclusion in the team, and as there are so many, all of more or less the same standard, it is exceedingly difficult to know who to include.

So far this season in the 1st VI we have won 5 matches and lost 3, while 6 have been scratched. The 2nd VI have won 3, lost 2, and 4 have been scratched, while one, in which we played only two pairs against the Northampton Engineering College, was drawn. The 3rd VI won the only one they have played out of 4.

On Wednesday, June 7th, we played the second round of the Inter-Hospital Cup (having received a bye in the first round) against London Hospital. The 1st VI managed to win quite easily by 9 matches to 3, but the 2nd VI were unfortunately beaten by the odd match after a very good finish. This was rather disappointing, as we were hoping that the 2nd VI would do better this year.

Our annual match against the Past was played on Saturday, June 10th, and was as usual a great success. Sir Charles Gordon-Watson had collected a VI which was really stronger than last year, but we managed to defeat them by 8 matches to 1. The weather was unfortunately rather dull, and as a result not so many visitors as usual came up to Winchmore. However, in spite of this it was really a most enjoyable afternoon.

The following are the results of all the matches played this season:

1ST VI.

Wednesday, May 10th, *v.* Worcester College, Oxford, at Oxford. Lost, 5—4.

R. C. Witt and J. W. B. Waring beat A. D. Adams and P. H. Wooley, 4—6, 6—4, 6—3; beat P. Henderson and D. N. Osborne, 5—7, 6—4, 6—4; beat A. N. Bryan-Brown, Esq., and R. H. B. Keater, 6—1, 6—2.

A. H. Hunt and J. J. Slave lost to Adams and Wooley, 2—6, 6—4, 5—7; lost to Henderson and Osborne, 3—6, 3—6; beat Bryan-Brown and Keater, 6—2, 4—6, 6—2.

L. R. Taylor and H. M. Dermorair lost to Adams and Wooley, 2—6, 3—6; lost to Henderson and Osborne, 4—6, 5—7; lost to Bryan-Brown and Keater, 2—6, 6—8.

Saturday, May, 20th *v.* R.N.C., Greenwich, at Winchmore. Won, 7—1.

J. H. Hunt and O. A. Savage beat Sub-Lieuts. Murdoch and Grace, 6—2, 6—3; beat Sub-Lieuts. Hawel and Lacon, 6—2, 6—3; drew with Lieut. Turner and Sub-Lieut. Dobbs, 9—11, 6—4.

J. R. Kingdon and J. R. Blackburne beat Turner and Dobbs, 6—4, 6—0, beat Hawel and Lacon, 6—3, 6—4; beat Murdoch and Grace, 6—2, 6—4.

F. J. Beilby and R. C. Witt beat Murdoch and Grace, 4—6, 6—0, 10—8; beat Hawel and Lacon, 6—1, 6—0; lost to Turner and Dobbs, 4—6, 4—6.

Sunday, May 28th, *v.* Lansbury Club, at Teddington. Won 6—3.

J. R. Kingdon and J. R. Blackburne lost to C. F. O. Lister and L. E. Cater, 4—6, 3—6; beat D. R. Brown and G. Loe, 6—3, 6—2; beat S. Horton and G. W. Hole, 6—3, 6—4.

R. C. Witt and J. W. B. Waring lost to Lister and Cater, 3—6, 4—6; beat Brown and Loe, 6—2, 7—5; beat Horton and Hole, 3—6, 6—4, 6—3.

R. Thorne-Thorne and W. K. Frewen lost to Lister and Cater 3—6, 4—6; beat Brown and Loe, 6—3, 6—1; beat Horton and Hole, 6—4, 7—5.

Wednesday, May 31st *v.* King's College Hospital, at Denmark Hill. Lost, 9—0.

Saturday, June 3rd, *v.* Roehampton, at Roehampton. Lost, 4—5

Wednesday, June 7th. Cup-tie, 2nd round, *v.* London Hospital. Won, 9—2.

Singles:

J. R. Kingdon beat J. Metcalf, 6—4, 6—4.
R. C. Witt beat A. K. Monro, 6—3, 6—1.
B. Thorne-Thorne beat A. C. Romsey, 6—0, 7—5.
J. G. Nel beat W. H. Poole, 6—2, 6—3.
J. C. Cochraine beat R. H. Dobbs, 6—3, 6—6, 6—2.
L. Heasman lost to J. R. Bodington, 3—6, 1—6.

Doubles:

J. R. Kingdon and J. G. Nel beat A. C. Romsey and J. Metcalf, 6—1, 7—5; beat W. H. Poole and A. K. Monro, 6—4, 6—1.
R. C. Witt and B. Thorne-Thorne beat Poole and Monro, 6—3, 6—1; beat Dobbs and Bodington, 6—2, 6—1.
J. C. Cochraine and L. Heasman lost to Romsey and Metcalf, 6—2, 2—6, 3—6; lost to Dobbs and Bodington, 3—6, 2—6.

Saturday, June 10th, *v.* The Past, at Winchmore. Won, 8—1.

K. A. Latter and O. A. Savage beat Knight and P. Hancock, 6—4, 6—4; beat W. S. Macklay and C. H. Hinds-Howell, 6—4, 4—6, 9—7; beat Sir Charles Gordon-Watson and B. H. Gibson, 6—1, 6—3.

J. R. Kingdon and J. R. Blackburne beat Knight and Hancock, 6—1, 6—1; beat Macklay and Hinds Howell, 6—3, 6—4; beat Sir Charles Gordon-Watson and Gibson, 6—1, 6—3.

R. C. Witt and L. Heasman beat Knight and Hancock, 6—2, 6—3; lost to Macklay and Hinds-Howell, 6—3, 3—6, 7—5; beat Sir Charles Gordon-Watson and Gibson, 6—3, 9—7.

Sunday, June 11th, *v.* The Bank of England, at Roehampton. Won, 5—4.

I. R. Kingdon and J. R. Blackburne lost to R. H. Berry and J. D. Warne, 3—6, 6—2, 3—6; beat D. J. Macara and C. J. Benavia, 6—4, 4—6, 9—7; beat R. H. Dean and S. A. Bilsham, 6—2, 6—1.

R. C. Witt and B. Thorne-Thorne lost to Berry and Warne, 10—8, 0—6, 1—6; beat Macara and Benavia, 6—3, 1—6, 7—5; lost to Dean and Bilsham, 1—6, 2—6.

W. K. Frewen and A. H. Hunt lost to Berry and Warne, 1—6, 3—6; beat Macara and Benavia, 6—4, 4—6, 7—5; beat Dean and Bilsham, 6—4, 6—2.

2ND VI.

Saturday, May 20th, *v.* R.N.C., Greenwich, at Greenwich. Won, 7—2.

B. Thorne-Thorne and P. J. Hardie beat 1st pair, 6—2, 6—3; beat 2nd pair, 6—3, 6—2; beat 3rd pair, 6—3, 6—4.

J. W. B. Waring and W. K. Frewen beat 1st pair, 6—3, 6—1; beat 2nd pair, 6—2, 6—3; beat 3rd pair, 6—4, 6—2.

J. R. Royston and R. H. Dale lost to 1st pair, 2—6, 3—6; lost to 2nd pair, 3—6, 5—7; beat 3rd pair, 8—6, 7—9, 6—3.

Wednesday, May 24th, *v.* U.C.H. at Winchmore. Won, 9—0.

R. H. Dale and J. Smart beat 1st pair, 6—3, 6—1; beat 2nd pair, 6—3, 6—4; beat 3rd pair, 6—0, 6—1.

A. Innes and J. Blackburn beat 1st pair, 6—2, 1—6, 6—1; beat 2nd pair, 6—3, 7—5; beat 3rd pair, 6—0, 6—1.

N. H. Bloom and J. J. Slave beat 1st pair, 6—3, 6—2; beat 2nd pair, 6—1, 6—2; beat 3rd pair, 6—1, 6—0.

Wednesday, June 7th: Cup-tie, 2nd round, *v.* London Hospital, at Winchmore. Lost 8—7.

Singles:

W. K. Frewen beat Grant, 6—0, 6—0.
J. W. B. Waring beat Walker, 8—6, 7—5.
P. J. Hardie beat Jones, 4—6, 6—4, 6—2.
R. H. Dole lost to Northcroft, 1—6, 3—6.
A. Innes beat Shaw, 2—0, 6—4, 6—3.
G. Blackburn lost to Robins-Browne, 1—6, 13—11, 0—6.

Doubles:

Frewen and Hardie beat Grant and Walker, 4—6, 6—3, 6—4; lost to Jones and Northcroft, 6—2, 2—6, 8—10; lost to Shore and Robins-Browne, 4—6, 5—7.

Waring and Dale lost to Grant and Walker, 6—1, 5—7, 2—6; lost to Jones and Northcroft, 6—2, 7—9, 4—6; beat Shore and Robins-Browne, 6—4, 7—5.

Innes and Blackburn lost to Grant and Walker, 4—6, 4—6; lost to Jones and Northcroft, 7—5, 2—6, 1—6; beat Shore and Robins-Browne, 7—5, 6—2.

Saturday, June 10th, *v.* King's College Hospital, at Denmark Hill. Won, 6—3.

R. H. Dale and W. P. Shemilt lost to 1st pair, 8—6, 5—7, 4—6; lost to 2nd pair, 6—3, 7—9, 0—6; beat 3rd pair, 6—3, 5—7, 6—3.

A. R. Pope and G. Blackburn beat 1st pair, 6—3, 4—6, 6—3; beat 2nd pair, 6—2, 6—3; beat 3rd pair, 6—4, 6—2, 6—2.

L. M. Curtiss and R. L. Benian lost to 1st pair, 4—6, 1—6; beat 2nd pair, 11—9, 6—0; beat 3rd pair, 7—5, 6—4.

Saturday, June 3rd, *v.* Melbury Club, at Kensington. Lost, 2—7.

J. G. Nel and J. G. Berry lost to F. Furnival and J. K. Hamilton, 1—6, 0—6; lost to W. S. Maclay and N. C. W. Green, 2—6, 5—7; lost to E. C. Moxon and C. A. Hinds-Howell, 3—6, 4—6.

R. L. Benian and A. Innes lost to Furnival and Hamilton, 3—6, 1—6; lost to Maclay and Green, 2—6, 4—6; beat Moxon and Hinds-Howell, 6—4, 4—6, 6—2.

J. Bell and C. Fletcher lost to Furnival and Hamilton, 2—6, 0—6; lost to Maclay and Green, 2—6, 5—7; beat Moxon and Hinds-Howell, 6—3, 8—6.

3RD VI.

Saturday, May 6th, *v.* Tankards Club, at Winchmore. Won, 5—4.

R. C. W.

ATHLETIC CLUB.

INTER-HOSPITAL ATHLETIC SPORTS, 1933.

It was as long ago as 1926 that Bart.'s succeeded in winning the Championship Shield at the Inter-Hospital Sports at Stamford Bridge.

For the next seven years Bart.'s had narrowly failed to establish themselves as Athletic Champions, although each time they have been runners-up. In 1931 they missed the Shield by a bare margin of 2 points from St. Thomas's. At last, this year, we have come into our own, for on the perfect afternoon of June 8th, at Motspur Park, our representative team of 18 athletes secured the trophy from St. Thomas's by a clear margin of 14½ points. It is noteworthy that our score of 62 points is larger than that of any winning Hospital team for many years, indicating our all-round strength.

Without becoming lyrical about our success, it is perhaps not immodest to observe that we scored at least one point (*i.e.* we were placed) in every event, except the Tug-o'-War. In this gymkhana event we were quite outclassed by St. Thomas's, who were well-trained experts.

Perhaps it is thought that one should only chant the praises of Reilly, Nel, and Dransfield, the champions who gained us four first places, yet when one considers that we also secured 8 second places and 6 third places, one feels that no praise can be too high for a team in which every man reaped the reward of steady training. It is true that the individual brilliance of C. P. C. Reilly and J. G. Nel contributed materially to our victory, yet it is obvious that no two athletes, however brilliant, could have won the Shield for us alone. It would be superfluous to broadcast the ability of Reilly, for his name is already coupled with those of the finest quarter-milers in the country. It is sufficient to say that he was awarded the "Princess Marie Louise" Cup for the best individual performance in the United Hospital Sports, as well as the "British Medical Association" Cup for the finest all-round athlete. The vastly improved sprinting of Nel has also been of the greatest value to us. He not only reached the final of the 100 yards in the U.A.U. Championships, but quite recently defeated E. L. Page, the Olympic sprinter and ex-A.A.A. champion. Another athlete who has improved his performance tremendously this season is E. E. Harris. By constant practice he has been able to add another 15 ft. to his javelin throw, in fact it was not until the final throw that C. M. Dransfield was just able to beat him by less than 2 ft. for the United Hospitals title. We have been very fortunate in obtaining an extremely promising long-jumper in G. A. Akeroyd, a freshman from Wrekin. At Winchmore Hill he has just failed to reach the 20-ft. mark, and at Motspur Park he cleared a sound 18 ft. 7 in. to secure us a second place in this event.

And now, having lustily "blown our own trumpets", what about our opponents? Our very worthy friends and equally redoubtable rivals, St. Thomas's, won 6 events to our 4; they were, however, unplaced in four events. L. T. Bond, as expected, broke his own record in the Pole Vault and was a serious rival to Reilly for the best performance. A. T. Marrable won the Long Jump with 20 ft. 3 in., and L. R. J. Rinkel just beat Nel in the "Hundred" in $10\frac{3}{10}$ sec. In the Tug-o'-War the well trained "Tommy's" eight were indeed worthy of better opposition, for each time first Bart.'s and then London were pulled along like toy trains.

B. S. Page, of London, the U.A.U. mile champion, won the 3 Miles and the Mile without any difficulty whatever. In the latter event he equalled the 40-year-old record of 4 min. $31\frac{2}{5}$ sec. T. B. L. Bryan, the Cambridge Blue, won the Half-mile in 2 min. 2 sec., but with more serious opposition he might have bettered 2 minutes. C. W. J. Claydon, of K.C.H., did not turn out in this event, as he was competing for the A.A.A. against Cambridge on the following day. It was in the Medley Relay, however, that Claydon's half-miling resulted in our downfall. Our sprinters, in spite of their ability, could never make up for us what Claydon had gained for King's; and in spite of a brilliant "quarter" by Nel in $51\frac{1}{5}$ sec. we were a good 15 yards behind King's at the finish. Thus Bart.'s lost the Relay Cup which we have held ever since Oxford last won the Boat Race.

This account could not be concluded without some mention of the laudable way in which our Captain, W. H. Jopling, has led and encouraged the team. No praise could be too high for his untiring energy shown in training and organization. It is all the more encouraging to find that his fine example as a captain has been followed by all, and as a result the Club has experienced one of the most successful seasons yet recorded.

J. W. P.

RESULTS.

100 Yards: 1, L. R. J. Rinkel (St. Thomas's); 2, J. G. Nel (St. Bartholomew's); 3, J. G. Youngman (St. Bartholomew's); 4, J. E. Read (King's). Time, $10\frac{3}{10}$ sec.

220 Yards: 1, J. G. Nel (St. Bartholomew's); 2, C. P. Reilly (St. Bartholomew's); 3, J. E. Read (King's); 4, W. A. Groom (Guy's). Time, $23\frac{3}{5}$ sec.

440 Yards: 1, C. P. Reilly (St. Bartholomew's); 2, A. T. Marrable (St. Thomas's); 3, W. H. Jopling (St. Bartholomew's); 4, C. W. J. Claydon (King's). Time, 51½ sec.

880 Yards: 1, T. B. L. Bryan (St. Mary's); 2, J. W. Perrott (St. Bartholomew's); 3, D. Fernando (Guy's); 4, T. P. Storey (St. Bartholomew's). Time, 2 min. 2 sec.

1 Mile: 1, B. S. Page (London); 2, T. B. L. Bryan (St. Mary's); 3, J. R. Strong (St. Bartholomew's). Time, 4 min. 31⅘ sec.

3 Miles: 1, B. S. Page (London); 2, T. S. Etheridge (Guy's); 3. K. O. Black (St. Bartholomew's). Time, 15 min. 21 sec.

120 Yards Hurdles: 1, R. S. Richmond (St. Mary's); 2, T. K. Griffin (Guy's); 3, B. Gibson (St. Thomas's); 4, H. W. Rodgers (St. Bartholomew's). Time, 17⅓ sec.

440 Yards Hurdles: 1, C. P. Reilly (St. Bartholomew's); 2, R. T. Norman (St. Thomas's), 3, A. T. Marrable (St. Thomas's); 4, W. H. Jopling (St. Bartholomew's). Time, 57⅗ sec. (U.H.A.C. record).

High Jump: 1, Le Fleming (St. Thomas's); 2, J. Smart (St. Bartholomew's); 3, W. G. Organe (Westminster) and D. Gibson (St. Thomas's). Height, 5 ft. 10 in.

Long Jump: 1, A. T. Marrable (St. Thomas's); 2, G. A. Akeroyd (St. Bartholomew's); 3, W. G. Organe (Westminster); 4, J. G. Youngman (St. Bartholomew's). Distance, 20 ft. 3 in.

Pole Vault: 1, L. T. Bond (St. Thomas's); 2, K. W. Martin (St. Bartholomew's); 3, J. Shields (St. Bartholomew's); 4, C. P. Pearson (St. Thomas's). Height, 11 ft. 9 in. (U.H.A.C. record).

Weight: 1, A. J. Martin (St. Thomas's); 2, G. E. Elliot (St. George's); 3, G. D. Wadd (St. Bartholomew's); 4, L. R. J. Rinkel (St. Thomas's). Distance, 30 ft. 10 in.

Javelin: 1, C. M. Dransfield (St. Bartholomew's); 2, F. E. Harris (St. Bartholomew's); 3, L. T. Bond (St. Thomas's). Distance, 136 ft. 4 in.

Mile Medley Relay: 1. King's; 2. St. Bartholomew's; 3. St Thomas's; 4, Guy's. Time, 3 min. 41 sec.

Tug-o'-War: St. Thomas's beat London in the final by 2 pulls to *nil*.

Total points:

1. St. Bartholomew's	62
2. St. Thomas's	47½
3. London and King's	14
5. St. Mary's	13

CORRESPONDENCE.

HOSPITAL ARMS.

To the Editor, 'St. Bartholomew's Hospital Journal'.

DEAR SIR,—When wandering through Winchester Cathedral last week I came across the lid of an old reliquary chest that reposes in the north choir aisle. The official description told me that the chest was given to the Cathedral Priory by Sir William de Lillebone (1238–1334), and that his arms, "per pale sable and silver, a chevron counter changed, are many times repeated on the lid". Ten times, to be exact. His arms are identical with those of Bart.'s, and it would be interesting to know if the heraldic experts could trace any connection between this ancient family and the Hospital.

It is curious that two families connected with Winchester at some time or other—the Lawsons (see Mr. Horner's letter in the May number of the JOURNAL) and the Lillebone family—should carry exactly the same coat of arms.

Yours truly,
HERBERT J. SEDDON.

Royal National Orthopædic Hospital,
Brockley Hill,
Stanmore, Middlesex;
May 25th, 1933.

To the Editor, 'St. Bartholomew's Hospital Journal'.

DEAR SIR,—Like your correspondent I, too, hope devoutly Bart.'s will not adopt the suggested alteration of the shield and its probable colour scheme of gold, black and white. It would add to the atrocities worn by bright young people at seaside resorts; colours which the unkind would hint are those of the "Old Borstallians"! Let us stick to the simple old restrained shield and our well-known colours.

What *is* the shield of the Wakeryng family, so unlike the present shield? (p. 124, April No.). Dr. Norman Moore wasn't often wrong. I expect he found good reason to suggest our shield was that of Wakeryng. John Wakeryng was a big man, whose forty years of office might well leave his arms for those of Bart.'s. Opposite p. 238, vol. i of Moore's work there is the present shield, 1198–1308. This is prior to the cartulary dated 1423 mentioned in your last number by Rouge Croix, and much clearer. Another point—whence and when came the legend below the shield, "Nosocomio (not nosocomeo, as on the Hospital notepaper) Regalis Santi Bartholomei"?

I wonder if the shield noticed by Mr. Horner at St. Cross Hospital had the tinctures argent and sable with the "ordinary" chevron counterchanged. It is a very rare blazon (or achievement). I can find no similar design in any book of coats of arms.

I venture to suggest the money which someone seems prepared to spend on the alterations should be devoted to the Merchant Taylors' site scheme.

The subject is worth getting straight, but we may as well not earn someone's jibe, "The silly man doesn't know his own silly subject", speaking of a certain herald at a law court. Still, heraldry is a pleasant hobby for an antique.

W. H. MAIDLOW.

Ilminster;
May 16th, 1933.

To the Editor, 'St. Bartholomew's Hospital Journal'.

DEAR SIR,—I had hoped to see in the May issue of the JOURNAL a stiffer and, if I may so express it, less tentative opposition from the heraldic standpoint, to the suggested alteration to the Hospital Arms than has actually been the case. Apparently the association of the name of Rouge Croix with the scheme has acted as a deterrent.

May I, therefore, be the fool who rushes in where angels fear to tread and endeavour to state the case against the design? This, as shown in the coloured plate, can only be regarded as an abominable compromise and an incomplete one at that, for the designers, having taken upon themselves to supply supporters, have not had the courage to carry the matter through to its logical conclusion and concoct a crest also.

In the April number of the JOURNAL, Rouge Croix informs us that the present Arms of the Hospital were in use in the year 1423. He also demonstrates that the Priory and Hospital used entirely different arms in the sixteenth century. These are definite facts which cannot be disputed and, happily, they completely knock the bottom out of the argument advanced in the "Editorial" of the same number, that because the Priory Arms appear on Rahere's tomb and the present Hospital Arms do not, it may be assumed that both institutions had the same arms originally. Perhaps they did, but not those particular arms, as Rouge Croix has also shown, and moreover, it happens to be a fact that the founder's monument in St. Bartholomew's the Great is not coeval with his death in 1145 but is some three hundred odd years later, being of late fifteenth or early sixteenth century date; that is to say, it was constructed *after* the year 1423, thus the absence of the Hospital Arms is easily accounted for, and the heraldry of the tomb is valueless as evidence either way.

Another passage in the same "Editorial" refers to the coloured plate in these words, "the scarlet and gold of the first and fourth quarters contrast admirably with the silver and black of the second and third". Surely, Sir, it can hardly be expected that such a statement (albeit strictly true) is likely to convert the opponents of the suggested design. It may be all very well for those who regard heraldry merely as an attractive means of decoration, but it carries little weight with those of us who take the science and art of heraldry seriously. But, since the decorative aspect has been introduced, let me add that the inclusion of the counterchanged cross (presumably an allusion to the City) is to my mind a particularly unhappy feature, and is the direct cause of the unnecessary confusion complained of by one of your correspondents in the May issue of the JOURNAL.

It must be admitted that corporate bodies (including our modern industrial centres, as shown on cigarette cards) and many institutions quite properly make use of the quartered coat with supporters and crest, but the purist in heraldic matters will remember, not only that the practice of marshalling arms by quartering originated for the perpetuation by the son of an heraldic heiress of the arms of his mother's family, but also that supporters were adopted in the first place as accessories to the achievements of Royalty, Peers, and certain orders of Knighthood only.

The case for the proposed change has certainly not been proved, and unless some really cogent reasons can be advanced by its protagonists, we must oppose resolutely any tampering with our Arms. One would have thought that the mere fact that the use of the Hospital Arms can be traced back five hundred years would have been a sufficient safeguard against any attempt to alter them, however "unsatisfactory and obscure" their origin may have been.

To instance a parallel case, imagine the indignation of those readers of our JOURNAL who may be in a position to prove to the satisfaction of Herald's College that their own family coat has been in continual use for five centuries (they must be numerically few) if suddenly faced by a similar proposition on the grounds of historical expediency.

Yours faithfully,
G. DRU DRURY, F.S.A.

Corfe Castle,
Dorset;
May 20th, 1933.

REVIEWS.

A SYNOPSIS OF SURGERY. By ERNEST W. HEY GROVES, M.S., M.D., B.Sc.(Lond.), F.R.C.S.(Eng.), Emeritus Professor of Surgery, Bristol University. Tenth edition. (Bristol: John Wright & Sons, Ltd., 1933.) Pp. viii + 693. Figs. 164. Plates xiii. Price 17*s*. 6*d*. net.

This member of the "Synopsis" series is famous enough to require little notice. A certain librarian, not, of course, of this Hospital, states that it is the most stolen book in his library!

It is very far from being "a mere crambook", publicly so much despised, so indispensable in private. Designed to epitomize the main facts of the larger surgical text-books, it is invaluable alike to the student in the wards and out-patient departments, already possessing a larger text-book, and to the overworked practitioner too busy to sort out new knowledge from the innumerable articles appearing in journal and magazine.

The treatment of each subject is uniformly methodical. The type is so varied that quick reference and clear memorizing become an easy task. Pressure of space drives the author to place lists in a continuous, rather than the more extravagant column form. Possibly the subdivision of these paragraphs into two or three columns would add greatly to the clarity of the work.

Beyond a complete general revision of the text, with the addition of the results of recent research in diagnosis and treatment, the edition is in form very like the previous one. A chapter has been added on amputations. There is an excellent chapter of twenty-six pages, illustrated with thirteen coloured plates, devoted to surface-markings.

A perfect, comprehensive index completes a book of reference that no student should be without, whatever his prejudices may be about the synoptic type of literature. Coming as it does from the pen of one who learnt his first principles at this Hospital and who has such a wide experience of teaching and examinations, the book would be a calm, comforting friend to have during those bemusing weeks preceding finals, as well as throughout the clinical course.

CLINICAL DISORDERS OF THE HEART BEAT. By Sir THOMAS LEWIS. Seventh edition. (London: Shaw & Sons, 1933.) Pp. xii + 127. Figs. 55. Price 6*s*. 6*d*. net.

Not even the barrier of price can keep this invaluable handbook from the student. It has become famous for its clarity and soundness. Emphasis is laid on the clinical examination, relying on the trained senses of the observer, with no other mechanical methods of investigation than the simple Dudgeon sphygmograph. Sir Thomas takes the seven fundamental forms of cardiac disorder *sinus arrhythmia, heart-block, premature contractions or extrasystoles, simple paroxysmal tachycardia, auricular flutter, auricular fibrillation, and alternation of the heart*, and defines each, with methods of diagnosis and means of treatment.

The text is almost clear enough to remind us of the elementary infants' readers. The work is illustrated by a number of diagrams and sphygmographic tracings. It is a pity that the first figure, one illustrating the anatomy of the heart, should be rather confused, when very little shading would greatly clarify it. There is very little change from the previous edition.

Few students can afford to disregard a book with such reputation written by a physician so expert in cardiology.

NEUROLOGICAL EFFECTS OF SYPHILIS: DIAGNOSIS AND TREATMENT. By B. BUCKLEY SHARP, M.D., M.R.C.P. (Oxford University Press, 1933.) Pp. 92. Figs. 3. Price 7*s*. 6*d*. net.

The work is divided into two main sections—the general aspects and pathology of syphilis, tabes, general paralysis and their pathological anatomy, and secondly, prevention and treatment.

In the section dealing with changes in the cerebro-spinal fluid, note is made of the bad prognosis in cases of congenitally syphilitic children coming late for treatment, and showing persistently positive Wassermann reactions despite active treatment. Stress is made of the diagnostic value of the colloidal gold curve. Another important point is the susceptibility of the nervous system. One authority states that perivascular infiltration of the meninges with lymphocytes may be found four to six weeks after the primary chancre; even after adequate anti-syphilitic measures when the blood Wassermann is negative, it may be strongly positive in the cerebro-spinal fluid. The author is convinced that inefficient early treatment of somatic syphilis is worse than no treatment at all as regards recurrences in the nervous system. There is no infallible test for the cure. In diagnosis the Kahn test is more sensitive than the Wassermann reaction, and is particularly valuable in treated cases; both should be done. It is interesting to read that amongst fourteen conditions which may give a positive Wassermann reaction, general anæsthesia is one. How long it persists is not stated, but this knowledge should make the anæsthetist approach his victim with some care and misgiving.

The diagram (p. 64) illustrating the technique of cisternal puncture is a happy adjunct to the text.

Malaria is an uncertain therapeutic weapon, and no hard and fast rules can be laid down as to its indications.

The bibliography is extensive and the book is most readable. The author has presented his subject in an acceptable form.

VITAMINS AND OTHER DIETARY ESSENTIALS. By W. R. AYKROYD, M.D. (London: Wm. Heinemann, 1933.) Pp. 218. Price 7*s*. 6*d*. net.

The study of food is fundamental to man's well-being. Now that, for the first time in history, the causes of malnutrition are being discovered, the little learning that is so dangerous is thrust on the gullible from every direction by the more acute but scarcely less ignorant producers. There is a real need for clear and wise instruction in the principles of dietetics. Of the host of books that are written on the subject, there are very few indeed that can be recommended to teach the general public in a way that will prove of general benefit.

Dr. Aykroyd has written a book that, besides being very interesting and readable, is quite as comprehensive as its size will permit.

"On the whole", he writes, "the principles of dietetics are easy to understand. As far as we know at present, dietary perfection can be attained by following simple rules such as those set out here. The serious student of modern dietetics does not offer to supply the elixir of life; he cannot manufacture vitamin concentrates which will prevent us from ever feeling tired; he can suggest no marvellously planned "natural" diets which enable us to live to be a hundred. He holds out little hope that science will discover new foods more sustaining and wholesome than those at present known to man. Avoiding all extravagant claims, he lays down rules by which we can make the best use of the ordinary common foods at our disposal, and promises that, if we take his advice, we shall increase our chances of living a healthy, energetic and happy life, and perhaps ward off a little longer the approach of age."

The book has a message, that the world, which in its natural economy is perfect, is occupied by a race whose diet is defective for the great majority.

The preliminary chapters deal with vitamins and the food constituents, with an explanation of their composition, function, and man's daily requirements of each. Historical details, especially of the more picturesque kind, are freely given. An account follows of the separate constituents and the deficiency diseases, the book closing with suggestions for perfect diets and the effects of such diets on the races of mankind.

Though primarily intended for the scientifically minded lay public, the book should find its way on to the bookshelves of many medical men as being a clear and interesting exposition of the principles of dietetics.

ARAFA'S MODERN ASPECTS OF GASTRO-ENTEROLOGY. (London: Baillière, Tindall & Cox. 1933.) Pp. xviii + 374. Figs. 23. Price 27s. 6d. net.

One of the most prominent features about this book is a point which is still the subject of disagreement amongst clinicians, namely, the value of X-rays in gastric disease. The author states in his preface (p. vii), "radiology has made such important advances that in the absence of radiological evidence the diagnosis of peptic ulcer and carcinoma is unjustifiable". This is a sweeping statement. Later, however, on p. 46 he states that "radiology ranks supreme in diagnosing gastric ulcer. Recent improvements in the technique will now show direct evidence of an ulcer, namely, the crater, however early and however small in the large majority of cases", which surely modifies his earlier remark.

Great stress is rightly laid on the importance of taking a good history in cases of gastro-intestinal disease; few workers will doubt this, but at the same time in no branch of medicine is it more difficult to assess the value and accuracy of the patient's history.

The value of auscultation of the stomach is considered to be small, although it is well known that the outline of this viscus may be mapped out with considerable accuracy in cases of pyloric obstruction with gastric distention by a combination of auscultation and percussion.

The general arrangement is good, and the classifications at the beginnings of the chapters and sections are clear and helpful; the diets at the end are a feature for which many students will be grateful.

The book is lavishly illustrated with excellent reproductions of X-ray photographs and coloured plates, and reflects great credit upon the publishers.

SPECIFIC CHANGES IN THE BLOOD SERUM. By S. G. T. BENDIEN.

The author has made a contribution to the cancer problem, especially as regards the diagnosis. It was found that a specific reaction was obtained by mixing various sera with mixtures of acetic acid and sodium vanadate. With conditions such as carcinoma, tuberculosis and pregnancy, peculiarities of flocculation are found with the acetic acid-vanadate mixture and sera of these patients. The author claims that disposition to tuberculosis and carcinoma are associated with certain flocculations. Experiments are being carried out on patients with cancer, and the results will be awaited with interest. The book has been well translated by A. Piney, who has had a difficult task.

RECENT BOOKS AND PAPERS BY ST. BARTHOLOMEW'S MEN.

ABRAHAMS, ADOLPHE, O.B.E., M.D., F.R.C.P. "A Case of Agranulocytosis." *Lancet*, May 20th, 1933.

BIRDSALL, S. E., B.Ch., M.R.C.S. "Sodium Soneryl as a Basal Hypnotic." *British Medical Journal*, May 20th, 1933.

BURROWS, HAROLD, C.B.E., M.B., F.R.C.S. "An Experimental Inquiry into the Association between Gall-stones and Primary Cancer of the Gall-bladder." *British Journal of Surgery*, April, 1933.

CAPPS, F. C. W., F.R.C.S., and DUNHILL, T. P., C.M.G., M.D. "Squamous-celled Carcinoma Occurring in a Pharyngeal Pouch." *British Journal of Surgery*, April, 1933.

COCKAYNE, E. A., D.M., F.R.C.P. *Inherited Abnormalities of the Skin and its Appendages.* (London: Oxford University Press, 1933.)

DAVIES, J. H. TWISTON, M.B. "A Wood's Glass Diagnosis Lamp for Twenty-five Shillings." *British Journal of Dermatology and Syphilis*, May, 1933.

DUNHILL, T. P., C.M.G., M.D., Ch.B. *See* Capps and Dunhill.

FORBES, J. GRAHAM, M.D., F.R.C.P., D.P.H. "Diphtheria Immunization in Infancy." *Practitioner*, May, 1933.

HARRIS, A. G. JEAFFRESON, M.A., M.B., B.Ch.(Camb.). "The Complications of Artificial Pneumothorax: Their Prevention and Treatment." *Tubercle*, March, 1933.

HOGG, J. CECIL, F.R.C.S. *See* Maxwell and Hogg.

HORDER, Lord, K.C.V.O., M.D., F.R.C.P. "Annual Oration on New Treatments for Old," delivered before the Medical Society of London, May 8th, 1933. *British Medical Journal*, May 20th, 1933.

HUDSON, BERNARD, M.D., M.R.C.P. (and HAEBERLIN, F.). "Extrapleural Plombage." *Lancet*, May 27th, 1933.

KINDERSLEY, C. E., F.R.C.S. "New Form of Abdominal Sucker." *Lancet*, May 20th, 1933.

LLOYD, W. ERNEST, M.D., M.R.C.P. (and MACPHERSON, MARGARET, M.D., M.R.C.P.). "A Reinvestigation of Children previously Examined by Tuberculin Tests." *British Medical Journal*, May 13th, 1933.

MCCURRICH, H. J., M.S., F.R.C.S. "Common Infections of the Gall-bladder." *Medical Forum*, vol. i, No. 3 (1933).

MAXWELL, JAMES, M.D., M.R.C.P. "Spontaneous Hypoglycæmia." *Clinical Journal*, June, 1933.

——— and HOGG, J. CECIL, F.R.C.S. "The Incidence of Laryngeal Cancer." *Lancet* May 20th, 1933.

MORLOCK, H. V., *M.C.*, M.D., M.R.C.P. (and PINCHIN, A. J. SCOTT, M.D., F.R.C.P.). "Epituberculosis." *Lancet*, May 27th, 1933.

——— "Primary Intrathoracic New Growth." *British Medical Journal*, May 27th, 1933.

MYERS, BERNARD. "A Case of Low Blood-Pressure Treated with Pituitary Whole Gland by the Mouth." *Proceedings of the Royal Society of Medicine*, May, 1933.

RAVEN, R. W., F.R.C.S. "Diverticula of the Pharynx and Œsophagus." *Lancet*, May 13th, 1933.

ROLLESTON, Sir HUMPHRY, Bart., G.C.V.O., K.C.B., M.D., F.R.C.P. "The Evolution of Endocrine Treatment." *Practitioner*, May, 1933.

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SMITH, A. J. DURDEN, M.B., B.S., M.R.C.S. *See* Ward and Smith.

SPARKS, J. V., D.M.R.E.(Cambs.). "Report of a Case of Pharyngeal Diverticulum containing a Neoplasm in its Walls." *British Journal of Radiology*, April, 1933.

SYKES, W. STANLEY, M.A., M.B., B.Ch., D.P.H. "Anæsthetic Mortality." *British Journal of Anæsthesia*, April, 1933.

WALKER, KENNETH, O.B.E., M.B., F.R.C.S. "Endocrinology of the Male Glands." *Practitioner*, May, 1933.

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WARD, W. ROY, M.B., B.S., M.R.C.S., and SMITH, A. J. DURDEN, M.B., B.S., M.R.C.S. *Recent Advances in Radium.* London: J. & A. Churchill, 1933.

——— and SMITH, A. J. DURDEN, M.B., B.S. *Recent Advances in Radium.* (London: J. & A. Churchill, 1933.)

WILLIAMSON, J. C. F. LLOYD, F.R.C.S. "Internal Hernia through Congenital Aperture in Mesentery: Strangulation." *British Journal of Surgery*, April, 1933.

WILSON, HENRY, M.D., M.R.C.P. "The Treatment of the Voluntary Boarder." *Journal of Mental Science*, January, 1933.

WORTHINGTON, G. V., M.B., B.Ch. "A Practical Survey of Spa Facilities." *Medical Press and Circular*, May 10th, 1933.

TIMES FOR ATTENDANCES IN THE OUT-PATIENTS' AND SPECIAL DEPARTMENTS.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
Medical Out-Patients New cases: 9 a.m. Old cases: male, 10 a.m.; female, 10.30 a.m.	Dr. G. Bourne at 9 a.m.	Prof. Fraser and Dr. Hilton at 9 a.m.	Dr. Geoffrey Evans at 9 a.m.	Dr. F. G. Chandler at 9 a.m.	Prof. Fraser and Dr. Spence at 9 a.m.	Dr. E. R. Cullinan at 9 a.m.
Surgical Out-Patients New cases: 9 a.m. Old cases: 10 a.m.	Prof. Gask and Mr. Paterson Ross at 9 a.m.	Mr. R. M. Vick at 9 a.m. (Mr. J. P. Hosford acting)	Mr. J. B. Hume at 9 a.m.	Prof. Gask and Mr. Paterson Ross at 9 a.m.	Mr. Rupert Corbett at 9 a.m.	Mr. Keynes at 9 a.m.
Diseases of Women	Dr. Shaw (new cases at 9 a.m. only).	Cases referred from House Physicians and House Surgeons at 10 a.m.	Dr. Donaldson at 1 p.m.	Cases referred from House Physicians and House Surgeons at 10 a.m.	—	Dr. Shaw at 9 a.m.
Ante-Natal Clinic	Dr. Shaw at 9 a.m.	—	—	Dr. Donaldson and Dr. Shaw at 12.30 p.m.	—	—
Orthopædic Department	Mr. S. L. Higgs at 1 p.m.	—	—	Mr. R. C. Elmslie at 1 p.m.	—	—
Throat and Nose Department	Mr. Bedford Russell at 1 p.m.	Mr. F. C. W. Capps at 9 a.m.	—	Mr. Bedford Russell at 9 a.m.	Mr. F. C. W. Capps at 1 p.m.	—
Aural Department	Mr. S. R. Scott at 1 p.m.	Mr. T. H. Just at 9 a.m.	—	Mr. S. R. Scott at 9 a.m.	Mr. T. H. Just at 1 p.m.	—
Ophthalmic Department	Mr. Rupert Scott at 1 p.m.	Mr. Foster Moore at 1 p.m.	—	Mr. Rupert Scott at 1 p.m.	Mr. Foster Moore at 1 p.m.	—
Skin Department	—	Dr. Roxburgh at 9 a.m.	Dr. Roxburgh at 9 a.m.	—	Dr. Roxburgh at 9 a.m.	—
Psychological Department	—	—	—	—	Dr. Porter Phillips at 1.30 p.m.	—
*Electrical Department	Dr. Cumberbatch. Males at 1 p.m.	Dr. Cumberbatch. Females at 1 p.m.	—	Dr. Cumberbatch. Males at 1 p.m.	Dr. Cumberbatch. Females at 1 p.m.	—
*X-Ray Department	9.30 a.m. and 1.30 p.m.	9.30 a.m. and 1.30 p.m.	9.30 a.m.	9.30 a.m. and 1.30 p.m.	9.30 a.m. and 1.30 p.m.	9.30 a.m.
*Exercises and Massage Department	9 a.m. and 1.30 p.m.	9 a.m. and 1.30 p.m.	9 a.m. to 1 p.m.	9 a.m. and 1.30 p.m.	9 a.m. and 1.30 p.m.	9 a.m. to 1 p.m.
Diseases of Children	Dr. Harris at 9 a.m.	Dr. Harris at 9 a.m.	Dr. Harris at 9 a.m.	Dr. Harris at 9 a.m.	Dr. Harris at 9 a.m.	Dr. Harris at 9 a.m.
Dental Department	Mr. Fairbank at 9 a.m.	Mr. Coleman at 9 a.m.	Mr. Hankey at 9 a.m.	Mr. Fairbank at 9 a.m.	Mr. Coleman at 9 a.m.	Mr. Hankey at 9 a.m.
Tuberculosis Dispensary	—	12.30 p.m. to 2.30 p.m. †5 to 7 p.m.	—	—	New cases only from 12.30 p.m. 3 to 4 p.m.	—
Venereal Department	Men, 5 to 7 p.m.	Women and children, 4 to 6 p.m.	—	Men, 12 to 2 p.m.	Women and children, 12 to 2 p.m.	—
Plastic Surgery	Sir Harold Gillies at 2 p.m.	—	—	—	—	—
Neurological Clinic	—	—	—	Dr. Hinds-Howell at 1.30 p.m.	—	—

March, 1933 (*revised*).

* Patients are not seen in these Departments unless recommended by the Medical Staff.
† These hours are intended for patients who cannot attend at mid-day.

RECENT ADDITIONS TO LIBRARY.

ABDOMEN.

COPE: *Early Diagnosis of the Acute Abdomen.* Sixth edition.

ANATOMY.

GRAY: *Anatomy, Descriptive and Applied.* Twenty-fifth edition.
McGREGOR: *A Synopsis of Surgical Anatomy.*

BACTERIOLOGY.

JORDAN: *General Bacteriology.* Tenth edition.

BIO CHEMISTRY

CAMERON and GILMOUR: *The Bio-chemistry of Medicine.*

BRAIN AND SPINAL CORD.

CUSHING: *Papers relating to the Pituitary Body, Hypothalamus and Parasympathetic Nervous System.*
Poliomyelitis: A Survey.

CHEST.

STRAUD: *Surgery of the Chest.*

DIAGNOSIS.

HUTCHISON and HUNTER: *Clinical Methods.* Ninth edition, revised.
SICARD and FORESTIER: *The Use of Lipiodol in Diagnosis and Treatment.*

FRACTURES.

OGILVIE: *Treatment of Fractures.*

GENETICS.

HOGBEN: *Genetic Principles in Medicine and Social Science.*

HEART.

BRAMWELL, C.: *Heart Disease.*
LEWIS: *Diseases of the Heart.*

HISTORY OF MEDICINE AND SURGERY.

NEWMAN: *The Rise of Preventive Medicine.*
POWER: *A Short History of Surgery.*

MEDICAL EDUCATION.

Final Report of the Commision on Medical Education, New York.

MEDICINE.

BEAUMONT: *Medicine.*
CECIL: *A Text-book of Medicine.* Second edition.
MAJOR: *Classic Descriptions of Disease.*
Medical Annual, 1933.
NEWMAN: *Medical Emergencies.*

NERVOUS SYSTEM.

SHARP: *Neurological Effects of Syphilis.*

OBSTETRICS AND GYNÆCOLOGY.

BOURNE and WILLIAMS: *Recent Advances in Obstetrics and Gynæcology.* Third edition.

PHARMACOLOGY.

CLARK: *Mode of Action of Drugs on Cells.*

PHYSIOLOGY.

LOVATT EVANS: *Starling's Principles of Human Physiology.* Sixth edition.
WINTON and BAYLISS: *Human Physiology.*

PSYCHIATRY.

CANNON and HAYES: *The Principles and Practice of Psychiatry.*

PSYCHOLOGY.

McDOUGALL: *An Outline of Psychology.* Fifth edition.

RADIUM

WAKD and SMITH: *Recent Advances in Radium.*

RECTUM.

GABRIEL: *The Principles and Practice of Rectal Surgery.*

SURGERY.

BICKHAM: *Operative Surgery.* Vol. VII.
MILES and WILKIE: *Operative Surgery.*

CHANGES OF ADDRESS.

ANDERSON, H. G., Henry Lester Institute of Medical Research, Shanghai, China.
BARNSLEY, Major R. E., R.A.M.C., Officers' Mess, R.A.M.C., The Citadel, Cairo.
BURGESS, W. J., Lauriston House, Chipping Ongar, Essex.
DE CAUX, F. P., 26, Abbey Lodge, Regent's Park, N.W. 8.
MILLER, T. M., 4, Chilston Road, Tunbridge Wells. (Tel. Tunbridge Wells 22.)
OAKLEY, W. G., 114, Harley Street, W. 1. (Tel. Welbeck 2157.)
POLLARD, W. H., 60, Fountain Road, Edgbaston, Birmingham.
WATERS, A. B., 10, Christchurch Road, Winchester.
WATKYN-THOMAS, F. W., 8, Wimpole Street, W. 1.
WINDLE, R. W., 33, Cromwell Road, Hove, Sussex. (Tel. Hove 1263.)
WOLFERSTAN, K., Riverdale, Sunbury-on-Thames, Middlesex.

APPOINTMENT.

NELSON, H. P., M.D., B.Chir.(Cantab.), F.R.C.S., appointed Assistant Surgeon to the Hospital for Consumption and Diseases of the Chest, Brompton, S.W.

BIRTHS.

FORDHAM.—On June 17th, 1933, at The Royal Northern Hospital, to Molly and Michael Fordham—a son.
HALL-SMITH.—On May 26th, 1933, at Logmore, Cheam, Surrey, to Kathleen (*née* Gaston), wife of Dr. Cedric Sharr Hall-Smith—a son (Alexander Michael).
HANCOCK.—On May 30th, 1933, at 7, Portland Place, W. 1, to Blue (*née* Barnes), wife of Dr. P. E. Thompson Hancock—a daughter.
ROBINSON.—On June 5th, 1933, at 11, Parklands, Surbiton, to Freeda, wife of K. D. Robinson, M.B., B.S., of 7, Richmond Road, Kingston—a daughter.
ROLES.—On June 12th, 1933, at 61, Springfield Road, St. John's Wood, N.W. 8, to Joan, wife of Dr. Francis Roles—a son.
THROWER.—On June 11th, 1933, at 8, Belvidere, Weymouth, to Violet Beatrice (Betty), wife of Dr. W. R. Thrower—a daughter.
YOUNG.—On May 29th, 1933, at 20, Devonshire Place, W. 1, to Stella (*née* Robinson), wife of Dr. F. H. Young—a son.

MARRIAGES.

GAISFORD—GAISFORD.—On June 1st, 1933, at St Ives, Cornwall, Wilfrid F. Gaisford, M.D., M.R.C.P., to Mary, eldest daughter of Capt. and Mrs. Gaisford, of St. Ives.
DE LABILLIERE—LAWLEY.—On June 8th, 1933, at St. George's, Hanover Square, W., Surgeon-Lieutenant Claude Denis Delacour de Labilliere, Royal Navy, younger son of the Rev. C. E. D. and Mrs. de Labilliere, of Stinsford Vicarage, Dorchester, to Frances Christine Wright, younger daughter of the late Arthur Ernest Lawley and Mrs. E. W. Lawley, of Ash, Stedham.
PRICE—CLARK.—On June 1st, 1933, at the Memorial Chapel, The University, Glasgow, by the Rev. J. G. Clark, M.A., assisted by the Rev. S. W. Wilson, M.A., Roy Kemball Price, M.D., M.R.C.P., eldest son of Mr. and Mrs. C. R. Price, Beacon Lodge, Crouch End, London, to Mary Campbell Clark, M.B., Ch.B., eldest daughter of Rev. J. G. and Mrs. Clark, 158, Hill Street, Glasgow.
RECORDON—ROBERTSON.—On June 1st, 1933, at the Old Church, Chelsea, by the Rev. P. Ardagh-Walter, Esmond G. Recordon, M.A., M.B., third son of the late David Recordon and Mrs. Recordon, to Frieda, second daughter of the late Henry Robertson and Mrs. Robertson.

DEATHS.

BANATVALA.—On July 2nd, 1932, Sir Hormasjee F. Banatvala, C.S.I.
CODY.—On May 28th, 1933, at a nursing home, after a short illness, Dr. William Ernest Cody, of 190, London Road, Twickenham.
FLETCHER.—On June 7th, 1933, after an operation, Sir Walter Morley Fletcher, K.B.E., C.B., Sc.D., M.D., F.R.S., of 15, Holland Street, Kensington, W. 8, aged 59.
GOW.—On June 19th, 1933, at Porlock, William John Gow, M.D., F.R.C.P., aged 70 years.
HARDY.—On June 14th, 1933, at 6, Cleveland Road, Ealing, W. 13, Lt.-Col. F. W. Hardy, R.A.M.C.(ret.).

NOTICE.

All Communications, Articles, Letters, Notices, or Books for review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, *St. Bartholomew's Hospital, E.C.1.*

The Annual Subscription to the Journal is 7s. 6d., including postage. Subscriptions should be sent to the MANAGER, Mr. G. J. WILLANS, M.B.E., B.A., *at the Hospital.*

All Communications, financial or otherwise, relative to Advertisements ONLY should be addressed to ADVERTISEMENT MANAGER, *The Journal Office, St. Bartholomew's Hospital, E.C. 1. Telephone: National* 4444.

St. Bartholomew's Hospital Journal.

"Æquam memento rebus in arduis
Servare mentem."
—*Horace,* Book ii, Ode iii.

VOL. XL.—No. 11.] AUGUST 1ST, 1933. PRICE NINEPENCE.

CALENDAR.

Tues., Aug. 1.—Lord Horder and Sir C. Gordon-Watson on duty.
Fri., ,, 4.—Dr. Hinds Howell and Mr. Harold Wilson on duty.
Mon., ,, 7.—**Bank Holiday.**
Tues., ,, 8.—Dr. Gow and Mr. Girling Ball on duty.
Fri., ,, 11.—Dr. Graham and Mr. Vick on duty.
Tues., ,, 15.—Prof. Fraser and Prof. Gask on duty.
Fri., ,, 18.—Lord Horder and Sir C. Gordon-Watson on duty.
Sat., ,, 19.—**Last day for receiving matter for the September issue of the Journal.**
Tues., ,, 22.—Dr. Hinds Howell and Mr. Harold Wilson on duty.
Fri., ,, 25.—Dr. Gow and Mr. Girling Ball on duty.
Tues., ,, 29.—Dr. Graham and Mr. Vick on duty.

EDITORIAL.

WE are constantly told by our elders that we should see ourselves as others see us. This is not always as easy as they would have us believe, for who can read the inner thoughts of a Zulu or of an Aboriginal?

Sir D'Arcy Power has kindly pointed out to us Miss M. E. Durham's description of the impressions of a distinguished visitor from the South Seas Isles on witnessing a modern surgical operation. It runs as follows:

"The High Priest dressed in white and having been ritually purified, is attended by male and female acolytes also specially garbed. The High Priest believes that the ghost is hidden in the victim's belly. By means of a grotesque apparatus an acolyte asserts that he can temporarily remove the victim's soul and the victim becomes apparently unconscious. To scare away the ghost both the High Priest and acolytes wear grotesque masks and cover their hands with artificial skin. They paint part of the victim's body brown for a similar reason and drench him with purgatives to drive the ghost from his body. Knives of steel are used which have previously been put under a strict taboo. Only the ritually purified may touch them. While cutting a hole in the unfortunate victim the High Priest frequently becomes greatly excited, sweats freely and objurgates the female acolytes."

We have not been informed which London hospital was attended by this stranger, but we suspect that he must have been amongst the many foreign visitors we have noticed of late in the Surgical Block.

* * *

THE MEDICAL COLLEGE APPEAL.

Owing to the holiday season we have heard no recent news of the present state of the College Appeal, but we would call the attention of our readers to Dr. Eric Young's letter in the correspondence columns. All Bart.'s men will substantiate Dr. Young's words in regard to the magnificent work the Dean is doing in raising the required funds, but we wish that more of them would be like Dr. Young in feeling that they will become "outcast and traitor" if they do not support his scheme.

We feel sure that the generous offer put forward in his letter will prove to be a fresh stimulus for those who have as yet delayed their support, or have thrown

away the many letters of appeal without further consideration.

We understand that certain remarks in our last issue were misconstrued concerning the future of the Medical Curriculum and the new College Scheme. Our readers will realize, we hope, that such remarks were made in support of Dr. Batten's article on medical education, and were not in any sense derogatory to the scheme.

* * *

ROYAL COLLEGE OF SURGEONS COUNCIL ELECTION.

We have to congratulate Sir Holburt Waring on being re-elected President of the Royal College of Surgeons, Prof. Gask as Vice-President, Sir Charles Gordon-Watson and Mr. Elmslie on being elected to the Council.

It is with great pleasure that we find Sir Charles Gordon-Watson's name at the head of the poll with 785 votes; he has written to us as follows:

"I should like, through the medium of your columns, to thank my many Bart.'s friends who supported me with such success at the recent Council Election, and so enabled me to be returned at the head of the poll."

* * *

We have been asked by Sister Surgery to issue an appeal to our readers for any cast-off clothes, garments, shoes, etc., which would be of use to the poorer patients who attend the Surgery. The demand for such articles is great and the present supply scanty.

Will all those who can afford a new suit this summer please send their old one and any other garments, however valuable sentimentally, to Sister Surgery who will be extremely grateful and distribute them appropriately?

* * *

Misfortune has again overtaken Mr. J. E. H. Roberts. We have been informed that while away in Switzerland, recuperating from his recent illness, he was suddenly taken ill with appendicitis and had to be operated upon by a Swiss surgeon. We extend our sympathy to Mr. Roberts for his long run of ill-health and wish him a speedy recovery.

* * *

The Warden requests us to state that the closing date for applicants for House Appointments in November is 12, mid-day Saturday, September 9th, 1933.

"STONE-CUTTERS AND STONE-CRUSHERS."*

THE earliest known specimen of "stone" is that discovered by Prof. Elliott Smith in a grave near Abydos, Egypt, estimated to be about 7000 years old. It was lying in the pelvis of a boy about 15 or 16 years of age.

The operation of "cutting for stone" or "lithotomy" dates from long before the Christian era. It was common in the time of Hippocrates (460 to 370 B.C.), being performed by non-professional itinerant stone cutters, while the orthodox medical profession would have nothing to do with it, partly because it was considered *infra dig.* for a physician to work with his hands, and partly because it was held to be very degrading to interfere with the genital organs, an exception, however, being made in the case of circumcision performed by a priest.

Hippocrates made all his pupils swear by Apollo and all the gods that "neither will I cut them that have stone, but will leave this operation to those that are accustomed to perform it"—part of the Hippocratic oath.

The first description of the operation is that given by Celsus, who practised in Rome during the first century A.D., and it is therefore known as the "Celsian" operation or "apparatus minor", because it required very few instruments for its performance; it was also called "cutting on the gripe", and was doubtless suggested by the occasional ulceration of a stone through the perineum and its spontaneous escape.

Operation.—Patient was seated on the knees of a strong man, who with his arms held the legs apart. The operator introduced two or three fingers of the left hand into the rectum, hooked them over the stone and held it firmly against the perineum. With a dagger-shaped knife a transverse cut was made in front of the anus directly on to the stone, and all the tissues overlying the stone divided. If the stone did not at once escape the fingers were introduced to lift it out, or a blunt hook was passed behind it. Sometimes, if the stone was very large, it was fixed by passing the hook behind it, and then broken up with a fine chisel and extracted in pieces, as was first mentioned by Ammonius of Alexandria, 200 years B.C.

This comparatively simple operation was in vogue until the sixteenth century, *i. e.* for at least 2000 years, but was thought fit only for quacks and mountebanks. In it the bladder was opened behind the prostate—a dangerous region from liability to extravasation of urine into the pelvic cellular tissues.

In the sixteenth century Marianus Sanctus, wishing to avoid this cutting of the bladder-wall, since Hippocrates had taught that wounds of the bladder are very fatal and seldom heal, introduced an operation that came to be known as the "Marian" operation or the "apparatus major", because of the number of instruments used compared to the "apparatus minor". He entered the bladder by forcibly stretching or tearing its neck.

Marian operation.—He used as a guide a staff with median groove. The incision was made to one side of the middle line, not going so far back as the transversus perinei muscle, and so not opening up the ischio-rectal fossa. The groove in the staff was felt for and the urethra opened in its membranous part by cutting on to the groove. Two strong iron probes, called "conductors", were passed into the bladder along the groove of the staff, and the staff was withdrawn. With a conductor in each hand the operator then forcibly separated them, tearing the deep parts, including the prostate. A dilator was then passed between the conductors, and the deep parts further stretched until the forceps could be introduced. The stone was seized and forcibly extracted.

It was a brutal operation, and the neck of the bladder and prostate were so torn that incontinence and fistula were common sequelæ. Moreover, since the transversus perinei was not divided, the stone had to be dragged through the narrow part of the pubic arch.

This "Marian" operation was the prototype of what came to be known later on as "median" lithotomy. It was extensively adopted by many stone-cutters, among whom was the famous family of the Collots, who practised lithotomy in France for eight generations, extending over 200 years. The first of the family was Germain Collot, a surgeon of high repute and in great favour with Louis XI. About 1460 he gained the confidence of some Italian lithotomists, and was allowed to watch and even assist at some of their operations. He then obtained permission of the King to operate upon a condemned criminal who was known to have stone in the bladder, and whose sentence of death was commuted to a sentence of "lithotomy". The operation was completely successful, and the King was so pleased that he granted Collot a pension. (The operation was performed in the churchyard of St. Severins in the presence of the King). One of the best known was Phillipe Collot (1593 to 1656). Their methods were kept strictly secret, and only the last of the family, François, (1630 to 1706), left any record of their work, and this was not published until after his death, in 1727.

The best known of all the itinerant stone-cutters was Jacques Baulot (Baulieu, or de Beaulieu), commonly known as *Frére Jacques.*

He was born at Besançon in Burgundy in 1651 (died there 1719), of poor parents. He served as trooper in a French cavalry regiment from the age of 16 for five years. On release from service he became servant to a strolling Italian stone-cutter and rupture-curer, and travelled with him through France and Italy for seven years. He then started for himself, adopted a semi-religious attitude, dressed like a monk except that he wore a large hat instead of a hood. He did this (1) for convenience in travelling, (2) for economy, since he thus received free entertainment at monasteries, and (3) because he felt that he really had a mission.

In 1688 he started calling himself Frére Jacques. Though a deeply religious man, he does not appear to have taken any steps to become attached to any monastic order. He never asked for any monetary reward for his services, and any money forced upon him he distributed to the poor, except the little required to repair his instruments and to sole his shoes. He always operated before physicians and surgeons, and at the end of the operation all he asked for was a certificate that the operation had been successful (*i. e.* that the stone had been removed). He usually left the city before the final result of the operation was known.

Armed with many of these certificates he arrived in Paris in 1697 at "La Charité" Hospital, and asked to be allowed to show his operation to the medical staff. He was refused at first, but through the influence of a Canon whom he had cured of stone he secured the patronage of the President of the French Parliament—de Harlay—and he was allowed to operate in the Hôtel-Dieu.

They would not trust him with a living patient, but allowed him to operate upon a dead body into whose bladder a stone had been placed. The surgeon-in-chief to the Hôtel-Dieu—Jean Méry—was a skilled anatomist, and he afterwards dissected the parts very carefully. He found that Jacques's incision had passed between the ejaculator urinæ and the erector penis muscles without injuring either of them, and had divided the neck of the bladder cleanly in a lateral direction. He noted that the bruising and tearing of the Marian operation were avoided, and Méry reported favourably upon the operation to the President. This raised such a storm of jealousy that Méry was obliged to recant his favourable report and Jacques was forced to leave Paris. He went to Fontainebleau, where the Court was, and got into favour by cutting a boy so successfully for stone before the Court physicians that he was able to walk about again in three weeks. This so pleased the King that

* The Summer Sessional Address delivered before the Abernethian Society on Thursday, June 15th, 1933.

he ordered that Jacques should be lodged and kept at his expense. Under this Royal patronage he again entered Paris, and after a debate on April 7th, 1698, between the magistrates of the city and the physicians, surgeons and managers of the Hôtel-Dieu, it was decided to allow Jacques to operate for the ensuing session at La Charité and Hôtel-Dieu. He now operated in public, and the audience to see him was very great. In the month of April he cut 60 people for stone, with the result that 25 died, 22 remained in hospital with incontinence, fistula or other serious complication, and only 13 were cured. As this mortality was much greater than that of the other surgeons of Paris, his enemies again managed to drive him from the city.

He then resumed his wanderings in France and Holland, but seems to have kept up a correspondence with Dr. Fagon, the chief physician to Louis XIV, who induced Jacques to return to Versailles and to study anatomy. Together they studied the parts that were cut at the operation, and as a result Jacques improved his method: (1) he used a *grooved* staff to guide the knife more accurately, (2) he used an ordinary scalpel instead of his former dagger-shaped knife, (3) he avoided wounding the bladder behind the prostate.

His new operation proved very successful, and he cut 38 patients in succession at Versailles without a death.

He again resumed his wanderings, but in 1702 he was recalled to Paris to operate upon a great nobleman—the Maréchal de Lorges As befitted his high rank a hospital was fitted up at his house, and before he would consent to operation he had 22 poor people operated upon by Jacques, all of them successfully. Thus encouraged, he submitted himself, but at the operation the cause of the symptoms was found to be, not stone, but malignant growth, and he died in a few days. Although Jacques was generally held to be blameless, yet he took this to heart so seriously that he left Paris again, and never returned.

He wandered about for some years after this, and had great success. In Amsterdam the magistrates presented him with his portrait and a set of sounds made of gold, but these he had melted down and gave the money to the poor of the city. He returned to his native village, and died there in 1719 at the age of 68.

Frére Jacques undoubtedly advanced the operation of lithotomy by—

(1) Incising the neck of the bladder cleanly, instead of tearing it open as in the Marian operation.

(2) Avoiding cutting the bladder behind the prostate—with its danger of extravasation of urine.

Joannes Jacobus Rau (1668 to 1719), one of the most renowned lithotomists on the Continent, was for many years Surgeon to the State Hospital at Amsterdam.

He practised the Marian operation, and when Jacques, after being driven out of Paris, visited Amsterdam in 1699 Rau vigorously denounced him and his operation. After dissecting the bodies of some who died after Jacques's operation, however, he came to see the advantage of Jacques's method of entering the bladder by cutting through the prostate laterally, instead of forcibly stretching and tearing the neck of the bladder as in the Marian operation he was then performing.

He further found that by keeping his left forefinger in the wound while introducing the knife into the deep urethra, he could keep the rectum out of the way and so avoid its being injured. He thereupon commenced to use Jacques's operation with his own slight addition, and met with greatly increased success. Yet he refused to give any credit to Jacques and continued to denounce his operation, deliberately misleading his colleagues into believing that he was performing Celsus' operation, with its dangerous cutting of the bladder behind the prostate.

His favourite assistant, Albinus, published an account of Rau's operation as he supposed that Rau performed it, and surgeons all over Europe, reading his description and knowing of Rau's great success, attempted to follow him, with disastrous results, thereby, by comparison, still further enhancing Rau's reputation. Some of these surgeons, however, among them Morand of Paris and Cheselden of St. Thomas's Hospital, complained to Albinus that his description of Rau's operation must have been inaccurate, and they accused him of misleading the profession. Albinus then had his eyes opened to the fact that he had been himself deliberately deceived by his chief, Rau, whose mean, selfish and grasping character had led him to keep the true nature of his successful operation a secret, and to induce his professional brethren to continue to perform what he knew to be a dangerous operation. He certainly amassed a large fortune, but was responsible, to his lasting shame, for many hundreds of deaths all over Europe.

Rau said in one of his lectures to his pupils, "Since I am obliged to live and gain my sustenance mainly by the employment of this method, I will not describe it to you at all. If I were forced to tell you something about it, that which I would tell you would not be the truth, wherefore I prefer to maintain absolute silence. If you can learn my method by seeing me operate, I have no objection to make, but for the rest read Celsus."

His angry colleagues suggested that the real reason he kept his left forefinger in the wound was to prevent them from seeing what he was cutting.

Rau's conduct was an inglorious exception to the accepted practice in our profession that any increase of knowledge should be at once pooled, and be available for the benefit of humanity at large.

William Cheselden (1688 to 1752) was lithotomist to St. Thomas's Hospital from 1723 to 1727.

Being dissatisfied with the results of Rau's operation as described by Albinus, Cheselden commenced a series of careful dissections of the parts concerned in the operation in an endeavour to avoid the dangerous incision of the bladder-wall behind the prostate. He discovered how to make the deep incision in the neck of the bladder and prostate only, and in a lateral direction so as to avoid the rectum—practically the same as Jacques's second operation.

He thus established the operation of "lateral lithotomy" as the recognized procedure, and as such it remained until displaced by the suprapubic operation and by lithotrity.

Cheselden became extremely expert in performing this operation, and his time of 45 seconds for the operation from start to finish has rarely been approached, and never surpassed. On his retirement from St. Thomas's he had cut 213 patients there for stone with only 10 deaths.

There has been no important improvement in the operation of lateral lithotomy since Cheselden's time.

The last, and in some respects the greatest of the itinerant stone-cutters was *Frére Jean de Saint-Come* (1703 to 1781), usually abbreviated into Frére Come. He was a monk of the order of St. Francis, and was given a special dispensation to practise surgery among the poor—at first general surgery, but later he restricted himself practically to stone-cutting.

He established, in 1753, a hospital for stone in Paris, where some 1000 patients were operated upon by himself or his nephew. He was said to have had 316 cures out of 330 consecutive cases.

The poor were treated free, and were often given a sum of money on leaving.

The hospital was supported by the voluntary contributions of the richer patients.

Frére Come's chief contribution to the technique of the operation of lateral lithotomy was the invention of the "lithotome caché", by which the incision of the neck of the bladder and prostate could be more accurately determined.

At a later date Dupuytren introduced the "bilateral lithotome caché".

After the time of Frére Come the operation of lithotomy was taken up seriously by qualified surgeons, and from being looked upon as a procedure beneath the dignity of the orthodox profession, it came to be regarded as one of the most important of surgical operations. In the first half of the nineteenth century in most of our hospitals the surgeon who had a lithotomy case took precedence over his colleagues on the operation day.

§

Suprapubic lithotomy was first performed by Pierre Franco in 1560. He was operating upon a boy, æt. 2, and failed to extract the stone by the perineal route. Urged by the parents to get the stone away at any risk, he pushed it forcibly upwards against the lower part of the abdominal wall and cut upon it, pressing it out of the wound. The patient recovered after a serious illness lasting three months, and Franco never repeated the procedure.

Suprapubic lithotomy was very slow in making headway because of the fear of wounding the peritoneum. This was especially likely (Swift Joly) under the struggles without effective anæsthesia, when the contraction of the recti and other abdominal muscles would force the peritoneum into the area of incision.

Stone-crushing—lithotrity, *i.e.* the crushing of a stone *within the bladder*.

(Ammonius, in 200 B.C., broke up a stone with chisel before extracting it during a lithotomy.)

Lithotrity must have been performed in prehistoric times, for Celsus, at the beginning of the Christian era, refers to it, and recommends it, but does not describe any method.

In the literature are two classical instances of people who have operated upon themselves for lithotrity:

(1) A monk of Citeaux inserted a hollow tube into his bladder, through which he passed an iron rod on to the stone, struck the rod with a hammer and splintered the stone.

(2) Major Martin, of Lucknow, in 1783, passed a tube into his bladder, and introduced through it a file made of the end of a knitting needle; with this he rubbed the outer surface of the stone away at many sittings, sometimes twice a day, and often in public, until his symptoms disappeared. It is reported, however, that he died of stone in Calcutta in 1800.

Gruithuisen, a Bavarian surgeon, in 1813 published his method, and was probably the first really to practise lithotrity, though there is no evidence that he actually used the instrument upon a living patient.

His instrument was a straight hollow tube, through the centre of which was conveyed a gimlet with a lance-shaped point. Between the gimlet and the wall of the tube a wire of brass was passed in the form of a loop, by which the stone was snared and held firmly against the end of the tube, while the gimlet was rotated until the stone was pierced.

Leroy (d'Etoilles), in 1822, invented an instrument consisting of two straight hollow tubes, between which slid four pieces of flexible wire, whose inner ends were fixed together by a button. By projecting the wires a cage was made in the bladder, in which the stone was caught and held firmly against the end of the inner tube, while

a gimlet was passed along the lumen of the inner tube and bored a hole in the stone by rotation.

It was practically a re-discovery of Gruithuisen's invention.

Amussat, in 1822, introduced an instrument which pulverized the stone by combined pressure and friction.

This was the pioneer of the present-day lithotrite.

At a Commission appointed by the French Academy of Surgery Amussat's instrument proved too weak to crush a stone in the cadaver, while Leroy's instrument was successful.

On January 13th, 1824, at the Necker Hospital, Paris, Civiale gave the first public demonstration of lithotrity, with success. His instrument was a trilobed pincers. It consisted of two metal cylinders sliding one inside the other, the inner having three branches hinged to its distal end. On projecting the inner tube into the bladder the three branches separated, and on withdrawing it into the outer tube the stone was caught between the three branches and fixed. A gimlet was then passed down the inside of the inner tube and perforated the stone.

Leroy now commenced a bitter controversy with Civiale, alleging that the latter had merely filched his idea. In both the object was to fix the stone over the end of a tube and perforate it with a gimlet.

In reality Gruithuisen should take precedence over both Leroy and Civiale.

The next advance was to drill the stone with holes in various directions so that it could be finally readily broken up by the "trilobe". This required a drill and drill bow, the latter being shaped like a fiddle bow, and with it the drill was rapidly rotated. Civiale used this instrument for twelve years with some success, though other surgeons found it too difficult and painful, on account of the frequent releasings and re-graspings of the stone which it necessitated.

To obviate this the next improvement was, once the calculus had been fixed in the vice, to scoop out the interior of the stone until it was a mere shell which could be broken up—*excentric lithotrity*—the stone being destroyed from within outwards.

The great difficulty was to remove the shell after being broken up.

Concentric lithotrity, i.e. the pulverizing of the stone from the periphery towards the centre: The stone was grasped lightly in a tribladed vice, the inner surfaces of the blades being roughened. By fixing a drill into the stone it was rotated against the roughened blades and its periphery gradually worn down. It proved too painful a method for practice.

Crushing the stone.—Leroy was the first to use the screw and vice in lithotrity, and in 1825 he introduced an instrument on this principle. On attempting to use it it proved too weak and broke, and Leroy continued to pulverize his calculi by drills.

Jacobson, a Danish surgeon, in 1829 introduced his articulated stone-crusher. He was the first to show practically the strength of crushing that could be obtained by screw action.

"*Percussion*" of the stone: Attempts were now made to break the stone by percussion, and the first to be used satisfactorily for lithotrity was *Huerteloup's* percussor, introduced in 1823.

This was the forerunner of the modern lithotrite, and when closed resembled a curved catheter. It had two blades, a larger female in which slid the smaller male blade. When the stone was grasped between the blades the female blade was securely fixed by a screw to a vice fixed to the operation table, so as to prevent it being forced against the bladder-wall when its outer end was struck with the hammer or "percussor". It required a special table.

As it took much time to fix the female blade to the vice on the operation table each time the stone was seized Huerteloup dispensed with this vice, and fixed a powerful handle to be held firmly by an assistant and so take up the shock of the percussion.

As the shock of percussion hurt the patient, crushing by pressure of the hands was then tried, but it was found that when the stone gave way under the crushing force the blades came together too abruptly and jerkily, so that there was risk of injury to the bladder.

To avoid this, "screw-pressure" was next introduced, so that the blades could be approximated steadily.

This compressor was at first detachable. Touzay's compressor was introduced in 1832.

The next improvement was to incorporate this screw compression in the instrument itself, as in modern lithotrites.

The earliest lithotrite in which this was accomplished was made by Salt, of Birmingham, and was used by Dr. Hodgson at the Birmingham General Hospital in 1825; the result of the operation is not stated.

The final improvement was the device introduced by Weiss, of London, by which the sliding action of the male and female blades could be converted into a screwing action once the calculus had been seized between the blades.

This brings us up to the modern instrument, *e.g.* Bigelow's lithotrite.

After all crushing operations, up to this date, the fragments were left in the bladder to be passed naturally.

Prior to 1878, when Bigelow introduced the operation of litholapaxy (stone-evacuation), *i.e.* the crushing of the stone and the evacuation of the fragments at one sitting under anæsthesia, the fragments were usually left in the bladder to be passed naturally.

But so long ago as 1832 Huerteloup had, after crushing a stone, washed out the fragments through a large-eyed catheter with a syringe, and Philip Crampton, in Dublin, had employed a suction apparatus to remove the fragments.

Sir Henry Thompson, 1820 to 1904, Surgeon to University College Hospital, the most famous of the English lithotrotists, had studied under Civiale in Paris in 1858. He acquired an extensive practice in vesical calculus, and in 1863 removed a calculus successfully by crushing from King Leopold I of Belgium, while in 1872 he operated upon the Emperor Napoleon III, who was then in exile in England, but unsuccessfully.

Mr. J. T. Clover, the anæsthetist and inventor of the well-known Clover's inhaler, administered the anæsthetic to many of Thompson's patients, and after observing many lithotrities he, in 1866, introduced his "evacuator", consisting of a rubber bulb with a glass trap to catch the fragments of stone as they were washed out through a large-bore slightly curved catheter, with a large eye. This instrument was the prototype of all modern evacuators. Thompson used Clover's evacuator after several of his lithotrities, but never made it a routine, and it was left to Bigelow, in 1878, to make the epochal advance of advising that in all crushings of calculi the operation should be completed and all the fragments evacuated at one sitting under anæsthesia. He called his procedure litholopaxy, *i.e.* "stone-evacuation".

Bigelow's litholapaxy is now the recognized procedure for the treatment of stone in the bladder by crushing.

Vesical calculus is now becoming comparatively rare in this country, and the opportunities of becoming expert in lithotrity are diminishing. In the future, for the surgeon who has only occasional opportunity of treating vesical calculus, suprapubic lithotomy will probably prove the safer method.

A. H. BURGESS.

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SURGICAL APHORISMS.

(*Continued from p.* 188.)

13.

Operating by the clock is the last fatuity of which a surgeon should be guilty. Every operation presents an individual problem which requires its own time for solution.

14.

Routine has a very large place in the technique of the operating theatre, and by its smoothness the efficiency of the team is to be judged. The beginning and end of the operation itself should also be usually a matter of routine, but in the middle is the climax, when the patient's body should be allowed to assert its individuality, and routine must give way to judgment.

15.

There can be no "routine" in the surgical treatment of any disease, and the surgeon who talks of his routine has probably substituted complacency for judgment. Complacency in ordinary life is often a harmless foible: in surgery it is always a vice.

16.

It may be thought that surgery which does not cure is surgery that has failed. But some of surgery's greatest triumphs are obtained in the field of palliation. Even if the result is merely the conversion of a painful death into an easy one, a measure of success has been achieved.

17.

It is easy to sentimentalize over the "romance of surgery". But how often is it appreciated that the thrills of the explorer are the surgeon's lot? Every stroke of the scalpel is opening up a realm where no human eye has ever looked before.

18.

Statistics of post-operative mortality are commonly held to justify or damn an operation. But the fact that patients don't die when an operation is done does not thereby justify its frequent performance. The question "is it necessary?" *honestly* answered will eliminate much surgery that is safe but superfluous.

19.

It must also be remembered that some patients do die if an operation be not done, so that the possible *non-operative mortality* should also be considered, though usually it is ignored.

20.

Whether King Edward VII's appendix was or was not removed in 1906, is of no importance in 1933. The junior dresser is familiar now with principles of diagnosis and treatment which were then hidden even from a surgeon to the King.

21.

General anæsthesia has been so good in this country that other methods have been unduly neglected. Surgeons in some other countries have been driven by necessity to develop the technique of local anæsthesia. We still have much to learn from them.

22.

Skilled anæsthetists are not numerous enough, and it rests with the surgeons to demand an ever-rising standard of anæsthetic administration.

23.

Surgery in good hands is now attended by comparatively small risks, and the chief danger lies in pulmonary complications. Not until ether has joined chloroform in the list of drugs that are but seldom used, will this risk be reduced to a minimum.

GEOFFREY KEYNES.

(To be continued.)

SOME PRACTICAL POINTS IN INTRAVENOUS PYELOGRAPHY.

INTRAVENOUS pyelography has supplied us with a valuable asset to our diagnostic armentarium.

Until recently the only method of investigation of the kidney, pelvis and ureter has been by cystoscopy and ureteric catheterization, with its attendant discomfort and need for specialized skill on the part of the investigator; intravenous pyelography has overcome these two difficulties.

At this stage, therefore, a few practical points, both as to the technique of carrying it out and the interpretation of the findings, may be of interest and possibly assistance to those who are as yet unacquainted with the means whereby the best results may be obtained from this method of investigation.

INDICATIONS FOR USE.

The aim, broadly speaking, is to determine the shape, position and excretory power of the urinary tract; from these physical signs it is possible to diagnose the pathological condition or conditions present.

Until recently these investigations have been carried out by cystoscopy and retrograde pyelography. Intravenous pyelography, on the other hand, can be carried out quite simply without the use of a cystoscope, thus saving the patient much discomfort, and with no further apparatus than a 20-c.c. syringe and the type of X-ray apparatus now available even in the more remote corners of the world.

In cases were tuberculous disease of the kidney is suspected, routine retrograde pyelography is inadvisable, but in these cases a valuable aid to diagnosis is often found in an intravenous pyelogram.

CONTRA-INDICATIONS.

Undoubtedly the main contra-indication to the universal use of intravenous pyelography in all and every case where the urinary tract is suspected of "being in trouble" is the question of expense. The cost of this form of examination would be approximately 30*s.* to £2 in materials alone, when taking into consideration the cost of the X-ray films, the uroselectan and wear and tear of the X-ray apparatus; the cost of an instrumental pyelogram would be about 7*s.* 6*d.*

With the introduction of intravenous pyelography the examination has frequently been carried out where the clinical history is even suggestive of a renal origin, and again often in cases where a careful history and examination would have shown that the symptoms really bore no relation to the urinary tract whatsoever.

PREPARATION OF THE PATIENT.

The patient is prepared as for a routine X-ray of the urinary tract, either a two- or one-day preparation. A useful point in these cases is the question of time, especially in children—the earlier in the morning the X-ray is taken, the less liable is there to be much wind present in the intestines, the great enemy of successful urinary tract X-rays.

For adults, castor oil is frequently used, 1 oz. two days and one day before the examination. It often happens that patients cannot take castor oil; in these cases it is well worth trying pil. calomel cum colocynth after tea the day before the X-ray; on the other hand, any purge that suits the patient is quite good, the essential point being to ensure an action of the bowel during the night before the X-ray, but without the production of wind.

In children, purging causes much wind, and good results are obtained by ensuring a normal action of the bowel, and then keeping the child playing and running about from the time of waking until meeting the radiologist.

It is essential for good, contrasting X-rays that there should not be active diuresis at the time of examination, which is best avoided by curtailing all fluids for about six hours previously.

There are many substances now on the market, all having their respective merits, such as abrodil, per abrodil, pelvirin and uroselectan B (D. 40). Personally I have, for two years, been using uroselectan B supplied by Messrs. Schering; it has given excellent results.

METHOD OF ADMINISTRATION: DOSAGE.

Uroselectan B is put up in ampoules of 20 c.c., which is the average dose for an adult, children up to 10 years of age a rough gauge is 1 c.c. per year, giving a child of 3, 5 c.c.

The solution should always be warmed to body temperature before injection. Any convenient subcutaneous vein may be used—in adults one of the veins in the ante-cubital region; these are equally good for children up to the age of 4 or 5; below this age any vein which is suitable must be found, the two useful ones being the saphenous or a scalp vein.

In children, if there is any doubt as to the child remaining quiet during the tedious minutes, it is best to give nitrous oxide and oxygen anæsthesia for a few minutes for this reason: if there is an indication sufficient to warrant an intravenous pyelogram in a child, it is of adequate importance that the pyelogram should be done successfully at the first attempt. Among children one generally finds that the psychological trauma of a three minutes' anæsthesia is considerably less, and certainly not so lasting as the pain of the intravenous injection.

The type of needle and syringe used is very important. The needle should be of the short, bevelled variety, which minimizes a possibility of injuring the opposite side of the vein; the size which is found most suitable for both children and adults is 20 B.W.G. One is very often tempted to use a smaller needle, thereby avoiding the pain of a vein puncture, but this is always found unsatisfactory. The uroselectan is so viscous that much prolonged pressure is needed for the injection, often causing jerky movement of the needle, sufficient to injure the vein or even pull the needle out. The syringe may be of any variety to hold 20 c.c., but should be of such a pattern as to be held quite still and comportable during the 2 to 4 minutes of the injection. The type found most suitable for this is one with the needle placed eccentrically near the side of the barrel, the latter then resting gently on the patient's arm and steadying the syringe during the injection.

The time taken for the injection should be between 2 and 4 minutes for 20 c.c.—too rapid injection causes much pain.

Using 20 c.c. of solution, the size of needle suggested and an average vein, the conditions found will be an optimum—that is, the uroselectan will be injected by gentle pressure on the plunger at a speed which will produce mixing with the blood in a concentration least liable to cause pain or any other ill-effects.

Immediately after injection the patient should be placed in a Trendelenburg position, about 30°; this gives much better shadows of the renal pelvis and ureter. During the later X-rays the patient is placed in a reverse Trendelenburg position or even flat, which fills the lower portion of the ureter and bladder.

ILL-EFFECTS.

1. Should the uroselectan be injected outside the vein, this accident is soon noticed by the subcutaneous swelling round the vein—no harm will follow provided the injection is stopped; even as much as 5 c.c. has frequently been seen in the subcutaneous tissues without untoward results.

2. Pain of a severe character, coming on after about 10 c.c. have been injected, is present to a varying degree, but is seen in about 25% of cases: the whole arm and shoulder feels as if gripped in a vice. Rarely does this spread into the chest, occasionally, however, giving a feeling of tightness. This can be minimized by decreasing the rate of the injection, but is merely made worse by hurriedly injecting the remaining 10 c.c. or so to "get things over quickly". All that can be done is to reassure the patient and continue the injection at the optimum rate. The pain passes off about 2 to 3 minutes after the injection is completed.

3. General faintness or even sickness often occurs, partly due to the injection and partly due to the vein puncture (an unsteady needle in the vein); this is never of a serious nature and yields to usual remedies.

Radiograms are then taken at intervals which vary with the pathological condition suspected. As a guide the following are suggested:

Ten minutes after injection, renal pelves and upper portion of ureters.

Thirty minutes after injection, renal pelves and whole course of ureters and bladder.

Forty-five minutes after injection, similar pictures to 30 minutes, but the bladder should be emptied immediately before the pictures are taken so as to remove the bladder shadow from its position, which is obscuring the lower end of the ureters.

If no shadows are seen 45 minutes after the injection, further X-rays are taken 6 or 12 hours later; this is often required in such cases as renal dwarfs with congenital hydro-ureters and hydronephroses. Some authorities attempt to shorten the time over which the X-rays are taken by giving urea by mouth round about the time of the intravenous injection; this serves the purpose of shortening the time and possibly giving good concentration, but it is doubtful whether the interpretation of the result is so efficient, so that this method is not commonly used.

Concentration.

It is often thought that good concentration in a pyelogram means a good secreting kidney; this is not the whole story. Good concentration depends also on another factor obstruction; good concentration is often best seen where a ureteric calculus is causing a temporary "hold up" of urine in the renal pelvis. Again, a much better pyelogram shadow is obtained when the patient is in a Trendelenburg position than when in the reversed position. Therefore, in assessing the concentration, there are three main factors to be considered: the excretory power of the kidney, the presence of obstruction, and the position of the patient.

Shape.

This is the most valuable asset in intravenous pyelography, giving almost diagnostic physical signs in such conditions as hydronephrosis and hydro-ureter, new-growths of the renal pelvis and cortex, tuberculous disease of the kidney and often in diverticulum of the bladder.

Comparison of the Two Sides.

A difference between the concentration on the two sides in the absence of obstruction is of value is assessing the excretory power of one kidney *as compared with the other*.

Diagnosis of Doubtful Shadows.

Shadows suggesting stones of doubtful position in relation to the kidney or ureter can often be accurately identified by the pyelogram or ureterogram being seen to overlie the shadow seen stereoscopically. Finally, stones in the renal pelvis not shown on a plain film may often become more obvious after intravenous pyelography.

Fallacies.

Ureterograms show varying appearances when seen in the consecutive X-rays. Deformities suggesting strictures are frequently seen at the pelvi-ureteral junctions and elsewhere in the ureter, but in interpreting these, attention should always be paid to the presence or absence of the deformity in the serial radiograms: if the deformity persists, then it is most probably pathological, otherwise it is of no diagnostic importance, being due to a wave of contraction in the ureter.

Pyelograms are occasionally misleading, inasmuch as they do not give an accurate outline of the renal pelvis such as is sometimes seen in an early hydronephrosis due to an intra-pelvic obstruction; also in very large hydronephroses the excretion may be small, and yet when diluted with the contents of the dilated pelvis, are of such a concentration that the shadow is not seen in X-rays.

Finally, intravenous pyelography can be well recommended from many points of view, especially under circumstances when one might consider whether to submit the patient to the discomfort of an instrumental pyelogram. There are, it is true, fallacies against which one must always be on guard, but with experience in interpreting the findings and thus knowing when an instrumental pyelogram should be used in addition, it is found that this form of investigation can be used as a simple and yet most useful aid to diagnosis.

In conclusion, these few notes serve as a brief outline of a method of carrying out intravenous pyelography and of the interpretation of the results; in the event of them being of assistance to those who are wishing to carry out this method for the first time, or to add, even in a small way, to the experience of those who are well acquainted with this examination, they will have served some useful purpose.

W. E. Underwood.

THE HISTORY OF THE HEDGEHOG'S ROSARY.

(*Continued from p.* 168.)

By now, the mid-point of the last century, the advances are so rapid and on so many fields that it becomes impossible to describe them simultaneously, and it will be necessary to study them consecutively.

First let us consider the continuation of the history of leuco- and erythropoiesis.

You will remember that in 1840 Reichert had shown the presence of nucleated red cells in the liver. Five years later Kölliker actually demonstrated the transition stage between the nucleated and non-nucleated red blood-corpuscle in the liver, but he suggested that their progenitors were splenic leucocytes. And in 1857, when he observed nucleated red blood-corpuscles in the newborn, particularly in the spleen, he thought that blood-formation took place in the spleen as well as the liver, and might continue in infancy. It is necessary now to go back for a short while and consider briefly the history of the spleen, which I have left alone, for it has been treated carefully by McNee (39) in his Lettsomian Lectures. Stukely (40), in 1722, delivered the Goulstonian Lecture on the spleen and its functions. He considered that its main function was that of a reservoir, which could contract at will and so control the amount of blood in the circulation. Then with Hewson's observations, the next is that of Kölliker, who noticed the disintegration of red cells, and regarded that as the chief function of the organ.

Kölliker had examined the bone-marrow, and considered that it consisted of fat and medullary cells, the functions of which he could not arrive at. Then in 1868 came a bombshell. Neumann (41) demonstrated that mammalian red corpuscles arise throughout life from colourless nucleated elements in the bone marrow. The reception of this epoch-making discovery varied enormously. Bizzozero (42) and Claude Bernard (43) received it with delight. Robin (44), a Frenchman, felt that Neumann was encumbering science with his new theory, and tried to repudiate it by the statement that since, logically considered, marrow-cells and leucocytes are essentially different in kind, there can never be a question of bone-marrow erythropoiesis.

To understand the views of Hayem (45) and Pouchet, it is necessary to retrace our steps again and study the history of the blood-platelet.

These tiny bodies were first seen in 1842 by Donne (46), but the first careful discription is by Max Schultze (47) in 1867, who considered them as a normal constituent of the blood and that they may arise from degeneration of granular leucocytes. Many others saw them, and Birch-Hirschfield (48), in 1873, suggested that bacteria might develop from them. Osler (49), while working with Burdon Sanderson, recognized them, and was the first to portray them in a vessel in 1874, but offers no explanation as to where they arose, and rather tends to the bacterial origin. Hayem, on the other hand, described them as "hæmatoblasts", and regarded them as the origin of the red cells, that they arose from the protoplasm of the lymph leucocytes, and through growth became microcytes, and hence, after assuming a biconcave shape, function as definite erythrocytes; others, like Arnold (50), felt that they arose from fragmentation of the erythrocyte.

In 1894 Wlassow (51) showed that thrombi consisted of masses of platelets, and in 1910 Wright (52) suggested the megakaryocyte as the primitive cell.

The third of the great advances took place in 1876 with the advent of specific staining. Up till this time, histology had been performed for the most part with unstained or injected material, usually with carmine, and it was by an accident that Joseph Gorlach, in 1854, while using the injection method, found that nuclei were stained by the dye. Accordingly various methods were employed, most of them very heroic to our way of thinking. Thus Ranvier's method, which was introduced in 1867 and enjoyed great popularity, was as follows: Tissue was boiled in a mixture of creosote and acetic acid, then allowed to dry completely, then macerated in acetic acid, and finally stained in dilute ammonium carminate and picric acid. Hæmatoxylin was introduced by Böhmer in 1865, employing alum as a mordant, as dyers had done for many years. Some ten years earlier an English chemist, Perkins, had been experimenting with coal-tar products, and in 1865 introduced the first aniline dye, mauveine; and very soon after this all the organic chemists in Europe were making new and wonderful colours, in spite of William Morris's dictum that "these hideous colours could never be of any value". At this time there was a medical student at Strasbourg who was a sore trial to his teacher; he would not work, at least not at the subjects of the curriculum, and was far happier dabbling with the new dyes, and trying to find out why the organs of persons suffering from lead poisoning were preserved so well after death. His name was Paul Ehrlich (53), and two years after qualifying he commenced his method of Farben-analyse. In the same year he discovered the mast cell, or basophil, by staining with dahlia; a few years later the eosinophil and neutrophil, and so introduced his classification of the leucocytes, which is in essentials that employed to-day. The stain he used was his

triacid mixture, which necessitated heat fixation, and though a splendid stain for granules, was an indifferent nuclear stain, and frequently did not stain at all. The methylene-blue-eosin compound stain which is employed now with Leishman's modification was first introduced in 1887, but it was not until 1891, when Romanowsky (54) devised the method of methyl alcohol fixation, that it became at all tractable.

Vital staining had been employed spasmodically, but it was not until Israel and Pappenheim (55) introduced neutral red that it was much employed in hæmatology, and this, together with Thoma's (56) method of using a dried alcoholic layer of stain (1899), evolved the modern technique which has been employed to such great advantage by Sampson (57), Cunningham (58) and Sabin (59).

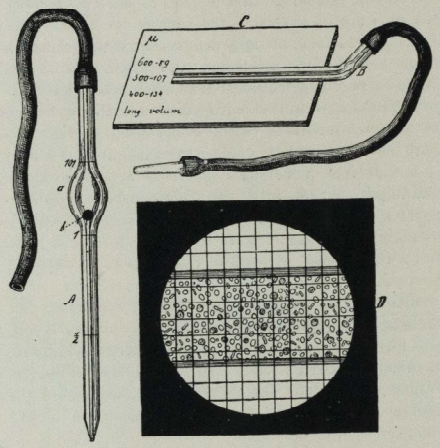
The clinical applications of hæmatology lagged far behind scientific inquiry, and by the early part of the nineteenth century, although the chemists were discovering and assessing innumerable elements in the blood, yet the study of formed particles was hardly considered.

The first to attempt to draw accurate deduction from the blood in different diseases was Gabriel Andral (60), who was a most careful worker and a staunch supporter of Louis' campaign against ruthless blood-letting. His most famous work is his *Clinique Médicale* (1829), which was the first of the kind made famous by Trousseau, Dieulafoy and others. In 1843 appeared his *Essai d'hématologie pathologique*. His method of investigation was to take the blood, defibrinate a portion and determine the percentage of dried fibrin; allow another portion to clot; evaporate the serum and so determine the percentage of solid matter, then dry the clot, and by deducting the amount of fibrin estimated to be in it assess the percentage of red cells (and incidentally white cells, which he ignores) in the blood. The methods were performed on a great number of controls and also animals, and a series of normals were obtained. From his figures he thought he could separate primary anæmias (*anémie spontanée*) from those secondary to a loss of blood. He also is the first to observe that there is a true anæmia in those suffering from lead poisoning, which was confirmed by Malassez (61) in absolute figures in 1874.

Although these ideas were sound enough in their way, yet they were, by necessity, complicated and not over accurate, and it is not until 1852 that clinical hæmatology as we understand it now began. In that year Karl Vierodt (62) devised a rather complicated method for counting the red cells with a microscope, and his first estimation on his own blood gave five million cells per cubic millimetre as the result; the method was improved a little by Welcher (63) and Cramer (64), but the honour of making it a practical method must go to Malassez and Potain.

Malassez was Potain's intern in 1867 and was intensely interested in the blood, and used a modification of Cramer's method for estimating the erythrocytes, of which one of the great difficulties was the dilution of the blood; accordingly Potain (65) devised a diluting pipette identical with that employed to-day.

In the illustration of Malassez' apparatus (66), A is the Potain diluting pipette and C is the "counting



MALASSEZ' APPARATUS.

chamber", which consisted of a piece of capillary tubing of known bore, into which the diluted blood was drawn; the figures at the side of the slide indicate the volume of a known length of the tube, *i.e.* a length of 600μ contains 89 c.mm., etc. Then a calibrated eye-piece micrometer was used and the number of cells in 600μ were counted; from this the absolute figure could be obtained. D is an illustration of the appearance under the microscope.

Hayem (67) simplified it by using a cell of known volume instead of the capillary tube, and Gowers (68) introduced the method of ruling the squares on the counting chamber instead of using an eyepiece micrometer. Since then the main advance has been in the accuracy of the ruling and manufacture of the cell.

Obviously from this the numeration of the leucocytes followed, and Thoma (69) in 1880 employing dilute acetic acid as a diluent, also to destroy the red cells, estimated them as varying between six and ten thousand per c.mm.

Hæmoglobin was discovered by Funke (70) in 1851, and the first clinical hæmoglobinometer was devised by Malassez (71) in 1876. It consisted of a prism of picrocarminate of ammonium which could be moved up and down until it matched the colour of the diluted blood, and the quantity of hæmoglobin was then read off from a scale; Gowers's method (72) was introduced two years later, and since then various devices of greater or less complication have been introduced.

The coagulation time was introduced by Vierodt (73) in 1878, who drew a fine white horse-hair up and down a capillary tube containing blood, and when it adhered the time was taken; he observed that his estimations were increased in purpura, hæmophilia and leukæmia. Wright (74) introduced his method in 1892.

We noticed that Leeuwenhoeck measured the blood-cell with reasonable accuracy, and this was repeated at intervals through the centuries, but in 1863 Welcher (75) devised an ingenious method for determining the volume of the red cell. He made models in plaster from his measurement of the erythrocytes, and then weighed these and determined the average volume as being 72 μ—a low reading. Blix and Hedin (76) devised the hæmatocrit in 1890, and Capps (77) wrote his classical paper on the size of the red cell in 1903.

Reticulocytes were first recognized by Howell (78) in 1890, and Hawes (79) made a careful study of them in 1909, but they were little regarded, and it was not until Whipple and Robschert-Robins were assaying the value of various substances in hæmorrhagic anæmias that their value was recognized.

The blood groups were first recognized in 1900 by Landsteiner (80), and the danger of isoagglutination in transfusion was first pointed out in 1907 by Hektoen.

It may have seemed strange that all this time I have scarcely mentioned a blood disease or the moment when they were recognized by one of the elaborate laboratory methods here described, but the fact remains that almost all the diseases of the blood were first discussed without the aid of any of these devices.

PERNICIOUS ANÆMIA.

In 1822 James Combe (81), an Edinburgh practitioner, described before the Medico-Chirurgical Society of Edinburgh a case of anæmia which is a typical case of the type which we now call Addisonian.

The following case has been already brought under the notice of the Society by my distinguished preceptor and friend Dr. Kellie, in his paper on the Pathology of the Brain, as affording a striking corroboration of his views regarding the circulation within the head in health and disease. It appears to me entitled to still further attention, and to a more minute detail, as exhibiting a well marked instance of a very peculiar disease, which has excited little attention among medical men, and which has been altogether overlooked by any English author with whose writings I am acquainted. Unfortunately, however, such is the allowable diversity of opinion on most medical subjects, that it is very possible the following case may be viewed in different lights, and receive different appellation; and while some may be disposed to regard the peculiar characteristic from which it derives its denomination of Anæmia, as constituting a morbid state *sui generis*, others may consider the defect of the red circulating mass as an accidental and occasional circumstance, denoting some peculiar change in the assimilative powers, the primary stages of which we have been unable to detect. Doubtful myself which of these opinions may be the most correct, I shall do little more than state correctly the phenomena of the case, and minutely the appearances presented on dissection. One remark only I may at present offer, that if any train of symptoms may be allowed to constitute Anæmia a generic disease, the following may be considered an example of it in its most idiopathic form.

It was in the month of July, 1821, that I was first consulted by Alexander Haynes, the subject of this case, on the nature of his complaints. Even at that time I was much struck by his peculiar appearance. He exactly resembled a person just recovering from an attack of syncope; his face, lips and the whole extent of the surface were of a deadly pale colour; the albuginea of the eye bluish; his motions and speech were languid; he complained much of weakness; his respiration, free when at rest, became hurried on the slightest exertion; pulse 80, and feeble; tongue covered with a dry fur; the inner part of the lips and fauces were nearly as colourless as the surface. He says that his bowels are very irregular, generally lax, and that his stools are very dark and fœtid; urine reported to be copious and pale; appetite impaired; of late his stomach has rejected almost every sort of food; has constant thirst; he has no pain referable to any part, and a minute examination could not detect any structural derangement of any organ. He is forty-seven years of age; was born and has spent the greater part of his life in the country, engaged in agricultural employments; for a few years has been servant to a corn merchant, where his duties are neither laborious nor unhealthy. He is married, and has no family; leads a regular and temperate life; has enjoyed perfect health since childhood, and has never been blooded. He was advised to use some medicine to correct the state of his bowels, to confine himself to a light diet, and to take gentle exercise.

I saw him again in a few days, and found him nearly in the same state. His stools were consistent, dark and very fœtid; urine pale and copious, depositing scarcely any sediment. His wife tells me that it is about two months since he began to complain, but not until his friends had observed his altered complexion; he then lost strength and said his head troubled him. Of this last symptom, however, he has no distinct recollection; his feet became edematous, and his appetite failed him. My attention was again drawn towards the skin, which was of the same waxen colour, soft and delicate, the cellular texture about the eyes and breast being slightly distended with watery effusion. The pulse was feeble and easily excited by any motion. The veins on the arm and neck were delicate, and could be felt on making pressure, but the colour of the blood did not appear through the skin. It was evident that the patient laboured under great debility, probably from a defective and languid circulation. Some tonic medicines, a mild nutritious diet, with wine were prescribed, and I was inclined to hope for a favourable termination to the case.

About a fortnight after this he was evidently better, was stronger and able occasionally to attend to his duty; but I was not at any time confident that there was any change in his complexion. He perspired freely on any exertion, but neither the face nor lips ever acquired any additional tinge. At one time, from the state of his stools and urine, I was led to suspect an affection of the liver; at another from the thirst, great flow of urine (exceeding the liquid ingesta), and peculiar state of the skin, I was apprehensive of diabetes; but none of these indications remained long stationary.

In September, and occasionally afterwards, he was visited by Dr. Kellie, and Dr. R. Hamilton, from whose able advise I trusted he would derive much benefit. A very minute examination of the case, and a careful consideration of its history, however, scarcely solved the nature of the affection, and its long continuance and inveteracy rendered our prognosis more doubtful.

Towards the end of September he tried the effects of a sea voyage and afterwards drank the waters of a chalybeate spring. He returned

in the middle of October with a loss of flesh and strength, his legs were much swollen, his skin had the same exsanguine appearance, secretion of urine copious, bowels lax and appetite greatly impaired; he was still in good spirits, made no complaints excepting debility, and looked forward to a speedy recovery.

It seems unnecessary to detail at great length the history of this case; for two months after this, it presented no peculiar features in addition to those already enumerated; all the symptoms, however, were aggravated, and the constituents began to sink under their pressure. About the middle of January, 1822, the œdema had extended over his face and upper extremities, and evident marks of effusion into the chest presented themselves. He died in a few weeks with all the symptoms usually attendant on hydrothorax.

James Scarth Combe is for the most part forgotten, and credit for recognition of the disease as an entity is given to Thomas Addison (82), whose description appeared some twenty years later in the preface to his famous account of the disease of the suprarenals.

For a long period I had from time to time met with a very remarkable form of general anæmia, occurring without any discoverable cause whatever—cases in which there had been no previous loss of blood, no exhausting diarrhœa, no chlorisis, no purpura, no renal, splenic, miasmatic, glandular, strumous, or malignant disease.

Accordingly, in speaking of this form in clinical lecture, I perhaps with little propriety applied to it the term "idiopathic", to distinguish it from cases in which there existed more or less evidence of some of the usual causes or concomitants of the anæmic state.

The disease presented in every instance the same general character, pursued a similar course, and, with scarcely a single exception, was followed, after a variable period, by the same fatal result.

It occurs in both sexes generally, but not exclusively, beyond the middle period of life, and, so far as I at present know, chiefly in persons of a somewhat large and bulky frame, and with a strongly-marked tendency to the formation of fat.

It makes its approach in so slow and insidious a manner that the patient can hardly fix a date to his earliest feeling of that languor which is shortly to become so extreme. The countenance gets pale, the whites of the eyes become pearly, the general frame flabby rather than wasted; the pulse, perhaps, large, but remarkably soft and compressible, and occasionally with a slight jerk, especially under the slightest excitement; there is an increasing indisposition to exertion, with an uncomfortable feeling of faintness or breathlessness on attempting it; the heart is readily made to palpitate; the whole surface of the body presents a blanched, smooth, and waxy appearance; the lips, gums, and tongue seem bloodless; the flabbiness of the solids increases; the appetite fails; extreme languor and faintness supervene, breathlessness and palpitations being produced by the most trifling exertion or emotion; some slight œdema is probably perceived about the ankles; the debility becomes extreme. The patient can no longer rise from his bed, the mind occasionally wanders, he falls into a prostrate and half-torpid state, and at length expires. Nevertheless, to the very last, and after a sickness of, perhaps, several months' duration, the bulkiness of the general frame and the obesity often present a most striking contrast to the failure and exhaustion observable in every other respect.

With perhaps a single exception the disease, in my own experience, resisted all remedial efforts, and sooner or later terminated fatally.

In 1872 Biermer (83) of Zurich described fifteen cases, and was the first person to give an account of the blood-findings, and he named the disorder "progressive pernicious anæmia" because, in spite of all therapeutic measures, it progresses without abatement and ends in death.

The first pathological observation was made by William Pepper (84) from Philadelphia, who described the characteristic changes in the bone-marrow, and a year later, in 1876, Cohnheim gave a similar account, although he was unaware of Pepper's work. In the same year Sorensen (85) maintained that megalocytosis was characteristic of pernicious anæmia, and in 1880 Ehrlich (86) demonstrated the difference between the megaloblast and normoblast, and stated that the former was only found in this disease or in the fœtal blood tissues; Laoche (87) in 1883 found that the colour index was constantly high, and in 1884 Lichtenstern (88) described two cases of "progressive pernicious anæmia in tabetics", but he considered that the anæmia was dependent on the tabes, and it was not until 1886 that Lichtheim (89) recognized the real significance of the syndrome of subacute combined degeneration of the cord. In the same year von Mering (90) observed the achlorhydria, and in 1889 William Hunter (91) gave an account of the glossitis, and propounded the theory of gastro-intestinal toxæmia as the ætiological factor. However, the treatment continued to be arsenic and iron, and until 1926 the disease continued to be as progressive as it had been in the days of Combe.

Purpura.

The first account of purpura distinct from that arising during the course of a specific fever was made by Amatus Leusitanus (92) in 1556, who described it as "morbus pulicaris alsque febre".

Of the clinical descriptions of purpura the first was made by Paul Werlhof (93) in 1735. He was one of the leading physicians of the Hanoverian court, and apart from his medical skill was something of a poet. In his description of the disease there is no mention of the familial element which we have come to associate with the type of purpura which bears his name.

Morbus Maculosus Hæmorrhagicus.

An adult girl, robust, without manifest cause, was attacked recently towards the period of her menses with a sudden severe hemorrhage from the nose, with bright but foul blood escaping together with a bloody vomiting of a very thick extremely black blood. Immediately there appeared about the neck and on the arms, spots partly black, partly violaceus or purple, such as are often seen in malignant smallpox. The sudden loss of strength, and sufficient singular characteristics of this *spotted hemorrhagic disease* being known to me, of which indeed there is only little discussion in medical writings, we forbade venesection. I gave the first day acid remedies and largely nitric, which while they did not help, but enduring continually both hemorrhages from the nose and indeed by vomiting, weakness and by chilliness of the extremities, with a small and most rapid pulse, a more efficient aid was needed; moreover the number of the spots increasing and surrounding completely both of the eyes, the back of the nose and the skin around the mouth and chin, with a livid black color, like marked from bruises. I gave twice hourly in any mixture desired half a drachm of Peruvian bark, adding alternately liquid laudanum of Sydenham four drops. The same day the bleeding from the nose gradually stopped, the vomiting became less, and the next day ceased: no lesions recurred: the spots daily, at the same time with a livid appearance assumed first a very ruddy then pale color, and disappeared the seventh day, so that also the pulse now recovered the normal character of its beat, her strength was nearly restored to its normal state, although the menses do not appear at the proper time, which is by no means unusual following hemorrhages.

The type of purpura in which abdominal symptoms are marked and which bears Henoch's name was first described by a brilliant English physician, William Heberden (94), and appears in his posthumous *Commentaries on the History and Cure of Diseases*, which was published in 1801.

Purpureæ Maculæ.

Some children, without any alteration of their health at the time, or before, or after, have had purple spots come out all over them, exactly the same as are seen in purple fevers. In some places they were no broader than a millet-seed, in others they were as broad as the palm of the hand. In a few days they disappeared without the help of any medicines. It was remarkable, that in one of these, the slightest pressure was sufficient to extravasate the blood, and make the part appear as it usually does from a bruise.

A boy four years old, for several days had swellings rise on his knees, legs, thighs, buttocks, or scrotum. The part affected was not discoloured, and when at rest, was easy, but could not be moved without some degree of pain. Together with these swellings there appeared red spots, sometimes round, sometimes angular, a quarter or half an inch broad, which on the second day became purple, and afterwards yellow, just as it happens from a bruise. The child continued perfectly well in all other respects. These swellings ceased to appear in about ten days; but the red spots continued coming out a few days longer.

Another boy five years old, was seized with pains and swellings in various parts, and the penis in particular was so distended, though not discoloured, that he could hardly make water. He had sometimes pains in his belly, with vomiting, and at that time some streaks of blood were perceived in his stools, and the urine was tinged with blood. When the pain attacked his leg, he was unable to walk; and presently the skin of his leg was all over full of bloody points. After a truce of three or four days the swellings returned, and the bloody dots, as before. These dots became paler on the second day, and almost vanished on the third. The child struggled with this uncommon disorder a considerable time, before he was entirely freed from it.

The first of these boys immediately grew better after being gently purged; the other took a decoction of the bark for several days without any manifest good effect.

Henoch's (95) account appeared in 1874, and though somewhat fuller and laying rather more stress on the abdominal symptoms, yet it adds nothing essential to the succinct account of Heberden.

Denys (96) was the first to recognize that the blood-platelets were reduced in number in this disease in 1887, and in 1889 Robert Koch (97) proposed as an indication of a purpuric state the elicitation of petechiæ after multiple intradermal punctures with a needle. In 1911 Weil described the tourniquet test for capillary resistance, and in the following year Duke (98) observed the lengthened bleeding time.

Hæmophilia.

In the *Talmud* (99) there is a dispensation which interdicts circumcision if fatal in two successive families, and there are slight references to what may, perhaps, be hæmophilia in the writings of Hochstetter and Fordyce, but the first careful and accurate description appeared in 1803 from the pen of a young American physician, John Otto (100). He came of a long line of physicians and was the favourite pupil of Benjamin Rusk. He published his account of hæmophilia when he was only twenty-nine.

An Account of an Hemorrhagic Disposition Existing in Certain Families.

About seventy or eighty years ago, a woman by the name of Smith, settled in the vicinity of Plymouth, New Hampshire, and transmitted the following idiosyncrasy to her descendants. It is one, she observed, to which her family is unfortunately subject, and has been the source not only of great solicitude, but frequently the cause of death. If the least scratch is made on the skin of some of them, as mortal a hemorrhagy will eventually ensue as if the largest wound is inflicted. The divided parts, in some instances, have had the appearance of uniting and have shown a kind disposition to heal; and, in others, cicatrization has almost been perfect, when, generally about a week from the injury, an hemorrhagy takes place from the whole surface of the wound, and continues several days and is then succeeded by effusions of serous fluid; the strength and spirits of the person become rapidly prostrate, the countenance assumes a pale and ghastly appearance; the pulse loses its force, and is increased in frequency; and death, from mere debility, then soon closes the scene. Dr. Rogers attended a lad, who had a slight cut on his foot, whose pulse was "full and frequent" in the commencement of the complaint, and whose blood "seemed to be in a high state of effervescence." So assured are the members of this family of the terrible consequences of the least wound, that they will not suffer themselves to be bled on any consideration, having lost a relation by not being able to stop the discharge occasioned by this operation.

Various remedies have been employed to restrain the hemorrhages—the bark astringents used topically and internally, strong styptics, opiates, and in fact all those means that experience has found serviceable have been tried in vain. Physicians of acknowledged merit have been consulted, but have not been able to direct anything of utility. Those families that are subject to certain complaints are occasionally relieved by medicines that are ineffeacious when applied to others; and family receipts are often of greater advantage in restoring them, than all the drugs the materia medica offers for that purpose. A few years since the sulphate of soda was accidentally found to be completely curative of the hemorrhages I have described. An ordinary purging dose, administered two or three days in succession generally stops them; and, by a more frequent repetition, is certain of producing this effect. The cases in which the most powerful, and apparently the most appropriate remedies have been used in vain, and those in which this mode of treatment has been attended with success, are so numerous, that no doubt can exist of the efficacy of this prescription. The persons who are subject to this hemorrhagic idiosyncrasy, speak of it with the greatest confidence. Deceptions may take place from accidental coincidence; but when a complaint has often occurred, and been almost uniformly fatal without the administration of a certain medicine, and has constantly yielded when it has been given, scepticism should be silent with regard to its utility. Nor should our inability to account for the fact, upon the theory and principles we have adopted, be conceived a sufficient reason for disbelieving it. An attempt to explain the mode of operation of this valuable remedy might give birth to much speculation. As the affection has been attended with mortality, and there is generally a disposition to give relief as early as possible, experiments have not been made with the other neutral salts to learn their comparative effect; nor have medicines been tried whose operation might be supposed to be similar. The prescription being known to the whole family, application is rarely made to a physician, and when it is, it is rather with a view of directing him how to proceed, than of permitting him to make a series of trials and observations which might be at the hazard of the life of the patient. The utility of the sulphate of soda cannot arise from its debilitating effects, since it has been found serviceable when the previous depletion has been great, the strength much exhausted, and the system has evidenced symptoms of direct debility. Perhaps time will elucidate its mode of operation, and some general principles may be developed that may be applied to advantage in restraining ordinary hemorrhages; but reasoning upon what has been discovered to be useful in idiosyncracies, and applying it to the general

constitution of human nature, must certainly be vague and productive of occasional evil in every case, however, a doubtful remedy is preferable to leaving the patient to his fate. The sulphate of soda has constantly succeeded when administered, but the prescription being in the possession of the Shepard family the descendants of Smith, and the cases that have been attended by physicians not being very numerous, it is impossible to ascertain the various states of the system in which it has been given, or to form any correct conclusions respecting its manner of acting. No experiments have been made on the blood to discover if any or what changes take place in it.

It is a surprising circumstance that the males only are subject to this strange affection, and that all of them are not liable to it. Some persons, who are curious, suppose they can distinguish the bleeders (for this is the name given to them) even in infancy; but as yet the characteristic marks are not ascertained sufficiently definite. Although the females are exempt, they are still capable of transmitting it to their male children, as is evidenced by its introduction, and other instances, an account of which I have received from the Hon. Judge Livermore, who was polite enough to communicate to me many particulars about this subject. This fact is confirmed by Drs. Rogers and Porter, gentlemen of character residing in the neighbourhood, to whom I am indebted for some information upon this curious disposition. When the cases shall become more numerous, it may perhaps be found that the female sex is not entirely exempt, but, as far as my knowledge extends, there has not been an instance of their being attacked.

The persons subject to this hemorrhagic disposition are remarkably healthy, and, when indisposed, they do not differ in their complaints, except in this particular, from their neighbours. No age is exempt, nor does anyone appear to be particularly liable to it. The situation of their residence is not favourable to scorbutic affections or disease in general. They live, like the inhabitants of the country, upon solid and nutritious food, and when arrived to manhood, are athletic, of florid complexions, and extremely irascible.

Dr. Rush has informed me, he has been consulted twice in the course of his practice upon this disease. The first time, by a family in York, and the second, by one in Northampton county, in this state. He likewise favoured me with the following account, which he received some years since from Mr. Boardley, of a family in Maryland, afflicted with this idiosyncrasy.

"A. B. of the State of Maryland, has had six children, four of whom have died of a loss of blood from the most trifling scratches or bruises. A small pebble fell on the nail of a forefinger of the last of them, when at play, being a year or two old; in a short time, the blood issued from the end of that finger, until he bled to death. The physicians could not stop the bleeding. Two of the brothers still living are going in the same way; they bleed greatly upon the slightest scratch, and the father looks every day for an accident which will destroy them. Their surviving sister shows not the least disposition to that threatening disorder, although scratched and wounded. The father gave me this account two days since, but I was not inquisitive enough for particulars."

It was Schönlein, who is also remembered for the variety of purpura which bears his name, who suggested that this disorder should be called hæmophilia.

A. H. T. R.-S.

(To be continued.)

THE ADVENTURE OF THE PLATINUM BLONDE.

(With apologies to the late Sir Arthur Conan Doyle.)

(Concluded from p. 173.)

I slept soundly, and next day devoted the morning, as usual, to my practice. Shortly after lunch a frantic ring at my bell heralded Mrs. Hudson, very red and agitated.

"Oh, Dr. Watson," she said, "I had to get out of the kitchen window to get 'ere; its about Mr. 'Olmes."

"What about him?"

"He's being beseeched."

"What?"

"Besearched."

"Talk sense, woman; what the deuce do you mean?"

"He's locked up and can't get out of the attic."

"Oh! besieged you mean?"

"Yes, that's it; that gentleman he 'as staying with 'im is sitting in the study or on the stairs and 'as got the key. I found him shouting at Mr. 'Olmes through the keyhole this morning asking for 'is trousis. And Mr. 'Olmes, 'e shouts out 'No!' and tells me through the back winder that if I go for the police or tell anybody he'll 'arf kill me. But I 'ad to call and see you, I was so put about."

"All right," I said, "you go back, and if Mr. Holmes wants any help he will soon ask for it."

I pondered upon this strange turn affairs had taken, but as luck would have it I had a difficult and anxious afternoon, and only had time to snatch a hurried cup of tea before my evening surgery. I had rung my bell many times and each ring brought in another patient, until I feared the stream would never cease. I rang the last time with no response and had begun thankfully to lock my desk when my consulting-room door opened and in came Lady Yvonne. I looked at her apprehensively.

"Let me see," I said, "your bag is bulging, due no doubt to a bag of chocolates; you have been eating too many and have got toothache or indigestion."

"That FOOL Holmes!" she exclaimed. "I went round to collect the letters and the landlady told me that Curtis had turned the tables on him."

"Well, Holmes knows what he is doing."

"I must have those letters and you must help me."

I shook my head. "You don't know Sherlock Holmes; he says he doesn't want help and I am sure he can deal with the matter himself, he will send for me if he wants me."

"Do you mean to say you are going to leave it there?"

"Yes."

"What about our agreement?"

"Agreement your grandmother! I'm acting in your interests."

"I thought you might be obstinate," said she, and opening her handbag, she removed the bulge, which proved to be, not a bag of chocolates, but a very useful-looking revolver.

"This makes no noise, my dear Watson, and I am quite a fair shot," she remarked; "please say you will come and help me or I shall have to show you what I can do."

"Look here, my lady," I said, "we must wait until it is dark and nobody is about."

"All right. What time?"

"Two a.m. would do—the only possibility is that Curtis might commandeer another car and give chase. There is a garage at the back."

"If we see another likely car we must disable it. I will call for you here."

I dined, then went into my garage and produced a large coil of strong rope, some string, which I tied to it, and on the free end of the string a leaden weight. These I placed ready in my car. I took no firearms, but a useful-looking club. Punctually at a quarter to two Lady Yvonne drove up. I led the way, driving my own car; the streets were deserted, a mist had arisen, and with engines running quietly we drove down Baker Street, under an archway, and came to rest behind Holmes's house. The situation favoured my purpose, for across the yard was a tall building formerly a warehouse. We stood below Holmes's attic, and after several low whistles I gave up the attempt to attract his attention. Her ladyship, however, was not so easily defeated, and putting both index fingers in her mouth, she took a deep breath, and gave vent to a piercing whistle which would have done credit to a railway engine. The attic window lit up and Holmes's head appeared, seen very dimly in the mist.

"Have you got them?" called my lady softly.

"Yes," came through the gloom.

"Drop them, then."

"Not yet. I am not finished with my lodger yet."

"Confound the man," said her ladyship. "What's the matter with the fool now?"

"He wants to deliver it in person—he is very conscientious," I explained.

"Pig-headed I call it. What can we do—smoke him out?"

"We don't want the fire-brigade here; wait a minute," and taking my rope from the car I lifted up a heavy grating which gave access to the basement of the warehouse. Slithering down, I landed on my back on the floor, which was covered with a thick layer of green slime. I felt my way across the dark cellar to the stairs, and went up until I arrived outside on a small platform formerly used for hoisting goods to the top floor. Holmes's window was directly opposite; the light was out. I hurled my weight across; it smashed the window and I felt the string being drawn across. The rope followed, and in a few seconds we had each made our end fast, and had a strong but slender bridge connecting us. I looked down and saw Lady Yvonne closing the bonnet of my car, no doubt after making some adjustment. She was a thoughtful girl at bottom. But now I saw a figure gingerly put forth one leg, and after some difficulty grasp the rope with his hands and feet. He was now upside down and crawling slowly towards me. His clothing, always odd, seemed doubly so until I saw he had a pair of trousers in his teeth. Laboriously he came, watched by two pairs of anxious eyes, and now he was half-way across; when too near to be comfortable I heard the blast of a police whistle, Holmes stopped.

"Drop it," called Lady Yvonne in desperation. Holmes shook his head and the trousers like a dog worrying the hearth-rug.

"Very well," she said, and produced her revolver. Taking careful aim she pressed the trigger; a bullet whistled past my friend's ear; another grazed his scalp, and with an involuntary grunt he dropped the trousers. I was just about to fling an old sack down on the fair-haired one when she saw me, and with what I acknowledge was a brilliant shot she lodged a bullet in my left deltoid muscle. She hastily picked up the trousers, jumped into her car, and rapidly gathering speed just reached the exit from the yard as two policemen ran in. Scattering them to right and left she was gone like a flash; she had no number plates and no lights. They ran after her blowing their whistles as they went. We were as yet undiscovered. Holmes had just begun to move when the face of Curtis appeared at the opposite window. We stared at one another for a few seconds; then he shook his fist at us and disappeared. Holmes reversed his direction and made for the attic. I hurried down to the basement and found I was locked in. Her ladyship had let down the grating. I managed to force open a small window and emerged in the yard. Running round to the front I found the door wide open—Curtis had fled.

"Go after her in your car," shouted Holmes from behind the attic door, "she will be heading south."

I ran to my car, then stopped short. The tyres were all flat, the petrol tank and radiator had been emptied; I opened the bonnet and found the wires had been cut and entangled; as I raised my head from the bonnet I found myself looking into the dazzling light of a policeman's lantern.

"You'd better come along with me to the station," he said; "I saw you crawling out of that there window—now come on!"

I went, seeing that it was useless to argue. At the station I was charged with being a suspected person on enclosed premises with intent to commit a felony.

"Nonsense," I replied indignantly. "I had been seeing my friend Mr. Holmes, and coming across the yard I fell down the grating, which was raised; I intend

to write a protest to the papers about the negligence of the police in allowing such a dangerous thing."

The sergeant rubbed his chin.

"Yes, doctor, but what about that there car of yours—tyres all flat, no petrol, no water?"

"What about it indeed? It seems any vandals can disable a doctor's car under the very noses of the police without being disturbed; that will also appear in my letter."

"Well, just wait a bit and I'll telephone Mr. Holmes."

I was taken to the cells and locked up. After a delay of about half an hour I was brought back.

"It's all right, Dr. Watson," said the sergeant; "Mr. Holmes has confirmed what you said; I am sorry for this inconvenience."

"Don't apologize," I replied, whereupon, business being slack, he took me into his little den, where we toasted each other in a stiff whisky. We parted on the doorstep.

"About that there letter?" said he.

"That there letter has been drowned in whisky," I said; "Good night."

I went home and applied a dressing to the puncture in my shoulder. I went to bed to dream of her ladyship driving me in her car along a tight rope and shooting at pork pies which had wings and were swarming around us in scores. Finally I said "Eh" in a loud voice, whereat they all disappeared, my lady seized me by the shoulder and I awoke with a stabbing pain, due to the fact that I had been lying on my injured limb. Of Holmes I heard nothing for two days. On the third he came in to breakfast with me, it was a delightfully warm day and we sat near the open window. I asked about his examination.

"I spent all the morning trying to find traces of Curtis, but he has escaped me; consequently I missed my examination, which was at nine o'clock."

"I lost the girl," I said; "I am very disappointed about it."

"Now after you left us on the bridge, things went very well; I rescued Curtis, and explained that you were rather unreliable and given to practical joking. He was all the more anxious to get to Baker Street and dry his clothes. There, however, he refused my offer to press his trousers, but stood and dried them before the fire. My next plan was to encourage him to drink heavily, then recover the letters when he was asleep. But when I entered his room later to my dismay I found him asleep in bed with his trousers on. I began to remove them, but they got caught around the ankles, and after a particularly strong tug I pulled him out on to the floor. He woke up and we had a fierce struggle. At last he tripped over the bed-post and I managed to tear off the trousers and raced up with them to the attic. He followed so closely that he was able to lock me in before I could snatch the key. I could not signal, as this would have attracted notice and given the show away. Curtis spent his time in my room or on the stairs, threatening all sorts of violence one minute and offering empty bribes the next."

"But when we came, why did you not throw down the trousers?"

"For all I knew Curtis was watching from the landing window; he could easily have overpowered both of you—I don't suppose you had a revolver with you?"

"Lady Yvonne had, and she is a good shot; the X-ray shows a small bullet embedded in my muscle; as it is quiescent I do not propose to have it removed."

We fell silent, and Holmes, who can eat, smoke and drink all at once, had just filled his mouth with hot coffee when a large object came hurtling through the window, hit him on the side of the face and knocked his pipe out of his mouth, which dragged both his plates of false teeth out and broke them; some of his coffee went down his larynx and he began coughing as if he would choke. I heard Lady Yvonne's clarion hoot in the distance. I ran to the parcel and opened it. Inside was a smaller one addressed to me. I hurriedly stowed it away. The larger one was a huge pork pie addressed to Holmes, but as he had no teeth he handed it to me and hurried off to see his dentist. It was a good pie.

My parcel contained two hundred and fifty guineas in bank-notes, a signed photograph and a beautiful silver cigarette case. I opened it and found a lock of fair hair faintly perfumed with "Lily of the Valley". Inscribed inside in a facsimile of her own handwriting was "To my darling Watson, with all my love from Yvonne."

I gave Holmes half my fee. He has not yet given up the search. If anybody wishes to know which is the best theatrical performance to see he can do no better than call for advice at Baker Street, for Holmes is an authority on them. He haunts all the theatres, and attends every manager's office where girls are assembled for approval or "auditions" as they are called. Moreover he sits in the front row of the stalls with a pair of field-glasses and scans intently every girl on the stage, whether dark or fair.

I know for a fact that this is so, for the other night Yvonne and I sat together behind him in the stalls and we saw him at it.

F. W. J. W.

ABERNETHIAN SOCIETY.

REPORT FOR SUMMER SESSION, 1933.

THE Summer Sessional Meeting was held in the Medical and Surgical Theatre on Thursday, June 15th, the President, Dr. Leishman, being in the Chair. The minutes of the previous meeting having been read and approved, the PRESIDENT introduced Prof. A. H. Burgess, who then delivered his address on "Stone-cutters and Stone Crushers" to the Society.

Lithotomy and lithotrity were taken separately, the details and stages of the history of each operation being each fitted together to form a complete picture of absorbing interest. Both operations from their inception had been removed from the sphere of medical art, and left largely to the quacks, from among whom stands out pre-eminently Frère Jacques, who thought of nothing but the good of his patients, and gave all his profits to the poor. On the other hand, Rau, a surgeon, succeeded in amassing a large personal fortune. He himself practised a method (that of Frère Jacques) far in advance of the inferior and more dangerous method which he taught to his students, and thus not only prostituted medical etiquette, but also was responsible indirectly for hundreds of deaths.

The modern developments of these two operations and their reabsorption into surgery as legitimate procedures brought the address, which had been illustrated throughout by a series of excellent and unique slides of historical instruments and techniques, to a close.

Mr. GIRLING BALL cordially welcomed Prof. Burgess to St. Bartholomew's Hospital, and proposed a vote of thanks for the admirable example of how operations have developed, both lithotomy and lithotrity being exceedingly difficult surgical manipulations. After Mr. CAPPER had seconded the vote of thanks, Prof. BURGESS briefly replied, and closed a very successful evening (despite the unavoidable absence of the Nursing Staff).

A meeting of the Society was held in the Morbid Histology Laboratory on Thursday, June 29th, when, after the minutes of the previous meeting had been read and signed, the President, Mr. A. J. OWSTON, introduced Dr. CANTI, who then proceeded with his cinematograph demonstration and address on "The Culture of Living Tissues *in vitro*".

After a brief outline of the inception and history of the subject of tissue culture, Dr. Canti gave a few examples of the difficulties with which earlier workers had to contend.

The kinematograph was first used in the studies of such living cultures five or six years ago, when Strangeways sought to evade the labour of making a permanent record of cell changes in tissues *in vitro* by utilizing photographic methods. After a few technical details had been shown, the first film, demonstrating the varied activities of normal tissue-cells under culture, was given; cell division, phagocytosis, and high-power views of fibroblasts under dark-ground illumination to show the finer details of cell structure, being succeeded by the reactions of motile and sessile normal and cancerous cells under the influence of unscreened irradiation with radium.

After a brief explanation of a few points arising out of the films which he had shown, Dr. Canti then proceeded to his final film, which dealt with the embryological aspect of applied kinematography. This latter demonstration included the differentiation of the embryonic tissues in the chicken, and especially the osteogenesis of the bones of the hind limb from the stage of precartilaginous condensation to that of actual ossified elements.

Dr. ROBB SMITH then proposed the Society's vote of thanks to Dr. Canti for an extremely interesting and instructive evening. Dr. HALL SMITH seconded the vote of thanks, which was carried with applause.

After Dr. CANTI had appealed for more research workers in this subject of tissue culture, the meeting stood adjourned.

A. INNES.
A. H. HUNT.

STUDENTS' UNION.

CRICKET CLUB.

Encouraged by much brilliant sunshine, the Hospital cricketing activities of the past month have been considerable, and the issue has been a general intimidation of bat by ball. I think one is justified in stating that none of our batsmen could be dubbed "crease-shod" in their ventures at the wicket.

1ST XI.

ST. BARTHOLOMEW'S HOSPITAL *v.* TIMES MIDWEEK C.C.

Played on Wednesday, June 21st. Won by 46 runs.

This game ran evenly. Batting first we made 157 runs, Dolly contributing a sound 42. Smart catching and good fielding resulted in our opponents being ousted for 111 runs; Mundy 4 for 34 and Dransfield 3 for 9 shared the bowling honours.

ST. BARTHOLOMEW'S HOSPITAL *v.* GUY'S HOSPITAL.

2nd Round Cup-tie.

Played on Thursday, June 22nd. Won by 6 wickets.

This day proved showery, but there was little curtailment of play, and we were gloriously successful by 6 wickets.

Guy's opened very carefully on a fast wicket, and rather laboriously compiled a total of 177 runs. Mundy and Nunn bowled with vigorous consistency throughout, and the fielding was both brilliant and formidable. We lost our 1st wicket with no runs scored, but then Morison found successively useful partners in Boney, Wade and Wedd, and completed a brilliant innings of 99 before he was bowled by a very good ball. A rare innings in one's first cup-tie! We passed the Guy's total with 6 wickets to spare.

Scores:

GUY'S HOSPITAL.		ST. BARTHOLOMEW'S HOSPITAL.	
Brown, run out	36	Boney, c Foster, b Doherty	23
Eddy, c and b Wedd	17	Dolly, b Lowery	0
Wright, b Nunn	26	Morison, b Whitridge	99
Doherty, st Bamford, b Wedd	23	Wade, c Hill, b Doherty	19
Hill, b Boney	16	Wedd, not out	33
Starun, lbw, b Nunn	2	Nunn	Did not bat.
Ridsdale, b Mundy	4	Wilson	
Whitridge, b Mundy	0	Dransfield	
Alexander, b Mundy	12	Anderson	
Lowery, not out	13	Mundy	
Foster, c and b Mundy	0	Bamford	
Extras	22	Extras	4
Total	177	Total (for 4 wickets)	178

Bowling: Mundy, 4 for 41; Nunn, 2 for 25; Wedd, 2 for 36; Anderson, 0 for 13; Boney, 1 for 15.

ST. BARTHOLOMEW'S HOSPITAL *v.* R.N.C., GREENWICH.

Played on Saturday, June 24th, at Greenwich. Won by 57 runs.

This victory, achieved by a depleted side, was very creditable. Consistent scoring by all enabled us to make 185 runs, whilst Moss, of the opposition, took 7 wickets for 58 runs. Nunn and Wedd, in taking 4 wickets apiece, bowled very commendably.

ST. BARTHOLOMEW'S HOSPITAL *v.* OLD PAULINES.

Played on Saturday, July 1st, at Thames Ditton. Won by 129 runs.

We batted first, and Wheeler gave a delightful exhibition in compiling a very care-free century in our total of 284 runs. He received adequate support from Anderson (42 runs) and Maidlow (28 not out), but altogether showed a superb individuality. With Dolly taking 6 wickets for 50 runs, the Paulines could muster but 155 runs, and we won with ease.

ST. BARTHOLOMEW'S HOSPITAL *v.* ARCHITECTURAL ASSOCIATION.

Played on Saturday, July 8th, at Elstree. Won by 61 runs.

Again did individual success dwarf the outcome, for Wade, out of a total of 141 runs, made a characteristically forceful 93 not out, and that batting as No. 4!

ST. BARTHOLOMEW'S HOSPITAL *v.* SHOEBURYNESS GARRISON.

Played on Saturday, July 15th, away. Lost by 7 wickets.

It was very surprising to see ourselves dismissed for a mere 119 runs on such a perfect wicket—our previous success had apparently reassured us against such an occurrence, but we failed because of an inability to tackle some crafty slow bowling. Gabb and Mundy alone batted without restraint, and the latter was concerned in a last-wicket stand of 40 runs. The Garrison put on 52 runs for the first wicket, their opening batsman, Capt. Glover, went on to complete an orthodox 93, and the whole side totalled 224. Dransfield, with 4 for 31, had most success of the ten bowlers tried. Perhaps we might add that some of our fielding was quite below standard, particularly in the matter of slip-catching—an art dependent on concentration.

ST. BARTHOLOMEW'S HOSPITAL *v.* ST. ANN'S HEATH.

Played on Wednesday, July 19th, at Virginia Water. Won by an innings.

In this game a further demonstration of our individual talent was forthcoming, and personal success ran rife. In dismissing our opponents for 56 in their 1st innings credit must go to Mundy, with 6 wickets for 18 runs, and support from Wedd with 4 for 33.

Our innings was a magnificent example of flexible batsmanship—in the hour before tea our score advanced by no less than 200 runs, our best ever! Most of our men made runs—Wilson (61), Bamford (31 not out), etc.—but all was eclipsed by Wedd's 63 runs in about 17 minutes. Rarely has the latter been so vigorous, and the three magnificent "sixes" he hit exemplified his colossal hitting powers. St. Ann's in their second innings managed to make 101 runs.

2ND XI.

ST. BARTHOLOMEW'S HOSPITAL *v.* UNIVERSITY COLLEGE.

Played on Wednesday, June 21st, at Winchmore Hill. Won by 60 runs.

We batted first and totalled 127 runs (for 9 wickets declared). Evans (37 not out) and Dias (31) showing a bright repertoire of strokes. Crosse and Howell both bowled with skill, and the opposition made but 69.

ST. BARTHOLOMEW'S HOSPITAL *v.* GUY'S HOSPITAL.

Played on Thursday, June 22nd, home. Won by 3 wickets.

2nd Round Cup-tie.

With a hard turf and shining sun one would have expected high scoring, but Guy's, who batted first, totalled but 98. This was in no small way due to accurate bowling by Hayes (5 for 27), and Capper (2 for 11), and some fast fielding. Slowe (29), Hayes (21) and Crosse (21) enabled the score to be passed with 7 wickets down. Capper's leadership was altogether inspiring.

ST. BARTHOLOMEW'S HOSPITAL *v.* WOODCUTTERS.

Played on Saturday, July 1st, home. Drawn.

Woodcutters, batting first, made 167 runs, they enjoyed escapes, but the pace was very timid. In taking 5 wickets for 58 runs Baker bowled really well, whilst of our batting total of 126 for 9, Jenkins's 27 not out deserves most mention. Howell, too, made an attractive 25.

ST. BARTHOLOMEW'S HOSPITAL *v.* ST. PHILIP'S NOMADS.

Played on Saturday, July 8th, home. Won by 84 runs.

This was a new fixture, and we were pleased to beat the opposition so comfortably. Batting first, our runs came quickly, and we were able to declare with 7 wickets down at a total of 148 runs. Capper, Dias and Crosse again showed welcome orthodoxy in stroke play. The Nomads could accumulate but 64 runs and we ran out easy victors.

ST. BARTHOLOMEW'S HOSPITAL *v.* R.A.F. (NORTHOLT).

Played on July 12th, home. Lost.

After a very late start we opened our innings, but our batting talent was non-responsive, and though the bowling rather lacked guile, we made but 97, Dransfield contributing 33 of these. Our score was passed with but 4 wickets down, and so our opponents won easily, though the display of batsmanship was hardly in the classical style.

ST. BARTHOLOMEW'S HOSPITAL *v.* K.E.B.

Played on Saturday, July 15th, home. Lost.

We had defeated our visitors somewhat easily earlier in the season, and so we were surprised to be trounced so completely by 10 wickets.

Our declaration of 106 for 9 (Wedd 54) was treated with scant respect, and the score passed very summarily by the opposition's opening batsmen. This is our heaviest defeat in several seasons.

ST. BARTHOLOMEW'S HOSPITAL *v.* HORNSEY GRANGE.

Played at Saturday, July 22nd, at Winchmore. Won.

Providing adequate contrast to our previous dismal failure, this game was a further demonstration of runs scored at breakneck pace against the clock.

Declaring at the tea interval with a score of 168 for 3 wickets, our opponents left us 1¾ hours in which to get the runs: we achieved that object with 15 minutes in hand, expressive enough of the scoring rate.

Their opening pair put on 97 runs, something like nine chances went a-begging, for slackness in the field was very rife. Cup-ties will produce no recurrence of this we hope. Our start was even more impressive, Wade (54) and Morison (47) putting on 103 for the first wicket in a merry bout of hitting. Both showed flexible wrist-play and perfect timing, and the runs came very quickly. Four wickets then fell cheaply, but a hectic innings of 45 runs not out by Mundy settled the issue.

Both the St. Ann's match and the above game illustrate our latent ability to make runs quickly, if required. Surely this "devil may care" cricket is to be commended in a game which, though rarely dull, is sometimes tending to depress these faster scoring rates. It is with anticipation, then, that both teams enter the Semi-final cup-ties for the second successive year.

C. M. D.

LAWN TENNIS CLUB.

It is gratifying to be able to write that the Hospital again reached the Final of the Inter-Hospital Cup and were again opposed to St. Thomas's. On Wednesday, June 21st, we played the semi-final round against the combined Charing Cross and Royal Dental Hospitals, and this we managed to win quite easily, only losing one match out of seven in the doubles, and one out of three in the singles.

The Final was played at Wentworth Club on Tuesday, July 18th, in glorious weather. St. Thomas's are an extremely strong side and we were very badly beaten. We lost all the singles, and could only win one out of five doubles played. Two of the singles, however, produced quite good matches. Latter won the first set in his match with Buzzard at 12–10, but after this he seemed quite exhausted and went down 6—3, 6—1 in the next two. Kingdon and Van Meurs had a great struggle for the first set, but eventually Kingdon lost it at 8—6, and then the next went to Van Meurs at 6—2. However, in spite of all this we were no match for them. We have been in the Final for many years running now, but have never been good enough to win.

The season has, on the whole, been quite successful. The tournament has now reached its final stage, and in the singles W. K. Frewen and L. Heasman are opposed to each other, and in the doubles R. C. Witt and J. W. B. Waring will play L. Heasman and D. Fearnley. In the singles the winner will receive a racquet presented by R. C. Fillingham & Co., and a money prize; the runner-up will also receive a money prize, and similarly the two final pairs in the doubles.

This year many new and perhaps better fixtures have been played, and it is hoped that next year the fixture-list will be still further improved, and that we shall not only reach the Final of the Cup matches, but accomplish what we have dreamt of for so long and win the Cup.

The following are the results of the matches played since the last issue of the JOURNAL. Excluding Cup matches the 1st VI have altogether won 8 and lost 4, while 9 have been scratched. The 2nd VI have won 4, lost 1, and 7 have been scratched, and the 3rd VI have won the only match they have played out of 5.

R. C. W.

1ST VI.

Saturday, June 17th, *v.* St. George's Hospital, at Winchmore. Won, 6—2.

J. R. Kingdon and J. R. Blackburne beat Miller and Jones-Davies, 6—2, 6—3; beat Barwell and Davies, 7—5, 6—1; beat Binning and Hartman, 6—1, 6—1.

O. A. Savage and M. L. Nairac beat Barwell and Davies, 6—4, 6—3; beat Binning and Hartman, 6—0, 6—1.

R. L. Benian and D. Levine beat Miller and Jones-Davies, 6—1, 6—4; lost to Barwell and Davies, 1—6, 6—1, 2—6; lost to Binning and Hartman, 3—6, 1—6.

Wednesday, June 21st, Cup-tie semi-final *v.* Royal Dental and Charing Cross. Won, 8—2.

Singles:

J. R. Blackburne beat W. D. Westoby, 6—3, 8—6.
J. R. Kingdon lost to K. H. Coulton, 3—6, 6—3, 4—6.
R. C. Witt beat J. C. Monchanoa, 6—3, 6—2.

Doubles:

K. A. Latter and O. A. Savage beat R. E. Lander and W. D. Westoby, 6—2, 7—5; beat K. H. Coulton and J. C. Monchanoa, 6—4, 6—0; beat C. F. Ballard and T. Kaufman, 6—1, 6—2.

J. R. Kingdon and J. R. Blackburne beat Coulton and Monchanoa, 6—1, 6—2; beat Ballard and Kaufman, 6—0, 6—3.

R. C. Witt and W. K. Frewen lost to Lander and Westoby, 3—6, 3—6; beat Ballard and Kaufman, 6—2, 6—2.

Wednesday, June 28th, *v.* Staff College, at Winchmore. Won, 5—4.

J. G. Nel and L. M. Curtis beat Dimoline and Oliver, 6—4, 7—9, 6—4; lost to Col. Browning and Burford, 3—6, 3—6; beat Goldie and Hutcheon, 6—2, 6—3.

A. Innes and R. H. Dale beat Dimoline and Oliver, 4—6, 6—2, 6—4; lost to Col. Browning and Burford, 5—7, 2—6; beat Goldie and Hutcheon, 6—3, 6—3.

R. L. Benian and J. R. Royston beat Dimoline and Oliver, 6—2, 4—6, 6—1; lost to Col. Browning and Burford, 3—6, 2—6; beat Goldie and Hutcheon, 6—0, 6—4.

Saturday, July 8th, *v.* Bank of England, at Winchmore. Lost, 3—6.

W. K. Frewen and B. Thorne-Thorne lost to Berry and Gartan, 4—6, 6—0, 3—6; lost to Barnett and Bonavia, 2—6, 2—6; beat Warne and Barno, 4—6, 6—3, 6—4.

J. R. Kingdon and J. G. Nel lost to Berry and Garton, 3—6, 2—6; lost to Barnett and Bonavia, 4—6, 7—5, 3—6; beat Warne and Barno, 6—4, 6—3.

J. H. Hunt and O. A. Savage lost to Berry and Garton, 4—6, 4—6; lost to Barnett and Bonavia, 1—6, 6—2, 2—6; beat Warne and Barno, 6—1, 7—5.

Wednesday, July 12th, *v.* Westminster Hospital, at Clapham. Won, 5—4.

Tuesday, July 18th. Final Cup-tie *v.* St. Thomas's, at Wentworth Club. Lost, 10—1.

Singles:

K. A. Latter lost to E. M. Buzzard, 12—10, 3—6, 1—6.
J. R. Kingdon lost to D. P. Van Meurs, 6—8, 2—6.
R. C. Witt lost to F. D. M. Flowerdew, 6—3, 1—6, 1—6.
B. Thorne-Thorne lost to P. T. Liem, 3—6, 4—6.
J. W. B. Waring lost to H. S. Sharp, 5—7, 3—6.
W. K. Frewen lost to R. D. McKelvie, 1—6, 6—4, 1—6.

Doubles:

Latter and Kingdon lost to Buzzard and Van Meurs, 7—9, 5—7; beat McKelvie and Liem, 6—1, 6—1.

Witt and Waring lost to Buzzard and Van Meurs, 2—6, 2—6; lost to Sharp and Flowerdew, 4—6, 4—6.

Thorne-Thorne and Frewen lost to Liem and McKelvie, 5—7, 6—1, 5—7.

2ND VI.

Saturday, June 10th, *v.* King's College Hospital, at Denmark Hill. Won, 6—3.

R. H. Dale and W. P. Shemilt lost to 1st pair, 8—6, 5—7, 4—6; lost to 2nd pair, 6—3, 7—9, 0—6; beat 3rd pair, 6—3, 5—7, 6—3.

A. R. Pope and G. Blackburn beat 1st pair, 6—3, 4—6, 6—3; beat 2nd pair, 6—2, 6—3; beat 3rd pair, 6—4, 6—4.

L. M. Curtis and R. L. Benison lost to 1st pair, 4—6, 1—6; beat 2nd pair, 11—9, 6—0; beat 3rd pair, 7—5, 6—4.

Saturday, July 1st, *v.* University College Hospital, at Perivale. Won, 8—1.

THE ST. BARTHOLOMEW'S HOSPITAL GOLFING SOCIETY.

The St. Bartholomew's Hospital Golfing Society held their Sixth Summer Meeting at Walton Heath, on Thursday, June 29th. The hospitality of the Club was extended to us through the kindness of Lord Riddell. The weather was perfect, and thirty members took part in the competitions. Twenty-four stayed on for supper, and all enjoyed an excellent day's golf. The scores returned were better than in the previous year, and we were glad to welcome several newly qualified members.

The results were as follows:

Gordon-Watson Cup.

K. F. D. Waters	4 up.
Sir Milsom Rees	1 up.
J. N. Groves, E. F. S. Gordon, J. G. Milner, J. V. Sparks	All square.

Best score for Last Nine Holes.

J. V. Sparks	1 up.
J. W. D. Buttery, T. H. Just, K. F. D. Waters, R. S. Corbett, H. G. Baynes	All square.

Sealed Holes.

Sir Milsom Rees	3 up.
R. Coyte, K. F. D. Waters, R. S. Corbett	2 up.

Foursomes.

K. F. D. Waters and R. S. Corbett	1 up.
J. W. D. Buttery and J. G. Milner	1 up.

Best Score for First Nine Holes.

J. W. D. Buttery and J. G. Milner	2 up.
S. L. Higgs and R. Coyte, J. N. Groves and W. Wilson	All square.

Sealed Holes.

J. W. D. Buttery and J. G. Milner	2 up.
J. Parrish and J. Spencer	All square.

RIFLE CLUB.

In spite of the success met with on the Miniature Range during the winter months the standard of shooting at Bisley this year has been rather below the average of recent years. The Club, however, has several young and promising members and next year should see much improvement.

In the Astor Cup, which was shot on May 27th, we were represented in the United Hospitals team by B. C. Nicholson and J. Shackleton Bailey. Their scores were 58 and 65 respectively out of a possible 70—a very good effort considering the appalling conditions under which the match was shot.

ARMITAGE CUP.

Competed for on June 7th, 14th and 21st.

1st Stage:

	200 yds.	500 yds.	600 yds.	Total.
J. Dalziel	32	32	31	93
J. Shackleton Bailey	29	31	31	91
K. F. Stephens	31	29	30	90
B. P. Armstrong	31	29	27	87
J. E. Underwood	25	30	31	86
I. R. Davies	31	29	24	84
Grand total				533

Total scores:

St. Mary's	553
Guy's	540
London	534
St. Bart.'s	533
St. Thomas's	527

2nd Stage:

	200 yds.	500 yds.	600 yds.	Total.
J. Shackleton Bailey	31	34	30	95
B. P. Armstrong	31	33	31	95
J. Dalziel	33	31	30	94
J. E. Underwood	30	34	29	93
K. F. Stephens	31	25	27	83
I. R. Davies	25	27	29	81
Grand total				541

Total scores:

Guy's	1097
St. Mary's	1080
London	1089
St. Bart.'s	1074
St. Thomas's	1047

3rd Stage:

	200 yds.	500 yds.	600 yds.	Total.
J. Shackleton Bailey	33	34	29	96
J. Dalziel	34	31	31	96
K. F. Stephens	28	33	29	90
J. E. Underwood	32	30	26	88
D. O. Davies	33	29	25	87
B. P. Armstrong	28	27	31	86
Grand total				543

Final total scores:

Guy's (winners)	1674
St. Mary's	1658
London	1620
St. Bart.'s	1617
St. Thomas's	1567

The Benetfink Challenge Cup, awarded for the best aggregate score in the Armitage Cup, has been won by J. Dalziel with a score of 285.

In the United Hospitals Prize Meeting, held at Bisley on Wednesday, June 21st, the following secured individual prizes:

	Score (possible 35).
(1) J. Dalziel, 1st prize at 200 yards	34
(2) K. F. Stephens, 1st prize at 300 yards	34
(3) J. Shackleton Bailey, 2nd prize at 500 yards	34

UNITED HOSPITALS CHALLENGE CUP.

Competed for at Bisley on Monday, July 17th:

	Score.
(1) St. Mary's (winners)	473
(2) St. Thomas's.	462
(3) Guy's	458
(4) London.	457
(5) St. Bart.'s	453

CORRESPONDENCE.

COLLEGE APPEAL FUND.

To the Editor, 'St. Bartholomew's Hospital Journal'.

DEAR SIR,—I had the pleasure of sitting next to my old friend, Mr. Girling Ball, when he presided at the Ninth Decennial Contemporary Club Dinner; his optimism, wonderful keenness and far-seeing vision so impressed me that I had the unhappy feeling of becoming an "outcast and traitor" to my old School if I refrained from supporting the great scheme, on which he has set his heart, and to which he is devoting his time and energy.

During the past few months I confess to having received many letters of appeal from him, but these have found their way into the receptacle so handy for such literature, and yet I did feel guilty at times that I was not supporting his efforts.

If the Dean of the College could interview personally all old Bart.'s men, the sum for which he is asking would, I feel confident, be quickly over-subscribed, for he possesses such an amazing magnetic power.

I have written and promised Mr. Girling Ball a sum of 125 guineas (spread over five years) if five of my contemporaries at Bart.'s will be willing and happy to make a similar promise before the end of the present year.

I am, Dear Sir,
Sincerely yours,
ERIC E. YOUNG.

Stoneyfields,
Newcastle-under-Lyme,
Staffordshire,
July 18th, 1933.

THE AIMS AND METHODS OF MEDICAL EDUCATION.

To the Editor, 'St. Bartholomew's Hospital Journal'.

SIR,—Criticism is healthy and entertaining, and many of your readers must have enjoyed Dr. Batten's indictment of the Medical Curriculum. Hunting with a pack of hounds appeals to me as a good pastime, and the Medical Curriculum is such an evasive old fox that I would like to join with Dr. Batten in the hue and cry he raises. But when you, Sir, connect Dr. Batten's remarks with an inquiry as to the future of our Medical School "equipped with costly laboratories", etc., etc., it is time for someone to sit up and take notice of this criticism.

To begin with I will not disparage the ideal of a medical student who begins his professional studies "with the trained mind of a classical or mathematical scholar". Or shall we just be content with a medical student who has had a good general education before he embarks on medicine? Let us then follow him in his study of anatomy and physiology when he learns the normal structure and function of the human body. These studies are of outstanding importance to him because he learns about the normal, and will be the better fitted to take an interest in and understand the healthy people who ask his advice when he is qualified. By these studies, too, he learns something of normal variations of structure and function. By his knowledge of such little things as carpal bones he may at some later date be the better able to recognize one that is fractured, and by knowing the normal pigments of urine he may recognize the significance of an excess of one of them, or the presence of a pigment that is not found in normal urine. In addition to the future technical value to be gained by the study of physiology and anatomy, the study of these sciences is of inestimable value in itself. It teaches that accuracy of observation and clearness of thought on which Dr. Batten so rightly lays stress. And in addition scientific study takes the student's mind far beyond materialism into the infinity of things. Let anyone who doubts this read Karl Pearson's *Grammar of Science*, or, if this very Bible of Science seems out of date, let him read such a book as *The New Background of Science* by Sir James Jeans.

Yet Dr. Batten would intrude into this precious period of scientific training (which appears to him "a dull and empty exercise") the study of abnormalities and signs of disease. Time, too, is to be found for research into clinical physiology, whatever that may be. Now it may be distasteful to some, but it is a matter of fact, that the practice of medicine is based on a broad scientific foundation of knowledge. Further, the advance of science will lead to an expansion of this knowledge, and the so-called "ologies" will increase in number and importance. In short, a good scientific training and knowledge is as important in the approach to the study of medicine as is a good general education.

As regards the clinical training of medical students, it *must* be based on what Dr. Batten calls the materialistic conception of disease. Organic disease is of first importance. No lay person is properly equipped by training and knowledge to diagnose tuberculosis, cancer, diabetes, pernicious anæmia, syphilis and the whole host of organic diseases (including subacute combined degeneration of the cord) as is the qualified doctor. It is a bad job to miss an acute appendix, or to overlook phthisis in someone who complains of indigestion. It is a tragedy to fail to recognize a perforated gastric ulcer or intestinal obstruction. Time after time disease stands out beyond personalities. In all sorts of ways it stands out so importantly that the professional attitude of mind which says this is a case of agranulocytic anæmia (to mention a rare disease about which Dr. Batten has made an original contribution to medical literature) is justified. If the medical profession fails to diagnose organic disease the public have nowhere else to turn for help. But if we fail to cure functional disease the public have a host of healers to whom they can go for help, and on some of whom they can, in fact, rely.

Apart from the matter of written examinations, which is too large a matter to take up now, but for which there is no immediate alternative, I think that the real burden of Dr. Batten's complaint is the failure to teach ordinary psychology, and the failure to emphasize the importance of a patient's state of mind. Things have changed a little since Dr. Batten's student days. For instance, there is a demonstrator of radiographic anatomy in the dissecting-rooms. And nowadays patients who are emotionally perplexed and ill in mind and body not uncommonly find a bed in the medical wards. But to demonstrate such cases (mark the word) is difficult. To understand the difficulties of life and living one needs some considerable experience of life and people. It is on this experience, and not on facts supplied by teachers of medicine, that a philosophy of life is based.

In conclusion, I maintain that the teaching of so-called materialistic medicine comes first. It is based even now on scientific principles and knowledge. Science will play a steadily increasing part in the evolution of medicine and in medical practice, whether general or special. The teaching of real psychology and the understanding of emotional tone belongs chiefly to a later stage of education, when experience of life enriched by responsibility, successful accomplishment and especially by failure to achieve, will have rendered the mind mature, and ready to grasp and understand the experience of others. It is idle to pretend that much progress can be made with this part of medical education in undergraduate days.

I am, Sir,
Yours faithfully,
GEOFFREY EVANS.

EARLY ACCOUNTS OF VACCINATION.

To the Editor, 'St. Bartholomew's Hospital Journal'.

DEAR SIR,—May I raise a humble, if belated, protest against the title which you caused to be printed over an account of a case of inoculation with smallpox, on page 111 of your March issue. "An Early Account of Vaccination, 1763," is, in fact, a rather late account of variolation, and the insinuation in the last paragraph at the expense of Jenner's "famous quarto" of 1798 is quite unjustified.

Inoculation, the ingrafting of smallpox matter into patients to furnish an easier way of undergoing the disease, is, in Garrison's words, "as old as the hills", having been certainly practised in China and Africa from time immemorial. It was introduced into England in the second decade of the eighteenth century, the earliest literary reference being in the *Phil. Trans.*, 1717, vol. xxix, where is published a letter on the subject from Timonius, dated Constantinople, December, 1713. Lady Mary Wortley Montague, wife of the Ambassador to the Porte, popularized the method, causing one son to be inoculated in Constantinople in 1718 and a daughter in London in April, 1721. The royal patronage of Princess Caroline was extended first to the theory and, after some trial on condemned criminals and charity children, to its practical application upon her own offspring. At the same time an epidemic in Boston, beginning in May, 1721, aroused the interest of Cotton Mather, and with his stimulation, Dr. Zabdiel Boylston, during the following months and in spite of much medical and lay opposition, inoculated as many as 244 persons.

The popularity of the practice waned after this first peak, to wax again after the publication of Kirkpatrick's tract in London in 1743, and from 1757 to 1767, the period of the account published by you, Robert Sutton alone is said to have inoculated over 2500 persons in England. The case described in the JOURNAL shows no unusual feature. After the then fashionable three weeks of medical preparation, the boy was given a mild attack of smallpox from an inoculated person. The illness and the generalized eruption, typical of variola and rare in inoculated vaccinia, we are spared through the work of Jenner.

A smallpox inoculation story of some local interest awaits narration, of the pamphlet war conducted in the best eighteenth century manner and centred around Pierce Dod, Physician to the Hospital from 1725 to 1754. Allow me here to refer your readers to the real forerunner of Jenner, Benjamin Jesty, a characteristic account of whom was published by Dr. Bett in *St. Bartholomew's Hospital Journal*, 1929, xxxvi, p. 88, and to Dr. A. C. Klebs's article on the early history of inoculation (variolation, as opposed to vaccination) in the *Bulletin of the Johns Hopkins Hospital*, 1913, xxiv, p. 69.

I am,
Yours etc.,
ALFRED W. FRANKLIN.

London, W.;
July, 1933.

REVIEWS.

AIDS TO PATHOLOGY. By HARRY CAMPBELL, M.D., F.R.C.P. 1933. Sixth edition. Pp. viii + 252. Figs. 13. Price 4*s*. 6*d*.

AIDS TO BIOLOGY. By R. G. NEILL, M.A. 1932. Pp. vi + 257. Figs. 27. Price 3*s*. 6*d*. net.

AIDS TO DISPENSING. By A. O. BENTLEY, Ph.C. 1933. Second edition. Pp. vii + 204. Figs. 9. Price 3*s*. 6*d*.

AIDS TO MATERIA MEDICA. By GEORGE NEWNS, M.B., B.S.(Lond.), M.R.C.P.(Lond.), 1933. Price 3*s*. 6*d*. net.

(London: Baillière, Tindall & Cox.)

The use of books which summarize the main facts of many lectures and large text-books is always a matter of controversy. It is, however, in their abuse that the error lies. When much time has been spent in storing haphazard a multitude of definitions, comparisons and classifications, a need is present for some kind of synopsis. To meet this the long Students' Aids Series has been prepared (we find that this series contains nearly fifty members).

Naturally certain of the books fit their subjects better than others, particularly so the *Aids to Pathology*. It is remarkable that the author has succeeded in compressing the whole range of his subject into so small a space. Yet he has presented a book that is as interesting as it is instructive. It is a pleasant surprise to meet such phrases as "that bald sexton, Time", under Hyperpyesis, "a large white kidney makes a large white body", and several other quotations from the classics, medical and otherwise. Especially notable are the chapters on Immunity, the Deficiency Diseases and Carcinogenesis. Everywhere authorities are freely quoted and full statistics given. The clinical viewpoint makes the book an invaluable one.

The second book on Biology, however, is not written solely for the medical student, and thus its scope is limited. Greater stress is laid on botany than the medical curriculum demands. The author is wise in dealing with the rabbit from the point of view of comparative anatomy, with only a short chapter on the frog and dogfish. The matter is arranged so that each section in itself contains a suitable answer to the major examination questions. The diagrams are original and very simple, and the text is clear, important words being picked out in heavy type. Unfortunately there are several errors both in text and in subject—for example: "carpels" for "carpals" several times, and a diagram of the venous system in *Scyllium* where truth has been badly sacrificed for simplicity.

The third book is intended for pharmacists and would be a luxury to the medical student. It deals with the technique and theory of dispensing, with the physical properties of the substances used. As throwing light, however, on a subject that is mysterious to the average student the book would be an inexpensive and useful addition.

The *Aids to Materia Medica*, on the other hand, caters only for the medical student reading for examinations. It is based on the 1932 British Pharmacopœia. After an introduction the various drugs, inorganic and organic, are dealt with, the dose, action and preparations of each being given. The preparations are then grouped, with the drugs placed in order of dosage—a useful aid to the visual type of memory. Finally the drugs are classed according to their action, general and local. There are two appendices, one mathematical, the second a list of the dangerous drugs and their doses, and a comprehensive index.

RECENT BOOKS AND PAPERS BY ST. BARTHOLOMEW'S MEN.

ANDREWES, C. H., M.D. (WILSON SMITH, M.D., C. H. A., and P. P. LAIDLAW, B.Chir.) "A Virus Obtained from Influenza Patients." *Lancet*, July 8th, 1933.

BEATTIE, JOHN, B.Chir., F.R.C.S. "Anæsthesia and Analgesia in Labour." *Lancet*, July 1st, 1933.

COLT, G. H., M.B., B.Ch., F.R.C.S. (and LYALL, A., M.D., M.R.C.P.). "Osteitis Deformans Treated with Parathormone." *British Medical Journal*, July 1st, 1933.

DRURY, E. G. DRU, M.D., B.S.(Lond.), D.P.H. "Psyche and the Physiologists." *South African Medical Journal*, June 24th, 1933.

ECCLES, W. MCADAM, M.S., F.R.C.S. "Recurrent Renal Calculi: Nephrolithotomy Twice on each Kidney in the same Patient." *British Medical Journal*, July 15th, 1933.

FRASER, FRANCIS R., M.D., F.R.C.P. "Toxic Goitre and its Treatment." *Lancet*, July 1st, 1933.

GASK, GEORGE E., C.M.G., D.S.O., F.R.C.S. "The Surgery of the Sympathetic Nervous System." *British Journal of Surgery*, July, 1933.

——— "A Diverticulum of the First Part of the Duodenum." *British Journal of Surgery*, July, 1933.

GROVES, ERNEST W. HEY, M.D., F.R.C.S. "An Improved Pattern of the Revolving Spinal Bed." *British Medical Journal*, July 8th, 1933.

HEALD, C. B., C.B.E., M.D., M.R.C.P. "The Permeability of the Body to Infra-red Rays." *British Medical Journal*, July 8th, 1933.

HERNAMAN-JOHNSON, F., M.D., D.M.R.E. "X-ray Sterilization for Uterine Hæmorrhage. Notes on the After-History of some Cases." *Practitioner*, July, 1933.

HIGGS, S. L., F.R.C.S. "Painful Feet." *Lancet*, July 15th, 1933.

HOSFORD, JOHN P., M.S., F.R.C.S. "Common Fractures of the Lower Limb." *Lancet*, July 1st, 1933.

HUBBLE, DOUGLAS, M.B. "The Influence of the Endocrine System in Blood Disorders." *Lancet*, July 15th, 1933.

KEYNES, GEOFFREY, M.D., F.R.C.S., and TAYLOR, HERMON, M.Ch., F.R.C.S. "A Case of Parathyroid Tumour." *British Journal of Surgery*, July, 1933.

MCCURRICH, H. J., M.S., F.R.C.S. "Common Infections of the Gall-bladder." *Medical Forum*, Vol. I, No. 3.

MARSHALL, J. COLE, M.D., F.R.C.S. "Perforation of the Orbit with an Aniline Pencil." *British Medical Journal*, April 16th, 1932.

——— "Safar's Method for Treatment of Detachment of the Retina by Diathermy." *Proceedings of the Royal Society of Medicine*, April, 1933.

*MAXWELL, JAMES, M.D., M.R.C.P. "Further Reports on the Tuberculin Treatment of Asthma." *British Medical Journal*, December 31st, 1932.

MYERS, BERNARD, C.M.G., M.D., F.R.C.P. "The Feeding of the Newly Born." *Practitioner*, July, 1933.

NORRISH, R. E., F.R.C.S. *See* Woollard and Norrish.

POWER, Sir D'ARCY, K.B.E., F.R.C.S. "Some Early Surgical Cases. I. The Edwin Smith Papyrus." *British Journal of Surgery*, July, 1933.

ROPER, F. A., M.A., M.D., M.R.C.P. "Encephalitis following Vaccination." *British Medical Journal*, July 15th, 1933.

ROSS, J. PATERSON, M.S., F.R.C.S. "Sympathectomy as an Experiment in Human Physiology." *British Journal of Surgery*, July, 1933.

SCOTT, H. HAROLD, M.D., M.R.C.P., D.T.M.&H.(Camb.), F.R.S. (Edin.) (N. HAMILTON FAIRLEY, F.R.C.P., and H. H. S.) "Fatal Case of Agranulocytic Angina Treated with Nucleotide K-96." *Lancet*, July 8th, 1933.

SHAW, WILFRED, M.D., B.Ch.(Cantab.), F.R.C.S., F.C.O.G. "The Treatment of Spasmodic Dysmenorrhœa." *Lancet*, July 15th, 1933.

TAYLOR, HERMON, M.Ch., F.R.C.S. *See* Keynes and Taylor.

WALKER, KENNETH M., O.B.E., F.R.C.S. "The Diagnosis and Treatment of Testicular Swellings." *Clinical Journal*, July, 1933.

WEBEK, F. PARKES, M.D., F.R.C.P. "Embolism of Abdominal Aorta with Auricular Fibrillation." *British Medical Journal*, June 24th, 1933.

WOOLLARD, H. H., M.D., and NORRISH, R. E., F.R.C.S. "The Anatomy of the Peripheral Sympathetic Nervous System." *British Journal of Surgery*, July, 1933.

* Apologies are due to Dr. Maxwell for a mistake in this announcement in the June issue.

CHANGES OF ADDRESS.

BURNE, T. W. H., Four Winds, Chesham Bois, Bucks. (Tel. Amersham 50.)

CORBETT, RUPERT S., 36, Harley House, W. 1. (Tel. Welbeck 3080.)

EYTON-JONES, F. M. M., Redcroft, 59, Arundel Road, Littlehampton.

HARRISON, L. F. A., Hill Cottage, Sutton at Hone, Kent.

WHITEHEAD, F. E., The Elms, Oulton Broad, Lowestoft.

WRIGHT, Surgeon-Commander F. C., R.N., Killock, Western Road, Canford Cliffs, Dorset.

APPOINTMENTS.

KING, J. F. LASCELLES, M.B., B.S.(Lond.), appointed Out-Patient Anæsthetist to the Hospital for Sick Children, Great Ormond Street, W.C. 1.

KLABER, ROBERT, M.D.(Lond.), M.R.C.P., appointed Physician to the Skin Department, The Prince of Wales's General Hospital, Tottenham.

BIRTHS.

BOSTON.—On July 5th, 1933, at 3, St. Mark's House, Regent's Park Road, N.W. 1, to Kathleen (*née* Carnon), wife of F. K. Boston, M.B.—a son.

BROCKLEHURST.—On July 15th, 1933, at 7, Kylestone Grove, Stoke Bishop, Bristol, to Sybille and Robert J. Brocklehurst—a son.

COLDREY.—On July 7th, 1933, at Chatham House, Rotherham, to Eleanor (*née* Gardiner), wife of Eric Coldrey, M.D.(Lond.), F.R.C.S. (Eng.)—a son.

EVERETT.—On June 20th, 1933, to Nancy (*née* Harris), wife of Alan D. Everett, F.R.C.S., of Montague House, Leatherhead—a son.

ORMEROD.—On June 24th, 1933, at St. Ronald, Broomhill Road, Woodford Green, to Margot (*née* Martin), wife of Thomas Laurence Ormerod, M.B.—a son.

POLLARD.—On July 15th, 1933, at King George V Hospital, Malta, to Honor, wife of Surgeon-Lieutenant-Commander E. B. Pollard, R.N.—a daughter.

RICE.—On July 9th, 1933, at 47, Thorpe Road, Norwich, to Doris, wife of Dr. Raymond Rice—a son.

MARRIAGES.

GREEN HINDE.—On July 8th, 1933, at Holy Trinity Church, Street, Somerset, Francis H. K. Green, M.D., M.R.C.P., eldest son of Mr. and Mrs. K. W. Green, of Yarradale, North Finchley, to Elsie Joyce, only daughter of Mr. and Mrs. Karl Hinde, of Rosewood, Street, Somerset.

HARRIS—ANGUS.—On July 29th, 1933, at St. Peter's, Eaton Square, W., by the Rev. Austin Thompson, M.A., Arthur George Jeaffreson Harris, M.B., B.Ch.(Cantab.), eldest son of Dr. and Mrs. H. G. Harris, of Southampton, to Marjorie Dora, only daughter of Mr. Alfred H. Angus, of Lexham Gardens, W.

DEATHS.

DOWN.—On July 11th, 1933, at 14, Sylvan Avenue, Exeter, Arthur Reed Down, L.R.C.P., aged 69.

JEANS.—On June 21st, 1933, suddenly, at Harrogate, Frank A. G. Jeans, M.A.(Cantab.), F.R.C.S., of 63, Rodney Street, Liverpool, second son of the late Sir Alexander Jeans, aged 55.

JOLLIFFE.—On May 24th, 1933, Walter John Jolliffe, M.R.C.S.

POYNDER.—On June 26th, 1933, at Bickington Lodge, John Leopold Poynder, Lt.-Col. (ret.), Indian Medical Service, aged 78.

RICHARDS.—On July 13th, 1933, at a nursing home at Chiswick, William Hunter Richards, J.P., M.S., F.R.C.S., aged 63.

ROBINSON.—On June 24th, 1933, at Greenhill Gate, Weymouth, John Elliott Robinson, M.B., D.P.H., County Medical Officer of Health of Dorset, aged 59.

NOTICE.

All Communications, Articles, Letters, Notices, or Books for review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, *St. Bartholomew's Hospital, E.C.1.*

The Annual Subscription to the Journal is 7s. 6d., including postage. Subscriptions should be sent to the MANAGER, Mr. G. J. WILLANS, M.B.E., B.A., *at the Hospital.*

All Communications, financial or otherwise, relative to Advertisements ONLY should be addressed to ADVERTISEMENT MANAGER, *The Journal Office, St. Bartholomew's Hospital, E.C. 1. Telephone: National 4444.*

St. Bartholomew's Hospital Journal.

"Æquam memento rebus in arduis
Servare mentem."
—*Horace*, Book ii, Ode iii.

VOL. XL.—No. 12.] SEPTEMBER 1ST, 1933. PRICE NINEPENCE.

CALENDAR.

Fri., Sept. 1.—Prof. Fraser and Prof. Gask on duty.
Tues., ,, 5.—Lord Horder and Sir C. Gordon-Watson on duty.
Fri., ,, 8.—Dr. Hinds Howell and Mr. Harold Wilson on duty.
Tues., ,, 12.—Dr. Gow and Mr. Girling Ball on duty.
Fri., ,, 15.—Dr. Graham and Mr. Vick on duty.
Tues., ,, 19.—Prof. Fraser and Prof. Gask on duty.

Last day for receiving matter for the October issue of the Journal.

Fri., ,, 22.—Lord Horder and Sir C. Gordon-Watson on duty.
Tues., ,, 26.—Dr. Hinds Howell and Mr. Harold Wilson on duty.
Fri., ,, 29.—Dr. Gow and Mr. Girling Ball on duty.

EDITORIAL.

AT the conclusion of the present month the Medical College will have passed through what must have been the most important academic year in its long history. The acquisition of the Merchant Taylors' site has opened a new era in the progress of medical education at this Hospital.

The advent of a new year makes one look back on the accomplishments of the past with pride and satisfaction; the magnitude of the funds already raised gives confidence for the future of the scheme. It seems especially appropriate that the year upon which we now embark should be heralded in by the Old Students' Dinner, which is going to be such an outstanding event for all who are present. There are many promised "catches" for the occasion, among whom is the Rt. Hon. Ramsay MacDonald.

We feel sure that those who have already declined the invitation will now want to change their minds, and we advise those who intend to be present to obtain their tickets as soon as possible.

"*21st August*, 1933.

The Dean writes:

"DEAR MR. EDITOR,—It is just a year ago since the Appeal on behalf of the Medical College was started. We can now congratulate ourselves on the sum of money already raised, which has enabled us to acquire the site in Charterhouse Square, henceforth to be known as the Medical College of St. Bartholomew's Hospital. My effort in raising these funds has necessitated a holiday in order that I may renew my energies in reducing the debt which we have now incurred.

"We have collected, in money and in promises, about £43,000. We had £7000 available of monies previously held by the Medical College, and we have the value of our building in Giltspur Street—£20,000—which we hope very shortly to be able to sell. Thus we can say we have £70,000 towards the £130,000 required.

"During this coming year, therefore, a very great effort has got to be made to raise the remaining £60,000, and another effort, which is an exceedingly urgent matter for us, to collect a further £25,000, so that we may equip the buildings we have acquired.

"To this end we are laying the foundations of a public appeal which we hope will date from the day of the Old Students' Dinner. This will be a particularly fitting occasion on which to advertise our needs, and moreover, it will be an auspicious one, for we shall have, as our Chairman, the first Bart.'s Peer—Lord Horder—and moreover the Prime Minister of England has signified his intention of being present.

"We hope, therefore, that old Bart.'s men will make a particular effort to support the occasion, so that they can have first-hand information of the scheme to circulate amongst their friends. Bart.'s men themselves have made a very great effort, and they should feel, as we feel, that they are in a position to ask assistance from outside.

"I should like it also to be known that on the afternoon of the 2nd of October, the new site will be open for inspection to any who care to see it, and at 4 o'clock in the afternoon I will be very happy to show old Bart.'s men personally over the site, and explain to them what we propose to do. In order to waste nobody's time it

would be convenient if those who intend to come would send their names to me, so that if necessary I can have more than one person present to give this explanation.

"If there are any wishful to have them, there are copies of the Appeal available which will be sent on application.

"There are still many old Bart.'s men who have not subscribed, and some of them have told me personally that they intend to do so. I shall be exceedingly grateful to them if they would let me have their subscriptions before the 1st of October, so that we can make the sum already subscribed by Bart.'s men as large as possible on this occasion.

"I would particularly commend to their attention the letter, which appeared in the last number of the JOURNAL, of my old friend, Eric Young, who has volunteered to give us 125 guineas spread over five years, provided that five others will do the same. This is a really magnificent offer. Surely there must be someone who is prepared to emulate his effort.

"We sincerely hope by the time the next Old Students' Dinner is held the College will be in full running order.

"Yours sincerely,

"W. GIRLING BALL,

"*Dean of the Medical College.*"

* * *

COLLEGE APPEAL FUND.

	£	s.	d.		
Staff	12,134	13	9	(68)	
Demonstrators	1,504	1	0	(65)	
Students	472	16	6	(255)	
Old Bart.'s men:					†
Bedfordshire	5	10	6	(2)	(26)
Berkshire	86	1	0	(13)	(37)
Buckinghamshire	72	17	0	(12)	(29)
Cambridgeshire	134	13	0	(11)	(42)
Cheshire	1	1	0	(1)	(26)
Cornwall	22	2	0	(5)	(36)
Cumberland	3	0	0	(1)	(6)
Derbyshire	19	14	0	(4)	(17)
Devonshire	452	1	0	(42)	(117)
Dorset	16	8	0	(8)	(30)
Durham	16	6	0	(3)	(11)
Essex	225	15	6	(15)	(69)
Gloucestershire	138	1	6	(11)	(66)
Hampshire	493	11	0	(38)	(134)
Herefordshire	12	7	0	(3)	(11)
Hertfordshire	62	10	0	(10)	(73)
Huntingdonshire					(1)
Isle of Wight	135	8	0	(9)	(25)
Kent	536	18	0	(62)	(146)
Lancashire	33	7	0	(10)	(82)
Leicestershire	133	12	0	(6)	(28)
Lincolnshire	42	3	0	(12)	(25)
Middlesex	373	15	0	(16)	(68)
Norfolk	159	7	6	(18)	(60)
Northamptonshire	54	4	0	(4)	(17)
Northumberland	101	1	0	(2)	(11)
Nottinghamshire	13	13	0	(2)	(28)
Oxfordshire	166	10	0	(14)	(29)
Rutland					(2)
Shropshire	35	9	0	(8)	(22)
Somersetshire	454	6	0	(23)	(43)
Carried forward	£18,045	5	3		

	£	s.	d.		
Brought forward	18,045	5	3		
Staffordshire	194	18	0	(6)	(37)
Suffolk	262	1	0	(15)	(46)
Surrey	409	11	0	(39)	(180)
Sussex	240	0	0	(41)	(170)
Warwickshire	177	0	6	(17)	(56)
Westmorland	1	0	0	(1)	(5)
Wiltshire	92	11	0	(10)	(26)
Worcestershire	142	8	6	(17)	(27)
Yorkshire	254	19	6	(19)	(101)
Wales	32	11	0	(8)	(150)
London	2,456	6	8	(153)	(971)
Channel Islands	10	0	0	(1)	(9)
Scotland	12	2	0	(3)	
Abroad	38	5	0	(7)	
South Africa	274	0	6	(16)	
Canada	113	2	6	(8)	
East Africa	62	7	0	(6)	
West Africa	146	10	0	(5)	
India	137	0	0	(5)	
Syria	2	2	0	(1)	
U.S.A.	5	0	0	(1)	
Ireland	14	14	0	(3)	
North Africa	1	0	0	(1)	
North Borneo	5	5	0	(1)	
Australia	12	2	0	(3)	
Egypt	2	2	0	(1)	
Malay States	6	0	0	(2)	
China	40	7	4	(7)	
France	50	0	0	(1)	
Trinidad	20	0	0	(1)	
British West Indies	23	1	0	(3)	
Kenya	5	0	0	(1)	
New Zealand	1	1	0	(1)	
Services	493	14	0	(25)	
*Others	19,465	13	7	(194)	
	£43,249	1	4		

*These figures include:	£	s.	d.
University of London	5000	0	0
Unilever Bros.	500	0	0
League of St. Bartholomew's Nurses	25	0	0
The Executors of the late Alfred de Rothschild, Esq.	2000	0	0
Rahere Lodge	105	0	0
Corporation of the City	1000	0	0
Fishmongers' Company	262	10	0
Mercers' Company	1000	0	0
Ironmongers' Company	100	0	0
St. Bartholomew's Hospital Reports	250	0	0
The Haberdashers' Company	50	0	0
The Goldsmiths' Company	500	0	0
St. Bartholomew's Hospital Women's Guild	627	10	9
St. Bartholomew's Hospital Governors	384	12	0

† Number of Bart.'s men in County.

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MEMORIAL TO THE LATE MISS N. POWELL.

This testimonial was to have been given to Miss Powell in April of this year, but her sudden death prevented the presentation being made. The testimonial, which is beautifully illuminated and bound in red niger, has been accepted by the Matron for the Nurses' Library, where it will long serve as a record of the friendship and esteem felt for Miss Powell. The script reads as follows:

"This Testimonial is presented to
MISS N. POWELL
by some of her friends who have worked with her in St. Bartholomew's Hospital during the years that she was Sister in charge of Luke, Mark and Hope wards. It is accompanied by a small token of esteem to which the undersigned have contributed. It is our desire to place on record our appreciation of the devoted service that Miss Powell has given, both to St. Bartholomew's Hospital and to all the patients who have been under her care.

"Miss Powell gave invaluable help to her Chiefs by her accurate observation and skilled collaboration in any investigation carried out in the wards under her charge, and those of us who worked with her as house physicians have benefitted by her knowledge of nursing and medicine, her wise and kindly instruction and her interest in our personal welfare.

"We wish Miss Powell good health and happiness, and we hope that she may enjoy to the full her years of retirement."

A cheque for £51, the balance of the small fund collected, has been given in memory of Miss Powell to the Capital Account of the Isla Stewart Memorial Fund. The income from the fund is spent, under the direction of the League of St. Bartholomew's Hospital Nurses' for the benefit of some member of the Nursing Staff each year. It was felt that its educational object would have appealed to Miss Powell.

It is hoped that all contributors have received notice of these actions of the Committee responsible for the Fund.

GEOFFREY EVANS,
Hon. Treasurer.

* * *

The following are to be congratulated on their appointments as Lecturers:

Royal College of Physicians.—Sir Humphry Rolleston, FitzPatrick Lectures, 1934. Dr. C. H. Andrewes, Oliver-Sharpey Lectures, 1934.

Royal College of Surgeons.—Sir Thomas Dunhill, Arris and Gale Lectures, 1934.

* * *

We have to congratulate Mr. H. B. Stallard on being appointed Assistant Surgeon to the Moorfields Eye Hospital.

* * *

We are happy to announce that we have obtained several hitherto unpublished poems by the author of those classics, "The Battle of Furunculus", "B. Subtilis", etc.

All those who know their Bart.'s Bible from cover to cover remember these ditties with ancient relish, and will welcome the new arrivals. We have to thank R. B. P. for his kind permission to publish them, and we hope to print the first of the batch in our October issue.

We would suggest that in the meantime our readers look up the old classics, and that those who are without or who have lost their copy of *Round the Fountain* should send to us immediately for another copy (price *3s. 6d., 7s. 6d.*).

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We would like to draw the attention of those readers who are interested in the history of the Hospital Arms to a letter in the correspondence columns from the Rouge Croix. In it many of the questions which have been raised on this subject have been dealt with.

§

OBITUARIES.

SIR JOSEPH COOKE VERCO.

SIR JOSEPH COOKE VERCO, who died on July 30th, was one of the most distinguished pupils educated at St. Bartholomew's Hospital in the latter half of the last century. Born on August 1st, 1851, at Fullarton, South Australia, he was the third son of Joseph Crabb Verco, who emigrated from Cornwall to Adelaide about 1838. He was educated from 1862–67 at J. L. Young's Academy, then in Stephen's Place, and afterwards at St. Peter's College. He entered the Civil Service as a clerk in the Railway Clearing House Department on leaving school, and came to England in 1870. He passed the Matriculation examination of the London University in June, 1870, and the Preliminary and Scientific examination—then considered the *pons asinorum* for medical students—in the following year. He then entered the Hospital, winning the Entrance examination and subsequently the Wix Prize. He took his M.B. in 1875, the M.D. in 1876 and the F.R.C.S. in 1877. He served as House Physician and Obstetric Assistant at the Hospital with such *éclat* as would have placed him in the running for a medical appointment on the Staff, but he chose instead to return to Adelaide. He sailed from Plymouth as surgeon superintendent of the barque "Clyde" (1140 tons) on January 26th, 1878, in charge of 377 emigrants, and reached Adelaide on April 23rd. He registered at the medical board of South Australia on May 24th, and began immediately to practise as a general practitioner in Victoria Square, advertising his arrival by means of a red lamp and an unusually large name-plate on which were displayed his various degrees. He is described at this time as being 5ft. 7½ in. in height, with a long, flowing beard reaching half-way down his waistcoat, deliberate in manner, speech and gait.

He was soon appointed Honorary Physician to the Adelaide Hospital and Honorary Physician to the newly founded Adelaide Childrens' Hospital; the latter post he resigned in 1890. From 1885–1919 he was Chief Medical Officer to the South Australian branch of the Australian Mutual Provident Society.

The University of Adelaide was founded in 1885, and two years later Verco was appointed Lecturer on Medicine jointly with Dr. Davies Thomas, acting as sole Lecturer from 1888–1915. He was also Dean of the Faculty of Medicine in 1889 and again in 1920, and was largely responsible for carrying out the details connected with the foundation of the Dental School and Hospital. In 1887 he was chosen President of the

first Inter-Colonial Medical Congress of Australia, and in this year he had a severe attack of typhoid fever. He gave up general practice on his recovery, and confining himself to medicine, was perhaps the first purely consultant physician in the colony, when he declined to attend cases of midwifery in 1891.

At the Adelaide Hospital he was Honorary Medical Officer in 1880; Honorary Physician 1882–1912 (with the peculiar privilege of operating upon patients with hydatids), and Consulting Physician from 1912. He resumed active work on the staff of the hospital when a shortage occurred during the years of the war.

A man of many interests, Verco was well known as a conchologist, and was President of the Royal Society of South Australia from 1903–1921. He was twice President of the South Australian Branch of the British Medical Association, and was its representative at the Portsmouth meeting in 1923. He received the honour of Knighthood in 1919, and was present as a delegate from South Australia on the occasion of the Octocentenary of the Foundation of this Hospital in 1923. He married on April 11th, 1911, Mary Isabella, daughter of Samuel Mills, of Adelaide, but there were no children by the marriage.

Verco was a skilled stenographer and a good teacher. His lectures were delivered so slowly that students could take them down *verbatim* and thus dispense with a text-book. He came of a sturdy and uncompromising Nonconformist stock, and in his earlier years excited some amount of ill-feeling, which was perhaps partly intensified by a jealousy of his higher professional attainments. D'A. P.

WILLIAM JOHN GOW, M.D., F.R.C.P.

The death of Dr. W. J. Gow was recorded in the July issue of the JOURNAL. It took place quite suddenly, on June 19th, when, after riding up a steep ascent on to Exmoor and while still seated on his horse, he was admiring the wide expanse of landscape spread out before him. Old Bart.'s men, especially those whose student days date from "the 'eighties" of the last century, will at once recall to memory the striking figure, so familiar to all associated with the Hospital half a century ago. Willy Gow was born in 1863, son of the Rev. John Gow; he was educated at Owen's College, and qualified from Bart.'s as M.R.C.S. in 1885, M.B. in 1886 and M.D.(London) in 1887. From his earliest days at the Hospital he was a marked man, for no student attending lectures there could help seeing the listener with the light hair, who rarely failed to occupy the seat in the front row of the amphitheatre on the extreme left; indeed, the first thoughts of those seating themselves in the higher rows of seats was, from sheer habit, to verify that the familiar figure was *there*, bending over a notebook, the while notes taken of the preceding lecture were being carefully studied in order that the reader might find himself *en rapport* with the theme of the lecture then about to commence. Careful observers soon, however, learnt that the said reader was remarkable for physical strength and for aptitude in playing games, as well as for indefatigable industry and mental alertness; in fact, he became the observed of all observers in that St. Bartholomew's of long ago. As an instance of the impression made by his unique personality, some few years ago when Willy Gow was on the Junior Staff he organized a visit to a theatre in East London to see a world-famous actor who was appearing there. Gow had booked the stage box, and on his entry with his retinue there was applause such as might have greeted a well known public character; the occupants of the gallery were later much gratified when the actor (whom all had come to see), who was taking the part of a knight on horseback, with his lance in rest, spontaneously paid tribute to the striking personality among the audience by riding across the stage and shaking hands with Willy Gow in the stage box. It was doubtless this remarkable capacity for exciting interest, combined with an unquestionable mastery of all branches of his work, which led us all to seek Gow's advice on knotty questions. "When in doubt, ask Gow" was recommended as a rule of conduct to many a Bart.'s student. Those who had clerked in Dr. Gow's wards when Gow was House Physician there, or in Dr. Matthews Duncan's ward when Gow was in charge of "Martha", and those who profited by Gow's demonstrations when he was assistant to Dr. V. D. Harris in the Physiological Laboratory, could not fail on settling down in practice to recollect the once familiar rule of conduct, and to this fact Gow's rapid success in consulting practice was doubtless largely due.

On the Junior Staff at Bart.'s Gow was contemporary with H. D. Rolleston, W. H. R. Rivers, F. W. Andrewes, G. L. Turnbull, H. J. Tilden and others, for, as already noted, he filled more than one post. He later held appointments on the hospital staffs of the Metropolitan, Queen Charlotte's and the Royal Waterloo Hospitals. In 1892 he was elected on the Secretary's Staff, and an appreciative account of his great work as Obstetric Surgeon there, and in his private consulting practice, appeared, on his retirement in 1913, in the *St. Mary's Hospital Gazette*. Note is made of "the sound judgment and extraordinary manipulative dexterity displayed by him in the management of an obstetric emergency", and of the fact that he performed the operation of Cæsarian section "more than fifty times with a mortality of one". The writer of this "In Memoriam", moreover, observes that "at Queen Charlotte's Hospital it was recognized among the residents of his day that quiet talks with Gow were experiences to be looked forward to and never to be forgotten".

So hard had Gow worked, and so rapidly had his consulting practice grown, that he was able to contemplate retirement when only fifty years of age. Then came the War; he volunteered for service, and was aboard a transport which was torpedoed in the Mediterranean, with result that he was a considerable time in the water before he was picked up; this experience, coming as it did after such strenuous years of work, prompted his complete retirement; he travelled, however, and continued to the end of his life to be greatly interested in horsemanship.

Dr. Gow's eminently successful, though all too short, work as an obstetric surgeon aroused feelings of the deepest gratitude on the part of a multitude of patients and their relations and friends. In thinking of his remarkable career, one recalls to mind the words of the latter-day philosopher, who wrote—"The abiding essence of a great mind and noble personality post-humously acts, if with a weaker, yet with a purer power than could be permanently exercised by himself . . . for his influence as for himself death cuts the tie between the mortal and immortal". W. H. H.

THE PSYCHOLOGY OF AUTHORSHIP.

Being the Annual Oration delivered before the Osler Club on July 12th, 1933, by W. Langdon Brown, M.D., F.R.C.P., Regius Professor of Physic in the University of Cambridge.

MAY I, in the first place, say how highly I appreciate the compliment of being invited to deliver the Osler Oration? It was a happy thought on your part to adopt the name of Osler for your Club, for he, of all men, had his eye directed towards the younger generation. Predecessors in the honourable duty I have to perform to-night have doubtless told you much of him. I did not know Osler really well, but no one who came within his magnetic field is likely to forget the electric force and charm of his personality. To me one of his outstanding services to British medicine was the foundation of the Association of Physicians, which has done so much to break down those barriers within which physicians were all too prone to work in an isolation which was not always splendid. The Association changed all that, and the friendly atmosphere, the free give and take which his spirit infused into its meetings has done much to humanize medicine in the British Isles.

Out of the Association sprang the *Quarterly Journal of Medicine*, and if you look into its pages you will find a fairly accurate reflection of the growth of English medicine in the last quarter of a century. And though he has passed away, the Association and the *Journal* carry on his good work—no slight memorial.

I am told that this Oration may be on any subject in which Osler would have been interested—a wide field indeed, for he was interested in everything. Undoubtedly the topic of "The Psychology of Authorship" comes within the four corners of the definition, for he was passionately interested in books. A mutual friend related to me a characteristic anecdote. They were talking of some book, when Osler rose from his chair, and unlocking a little cupboard by the fireside, drew out the book in question. "I keep these particular books locked up," he said; "I'm so afraid I should steal them myself."

In beginning with some aspects of authorship in the seventeenth century, I am actuated by two motives. The first is a personal one. When I was introduced to Osler he made a friendly allusion to me as the son of my father. For we both sprang from the same Puritan stock, and from his youth his mother had instilled in him an interest in John Bunyan, to whom my father was the sixth direct successor, and of whom he wrote the standard biography. The second is a more topical one: at the present moment there is a great revival of interest in seventeenth century literature. And there is good reason for this, for that age and the present have this in common: they are both ages of disillusionment.

No one, I fancy, would challenge the statement that this is an age of disillusionment. The enormous material advance of the nineteenth century begat an invincible belief in the Law of Progress, and in its latter half Manchester Liberalism and the doctrine of "*laisser-faire*" drew fresh sustenance from Darwinism after a preliminary revolt from such unaccustomed food. The struggle for existence and the survival of the fittest seemed to provide scientific sanction for its business methods. And then the skies changed; a preliminary rumble of thunder came from the Boer War, and then the storm was upon us. Ruefully regarding the wreckage left by the passage of that tornado, doubtfully gazing around for fresh clouds which may burst upon our devoted heads, we realize indeed the shrewd winds of disillusionment.

In another way, and for somewhat different reasons, the seventeenth century was also an age of disillusionment, which began before the Civil War. It therefore interests us to see how our ancestors comported themselves when they awakened from the heady dreams of the Elizabethan age. Man's impulse to classify perhaps tends to make him lay undue emphasis on the cleavage between one century and another, for our calendar is purely artificial in that respect. Yet who can doubt that with each of the two queens, Elizabeth and Victoria, an epoch also died?

On its intellectual and artistic side what a marvellous flowering was the Renaissance! We may attribute much to the new writings, that is to say, printing, the new learning which was the old learning come to life again, and the new world across the Atlantic. All of these seemed to stimulate man's imagination in a way that had not happened since the Greeks rebuilt Athens after defeating the Persians. Yet its inner essence remains as mysterious as the springing of youth into adolescence. Of the Renaissance the late Sir Walter Raleigh, whose name and spirit alike are reminiscent of that time, wrote thus:

"That great movement of the mind of man brought with it the exhilaration of an untried freedom and the zest of an unlimited experiment; but it took the human soul from its station in a balanced and rounded scheme of things, to deliver it over to every kind of danger and excess. . . . From his servant's estate in the great polity [of Catholic theology], man was released by the Renaissance, and became his own master in chaos, free to design and build and inhabit for himself. The enormous nature of the task, which after three centuries is still hardly begun, did not at first oppress him; he was like a child out of school, trying his strength and resource in all kinds of fantastic and extravagant attempts."

If danger and excess, fantastic and extravagant attempts are to be put on the debit side, we may fairly put it on the credit side of the Renaissance that free inquiry was no longer stifled. It is an intriguing thought that if the attitude of the Middle Ages to scientific research still held, Lord Rutherford, Sir J. J. Thomson and Marconi would certainly be languishing in prison, if indeed they had not already been burnt at the stake.

Gerald Heard, in his thought-provoking book, *The Ascent of Humanity*, expresses his point of view somewhat as follows: The Renaissance stated its problem and gave its solution, that man is an individual, and that he is free to take his satisfaction from Nature and the community. Up to the close of the sixteenth century the most active spirits had not got beyond that simplicity. This, under the thin disguise of a formal assent to religious *clichés* was still Bacon's attitude. Machiavelli's *The Prince* is fundamentally the product of a simple mind. It is not subtle; it is only cynical; the eternal commonplaces of virtue are merely reversed. If "Thou shalt love thy neighbour as thyself" does not make for success, then the opposite obviously must. But inevitably the Prince of Machiavelli is succeeded by Hamlet, Prince of Denmark. Bacon remains no more than the last great fruit of the Renaissance; the highest development to which the speculative mind could attain is unaccompanied by a proportionate sensibility. He fulfilled the middle *rôle* between Machiavelli and Shakespeare. The theme that individuality, however intellectually endowed, is not enough, the recognition of a rudiment of feeling breaking through the surface of the self-contained mind is the fundamental obsession of Shakespeare. He cannot escape from the fatal irresolution which he discovers developing in his own consciousness and among his contemporaries. The age had been one of almost frantic activity. The country of which he was a native had had every stimulant; wild adventure in the ends of the earth, threats of destruction from abroad, constant plots within. Now it was beginning to sober down.

Whether Shakespeare was a syndicate or an individual, whether he was Edward de Vere, 17th Earl of Oxford, or not, in my opinion he certainly was not Bacon. And my principal reason for being so dogmatic is the kind of evidence I have adduced from Gerald Heard. Intellectually, at any rate, they were not really contemporaries. A gulf yawns between them; a new sensibility has been born, even though Shakespeare records and comments, but does not judge.

In the drawing-room of the Master's Lodge at Trinity College, Cambridge, hangs a portrait of Bacon sufficiently sinister to make the onlooker uncomfortable. Yet I am informed that it is less sinister than the original one in the possession of his family, which, when copied, has actually been altered, so evil is its expression. An interesting sidelight on his character!

The greatest proof of Shakespeare's genius to me is that each century has found something new in him. Regarded by certain of his contemporaries with something "this side idolatry", to the seventeenth century he was fancy's child, warbling his native wood notes wild, and to the eighteenth century a master of rhetoric. Then the early nineteenth century found something unsuspected before or since, for Coleridge took him as a final and complete exponent of morals. He even went so far as to say that any characteristic not described by Shakespeare was not an important ingredient of human nature. Unfortunately for his thesis, he illustrated it by saying Shakespeare never described avarice, which was therefore not a fundamental human characteristic. True, Shylock was actuated more by revenge than by avarice, but Coleridge's idea seems to have been to make Shakespeare a Bible of human conduct. A curious conception of a man who had to write plays that would literally beat cockfighting if he was to attract audiences to his Bankside theatre from the neighbouring sports! The Victorian age commended Shakespeare for his intelligent anticipation of the Victorian young lady, while ours finds in him an exponent of those psychological problems by which we are obsessed.

Then there is Pearsall Smith's view: "Once and once only in the history of a people, there comes a divine moment when its speech seems to those who write it a new-found wonder; when its words are fresh with the dew of the morning upon them, when its language is in a plastic state, unstereotyped, unhackneyed, unexploited; and it is at this moment that the one supreme poet appears; for no form of language seems rich enough to provide material for more than one single poet of this rank.

"Such a supreme poet Shakespeare became; in the great linguistic ferment of the 1590's he made himself the great lord of language, the most articulate of human beings".

Not that this expresses all of Shakespeare's magic. Like Lyly, he started as a euphuist, but he became much more. There is, by the way, the same sense of joyous discovery of a new language in the writings of Joseph Conrad, to whom also English was foreign and fresh.

Since writing this I have come across a cutting I made from the *Times Literary Supplement* some two years ago. It serves to illustrate the point I have been trying to make:

> "Now there seem to be, or to have been, two principal conditions under which poetry in the grand style has been written in the Christian era—conditions represented by Dante and Shakespeare respectively. One is the universal prevalence of a systematized religious faith offering symbols which express the mystery of human life, so that poetry can, without any sense of derogation or imitation, make itself ancillary to religion and 'justify the ways of God to man'. The other is the occurrence of a moment, naturally associated with the decline of a universal religious faith, when the individualistic view of life prevails, and the mystery of life finds expression in tragedy. These moments are not simply opposed to one other. They are phases in a historical movement. While Christianity was, consciously or unconsciously, the universal faith, tragedy was impossible; since Christianity, obviously, does not permit the tragic view of life. As Christianity weakens, tragedy emerges. But manifestly the tragic view of life has no finality. As an individual and prophetic man, Shakespeare passed beyond tragedy. It would be a mistake to urge, as is sometimes urged, that he returned to Christianity; he rather passed from Christianity, through tragedy, to a reconciliation of a kind which, no doubt, was found in former days by chosen spirits in Christianity, but is not uniquely Christian. Of all this movement in Shakespeare, Goethe, the first profound student of Shakespeare, was perfectly conscious."

But I am not embarking on the sea of Shakespearian criticism, which is bestrewn with so many wrecks. I am content to rejoice that the magic of his language increases for me with every year I live. Where he comes into my story to-day is that his later work marks the definite change of thought which happened because the Renaissance and the Reformation "had quickly fallen out of step". Things were proving not so simple after all. The counter-Reformation, too, was complicating things. Men began to cast up their losses and their gains. Hobbes, that forerunner of the materialistic rationalists, remarked in his *Leviathan* that since the Renaissance led to so much effusion of blood, "I think I may truly say that never was anything so dearly bought as these Western poets bought the learning of the Greek and Latin tongues". The political horizon was clouding too. All this is reflected in what Grierson has called the "cross currents in English literature of the seventeenth century", and of which he has written so illuminatingly.

The change is well illustrated by the difference between the earlier and the later writings of Donne, though the change from the extroversion of the sixteenth to the introversion of the seventeenth century is implicit in both. But my acquaintance with the Anglican writers, such as Donne and Sir Thomas Browne, is of the slightest. I prefer to illustrate my thesis from such Puritan writers as Milton and Bunyan, of whom I know something more. Milton's case was complex, Bunyan's simple. I will take the simpler first.

John Bunyan's upbringing was of the humblest. There is a note in the diary kept by the Rector of the neighbouring parish about his father: "One Bonion of Elsto clyminge of Rookes neasts in the Bery wood ffound 3 Rookes in a nest, all white as milke and not a black fether on them." "And as we watch him, the surprise on his face becomes symbol and presage of a wider world's wonder than his, the wonder with which men find in the rude nest of his own tinker's cottage, a child of genius." Indeed a white bird in the black rook's nest.

He lived sixty years and wrote sixty books. His prose was poetry and his poetry was prosy. His imaginative power was great, and Puritanism allowed of few outlets for it, except that of the religious allegory. It may be that the continued popularity of the *Pilgrim's Progress* is partly due to the fact that it was one of the few books which, in the stricter days of nonconformity, children were allowed to read on Sunday. Myself, I have pored with delight over illustrated editions portraying Christian in deadly conflict with that laidly beast Apollyon, and followed the siege of Mansoul in "The Holy War" with quite another interest from that intended by the author. And then there was *Foxe's Book of Martyrs*, an early edition which had belonged to Bunyan himself—with illustrations of horrible tortures and burnings such as charm the sadistic strain

to be found in most children. Yes, these were compensations which even that hymn, "A few more years shall roll", with its appalling threat of an "Eternal Sabbath Day", could not quite obliterate. Augustine Birrell tells us how, in his early days, the title of "The Bible in Spain" allowed him to mitigate the Sabbath by revelling in George Borrow. However, there is no doubt that the *Pilgrim's Progress* is a fine allegory written in fine English.

But if we are to know Bunyan himself, we shall find the key in his *Grace Abounding to the Chief of Sinners*. The psycho neurotic note is struck at once. "The Chief of Sinners"—for the psychoneurotic must be the chief of *something*.

Bunyan was a sick soul in those earlier years. Literature owes much to the sick soul. If you want a skilful dissection of different types of the sick soul read William James's *Varieties of Religious Experience*. To the normal man such shuddering depths of despair and fear seem unreal, but they are real enough to the sufferer. Bunyan was obsessed with a sense of sin. When the history of thought in the nineteenth and twentieth centuries comes to be written, it will surely strike the writer that about seventy years ago the idea of sin began gradually to lose its hold over man's minds, and that to-day it has almost vanished for the great majority. And I should be surprised if that writer does not point out that this change is almost synchronous with the increasing hold of the idea of evolution. But obsessional states and anxiety neuroses continue among religious and irreligious alike. Religion does not cause them, nor, according to the histories religious patients give me, does it cure them. Rather does the failure of religion to help them add to their torture, since they feel this must be due to some failure of faith on their own part. The falling and the lifting of the cloud seem equally mysterious in the present state of our knowledge.

Bunyan's anxiety neurosis shows the characteristic spread of a phobia. He tells us that he was fond of bell-ringing. Then he came to regard this as a sin. But he would still go and lean against the old doorway and look longingly while a neighbour pulled the bell rope. Then he was afraid even to do this. How if the bells should fall? How if even the steeple itself should come down? About that very time a flash of lightning struck one of the village churches of Bedfordshire, and "passing through the porch into the belfry, tripped up his heels that was tolling the bell, and struck him stark dead". What if this should happen to him? And so the phobia spread and spread.

Strange alternations of gloom and glory came over him. Sometimes he was visited by such visions of light and hope that he could have told his joy to the very crows of the field. He thought then that he should never forget that joy even in forty years' time. But alas! in less than forty days the vision was all faded and gone: "Oh how happy now was every creature over I was! for they stood and kept fast their station, but I was gone and lost." Then at last comes relief in his conversion. I hope you will not think me flippant if I suggest that this was a "conversion" in the Freudian sense of the term, for what really happened, as Grierson points out, was that "Bunyan's fear of the wrath to come made him afraid of nothing else". I believe that is correct; the fear of the unknown was less bearable than the fear of something which he thought he knew, and from which he felt he had the means of escape.

In allegory, too, one is tempted to think he found an escape. "He enjoyed writing and creating scenes and characters, drawing on his knowledge of the human heart and the human character, and also a little on those 'beastly romances' which he had read in his youth. It is a partial emancipation. The main issue is never lost sight of. . . . Fear is the dominant emotion." It is an interesting fact that when he married a wife as poor as himself she brought with her two books, one of which was entitled *The Plain Man's Pathway to Heaven*. Herein he may well have found the germ of *The Pilgrim's Progress from the City of Destruction to the Celestial City*.*

Schirmer has emphasized the interesting fact that the Puritans, despite their condemnation of the drama and general disapproval of all secular literature that had only pastime for its end, were vital contributors by way of allegory to the rise of the novel, as a realistic picture of everyday life and character, and also as a vivid portrayal of the inner conflict of conscience and passion. I may remind you that Defoe was a dissenter, and therefore had stoutly to maintain that his romances were narratives of fact.

"But if the *Pilgrim's Progress* was a forerunner of the novel, *Grace Abounding* was the ancestor of Rousseau's *Confessions*, and James Joyce's *Portrait of the Artist as a Young Man*" says Schirmer. Strange adventures that link John Bunyan with James Joyce. But how different were their spiritual Odysseys!

The case of Milton was a more complex one as I have said, and one that is more illustrative of cross-currents.

I count it a gain that at school I was made to learn "L'Allegro," "Il Penseroso," "Lycidas" and the "Hymn on the Nativity" by heart. They are a storehouse of

* In the discussion which followed the Oration, it was pointed out that a Cluniac MS. of the thirteenth century, *Le Voyage d'une Ame*, contains too many of the incidents of *The Pilgrim's Progress* to be merely coincidence. As this MS has only been recently translated into English it is impossible for Bunyan to have read it. He may, however, have heard its story at third or fourth hand.

lovely imagery and have become for me an abiding possession. But I see now, as I did not then, that they also illuminate both the passionate and the Puritan sides of his nature, which waged perpetual warfare in him. His parents early made up their minds that he was destined for greatness. That, I believe, is not uncommon in parents! The result was, as Mark Pattison emphasized, that his early life was a long preparation for some great task which he felt was laid upon him, the exact nature of which it was not given to him at once to descry, though his natural aptitudes and inborn tastes pointed to a literary work, a great poem which should be an act of service to God and to his country. But his sheltered upbringing left him to some extent without armour for the contacts of a rough world. And Milton had to live through troublous times, within and without. The way of idealists is hard, especially if they be also poets and egoists, and "the Milton who composed *Paradise Lost* was an angry and embittered man", says Grierson. "Much for this man, young, passionate, pure, would depend on the woman with whom he first fell seriously in love, and whom he should make his wife. That experience came to Milton simultaneously with the challenge that summoned him to leave the enchanted garden of culture and meditation, to take up his *rôle* in the world of action." The meeting of the Long Parliament in 1640 was for him the great awakening. "To the young man of 33 it seemed that a new age was beginning for the English people and the Christian church. . . . And then in the early summer of 1643 he made his sudden journey into the country, 'nobody about him certainly knowing the reason, or that it was more than a journey of recreation,' and returned with Mary Powell as his wife. Of what led up to that marriage we know nothing and can only assume . . . that the susceptibility to passion of which his Latin poems give evidence, which his high ideals of purity and love, his religious temper and training, had kept in check took revenge upon him and made him too hastily discover the 'well beloved' in a young girl of 17. The consequences were for him almost as disastrous as the very different marriage of Byron was for a very different poet. This first and fatal shock to a finely tempered and carefully nurtured and sheltered personality . . . coloured everything that he thought and wrote to the end of his life" You are to remember his point of view. His praise of chastity in "Comus" is so extreme as to seem to us to-day deliberately designed to defeat its own purpose, and was indeed recently so represented on the stage. But it was real to him. Here indeed was a crux. He was not disposed to accept the situation as irreparable. "If his marriage had gone wrong, the laws of marriage must be reconsidered," and that early summer had only deepened into August before he had published his *Doctrine and Discipline of Divorce*. "But among the most censorious critics of the doctrine of divorce are the Presbyterians, and they are the censors of the press. So Milton parts from his old friends." He writes his *Areopagitica*, a demand for the freedom of the press, pours contempt upon his opponents, and declares that new Presbyter is but old Priest writ large. His second marriage brought some promise of assuagement, but "his late espoused saint" died all too soon, as we know from one of his most beautiful sonnets.

We see that for Milton to feel a thing strongly, it had to be part of his personal experience. This is seen even in *Paradise Lost*. The Homeric conflicts between God and Satan reflect the turmoil of his own soul. The idyllic scenes in the Garden of Eden represent the conquest of reason by romantic love, of which he had had bitter experience. But after that, when he is trying "to justify the ways of God to man" he becomes more didactic and far less interesting. I doubt if any of us remember much beyond the first four books. Seen in this light we can understand why Satan is made such an heroic figure—he represents Milton's own instinctive emotional self, struggling in the toils of social convention which bound him. Blake says that "Milton was of the Devil's party without knowing it", though Blake's own illustrations to Job show more than a sneaking admiration for Satan. Landor is probably nearer the mark when he says that *Paradise Lost* is "not a justification of the ways of God to man as orthodoxy understands it, but an arraignment of orthodox conceptions of God and the Devil, a complete reversal of the apparent values of the poem". Grierson sums up the situation when he says: "In Milton the creature imagination and the critical intellect did not work in such harmony with one another as they have in some other poets".

But that indeed is the crux for many writers, both of poetry and prose. Let me illustrate two different methods of resolving this conflict, both of which I regard as pathological.

Just after my first visit to Rome, some thirty years ago, I read a remarkable novel, *Hadrian the VIIth*, by Rolfe. In it an Englishman achieves the triple tiara and takes the title of Hadrian, because it is the same as that taken by Nicholas Breakspear, the only Englishman who ever became Pope. He renounces all claim to temporal power, aiming at solely a moral sovereignty over Europe. The people applaud, the Cardinals are scandalized, and Hadrian is killed by an assassin's bullet. As I read the story I became more and more convinced that the author had visualized himself as Pope. A few years ago I read an account of him which

more than justified that idea. He took the title of Baron Corbo—where gained no one knows. He wrote several books, but this was the only one which attracted much attention, and he became more and more overbearing, quarrelsome and impossible in every relationship of life. Those who knew him realized that he was always seeing himself as Pope, and as he was not treated as Pope, he was fiercely resentful. He would begin a letter, "Quite cretinous creature", and end another, "bitterest execrations". It has been said that "to the world at large he seemed actuated by motiveless malice. . . . He saw the hand of an enemy in every misfortune; and where he saw an enemy he struck". The fantastic image of himself that he constructed overflowed into real life; the conflict became an external instead of an internal one. His condition was perilously near a psychosis, if it did not actually become one.

The second illustration is that of the author of *John Inglesant*. When I was entering my teens it happened that I came into a literary atmosphere which I enjoyed without comprehending it. The people in it talked much of John Henry Shorthouse and his book *John Inglesant*. When I was thirteen his much-heralded second novel appeared—*The Little Schoolmaster Mark*. It was a complete and dismal failure. He proved to be emphatically a man of one book, but that book continued to have readers and admirers more than half a century after its first appearance, when the author was regarded as a "minor prophet of things of mystical taste".

Then in 1925 came a bombshell into literary circles when W. K. Fleming published an article in the *Quarterly Review* entitled "Some Truths about John Inglesant". He had discovered that this much-admired book was a regular mosaic of borrowed gems. His enlightenment came from reading in the *Diary of Thomas Ellwood* these words: "I was sitting all alone. . . . I felt a word sweetly arise in me, as if I heard a voice which said, Go and Prevail. And Faith springing in my heart with the word, I immediately rose and went, nothing doubting". The phrases had a familiar ring, and then Fleming remembered that these were the words in *John Inglesant* used by Mr. Thorne in paying his addresses to Mary Collet of Little Gidding. Further search reaped a rich reward. The "liftings" were sometimes paragraphs, sometimes whole pages from many works. The extraordinary thing is that many extracts had been taken from books that are still read, and not merely from recondite sources. I might instance Evelyn's *Diary*, Hobbes's *Leviathan*, John Aubrey, Anthony à Wood, Burton's *Anatomy of Melancholy*. There were many others. Yet the book had been published forty-four years before this was detected. It suggests that we are not so well versed in seventeenth century classics as we sometimes pretend to be.

Fleming's comment is that Shorthouse apparently drenched himself in literature contemporary to his tale of the seventeenth century, which he threaded together with his own really beautiful nineteenth century English. "Shorthouse," he says, "probably looked on the book as a private labour of love, never destined to see the light; when persuaded by friends less versed than himself in the originals he found it impossible to tear out the borrowings without fatally disfiguring the whole." But this is hardly a complete explanation. Let us turn to the preface he wrote to the second edition and his defence of what he calls the philosophical romance, in the course of which he says, "Yes, it is only a Romance. It is only the ivory gates falling back at the fairy touch. It is only the leaden sky breaking for a moment above the bowed and weary head, revealing the fathomless Infinite through the gloom. It is only a Romance". Beautiful words, but not precisely informed with the humility of a conscious plagiarist.

Mr. Spens, the Master of my College, tells me that with full knowledge of these borrowings, he cannot believe that the mystery of *John Inglesant* is yet solved. He maintains that there is still much of Shorthouse in it. In particular he instances Inglesant's statement of the Catholic position in the Epilogue, which is only thus stated in one other work—and that a Russian book which has only recently been translated into English.

Soon after Fleming's revelations appeared I happened to come across A. C. Benson's description of Shorthouse in *The Silent Isle*. It is important to remember that Benson died before these revelations were made:

"I have been reading the *Memoir of J. H. Shorthouse*, and it has been a great mystery to me. It is an essentially commonplace kind of life that is there revealed. He was a well-to-do manufacturer of vitriol, too, of all incongruous things. He belonged to a cultivated surburban circle, that soil where the dullest literary flowers grow and flourish. He lived in a villa with small grounds; he went off to his business in the morning, and returned in the afternoon to a high tea. In the evening he wrote and read aloud. The only thing that made him different from other men was that he had the fear of epileptic attacks for ever hanging over him; and further, he was unfitted for society owing to a very painful and violent stammer. I saw him twice in my life; remote impressions of people seen for a single evening are often highly inaccurate, but I will give them for what they are worth. On the first occasion I saw a small, sturdily-built man, with a big clerical sort of face with marked features, and as far as I can recollect,

rather coppery in hue. There was a certain grotesqueness communicated to the face by large, thin, flyaway whiskers of the kind that used to be known as 'weepers' or 'Dundrearies'. He had just then dawned upon the world as a celebrity. I had myself read and re-read and revelled in *John Inglesant*, and I was intensely curious to see him and worship him. But he was not a very worshipful man. He gave the impression of great courtesy and simplicity; but his stammer was an obstacle to any sense of ease in his presence. I seem to recollect that instead of being brought up, as most stammerers are, by a consonant, it took the form with Shorthouse of repeating the word 'Too—too' over and over again until the barrier was surmounted; and in order to help himself out he pulled at his whiskers alternately, with a motion as though he were milking a cow. Some years after I saw him again, he was then paler and more worn of aspect. He had discarded his whiskers, and had grown a pointed beard. He was a distinguished-looking man now, whereas formerly he had only been an impressive-looking one. I do not remember that his stammer was nearly so apparent, and he had far more assurance and dignity. I was still conscious of his great kindness and courtesy, a courtesy distributed with perfect impartiality.

"But the mystery about him is this. The *Life* reveals or seems to reveal a very commonplace man—religious, essentially parochial. His letters are heavy, uninteresting, banal and reveal little except a very shaky taste in literature. The Essays, which are reproduced, which he wrote for Birmingham literary societies, are of the same quality, serious, ordinary, prosaic, mildly ethical.

"Yet behind all this, this pious, conscientious man of business contrived to develop a style of quite extraordinary fineness, lucid, beauty-haunted, delicate and profound."

Now does a distiller of vitriol become a distinguished man by fraud and robbery? I find the clue in the fact that Shorthouse was an epileptic. We know by clinical experience that epileptics may suffer from an extraordinary division of personality. Shorthouse making sulphuric acid in Birmingham and taking high tea was one man. Shorthouse in his study utterly immersed in the seventeenth century was quite another, and one Shorthouse did not know what the other Shorthouse did. The real life and the dream life were separate things, and the initial sentences of his preface indicate a mild surprise at finding a white bird in this nest in the Black Country. Insofar as the dream life overflowed into the real life it made a bigger man of him—the complete opposite of Baron Corvo's fate.

But this is the seventeenth century at second hand, and I will merely draw this part of my subject to a close by quoting from a recent article by John Hayward, my predecessor's nephew, which I think puts forcibly and well the decline that accompanied the end of that century.

"The vein of true poetic gold follows a strange uneven course through English poetry, but never more crookedly and unaccountably than in the seventeenth century.

"An age not 60 years separates Sir Henry Wotton from Tom Southerne. Sophistication increases as the century draws to its close, though it cannot disguise in a changing world, an all too apparent restlessness of thought and sensibility. . . .

"The heaven of Traherne and Herbert, the mystical paradise of Vaughan and Crashaw had passed away; Herrick's flowers had withered; in the songs of Dryden and his contemporaries are only echoes of an earlier music; while the metaphysical brilliance of Donne and Marvell had become dissipated in the absurdities of Cleveland and in Cowley's egregious imitations."

Dryden is not in much favour at the present moment. Prof. Housman rated him soundly in his recent Leslie Stephen Lecture at Cambridge. Speaking of Dryden's attempts to modernize Chaucer he said, "That there should ever have existed an obtuseness which could mistake this impure verbiage for a correct and splendid diction is a dreadful thought. More dreadful is the experience of seeing it poured profusely, continually and with evident exultation from the pen of a great and deservedly illustrious author. But most dreadful of all is the reflexion that he was himself its principal origin".

He goes on to say: "Meaning is of the intellect, poetry is not. If it were, the eighteenth century would have been able to write it better. As matters actually stand, who are the English poets of that age in whom one can hear and recognize the true poetic accent emerging clearly from the contemporary dialect? These four: Collins, Christopher Smart, Cowper and Blake. And what other characteristics had these four in common? They were mad." He claims that he recognizes the veritable poetic note by its physical effects upon him, in the following amusing way: "Experience has taught me, when I am shaving of a morning, to keep watch over my thoughts, because, if a line of poetry strays into my memory, my skin bristles so that the razor ceases to act. This particular symptom is accompanied by a shiver down the spine", and so on. "The seat of this sensation," he concludes, "is the pit of the stomach." Here he joins hands with Van Helmont across the centuries we have traversed this evening, who located the "sensitive soul" there. It is interesting to find poetry defined in terms of its effect upon the autonomic nervous system, and it again brings us up sharply

against authorship as a conflict between the intellect and the emotions.

Renaissance, Reformation, Rationalism, Romantic Revival, the R's roll on their way, each wave bearing witness to some phase in this eternal conflict. That it is present to-day, smaller wavelets are constantly reminding us. If I select a modern instance, I fear I may not carry you with me as much as I would fain hope I have done so far. For to mention the name of D. H. Lawrence is to see wigs scattered afar upon the green.

Harold Nicolson appears to regard him as the prophet of a new revelation, and thinks that his influence upon the younger next generation will in the next few years be overpowering. I rather doubt this. My view is that Lawrence had great literary gifts, which were fatally crippled by his psycho-neurosis. And I think that a generation with minds undamaged by the war and the scarcely less disastrous peace which has followed will recognize that fact.

It is generally recognized that D. H. Lawrence was in the grip of mother fixation all his life. So much is clear from his intensely autobiographical novel *Sons and Lovers*, which in my opinion is the only book of his which will prove of permanent value. His mother, disappointed in her husband, turns to her son. In a later book, *Fantasia of the Unconscious*, he had realized the situation and judged it severely. He says: "So she throws herself into a great love for her son, a final and fatal devotion, that which would have been the richness and strength of her husband and is poison to her boy. . . . Parents are the first in the field of the child's further consciousness. They are criminal trespassers in that field. . . . They establish [a] circuit. And break it if you can. Very often not even death can break it". He clearly recognized, as Middleton Murry said, that the father failed the mother because he would not assume purposive responsibility; the mother failed the father because she was cold and untender to him; and the children were devastated by the diverted and perverted love.

Naturally he failed in his adult relationship with women. Such men always do. He said: "You will not easily get a man to believe that his carnal love for the woman he has made his wife is as high a love as that he has felt for his mother". The word "carnal" betrays him; it is all that the mother-fixed can give, but they ask a great deal more. He met with great sympathy and help—he recognized that, but could not avail himself of it. Note this passage: "In her heart the woman believes that the birth of a child is the appointed end of sex-fulfilment and the ecstasy only the blossom on its way to become ripe seed. . . . If she were fulfilled, according to her own desire, there would be no turning back, or if there were, it would be only a momentary turning back of which the man need not be afraid. But he is afraid: and the fear turns to hate". From his writings "we fall into the habit of thinking because Lawrence was so constantly concerned with sex that he loved it". Really "it is a fetter which he longs to shake off. He has the intense hatred felt by the mediæval monk against the humiliation and the cause of it—woman". Naturally his wife resents this. "That the man should regard her as the creature and embodiment of *his* darkness horrifies her, she repudiates it utterly. Really he was practically impotent and wanted to be as a child seeking security and happiness from a protective woman, but he imagined himself as the hardy, indomitable male, demanding complete submission. Incapable of normal sex fulfilment he seeks abnormal fulfilments. But even in his earlier works the note of homo-sexuality is heard, before it becomes explicit in his later novel *Aaron's Rod*, where Lilly (who is Lawrence scarcely disguised) wants a homosexual relation with Aaron to complete his incomplete hetero-sexual relation with his wife. This he calls 'extending marriage'. Other people might find a different name for it".

Naturally when a man reaches a stage like this he has to try and construct a philosophy to rationalize his abnormal cravings. Hopelessly divided between his sexual appetites and his spiritual love for his mother's memory, while yet knowing how it has destroyed him, he portrays growth as duality, *i.e.* an increasing cleavage between the senses and the spirit. A tragic if laughable misinterpretation of decay for growth. Frustrated in his relationships with women and men alike, longing to be free without the courage to achieve freedom, his power motive grows to fantastic dimensions; he must dominate utterly. He talked of "the deep fathomless submission to the heroic soul in a greater man" (meaning himself), and again, "Men must submit to the greater soul in a man for their guidance and women must submit to the positive power-soul for their being". He must go away with a chosen man to make the nucleus of a new society. He must deny reason, find release in mindless sensuality (his own phrase) and find it among pre-mental primitive people. And so he goes forth: first to the Alban Hills, then to Sicily, thence to Sardinia. In each in turn he finds El Dorado—for about a week. For he found that "the mindless human being is malevolent". He was invited to stay at the Benedictine Monastery at Monte Cassino. His description of his stay is vivid: "They were the old-world peasants still about the monastery, with the hard, small bony heads and deep-lined faces and utterly blank minds, crying their speech as crows cry and living their lives as lizards among the rocks, blindly going on with the little job in hand, the present moment, cut off from all past and future, and having no idea and no sustained emotion, only that eternal will-to-live which makes a tortoise wake up once more in spring, and makes a grasshopper whistle in the moonlight nights even of November". From the heights of Monte Cassino he looked down again on to the modern world. "And here above . . . we were in the Middle Ages. Both worlds were agony to me. But here on the mountain-top was the worst: the past, the poignancy of the not-quite dead past".

"I think one has got to go through with the life down there—get somewhere beyond it. One can't go back," he said.

And so he passed from disillusionment to disillusionment. In Sicily he felt that it would be best to be one of the suave and completely callous demons; but unfortunately he could not stand their company. He found that the Sardinians "have not passed beyond democratic uniformity, they have not reached it. They are beneath, not beyond, the civilization which is as necessary to Lawrence as to any other man who has inherited it". And so like the Wandering Jew, he is driven on and on. He went to the United States, but as his head was full of Aztecs and the novels of Fenimore Cooper it is not surprising that disappointment awaited him again.

To paraphrase Middleton Murry—the question was this: Did he really accept or did he really reject modern life—the life into which fitfully and weakly but yet finally, the spirit of love has entered? He would not decide this; he wanted to be able to proclaim the pre-mental as an ideal and to denounce it as an experienced fact. For he knew that a completely achieved mental consciousness is the distinguishing mark of the modern world—that which makes it modern. That ideal country of his would never be found. Unless he could make himself a whole he would never find the whole of which he could be a part, yet his desire for leadership continued and grew, as did his craving for complete submission of others to his will. But leadership was impossible for a man so completely divided between love and hatred. And, as is usual in such a case, hatred became dominant, and death loomed almost as an escape.

It seems to me, however, that in his last writings he must have got nearer accepting the truth, for he wrote: "We dimly realize that mankind is one, almost one flesh. It is an abstraction, but it is also a physical fact. In some way or other the cotton-workers of Carolina or the rice-growers of China are connected with me, and, to a faint yet real degree, part of me. The vibration of life which they give off reaches me, touches me, and affects me all unknown to me. For we are all more or less connected, all more or less in touch: all humanity. That is until we have killed the sensitive responses in ourselves, which happens to-day only too often". So he came at last to "accept the Universe" but, gad, he had better have done so earlier. For his physical frame was by now exhausted by the hopeless struggle of his divided personality. It is a story as inevitable as Greek Drama—mother-fixation—the splitting of love into physical and psychical components—impotence—and an attempted compensation for it in a fantastic power motive which became completely asocial, and so destroyed itself. His writing is exhibitionism, but also an attempt to explain himself to himself, for, as he said, "one sheds one's sicknesses in books—repeats and presents again one's emotions to be master of them". Mingled with his turgid philosophy and preposterous physiology there are passages of really lovely comprehension of external nature, and flashes of self-knowledge. But he puts the final verdict on himself into the mouth of one of his characters: "When it comes to doing anything—you sort of fade out—you're nowhere".

One of Osler's profoundest remarks was that we all drag about with us the chains of the original error in which we were trained. It is a truth with many applications—not only to D. H. Lawrence, but to every one of us. We are, for good or evil, the resultant of our heredity and our environment.

Well, that was a platitude, and I seem to see Osler's quizzical smile across the room as I utter it. So I will conclude this attempt to do honour to the memory of a great man. I am thankful that I had the privilege of knowing him. His gaiety, his sanity and his courage were not the least of his many gifts to us. We mourn the dreadful test to which that courage was put in his latter years, a test under which, though his body broke, his courage failed not to the end. Medicine is proud of him, but we may fairly claim that medicine alone could have shaped and developed him thus. "So true it is," as Stephen Paget used to maintain, "So true it is, that it is not we who make our profession, but our profession which makes us."

SURGICAL APHORISMS.

(*Continued from p.* 208.)

24.

It may be a wise precaution to make all the arrangements for the performance of a blood transfusion after a very severe operation, even though the necessity for it will probably not arise. Carrying an umbrella will sometimes prevent the rain.

25.

When the necessity for a blood transfusion as an adjunct to a major operation has been foreseen, it is not necessary to keep the donor hovering in the neighbourhood to await the "psychological moment". The blood can be drawn beforehand and kept warm for immediate use. "Blood on the sideboard" means confidence for the operator and safety for the patient.

26.

Blood transfusion done in order to counteract a hæmorrhage need not aim at replacement of the whole volume of blood that has been lost. If a quarter of it is restored to the circulation, physiological requirements will have been satisfied.

27.

Blood transfusion as an aid to surgery may be pursued to its logical conclusion. If a patient is bleeding from an obscure source, transfusion may be repeated as a life-saving measure until the bleeding stops. More than five transfusions will hardly ever be needed.

28.

The surgery of many acute pyogenic infections is strictly comparable to medicine—the surgeon's proper *rôle* is restricted to watching the patient cure himself.

29.

Brodie's tumour—few people now have a clear idea of what is meant by this name. The association of the name hides the fact that the tumour is merely a glorified fibro-adenoma which tends, in its later stages, to become cystic or even sarcomatous—but these stages, described by Brodie, are now seldom seen.

30.

An apparently polycystic tumour of the breast is not necessarily a "Brodie's tumour"; it may prove to be a colloid carcinoma.

31.

Retraction of the nipple is not diagnostic of carcinoma, though it should always arouse a strong suspicion. It may result from any prolonged irritation in the breast with fibrosis.

32.

Invagination of the nipple is not to be confused with retraction. The former is often seen in young women without any disease. Retraction, to be detected by picking up the nipple, is associated with other signs.

33.

Carcinoma of the breast is a very fatal disease, but patients hardly ever die of the primary lesion.

34.

But every carcinoma is at one stage a local disease which can be cured by local treatment. The chief hope, therefore, for improved results is earlier diagnosis and prompt treatment.

35.

A cancer in any part of the body may be "early" or "late" in two senses—temporal and pathological. The second sense is the only one that matters, since a cancer that has not disseminated or infiltrated widely is pathologically "early", however long it may have been in existence. GEOFFREY KEYNES.

(*To be continued.*)

THE HISTORY OF THE HEDGEHOG'S ROSARY.

(*Continued from p.* 216.)

LEUKÆMIA.

It is remarkable how frequent is the simultaneous discovery of a subject by two workers often unaware of one another's presence, and it is sad to see how these discoveries often degenerate into a childish argument over priority. In leukæmia the recognition was almost simultaneous, but the altercation took place, not over priority, but as to the true explanation of the findings.

In the descriptions of remarkable cases which appeared in the seventeenth and eighteenth centuries, there are to be found a few of large livers and spleens, but none of them are detailed enough to consider as classical descriptions of this disease, and the first accurate account appeared in 1845. John Hughes Bennett (101) was an Edinburgh physician and Lecturer in Pathology to the University; in 1845 he published his case of *Hypertrophy of the Spleen and Liver in which death took place from suppuration of the blood.*

The very remarkable case about to be related derives unusual interest from its similitude in almost every respect to the one just recorded by Dr. Craigie. Although the most evident lesion during life was enlargement of the spleen, I agree with him in thinking that the immediate cause of death was owing to the presence of purulent matter in the blood, notwithstanding the absence of any recent inflammation, or collection of pus in the tissues.

Numerous authors have asserted that they have found purulent matter in the blood, independent of any local inflammation, or abscess from which it could have been derived. Hitherto all such statements have been very vague, because no measures were taken to ascertain whether this purulent-looking matter was really pus. We frequently meet with animal fluids, which, to the naked eye, resemble pus, although when more minutely examined, they are found deficient in the peculiar cells that characterize that morbid product. Gulliver more especially has pointed out that the colorless coagula which form in the heart and large vessels break down mechanically or by maceration into a pulpy mass of liquid. The purulent collections in the heart and blood-vessels described by Goodsir and Andral are considered by him to be fibrin softened in this manner. Again, we know that the blood in a state of health contains a number of colourless corpuscles, which closely resemble those of pus. Hence has latterly arisen the opinion, that the isolated pus corpuscles described by some authors were only the normal structures of the blood, and that, where after death large intravascular collections of purulent looking matter were discovered, they were caused by softened colourless coagula.

In the present state of our knowledge, then, as regards this subject, the following case seems to me particularly valuable, as it will serve to demonstrate the existence of true pus, formed universally within the vascular system, independent of any local purulent collection from which it could be derived. The individual entered the clinical ward of the Infirmary under Dr. Christison, to whom I am indebted for the history of the case. The *post mortem* examination and microscopic investigation were conducted with the greatest care by myself, and my assistant Mr. Morris.

John Menteith, aged 28, a slater, married, admitted into the clinical ward of the Royal Infirmary, February 27, 1845. He is of dark complexion, usually healthy and temperate; states that twenty months ago he was affected with great listlessness on exertion, which has continued to this time. In June last he noticed a tumour in the left side of the abdomen, which has gradually increased in size till four months since, when it became stationary.

It was never painful till last week, after the application of three blisters to it; since then several other small tumours have appeared in his neck, axillæ, and groins, at first attended with a sharp pain, which has now, however, disappeared from all of them. Before he noticed the tumour he had frequently vomited in the morning. The bowels are usually constipated, appetite good, is not subject to indigestion, has had no vomiting since he noticed the tumour. Has used chiefly purgative medicines, especially croton oil, has employed friction with a liniment, and had the tumour blistered.

At present there appears a large tumour, extending from the ribs to the groins, and from the spinal column to the umbilicus, lying on the left side. It is painful on pressure near its upper part only. Percussion is dull over the tumour; pulse 90; states that for three months past he has not lost in strength. There is slight œdema. To have two pills of iodide of iron morning and evening.

March 13: Died suddenly in the morning.

Sectio cadaveris, *March 19th (four days after death).* Externally the body presented a considerable prominence of the ensiform cartilage and false ribs on both sides. The abdomen was contracted, considerable dulness on percussion on left side, which had previously been marked out by a line formed with nitrate of silver.

No ascites or œdema of the limbs.

Blood: The blood throughout the body much changed. In the right cavities of the heart, pulmonary artery, *venæ cavæ, vena azygos* external and internal iliac veins, and many of the smaller veins leading into them, it was firmly coagulated and formed a mold of their size and form internally. In the cavities of the heart and *vena cava* the blood when removed was seen to have separated into a red or inferior, and a yellow or superior portion. The red portion was of a brick-red colour, it did not present the dark purple smooth and glossy appearance of a healthy coagulum, but was dull and somewhat granular on section, and when squeezed readily broke down into a grumous pulp. The yellow portion was of a light yellow colour, opaque and dull, in no way resembling the gelatinous appearance of a healthy decolorized clot. When squeezed out of the veins as was sometimes accidentally done where they were divided, it resembled thick creamy pus. In some portions of the veins the clot was wholly formed of red coagulum. In others it was divided into red and yellow. In a few places the yellow formed only a streak or superficial layer upon the red, or covered the latter with spots of various sizes. Whether this coagulum existed in all the veins could only have been ascertained by a complete dissection of the body. It was seen, however, that the femoral veins after passing under Poupart's ligament, were empty and perfectly healthy as far down as the Sartorius muscle.

The external and internal iliac veins were full and distended. The azygos, both axillary and jugular, veins, were full, also the longitudinal, the lateral and other sinuses at the base of the cranium and veins ramifying on the surface of the brain.

In this last situation some of the veins appeared as if full of pus whilst others were gorged with a dark coagulum. In the aorta and external arteries were a few small clots resembling those found in the veins. These vessels, however, were comparatively empty. The basilar artery at the base of the brain was distended with a yellow clot.

Vessels: The arteries and veins themselves were perfectly healthy. Although carefully looked for, in no place could thickening or increased vascularity be observed. Nowhere was the clot adherent to the vessels, but, on the contrary, readily slipt out when an accidental puncture was made in them.

The *spleen* also enormously enlarged with simple hypertrophy. It was of a spindle shape, largest in the centre, tapering towards extremities. It weighed seven pounds twelve ounces. It measured in length fourteen inches; in breadth at its wide part, seven inches; and in thickness, four and a-half inches. Toward its anterior surface was a yellow firm exudation, about an inch deep, and three inches long. The peritoneum, also covering a portion of its anterior surface, was thickened, opaque, and dense over a portion about the size of the hand.

* * *

The *lymphatic glands* were everywhere much enlarged. In the groin they formed a large cluster, some being nearly the size of a small hen's egg, and several being that of a walnut. The axillary glands were similarly affected. The bronchial glands were not only enlarged, but of a dark purple colour, and in some places black, from pigmentary deposit. The mesenteric glands were of a whitish colour, some as large as an almond nut. A cluster of these surrounded and pressed upon the *ductus communis choledochus.* The lumbar glands were of a greenish yellow colour, also enlarged, forming a chain on each side, and in front of the abdominal aorta, more especially at its bifurcation into the iliacs.

Microscopic Examination.—The yellow coagulum of the blood was composed of coagulated fibrin filaments, intermixed with numerous pus corpuscles, which could be readily squeezed out from it when pressed between glasses. Where the yellow coagulum was unusually soft, the corpuscles were more numerous and the fibrin was broken down into a diffluent mass, partly molecular and granular, partly composed of the debris of the filaments broken into pieces of various lengths. The corpuscles caried in size from the 1/80th to the 1/120th of a mill. in diameter; they were round, their cell-wall granular, and presented all the appearance of pus corpuscles. That they really were such was proved by the action of water and of acetic acid, the former of which caused them to swell and lose their granular appearance, whilst the latter dissolved the cell-wall and caused a distinct nucleus to appear.

* * *

The next question is, how were these corpuscles formed? Pus has long been considered as one, if not the most characteristic proofs of preceding acute inflammation. But in the case before us, what part was recently inflamed? There was none. Piorry and others have spoken of an inflammation of the blood, a true hematitis; and certainly if we can imagine such a lesion, the present must be an instance of it. But it would require no laboured argument to show, that such a view is entirely opposed to all we know of the phenomena of inflammation. Without entering into this discussion, however, I shall assume it to have been satisfactorily demonstrated that we can form no idea of this process, without the occurrence of exudation from the blood-vessels, and that, consequently, the expression inflammation of the blood is an error in terms. A moment's reflection will make it evident that all our ideas of, and facts connected with inflammation are associated with some local change in the economy. The constitutional disturbances connected with it we invariably ascribe to phlegmasia or fever, which pathologists hitherto have always separated. Unless, therefore, it could be shown that inflammation and fever were like processes, we must conclude that the alteration of the blood in this case was independent of inflammation properly so called.

But can we explain the production of pus independent of inflammation? We reply in the affirmative. The corpuscles of pus arise in a blastema formed of Liquor Sanguinis. This fluid, when exuded through the blood-vessels, does not thereby in itself undergo any change. If any circumstances, therefore, should arise by means of which it could be separated from the red corpuscles within the vessels there is no reason why these pus cells should not be formed in it. Facts point out that this coagulation happens not unfrequently.

About a month later Rudolf Virchow (102), while he was an assistant at Froriep's clinic, published a case of leukæmia, and it will be useful to reproduce his post-mortem findings and conclusions in order to contrast them with those of Hughes Bennett.

Section, twenty-eight hours after death. On the palmar surfaces of both hands, incisions with a discolored blackish appearance which lead to superficial collections of pus which do not penetrate the fascia, and contain a reddish, fairly firm pus. The adjacent lymphatics and blood-vessels normal. In the muscular tissue of the flexors some old cysticercus cysts. In the veins above, some discolored blood, scarcely red, poorly clotted. As I examine the further course of the blood-vessels; there was everywhere in them a pus like mass. The heart which was somewhat enlarged, was completely filled with large, loosely adherent, greenish, yellowish white coagula, which crumbled under the fingers, could be easily smeared about, not at all adherent, to the walls and which looked exactly like firm pus. The same mass was also present in the aorta and in the larger arteries, in the veins of the body cavities and in the veins of the lower extremities. The veins with thin walls presented the picture of canals filled with pus, and the surface of the heart and of the meninges, whose veins were markedly dilated by their pus-like contents, seemed to be covered with solid yellowish white cords. Everywhere this material lay free in the vessels, whose walls appeared in no way changed. All organs very pale. The lungs normal except for a slight bronchial catarrh. The intestinal tract was normal except for a succulent appearance of the mucosa. Liver not essentially changed. Spleen enormously hypertrophied, nearly a foot long, very heavy, dark brownish red, with a board-like firmness, crumbling, on cross-section pale and apparently composed of a homogenous tissue, the cut section slightly shiny, wax-like, thus resembling a large ague cake. Kidneys normal, only in the calices and pelvis a large mass of uric acid stones, which were partly small particles the size of hemp-seeds, partly in masses the size of cherry-stones covering the papillæ and partially filling the upper portion of the ureter. Genitalia normal.

The yellowish white almost greenish mass which the vessels contained and which was collected from the heart and the great vessels, weighed nearly 2 pounds. When removed with some care, it had the appearance of a loose coagulum; but when placed on an uneven surface it fell apart from its own weight and the microscope showed no adherent masses of fibrin. Except for a very few red blood corpuscles, the greater part was composed of colorless or white corpuscles, which also occur in normal blood, namely, small, somewhat irregular protein molecules, larger, nucleated, fatty capsules without nuclei and granular cells with a round, horse-shoe-shaped or clover-like nuclei or with several bowl-shaped, distinct nuclei. The larger of these cells had a slightly yellowish appearance. The relationship between the pigmented and colorless blood corpuscles seemed to be reversed here from that of normal blood, for the white corpuscles seemed to be the rule and the red corpuscles a kind of exception. When I therefore speak of *white blood*, so I mean in fact a blood, in which the proportion between the red and white blood corpuscles is reveresed, without noting any mixture of strange chemical or morphological elements.

Considerations. It would be premature to draw sweeping conclusions from a single case, so unusual, since the relationships are not so clear and the history of the disease contains so many gaps. The older accounts of white blood are quite useless because a microscopic examination is lacking. They relate mostly to loss of blood by hemorrhage, fasting, etc. Now it is further known since Hippocrates that the diseases of the spleen rather frequently produce nose-bleed. In the present case we can construct the following etiological succession: splenic tumour, nose-bleed, white blood. The cough and the diarrhœa whose persistence was due to no local lesions, as well as the hydropic infiltration, the nose-bleed, the furuncular and pustular eruption, are all to be considered as signs of the increasing dissolution of the blood. The excessive formation of white blood cells (lymph corpuscles) cannot be explained by increased flow of chile, since chylification is not especially active in the presence of diarrhœa, but this all speaks for an increased formation of the cells on the blood, which suggest a great mass of small molecules (primary nuclei). Also it should not be overlooked that the cough, diarrhœa and edema were present before the nose-bleed, and that the remarkable change of the red blood into white blood could have taken place only quite recently, because the blood from the epistaxis was always red.

I have presented these observations only with the purpose of showing that such a remarkable and unusual case may have so many relationships with further investigations and so many suggestions for explaining other questions, but it remains a rather uncertain subject for positive proof and conclusion so long as it itself remains unexplained. A case very similar and very well described, has appeared in the recent literature but unfortunately the history of the patient's illness is lacking.

Laulner (Report of the Proceedings of the Pathological Institute of the Vienna General Hospital, directed by Prof. Rokitansky in the *Zeitschr. der k. k. Ges. der Arzte zu Wien* 1845 Ba. IS 488) describes the following: general pyemia in a locksmith aged 33. Decubitus over the sacral area, which extends into the subcutaneous tissue. The skin of the lower abdomen, back and posterior portions of the thighs covered with small abscesses varying in size from a pea to a groschen and filled with pus. The pleura at the base of the right lung covered with a delicate membranous coagulated exudate. In most of the pulmonary vessels, large and small, there were yellowish-green *tough* coagula, in the posterior lower portion of the right lung there were two consolidated areas, large as walnuts. In the cavities and great vessels greenish yellow coagula. The liver is three times its normal size, weighs 6 pounds 4 ounces, pale, fatty, very anemic and dampened with a cloudy pus-like fluid; the spleen 5 pounds 14 ounces, heavy, coarse, and on the upper third of the convex surface shows a deposit the size of a walnut, partly pale yellow, partly dark red reticulated and fibrinous: the rest of the parenchyma brownish red, infiltrated like bacon. The lymph glands around the pancreas are swollen to the size of a pigeon's egg, pale reddish and infiltrated with a sticky greenish yellow pus-like fluid. Both kidneys pale, infiltrated with a cloudy discolored fluid.

It does not seem to me demonstrated that this case should be included under the term pyemia, although the purulent infiltration of the different parts seems to speak for this. The complete identity of the colorless blood corpuscles (lymph corpuscles) with pus, makes a conclusion uncertain even when the microscope is employed, as the case I described shows. The usual composition of the blood in pyemia is entirely different, not because of the presence of pus in the blood but because it is characterized by a liquefaction and destruction of the blood components and by a tendency to the production of exudates with purulent metamorphosis. It seems to me clear that in this case there is not a purulent infiltration into the tissues but a purulent change in the exudate which has taken place through a stasis of the blood in various places. The course of the hepatized places in the lung and spleen seem to prove this; the abscesses of hands probably had a similar origin as well as the purulent eruption on the nose and hands. In the case from Vienna there were apparently no hemorrhages and yet there was white blood and a splenic tumor. Recent observers (*Donné*) have ascribed to the spleen an especial rôle in the transformation of red corpuscles into white. According to observations made repeatedly the loss of the spleen produces no similar condition: could a diseased spleen have such an effect? Is nose-bleed in splenic disease caused by a similar blood disease? Perhaps my report will cause one of the Viennese physicians to publish the history of the patient's disease in greater detail: I should consider myself lucky to have aided science with a new, and it seems to me, not unimportant fact.

A. H. T. R.-S.

(To be concluded.)

THE ANÆSTHETIC.

WHAT a momentous event was the first paid work one did after qualification.

When the opportunity came to me I had scarcely recovered from the headache brought on by the excitement of the night before, when after prolonged struggles and misunderstanding, I at last passed the College Finals.

While I was seated on the brim of the Fountain, receiving the congratulations of my friends and dispensing sympathy to the less fortunate, Mr. Sargant, the Registrar of those days, was seen approaching.

Apart from his official duties Sargant ran a kind of agency for the sale and purchase of practices, and would supply a *locum* at the very shortest notice.

After gravely congratulating me on my achievement, he asked me, before the admiring circle, if I was free to do a *locum* at the Metropolitan Hospital. Blushingly I admitted I was disengaged and could go at once; and off I went to the Kingsland Road, to act as temporary anæsthetist.

On my arrival at the hospital I was told to hurry to the theatre, where the senior surgeon was waiting to operate.

I had scarcely had time to don a white coat when the patient was brought in and placed upon the operating table, and I prepared to administer a perfect anæsthetic on the method of "Dicky" Gill.

Apart from the professional fat women to be seen at country fairs, this one was the fattest and biggest I ever saw.

A veritable mountain of a woman, she needed support on both sides to prevent her from rolling off the table.

Nothing daunted, I got to work trying at the same time to appear at my ease although really as nervous as could be.

After a few reassuring words to the quaking mass, who was, if possible, more nervous than I, the induction commenced.

The anæsthetic was, of course, chloroform, given as taught us by Gill; three squirts on a piece of lint, held in the fingers of the left hand. After the proper interval the lint was deftly reversed by a process of sleight-of-hand, the result of long practice, and three further jets of chloroform damped the lint.

Senior surgeon or not, I was taking no risks with this, my first case, and was not going to be hurried. Out of the corner of my eye I saw the surgeon showing signs of impatience, but with calm deliberation I kept up the steady Gill rhythm. At last, after what seemed to me an age, the patient began to go off—or was it only sleep simulating anæsthesia? No, it was the real thing, steady deep respirations, pupils all right, everything as it should be, and I informed the surgeon that he might begin.

But after all she must have been asleep, and my voice half-awakened her, for suddenly in a loud, clear strain, which filled every corner of the theatre, she sang, "Give me just a little love, one tiny kiss", and went on singing these words over and over again, and this in spite of my breaking all the rules of Mr. Gill by giving her large and repeated doses of chloroform.

It must have been for at least ten minutes that she continued to implore me to give her just a little love, "one tiny kiss", and the shattering song only ceased as the dregs of the chloroform bottle were in sight.

But all the same, even if I did mistake slumber for anæsthesia, I still consider the remark of the surgeon quite uncalled for when, in front of everybody, he asked me if the patient was an old friend of mine.

PHILIP GOSSE.

STUDENTS' UNION.

RUGBY CLUB PROSPECTS, 1933–34.

It will be observed by those interested in the Club that there have been included some additional fixtures for the coming season, notably those against three other hospitals. For the past few seasons it has been usual to play the "London" in a friendly, but this year, and in future, it is hoped that a few more of these matches may be possible, for apart from the natural goodwill that is bound to arise, we are assured of having a good game, without that tenseness and ferocity displayed in a cup-tie. The critics may be confounded by learning that inter-hospital rugger is not all ignorance and brute force. Among other notable fixtures are matches against Otley, University College, Dublin, Army Trial XV and Bridgewater Albion.

It is usual to look upon the coming season with great optimism in spite of what has gone before. But this year we may surely look forward to a successful and enjoyable season, although we are going to miss, in more senses than one, that great personality and grand little player, "Jimmy" Taylor, who probably has had more to do with our successes in the past few seasons than anyone else. The good wishes of the whole Club go with him, and we hope that he will still play rugger for a season or two to come.

The team will be captained this year by E. M. Darmady, with J. M. Jackson as vice-captain. We will be lucky in having the same pack that did so well under the inspiring leadership of W. M. Capper last season, and in addition there are some very useful members of the "A" XV who on their form of last season should gain a place.

As usual the back division will be a problem. We all know what to expect of C. R. Morison at full back; he gives the team that feeling of confidence that is so vital to its *morale* under any circumstances. But there has been a dearth of true attacking centres for the past few seasons, and this fact has to a great extent nullified the good work done by the rest of the team. This is by no means detrimental to the centres of the past, who have played magnificently, especially as everyone who had the good fortune to see the Cup final last season, when they held the speedy Guy's backs for the greater part of the game, behind a beaten pack. They have been sound without being brilliant, and seemed to lack finish, which is tragic when a club possesses such first-class wings as J. G. Nel and L. M. Curtiss. But it is going to be difficult to fill J. T. C. Taylor's place at scrum-half, a position on which success depends so much.

Practice games will be held on September 16th and 23rd, and it is hoped that all members of the Senior three XV's will make an effort to get fit for them. This year there should be ample opportunities for everyone, as the Merchant Taylors' site will shortly open for training facilities. Fives and such games are a very useful form of exercise to ensure fitness. The Students' Union have kindly given the Club a practice pitch on the site, on which it is hoped to erect a goal post, which will be badly needed if the place-kicking is to improve.

To the Junior teams we wish the best of luck, and hope that their enthusiasm will be rewarded with success.

And finally it is hoped that we will get even better support than hitherto at home matches.

J. D. W.

Officers for Season 1933–34.

President: Dr. J. D. Barris.
Captain: E. M. Darmady.
Vice-Captain: J. M. Jackson.
Hon. Treas.: J. R. Jenkins.
Hon. Sec.: J. D. Wilson.
Capt. "A" XV: E. E. Harris.
Hon. Sec. "A" XV: C. M. Dransfield.
Hon. Secs.:
Extra "A" XV: R. Hanbury-Webber.
"B" XV: J. M. Macdonald.
Extra "B" XV: A. H. Jack.
"C" XV: H. N. Rees.
Extra "C" XV: J. Longland.

Fixtures, 1933–34.

1933.			
Sat.,	Sept. 30.	Middlesex Hospital	Home.
,,	Oct. 7.	Old Leysians	,,
Wed.,	,, 11.	St. Thomas's Hospital	,,
Sat.,	,, 14.	Rugby	Away.
Wed.,	,, 18.	London Hospital	,,
Sat.,	,, 21.	Bedford	,,
Wed.,	,, 25.	Cambridge University	Home.
Sat.,	,, 28.	Wasps	Away.
,,	Nov. 4.	London Irish	,,
,,	,, 11.	University College, Dublin	Home.
Wed.,	,, 15.	Army Trial XV	,,
Sat.,	,, 18.	Moseley	Away.
,,	,, 25.	Devonport Services	,,
Mon.,	,, 27.	R.N.E.C., Keyham	,,
Sat.,	Dec. 2.	Rosslyn Park	Home.
Wed.,	,, 6.	R.M.A.	Away.
Sat.,	,, 9.	Northampton	Home.
,,	,, 16.	Old Paulines	Away.
,,	,, 23.	Xmas	,,
,,	,, 30.	Redruth	Home.
1934.			
Sat.,	Jan. 6.	Harlequins	Home.
,,	,, 13.	O.M.Is.	Away.
,,	,, 20.	Coventry	Home.
,,	,, 27.	Old Alleynians	Away.
,,	Feb. 3.	Halifax	,,
,,	,, 10.	Pontypool	Home.
,,	,, 17.	Old Paulines	,,
,,	,, 24.	Otley	,,
,,	Mar. 3.	Moseley	,,
,,	,, 10.	Devonport Services	,,
,,	,, 17.	Bridgewater Albion	Away.
,,	,, 24.	Pontypool	,,
,,	,, 31.	Easter	
Tues.,	Apr. 3.	Bristol	Away.
Sat.,	,, 7.	Torquay	,,
Mon.,	,, 9.	Redruth	,,
Tues.,	,, 10.	Falmouth	,,

CRICKET CLUB.

Of major importance during the past months has been the cup-tie success of both 1st and 2nd XI's. With King's as opponents in each case both teams conquered the precarious, and emerged successfully from the critical ordeal of semi-final cup-ties. Pallid reflection might indicate that only individuality saved the day, but since the pooling of individual effort is a synonym for efficiency, the true balance is preserved. Superlative in the reckoning stand out Nunn's intuitive leadership, Mundy's all-round skill and Bamford's wicket-keeping.

1ST XI.

ST. BARTHOLOMEW'S HOSPITAL *v.* MIDHURST.

Played on Thursday, July 20th. Lost.

This game was played on the picturesque Midhurst ground, but the effectiveness of our display would hardly illumine a province. Even a charitable beneficence could not be reconciled to our dismissal for 77 runs on a perfect wicket. There was a definite lack of orderliness about our batsmanship, for the bowling possessed only average guile.

Our opponents added 90 runs for the second wicket and ultimately totalled 174. Our bowling was very steady, Dransfield taking 4 for 46 in 17 overs. In exculpation, we might add that the side was not at full strength and therefore we were not unduly perturbed.

ST. BARTHOLOMEW'S HOSPITAL *v.* KING'S COLLEGE HOSPITAL.

Semi-final Cup-tie.

Played on July 23rd at Winchmore Hill. Drawn.

Batting on a fast pitch, our opening was eminently cheerful in that Nunn (80) and Boney (102) put on 145 runs for the first wicket. Both showed a positive batsmanship which intimidated all but good-length bowling. Wedd followed with a quick 63, scored with his usual freedom, and we were enabled to declare at 336 for 7 wickets. Victory seemed assured when 2 wickets had fallen for 11 runs, but in spite of superb bowling by Nunn and expert wicket-keeping by Bamford, the third wicket added 160 runs, and when time was called our opponents had made 266 runs for 9 wickets. Never has Bamford shown such an art as on this occasion; with three men brilliantly stumped and two caught, he was responsible for 5 of the 9 wickets which fell.

In such a picturesque contest, Boney's century, Nunn's display and Bamford's skill stand out, whilst our opponents are to be congratulated on such a stubborn reply to an intimidating total.

Scores:

ST. BARTHOLOMEW'S HOSPITAL.		KING'S COLLEGE HOSPITAL.	
Boney, c Miles, b Kerr	102	Miles, b Wedd	87
Nunn, b Stokes	80	Davis, c Bamford, b Nunn	0
Morison, b Stokes	0	Carey, c Bamford, b Nunn	2
Wedd, c Miles, b Walters	63	Ledger, st Bamford, b Wedd	81
Gabb, c Walters, b Stokes	19	Wise, st Bamford, b Nunn	25
Wheeler, b Ledger	8	Coombes, b Mundy	36
Wade, b Stokes	33	Stokes, st Bamford, b Wedd	11
Wilson, not out	9	Walters, not out	2
Mundy, not out	4	Kerr, b Wedd	0
Dransfield, Bamford }	Did not bat.	Mitchell-Smith, b Mundy	0
		Bynoe, not out	0
Extras	18	Extras	22
Total (for 7 wkts., dec.)	336	Total (for 9 wkts.)	266

Bowling: Mundy, 2 for 84; Nunn, 3 for 49; Wedd, 4 for 61; Gabb, 0 for 30; Wade, 0 for 23.

The replay was played at Dog Kennel Hill on Monday, July 31st, Won by 134 runs.

The side was depleted, Nunn and Gabb being unable to play, and accordingly victory was all the more creditable. Again we batted first, and again Boney and Wedd proved their practical skill in scoring 61 and 41 respectively. The issue seemed very doubtful, however, when the seventh wicket fell at 139, but Mundy and Dransfield, moving on eager feet, added 60; Baker and Mundy then added 60 more precious runs and so we totalled 263. Mundy's innings of 76, coming as it did at a critical time, was a glorious effort for one leading the side. Not only that, for the immediate sequence was even more epic in that he took 6 wickets for 43 runs and King's were all out for 129 runs.

Scores:

ST. BARTHOLOMEW'S HOSPITAL.		KING'S COLLEGE HOSPITAL.	
Boney, c Ledger, b Wilson	61	Davis, lbw, b Mundy	9
Masina, b Kerr	2	Wilson, lbw, b Mundy	0
Morison, b Kerr	10	Miles, b Mundy	0
Wedd, b Kerr	41	Ledger, b Wedd	8
Dolly, c Carey, b Kerr	2	Carey, b Mundy	6
Wade, b Kerr	4	Stokes, b Mundy	1
Wilson, b Wilson	1	Fearnley, b Dolly	29
Dransfield, b Stokes	27	Coombes, b Mundy	10
Mundy, c Miles, b Wilson	76	Kerr, b Wedd	2
Baker, b Ledger	20	Walters, not out	53
Bamford, not out	0	Bynoe, b Dransfield	5
Extras	19	Extras	6
Total	263	Total	129

Bowling: Mundy, 6 for 43; Dransfield, 1 for 24; Wedd, 2 for 38; Dolly, 1 for 18.

2ND XI.

ST. BARTHOLOMEW'S HOSPITAL *v.* KING'S COLLEGE HOSPITAL.

Semi-final Cup-tie.

Played at Denmark Hill. Won by 5 wickets.

This was a glorious victory, for we triumphed by sheer batting flexibility alone. In facing a total of 245 runs, our methods were vigorous to a degree, thanks to Maidlow and Baker, who slammed through the covers, cut with freedom and ran with zest; both narrowly failed to achieve a century, but even arithmetical glamour cannot dwarf such practical innings.

Scores:

KING'S COLLEGE HOSPITAL.		ST. BARTHOLOMEW'S HOSPITAL.	
Fearnley, b Baker	56	Capper, b Mason	0
Dacie, c Masina, b Baker	10	Hindley, b Hurst	2
Copesake, c Hindley, b Hayes	0	Maidlow, st Dacie, b Peel	99
Prole, c Hayes, b Harris	77	Masina, c McClintock, b Lassen	8
Hurst, b Crosse	35	Baker, not out	96
McClintock, lbw, b Harris	0	Mundy, (M. L.), b Lassen	16
Mason, c Capper, b Harris	0	Crosse, not out	13
Peel, c Baker, b Crosse	38	Hayes, Howell, Berry, Harris }	Did not bat.
Lassen, b Crosse	5		
Stone, not out	7		
Ledger, not out	6		
Extras	11	Extras	16
Total (for 9 wkts., dec.)	245	Total (for 5 wkts.)	250

It is therefore gratifying to record that, for the third successive year, both teams enter the final ties. The strength of our batting is obvious, our fielding propensities are very sound, whilst the bowling has been and can be brilliant. Our success will depend very probably on the latter factor, for the Thomas's batting capabilities are well founded on result. The 1st XI final will be played on September 8th, 9th and 10th at Denmark Hill; it will be a two innings' game.

The 2nd XI final tie will be played on Saturday, September 2nd, at Winchmore Hill, our opponents being London Hospital 2nd. The game will start at 11 a.m.

We hope to report in the October JOURNAL that both teams have been successful in retaining Senior and Junior Cricket Cups; if not, then we shall take the hap of our deeds. C. M. D.

CORRESPONDENCE.

To the Editor, 'St. Bartholomew's Hospital Journal'.

DEAR SIR,—I read with considerable interest the correspondence concerning the Hospital Arms published in the July number of the JOURNAL. I took the opportunity, when at Winchester recently, to try and find out more about the Lillebone Reliquary. This appears to have been given to the Cathedral by William de Lillebon or Lislebon, who also gave them the Manor of Brandesbury in Hampshire. The chevron is also given as the Arms of Walter de Lillebon, *c.* 1277–1287, in the Arden Roll. From this we may deduce that the Lillebon family used the black and white chevron at this date, and that they were probably a Hampshire family.

At this early period, heraldry in relation to families was not very systematized, and as in the later records, made when the heralds toured England with a view to examining the rights and wrongs of the claims which families made to their armorial bearings, there is no reference to the Lillebon family, the presumption is that they had been wiped out by battle or disease; at any rate, no one of the name claimed the Arms or disputed the right of the Lawsons of Osworth to use them. If, therefore, the Hospital adopted them because of any connection with the Lillebon family, this connection must have been at a very early date.

The salient feature in the Wakering coat of arms is a pelican. Bishop Wakering's arms were a pelican, and it is these which appear as far as I can make out, on the church at Little Wakering. I have traced, as far as I can, the owners of the manors of Great and Little Wakering, but none of them appear to have borne the Hospital Arms, so the ownership of this manor by the Hospital would not seem to have been the source of inspiration.

With regard to Dr. Maidlow's contention that the exemplification of the arms, which appears opposite p. 238 in vol. i of Dr. Norman Moore's invaluable book, is prior to Cok's *Cartulary*, surely this illustration is a page from the *Cartulary* itself, which I understand dates from the reign of Henry VI.

I am afraid I must differ from Dr. G. Dru Drury in his opinion that it is a "logical conclusion" to include a crest as well as supporters. In the days when heraldry was part of the military uniform and not mainly decorative, a crest was only displayed on the helmet of its owner, consequently, many people consider it more correct that a corporate body, which has no head upon which to wear a helmet, should not include a crest in their armorial bearings, although, of course, there are plenty of precedents for the inclusion of a crest if so desired, as may be instanced by the arms of the city companies, which have both crest and supporters. Dr. Drury has misinterpreted the design in describing it as quarterly. On the contrary, it is a single shield, charged with a cross, and bearing certain devices, placed in the quarters so formed; quite a different thing from a quarterly coat recording the perpetuating of arms derived from the marriage with heiresses.

In general, I agree that there is a lot to be said for not changing the Hospital Arms. There is no reason, however, that the Hospital should not commemorate their development and increased importance by taking unto themselves supporters.

If the Hospital do not want to use the coat combining Hospital and Priory, the Medical College, to be set up in Charterhouse Square, might like to take it on, without supporters, but with a crest instead. I think they should have arms of their own, based on the Hospital but not identical, so the design, less supporters, would do very well.

Yours faithfully,
PHILIP W. KERR,
Rouge Croix.

College of Arms,
Queen Victoria Street, E.C. 4;
August 23rd, 1933.

REVIEW.

MODERN BIRTH CONTROL METHODS. By GEORGE RYLEY SCOTT. (John Bale, Sons & Danielsson, Ltd.) Pp. 209. 7s. 6d.

Mr. Scott, in a book written presumably for the general public, sets out to "review calmly and without prejudice the known methods of avoiding conception", and in his introduction states that he is concerned with the methods rather than with the ethics of his subject. But he is wrong in thinking that he is "almost alone in voicing this viewpoint". Dean Inge, writing nearly fifteen years ago in the *Edinburgh Review*, says that birth control is "emphatically a matter in which every man and woman must judge for themselves, and must refrain from judging others".

There is a pleasant sanity about this book; the various methods are described with their pros and cons in straightforward fashion, the author rightly stressing the importance of a combination of methods. Full directions for obtaining contraceptives, a list of clinics and a selected bibliography are included in the appendix. Practitioners will find this a useful book, free from fads, which may be recommended to the more intelligent patient.

EXAMINATIONS, ETC.

University of Cambridge.

Second Examination for Medical and Surgical Degrees, Easter Term, 1933.

Part II.—Brennan, E. B., Edwards, T. A. W., Oppenheimer, G., Thackray, A. C.

Third Examination for Medical and Surgical Degrees, Easter Term, 1933.

Part I.—Briggs, G. O. A., Cohen, E. L., Hindley, G. T., Houlton, A. C. L.

Part II.—Berry, W. T. C., Briggs, G. O. A., Carr, C. M., Cohen, E. L., Ghey, P. H. R., Groves, J. N., Langford, A. W., Morel, M. P., More Nisbett, J. G., Murless, B. C., Sykes, R. A., Thomas, G. W., Williams, R. H. H., Wilson, J.

University of London.

M.D. Examination, July, 1933.

Branch I (Medicine).—Page, A. P. M., Roberts, J. H. O., Watkin, J. H.

First Examination for Medical Degrees, July, 1933.

Allen, W. H. E., Ballantyne, J. C., Banaji, P. B., Boatman, D. W., Butler, K. A., Dobree, J. H., Dunn, D. M., Edwards, J. A. C., Evans, D. G., Evans, E. O., Evill, C. C., *Fagg, C. G., Frazer, A. L., Golledge, N. H. H., Hall, W. S., Harrisson, G. J., Jayes, P. H., Kruatrachue, G., McMahon, R. J. H., Morse, D. V., Parkinson, T., Phillips, B. M., Pickering, G. H., Porter, A. S., Rees, H. N., Reilly, C. P. C., Staley, G. R., Swinstead, P. D., Thomas, W. I., Upshon, H. M., Vandy, K. W., Young, N. A. F.

* Awarded a mark of distinction in Physics.

Second Examination for Medical Degrees, July, 1933.

Part I.—Bacon, A. H., Baines, F. M., Brown, K. C., Burnham-Slipper, C. N., Carey, C. J., Cawthorne, J. E., Cunningham, A. G., Dunn, J. R., Evans, D. G., Foster, W. B., Frewen, W. K., Goodrich, B. H., Hill, P. G., Jack, A. H., Jamieson, J. G., Jordan, A., Phillips, B. M., Pickering, G. H., Ramsay, F., Rendall, D. C. S., Thomas, W. I., Thomson, A. H., Waring, J. W. B., Welply, R.

Part II.—Armstrong, J. H., Barrett, R. H., Cates, J. E., Cobb, W. A., Dastur, H. K., Knight, F. D. W., Lewis, C. L., Roy, A. N., Royston, G. R., Smyth, E. H. J., Stephens, A., Vahrman, J., Williams, A. M., Youngman, J. G.

Third (M.B., B.S.) Examination for Medical Degrees, May, 1933.

Cunningham, G. J., Hackett, L. J., McOwan, B. M., Magnus, H. A., Snell, V. C., Trueman, R. S., Weddell, A. G. M., Williams, H. M.

Supplementary Pass List.

Group I.—Harris, R. V., Morrison, R. J. G.

Group II.—Beard, A. J. W., Cohen, P., George, W. F. T., Thomson, D. M.

Conjoint Examination Board.

Pre-Medical Examination, July, 1933.

Chemistry.—Grant, D. S., Huddlestone, C., Jones, D. A. V., Redman, V. L.

Physics.—Grant, D. S., Huddlestone, C., Jones, D. A. V., Redman, V. L.

Biology.—Anklesaria, J. M., Dean, D. W. J., Halper, N. H., Pallot, K. R., Webb, C., Wedd, J. R. K.

First Examination, July, 1933.

Anatomy.—Berry, J. G., Evans, A. H., Gardiner, L. E., Jones-Roberts, W. A. D., Owen, W. A., Scott, K. B., Smith, J. B. G.

Physiology.—Berry, J. G., Evans, A. H., Gardiner, L. E., Hicks, W. R., Jones-Roberts, W. A. D., Maidlow, W. M., Owen, W. A., Smith, J. B. G.

Pharmacology.—Adel, M., Ball, P. H., Bensley, W. E. C., Moynahan, D. J. M., Shemilt, W. P., Weston, C.

Final Examination, July, 1933.

The following students have completed the Examinations for the Diplomas of M.R.C.S., L.R.C.P.:

Boney, A. R., Fear, R. G., Fletcher, C., Fountaine, E. C., Hadfield, S. J., Harris, R. V., Harvey, K. J., Hugh, H. G., Jackson, B. F., McGavin, D. B., Mason, T. O., Naidu, C. R., Oxley, W. M., Sen, S. K., Squire, J. A., Swain, V. A. J., Thomas, D. M. E., Vaid, J. R., Wenger, R. A. L.

L.S.A.

Primary Examination, July, 1933.

Anatomy.—Anderson, J. D., Evans, A. H.

Physiology.—Mills, C. W.

CHANGES OF ADDRESS.

BULL, L. J. FORMAN, Nuku'alofa, Tonga, Pacific Islands.

GREEN, F. H. K., 138, Dedford Court Mansions, W.C. 1. (Tel. Museum 0368.)

JENKINSON, Surg.-Lt. S., R.N., Royal Naval Barracks, Devonport.

UNDERWOOD, W. F., 20, Upper Wimpole Street, W. 1. (Tel. Welbeck 3640.)

WARE, H. A., 10, St. Andrew's Street North, Bury St. Edmunds. (Tel. 270.)

WEHLBURG, T. H., Escombe Street, Port Shepstone, Natal.

APPOINTMENTS.

BULL, L. J. FORMAN, M.B., B.S.(Lond.), appointed Chief Medical Officer to the Government of Tonga, Pacific Islands.

HUNT, W., M.R.C.S., L.R.C.P., appointed Assistant Medical Officer to the Leicester and Rutland Mental Hospital, Narborough, near Leicester.

BIRTHS.

BURGESS.—On August 11th, 1933, at Lauriston House, Chipping Ongar, Essex, to Margaret (*née* Wright), wife of Dr. W. J. Burgess a son.

DURDEN SMITH.—On August 18th, 1933, at 101, Richmond Park Road, East Sheen, to Yvonne (*née* Neill), and Anthony Durden Smith a son (Neil).

MCCURRICH.—On July 28th, 1933, at 20, Devonshire Place, W. 1, to Bettine, wife of H. J. McCurrich, M.S., F.R.C.S., of Hove, Sussex—a son.

MACLAY.—On July 4th, 1933, at 1, Orme Square, London, W. 2, to Dorothy, wife of Dr. the Hon. W. S. Maclay—a daughter.

MORRIS.—On July 30th, 1933, to Margaret Maude, wife of Leslie Morris, M.D., F.R.C.S., of 15, Stonegate Road, Leicester—a daughter.

ROBSON.—On July 3rd, 1933, to Edith (*née* Knape), wife of John A. Robson—a son.

SEYMOUR-ISAACS.—On July 17th, 1933, to Leonora Milne (*née* Mackenzie), wife of H. N. Seymour-Isaacs, of 106, Farm Road, Morden—a daughter (prematurely).

WROTH.—On June 26th, 1933, at Alndyke, Horley, Surrey, to Violet, wife of Charles Wroth—a son.

MARRIAGES.

HANKEY—COULSON.—On June 10th, 1933, at Christ Church, North Shields, by the Vicar, Canon Milner, George Trevor, elder son of Mr. and Mrs. J. Trevor Hankey, of Bellhurst, Lingfield, Surrey, to Norah, youngest daughter of Mrs. and the late R. H. G. Coulson, of Alma Place, North Shields.

RICHARDS—MURRAY.—On August 3rd, 1933, at St. Botolph's Church, Cambridge, by the Rev. J. O. F. Murray, D.D. (father of the bride), assisted by the Rev. A. E. N. Hitchcock, Francis Alan, elder son of Mr. and Mrs. R. A. Richards, of 7, Duppas Hill Road, Croydon, to Mary Loveday, only daughter of the Rev. and Mrs. J. O. F. Murray, of 15, Selwyn Gardens, Cambridge.

WOOD-SMITH—LOANE.—On August 12th, 1933, in London, Francis Geoffrey, son of Mr. and Mrs. Wood-Smith, Studland Lodge, Walton-on-Thames, to Joan Edith, daughter of Mr. and Mrs. Loane, of Woodthorpe, The Thrupp, Gloucestershire.

DEATHS.

ANDERSON.—On July 28th, 1933, at 11, Spa Road, Boscombe, Alexander Richard Anderson, C.B.E., F.R.C.S.

CAPON.—On August 9th, 1933, at Pine View, Sonning Common, Reading, Herbert James Capon, M.D., L.R.C.P., M.R.C.S., L.S.A. (of the Middle Temple), Barrister-at-Law, aged 82.

GILES.—On July 4th, 1933, suddenly, at Santander, Spain, Leonard Thomason Giles, F.R.C.S., of Brockenhurst, Hants, aged 64.

MAIDLOW.—On July 29th, 1933, after a brief illness, William Harvey Maidlow, M.D., F.R.C.S., of Bay House, Ilminster, Somerset, aged 65.

TOYE.—On July 29th, 1933, at Stanhope, Bideford, Devon, Mary Ellen, wife of E. J. Toye, M.D.(Lond.), F.R.C.S.

TROTTER.—On August 5th, 1933, at Bishopsgarth, Stockton-on-Tees, Walter Octavius Trotter, M.R.C.S., L.R.C.P., J.P., aged 73.

VERCO.—On July 30th, 1933, at Adelaide, Australia, Sir Joseph Cooke Verco, M.D., F.R.C.S., aged 82.

NOTICE.

All Communications, Articles, Letters, Notices, or Books for review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, *St. Bartholomew's Hospital, E.C. 1.*

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