All club members enjoyed the "mini-tour" which is clearly the sort of occasion one hopes will recur in the not too distant future.

In the U.L. League, Division I, Bart's continue to keep the flag-flying (a battered running vest on the parapet of Lambeth Bridge).

RESULTS: 1—U.L. Championships P.H.F. 12-XII-70.
1 LSE 64; 2 QMC L 74;
3 RVC 91; 4 I.C. 112; 5 U.C. 144; 6 BART'S 196; 7 QMC II 247; 8 RHC 292.

In this race, John Brooks came 5th overall with a time of 27.59.

2—U.L. League Race, Division I
Petersham 20-1-71

Bart's: 8th overall—an improvement of two places on our previous League Race at Borough Road on 25-XI-70.

Again a fine run by John Brooks and good supporting performances by Richard "Captain" Moody (see picture) and Bob Miller.

Other results from January-February races:

1—Bart's—Sussex Univ. Brighton 27-1-71—the hospital team was heavily defeated in this fixture by a superb Sussex side—in fact, something of a walk (? run) over:

Sussex University 27
Bart's 64

However, the field was led home by John "The Fox" Brooks (something one has come to expect all through this season as a matter of course) who finished 24 seconds ahead of the next man (Sussex). Unfortunately, there were 6 more Sussex hounds behind John's pursuer. The rest of the Bart's men prefered to bring up the rearguard rather in the style of old-timers at the back of a hunt.

2—On Wednesday 2-II-71, the hospital redeemed its name by sweeping to success in the Middlesex Hospital Relay at Regent's Park. Dave Wainstead ran superbly and laid the sound foundations of the victory.

3—A select quartet, R. Moody, D. Wainstead, M. Erith and H. Glennie (see picture) went to Cambridge on 17th Feb. to participate in the Selwyn College Road Relay. A lap time of 12'47" returned by Mike Erith gave the Club a flying start. Dave Wainstead again ran on top form and ended with the second fastest lap (2 1/2 m.) for the team.

Overall Bart' finished 15th in a field of 25. Not as bad as it appears since the Selwyn is very much a road-race specialists' affair.

4—Saturday 20-II-71 I.C. Hyde Park Relay. Another fast road in which we finished 57th in a field of 80. A result which is two places worse than that of last year—but, of course, some allowance has to be made for Decimalisation, etc. . .

Our performance in the race as a team in no way reflects the outstanding first leg run by John Brooks. He flowed round the Serpentine course (3 miles) in 14'34" and set a standard which, had it been maintained by the rest of us, would have given us 19th position. Sorry, John!

Fixtures yet to come this season:
(excluding United Hospitals races)

1—Bart's—London Hospital	3-III-71
2—Inter-Hospitals Championships	6-III-71
3—U.L. League Division I race	10-III-71
4—The Club Dinner (a homematch)	19-III-71

A CORRESPONDENT.

DIARY OF EVENTS FOR APRIL

April 3
Rifle Club Hop. Charterhouse Square.

April 6
Bartsfilm. Physiology Lecture Theatre, Charterhouse Square.

April 13
Bartsfilm. Physiology Lecture Theatre, Charterhouse Square.

April 15
London Medical Group Lecture. 'Sexual Abnormalities'. W. Lindesay Neustatter, M.D., F.R.C.P., formerly Senior Physician to the Department of Psychological Medicine, Royal Northern Hospital. 5.45 p.m.

April 17
Golf Club Hop. Charterhouse Square.

April 28
Pre-clinical Term begins.

May 1
Rugger Club Hop. Charterhouse Square.

Future events for your Diary:—

May 8
Guinness Stroll.

May 27
Bart's Music Society. Verdi "Requiem" at Southwark Cathedral.

June 11
Barbecue Ball.

SAINT BARTHOLOMEW'S HOSPITAL JOURNAL

Founded 1893. Vol. LXXV No. 5

Editorial

In this issue of the Journal, we feature an article on the National Health Service, commenting primarily on the rigidity of the system and the frustration of interested doctors who are unable to make any impression on a system which is run almost entirely by "lay" people. We, both qualified and unqualified, need to take a long, cold look at the NHS and consider where exactly we are heading in relation to the period of flux which this country is going through. It is extraordinary that a man can practice as a registered doctor in this country, without having any medical degree whatsoever. The height of impudence is then reached when one of these "bogus" doctors announced that he was returning to this country, not only to claim his tax rebate and free treatment from the NHS, but also once more to set himself up as a practising hospital doctor, as he found this deception so simple.

Recently a meeting of the BMA was held to discuss the question of the NHS and the Common Market. A paper printed in the BMJ (1970, 3, 216-218) makes interesting reading on this point. What provision will be made for the practice of medicine if Britain joins the Common Market? The general behaviour of doctors and patients is very different on the Continent: there are restrictions on movement and definite requirements laid down in some countries for the time spent, not specifically knowledge gained, in training for a specialist post. Will the NHS in its present format, and indeed medical training as it is now, be adequate to meet the contingencies of a "united Europe"? Will there be free passage of doctors between countries, and if so, what safeguards will be instituted to ensure that these doctors are competent, both linguistically and medically, to deal with the disorders, mental and physical, of a native population?

No comment has yet been made by the Department of Health and Social Security on these matters—in fact, as the Common Market is primarily an economic agreement (European Economic Community) it appears that very little thought has been given to the problem. The somewhat ludicrous state of affairs is that the Standing Committee of Doctors of the EEC has not yet been recognised as the official advisory body to the European Commission; and yet with the present state of international preoccupation with health, surely somebody is doing something—somewhere?

Spring is the time when everything is supposed to be bright, new and shiny—where the world is one's oyster and the time is ripe to embark on new enterprises and refurbish the old ones. Recently, the Budget was announced, to be met with general enthusiasm, but there was little, if anything, in it which applied to the medical profession per se, or to its present and future problems. The proposed increases in prescription charges have provoked mixed reactions and seem a strange way of filling the government coffers.

"Now is the merry month of May"—but is it?

Letters

The Abernethian Room,
St. Bartholomew's Hospital,
W. Smithfield, E.C.1
31st March.

Madam,

As most people in the Hospital will have noticed, on the 29th March, a seemingly adequate piece of pathway outside the entrance to both the Students' Cloakroom and the New Pathology Block was attacked by a group of road technicians (as these gentlemen like to be called). This entailed employing seven men and a foreman, and involved an inordinate amount of noise which must have been most unpleasant, if not downright harmful, to the Patients.

When this exercise had finished, a new surface was laid, using more noisy machines, and the whole process took all day. That night the new surface was left alone but early next morning the pigeons and goldfish in the square, not to mention the patients, were awakened by the sound of more pneumatic drills. To the utter amazement of all onlookers, the brand new surface was being dug up again to find the broken water main which the contractors appeared to have damaged the day before.

This whole sequence of events reminds one of the Flanders and Swan song "The Gas man cometh". On a more serious note is the amount of completely wasteful and unnecessary expenditure to the Hospital, and the great deal of upset to the patients it caused. Perhaps the relevant Authority would care to comment on this farce?

I am, Madam,

Your most obedient servant,

MICHAEL J. GOLDSMITH.

THE TRUTH ABOUT OLD AGE

11 Shrubbery Avenue,
Worcester.
1st April, 1971

Dear Editor,

May I be permitted to reply to Mr. Donaldson's short article on this subject. I am in the early stages of senility! Approaching 70 years of age and in my experience old age is exactly what the individual makes it. This is true of every disability. If you lose your legs or your sight you can remain a life long martyr to self pity or you can become a Douglas Bader or a Helen Keller and take a pride in overcoming it. It is possible to learn to live with old age as with any other disability and indeed there is great joy in doing so. It is of course sheer folly to expect to do what one did when young but if we take life as we find it it is tremendous fun. Spinal arthritis cramps my style physically but I sometimes play nine holes of golf on an 18-hole course (leaving out all the hilly ones of course) and taking three strokes over par for each hole. This gives me as great a thrill as climbing over 13,000 feet in the Alps which I did when I was young. I sometimes potter around for an hour or so alone with a gun and this gives me as much pleasure as a full day's pheasant shooting in Norfolk gave me years ago. Indeed I intend to continue with both as long as I am able and when I cannot do so I shall thank God for the health and strength that enabled me to remain reasonably active for so long and shall then catch up on arrears of reading.

Finally may I add that the Christian faith which I first embraced in my early student days at Bart's and has been my inspiration ever since will, indeed, ensure a serene old age. St. John when he was well over 90 years of age wrote the Revelation and it is probable that he was not much short of this age when he wrote his Epistles. There is no trace of self pity or resentment to be found in any of them. His secret of this is two fold, counting his blessings and thinking of other people.

Yours faithfully,

C. MARTIN-DOYLE.

STUDENTS' UNION LETTER

Abernethian Room,
St. Bartholomew's Hospital,
2nd April, 1971

Dear Sirs,

On 18th March ten members of the Students' Union took part in a Lobby of M.P.s with about sixty medical students from other London Hospitals. The Lobby was to explain the present disparity in the grants system whereby medical students only receive a vacation allowance for sixteen weeks of the year (£7 per week), when the national average cost of board and lodging alone is £8-22 (Brown Report 1968). Many M.P.s said that they would write to Sir Keith or ask questions in the House. We hope that this Lobby has emphasised our own case at a time when the whole grants system is being reviewed.

The University Grants Committee is to visit Bart's on 27th April to discuss virtually anything connected with Medicine (except grants!). We distributed sheets upon which suggestions for discussion could be made and received a grand total of 13 in reply. The subjects I have put forward for discussion are:—

1. Library regulations/facilities
2. Audio-visual aids
3. Student housing/married quarters
4. Tutors—moral and academic
5. The Todd ideal is worthy, but the money is not to be made available to implement the Report fully . . . halfway houses are less than satisfactory. Discuss
6. Post-graduate "training"

By the time this letter is published the discussions will have taken place, the results of which will be published in an information sheet.

Recently Union activities have resulted in the buying of a new piano which is in excellent condition and which is to be used only by proficient pianists. A coffee machine is to be installed in the H.A.R.; also the spot lights have been completed on the tennis courts, which should help next year's sports training in the winter!

For the information of those who have not seen the notice boards recently this will be my last letter. The Union Council have decided that the post of Chairman should run from May until May; this will provide continuity for the new Council elected in November at the A.G.M. and will prevent a final year student from holding the post for more than six months of that year.

In retrospect the advance which has afforded me most pleasure is the efficient and useful functioning of the Staff/Student Committee, largely due to the understanding chairmanship of the Dean.

PAUL MILLARD.

Announcements

Birth

ATKINSON—On February 26th to Barbara and Dr. Richard Atkinson, a daughter.

Engagements

GRIFFITHS—YOUNG—The engagement is announced between Mr. Peter Fairburn Griffiths and Miss Lindsay Jane Young.

HANNAH—BOYCE—The engagement is announced between Mr. Richard Hannah and Miss Diana M. Boyce.

ALLEN—TOMBLIN—The engagement is announced between Mr. Michael John Allen and Miss Penelope Gay Tomblin.

DAVIES—LLOYD—The engagement is announced between Mr. Gareth Davies and Miss Gaynor Lloyd.

RAFFERTY—BROWN—The engagement is announced between Mr. Richard Rafferty and Miss Pamela Brown.

Marriage

KNIGHT—HOYLE—The marriage took place on March 20, between Dr. M. T. N. Knight and Miss D. L. Hoyle.

SKIDMORE LONG The marriage took place on March 27, between Mr. Martin Skidmore and Miss Gretchen Long.

Change of Address

The new address of Mr. and Mrs. Vernon Thompson is Vicarage House, Llowes, Hereford.

The new address of Dr. and Mrs. R. J. C. Sutton is 60 Dane Road, Seaford, Sussex. (Tel. Seaford 3252).

The new address of Miss P. D. Page is 167 Carshalton Park Road, Carshalton Beeches, Surrey.

The new address of Mr. E. M. Hoare, F.R.C.S., is 68 Thornhill Road, Islington, London, N.1.

Appointments

Mr. R. L. Rothwell-Jackson, F.R.C.S., has been appointed Consultant General Surgeon at the Luton and Dunstable Hospital and associated hospitals.

Mr. Ian McColl, F.R.C.S., has been appointed Professor of Surgery at Guy's Hospital Medical School, in the University of London.

Fellowship Results

At the recent final examination for the fellowship of the Royal College of Surgeons of England, the following were successful:—

Mr. Lawrence Mmadi Iregbulem
Mr. Peter Kenneth Leaver
Mr. Anthony Chant
Mr. Michael Kettlewell.

Award

Miss Julie Dorrington has been awarded the Medical Group technical award of the Royal Photographic Society of Great Britain.

DIARY OF EVENTS FOR MAY

May 1st
"The Birdgarden" at the Institute of Education, for the Convocation of the University of London
Rugby Club Hop. Charterhouse Square.

May 7th
Matron's Ball.

May 7th to 9th
Ladies' Tennis Club Cambridge Tour.

May 8th
Inter-Hospital Stroll. Enjoy*/Torture† yourself along 30 miles of the Pilgrim's Way. Refreshments and transportation provided. Coaches leave Bart's at **0700 hrs.** *Arthur Guinness will help here. †For those who do not drink and masochists.

May 10th
Harvey Society Meeting, Pharmacology Lecture Theatre, Charterhouse Square at 5.45 p.m. "Pugwash" by Professor Rotblat.

May 10th
Wine Committee Wine Tasting, College Hall, Charterhouse Square at 7.30 p.m. Admission for a nominal fee.

May 12th
View Day.

May 14th to 16th
C.U. House Party. "The purpose of Life". Summer Institute of Linguists, Merstham, Surrey.

May 15th
Soccer Club Hop. Charterhouse Square.

May 21st
Rugby Club Dinner at the Connaught Rooms. 7.30 for 8.00. Further details and tickets from Simon Smith, The Abernethian Room.

May 26th
The British Epilepsy Society's Annual General Meeting in the Great Hall in the presence of the Duchess of Kent.

May 27th
Bart's Music Society. Verdi "Requiem" at Southwark Cathedral at 7.30 p.m. Tickets 50p (30p for students and nurses) from the Flower Shop.

Future events for your diary:—

June 7th
Great Hall Concert at 7.30 p.m. The Georgian Quartet—Bartok, Schubert and Haydn. Tickets (including wine) only 25p from the Flower Shop.

June 11th
Barbecue Ball, Charterhouse Square at 10 p.m. Tickets 6 gns. (Students 5 gns.) from the Secretary of the Wine Committee, College Hall, Charterhouse Square, E.C.1.

ORDER OF VIEWING - BY THE GOVERNORS

Time	
1200	Main Kitchens
1230	Physiotherapy Department
1245	LUNCH

The Treasurer and Governors are keen to see as much of the Hospital as possible and to meet patients in the hospital's care, and they are, therefore, proposing to split into two parties in the afternoon.

Time	Group 1	Group 2
		Q.E. II
1400	Stanmore Ward	Vicary Ward
1415	Garrod Ward	W. G. Grace Ward
1430	Percivall Pott Ward	Henry Butlin Ward
1445	Lawrence Ward	Radcliffe Ward
1500	Harley Ward	Radiotherapy Department.

The following departments will be open from 1400 hours with displays and exhibitions for visitors and staff.

Outpatient Department
Demonstration of the "Max' mobile intensive care trolley.

Medical College Library
Exhibition of old medical books

Cytology Department
(Ground floor—G.25 —New Pathology Block)
Display.

Department of Pathology
Sherlock Holmes
(4th Floor—Museum Block)
Visit the laboratory where Sherlock Holmes met Dr. Watson on New Year's Day 1881

Department of Medical Illustration (behind West Wing)
Display.

Department of Pharmacy (Basement)
Exhibition/Demonstration—"Production, Control and Distribution of Medicines".

Dietetic Department (Basement—George V Block)
Display.

Central Sterile Supply Department (George V Block)

Midwifery Classroom (Ground Floor—East Wing)
Display.

Physiotherapy Department
(Rear of Church of St. Bartholomew-the-Less)
Display.

Church of St. Bartholomew-the-Less
Flower Festival

Department of Medical Electronics
(Queen Elizabeth II Block Entrance Hall)
Display.

Department of Clinical Neurophysiology (will close at 1630) **(38 Little Britain)**

Physics Department
(Radiotherapy Department, Bartholomew Close)
Teaching Demonstrations concerned with the application of physics in radiotherapy.

School of Nursing
(11th Floor—Gloucester House)
"Work of the School".

Department of Occupational Therapy

Tea will be served to Staff and their Visitors at 1530 in the following areas:—
Nurses' Dining Room
Gloucester Hall
Lay Staff Dining Room

HOUSE APPOINTMENTS

Consultant Staff	House Officers		Wards *Male*	*Female*
Sir Ronald Bodley Scott	I. R. Battye			
Dr. W. E. Gibb	J. H. Scarffe		Harvey	Luke
Dr. G. W. Hayward	K. G. Taylor			
Dr. H. Wykeham Balme	Mrs. G. M. Vanhegan		Smithfield	Mary
Dr. K. O. Black	J. Mackinnon			
Dr. A. M. Dawson	R. T. B. Rogers		Rahere	Colston
Dr. N. C. Oswald	R. T. B. Sutcliffe			
Dr. G. Hamilton Fairley	J. M. Winner		Dalziel	Annie Zunz
Professor E. F. Scowen	N. Thatcher			
Dr. A. G. Spencer	H. R. Tubbs		Stanmore	Garrod
Mr. E. G. Tuckwell	J. F. Shaw			
Mr. M. A. Birnstingl	J. F. Burman		Rees Mogg	Paget
Mr. D. F. Ellison Nash	J. A. Rennie			
Mr. J. D. Griffiths	W. A. P. Hamilton		Waring	Abernethy
Mr. J. O. Robinson	R. C. Froggatt			
Mr. H. B. Ross	Miss J. Begg		Bowlby	Heath Harrison
Mr. Ian P. Todd	M. S. Elliot			
	J. F. Redden		Fleet Street	Harmsworth
Professor G. W. Taylor	N. H. Brooks			
Mr. I. McColl	Miss J. A. M. R. Almeyda		Percivall Pott	Lawrence
Dr. K. O. Black	R. T. Jolly		Casualty House Physician	
Mr. J. O. Robinson	W. E. J. Leverton		Casualty House Surgeon	
Department of Child Health				
Dr. P. J. N. Cox	A. M. Burke		Lucas	
	Miss G. V. Davies		Kenton	
Ear, Nose and Throat Department	P. Bowen-Roberts			
Mr. J. W. Cope	N. B. Houghton		Henry Butlin	
Mr. R. F. McNab Jones				
Mr. A. P. Fuller				
Mr. L. N. Dowie				
Eye Department				
Mr. J. H. Dobree	Miss S. A. Lack		Radcliffe	
Mr. M. A. Bedford	R. Markham			
Department of Obstetrics and Gynaecology				
Mr. D. B. Fraser	F. Vandyk	(O)	Martha	
Mr. Gordon L. Bourne	M. J. Rymer	(O)	Elizabeth	
Mr. David Williams	I. D. Fraser	(G)	Sandhurst	
Mr. C. N. Hudson	R. S. Baumber	(G)	Pitcairn	
		(G)	Harley	
Dental Department				
Mr. T. T. Schofield	C. S. Power		Fleet Street	Harmsworth
Mr. F. R. Coffin				
Mr. B. D. Markwell				
Mr. D. Winstock				
Orthopaedic Department				
Mr. J. N. Aston	I. W. L. Bintcliffe		James Gibbs	Hogarth
Mr. C. W. S. F. Manning	S. A. Copeland		Henry	
Mr. A. W. F. Lettin	H. G. Dunckley			
Department of Thoracic Surgery				
Mr. O. S. Tubbs	C. P. L. Wood		Vicary	
Mr. I. M. Hill	C. I. V. Franklin			

DEPARTMENT OF NEUROLOGICAL SURGERY
MR. J. E. A. O'CONNELL — G. Gordon
Mr. R. Campbell Connolly — B. D. Cutler

SKIN DEPARTMENT AND SPECIAL TREATMENT CENTRE
DR. P. F. BORRIE
DR. D. D. MUNRO — P. J. McKenna
DR. C. S. NICOL

DEPARTMENT OF NEUROLOGY AND PSYCHOLOGICAL MEDICINE
DR. J. W. ALDREN TURNER — P. V. L. Curry

PROFESSOR W. L. LINFORD REES
Dr. C. M. B. Pare

DEPARTMENT OF UROLOGY
MR. J. E. A. WICKHAM — J. S. Davies
Mr. C. A. C. Charlton

W. G. Grace

Smithfield — Mary

Rahere — Colston

Stanmore — Garrod
Harvey — Luke
Radcliffe
Dalziel — Annie Zunz

Bowlby — Heath Harrison
Waring — Abernethy

NHS?

BY CHARLES J. HINDS

Over the last few years, there has been a steadily increasing wave of criticism of the National Health Service and its staff by members of the general public, the press in particular: discontent with the Service and its practitioners is also growing. Ultimately, this can be attributed to a continuing change in the status and attitude of mind of the average patient, while the average doctor has failed to adapt himself to this change. Three main factors are responsible for this change in the patient: more widespread and more effective education, "the convergence of the life-styles" of the lower and middle classes, and the demise of those members of the public who remember the "bad old days" before the introduction of the NHS. For those and other reasons, it is becoming increasingly obvious that the service and its staff must become more aware of the need for change, and must both accept and implement it in order to adapt to the requirements of our present and future society.

We must begin to face the fact that we provide a public service, just like any other public service, and that the patient, as a tax-paying citizen, has a right both to make use of that service and to have some say in the way in which it is run. Much of the criticism and discontent stems from poor communications between staff and patients, in both directions: we are no longer benevolent, god-like distributors of mercy to the ignorant and low-born. The relationship between patients and staff must be brought down to a more civilised level, with greater co-operation between staff, patients, relatives and friends. Whenever possible, full explanations must be given to all those concerned as to the nature of the illness, the treatment, the likely effects of the treatment, and the probable outcome. These processes are essential to adjust to the changes in our society, and thus in our patients, as described in the first paragraph. An example of the good effect of this "humanising" process can be seen in the Burns Unit at East Grinstead (see "A Burned Patient's View"—Bart's Journal Vol. LXXV, No. 2).

Relationships between members of the staff are equally important, both directly in the treatment of patients, and more particularly, on the administrative side. There must be more exchange of ideas, explanations of the reasons for changes must be given, and the co-operation of those affected by the changes sought. This problem was highlighted by a study, admittedly carried out ten years ago, quoted by Professor R. W. Revans in an article in the British Journal of Hospital Medicine in January of this year. In this study, ward sisters complained that their superiors were introducing changes of practice without consulting them. In the same survey, however, the same ward sisters explained that they themselves did not consult their subordinates before introducing local change, because they did not consider these subordinates sufficiently qualified to hold any worth-while views on the change in hand!

Complete understanding of the whys and wherefores by those people affected is essential before change can be successfully brought about. This applies not only within the confines of the hospital, but also to relationships with G.P.s, social workers, etc. The hospital can no longer be regarded as an isolated unit which transforms sick members of the community into healthy ones and then discharges them back into a relatively unknown social set-up. Rather, it is part of a complex system of services which is available to the community, consisting of G.P.s, welfare workers, family planning, home care and the like, all of which should operate as an integrated whole. An excellent example of this being put into practice is the psychogeriatric service developed at Severalls, Colchester, by Dr. Anthony Whitehead: he has evolved a system "which maintains a large number of old people fairly successfully in the community, reduces the number of in-patients, and makes reasonably efficient use of limited resources of money and manpower". He also states that "A complex of services is necessary, since different problems require different solutions, and failure to provide this complex usually means inadequate care". Another area in which this is of importance is in dealing with "battered babies" where social conditions are major contributary factors. J. Malcolm Cameron in the British Journal of Hospital Medicine of December 1970, states that in dealing with these cases "close co-operation between doctors and social agencies is essential at all stages". These are specific examples, but the principle applies to a greater or lesser extent to all branches of medicine. Nowadays we are becoming more and more aware of the effects of social background, psychological stress etc. on organic diseases, and a closer liaison as outlined above would lead to a greater understanding of those effects and improved treatment of the disease processes by attacking *all* the factors in their aetiology. Generally, closer co-operation leads to a better understanding of each others' aims, ideas and problems, and thus mutual encouragement and assistance. This means greater efficiency in recognising the need for, and implementing, change throughout the medical and para-medical social services.

The above are just some of the more widely accepted shortcomings of the NHS, but the fact remains that such changes as do take place are occurring slowly, spasmodically and in isolated pockets. Why is this so?

NHS hospitals are isolated units, run by isolated groups of people: some groups are critical of their hospital and progressive, others are backward, stuffy and self-satisfied. The same applies to the regional boards and the Department of Health and Social Security. Further, within the hospital, each consultant and each ward sister reigns over his or her own little kingdom, and obviously their quality varies enormously. A very good consultant will have under him a happy, efficient and co operative team, while the reverse is true of a very bad consultant; the majority fall somewhere between these two extremes. It is also true to say that one "bad egg" in the team can hamper, or even nullify, the good work of all the others. Because of these truisms, any changes that do occur only take place in isolated units, and then usually only after overcoming opposition from other members of that unit. Thus only a small minority of the public benefit, and progress occurs so slowly as to be almost imperceptible.

Another major obstacle to progress is the atrocious financial situation in the NHS. In order that the staff may feel able and willing to devote their time to developing a closer relationship with their patients, the staff/patient ratio must be dramatically increased. To achieve this, we must expand training facilities considerably, and we must discourage emigration and encourage immigration of trained personnel by increased salaries and, more important, improved working conditions. (The latter is in turn partly brought about by an increased staff/patient ratio). We can reduce the load on our resources by making more effective use of G.P.s and the para-medical services for the care of the old, the mentally sick, and the chronic sick. On top of all this, and this applies particularly to the more remote provincial hospitals, improvements are necessary in the standard of accomodation, food drugs and equipment.

It takes as long as 25 years of training and hard work to reach a position of power within the system. By that time, the doctor's original idealism and enthusiasm for change and adaptation has been thoroughly beaten out of him. It seems to me that, even supposing he reaches a consultant post with all his good intentions still intact, he usually finds that, far from having more time to devote to individual patients, questions of administration, and the smooth running of his department, he has even less. Added to this, the power of the consultant is limited: he is kept at bay by the management committee, the regional board, and, ultimately, the Department of Health and Social Security. The problem is that the NHS is too unwieldy: there is no efficient, broad-minded central body with the power to introduce change throughout the Service. An example of this shortcoming is the Platt Committee which investigated the welfare of children in hospital. One of its recommendations was unrestricted visiting: the implementation of this recommendation was left up to the hospital concerned. Consequently, twelve years later, still only 85% of hospitals have this system.

Thus, two major obstacles prevent any prospect of improvement in the service we offer. The first is lack of funds, and for this, at the moment, there seems to be no remedy forthcoming.* the second is the individual doctor and individuals vary; some have wrong attitudes from the start, others have their ideals knocked out of them en route, and those who retain them have insufficient time, money or influence to do anything about it. Lastly, amongst those who are trying to bring about some change for the better, the "best" is a debatable point.

* although a redistribution of resources might alleviate the situation.

Education for Mentally Handicapped Children

On April 1st this year the responsibility for mentally handicapped children passed from the Health to the Education service. Mr. George Lee, Secretary General of the National Association for Mentally Handicapped Children, welcomed the change at a press conference given by the N.A.M.H.C. on the grounds that the old dichotomy of "education" for normals and "training" for subnormals is ill-founded. His association has long campaigned for subtler and more professional teaching of subnormals.

Sadly, this appeared to be a nominal change, at least so far. No definite plans coming from the Education Services, nor extra financial support, had been reported to him. As a national representative of parents of mentally handicapped children he made an eight-point proposal for an adequate service. Apart from the obvious need for more specialists and facilities he stressed the crucial problem of assessment at an early age. At present, he said, far too many children are undiagnosed during the vital early stage, from two onwards. He pressed for proper parent counselling and for better educational attention for those in hospitals.

The N.A.M.H.C. has fought hard and contributed a great deal in research and public education. One was left with the impression, however, that a "consumer body" (Mr. Lee's term for his association) in this field is badly in need of stronger champions. The Education Service welcomes its new responsibility. It must be hoped that it will be given the means to carry it out.

M. R. DUNWELL.

BART'S AND THE CITY IN DICKENS TALES

YVONNE HIBBOTT, A.L.A.

"I thought I knew something of the town, but after a little talk with Dickens I found that I knew nothing. He knew it all from Bow to Brentford,"—recollected an attorney's clerk who had worked with Dickens. An important part of the writer's success was due to his basing his characters on people he knew, and then placing them in surroundings with which he was familiar. Bart's and the City of the early Victorian era are well represented in the fifteen major novels.

Oliver Twist and Bill Sikes pass through Smithfield Cattle Market in the early morning on their way to a robbery:—

> "It was market-morning. The ground was covered, nearly ankle-deep, with filth and mire; and a thick steam, perpetually rising from the reeking bodies of the cattle, and mingling with the fog, which seemed to rest upon the chimney-tops, hung heavily above. All the pens in the centre of the large area, and as many temporary pens as could be crowded into the vacant space, were filled with sheep; tied up to posts by the gutter side were long lines of beasts and oxen, three or four deep. Countrymen, butchers, drovers, hawkers, boys, thieves, idlers, and vagabonds of every low grade, were mingled together in a mass; . . . the crowding, pushing, driving, beating, whooping, and yelling; the hideous and discordant din that resounded from every corner of the market; and the unwashed, unshaven, squalid, and dirty figures constantly running to and fro, and bursting in and out of the throng; rendered it a stunning and bewildering scene, which quite confounded the senses."[1]

On his arrival in London, Pip, in *Great Expectations*, explores the area around Mr. Jaggers' offices in Little Britain:

> "So I came into Smithfield; and the shameful place, being all asmear with filth and fat and blood and foam, seemed to stick to me. So I rubbed it off with all possible speed by turning into a street where I saw the great black dome of Saint Paul's bulging at me from behind a grim stone building which a bystander said was Newgate Prison. Following the wall of the jail, I found the roadway covered with straw to deaden the noise of passing vehicles; and from this, and from the quantity of people standing about smelling strongly of spirits and beer, I inferred that the trials were on.
>
> While I looked about me here, an exceedingly dirty and partially drunk minister of justice asked me if I would like to step in and hear a trial or so, informing me that he could give me a front place for half-a-crown, whence I should command a full view of the Lord Chief Justice in his wig and robes —mentioning that awful personage like waxwork, and presently offering him at the reduced price of eighteen pence. As I declined the proposal on the plea of an appointment, he was so good as to take me into a yard and show me where the gallows was kept, and also where people were publicly whipped, and then he showed me the debtor's door, out of which culprits came to be hanged, heightening the interest of that dreadful portal by giving me to understand that "four of 'em" would come out at that door the day after tomorrow at eight in the morning to be killed in a row. This was horrible, and gave me a sickening idea of London, the more so as the Lord Chief Justice's proprietor wore (from his hat down to his boots and up again to his pocket-handkerchief inclusive) mildewed clothes, which had evidently not belonged to him originally, and which, I took it into my head, he had bought cheap of the executioner. Under these circumstances I thought myself well rid of him for a shilling."[2]

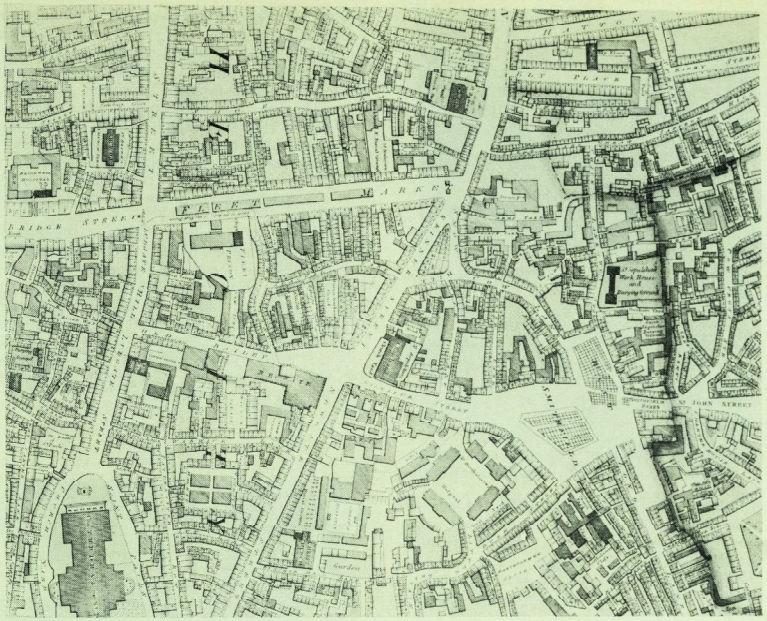
Mr. Pickwick was imprisoned in the Fleet after refusing to pay the costs and damages in the breach of promise action brought against him by Mrs. Bardell. The Fleet was a debtors' prison situated in Fleet Market, which is now Farringdon Street (see illus. no. 1). Dickens the social reformer is evident in this description of the Fleet:—

> "Most of our readers will remember, that, until within a very few years past, there was a kind of iron cage in the wall of the Fleet Prison, within which was posted some man of hungry looks, who, from time to time, rattled a money-box, and exclaimed in a mournful voice, "Pray, remember the poor debtors; pray, remember the poor debtors." The receipts of this box, when there were any, were divided among the poor prisoners; and the men on the poor side [of the prison] relieved each other in this degrading office.
>
> Although this custom has been abolished, and the cage is now boarded up, the miserable and destitute condition of these unhappy persons remains the same. We no longer suffer them to appeal at the prison gates to the charity and compassion of the passers by: but we still leave unblotted in the leaves of our statute book, for the reverence and admiration of succeeding ages, the just and wholesome law which declares that the sturdy felon shall be fed and clothed, and that the penniless debtor shall be left to die of starvation and nakedness. This is no fiction."[3]

Arthur Clennam in *Little Dorrit* witnesses the accident in which the Italian, John Babtist Cavalletto, is run over by a mail-coach. An improvised stretcher is made from a shutter, and Cavalletto is taken to Bart's:—

> "Arthur Clennam turned; and walking beside the litter, and saying an encouraging word now and then, accompanied it to the neighbouring hospital of Saint Bartholomew. None of the crowd but the bearers and he being admitted, the disabled man was soon laid on a table in a cool, methodical way, and carefully examined by a surgeon: who was as near at hand, and as ready to appear, as Calamity herself. 'He hardly knows an English word', said Clennam: 'is he badly hurt?' 'Let us know all about it first,' said the surgeon, continuing his examination with a business-like delight in it, 'before we pronounce.'
>
> After trying the leg with a finger and two fingers, and one hand and two hands, and over and under, and up and down, and in this direction and in that, and approvingly remarking on the points of interest to another gentleman who joined him, the surgeon at last clapped the patient on the shoulder, and said, 'He won't hurt. He'll do very well. It's difficult enough, but we shall not want him to part with his leg this time.' Which Clennam interpreted to the patient, who was full of gratitude, and, in his demonstrative way, kissed both the interpreter's hand and the surgeon's several times.
>
> 'It's a serious injury, I suppose?' said Clennam.
>
> 'Ye-es,' replied the surgeon, with the thoughtful pleasure of an artist, contemplating the work upon his easel. 'Yes, it's enough. There's a compound fracture above the knee, and a dislocation below. They are both of a beautiful kind.' He gave the patient a friendly clap on the shoulder again, as if he really felt that he was a very good fellow indeed, and worthy of all commendation for having broken his leg in a manner interesting to science."[4]

Mrs. Betsey Prig in *Martin Chuzzlewit* nursed "turn



1 DETAIL FROM R. HORWOOD'S *Plan of London and Westminster*, 1819. (*Reproduced by kind permission of the Trustees of the British Museum.*)

2 *The Last Cattle Market at Smithfield, June 11th,* 1855.

and turn about" with Mrs. Sarah Gamp, both ladies frequently being "in liquor." Betsey came from St. Bartholomew's Hospital:—

> "Mrs. Prig, of Bartlemy's: or as some said Barklemy's, or as some said Bardlemy's; for by all these endearing and familiar appellations, had the hospital of Saint Bartholomew become a household word among the sisterhood which Betsey Prig adorned." [5]

Bart's is also represented in *Pickwick Papers* by the student Jack Hopkins. Mr Pickwick is at dinner with Bob Sawyer, a student from Guy's, and his friends, when they are joined by Jack Hopkins:—

> "You're late, Jack?" said Mr. Benjamin Allen.
>
> "Been detained at Bartholomew's," replied Hopkins.
>
> "Anything new?"
>
> "No, nothing particular. Rather a good accident brought into the casualty ward."
>
> "What was that, sir?" inquired Mr. Pickwick.
>
> "Only a man fallen out of a four pair of stairs' window;—but it's a very fair case—very fair case indeed,"
>
> "Do you mean that the patient is in a fair way to recover?" inquired Mr. Pickwick.
>
> "No," replied Hopkins, carelessly. "No, I should rather say he wouldn't. There must be a splendid operation though, tomorrow— magnificent sight if Slasher does it."
>
> "You consider Mr. Slasher a good operator?" said Mr. Pickwick.
>
> "Best alive," replied Hopkins. "Took a boy's leg out of the socket last week—boy ate five apples and a ginger bread cake—exactly two minutes after it was all over, boy said he wouldn't lie there to be made game of, and he'd tell his mother if they didn't begin."
>
> "Dear me!" said Mr. Pickwick, astonished.
>
> "Pooh! That's nothing, that ain't," said Jack Hopkins. "Is it, Bob?"
>
> "Nothing at all," replied Mr. Bob Sawyer.
>
> "By the bye, Bob," said Hopkins, with a scarcely perceptible glance at Mr. Pickwick's attentive face, "we had a curious accident last night. A child was brought in, who had swallowed a necklace."
>
> "Swallowed what, sir?" interrupted Mr. Pickwick.
>
> "A necklace," replied Jack Hopkins. "Not all at once, you know . . . No, the way was this . . . Child, being fond of toys, cribbed the necklace, hid it, played with it, cut the string, and swallowed a bead. Child thought it capital fun, went back next day, and swallowed another bead . . . In a week's time he had got through the necklace—five-and-twenty beads in all . . . He's in the hospital now, and he makes such a devil of a noise when he walks about, that they're obliged to muffle him in a watchman's coat, for fear he should wake the patients!" [6]

Mr. Carker, the smiling villain of *Dombey and Son,* rides along Cheapside in the five o'clock "rush-hour":—

> "As no one can easily ride fast, even if inclined to do so, through the press and throng of the City at that hour, and as Mr. Carker was not inclined, he went leisurely along, picking his way among the carts and carriages, avoiding whenever he could the wetter and more dirty places in the over-watered road, and taking infinite pains to keep himself and his steed clean." [7]

3 *Outpatients entrance, St. Bartholomew's Hospital, c.* 1850.

The offices of *Dombey and Son* were in the heart of the City:—

> "Though the offices of Dombey and Son were within the liberties of the City of London, and within hearing of Bow Bells, when their clashing voices were not drowned by the uproar in the streets, yet were there hints of adventurous and romantic story to be observed in some of the adjacent objects. Gog and Magog held their state within ten minutes' walk; the Royal Exchange was close at hand; the Bank of England, with its vaults of gold and silver 'down among the dead men' underground, was their magnificent neighbour. Just around the corner stood the rich East India House, teeming with suggestions of precious stuffs and stones, tigers, elephants, howdahs, hookahs, umbrellas, palm trees, palanquins, and gorgeous princes of a brown complexion sitting on carpets, with their slippers very much turned up at the toes . . ." [8]

The famous boarding-house of Todgers in *Martin Chuzzlewit* was close to the Monument:—

> ". . . And turning round, the tall original was close beside you, with every hair erect upon his golden head, as if the doings of the city frightened him." [9]

The attendant taking the money at the Monument tells Tom Pinch:—

> "They don't know what a many steps there is!" he said. "It's worth twice the money to stop here!" [10]

In *Barnaby Rudge* Mr. John Willett gives his son the following advice:—

> ". . . Go to the top of the Monument and sit there. There's no temptation there, sir—no drink, no young women, no bad characters of any sort—nothing but imagination." [11]

In *Martin Chuzzlewit* the patience of Mark Tapley has been sorely tried by his fellow travellers in a train leaving New York. These men of the New World insist that Queen Victoria lives in the Tower. Mark, keeping a perfectly straight face, tells them:—

> "The Queen of England, gentlemen, usually lives in the Mint to take care of the money. She *has* lodgings, in virtue of her office, with the Lord Mayor at the Mansion-House; but don't often occupy them, in consequence of the parlour chimney smoking."[12]

London Bridge is the scene of the ill-fated meeting between Nancy and Rose Maylie and Mr Brownlow, which led to Nancy's murder by Bill Sykes. (*Oliver Twist.*) It was a very dark night, close on midnight:—

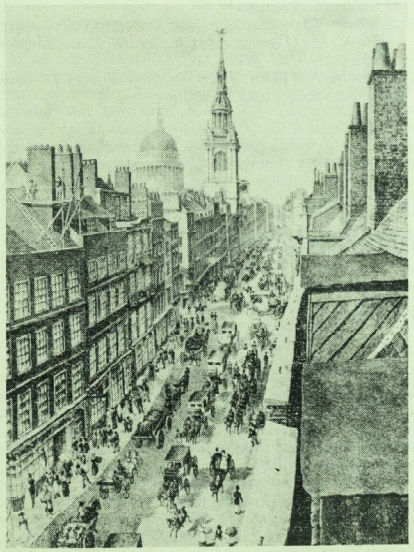
> "A mist hung over the river, deepening the red glare of the fires that burnt upon the small craft moored off the different wharfs, and rendering darker and more indistinct the murky buildings on the banks. The old smoke-stained storehouses on either side, rose heavy and dull from the dense mass of roofs and gables, and frowned sternly upon water too black to reflect even their lumbering shapes. The tower of old Saint Saviour's Church, and the spire of Saint Magnus, so long the giant-warders of the ancient bridge, were visible in the gloom; but the forest of shipping below bridge, and the thickly scattered spires of churches above, were nearly all hidden from the sight." [13]

The London Coffee House which stood at No. 42 Ludgate Hill is the scene of Arthur Clennam's meditations on his return from Marseilles (*Little Dorrit*). It was a gloomy Sunday evening when "everything was bolted and barred that could by possibility furnish relief to an overworked people." Clennam listens to the church bells:—

> "At the quarter, it went off into a condition of deadly-lively importunity, urging the populace in a voluble manner to Come to church, Come to church, Come to church! At the ten minutes, it became aware that the congregation would be scanty, and slowly hammered out in low spirits, they *won't* come, they *won't* come, they *won't* come!" [14]

The original of Tellson's Bank in *A Tale of Two Cities* was Child's Bank, No. 1, Fleet Street, which stood next to Temple Bar (see illus. no. 5):—

> ". . . Tellson's was the triumphant perfection of



4 *Cheapside, Looking Westwards, with the Church of St. Mary-le-Bow and St. Paul's Cathedral,* 1823.

5 *Child's Bank and Temple Bar, Fleet Street,* 1855.

inconvenience. After bursting open a door of idiotic obstinacy with a weak rattle in its throat, you fell into Tellson's down two steps, and came to your senses in a miserable little shop, with two little counters, where the oldest of men made your cheque shake as if the wind rustled it, while they examined the signature by the dingiest of windows, which were always under a shower-bath of mud from Fleet-Street, and which were made the dingier by their own iron bars proper, and the heavy shadow of Temple Bar." [15]

Of the four Inns of Court, two lie in the City the Inner and Middle Temple. The Temple was frequently used by Dickens as a setting in his novels.

—in *Pickwick Papers*:—

"Scattered about, in various holes and corners of the Temple, are certain dark and dirty chambers, in and out of which, all the morning in Vacation, and half the evening too in Term time, there may be seen constantly hurrying with bundles of papers under their arms, and protruding from their pockets, an almost uninterrupted succession of Lawyers' Clerks . . . These sequestered nooks are the public offices of the legal profession, where writs are issued, judgments signed, declarations filed, and numerous other ingenious machines put in motion for the torture and torment of His Majesty's liege subjects, and the comfort and emolument of the practitioners of the law."[16]

—and in *Barnaby Rudge*:—

"There is yet a drowsiness in its courts, and a dreamy dullness in its trees and gardens; those who pace its lanes and squares may yet hear the echoes of their footsteps on the sounding stones, and read upon its gates, in passing from the tumult of the Strand or Fleet Street, 'Who enters here leaves noise behind.' There is still the splash of falling water in fair Fountain Court . . . There is yet, in the Temple, something of a clerkly monkish atmosphere, which public offices of law have not disturbed, and even legal firms have failed to scare away."[17]

It was no idle boast of Dickens when he said "I suppose myself to know this rather large city as well as anyone in it." He knew all the varied facets of the City—its ugliness and cruelty, as well as its beauty and fascination.

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9. *Martin Chuzzlewit,* Ch. 9.
10. *Martin Chuzzlewit,* Ch. 31.
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BARTSTIME - 3 - THWAITES and REED

BY A. J. B. MISSEN, F.R.C.S.

In Mediaeval London as in other towns and cities many street names were derived from the trade or craft practised by those who lived there. thus silversmiths were to be found in Silver Street, while Milk Street, Bread Street and Poultry were the centres of their respective trades. (Ekwall 1954) Today many trades and crafts are concentrated in small areas of London just as they were several hundred years ago—furriers are found in Upper Thames Street, wood turners in Shoreditch, jewellers in Hatton Garden and clockmakers in Clerkenwell.

Thwaites and Reed, one of the oldest established clockmaking firms in London, are to be found at number 15 Bowling Green Lane, Clerkenwell. The firm was founded in 1740 by Aynsworth Thwaites who was made a Freeman of the Clockmakers Company in 1751, and is noted as the maker of the Horse Guards clock and also the two clocks installed in Somerset House in 1785 by Benjamin Vulliamy who was clockmaker to King George III. Aynsworth Thwaites had two sons who carried on the business. Benjamin was made Free of the Clockmakers Company in 1770 and his brother John in 1803. John served the Company as Junior, Senior and Renter Warden and was Master in 1816, 1820 and 1821. At this period Bart's seems to have had further problems with time keeping and punctuality. The House Committee meeting on 16th April 1819 considered the suggestion of Mr. Hardwick ". . . that a clock to be fixed in the upper centre window of the Court Room facing the quadrangle would be found very useful and materially contribute to the better regulation of this hospital." It was resolved . . . "that such suggestion be approved and that Mr. Hardwick do procure from Mr. Barraud, clockmaker, of Cornhill, his with other estimates of the expense thereof to be layed before the next committee".

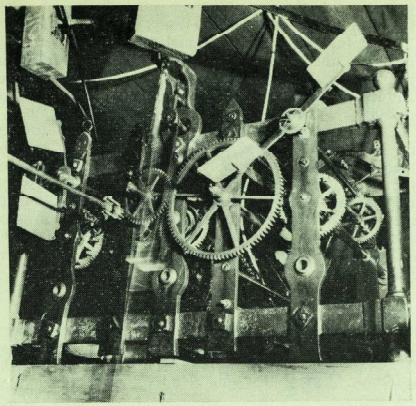

Fig. 1. Front view of three train turret clock by Thwaites and Reed, 1819.

When the committee met again on 21st April Mr. Hardwick was able to lay before them estimates for an eight day turret clock prepared by Thwaites and Reed, Barraud and Sons and R. Wood. The contract was awarded to Thwaites and Reed . . . "Whereupon it is ordered that Messrs. Thwaites and Reed do forthwith make and fix such clock as described in their estimate under the inspection and to the satisfaction of the Hospital Surveyor and at an expense not exceeding £120 according to their estimate". This contract started an association between Thwaites and Reed and Bart's which has lasted over 150 years.

The clock made by John Thwaites and his nephew Jeremiah Reed, who became a partner in the firm after his uncle's death, is a fine example of a three-train turret clock. In such clocks a separate weight and train of wheels is provided to drive the hands, the quarter striking and the hour striking As may be seen from Fig. 1 the layout of the clock with its robust iron frame is similar to that made by Horton for the Henry VIII gate but it is larger to accommodate the two striking trains.

Like Horton's clock the pendulum is 39.1 inches long and the escapement is of the anchor type. The pendulum is not seen in Fig. 1 except as a slight blurr because the clock was not stopped when the photograph was taken. The large paddles or "flies" control the speed at which the clock strikes and this can be varied by altering their pitch. A rather Heath-Robinson arrangement of wires and levers operates the bells which are mounted behind the dial and some distance from the clock which is in a small room in the loft over the Great Hall or Court Room as it was formerly known. The quarters are struck ting-tang fashion on two small bells and the hours on a larger one. As with Horton's clock automatic winding gear has recently been fitted by Thwaites and Reed and this has necessitated the removal of the barrel from each of the three trains—the holes in the upright members of the frame indicate the position of the barrel pivots. Many people have noted with sadness that this clock is not going at present. This is due to the need for extensive cleaning and overhaul which is about to be undertaken by Thwaites and Reed. In 1856 control of Thwaites and Reed passed to Thomas Buggins (a former apprentice of the firm) and has remained in his family ever since, the present managing director being Geoffrey Buggins, M.B.E., F.B.H.I.

In the latter part of the last and the early years of the present century Bart's eventually managed to provide a clock for every ward and every major department. These were of the eight day "English dial" type which used to be found in offices and public buildings everywhere. The great majority of those at Bart's were made by Thwaites and Reed though examples by other makers such as Clerke, Royal Exchange, and James Shoolbred, London, were also in use. The English dial clock is extremely functional and has the simplest possible going train with only one concession to complexity—the drive from the spring is transmitted via a fusee. This is a device which evens out the pull of the mainspring so that the same amount of power is produced regardless of whether the spring is fully wound or nearly run down. The movements were fitted with black and white dials of exceptional clarity and could be read with ease in

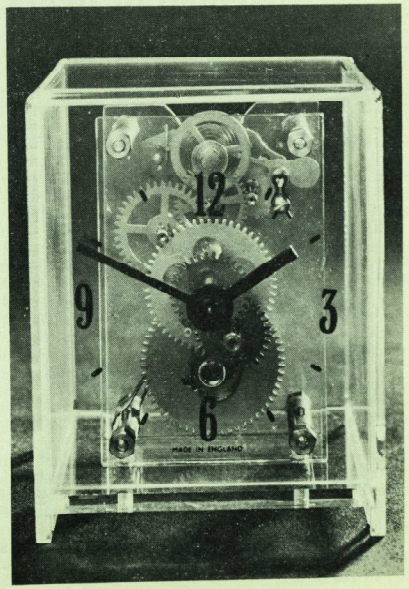

Fig. 2. Fully assembled Visikit.

large rooms. The excellence of design and quality of manufacture is such that without any form of temperature compensation these clocks will keep time to within plus or minus one minute per week.

Thwaites and Reed wound and serviced these clocks on a contract basis until the majority of them were replaced by electrical devices not of their manufacture in the early sixties. These have proved a fruitful source of inaccuracy and irritation affording an excellent example of how we may take one step forward and two backward in the name of progress. Remaining dials are still giving good service in the Church of St. Bartholomew-the-Less, the Stewards Office, and one or two other places in the hospital.

Thwaites and Reed have adapted to the times and although they still make formal clocks for public places most of them, like that for the new Knightsbridge Barracks, are electrically driven. They will also undertake special commissions which utilise their 200 years of experience to the full—good examples are the well known Fortnum and Mason clock made in 1964 and a clock made for the Smithsonian Institute in 1961 from specifications drawn up by Giovanni Dondi in 1364.*

One other bright idea from Thwaites and Reed deserves mention. With the aid of the Visikit anyone who is interested can assemble their own clock and, since the case is made of perspex, watch it working (Fig. 2). Too useful and too educational to be dismissed as a mere toy, the Visikit has already been successfully put together by a number of members of both the medical and nursing staff who have strongly recommended it for passing a wet afternoon or a long winter evening.

I am most grateful to Mr. Peter Haward, co-director of Thwaites and Reed, for a very interesting tour of their works and for supplying biographical details of the Thwaites, Reed and Buggins families. Miss N. Kerling has again produced the relevant extracts from the hospital archives. The photograph of the Thwaites and Reed clock was taken by the Department of Medical Illustration, that of the Visikit was provided by the makers.

* Four further Dondi clocks are in the course of construction one of which will go to the Science Museum.

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Note

The Visikit may be obtained direct from the manufacturers at 15 Bowling Green Lane, E.C.1.

Teaching of Asepsis to Undergraduates

A half-day Symposium on the Teaching of Asepsis in the Undergraduate Medical Curriculum was held on March 8th at St. Bartholomew's Hospital, London. Under the Chairmanship of Sir Thomas Holmes Sellors, President of the Royal College of Surgeons, some 250 people attended. The speakers included Professor R. E. O. Williams, G. W. Taylor, E. M. Darmady, B. N. Brooke, Miss B. Brysson Whyte, Mr. I. McColl and Dr. H. B. May.

The first session was devoted to the problems of teaching asepsis, and, whilst there was general agreement that problems exist, several interesting viewpoints were heard. One such view was that surgical dressers nowadays have less opportunity for learning the aseptic ritual than did their forbears because wounds are cleaner, dressings changed less frequently and drainage tends to be closed; and furthermore that the introduction of C.S.S.D. packs has complicated the procedures. Also the majority of dressings are done by nurses. It was pointed out that housemen taking up pre-registration appointments in district hospitals were not always able to perform simple procedures such as lumbar puncture or setting up an intravenous infusion, and that it is perhaps the fault of the teaching hospitals that this situation exists. From the nurse's point of view, the existence of dual standards of asepsis—one for nurses and one for doctors is ridiculous.

A lively discussion followed the first session and this was brought to a close only through lack of time and the advent of tea.

In the second session, which dealt with teaching methods, the place of audio-visual aids was discussed and demonstrated, and it was concluded that these could usefully be employed in teaching practical procedures along with the teaching of small groups at the bedside. These groups should be taught by the Registrar and by the Nursing Tutor, and the students should in addition take every opportunity to carry out simple procedures themselves. Thus if teaching of asepsis was adequate, one would see, in the words of Lister, the "noxious ferments with the intellectual eye as one sees flies with the corporeal eye".

In the discussion following this session, and also the earlier one, members of the audience, which included many medical students, aired their views on sepsis and the teaching of asepsis. Some felt that microbiologists should collaborate with clinicians in teaching asepsis on the wards, whilst others made a case for teaching the principles of microbiology in the pre-clinical period followed by clinical instruction towards the end of the medical curriculum. Furthermore, a plea was made for more students to spend their elective periods in district hospitals where they could act as assistant housemen and where their help would be welcomed.

As the meeting drew to a close, Sir Thomas Holmes Sellors thanked all the speakers, particularly the medical students, for their contributions, and the Symposium ended congenially with a reception by the Chairman of the Board of Governors in the Great Hall of the Hospital.

H. GAYA, M.B., Ch.B., M.R.C.Path.

PULSELESS DISEASE - A REVIEW

BY DEIRDRE LUCAS AND JANUSZ KOLENDO

Case Report

Mrs. J.L., aged 44 years and of Polish extraction, presented in July of last year with a ten year history of muscle weakness of the head, neck and shoulders, leading to rapid deterioration in the preceding six months. She was admitted under the care of Professor G. W. Taylor on 11 October, 1970. The weakness was most noticeable after effort, and occasionally affected her hands. Since autumn, 1969, she started getting pains bilaterally in her shoulders and neck, particularly in the morning, and occasional numbness of her fingers, but no parasthesiae. There was also some claudication of the jaw muscles. She never became unconscious, or suffered from fits or syncopal attacks.

She also admitted to a "sick feeling in the head" accompanying a left frontal headache and intermittent visual disturbances: these included double vision with occasional choraid-like images, flashing lights, and blind spots. These episodes had become worse over the past twenty years and were described as migraine as they were confined almost entirely to her left eye; there was, however, no vomiting. She had noticed visual field defects in the upper part and nasal region of her left eye, and a revolving feeling with upward movements of her head. The headaches were exacerbated when the patient suffered from a cough.

Over the last ten years her hearing had deteriorated, described as "nerve deafness", and she was finding high sounds and whispers hard to detect. She also complained of tinnitus, and had noticed an almost complete absence of her sense of smell.

Her past medical history includes measles, chickenpox, scarlet fever, numerous upper respiratory tract catarrhs, and obstruction following an appendicetomy. For a few years she has had attacks of hepatic colic, and has mucoid stools from inadvertently swallowing a live culture of dysentery. Four years ago she was treated with Femigen for menstrual frequency; following an initial success, her periods have again become more frequent.

There is nothing significant in the family history, except, perhaps, that her father died aged 68 with a cerebral artery thrombosis.

On examination on her admission to the Surgical Unit, there was no clubbing or cyanosis. She was slightly short of breath on stairs, but she smoked 5 cigarettes each day, having recently cut down from twenty. There were two scars, one over the right chest (? tuberculosis), and one from the xiphoid process to the navel (from the obstruction following appendicectomy).

No abnormality was detected in the cranial nerves or fundi, and all reflexes were present and equal, perhaps slightly brisk. Ophthalmological examination revealed three scotomata, one nasal on both the right and the left, with an additional superior one on the left.

The cardiovascular system, however, showed marked pathological changes. The heart was of normal size, confirmed by X-ray, and though the sounds were very clear, there were no abnormal sounds. The pulses were all present in the lower limbs, but the superficial temporal, carotid, subclavian, brachial and radial pulses were all absent on both sides. There was a loud systolic bruit in the right supraclavicular fossa, extending high up into the neck. The blood pressure in the right arm was 60/40 mmHg, in the left arm 60/50 mmHg, in the right leg 190/110 mmHg, and in the left leg 200/160 mmHg. The pulse was 100 p.m.

Investigations included Hb 75-81%, WBC 10,600 with a normal differential, and an ESR of 18. Electrophoretic studies were normal, and WR and Rose Waaler tests proved negative. The other results were as follows:

Na 137mEq/L	bilirubin 0.6 mg%	cholesterol 205 mg%
K 4.4 mEq/L	alk. phosphatase-6 KA units %	Ca 9.7 mg%
Cl 103 mEq/L	SGOT 36 units/ml	phosphate 3.4 mg%
HCO_3 26 mEq/L	protein 7.3 g%	HBD 90 units/ml
Urea 28 mg%	albumin 4.1 g%	uric acid 3.5 mg%

Nothing was seen on her chest X-ray in the way of heart enlargement, abnormality of the aorta, or rib notching. Her ECG was normal. An aortogram had been performed in the referring hospital, and this showed severe stenosal changes at the origins of the branches of the aortic arch, i.e.

1. Innominate a. at its origin
2. Right subclavian a. at its origin.
3. Left common carotid a. at its origin.
4. A two centimetre occlusion of the left subclavian a.
5. Left vertebral a. filled by collaterals.

The patient had been treated originally for four weeks on Dexamethazone, Hydrocortisone and Immuran, presumably on the assumption that this was an immunological condition. No immunological basis could be demonstrated, however, by antibody and complement fixation tests, and in view of the progressive worsening of her symptoms, operation was performed on 16 October, 1970.

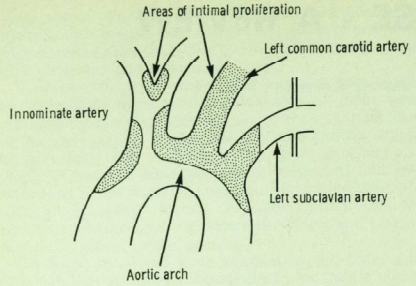

Fig. 1. Diagram of the aortic arch and origins of the great vessels, showing areas of thickening and occlusion.

Report on the Operation of Aorto-carotid Bypass
(figs. 1 & 2)

The sternum was split totally, and with an associated collar incision, was retracted to expose the heart and great vessels. The ascending aorta was dissected free and the pericardium opened; the great vessls were exposed and isolated in the neck.

The ascending aorta and the arch were found to be normal apart from localised sub-intimal nodular thickening (the intima itself was not involved) occluding the origins of the great vessels. The abnormality extended into the proximal two-thirds of the innominate a. producing severe stenosis with a palpable thrill. The left common carotid a. was completely occluded at its origin, and was filled with recent thrombus. A Fogarty catheter passed distally into this artery produced much thrombus but no back bleed, and the occlusion was therefore taken to be irreversible. The left subclavian a. was totally occluded for 4 cm. and patent 1 cm. proximal to the origin of the vertebral a.

Surgical intervention involved placing a Brock aortic clamp on the ascending aorta, and anastomosing a 16 by 8 mm dacron prosthesis end-to-side to the aorta. The left limb of the graft was joined to the left subclavian a. as it became patent opposite the vertebral a., and this limb was then opened. The innominate a. was then opened at its bifurcation, and the intima was noted to be smooth except for some slight nodularity at the origin of the right subclavian a. The largest Bakes dilator was inserted and an internal shunt was directed into the right common carotid a. (During the placement of this shunt there was a brief period when the patient's brain was being maintained on the left vertebral a. alone). The right limb of the prosthesis was then anastomosed across the bifurcation of the innominate a.

Flow meter recordings were taken (using a Nycotron electromagnetic flow-meter) before and after reconstruction:

Before reconstruction: right common carotid a.—210 ml/min.; innominate a.—600 ml/min.

After reconstruction: right branch of dacron—422 ml/min; left branch of dacron—680 ml/min, dropping to 420 ml/min on closing the left subclavian a. (see fig. 3).

Two mediastinal under-water seal drains were inserted, and one suction drain to the left neck incision. She had been transfused with 8 pints of blood during the operation.

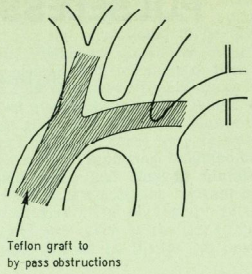

Fig. 2. Diagram to show position of dacron graft at operation.

Three specimens were sent for pathological investigation after the operation. They were a piece of thymus (in view of the immunological question) showing normal regression, a lymph node showing reactive changes, and a biopsy of arterial wall from a site of stenosis (see fig. 4). This last showed considerable fibrous thickening of the intima with occasional inflammatory cells. There was no lipid deposition in the intima, and the fibrous tissue present was more uniform and cellular than is usual in degenerative arterial disease. The changes were therefore non-specific, but consistent with Takayashu's Syndrome.

Post-operative Recovery

The patient was fully awake on her transfer to the Intensive Care Unit after the operation. She was maintained on the electric ventilator overnight, and by the third day she was on oral fluids. She developed some pulmonary infection with E. Coli which was treated accordingly; she also developed bilateral basal pleural effusions which were tapped on two occasions. She was transferred to Lawrence ward one week after the operation and her progress thereafter was steady. There was some difficulty in assessing her mental state as she spoke little English and appeared disinclined to talk, even in her own language: those who did speak to her in her native tongue thought that initially there was some mild expressive dysphasia. Both radial pulses and the right common carotid and external carotid pulses returned post-operatively, but her visual fields showed no change.

The patient was discharged on 27th November, and has subsequently written to say how well she is. Prior to her discharge, however, it was noted that her Hb was

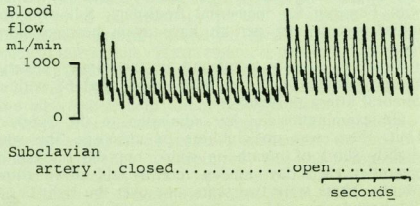

Fig. 3. Recording showing flow in the left branch of the dacron graft as the left subclavian artery was closed. (recording by courtesy of Dr. H. J. Terry, Ph.D.)

rising steadily to a level of 19.4 g% and her PCV was 53%: a provisional diagnosis of polycythaemia rubra vera was made, requiring further watching and possibly treatment.

Discussion

Pulseless Disease is the name applied to a group of chronic disorders of the great vessels arising from the aortic arch, which produces a decrease in size of the lumen of the affected vessels, resulting in diminished or absent pulsation in the arteries of the head, neck, and upper limbs. It is, therefore, a reasonably descriptive name, but not sufficiently specific to be a perfect choice. Many other names have been used by different authors, e.g. aortic arch syndrome, reverse coarctation, non-specific arteritis of the branches of the aortic arch, Martorelli's syndrome, and Takayashu's syndrome.

Fig. 4. Section through arterial wall biopsy showing grossly thickened intima (stained for elastirs.)

Historical Review

The first mention of a case of absent pulsation was in 1839, and concerned an army officer aged 55 years who had been severely wounded in the chest and who, on subsequent examination for another complaint, was found to have no radial or brachial pulses (Davy, 1839). In 1856, there was written up a case of a young woman, aged 22 years, admitted to Barts complaining of severe left-sided headache, vertigo, visual disturbances, chest pain, and dyspnoea. The physician examining her recorded the fact that she had absent pulsation in her upper limbs, and further inquiries revealed that this had lasted 5 years (Savory, 1856). Her condition deteriorated gradually, with progressively worsening vision and onset of right hemiplegia, until she died 13 months after admission. Another case was described of an American Civil War veteran, injured in battle, who complained of similar symptoms and who was found to have a large aortic aneurysm and spreading thrombosis occluding the branches of the aortic arch (Parsons, 1872). On fairly slender evidence, Osler in 1908 suggested an aneurysmal aetiology for this condition.

In that same year appeared one of the "classic" papers on this condition written by a Japanese ophthalmologist, M. Takayashu, who had studied for a time at St. Thomas' Hospital, London. He described a syndrome, of no known aetiology, which presented as pulselessness and apparent lack of blood pressure in the upper limbs, syncopal attacks, vertigo, and visual defects including cataracts. He noted that chiefly young women were affected and called it "idiopathic arteritis of young females". Altogether 33 cases were noted by Japanese workers, and the first case reported of a non-oriental origin only appeared 14 years later (Harbitz and Raeder, 1926). The first case in the USA was reviewed in 1952 by Caccamise and Whitman, and it was these authors who introduced the term "Pulseless Disease". Further reviews of this complex disorder were produced by Ross and McKusick (1953) and Martorelli and Fabré (1954; 1961).

Aetiology of Pulseless Disease

In spite of a varied selection of possible causes for this condition suggested by different authors, essentially the aetiology is unknown. Syphilitic involvement of the vessels—to be more precise, an aortitis with or without aneurysm formation—has been noted with some frequency, especially among the earlier cases reported. The obstruction in these cases was due to intimal proliferation, thrombus formation being conspicuous by its relative rarity. The aortitis is the major factor, less than 50% of patients reviewed also possessing an aneurysm of syphilitic origin. Atheromatous degeneration, accentuated in its effects by secondary thrombus formation, has also been proposed as a major aetiological factor. It has been noted that of those patients without any syphilitic involvement, 50% have evidence of obliterative atherosclerosis elsewhere, e.g. coronary arteries, femoral and iliac arteries, but, on the other hand, evidence of generalised atherosclerotic lesions has been lacking in many reported cases. Where there is only coronary artery involvement, atheroma could well be a primary cause of symptoms, but in the more generalised form of the disease, it seems likely that it is merely a contributing factor in the vascular occlusions of syphilitic aortitis, trauma and congenital lesions of the arch, all of which may render the arch more vulnerable to atheromatous degeneration. Cases of complete occlusion of the branches of the arch by atheroma must be extremely rare.

It is always difficult to implicate remote or even recent trauma in conditions such as the one under discussion. It has been a feature of several cases reported, notably those by Davy and Parsons, but there is no evidence of its direct causative role. It may hasten the onset of atheromatous changes and thrombus formation in the vessels and thus be involved in a supporting role; or "local trauma" in the form of stress from high flow rates and eddy currents may be responsible for the specific intimal changes of the condition. In four re-

ported cases, there was suggestive evidence that trauma precipitated dissecting aneurysm of the aorta, and it is not inconceivable that injury to the aortic wall might result in intimal tears and that these tears might later initiate dissection of the vessel wall or be a nidus for atheroma encroaching on the vascular lumen. Experimentally Ssolowjew has shown a predilection for the development of atheroma at sites of trauma to arteries.

Kampmeier and Neumann in 1930 were the first to suggest that congenital variation may contribute to the vascular occlusion. It seems likely that anomalous placement of vessels may render them more susceptible to occlusion by any of the factors mentioned. In several cases, congenital factors have been suspected and various anomalies revealed at post mortem. It is also important to remember that the mode of origin of the great vessels from the arch is more variable than one might think. The true congenital anomalies of the arch, e.g. coarctation and PDA, may produce variations in the pulse, but these are generally unilateral. Nevertheless, it must be emphasised that while these features may contribute to the condition, they are rarely the primary cause. The situation was well summarised by Sir Thomas Lewis in 1942: "No such anomaly is known in which all the usual vessels, innominate, subclavian and carotid, fail, or which would account for pulse loss in the head, neck and arms. The congenital anomalies of the arteries are not the suppressions of arterial supply, they are merely unusual arrangements of supply".

Several other possible factors have been mentioned in connection with this condition, and it is worthwhile summarising them at this point. Frovig (1946) was of the opinion that the cause was a panarteritis of a giant cell variety, possibly of an allergic origin. Alternative forms of arteritis which suggest themselves as possibilities are Buerger's Disease and PAN. An infective inflammatory origin was suggested by Harbitz and Raeder (1926)—in this case infection by haemolytic streptococcus—while Japanese writers came out very strongly in favour of a tuberculous origin.

More recently, an auto-immune basis has been suggested, a concept much favoured among modern research workers, and therefore one which certainly deserves closer investigation. Hirch et alii and Strachan (1964) both suggested that the tissue damage might be due to Ag-antibody complex formation, on the basis of the protein nature of the disease, the raised gamma globulins, the high ESR, and the occurrence of "rheumatic" manifestations either accompanying or preceding the arteritic phase. Schire and Asherson (1968), working on the assumption of an auto-immune basis, investigated 21 patients for immunological abnormalities, and found that there was a statistically significant rise in the serum level of the three major groups of immunoglobulins (IgA, IgM, IgG) in the patients with aortitis as compared with their controls, a group of patients with functional disorders, matched for age, sex, and ethnic group. They did not, however, report an increased incidence of organ specific autoantibodies as found in Hashimoto's Disease, or of non-specific autoantibodies as found in LSE; neither could they demonstrate anti-aorta antibodies by gel diffusion, complement fixation or immunofluorescence. They suggest that the raised level of immunoglobulins indicates that these patients are exposed to antigenic stimuli occurring to a lesser extent or not at all in the control group, but commit themselves no further.

It is on exclusion of all these aetiological factors that we are left with a group of patients suffering from an "idiopathic arteritis of young women", so called because the process starts at about the age of twenty, and favours women to men in the ratio of 10:1. The majority of cases seem to have occurred in the Orient, but cases have been reported in the USA and Europe, notably the UK and Scandinavia. It is this particular aetiological form of the disease that was originally designated specifically "Takayashu's Syndrome", but now the name is used for all forms. It resembles, yet has distinct differences from, other forms of panarteritis, besides which, other forms of Pulseless Disease have a wider age range and attack males to a greater degree.

Pathology of Pulseless Disease

There are two processes basically responsible for the effects of this disease: intimal proliferation leading to cicatrical stenosis, and thrombus formation. As far as the latter is concerned, several cases have been shown at post mortem to have vessels occluded by the projecting fingers of an organised or organising ante-mortem thrombus, derived from a nearby aneurysm. Thrombus formation also readily occurs on atheromatous plaques.

In most cases of arteritis one finds inflammatory cells (i.e. leucocytes, plasmocytes, macrophages) invading the layers of the arterial walls, causing a variable degree of damage. This usually results in fibrotic stenosis of the lumen. Using syphilis as an example relevant to this discussion, it has been shown that the Treponema gains access to the aorta via the vasa vasorum producing endothelial swelling, hyperplasia, and occlusion of the vasa, adding ischaemic necrosis to the destructive effects of the spirochaete in the elastic and smooth muscle elements of the media. Cellular infiltrates of lymphocytes, plasma cells and epitheloid cells can be seen about the vasa and in the necrotic foci. In 15% of patients, the changes in the media are responsible for fusiform or saccular aneurysms. The adventitia is also involved in the inflammatory reaction, becoming very fibrotic, and there is invariably intimal proliferation with secondary atheromatous deposits being laid down.

Pathology of Takayashu's Syndrome

The condition is characterised by a severe panarteritis, involving usually the transverse portion of the aortic arch, but also spreading to the ascending and descending portions as far as the abdominal aorta. The macroscopic appearance of involved vessels is one of eccentric narrowing with small, firm nodules around whitish-yellow coloured arteries. Microscopically, the primary lesion in the majority of cases appears to be an inflammatory process in the media, about the vasa vasorum supplying that layer. Secondary to this, there is a thickening of the tunica intima which results in the progressive narrowing of the arterial lumen. Histologically, the intima is seen to consist of mesenchymal cells separated widely by an accumulation of greyish material, best described as "ground substance". Early lesions show localised foci of coagulation necrosis accompanied by giant cell formation (cf. tuberculosis). Later on, there appears a diffuse infiltrate containing plasma cells, lymphocytes and giant cells. The presence of elastic fibres and smooth muscle cells has also been reported. These changes eventually lead to scarring and fibrous stenosis, but there are none of the changes typical of arteriosclerosis, i.e. cholesterol plaques or fatty infiltrations.

Thrombosis, secondary to the loss of the smooth intimal lining, is another common complication of this process. In the tunica adventitia, the characteristic change is that of fibrous tissue proliferation which is often seen around the vasa, and may, in fact, be the factor pre-disposing to the degenerative changes in the media, rather than just a secondary phenomenon. The fibrosis and thickening of the wall often achieves a thickness three or four times that of uninvolved areas, distal to which there may be dilatation of the aorta.

Clinical Picture

Pulseless Disease presents a fairly uniform set of symptoms and signs whatever the aetiological factor involved. The severity of the symptoms depends on the degree of stenosis of the vessels, the number affected, and the efficiency of formation of a collateral circulation. For the sake of clarity, the clinical features may be divided on anatomical grounds into those affecting the cardiovascular system, and those affecting the head and neck. Most prominent among the CVS features is the lack of pulsation in the radial, brachial, temporal and carotid arteries, giving the condition its name. In the arms, there is low or absent palpable blood pressure (although it may still be detected by faint Korotkov sounds if at the systolic level of 75-80 mm. Hg.), but fortunately nowadays very sensitive electrical methods of measuring blood pressure are available. In the lower limbs, the pressure is normal or elevated, often being greater than 160 mm. Hg in young patients. A distinction should be made between lack of detectable blood pressure and serious restriction of blood flow in the upper limbs, for even in cases with no recordable blood pressure there are rarely signs of ischaemic changes (i.e. ulceration, brittle nails, hair loss, low temperature, pallor, cyanosis or claudication). This is due to the fact that a good collateral circulation is able to build up due to the relatively slow progress of the disease. These collaterals can be detected clinically by auscultation as systolic or continuous murmurs heard parasternally and over the scapula, but best of all over the supraclavicular joints at the base of the neck. Radiologically the collaterals may produce rib notching. Hypertensive cardiac disease, not uncommonly progressing to left ventricular failure, has been noted in several patients. Angina pectoris, tachycardia, dyspnoea, and one case of bilateral clubbing have also been reported, but these symptoms were probably due more to associated cardiac disease than the pulseless syndrome itself.

In considering the head and neck, we shall divide the symptoms into those affecting the eyes, those affecting the cerebrum, and those involving other stuctures. In general, the symptoms are all due to ischaemic changes in the structures concerned. The eye symptoms were emphasized in his original paper by Takayashu. Dimness of vision, blurred vision with black spots or white lights in front of the eyes, and transient blindness, especially on rising from the horizontal position, have been prominent among the presenting symptoms: the term "intermittent claudication of vision" has been applied to them. The blood flow in the retinal arterioles tends to be very sluggish with the accumulation of groups of red cells ("sludging"), and the formation of microaneurysms and peripapillary arteriovenous anastomoses has been noted. The intra-optic pressure is decreased as is shown by the fact that flow can easily be obliterated by light pressure on the eyeball. Atrophy of the iris, retina and optic nerve are complications of later stages of the disease. Photophobia as a presenting symptom is not unknown.

As far as the cerebral hemispheres are concerned, the condition manifests itself most frequently as vertigo or syncope on rising or after exercise. There is also very often a severe continuous headache in the occipital region. Other sequelae of this disease are hemiparesis or hemiplegia, aphasia, memory impairment, personality changes, and convulsions or epileptic fits of the jacksonian or grand mal variety. Auditory symptoms are rare, but tinnitus or deafness may be present. Several patients have been reported as having hypersensitive carotid sinuses thus producing syncopal attacks.

Other symptoms noted include claudication of the jaw muscles after chewing, perforation of the nasal septum due to infarct of the cartilage leading to a saddle nose deformity, atrophy of the facial muscles with loss of wrinkles and facial expression, poor healing of facial infections, and trophic changes in the skin, e.g., loss of hair and abnormal pigmentation.

Diagnosis and Treatment

As in the case of any patient, a full history should be taken and a full clinical examination performed. Points to note in the history are the possibility of syphilitic involvement, recent or distant trauma, worsening vision, headaches, heart disease including angina, and any symptoms of arterial insufficiency in the limbs. In the clinical examination, it is necessary to do a complete examination of the pulses. Auscultation of the heart should be diligently performed for any signs of disease, and also careful auscultation of the thorax, back, neck and supraclavicular fossae for evidence of any collaterial vessels (i.e. bruits). A very detailed examination of the eyes is required, preferably in a well-equipped specialist department, in any suspect.

Apart from routine blood (which may show anaemia and leucocytosis) and urine tests, a WR and TPI are required, plus a serum cholesterol and a platelet count, which would suggest a possible cause for thrombosis if raised. The ESR is often raised, and serum protein electrophoreis may show raised immuniglobulin levels, antibodies of the IgG, IgA, and IgM types. A plain chest X-ray might reveal calcification (suggesting syphilis or aneurism) or enlargement of the heart, while aortography may show the exact extent of the damage. Further investigations may include ophthalmodynamometry (measurement of the pressure of the ophthalmic artery) and an ECG with and without manual occlusion of the carotid pulse in the neck, to show to what degree the vessels of either side contribute to cerebral function at the time of the test.

Treatment must be aimed at the aetiology of the disease. Penicillin is given to those with proved syphilitic involvement. Anticoagulants have been tried, but with minimal success. With the thought of an auto-immune basis, treatment has been tried with steroids and azothiaprine, but it is as yet too early to say how effective this treatment is, since it is a new form of therapy. The scope for conservative treatment seems rather limited, however, and with the rapid advance in vascular surgery over the past few years, this is becom-

ing the main line of attack on this disease. As in the treatment of peripheral vascular disease, the candidate for surgery must be selected with great care, choice depending mainly on how the patient will benefit from surgery. An older person, for example, with complete hemiplegia will not benefit at all, whereas someone with only intermittent attacks, or who has a mild neuological deficit not worsening at the time, or who has recovered from a major attack, may benefit greatly, especially if the operation restores him to a relatively normal life.

Consideration of possible Operative Techniques

The operability of the lesions in Takayashu's Syndrome depend on the location, extent and duration of the occlusion. The earliest surgical procedures to try to relieve the obstruction were done in the early 50s, and consisted of thromboendarterectomy: this involved passing an instrument through an arteriotomy in the obstructed vessel, removing the thrombus and involved intima, thus restoring pulsatile flow in the vessel. Several successes were reported by Davis et alii in 1956. It is now realised, however, that this procedure is really only of value in atherosclerosis, and therefore not applicable to this condition.

A modification of this method involves removal of the diseased intima, and closure of the incision using a patch graft of tubular knitted dacron or acrylate foam compressed onto sheer knitted dacron. The wound edges are sutured to the edge of the patch circumferentially, thus preventing closure of the artery through constriction. Bilaterial cervical ganglion sympathectomy has also been tried, but was soon abandoned.

The third, and most suitable, alternative involves a proximal anastomosis between the end of a prosthetic graft and the side of an accessible portion of the ascending aorta, with the other end attached to the patent distal segment: this is the latest technique in this field. The location and number of distal anastomoses depend on the extent of the lesion, so bi- and tri-furcated grafts may be necessary, and these will be sutured to the sides of involved vessels. The graft may then be drawn through tunnels made by blunt dissection, or bypass the vessel altogether; the latter is generally held to be the more satisfactory. The use of straight grafts is not applicable in these cases as the disease affects all the great vessels.

Dacron tubular grafts of 10-12 mm. diameter have been found suitable: accessory branches may be sutured to the graft itself to minimise the amount of graft material in the neck and thorax.

Suitable incisions for the operation include a small intercostal incision in the third space on the right, and a sternal split with separate incisions in the neck and/or the supraclavicular fossa as necessary.

Operative Precautions

As this disorder will nearly always involve the cerebral circulation, preservation of this will be of prime consideration during the operation. Similarly, each patient declared clinically favourable for surgery must have a cerebral arteriogram to evaluate the amount of disease present in the cerebral vasculature, and thus determine his real suitability for operative procedure.

Anasthesia is also important with concomitant control of the peripheral blood pressure. The injection of procaine into the carotid sinus will prevent baroreceptor influences, and the peripheral BP is maintained at a level slightly higher than normal to ensure a good cerebral circulation. Temporary arterial occlusion in patients with both common carotids affected is obviously dangerous, and severe neurological complications may occur within a few seconds. Temporary arterial shunts of polyethylene tubes (diameter 1.5-3.5 mm.) may be inserted in segments, each fitting loosely in the artery with a suture round the middle of the tube. The tube is held in place and controlled by silk ligature loops just tight enough to compress the tube on the arterial wall.

Conclusion

Takayashu's Syndrome is, indeed, a rare phenomenon, and few papers are to be found giving any indication as to its true aetiology. Many suggestions have been made, but certainly medical treatment has not met with much success, despite the fact that the rather non-specific pathological lesions are recognised. Surgery is now considered to be the only approach feasible in this condition, but too few operations have as yet been undertaken to enable one to judge of their success.

Acknowledgements

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KWOK'S QUEASE (or) Gourmet's Grippe

By G. J. Lodge, B.Sc.

Connoisseurs of Chinese Cooking will appreciate my dismay on first visiting a haven of oriental cuisine, not far from the confines of our Royal and Ancient Hospital, in discovering that I was one of those unfortunate individuals doomed to suffer from Kwok's Quease (the Chinese Restaurant Syndrome).

Having first savoured a delicate clear tomato soup with eggs whipped freshly into it and decorated with watercress, I then gorged myself on a dish heaped high with the most indescribably delicious barbecued spare ribs, and launching into the beef and beansprouts I was suddenly seized with an unfamiliar and distinctly unpleasant sensation. An impression of bitemporal pressure crept forwards to compress both my orbits, this associated with a queasy feeling in my stomach. At first I attributed this ruefully to the moderate quantity of alcohol I had consumed prior to the meal, and it was not until I became aware of a sense of creeping numbness spreading down from my scalp over the back of my neck and shoulders onto my back, that I remembered the similar quease of Dr. Kwok.

Dr. R. Ho Man Kwok first described the syndrome in a letter to the New England Journal of Medicine in 1968[1]. Since arriving in the U.S.A. he had, on several occasions, noticed the strange effect produced by eating out in certain Chinese restaurants, particularly those with a Northern Chinese cuisine. The symptoms began 15-20 minutes after starting a meal and lasted about two hours. They were numbness of the back of the neck radiating to the arms and back, generalised muscular weakness and palpitation. Several of Dr. Kwok's friends had had similar experience and there was soon a deluge of letters, each with a new theory on the aetiology. One of the most entertaining of these was that the stiffness of the masseter experienced by some sufferers (myself included) was due to Westerners attempting to eat with the unfamiliar chopsticks.

It was not long however before the true culprit was run to earth. Two groups in New York[2, 3] pinned the blame firmly on mono sodium glutamate, a flavouring used liberally in Chinese cooking as well as in most modern dried and canned convenience foods: five grammes is enough to cause symptoms in sensitive individuals and women appear to be more frequently sensitive than men.

There have been only two reports of this syndrome in the British literature[4,5], and this I can only suggest reflects the well recognised inferiority of British as opposed to American Chinese food. Having experienced the syndrome once again while eating an even more delightful meal I have come to the sad conclusion that it is associated only with the best Chinese food. I shall not be deterred however, as the worst of the symptoms are over in about 10 minutes, after which they diminish despite continuing the meal.

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Reviews

THE MUSIC SOCIETY CONCERT

A delightful amateur atmosphere, reminiscent of Edwardian smoking concerts, pervaded the scenes which were enacted in the Great Hall concert on March 4.

Konrad Maurer began the evening by playing the Suite No. 3 in C major for unaccompanied 'cello, by Bach. His tone was beautiful, warm, full and confident: likewise his intonation was faultless, but he badly needs a rhythmic strait-jacket, sometimes he quickened, sometimes he relented, but he could never keep an even beat.

The Cantata Singers, under John Allen, sang "Il est Bel et Bon", by Passereau, and "When David Heard" by Tomkins. There was some lovely singing among the sopranos, whose purity of tone was well-suited to the famous lament of David for Absalom. The words might have been clearer in both pieces, but the rhythmic buoyancy of the French song made it light and well-aired, and as enjoyable for the audience as for the singers.

Five of the duets for basset horn, K.487 by Mozart, were played upon two clarinets by Steve Warrington and Don Gillett. Steve presented an apologia for the impending performance, but in his witticisms forgot to mention his reed, which caused some trouble by leaking (it seemed). Perhaps Don Gillett might have played the first clarinet part, as his tone was the better.

For us, the highlight of the first part of the concert was the Fantasia op. 103 for piano duet by Schubert. Anthony Nethersell was the first pianist, Cynthia Fung the second. The whole performance was of high quality, with plenty of dynamic interest, and no banging, with good, sensitive phrasing, and with the melody musically executed. The second pianist, however, should have brought out her melody more, when the first was decorating above the bass.

After imbibing wine during the interval, we returned to our seats to be entertained by John Marston, countertenor, singing Elizabethan songs of the sixteenth and seventeenth centuries. He accompanied himself on the piano, while rendering "Oh, Mistress Mine", Purcell's "Music for a While", and "Have you seen but a White Lily Grow?". By special request, he finished with "It fell on-a-summer's Day", which appealed greatly to the medical audience, as the theme was really "She fell, on a summer's Day". Unfortunately, John Marston also fell—into the well-known trap of singers who accompany themselves: he played too loudly, and did not project his voice and words to the back of the Hall. His quality of voice was pleasing, but varied between the lower and higher parts of his range: the voice was easily produced, and never sounded strangled, but his ornamentation was shaky: perhaps he could not support his tone while supporting his body on a piano stool.

Michael Jamison (oboe) played "Pièce V" by César Franck, accompanied by Cynthia Fung on the piano. After a trembling start, with rather rough oboe tone, he played easily, articulating and phrasing well. Cynthia Fung accompanied pleasingly, allowing the oboe to dominate. Anthony Nethersell accompanied the oboe in "Roundelay" by Alan Richardson. This piece was light, amusing and well-played; the oboe tone was produced with ease.

The Cantata Singers returned to sing three songs of Vaughan Williams. The first two—"Lover's Ghost" and "Just as the tide was Flowing"—are folk songs in the best tradition, such as one associates with Vaughan Williams in that medium. "Silence and Music", on the other hand, showed the deeper side of his creative mind. He set this poem of his wife's atonally, like "In Dreams" in the Songs of Travel. The choir managed this difficult song well. The dynamics were varied, but the ends of phrases not always synchronised: an elderly resonant bass would have helped the tone of the many young voices in that section.

Konrad Maurer and Anthony Nethersell combined to perform the Sonata op. 38 for 'cello and piano by Brahms. This was a splendid climax to the evening. The 'cello tone was again very good, the dynamics had plenty of variety, ranging from pianissimo to fortissimo. The accompanist was most sensitive, with a lovely touch and good phrasing. At times, he was almost too unobtrusive! He kept the 'cellist in time, and they did justice to a great work, playing it with confidence and fluency.

TOM PONSONBY.

(Mr. Ponsonby is a student at the Trinity College of Music).

BOAT CLUB BALL 1971

It has been common practise, I think, for people at Bart's to miss out on the Boat Club Ball claiming it to be a non-event. However this year's Boat Club Ball made a tremendous change for the better. I must congratulate all those concerned with organising it for a highly successful evening. It was very professional, and from what I can remember of it, it seemed to run smoothly from the beginning to the end. I think most people thoroughly enjoyed themselves and it was only a pity that there weren't more there to appreciate it. Perhaps the only people who weren't so appreciative were the Boat Club themselves who, I believe, made a rather nasty loss.

Dick Fowler took a week's holiday immediately prior to the Ball and it certainly paid off dividends. Surely he should be requisitioned to do the decorations for every single ball in the future! Painting on the huge scale necessary for the Balls is a technique he seems to have mastered along with some sculpting as well, I noticed. He also seems to have a great knack of making the College Hall rooms almost unrecognisable. This was

helped by the lighting which was done by Barry Grimaldi. The entrance foyer was decorated with scenes from the Jungle Book which aptly covered up the porter's desk and set the atmosphere admirably for the rest. The recreation room was great although the Roman bar was a little unusual having a Buddha and a steel band in it!

One of the few criticisms that I could level would be at the group in the recreation room who left me rather deaf and definitely uninspired. However "Choice" who played in the Dining room easily made up for them. The steel band as always was a great success. They played in the Romanised bar for most of the evening. During one of the breaks a guy playing country and western gathered a small crowd and all joined in the rather dubious songs. Barry Grimaldi's discotheque was surprisingly good and supplied the background for the usual Abernethian Room freak-out.

The small number of people that came certainly made the ball more civilised. The leg cramps and sore backsides, which so often dull the enjoyment of the crowd around the cabaret, were not apparent this time. Lance Percival gave an excellent show which was helped by the inebriated state of his audience. His act in which he asked the audience for professions which he then sang about in calypso form, must be mentioned: his speed of thought was incredible. The professions suggested were not exactly normal! It was a pity though that he ended on a joke which was done in the Pot Pourri. However it was one of the best cabarets I've seen at a Bart's ball.

Serving the food in hampers, although detracting from its presentation, must, I think, be the only way to get round the rugby scrum of a buffet. It certainly tasted very good. Anyhow, many thanks to the Boat Club for a very pleasant evening.

ALLAN COLE.

THE XIII ANNUAL SMOKER

The lot has fallen on me to review the Wine Committee's thirteenth annual Smoker. This was not an easy task owing to my slight inebriation following several glasses of the well-laced punch served by the Wine Committee on the stag night.

The Thirteenth Smoker continued a tradition started six years ago by Graham Chapman with certain of the Cambridge Footlights, to provide an evening of bawdy entertainment for the gentlemen of Bart's. These days, we also have a non-stag night so that the gentlemen may bring their wives and girl-friends, who, in this liberated time of female emancipation, seem to enjoy a good laugh as much as their menfolk; certainly the catty exchange between Janet Dinwiddie, Wiz Mansi and Kate Walker in "Just Good Friends" must have had special significance for the ladies.

This year, the Smoker was put on by members of Bart's Drama Society, and though similar in content to the Pot Pourri, demonstrated to us all how good acting can transform barely funny material into a show which was always amusing and sometimes hilarious.

The show started with the whole cast (Janet Dinwiddie, Wiz Mansi, Kate Walker, George Blackledge, Peter Burnett, and James Griffiths) with very competent musical accompaniment by Mike Hendry, Steve Tunson and Patch Venables, singing a song entitled "Non-smoker" between long drags on cigarettes. The song contained references to a certain well-known neoplastic lesion and Dr. Issels, and was well received.

In the first half I particularly liked "Thanks to Ross and Norris", a phallic "Guinness Book of Records", much enlivened by Pete's enthusiastic delivery, and "Belfast" with George as a British soldier somewhat dwarfed by a catholic and a protestant Irishman: this was the old three man routine, much utilised in Bart's ward shows, but well done and very funny. "Thinks" was an imaginative sketch showing us the difference between the thoughts and words of a group of people at a dance (a Bart's hop?). We also heard two good songs: "Sugar Pie" where Janet's slightly out of tune Alice-in-Wonderland voice contrasted splendidly with the becoming operatic presentation of George Blackledge, and "Love is Here", on a less flippant note, written by Pete Burnett and sung by Kate Walker. Kate also sang another song written by Patch Venables, and both were beautifully sung, although I consider her expression remained rather too serious for such an occasion.

The second half had the advantage of a well-lubricated audience, who received James' unconventional approach to the fairer sex with enthusiasm. I liked "Good Old Days", a silent film with elements of Charlie Chaplin modernised by the use of a stroboscope. George as a devoted servant, held the audience single-handed with the tragic story of the demise of his master. Also notable was the dig at the Bart's Drama Society, presumably included in order to prevent too much bigheadedness over their recent successes. The high spot of the second half, though, was undoubtedly the appearance of James in drag as Cleo Laine: his rather obscene antics with the microphone delighted the by now well-pickled audience.

In summary, this was a very good Smoker, especially when one considers that it was accomplished in only three days. At least the Smoker is one Bart's tradition that Matron cannot take away from us.

ANDY PEACOCK.

Book Reviews

Family story: the Drages of Hatfield, by Charles Drage. Hatfield, *Stellar Press*. 1969. Pp. xii, 223; illus. (£2.25).

Many family histories are extremely dull, except possibly to relatives and personal friends, but this one includes some very colourful characters, and is most fascinating reading. Dr. Charles Drage (1825-1922) is of particular significance to us because he entered Bart's as a student in 1843, and our Library contains numerous testimonials to him from his teachers, and also the Boat Club Flag which he possessed until his death. Sir James Paget described Charles Drage as: "Active, clear headed, well mannered. Went into practice at Hatfield and had great success".

The book contains several genealogical tables, and is illustrated with twelve appropriate plates. It commences with the coming of the Drages from Norway some 400 years ago, and then covers another medical man, Dr. William Drage (1637-1668) who struck his own money bearing the inscription: "W. Drage of Hitchin—His Halfpenny—1667", with the arms and motto of the Worshipful Company of Apothecaries on the reverse. The death of the author's father Geoffrey Drage (1860-1955), who married Ethel Ismay, and was a well-known politician, completes the book, but many of the other Drages are portrayed. The author, who has written several other books, and is himself a dynamic character, must have spent many years piecing together the material for this study of his family. It was worth the time and trouble involved!

J.L.T.

A Stitch in Time, by Emma Lathen, Penguin Books (30p).

Although several of Emma Lathen's books have been published by Penguin Books already, she is not a well-known writer in this country, although apparently she is very popular in the States.

"A Stitch in Time" is a traditional whodunit with the initial suspect proving his innocence, and the accusing finger only being pointed correctly in the closing pages. The story is set in an American City hospital. A millionaire, Pemberton Freebody, tries to commit suicide, but is rushed to the hospital where he has an emergency operation. Unfortunately seven "haemostatic clips" are left in by mistake and Pemberton Freebody dies. Lawyers are brought in to sort out whether he died from the suicide attempt, in which case no life insurance would be paid, or whether he died from the clips, when it would. The turmoil seething beneath the surface of the hospital erupts with the violent death of the surgeon who did the operation—and the inquiry changes to one of murder. But as the investigation proceeds the hospital staff become less co-operative—not, however, to save the reputation of a colleague but to save their own skins. Eventually justice wins through, the murderer confesses, many of the senior staff are convicted of fraud, and Southport General Hospital settles back into anonymity, with rather a skeleton staff one presumes.

Although quite an ingenious story it lacks the subtlety of a first-class detective novel. But those that like whodunits will enjoy this the latest of Emma Lathen's books.

R. J. WILLIS.

Bruno's Dream, by Iris Murdoch, Penguin Books (35p).

This is the latest of Iris Murdoch's novels to be published by Penguin. Bruno, aged nearly 90, and with death knocking at the door, is obsessed with his past and his passion for spiders. Around this old man Iris Murdoch spins a story as complex and fascinating as any spider's web.

Simply, a word one hesitates to use in connection with Iris Murdoch's novels, this story traces the inter and intra-relationships between two households. Caught up are Danby, Bruno's son-in-law, Danby's mistress, Adelaide, and her twin cousins, Will and Nigel, and, in the other court, Bruno's estranged son, Miles, his wife and sister-in-law. The two groups are brought face to face when Bruno insists on seeing Miles. The story erupts into an extraordinarily complex and highly original chronicle of middle-aged passions, switching and turning on every page.

This is an absorbing novel in true Iris Murdoch tradition. Iris Murdoch devotees will need no recommendation, but, for the uninitiated, this is a marvellous book, well worth reading.

R. J. WILLIS.

Understanding Anxiety, by Eric Trimmer, Allen & Unwin (£1.25).

Although anxiety is such a universal experience it is commonly misunderstood, misdiagnosed and mishandled. This small book on the subject presents a sensible and practical view of anxiety with the help of illustrative case histories. It has been written mainly for the general public by a G.P. with a special interest in "Health Education".

Dr. Trimmer first discusses the nature of anxiety, with its biological protective function and in contrast to this the anxiety, which is irrational, and frequently crippling to the patient. This morbid anxiety he describes as due to supposed "deprivations"; "inexplicables"; a "lack of creativity" or a "fear of reality".

The second part of the book goes into more detail, elaborating on anxiety as it manifests itself in obesity, skin complaints and in relation to cardiac and gastro-intestinal disorders. The special problems of anxiety in women and children are also discussed.

Finally, and rather as an afterthought, the all important relationship of anxiety to depression is mentioned briefly. Perhaps more could have been made of this point. Generally, however, the book can be recommended to all those who have experienced anxiety and found it difficult to understand either in themselves or in others.

J. B. PEARCE.

Bart's Sport

SKI REPORT

Season 70-71: Almost a washout

The season which has just finished must go down as the one with the least snow ever, taking Europe as a whole. The Alps and the Pyrenees were without reasonable snowfall until the middle of February, Norway and Scotland have had disastrous seasons which have resulted in the cancellation of many races, and comrades behind the iron curtain have had a snowless time too. There was one encouraging sign however, the island of Grand Canary had its first snowfall in twenty-five years and locals were reported to be going in coach loads to the summit of their mountain to see this white stuff that had come to pass. However amongst these snowless wastes members of the Bart's Ski Club fought on regardless. Messers Robert Davis, Nigel Findlay-Shirras and Christopher Trower were racing in the Alps at Christmas, Nigel and Christopher competed in the Winter Commonwealth Games in St. Moritz for Scotland and England respectively. Christopher gaining the third best time in the Giant Slalom for the latter.

Selection for the British Universities Team took place in Davos as last year on the results of the British Championships, but by this time injury had overtaken all the Bart's racers. Robert had had to return to England due to illness, Nigel broke his fibula one day before the British Championships which sent him back to England, and Christopher by this time had sustained a broken finger and dislocated shoulder and was only able to compete in one of the British Championship races. He was lucky, therefore, to make the British Universities Team as reserve and thereby get a week free in the £20 a night Palace Hotel in St. Moritz. Nigel should be in this enviable position next year and considering Tony Lipscombe (Bart's Ski Captain) did it last year this is a very good record for Bart's.

Turning our attention to Scotland, ten Bart's skiers made their way to Aviemore for this year's London University inter-collegiate Ski Race to defend the cup narrowly won from the L.S.E. last year. This year the main opposition came from some place called Guy's, but unfortunately the battle of the giants could not take place as rain plus frost plus more rain had made the off course conditions far too dangerous for racing so we shall have to wait another year until we can have the interesting Bart's/Guy's test of strength on the snow.

It is sad that the British Universities Ski Championships have suffered the same fate as the L.U. Ski Race as this was Tony's last year as the London Captain. His passing as a skier and a gentleman will be mourned by London and Bart's Ski Clubs alike. While losing Tony we have gained another highly experienced ski racer this year in Albrech Fiennes who has lived and raced in Switzerland for the last ten years. He hasn't unfortunately been able to race with us this year but we are expecting great things from him next year.

Roger Lee, one of last year's London University Team members, coping admirably with one of the few patches of snow available in Scotland this year.

LADIES' TENNIS CLUB

As the new season starts, we are aiming to run two teams, and also to have a more successful season. If you are interested in playing regularly or just occasionally, do contact one of the following:—

Frances Seccombe—Preclinical Cloakroom.
Sue Parrish—W.S.C.R. Hospital.

We also play mixed matches on Sundays—players are needed for these—they are usually great fun!

We are organising a Ladies' Tennis Club tour to Cambridge from May 7-9.

SUE PARRISH.

HOSPITALS RUGBY

A Fight for Survival

After the setback of losing to Guy's in the Hospitals Cup in February, Bart's rugby seems to have degenerated somewhat, as could be expected. Nevertheless, only one or two junior fixtures have been cancelled, unlike the well publicised cases from the other London Hospitals, and until quite recently, when the pre-clinical students departed, Bart's regularly turned out four undergraduate teams plus the Veterans each week. Even so, however, there are early signs that Bart's, in common with the other Teaching Hospitals is suffering a dwindling interest in rugby, and the standard of play is dropping.

Cambridge University beat Guy's 66-0, St. Mary's (even with John Williams) 27-0, and one Saturday Guy's 1st and "A" XVs lost to Coventry by a combined total of over 120 points. More recently Mary's lost 44-0 to London Irish, St. Thomas's cancelled their game with Streatham and Croydon through a shortage of players, while a few weeks later they asked to be "relieved" of a fixture with the Irish. It is true that St. Thomas's have had a large number of injuries this season, but recently they have been pushed to raise even one side throughout the whole Hospital. It is only the smaller hospitals with more modest fixtures who have ended the season with even a reasonable record, while Tommies have won only two games up until the beginning of April.

At the present time Bart's seems to have found its level, with a mixture of hard and a few softer games, but it doesn't take much foresight to envisage a Bart's side getting beaten regularly by the better opponents. Part of the trouble lies in the really good players playing for other clubs, but who can blame them when the rest of the team is not in the same class. It is always disturbing when the Hospitals Cup sides are almost unrecognisable from those which represent the hospitals on Saturdays, but that is the way it has always been.

As an answer to these problems, many people would like to see a United Hospitals' side playing each Saturday on a regular basis. This need not necessarily be composed of the really top players, but *good* players, a few from each hospital, who play together each week and get to know each other. A fixture list could easily be found by taking up the hardest fixtures which individual Hospitals cannot maintain on their own, and this would probably suit the opposing clubs who would get a better game.

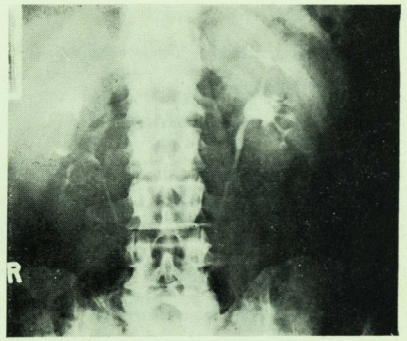
The essence of a good side is playing together regularly, and U.H. fails at present because it goes for the big names who either play hard to get or answer County, Army or Representative calls, who all drop out at the last minute leaving a team of eleventh-hour call-ins with no spirit whatsoever. All arrive at the ground in complete confusion and are still finding out each other's names at half-time.

Surely few people would deny that, on the whole, Hospital rugby is at a low ebb at present. Unfortunately it is easy to say that this never happened 10 years ago, and it is certain that any campaign of this type will meet with plenty of opposition, but for the players, who are being beaten by such large margins, some sort of change has got to come. Although every so often a particular hospital has a revival in interest and does better on the field, I feel this is more a remission than permanent cure, and that change must come quite soon.

JOHN LAIDLOW.

SPOT THE LESION

By C. J. Hinds



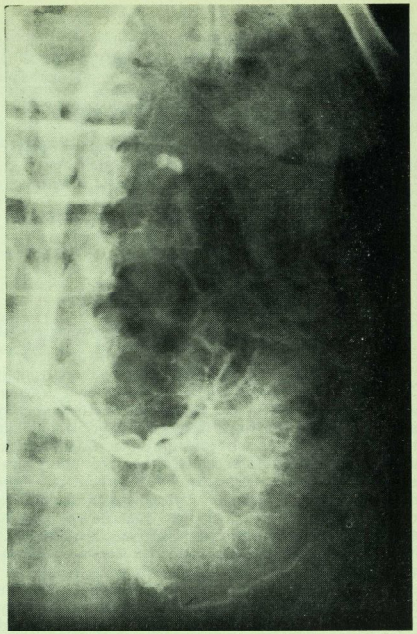
Questions:

(a) What pathology does this I.V.P. suggest?

(b) What further investigation would you carry out to confirm the diagnosis?

Answers on p. 168.

SPOT THE LESION ANSWERS ;



(a) Displacement of the right superior and middle calyces suggests a tumour of the right kidney.

(b) An aortogram. In this case it shows increased vascularity of the affected area of the right kidney; there is no displacement of the vessels. This suggests a malignant neoplasm. (A cystic growth would cause displacement of the blood vessels).
In fact the patient had a fairly well encapsulated clear cell carcinoma, centrally situated in the right kidney.

POEM :

My Body (written during a biology examination).

Sad heart thy life is over,
No more to rise and fall,
The leucocytes and phagocytes
Shall cease to pound thy wall.

The tiny little villi
Unseen by naked eye,
Waft dirty bits of nicotine
Slowly by and by.

Dear spleen, I do abhor you,
Your redness blushing for shame,
The erythrocytes, poor darlings,
Have none but you to blame.

My kidneys are a blessing
They do relieve me so.
But I find that Bowman's capsule
Tends to restrict the flow.

In general through my body
(Resembling a keg of ale)
Can in no way help but thinking
"Hell, I'm going to fail."

ANON

(60 *per cent was the examination result.*)

SAINT BARTHOLOMEW'S HOSPITAL JOURNAL

Founded 1893. Vol. LXXV No. 6

Editorial

How much right does anyone have to protect their privacy—both of property and of personal life? Bart's has been in the news recently with the "marvellous recovery" of a boy savaged by guard dogs, and there is now hot dispute as to whether this is a reasonable way for a company to guard its premises, leaving aside the question of how the boy got in.

In most civilisations, a man's importance is measured by his material possessions, whether they be money, pigs or wives: there is an old adage saying "Possession is nine-tenths of the law," and a man will use any means available to protect his possessions and thus his individual rights: a man in America uses rattlesnakes to guard his business premises! Material possessions thus encourage a feeling of stability and security: the modern trend of "share all" is applicable to only a few communities and may be regarded by some as a form of petty communism to be avoided at all costs.

The census is another intrusion into privacy and security, although the questions are innocuous enough. When one considers, however, that the information has been sold to a computer company, one might be forgiven for wondering what will be the outcome. It is estimated that there is a file somewhere on each adult member of the population, available to whoever has the right combination of position and curiosity. So far this information has been used in assessing a person's suitability for credit, but, with the increased use of computers, might this filing system extend to health? Man is becoming more and more preoccupied in previous years. Recent consternation over a doctor informing a juvenile's parents of her "treatment" without her consent has led many doctors to treat their young patients more cautiously. Whilst this is not a bad thing, the publicity given the matter may have led many of the public to question the hitherto "seal of the confessional" atmosphere of the doctor's surgery and leads to the question Are the days of the Hippocratic oath now over?

Letters

SYNOVECTOMIES

Royal College of Surgeons of England,
Lincoln's Inn Fields,
London, WC2A 3PN.

Dear Editor,

The Survey on Synovectomies of the wrist by Mr. John W. Frank in the April number of the *Journal* is valuable but poses a number of problems.

Operations for synovectomy in the wrist region are mostly limited to the interior radio-ulnar joint, sometimes with removal of the distal damaged end of the ulna. This is generally considered to be a "good" operation on two counts. It should remove the pain on rotation of the forearm which limits use of the wrist region. Given adequate early post-operative activation, movement should then be free and painless. Power grip and power activity is associated with ulnar deviation at the wrist, leading to pressure loading on the rheumatoid synovial mass around the ulnar end. A protective avoidance of ulnar deviation activities (i.e. power movements) occurs. Removal of the pain and inhibiting swelling should lead to freer power activity. It is, of course, difficult to differentiate clinically between these two components of radio-ulnar disorganisation in the post-operative improvement, unless very careful pre-operative studies have been made.

The wrist complex is a very different problem from the inferior radio-ulnar joint. It is a joint complex and as such is difficult to clear of synovium without wide capsular incisions. The results in my experience are less good and unless there is vigorous, early post-operative rehabilitation, joint stiffening will ensue. But if the hypermobility of Rheumatoid disease is present pre-operatively, a synovectomy and short post-operative fixation in a suitable position can be of immense value; the joint capsule tightens up and the wrist becomes more stable and useful. Reduced mobility is there a feature of good rather than ill. Compared with the wrist region synovectomy on the finger and tendons presents even more complex hand problems which make assessment in toto even more difficult.

I intend no criticism of Mr. Frank's useful paper in this letter but submit it in the hope that he will continue in his good work, and attempt a more detailed assessment of the value of synovectomy.

It is perhaps significant that synovectomy was being practised in Bart's in the 1930's and we are still assessing its value.

K. M. BACKHOUSE.

STUDENTS' UNION LETTER

Abernethian Room,
St. Bartholomew's Hospital,

Dear Editor,

It was agreed at the last Union Council meeting that the post of Chairman of the Students' Union should run from May to May, and not October to October, as at present. This has two advantages: a student cannot hold office of Chairman whilst he is taking the most important part of his Finals; when a new Council is elected in October, it will have an experienced Chairman for its first half-year of office.

In accordance with this new policy, Paul Millard resigned from the post of Chairman on 4th May. An Extraordinary General Meeting was called on 6th May; this was to allow Paul the opportunity of summing up his term of office and to begin on the constitutional changes required.

Paul took over the post of Chairman from Mark Britton last May. During this last year he has succeeded in improving the image of the Union, both in the eyes of the Staff and of the Students. He has also achieved a great deal, not least of which was the setting up of a Staff/Student Committee, which has been an ideal body for use in trying to obtain audio-visual aids for the Hospital, and in voicing our opinions about the Ward Shows, which have fortunately been saved for another year.

Interest within the Union is growing. Over 20 Council members attended the last Council meeting; this must stand as something of a record. A flat agency is being set up by the Union; a Mini-Bus has at last been arranged for the daily trip to Hackney, which so many students now undertake. A Co-ordination Officer has been appointed to avoid the conflict of events which has occurred several times in the last few months.

These are but a few examples of the achievements of the past year. Thanks are due to Paul, not only for the achievements themselves, but for the way he has gone about them, quietly, tactfully and efficiently.

The University Grants Committee (U.G.C.) visited the College on 27th April. They are a body whose members visit all the Universities every five years, to decide on the allocation of money to the Colleges. Twenty students were invited to give their views at a meeting with this Committee and Paul opened by saying that we were basically satisfied with our College, but would like to present the following five points:—

1. *Library Facilities:* We have in the past been led to believe that the U.G.C. requires all books to be freely available on the shelves and that no locking up system for the more expensive and more popular textbooks would be allowed. However, although the U.G.C. admitted to having a 20 year old rule on this they felt that they did not wish to enforce it and we were free to make our own arrangements for lending facilities.
2. *Married Accommodation/Student Housing:* A plea was made for money to be made available for such schemes. The U.G.C. said they can only give up to 25% of development costs.
3. *Tutors:* One of the objections to having a personal tutor system in the college is that some tutors might require remuneration. The U.G.C., however, cannot earmark money in this way.
4. *Todd Report:* Concern was expressed that since the amount of money required to implement the Todd Report fully was unlikely to be made available in the near future, the half-way implementation likely to occur would leave us with a worse situation than we had at present.
5. *Postgraduate Training:* Since the G.M.C. has said that it will not recognise a two-year Clinical Course following a B.Med.Sci. Degree, even in the case of implementation of postgraduate training, are we to be landed with a six-year medical course? It was also said that we thought it naive to believe that we would get a free choice of appointments during the postgraduate training. Finally, where are all the postgraduate teachers going to come from, since the problem that the Todd Report is meant to be solving is the lack of teaching of a good standard available at the moment. None of these questions was satisfactorily answered.

Full copies, as presented to the U.G.C., are posted on the Union notice boards.

I would finally like to express thanks to Paul on his termination of office.

JOHN WELLINGHAM.

Announcements

Engagements

SEARLE—CARTER—The engagement is announced between Mr. Alan J. Searle and Dr. Sharon M. Carter.

WATERSON—RICHARDS—The engagement is announced between Mr. Merlin Waterson and Miss Imogen Richards.

WATKINS—THURLING—The engagement is announced between Mr. John Watkins and Miss Frances Thurling.

CHAPMAN—MACLENNAN—The engagement is announced between Mr. Roger Chapman and Miss Anne MacLennan.

DALE—ENGLISH—The engagement is announced between Mr. Nigel Anthony Dale and Miss Felicity English.

Marriage

WALL—PLATTEN—The marriage took place on April 17 between Mr. Anthony R. J. Wall and Miss Margaret Platten.

Births

GARROD—On April 18, to Sallyanne (née Onslow-Free) and Dr. Anthony Garrod, a daughter.

ROBINSON—On April 1, to Melinder (née Singleton) and Dr. John S. Robinson, a son.

Ward Shows

Mr. Gooddy, Clerk to the Governors, has informed us that the Ward Shows will be held this year but are under review as to their future format and location.

Deaths

ABRAHAM—On April 4, Dr. Rosslyn John Davies Abraham, M.R.C.S., L.R.C.P. Qualified 1950.

LOUGHBOROUGH—On April 16, Mr. Geoffrey Trevor Loughborough, M.R.C.S., L.R.C.P. Qualified 1913.

WARD—On April 4, Mr. Ronald Ogier Ward, F.R.C.S. Qualified 1912.

Change of Address

Dr. and Mrs. J. E. von Bergen are now at Ellicombe, Nr. Minehead, Somerset.

G. R. Hamilton has moved to 29, Elms Road, Clapham Common, London, S.W.4.

Cambridge University

The degree of M.D. has been conferred on Dr. R. J. White.

Prize

The Mental Health Research Fund Essay Prize has been won by Jeff Tobias.

Students' Union

The new chairman of the Students' Union is John Wellingham.

CHRISTMAS WARD SHOWS

By R. M. JONES, S.R.N., R.S.C.N., S.C.M.

The Editor of the *Journal* had to cancel an appointment to meet me, and as I have not been approached again, I feel I should inform readers of the facts relating to the Christmas Ward Shows, since it would seem from a previous edition of the *Journal,* that readers would expect me to do so.

I would not wish to appear ungrateful for all the efforts expended by the medical students and staff in their endeavours to provide some light relief for the patients and staff during the Christmas period, and I would wish as many people as possible to be able to enjoy themselves under suitable conditions. Indeed, I am always happy to encourage the party in Gloucester Hall on Christmas Day evening for nursing staff, medical students and staff or any friends, at which a show takes place.

I make no secret of the fact that when I first experienced the ward shows in 1968 at St. Bartholomew's Hospital, I was concerned to find that this practice, which was a feature of several undergraduate hospitals in the past, still continued. The arrangement was introduced before the days when visitors could provide their own transport on these days, when public transport is either non-existent or limited.

The experience took me back to the days when I was a Ward Sister in my Training School, and I remembered how distasteful I found it to have the gravely ill and their relatives, and indeed those less ill, having to fit into the organisation and be a "captive audience", and I was aware that some patients tolerated this situation because they felt it would be ungracious to complain.

The noise of high-spirited laughter, singing, clapping and piano playing, visitors and staff crowding round the beds, and at times standing on the furniture to gain a better view, undoubtedly brings pleasure to many patients, including those invited specially to spend Christmas in the hospital. The hospital's prime objective, however, is to care for the sick, and the needs of the ill patients and their relatives must be recognised and considered, even though they may be a small minority.

I soon learned that I was not alone in feeling this way, and that other nurses for the past ten years had had grave doubts about this intrusion into the wards. I was not brave enough to speak out about this formally, although I was aware that some medical colleagues shared our concern.

A former patient's relative came to see Miss Harper, the Principal Nursing Officer, early last December, telling of the distress both he and his wife had been caused by the ward shows, (the wife died here on the 31st December, 1969), and then he followed this visit with a letter and subsequently came to see the Clerk and myself. I then knew that I must have the courage of my convictions, and that the complaint must be reported to the Board of Governors.

It was explained to the complainant that the Executive Committee of the Board of Governors, considered it was too late at the beginning of December to make any changes last Christmas, but the Nursing Staff had recommended the shows should be held in Gloucester Hall or the Lay Staff Canteen, and the matter was to be reviewed.

It has been the practice over the years for the Senior Resident Officer to call on the Head of the Nursing Service to discuss the arrangements for the ward shows. When the sisters heard the contents of the complainant's letter, they too expressed concern, and wisely suggested that I should inform the Senior Resident Officer of the complaint.

There is no doubt that this discussion had an effect on the ward shows in 1970, and the Senior Resident Officer influenced the degree of discipline required in trying to protect the ill patient.

I later learned that the Senior Resident Officer circulated a questionnaire to 200 patients for their views of the Christmas Shows, and 152 replies were received, (the total number of patients in the hospital on Christmas Day was 384 and on Boxing Day 390). However, from research work undertaken concerning patients' attitude, it is known that they are reluctant to express views that may appear to criticise whilst still receiving care, and the very ill patients were excluded from the questionnaire (eleven of whom died between Christmas Day and the 31st December, 1970.)

Next, a member of the Consultant Medical Staff visited twenty Ward Sisters and received various comments. When the matter was again discussed at the Executive Committee it was decided that a secret ballot should be held amongst the Nursing Staff. The object was to determine, in the light of the nurses' responsibility for ill patients and the needs of both the patients and their relatives, where it was considered Christmas Shows should be held. Those amongst the Senior Nursing Staff who have held a Ward Sister's post or have been responsible for the supervision of ward patients, were included. The results were:

In the wards	18
In the wards (provided that ill patients are able to be suitably protected)	7
In Gloucester Hall/Lay Staff Canteen ...	29
Nowhere	6

Since it is the nurse's responsibility to provide care throughout the twenty-four hours and to estimate the individual's immediate and long term need for physical care, emotional support and re-education, and to ensure that the patient is enabled to die with dignity when death is inevitable, I should have been disappointed in a hospital which has always prided itself on its standards of nursing care, if the result of the ballot had not demonstrated this perception.

The results were reported to the Board of Governor's meeting on 11th March, 1971, when it was proposed that the ward shows should continue to be held in the wards, but that a show would be held, other than in the wards, for those wards where there were very ill patients, and where the Sister felt it would be unsuitable to have a ward show.

Patients have always been able to say they did not wish to have the ward shows, but they do not want to appear ungrateful or to deny others the opportunity, and so distress can be caused such as occurred to the family from whom we have heard, and to others of whom we are aware. Some patients may be too ill to be capable of making the choice.

To those of you who have the experience of watching your loved ones very ill, or die in hospital, or have been very ill yourself and in pain, when noise aggravates and increases the distress, I ask—is this really what you feel we should impose upon the ill patients and their relatives? Would you wish it for your own family? Would you make such an arrangement if the patient were ill at home, instead of in hospital?

It is, I am sure, for these reasons that no other Teaching Hospital has continued to have Christmas Shows in the wards.

(We regret that we were unable to organise an interview with the Chief Nursing Officer, but the tape recorder broke at the vital moment, and subsequent changes in Journal staff with the departure of various members on courses outside the Hospital made another date difficult to arrange.—Ed.)

ABDOMINAL TRAUMA

By JOHN S. SIMON, M.D.

A growing literature has sprung up around the subject of abdominal trauma. Most recently this has concerned the various diagnostic procedures available for early diagnosis of intra-abdominal injury and whether their use is necessary or justified.

This paper tries to provide a framework within which the surgeon can evaluate for himself the need and efficacy of such procedures. It discusses in practical terms the technique of each procedure, concentrating on the possible pitfalls. The paper begins with a brief discussion of the more common "weaponary" involved in abdominal trauma in our increasingly violent society.

"WEAPONARY"

Some knowledge of the "weaponary" causing abdominal trauma is helpful in the diagnosis and treatment of trauma patients.

Gunshot Wounds

Fortunately in civilian practice it is rare to be faced with high velocity missile wounds. The tissue damage done by a bullet is in part proportionatal to the muzzle velocity of the weapon. Commoner pistols are of low or middle velocity and do not generate the energy a high powered rifle or military weapon does. The only popular hand weapon which aproaches high velocity is the .45 calibre Magnum made by Smith and Wesson. Injuries incurred from high velocity weapons require more thorough and wider debridement than may be apparent from inspection. It was common, early in the war, to do a limited debridement or resection of a viscus or vessel only to have the anastamosis to disrupt because of non-viability. The path of destruction may be so wide as to cause intra-abdominal injury without penetration of the peritoneal cavity. In Vietnam there have been a number of reports of rupture of the liver or spleen from high velocity missile wounds confined to the overlying soft tissue only.

A dumdum is a soft nosed expanding type bullet. The unsportsmanlike assailant can convert an ordinary bullet into a dumdum by filing deep grooves in its tip. On impact the dumdum tends to flatten out and shatter, creating a wider path of tissue destruction than an ordinary bullet.

Most bullets are made of alloys, usually nickel or brass. They are relatively inert and will remain in the body for years without causing difficulty. Unless the bullet is near the surface or impinging upon a vital structure there is no necessity to remove it. Certainly it is the rare instance where major surgery is needed solely for the purpose of removing a bullet.

Knife Wounds

Stab wounds may be quite deceptive on initial inspection. An ice-pick or stiletto may cause serious injury although the superficial wound looks quite trivial, whereas, if the weapon is a hunting knife, or a kitchen knife, the superficial wound may be extensive without deep penetration.

It may help to know whether the assailant is a man or a woman. Women virtually always bring the knife over the shoulder and plunge it downwards. Wounds

in the lower chest may extend through the diaphragm into the abdomen. Men tend to stab straight on from more of an underhand position and usually do not traverse the diaphragm.

Blunt Trauma

The advent of seat belts has done much to reduce serious injuries in automobile accidents. Severe injuries result from the victim being thrown from the car or tossed about inside the car, and are therefore prevented by wearing seat belts. Seat belts, however, have introduced some particular injuries of their own of which the surgeon should be aware. The "lap" type belt is worn not around the waist, but around the pelvis, the belt crossing between the iliac crests. It is the improperly worn belt which usually causes the abdominal injury and unfortunately, most belts are improperly worn. The particular injury associated with "lap" belts is a "blow out" perforation of the small bowel, most commonly the retro-peritoneal portion of the duodenum. This is an insidious injury which is often missed even on laparotomy, unless specifically looked for. The "shoulder" type belts are often associated with cervical injuries, less with abdominal injuries. The steering wheel usually strikes the chest and tends to be associated with cardiac injury.

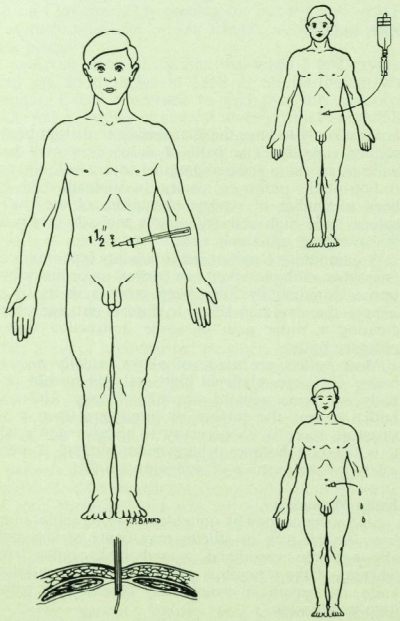


Fig. 1. Diagram illustrating the technique of abdominal parocentesis.

WHOM TO EXPLORE

Blunt Trauma

The diagnosis of intra-peritoneal injury following blunt trauma to the abdomen frequently presents a challenge to the surgeon. There are few diagnostic techniques available which can be of aid in difficult cases. It must be emphasised that these techniques should be used only in *equivocal* cases. They are particularly useful in patients who:—

1. Have an altered state on consciousness from head injuries or for other reasons.
2. Have combined abdominal and chest injuries where the severity of the abdominal trauma is in doubt.
3. Have multiple systems trauma where added surgery would be dangerous.
4. In infants and children who are difficult to evaluate, especially those with concommitent long bone fractures.
5. In patients with unexplained blood loss after trauma.

These techniques are unnecessary in patients who show obvious physical signs of peritoneal irritation or intra-abdominal haemorrhage on physical examination, or who have X-ray evidence of intra-abdominal injury. Much emphasis is placed on the presence or absence of bowel sounds on examination of the abdomen. In trauma bowel sounds, present or absent, are of no significance whatsoever in the acute case.

For some years the "four quadrant tap" has been used to determine the presence of free blood in the peritoneal cavity. Experience would indicate this to be an unreliable technique with many false negatives. When positive it means a massive amount of blood, which should be apparent on physical examination.

Ready access to the peritoneal cavity is available in young women. Intra-abdominal free blood usually finds its way into the pelvis and the pouch of Douglas. Its presence or absence may be confirmed by culdocentesis. The patient is in the lithotomy position and the cervix is grasped with a tenaculum and lifted forward exposing the posterior cul-de-sac. A number 18 needle is inserted in the posterior vagina below the cervix in the midline. Sometimes the utero-sacral ligaments can be seen on each side, but keeping to the midline reduces the likelihood of puncturing a vessel. Aspiration of non-clotting blood is a positive culdocentesis. This procedure is contra-indicated in women who have had pelvic sugery or who might be suspected of having obliteration or other disease in the pouch of Douglas. This procedure is quite simple but rarely done by the general surgeon who seems to feel ill at ease in this area.

Recently a new and more accurate method of abdominal paracentesis has come into vogue. This procedure is as follows (see fig. 1):
The skin is cleaned and draped and a spot in the midline half inch below the umbilicus is injected with a local anaesthetic (Xylocaine with Adrenalin reduces local skin bleeding). A large (14) intracath is then introduced into the peritoneal cavity and the catheter slipped in. One litre of sterile saline is then run into the peritoneal cavity through a standard infusion set. The tubing is then cut leaving about six inches connected to the intracath and the fluid allowed to drip out onto a sterile pad or into a cup. The amount of saline is proportionately reduced in children. A positive tap returns blood-tinged red or pink fluid. It has been our experience that a positive tap is always clearly blood stained and microscopy is not required. One cc of free blood will significantly colour 1,000 cc of saline. There are a few technical problems with this procedure:—

(i) First and foremost it is important to ascertain that all examinations and X-rays are complete before proceeding with the diagnostic paracentesis. Occasionally a small amount of air may be introduced by the catheter confusing the interpretation of the X-rays. Examination after the lavage may be somewhat altered by the presence of the saline although it is rapidly re-absorbed.

(ii) The catheter should slide through the needle with ease and the saline run in freely if it is properly placed in the peritoneal cavity. If this is not the case the needle may not have entered the peritoneal cavity.

(iii) The last, somewhat disconcerting problem, is when the fluid does not return. Usually if you wait a few minutes it will begin, but if not, minor manipulation of the catheter at the skin level, or change in the patient's position will overcome the problem.

This procedure is at least 85 per cent. accurate if properly done, but is contra-indicated in patients who have had previous lower abdominal surgery and also in patients with extensive pelvic fractures accompanied by supra-pubic haematoma.

If the patients condition is such as to warrant a diagnostic paracentesis, then even if negative, close observation in the hospital is mandatory. When doing a laboratory procedure which may influence whether a patient is operated upon or not it behoves the surgeon who will ultimately do the operation at least be present when it is done.

Knife Wounds

Superficial knife wounds need nothing but local wound care. The patient who enters in hypovolemic shock, with obvious peritoneal signs, or with viscera extruding from the wound, needs exploration. The difficult cases, which are in fact the majority, are those in whom it is difficult to assess whether the peritoneal cavity has been violated or not. The management of this group may be by immediate laparotomy or by careful observation; the course of action being dictated by local circumstances and personal preference. The observational approach demands serial observations of the patients abdominal signs, vital signs and haemoglobin as guide lines for laparotomy. In this way a number of unnecessary laparotomies will be avoided, for it is estimated that up to 20 per cent. of wounds which enter the peritoneal cavity cause no injury whatsoever, and a significant percentage cause injuries which are essentially self remedied, such as serosal tears of the bowel, small haemorrhages in the omentum or mesentery.[1] It must be emphasised, however, that to justify this method of management, there should be an experienced practitioner available to evaluate the patient's abdominal signs every 2-3 hours night and day; that there is easy access to the operating theatre at all times and that facilities are available for laboratory evaluations frequently, night and day. It is valueless to quote results from other hospitals about the "conservative" or "aggressive" management of abdominal

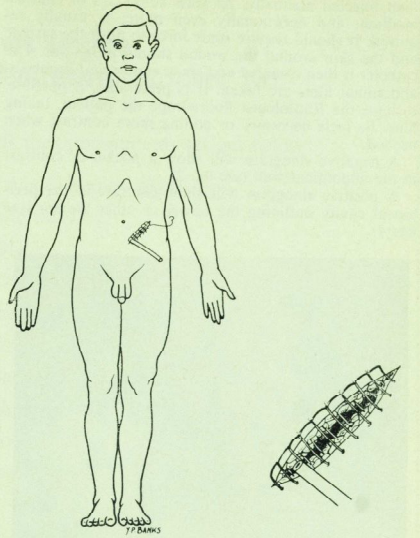


Fig. 2. Diagram showing how the catheter should be inserted for doing a sinogram.

trauma where their conditions are not comparable to one's own. This attitude will also mean that some patients will come to surgery some time after the injury when the process has had a chance to advance (e.g., peritonitis from a puncture wound in the bowel).

If local circumstances exclude the possibility of close observation of the patient then all wounds that violate the peritoneal cavity should be explored. Some surgeons prefer to explore all wounds which penetrate the peritoneum feeling in the longrun this is the safest action for the patient. They will accept the "negative" laparotomy in order to avoid the occasional disaster.

Should you adhere to the immediate laparotomy approach for penetrating wounds of the peritoneal cavity, it is reasonable to use techniques designed to show the knife has actually entered the peritoneal cavity. In the past 5 years sinography of abdominal stab wounds has gained increased popularity.[2, 3] Series vary in accuracy of the procedure, but most run greater than 95 per cent. with the mistakes being false negatives.

The technique of abdominal sinography is as follows (see fig. 2):

The skin is prepared and draped in a sterile manner and the wound infiltrated with local anaesthetic. A rubber catheter size 14 to 18 French, with one hole in the tip, is placed at the wound just below the skin. No attempt should be made to probe the wound track with the catheter. The wound is then closed water-tight, preferably with a running locking suture and the catheter secured in place. Small wounds can be closed with a purse string around the catheter. A contrast material

(Hypaque 50 per cent. or Renografin 60 per cent.) is then injected manually. At least 50-60 cc's of contrast medium, and occasionally even more, is usually required. It should require some force to push the syringe and the skin around the wound should bulge out. The catheter is then clamped and erect, supine and decubitus abdominal films are taken. It is preferable, if possible, to have the Radiologist fluoroscope the patient, taking films he feels necessary or adding more contrast when needed.

A negative sinogram will show a pocket of contrast in the abdominal wall (see fig. 3).

A positive sinogram will show contrast in the peritoneal cavity outlining the bowel or other viscera (see fig. 4).

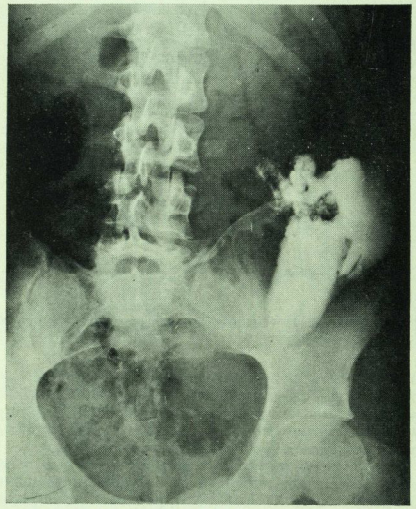


Fig. 3. This patient was stabbed in the left iliac fossa. This is a negative sinogram. The contrast is limited to the subcutaneous tissue.

Obviously the more experience with the procedure, the better results. Frequently the surgeon has a clue that the contrast has entered the peritoneum because the patients suddenly experience increased abdominal discomfort over and above that of the local pressure.

The main pitfalls in the procedure are:

1. Insufficient amount of contrast or leakage from the wound;
2. Pre-sinography diagnostic peritoneal lavage which dilutes the contrast;
3. Multiple abdominal stabs which are not all sinogrammed for one reason or another;
4. Wounds which traverse the chest and enter the abdomen through the diaphragm. In these cases the contrast will seek the line of least resistance and deffuse in the thoracic cavity.

Any patient who has had a negative sinogram warrants observation for 24 to 48 hours following injury.

Gunshot Wounds

In the management of the traumatised patient the vital decision is whether surgical exploration is called for or not. However, all patients with gunshot wounds of the abdomen should be explored, so this problem does not arise. It is very unlikely that a bullet will traverse the abdominal cavity without causing injury to viscera or vessels. Careful attention to the entrance and exit wounds and probing the wound track can be misleading in assessing the course of the missile which often reflects off bone or peritoneum. If the patient is observed until the signs of peritoneal irritation appear, valuable time is lost and the surgeon is faced with increased peritoneal soilage. Remember also the

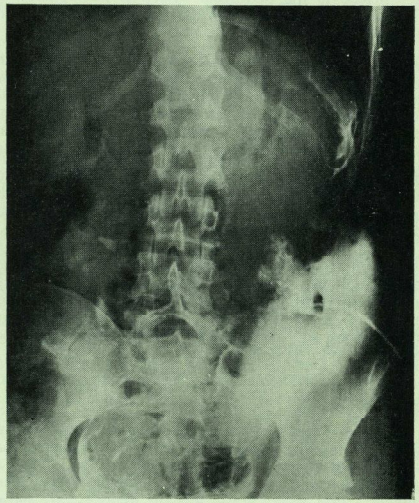


Fig. 4. This young man was stabbed in the left mid-abdomen. His examination was normal. Sinogram is positive. Note the contrast over the spleen, in the pelvis and right side of the abdomen highlighting loops of bowel. He had a lacerated mesentery with approximately 1,000 c.c. of blood in his peritoneal cavity and active bleeding.

"anaesthesia of trauma". The patient may not experience severe pain immediately after injury and some have no recollection of even being in the Emergency Department although they seemed alert and responsive at that time.

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BARTSTIME - 4 - THOMAS TOMPION

By A. J. B. MISSEN F.R.C.S

I have left the Hospital's most distinguished clock until last because it was not purchased for use in the hospital but was the generous legacy of Dr. F. E. Withers (a former Bart's student) in 1941. The clock was made by Thomas Tompion about the year 1686.

Tompion is perhaps the most famous of the group of clockmakers practising their craft in Restoration England who established this country as the world leader in the science of measuring time. During his lifetime his name was synonymous with the best that money could buy. Symonds (1951) says, "He was 'the famous watchmaker': most of the English nobility carried his watches in their pockets and the rooms of royal palaces in England and abroad resounded with the chiming of his clock bells".

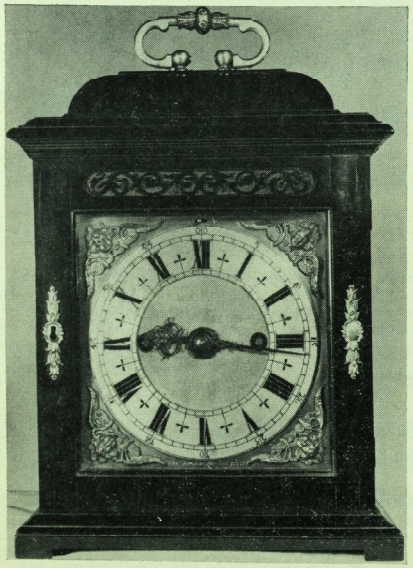

Fig. 1. Bracket clock No. 17 by Thomas Tompion.

Thomas Tompion was born at Ickfield Green in the parish of Northill, Bedfordshire, on 25th July, 1639. The details of his apprenticeship are unknown but on 4th September, 1671, he was admitted a "brother" of the Clockmakers Company of London on payment of a fee of thirty shillings. Since both his father and grandfather had been blacksmiths, Tompion's early training was probably in this field. When he was admitted to the Clockmakers Company he was described as a "Great Clockmaker" meaning that he was a Master blacksmith—clockmaker specialising in large iron turret clocks such as those in Churches and other public places. Two years later he paid a further fee of ten shillings and became "free" of the Clockmakers Company by redemption.

Tompion set up in business in Water Lane and the earliest mention we have of him comes from the diary of Robert Hooke who employed Tompion to make a quadrant to his design in 1674. Hooke's diary records frequent visits to Tompion's shop and it is evident from notes on their conversations that Hooke was able to teach Tompion a good deal, thus on 2nd May, 1674, he wrote ". . . told him the way to make an engine for finishing wheels, and a way to make a dividing plate . . ." This chance commission developed into a firm friendship: through Hooke, Tompion was brought into contact with other members of the Royal Society and met the King and members of the Court.

In 1675 Huygens announced his invention of a watch with a spring balance. This infuriated Hooke who had invented a similar mechanism in 1658 and demonstrated a watch fitted with a balance spring before the Royal Society in 1668. He was unable to get satisfactory terms for its production and so suppressed his own invention. Now in his haste to establish priority Hooke went straight to Tompion and ordered him to make a watch which incorporated a spring balance of his design. As soon as it was completed Hooke took the watch and its maker to the King who was much impressed and ordered one for himself. Thus Tompion caught the eye of royalty early on and as a result of making this watch for the King received commissions also from Prince Rupert and the Duke of York (late James II). The following year Tompion made the first two clocks for the new Royal Observatory at Greenwich—these showed solar time and had 13 foot pendulums which made one swing every two seconds.

Tompion's position was now well established and in 1675 he moved from his early shop in Water Lane to a

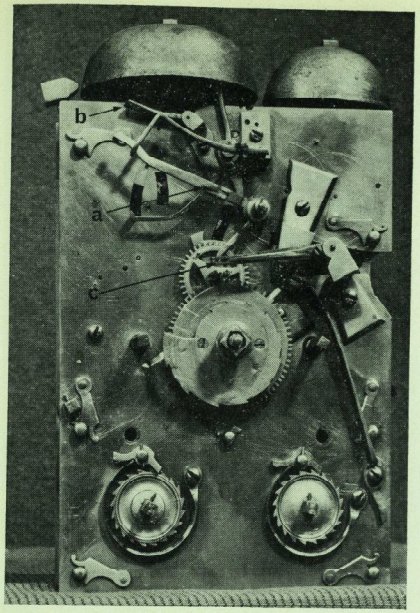

Fig. 2. Under dial work of clock No. 17 before recent cleaning and restoration.
(a) articulated lifting piece.
(b) tail of rack hook.
(c) spring loaded nib on rack tail.

larger house on the corner of Water Lane and Fleet Street where his shop was to be identified by the sign of "the Dial and Three Crowns". During the next twenty years he was to become the most distinguished and probably the busiest clockmaker in England. Large numbers of clocks, watches, sundials, alarums and barometers were produced in his workshops and the finding of clocks of his manufacture in Holland, France, Spain, Italy and Russia gives some idea of the scope of his export trade.

Tompion worked for Charles II, William III and Queen Anne but never held the position of "Watchmaker to His (or Her) Majesty". In practical terms this mattered little for the royal patronage, particularly that of William III who at one time owed Tompion £564 15s. for work done, was sufficient to guarantee the success of his business.

As he became older Tompion took on his former pupil Edward Banger as an assistant and many fine clocks exist bearing their joint signature. The association broke up following a quarrel and Banger was succeeded by George Graham who was Tompion's nephew. Graham's career was as distinguished as that of his uncle for he invented the "dead-beat" escapement and the grid-iron and mercury compensated pendulums. He was elected a Fellow of the Royal Society in 1720.

In his latter years Tompion visited Bath frequently and became a distinguished member of society there. He was made an honorary Freeman of the city and presented a fine equation clock to the new Pump Room. Tompion died in 1713 at the age of 75.

The clock in the possession of the Hospital is a pleasing example of Tompion's work. As may be seen from Fig. 1 it is a bracket or mantle clock of simple and dignified design, free from the excessive Rococco ornamentation of many of its contemporaries. The basket-top case, which is 14 inches tall to the top of the handle, is veneered in ebony and has fire gilt mounts. The fret above the dial allows the striking of the bells to be heard more clearly. The dial which is extremely simple, and a model of clarity, is embellished with fine cherubs head spandrills and is signed below the chapter ring *Tho: Tompion Londini fecit*. There are no subsidiary dials or calendar work but a strike/silent lever is provided at the top of the dial plate. This operates an articulated lifting piece (see Fig. 2). In the silent position the lifting piece is moved forward and prevented from engaging the tail of the rack hook. Another interesting feature is the provision of a spring loaded nib on the rack tail. This refinement prevents the clock being stopped by the rack tail if the striking train runs down before the going train. The rack itself is unusually robust in design and is placed between the plates instead of behind the dial. The complex striking and repeating mechanism is so

Fig. 3. Engraved back plate of clock No. 17.

well arranged that it is possible to remove the rack without parting the plates. The click-work on fusees is normally enclosed but here it has been left exposed and is ornamental in design.

The back plate (Fig. 3) is finely engraved with scroling foliage and tulip designs which show the persisting influence of the early 17th Century Dutch School of clock making. The short pendulum is typical of the verge escapement and the bob is engraved with numbers to assist in regulating the clock. Below the bob the number 17 is rather crudely punched on the backplate. Tompion started numbering his clocks in 1685 so it is reasonable to assume that this one was made in 1685 or 1686. The earlier clocks usually had the number punched in rather small figures high up on the left side of the plate and only No. 7 has previously been recorded with the number in the low position as on later clocks. Fig. 3 shows that the cock for the repeating lever occupies the expected position for the number. When this cock was removed recently the number 17 punched in small figures was found beneath it. This might suggest that Tompion made up batches of plates and had them engraved and numbered before the final layout of the mechanism was known, the siting of the cock then necessitating renumbering. Alternatively the repeating mechanism may have been modified after the clock was completed with the same end result. This is supported by the fact that other early clocks have straight repeating levers and are not provided with cocks. The finding of carefully plugged surplus pin holes in the periphery of two wheels in the repeating train also suggests modifications to the original design.

The striking train records the hours throughout the day on the larger of the two bells. The repeating train strikes the quarters and the previous hour on demand using both bells. The repeating lever is operated by silk cords which are lead out through holes in the side of the clock case. This mechanism was provided mainly for use at night so that the owner could get a fair idea of the time without the need to struggle with flint

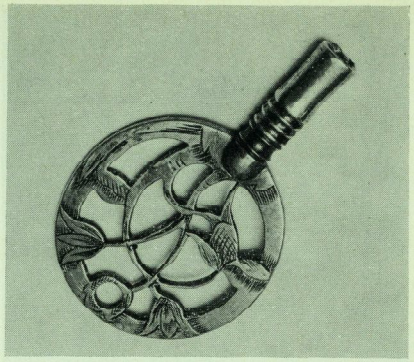

Fig. 4. Contemporary clock key which still bears traces of original gilding.

and tinder or keep a light burning in his room. As there is a cord on either side of the clock it did not matter on which side of the bed it was placed. The key of this clock is illustrated (Fig. 4) as it is almost certainly the original one sold with the clock.

Acknowledgements

I am most grateful to the Department of Medical Illustration for permission to use the photographs of Tompion's clock and to Miss J. Head who prepared the typescript of the articles in this series.

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DOUBLE TROUBLE

By MICHAEL GLANVILL

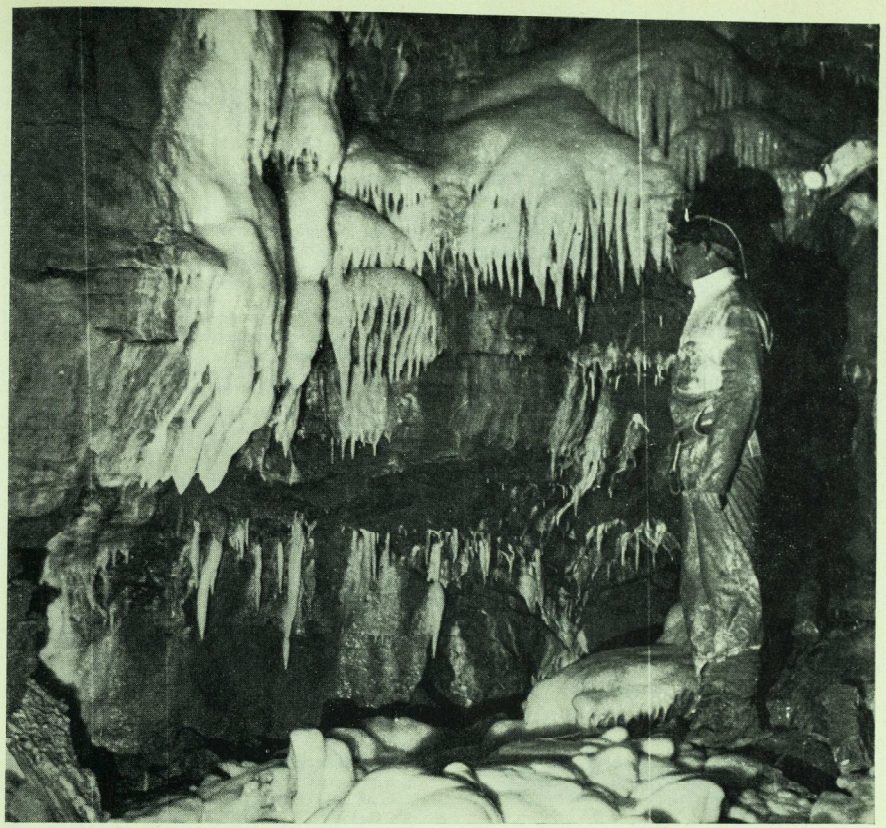
I was looking forward to my caving trip with Peter on the Mendips. It was explained to me in not very great detail that we were about to embark on the "round trip" in Swildon's Hole. On enquiring the length of the trip underground I was told that it would take about four hours.

My 48th birthday was looming on the horizon and it occurred to me that I could take this trip in my stride. Memories of happy days cross-country running at Bart's!

Yes, all would go well. Then one or two murmurings by one of Peter's friends (who was leading the expedition) began to get me worried. Such ominous words as "I think we can manage to get him through the 'Blasted Boss', but what about the 'Birthday Squeeze', that will be a bit tight for him. Do you remember poor old Nick had quite a struggle there?" I mentally measured my size against Nick's and tried to convince myself that Nick was far bigger than me.

The great day came. The trip had been arranged for a Friday, by me, as it was my week-end off duty and I would have two whole days to recover. By this time I had incorporated into our kit a space rescue blanket, an inflatable fracture splint, my indigestion tablets and some pentazocine tablets. I did not feel "very well" in the morning, all sorts of aches and pains developed in the most weird places; my bowels were not working properly and I was having frequency of micturition; in fact I was in a state.

On our way to the Mendips in the car I was told not to worry, if we could not get through the "Birthday Squeeze" we could always all go back the same way. When I enquired the whereabouts of this delectable spot,



"Me n' Bill" (my reward).

I was told that it was well over half-way through the round trip, in other words I had to go back through all the other horrid squeezes and sumps that I had already negotiated. I was getting in a worse state as we drove along. The leader of the party could tell what I was feeling, but was no comfort as he muttered something about having a walking strick or a Bath chair. This last remark seemed to act as a stimulant. I reasoned that if I could put up a good show before we turned off into the awkward part known as the "Double Trouble" series, I should be able to take things more easily and still do well.

As soon as we entered the cave I pelted on as fast as I could go down the first part which was surprisingly devoid of water. I regretted having put on my exposure suit because by the time we reached the turning point off this part I was feeling like a race-horse, all of a lather. My heart was thudding away and I was pouring with sweat. My reward for my effort was someone saying "We made quite good time, but we haven't done half the trip yet."

With my hands stretched out fully in front of me and with several good grunts, like a female in the second stage, and with a squeak of rubber against rock sounding in my ears, I managed to negotiate the "Blasted Boss" squeeze. We tore on to the "Greasy Chimney" (where a chap dislocated his shoulder a few months later) where I managed to scrabble up it, feeling a bit maniacal by now. I was getting to the stage when the hell passes out, as in cross country running, and one goes stuperose. Small snippets of song ran through my head, endlessly repeating themselves. I was biffed and battered like a pair of trousers in a launderette. I said a silent Thank You when we reached the two sumps

that had to be bailed. By this time I couldn't lift a bucket, and the others had to do the bailing.

As I waited memories flooded to me that I should look a right twit if the M.R.O. (Mendip Rescue Organisation) was called out, especially as I was one of the Wardens. I even dwelt on the thought of how long it would take to get my body out if I died there.

The one comfort of the "Double Trouble" series sump was that I could lie my aching body full length in the dirty brown chocolate coloured water. What heaven! But we soon pressed on and arrived at the dreaded "Birthday Squeeze". By this time I decided that anything was better than going back through all that I had come through. Surprisingly enough I slipped through the "little sporty bit" with very little trouble, slid down the landing and was back in the stream way with only the sump "one" to dive before we arrived back at the point where we had turned off for the "Double Trouble" passages.

A wolfish grin spread over my face as Peter had been giving me psychological encouragement up until now, but I realised that a sump was ahead, and sump diving was not his "cup of tea". He had chatted me through all the squeezes, but now it was time to turn the tables as sump diving did not particularly worry me. I took a deep breath and pulled on the guide line in the water and felt my helmet scrape against the rock above me as I shot through the sump like a "dose of salts". The elation of having done the trip saw me through the rest of the cave, but I have to admit that I emerged at the entrance literally on my hands and knees. But I had made it.

At this point I was informed that we had done the trip in 2 hours 20 minutes and the best time ever done was 2 hours. I could have "enjoyed" the trip without the effort put into it if I had given myself another hour.

On our way home I asked the leader of the party why he had bellowed at me in the cave all the time. He replied that he had noticed my hearing aid! He must have thought me a real old crock. The wire he had thought was a hearing aid was courlene thread that I had attached to my spectacles so that I should not lose them in the sump!

I have since spoken to another Warden of the M.R.O. and I gather he runs caving trips for the older cavers; not quite so energetic . . . I think I shall join them.

Why do we do it? Because we are stark staring mad.

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DIARY OF EVENTS

June 5th

Sports Day at Chislehurst. 3.0 p.m.

June 5th

North East Metropolitan Regional Anaesthetists' Group Spring Meeting at St. Bartholomew's Hospital, E.C.1 from 9.30 a.m. to 2.30 p.m.

June 7th

Great Hall Concert at 7.30 p.m. The Georgian Quartet—Bartok, Schubert, Haydn. Tickets including wine 25p from the Flower Shop.

June 11th

Barbecue Ball, Charterhouse Square, 10.0 p.m.-5.0 a.m. Tickets £6.30 (Students £5.25) from the Secretary of the Wine Committee, College Hall, Charterhouse Square, E.C.1.

The Life and Works of Ferdinand Sauerbruch

by JEFF TOBIAS

(A much-shortened version of the Wix Prize Essay)

Although Ferdinand Sauerbruch was born in Prussia in 1875, the interesting part of his story does not begin until 1895. He had gravitated towards the University of Marburg and Natural Sciences, but found himself so bored by the plants and formulae that he left, resolved to study Medicine at Leipzig. Fortunately, he realised that this time he had made the right decision, and his enthusiasm for all subjects (even anatomy!) was evident from the start. He qualified in 1901, and after doing a locum in Thuringia and a lowly job in a Protestant nursing home in Cassel, he settled down in the Surgical Hospital at Erfurt. It was during these years that he learnt the fundamental skills of a surgeon; and he always remembered with affection the principles of hospital medicine that were applied there :

"The general physician was Dr. Buchholz. Working under him and watching his treatment of individual cases taught me much about medical matters.

The collaboration between surgeon and physician in that hospital was perfect: it was based entirely on co-operation and mutual help. In contrast with the Cassel nursing home, I found a well-trained and able body of nurses, devotedly supervised by Matron Krickhaus. By watching these exemplary nurses at work I learned the fundamental principles necessary to the smooth running of a hospital."

At Erfurt, one particular case impressed him deeply. A young man was brought in who had been gored by a bull; his injury seemed so slight that recovery looked fairly certain. It is just as well that Sauerbruch did not bet on it, for the man deteroriated rapidly and was dead within a short while. Sauerbruch performed the post-mortem himself, and found that the cause of death was pneumothorax, due to a tiny chest wall puncture which was almost unnoticeable. So small and yet so lethal, this kind of wound and its treatment occupied a gradually larger part of his time and energy. He realised quickly that pneumothorax was the stumbling-block on which thoracic surgeons had faltered for as long as chests had been opened; and that there was no hope of any surgical treatment for chest disease until the problem of pneumothorax had been solved. All he knew was that every time a chest was opened, its negative pressure was lost because air rushed in from the outside, leaking in between the lung and the chest wall. This meant that the lung collapsed and of course, further respiration was impossible. No manoeuvres had been devised which could reliably prevent this dreadful state of affairs.

So keen was he to work in this field, that he moved to the Department of Pathological Anatomy at the Berlin-Moabit Hospital—run by Langerhans—where he leafed through the ancient and Mediaeval literature on the subject without success. At his Chief's instigation, he sent a paper to Professors Naunyn of Strasbourg and von Mikulicz of Breslau, which resulted in another move—to Breslau—in October, 1903.

It was at Breslau that Sauerbruch made his greatest discovery, an inspiration of elegant simplicity that had evaded surgeons for centuries. The pressure inside the chest was crucial, and it was altered by necessity at operation when the chest was opened. Supposing chest operations could be carried out by reducing the pressure in the operating area? Surely this simple expedient would allow the lungs to remain inflated? Sauerbruch wasted no time in designing a negative pressure chamber in which operations could be performed in this manner, and it was not long before he had an impressive series of successful operations on animals which proved his point. Not daunted by a leak in the apparatus which led to the death of his first human patient, he continued to perfect the equipment so that within a couple of years, he and von Mikulicz were able to place their findings before a hushed Berlin Surgical Congress. It was probably the greatest moment of his professional life; only twenty-eight years old, and already a man who had revolutionised his field. Official recognition arrived quickly, for in 1905 he was appointed lecturer in Surgery at the University of Breslau.

Sadly enough, von Mikulicz died shortly afterwards; his successor was Professor Garré from Koningsberg, and as was the custom, he brought his staff with him. Sauerbruch was out of a job and eventually decided to go to Greifswald, to work with Professor Friedrich.

Things did not go at all well to start with; Sauerbruch was used to being in the midst of a sophisticated and intellectual social milieu, and besides, he found the work tedious. He missed the thrill of his research, and it was not until he fled to Breslau one day to see his old friend Anschütz that things brightened up; for his colleague suggested that he should take the pressure chamber back with him to Greifswald. Once the possibility of working with this tool was open to him again, he was a new man. Back he went to studying the chest, the abdomen, the thyroid, and this time, a brand-new topic too parabiosis, the use of surgically joined twins as a research technique. This was Friedrich's chief interest, and he was most concerned with the action of blood borne substances that were later identified as hormones. In this type of experiment, one animal could be stimulated in a particular way, and any physical or

biochemical effect on the other could be noted. Sauerbruch himself showed that it was possible to remove the pancreas of one animal without its developing diabetes—providing that it was joined parabiotically to another animal. Not until 1922 did Banting and Best isolate insulin as the key factor for the treatment of diabetes, and Sauerbruch always insisted that insulin might have been a German discovery had it not been for the war.

During this time at Greifswald, he made another important contribution to chest surgery—namely that positive pressure offered a more satisfactory alternative to negative pressure when opening the chest. Rather than using a cumbersome chamber in which the whole surgical team were placed, why not force air or gas into the patient's lungs at a pressure greater than atmospheric? Oxygen and anaesthetic gas could be added to the mixture, and a complete system evolved. The work of Tiegel, and of course that of Magill in this country, was important in this respect, and the Tiegel-Henle apparatus became standard. Strictly speaking, this was not an original discovery, having been suggested by Rudolph Matas in 1899 in conjunction with the intubation of patients. In fact, one rarely knows to whom one should attribute these great discoveries, for Matas says that Dillon had traced the origin of laryngeal intubation to Hippocrates, and that according to J. A. H. Depaul, references to positive insufflation are found in the Bible! Perhaps it is also worth mentioning here that the whole problem of differential pressure which Sauerbruch solved in 1904 had been clearly understood by E. A. V. Quénu and T. Tuffier in 1896; the latter was the inventor and developer of cuffed endotracheal tubes for anaesthesia. In the U.S.A., O'Dwyer and Matas had even devised an artificial means of inflating the lungs in chest operations, but no method yet invented was remotely practicable. It must be added that any great discovery not only entails an awareness of facts but also an understanding of their significance; and combined, if possible, with some sort of translation into practical terms. The meeting of all these paths came only with Sauerbruch's contribution of 1904.

He did not last very long at Greifswald, for in 1907 his professor was offered a post at Marburg University, and Sauerbruch was naturally asked go with him. Leaving his fiancée in Greifswald, he dutifully moved off to what proved to be a stimulating and unusual life. He had become more and more well-known as a social figure as well as an accomplished surgeon, and at Marburg his social life reached a new highpoint of elegance. Not much work was done—but he did go on a lecture tour of the United States, accompanied by his pressure chamber. This was Sauerbruch's "marking time" period, as he puts it, although the work he was doing with Friedrich on the treatment of tuberculosis by collapsing the lung was by no means unimportant. At this time he came to realise that deflating a lung in the vain hope of treating or alleviating the disease was a very second-rate method of dealing with it; but there were no procedures available which were safe enough to use. It was only in the light of this hard-won experience that he could later advocate the two-stage thoracoplasty with such certainty. Of that, more later.

The carefree days at Marburg suddenly came to an end, for in the autumn of 1910 a telegram arrived from the Swiss Government, requesting an interview. It turned out to be much more than just an ordinary interview: would he care to take up duties as Professor of Surgery and Director of the Surgical Hospital at Zurich? Sauerbruch was rather taken by surprise, for Switzerland boasted the finest sanatoria and medical services in Europe; and it was with a good deal of apprehension that he said yes. After all, he was to follow the great Rudolph Krönlein, the first man to remove successfully a burst appendix, and who had even managed to remove a lung sarcoma before the advent of pressure chambers, goodness only knows how.

Sauerbruch worked like a demon during those first few months at Zurich; he probably never worked so hard before or afterwards. Invariably he performed every major operation himself; even at night he was on hand for the emergency cases. At the same time, he was busy building a new pressure chamber—largely out of his own pocket. His fame had preceded him, and soon the great Swiss lung specialists came to observe and learn his techniques; among them were Professors Turban from Davos and Kocher from Berne. Kocher brought his two sons, one a surgeon and the other a physician; the three stayed for a fortnight and watched every operation. Gradually, Sauerbruch was turning to positive-pressure anaesthesia more and more, and others were following suit. For the first time, suppurations, abscesses, carcinomas and sarcomas of the lung were becoming generally accessible. As Sauerbruch became more famous, so his patients became more illustrious; in 1911, the daughter of Lord Cavendish-Bentinck, the Russian Foreign Minister Sasanow, and strangely enough, Lenin—for toothache! Financially, his security seemed to be assured when in 1910 old Nathan Rothschild from Gailingen—the richest man in Switzerland—called him in. His own physician had diagnosed a malignancy in the leg from a surface carcinoma: Sauerbruch realised that it was no more than a varicose ulcer. He was successfully treated, but apparently Sauerbruch never presented a bill. Rothschild would merely turn up at odd moments, stuff banknotes into his hands, and with the phrase "You're still living beyond your means, beyond your means . . .", would turn and walk away.

Much more important during these years was the preparation of his great book "Die Chirurgie der Brustorgane", the first volume of which was published in 1918. It was later published and revised in English by Sauerbruch and his assistant Lawrence O'Shaughnessy; this appeared in 1936, just a few years before O'Shaughnessy was tragically killed at Dunkirk. It was a monumental work, dealing in a comprehensive and lucid way with the physiology, surgical techniques and aftercare of all chest disease—chest wall, lung, heart, pericardium, mediastinum, thymus, oesophagus, diaphragm and so on. Apart from being so beautifully written and illustrated that it became the standard text for many years, it also put into some sort of order Sauerbruch's own research during the previous fifteen years. One cannot fail to be impressed by the broadness of his work and the number of his interests. It discusses some of the physiological findings—the increase in volume of the lung after bilateral vagotomy; the measurement (with Friedrich) of pulmonary arterial pressure in animals and man; the importance (with Bruns) of intact bronchial vessels in the avoidance of gangrene of the lung after pulmonary artery ligature; the change in tidal volume after exercise, and (with Brunner) after

paravertebral thoracoplasty. It stresses the need for total abandonment of local anaesthetic techniques for all chest operations (previously L.A. had been popular). Much of the early work on the control of pneumothorax is reviewed, and some new findings added. He had worked with animals under positive pressure anaesthesia and found that ligation of one lung root had failed to produce the symptoms of open pneumothorax or respiratory arrest. There is a discussion of hydrothorax, haemothorax, and even chylothorax. The one-stage lobectomy operation for bronchiectasis—first insisted on by Sauerbruch in 1905—is reinstated as the operation of choice, with the support of many surgeons who once found it too radical. The pneumobronchotomy technique, for removing foreign bodies in the lung periphery, is described, as is the bronchostomy with bronchial fistula operation for terminal carcinoma, the paravertebral thoracoplasty with artificial pneumothorax (Sauerbruch and von Muralt), and the bilateral lung collapse with filling of the extrapleural space (plombage) for tuberculosis. Although surgery of the chest wall and lung was always his real forte, Sauerbruch devotes a large part of his book to the then embryonic study of cardiac surgery. He had always been interested in the relations between the heart and lungs, and indeed had shown that ligature of one pulmonary artery does not affect systemic blood pressure. Later (in 1931) he was to become the first surgeon to intervene successfully in a case of cardiac aneurysm—and it was only a misdiagnosis that led to such a bold piece of surgery. As for the treatment of pericarditis, Sauerbruch had carried out the Brauer type of operation—essentially a resection and mobilisation with rib removal—in seven cases, all without fatality, before 1923. And by 1914 he had performed 172 two-stage thoracoplasties, 122 of them extensive, with a record of only three immediate fatalities; a remarkable feat for the pre-antibiotic era. Furthermore, these were usually hopeless cases, yet he obtained a real improvement in about half of them. His figures for bronchiectasis were just as impressive: by 1934, he had carried out 58 lobectomies with six deaths and fifty-two substantial successes. It was in his clinic and using his apparatus that Nissen, his chief assistant, achieved the first satisfactory pneumonectomy for bronchiectasis in 1931. Some of his other specialities which were reported in later editions of the book included local resection of carcinoma of the lung with several three-year survivals, and splitting of the sternum to remove massive retrosternal goitres. As long ago as 1917, he successfully removed the thymus for myasthenia gravis, after removing the thymus for a case of goitre in 1912 and noticing that the myasthenia from which the patient had been suffering, was improved. In fact, Carl Weigert had noted the connection of the hypertrophy of the thymus with myasthenia, in 1901; and the surgical treatment which Sauerbruch practised was the only useful therapy for many years. Not until 1930 did Harriet Edgeworth discover by accident the value of ephedrine for this disease, and prostigmine did not arrive until 1932. Sauerbruch had clearly stumbled on something way beyond his time, and orthodox sources usually accredit the first deliberate treatment of myasthenia by thymectomy to Alfred Blalock in 1939.

Thoracic surgery had become bolder and bolder since the turn of the century, and by the time the book was published, Sauerbruch had done pioneer work on the closed method of draining lung empyemata, the removal of gunshot fragments in lungs (using the pneumobronchostomy mentioned above), transdiaphragmatic approaches even for gastric surgery, and the transthoracic approach for hiatus hernia. 1907 had seen the first suggestion by Trendelenberg that pulmonary embolus was a potentially operable condition, and Sauerbruch did not shrink from such operations though the first success belonged to Kirschner in 1924.

An area of surgery which interested Sauerbruch more and more was that of the oesophagus. He had made important discoveries as to the physiology of this organ already—concerning the innervation of the oesophageal sphincter (work already started by Gottstein, and Starck)—and was by now operating to remove foreign bodies, to alleviate carcinoma and chronic oesophagitis, and to repair ruptures and simple strictures. He kept careful figures of all his carcinoma cases and found that 35 per cent. of the 117 cases in which the growth was between the hilus and the cardia died without metastasising, and that a gastrostomy operation was beneficial for most of them. Finally, I shall just mention that Sauerbruch's work on diaphragmatic surgery included the first successful removal of a fibromyosarcoma, and even strayed into the radiology of this area to clear up (with Chaoul in 1923) an inaccuracy—i.e. that the so-called "typical" picture of hiatus hernia was in fact found frequently in normal subjects. He reported the first known case of bilateral paralysis of the diaphragm compatible with life, in a young boy, and later wrote about the diaphragm more extensively.

I must emphasise that this is no more than a glance at Sauerbruch's textbook; so vast was his interest and ability that it is necessary to condense his work enormously. However, it is sufficient to give an idea of his Herculean output, and individual references to all of these works will be found at the end. I have deliberately ommitted the technical steps involved in his operations, for it would take up far too much space, and they are beautifully set out in his textbook for all to see.

Then came the war. Sauerbruch was appointed Consultant Surgeon to the 15th Army Corps, and managed to find time for his duties in Zurich as well.

The years of the Great War were to furnish him with yet more ideas about new surgical techniques in an area quite outside his previous interests. In 1915 he met Professor Stodola of the Zurich Technical College, whose great enthusiasm at the time was the designing of artificial limbs for war casualties. This effervescence soon transferred itself to Sauerbruch, who had seen too many gruesome mutilations at the front. He addressed himself to the task by studying the work of his predecessors, from Pliny the Younger to Krukenberg and Vittorio Putti; and before long, he was ready to demonstrate the first crude attempts at an artificial hand to von Schjerning, head of the medical services. The rest was just a question of perfecting the detail, and a special hospital was soon built near the Swiss border, to fit on the limbs made in a new factory in Tuttlingen.

Sauerbruch's method of fixing these limbs was characteristically original, and the first stage involved freeing completely the flexors and extensors from bone and connective tissue, and then covering the extremities with skin—thus creating protuberances on the stump. When this had healed, a tunnel was made into each protuberance, and lined with skin. Finally, an ivory peg was inserted into the channel and a few weeks allowed for

it to grow in. So these pegs were a replacement for the lost flexor and extensor tendons, and it merely remained to link up the peg to the artificial hand which was fixed to the stump by a bandage. In 1915-1916, many such hands were made, mostly based on Stodola's broad grip pattern—which opened the hand when the peg moved forward and closed it when the peg slid back up into the arm. As well as this, a more sophisticated "Sunday hand" was made, in which apposition of the thumb was the essential action. As the technology improved, the artificial hand more nearly resembled the lost one—so much so that one of Sauerbruch's patients, a musician, was still able to play Bach organ fugues, no mean feat even with two good arms.

At the end of the war, Sauerbruch accepted the chair of surgery at Munich. It is difficult to know what prompted him to accept the offer, for Munich had few attractions to compare with Zurich. The poorer operating conditions meant that he gradually performed fewer chest operations, and curiously enough, this led to an increasing interest in orthopaedics. It all started when a young man with osteosarcoma of the femur was brought in; he turned out to be a metal worker, for whom the loss of a leg meant as much as the loss of his life. Sauerbruch quickly came forward with the idea that it might be possible to save part of it in this way: if the leg were to be removed at the hip, and the thigh were then separated from the lower leg at the knee, perhaps the lower leg, which was healthy, could be made to implant into the place left by the amputated thigh. With luck, perhaps the lower leg could be made to perform the functions of the thigh—providing that the upper end of the tibia could be coaxed into the acetabulum. Feeling that he was grasping at a straw, the patient agreed, and the operation was a success. It was repeated many times, and became part of the repertoire of the orthopaedic surgeon.

Another research topic which interested him in those years was the treatment of tuberculosis of the skin. He had heard of the work of Dr. Gerson of Bielefeld, who claimed to be able to cure it by the simple expedient of feeding a salt-free diet. Obviously Sauerbruch was sceptical, yet he mounted a large well-controlled experiment in the Munich Hospital. A few months later, his misgivings had disappeared, for out of 450 patients, only four were not cured by the regime. The modified diet was published in 1926, and became known as the Gerson-Sauerbruch-Herrmannsdorfer diet.

In 1927, Sauerbruch made his last great move: Berlin, the zenith of German academic life. From then until the end of his working days, he was installed at the Berlin Charité Hospital as the greatest chest surgeon of Europe, and honour upon honour was heaped upon him. In 1929, he was asked to go on an official tour of Egypt, where he received princely treatment, and in 1935, he came to England, where he delivered a lecture on "The Development of Thoracic Surgery" which was published in the *Lancet* of that year. In 1934, he had been called in to attend the dying Hindenberg, President of the German Republic; and there was even a persistent rumour that he had operated on King George V. The truth of the matter was that he had given a second opinion on some X-ray photographs which had been flown over specially to Berlin. The real surgeon was the great Wilfred Trotter. Nevertheless, Sauerbruch did visit this country many other times before the last war,

and had many academic connections here. His association with British medicine started with the 1914 Congress of Medicine which was held in London (at which he demonstrated his first thoracoplasty cases); and it lasted until just before the outbreak of war in 1939, when he gave the Macewen Lecture at Glasgow University.

Sauerbruch's position during the Second World War, and his relations with the Third Reich, will always, I fear, be suspect. It would be very pleasant to be able to agree wholeheartedly with G.A.M., who wrote in the *Lancet's* obituary of Sauerbruch (July 14, 1951):

"Never a Nazi in thought, word or deed, he understood fully the implications of the system, and he fought courageously for the best of German Culture and in defence of his colleagues and other sufferers from the system."

I think it is probably true that any German of prominence who chose neither to leave nor to defy the totalitarian regime will always have to face censure. There were certainly few personalities so eminent that they had nothing to fear by speaking out against Nazism, but without doubt Sauerbruch would have been in this class. In this respect, it is interesting that contemporary and present-day historians have, almost without exception, reacted scathingly to the total and unquestioning acceptance which most German universities showed to Hitler's policies. William L. Shirer has this to say:

"It was surprising to some how many members of the university faculties knuckled under to the Nazification of higher learning after 1933. Though official figures put the number of professors and instructors dismissed during the first five years of the regime at 2,800—about one-fourth the total number—the proportion of those who lost their posts through defying National Socialism was . . . exceedingly small . . . A large majority of professors remained at their posts, and as early as autumn 1933, some of them, led by such luminaries as PROFESSOR SAUERBRUCH, the surgeon, Heidegger, the existential philosopher, and Pinder, the art historian, took a public vow to support Hitler and the National Socialist regime.

" 'It was a scene of prostitution' Professor Roepke later wrote,* 'that has stained the honourable history of German learning.' And as Professor Ebbinghaus, looking back over the shambles of 1945, said, 'The German universities failed, while there was still time, to oppose publicly with all their power the destruction of knowledge and of the democratic state. They failed to keep the beacon of freedom and right burning during the night of tyranny'."†

There is no question that Sauerbruch could have done a great deal more in exposing Nazi disgraces in medicine and academic life. Fortunately, he seems to have come to his senses again sometime during the war, and the turning point must have been in 1943 or 1944; for by the time of Stauffenberg's famous attempt on Hitler's life on July 20th, 1944, Sauerbruch would have been glad to see Hitler gone. In fact, he had already been introduced by General Beck to many of the plotters—Olbricht, Thomas, Popitz, and others. Popitz's fanaticism was so great that he even thought of sounding out Himmler, head of the secret police, to join the conspiracy—and if this man was Sauerbruch's friend, it is inconceivable that the surgeon could still be a Nazi sympathiser. Stauffenberg himself had been a patient of Sauerbruch's in 1943. He had been wounded in Africa—a bullet had passed through his eye, and he had also lost his right arm and three fingers of his left hand. During the course of their relationship, von Stauffenberg told Sauerbruch of his plan to assassinate Hitler, and Sauerbruch acted as confidant to many of those concerned in the attempt, as his house was free of suspicion. After the unsuccessful attempt, he himself was compromised, and by an ironic twist of fate, was saved by a dreadful man named Gebhardt, one of the most villainous of the human experimentalists, and who had been a pupil of Sauerbruch at university.

The war ended, as he puts it, "in a cataclysm": some of his children were missing, though his wife Margot, herself a doctor, was still alive and able to help in the hospital. Before long he was summoned by the denazification tribunal, and the case against him was dismissed. It seemed that soon, he would be reinstated as head of the Charité Hospital, and that his work would continue peacefully until his retirement. On the brink of a happy old age, with the war over, work to be done, and at last a successful family life; what could be better?

I wish I could end the story there.

A whole volume could be and has been written about Sauerbruch's life after the war. In 1945 he was still the pre-eminent surgeon of Europe, with Berlin as the Mecca of private patients and eager young doctors alike. No one was to know that within six years he would be dead from a disease which would gradually rob him of his reason. We all know that senility of one kind or another is an affliction which can overcome the gifted as easily as anyone else, but somehow, Sauerbruch never seemed a likely candidate, and it is hard to believe that the great Geheimrat could be laid low by such a common and unspectacular complaint. But by 1947, his mind had deteriorated forever. The disease which struck him was cerebral atherosclerosis, and at the time of his death in 1951, he was suffering from a full-blown picture; as is usually the case, the symptoms appeared so gradually that it was well established before anybody realised it. He had always been eccentric and finicky about the strangest things—like not wearing cap or gloves in the theatre except for cases which were suppurating—and because of this, many oddities which may have been significant were passed off as part and parcel of the great man.

At any rate, the situation in Berlin after the war was chaotic. Opportunists and informers had seized authority and power. For a while the Charité was directed by a man named Baer, until he was unmasked as a former overseer of a Nazi labour camp in the East. The Soviet military administration was resolved to revive higher education as fast as possible—especially in Berlin. They were quite aware of the strong pull that the West held for intellectuals and professionals, for it tempted them with better facilities, better pay, and better prospects. A very gifted and clever diplomat, Paul Wandel, was put in charge of the Central Administration for People's Education, and he did his best to attract and retain academic staff.

One man seemed to tower above all of these political difficulties, untainted by anything except the desire to

*Wilhelm Roepke: The Solution of the German Problem. p. 61. London 1946.

†Frederic Lilge: The Abuse of Learning: The Failure of the German University. p. 170. London 1948.

get back to work: Sauerbruch. His reputation had never been higher, and Wandel realised how essential it was that he be kept working as head of the Charité. He was one of the few bright stars that the Communists could display to the West, one of the living proofs that Russian-dominated education was not to be sneezed at. The last thing that Wandel wanted to hear was that Sauerbruch was no longer capable of working, and it is not surprising that he was prepared to fight tooth and nail to retain him.

This was the background to the situation in 1946. From that year on, it was evident that Sauerbruch was deteriorating, and the fateful day in the story is probably July 17th. It was on this day that Sauerbruch performed a simple hernia operation on Heinrich Greif, a well-known actor of thirty-nine; and it was on the following day that Greif died of an unchecked femoral artery bleed. One cannot say with certainy that this was a manifestation of the disease. Was it a reasonable surgical error? Was it also reasonable to place a total ban on penicillin at the Charité, on the grounds that it might lead to slapdash surgery? Or was it the same sort of eccentricity that made Schweitzer eschew bulldozers at Lambarene, on the grounds that they might upset the insect life? Unfortunately this blunder was by no means an isolated one, and it was clear that his technical finesse was no more. He was now his worst enemy and gradually lost the respect of his colleagues as he became more and more paranoid and hostile. His chief assistant, Dr. Karl Stompfe, resigned in 1946 after being assaulted by the Chief in a hospital corridor. Other assistants began to fear operating with Sauerbruch, for he would frequently storm out in a fit of temper, or worse still, poke at their fingers with a scalpel if they got in the way.

By this time something clearly had to be done, but all attempts to sway Wandel were forestalled by his chief adviser, Joseph Naas, who was quite blunt:

"In the coming struggle of the proletariat, in the clash between socialism and capitalism, millions will lose their lives. In the face of this fact it is a trivial matter whether Sauerbruch kills a few dozen people on his operating table. We need the name of Sauerbruch."

Not until December 1949 was Sauerbruch forced to resign from the Charité, and even then it was a terrible business, unpleasant for all concerned. Lifelong friendships were broken, for it was the expert testimony of his closest colleagues that mattered so much. Robert Rössle, for example, Chief Pathologist at the Hospital, had known about Sauerbruch's failing abilities before anyone. After all, it was he who performed the post-mortems and uncovered the surgeon's errors. One can imagine how reluctant he was to give evidence to Wandel against his friend, and yet how essential it was for him to do so. Another was Theodor Brugsch, Dean of the Medical Faculty at Berlin and Director of the First Medical Clinic at the Charité. Although nearly as old as Sauerbruch, he had mercifully retained all his clearheadedness, and had noticed Sauerbruch's changing behaviour during the recent months. Sauerbruch never forgave either of these men for giving the evidence which proved his inadequacy; how could it have been otherwise?

In the sumemr of 1950, the last phase began. Many of his patients found it hard to believe that he was no longer allowed to work, and they continued to visit him at home. Soon he was carrying out major operations almost literally on the kitchen table. Before long, he had surgically treated a child's meningocele, suturing the wound with a needle and thread from his wife's sewing basket. He was clearly a public menace, but not even the medical world was aware of this until June, when he was invited to give a memorial speech for von Mikulicz, his old boss, at Frankfurt. Flanked and supported on either side by Professors Redwitz and Bauer, he gave a slow, hesitant dissertation; and from his slurred pronunciation it was very obvious that the old man was seriously ill.

The last five years of his life make tragic reading. It should be a salutary tale for the whole medical profession, as a lesson on how not to deal with difficult problems. However impossible it appeared, he should have been restrained years before he was, not only for the sake of the lives lost on his operating table, but also for the sake of his past and his reputation. Lest these terrible last years detract from his great achievements in medicine, I must quote a few passages from the obituaries.

Professor Emil Frey: ". . . . He was a personality of enormous stature, a divinely gifted physician and scientist, who contributed greatly to the field of medicine and especially the development of surgery; he enriched his special subject as did no other of his contemporaries. And yet he of all persons, the world famous surgeon of the thorax, never wanted to be considered as a specialist. Again and again he affirmed his faith in the vital concept of Universitas Literarum, and emphasised that it alone could overcome the limitations of specialist research and serve the higher cause of scientific universality . . . A beneficient destiny conferred on Sauerbruch a plenitude of good qualities. He was the most glorious light in surgery during the past century, and he will continue to shine far into the future."

Professor Erich von Redwitz: ". . . Sauerbruch was one of the great masters of our age . . . The fundamental element in his attitude toward the problem of medicine was love for his patients. To that abiding love he subordinated the entire machinery of his hospital organisation. The responsibility for the grand, difficult, and often untried operations which he undertook with great courage, always rested heavily on his spirit."

The *Lancet*: ". . . Few surgeons can have had such an outstandingly brilliant career. Of humble origin, all his achievements were due to his own efforts, enthusiasm, hard work and clear intellect. He took no narrow view of surgery, always emphasising its dependence on a 'living contact with the whole science of medicine' . . . He ridiculed nationalism in surgery, and he never lost an opportunity of emphasising its essentially international nature, even when there were those present to whom such a view was anathema."

Perhaps it is most fitting to let the case rest there.

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RIFLE CLUB REPORT

The past six months have shown a considerable change of attitudes vis a vis Student/Nurse relations. Not only may Medics eat in the dining-room (is that a concession or a sanction? I often wonder), but we may also enjoy each others' company in the relative ease and comfort of the coffee lounge.

This is not much, really, and I suppose does not merit any comment at all. It does, however, indicate a slight change of heart as far as the Powers are concerned.

The nursing and student bodies have long been regarded as two entities with little or no common ground. This is indicated clearly by such antiquated and almost fatuous rules which nurses at the beginning of their training here are required to observe—even in one case to sign an agreement to the effect that they will not, under any circumstances, enter a students room at College Hall for the duration of their training. This may seem ridiculous—in some cases unnecessary—measures to take to prevent student/nurse intercourse; however that such action should be contemplated, let alone implemented, seems to me to be an anachronism and totally out of keeping with the responsible work we are doing which gives us the right to be treated as adults. On the contrary, every attempt has been made to prevent the two groups from living and working together harmoniously.

What seems even more distressing is that although groups in the two camps are not satisfied with this state of affairs, no-one is really prepared to get up and do something. Apathy is endemic at Bart's and will prevent any innovations however minor or relatively innocuous from being implemented. "I'm alright Jack," should be our motto!

We are a student body and as such should organise to achieve our aims in changing or reshaping that which is due for change. Co-operation could achieve much, much more.

In many respects medical students are more fortunate than student nurses in so far as the hierarchy they deal with is much more reasonable and amenable to logical argument. This is not the case in the nursing world. A totally different approach is necessary to achieve anything. Almost all contact reinforces the feeling of "them and us" and thereby emphasises the almost impregnable atmosphere of antagonism. Because of this we need to work together, supporting each other to achieve more important and more far-reaching innovations, which will, we hope, make community life at the hospital more like that of students elsewhere.

OUR CORRESPONDENT.

NURSES' REPORT

This year we have had a mixture of good and bad fortune, on the one hand several excellent marksmen joined the club, on the other we suffered at the hands of the postmen. The London University leagues were so severely disrupted that they were not completed and our own shoulder to shoulder matches could not be arranged. In spite of there being no definite outcome in the league competitions it is almost certain that we would have won the Novices "A" and Engineers "B" competitions. In the latter we beat Imperial College and Queen Mary College by 50 points each and average team scores rose from 88 to 94.5 over the season. In Novices "A" we beat Kings College, Imperial College and Queen Mary College by margins of 20 points or more per round. At the end of the Easter term we had an away match versus Westminster Hospital R.C. which we won by 5 points in spite of the absence of several of our more experienced team members. Usually small-bore shooting lapses during the summer months and full-bore grabs the limelight, but in future we will keep .22 going. This term we have entered a team for the U.H. League (postponed from the winter through the grace of the postmen). We also want to do the urgent modifications required in the range which include lighting, painting, renewal of the stop-butt and firing-point as well as cleaning the place and acquiring a ventilation unit. If possible we will also have a couple of S/S matches.

Three members of the club (two of them novices: Mike Anderson and Albreic Fiennes) represented United Hospitals in matches versus Cambridge University, R.A.F. Cranwell and The Bank of England.

In full-bore we are adopting the same policy as in small-bore and will keep shooting all the year round, we will probably go to Bisley once or twice a month during the winter and include shoots at 900 and 1000 yards. The club subsidises these practices but we make the cost even cheaper by sharing the cost with other hospitals. We have had four such joint practices and they are proving to be very popular both socially and financially.

On Wednesday, 5th May, we put in a team for the "Pafford Cup" which is shot for at Bisley. It was a sad occasion. After the first stage (200 yards) we were only 4 points behind the leaders, Westminster, Philip Morrison had an excellent shoot making a highest possible 50 ex 50 points with 9 central "V" bulls. But at 500 yards we ploughed the match, we developed an annoying habit of putting central bulls on other people's targets. We lost 15 points and dropped from second to fifth place as a result. We drowned our sorrow in the traditional manner both on the point and in the club house and looked forward to next year.

Pafford Cup

	200	500	Total ex 100
Tony Knight ...	49	48	97
Mike Pembrey ...	48	45	93
Philip Morrison ...	50	37	87
Dave Edwards ...	41	37	78
Placed 5th ex 7 ...			355

Mike Pembrey, Tony Knight, Philip Morrison have represented the United Hospitals and University Rifle Teams.

SAINT BARTHOLOMEW'S HOSPITAL JOURNAL
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Editorial

The cost of drugs to the National Health Service is a matter for serious consideration. No one would deny that where a cheaper drug is as good as a more expensive one, the cheaper one is the drug of choice, but this decision *must* be left to the doctor. Efforts are certainly being made through the postal services to ensure that doctors are aware of the relative costs of pharmaceutical preparations, and it is to be hoped that these communications are heeded. The prescribing pharmacists are also a great help in contacting those doctors who consistently prescribe expensive drugs without thinking about this aspect. It would, however, be a very dangerous thing were the pharmacists to be allowed to change a drug without the express permission of the prescribing doctor. There is now an influx of drugs from the continent which, though bearing the same name as some standard products, contain only 10% of the active ingredient, or in some cases 110%! One shudders to imagine the consequences.

It is, however, very much to be feared that this responsibility will be allocated to the pharmacists if the proposed change in prescription charges comes into effect. Everyone must now be aware that the charge for each item on a prescription rose on April 1st of this year from ten to twenty pence, and further new charges envisage a cost-related system whereby the patient will be charged half the cost of the prescribed medicine up to a maximum of 50 pence. Whilst this new system will assuredly increase the revenue to the Health Service, and may well discourage the malingerers and spongers from plaguing their GPs for aspirin and cotton-wool, it is wide open to many problems.

It is obvious that the pharmacists are going to meet serious difficulties when faced with a patient with a long list of drugs in his hand, who then inquires which is the most essential, and which can be omitted, or would they kindly find a cheaper alternative; the pharmaceutical union have refused, quite rightly, this type of ultimate responsibility, yet they are the only ones in a position to know the exact cost of drugs. Doctors may be influenced in their choice of treatment by the financial position of their patients, and may prescribe a combination tablet of less efficiency than two separate forms. Overprescribing is another temptation not to be overlooked, with all the attendant dangers of overdose, pill-swopping and selling, etc — practices becoming all too common nowadays.

The current opinion of those who have not gone into the matter very closely is that the exemption forms will cover their chronically sick patients. This, however, is not the case, and these people on long-term treatment are the most likely to be hardest hit by these increases. It is notable that nearly 50% of the most commonly used drugs are in the higher cost bracket, and these people are not offered any relief from what may well be a crippling punishment for ill-health. The whole concept of an already crumbling health service is in question. People may well be scared away from the doctor: to make them think twice is one thing, but a positive deterrent to seeking advice for a genuine complaint is quite another.

Strikers, menacing our society, blame rising food prices: will the Health Service (with some justification) be the next scapegoat? Even in the two-shilling days, stories were circulating of the doctor passing over the money with the prescription. What next? It is to be hoped that the medical profession will maintain a united front against these ridiculous proposals.

Letters

WARD SHOWS

Resident Staff Quarters,
St. Bartholomew's Hospital,
London, E.C.1.

Dear Editor,

As the organiser of the Ward Shows 1970 and as a member of the committee responsible for representing the House and the Student Body in discussions concerning the future of the Ward Shows I feel that I must make a number of comments on the article written by Miss R. M. Jones in last month's Journal.

On December 4, 1970, as Senior Resident I received a letter from the Principal Nursing Officer with the requests for Ward Shows from the Ward Sisters of 25 wards. Shortly afterwards on December 8, 1970, the Chief Nursing Officer requested that Ward Shows be discontinued on the wards as a result of a letter from a patient's relative and a sisters' meeting held that day. By that time the arrangements for Christmas and the Ward Shows were well under way. The Executive Committee allowed the Ward Shows to continue as in previous years. It would seem from reports that the representations on behalf of the Nursing Staff to move the shows out of the wards stem from a personal dislike of Ward Shows by the Chief Nursing Officer which she expresses in her letter. Liaison with Ward Sisters and Junior Nursing Staff who are in daily contact with patients assured the organisers that the shows, which were to occupy only an hour of a patient's Christmas, ought to go on.

The Ward Shows took place as usual and were hailed as a great success both by the patients and by those observers of the Ward Shows who were interested in the conduct and behaviour of the students and nursing staff. A survey was carried out by the Senior Resident, issuing 200 questionnaires to the Ward Sisters to distribute and collect as they pleased. The 151 returned were all in favour of keeping the shows and the multitude of comments made on the questionnaire forms revealed a deep appreciation of the efforts of the staff and students. The results of this survey are very similar to those of the survey carried out by the Journal in 1968 (St. B.H.J., February 1969, page 70).

More information on the research work undertaken to show that patients are "reluctant to express views that may appear to criticise whilst receiving care" would have been more convincing. This may well have been true in the days of hospitals run by charity contributions but those who work at close quarters to patients in the N.H.S. realise that they are only too ready to express their frank opinions at all times.

Bart's rightly prides itself on the care of its patients. Medical and nursing staff work together to meet the total needs of its patients, whether they are recovering or dying. This fine reputation was made on the care which is still maintained and enables us to fill the beds of this hospital with patients outside our geographical catchment area. Doctors, nurses and students develop a perception of the needs of their patients and at Christmas they act in selfless good faith making great efforts to avoid distress to the ill and attempting in a few minutes to relay the message of goodwill. With perception and good organisation the experience whereby the gravely ill and their relatives had to form a "captive audience" and have to tolerate a situation because "they felt it would be ungracious to complain" need not and should not occur. Good liaison between the Ward Sisters and Ward Show organisers proved this point last Christmas.

After Christmas a ballot was held amongst the Senior Nursing Staff (60 according to the letter published), the results of which were presented to the Board of Governors. Some Governors criticised the wording and methodology which revealed that only 25 of the 60 voters wished Ward Shows to continue on the wards. In fact only 25 wards accommodate Ward Shows and on questioning the Sisters of these wards who have immediate clinical responsibility, it was found that they all wished Ward Shows to continue. This was confirmed by a Senior Consultant who interviewed 20 available and unselected Ward Sisters "all of whom were in favour of continuing the Ward Shows and commented on the excellent behaviour displayed over Christmas 1970". (Minutes of the House Liaison Committee, January 19, 1971.)

The popularity of the Ward Shows with the patients, ward nurses, medical staff and students is reflected by the Board of Governors who wish the shows to continue with an endorsement of the recommendations made to ensure that all patients' interests are met. With this in mind the organisers of the Ward Shows are not keen to use Gloucester House or the Lay Staff Canteen, because of the distance away from the amenities and immediate help on the wards and the burden on the patients and nursing staff in travelling to and from the halls.

The Board of Governors has made its decision which we should accept graciously. It would be wrong to expect our seniors to occupy a disproportionate amount of time debating this subject when other important issues confront our Hospital. It is now up to the individual in the Student Body or on the House to make up his mind whether or not to support the Ward Shows as his predecessors have done in the past. It is with these people that the reputation and the future of the Wards Shows rests.

Yours sincerely,
IAN D. FRASER (Senior Resident).

SPEEDING IN CHARTERHOUSE

The Medical College of St. Bartholomew's Hospital,
College Hall,
Charterhouse Square,
London, E.C.1.

Dear Editor,

The present tendency for many drivers to ignore the speed limit in Charterhouse Square, coupled with some recent accidents, has given rise to some concern that, unless steps are taken to control this, someone may receive serious injury.

As a result, the Dean has given instructions that certain steps should be taken to implement the maintenance of the speed limit and, after consultation with a police adviser, for some modification to the traffic circulation to be arranged.

With regard to the enforcement of the speed limit, to some extent this depends on the co-operation and goodwill of all concerned and it is obviously very necessary that this should be forthcoming. Some additional signs are going to be erected inside the College grounds to remind drivers that they must restrict speed to 10 m.p.h. In addition, a system of issuing written warnings to drivers who are seen to ignore the limit is to be introduced. These warnings will be issued by Dr. Francis or the Bursar on receipt of reliable information from any member of the College or College staff and will be worded as follows:

> "You have been seen exceeding the speed limit and are reminded that this is being enforced in the interest of the safety of persons and property. Should you fail to keep within the limit of 10 m.p.h. again, permission to bring your car onto the College property will be withdrawn."

In the event of such a warning being ignored, the driver will be informed that he is not permitted to bring his car into the College grounds and the gate keepers will have instructions to enforce this. The maintenance of the speed limit will also become a condition of tenancy in College Hall.

The adjustment to the circulation of the traffic has been designed to cause as little inconvenience as possible. The only major effect will be to prevent cars, which enter from Clerkenwell Road, turning left at the Tower Block.

It is to be hoped that recourse to sanctions, to ensure the safety of people's lives and property, will not be necessary and that all members of the College, bringing cars to Charterhouse, will appreciate the need for care.

Yours truly,
C. D. H. NIXON,
Bursar.

STUDENTS' UNION LETTER

The Abernethian Room,
St. Bartholomew's Hospital,
West Smithfield,
London, E.C.1.

Dear Editor,

At a recent meeting of one of the many College committees, a final and firm decision was made to go ahead with the setting up of an audio-visual centre in the hospital. The budget is of limited value, and the architects are now in the process of trying to prepare a scheme for rebuilding the old students' refectory within the financial limits set. Problems of staffing, especially for evening and perhaps for weekend opening are already becoming apparent, but it is hoped that these and other difficulties can be solved in time for it to be open for use early in the next academic year.

The success of this unit will depend largely on the quality and quantity of tape slide programmes available. Now that an opening date has been decided upon, it is hoped that both more staff and more students will be prepared to write 20-minute programmes for the audio-visual machines. Since it is not intended that these programmes should replace lectures, only a good basic background is required such that they can then be used as an introduction to a subject and as a revision. Primrose Watkins, the secretary of the Teaching Sub-Committee, would be pleased to hear from anyone interested in preparing such programmes.

There has been increasing concern over the lack of current text-books available in the library. We felt at one point that the solution to this would be to have a system for locking up the major textbooks, and having a tightly controlled lending system; however, it was pointed out that there is insufficient storage space in the library offices and this appears impracticable. The situation has now changed considerably since the library has had a substantial increase in its financial grant, and there should now be sufficient money to buy up to about a dozen copies of the most widely used books. It is hoped that by having sufficient copies readily available in the library, there will be no need for people to be frightened of returning them in case they lose the copy to someone else.

Margaret Thatcher has now succeeded in losing much of any popularity she may have had amongst Clinical Medical Students. She has decided to ignore the pressure put on her department to give the same type of grant for our 16 weeks study each year over and above the 30 weeks of academic terms. It appears that our clinical

work for these weeks is still to be regarded as a vacation course! I wonder if the department will ever understand the situation? Both B.M.S.A. and the London Medical Schools' Presidents' Council are at the moment "expressing their concern" over her statements and will continue to plague the department to the best of their ability.

On a happier note, Tony Wall's "Find-a-Flat" agency is working well. I would like to draw it to the attention of anyone vacating or about to search for a flat in the near future. It is possible that we might be able to persuade the Hospital to start investing in some property and rent it out to students, thus further helping out the shortage of good and convenient flats for Bart's.

Finally, last but not least, negotiations appear to be reopening over the use of the Gloucester Hall stage. Since the Drama Society have tried to negotiate direct with Gloucester Hall, but have repeatedly been turned down, the subject was brought up at a Staff-Student committee meeting. We were able to impress the staff sufficiently for them to promise to take up the subject with the relevant College committees.

Sports Day has been taken more seriously this year and it is hoped that it will set itself up as an event in the annual social diary at Bart's. I trust that both this and the Barbecue Ball will prove to be even more successful than usual.

Yours sincerely,
JOHN WELLINGHAM,
Chairman, Students' Union.

VIEW DAY, 1971

Southfield,
6, Furzedown Road,
Sutton,
Surrey.

Dear Sir,

May an old Bart's man be allowed to write and express his real pleasure at paying the Hospital a visit on View Day, his first such visit for very many years?

I was struck by the attraction of many of the new buildings such as Gloucester House which I had never seen before. The dignified entertainment hall and beautiful swimming bath in the basement were most pleasing features.

The displays in various parts of the Hospital were truly absorbing and fascinating and reflect the great credit on their respective organisers. What a wonderful view one gains from Floor II of Gloucester House over London!

It was indeed imaginative to arrange the Flower Festival in the Hospital Chapel. Seldom can it have looked more lovely with the gorgeous flowers offsetting the furnishing and glorious stained glass windows. This was indeed a display to warm the heart.

As always, the famous square, called by Robert Bridges "The Soul of Bart's", was the focal point, looking lovely in the bright May sunshine. The nurses looked as glamorous as they have always done, as befits a Royal Foundation.

View Day 1971 visit is something I shall always remember, and it made me tremendously proud to be a Bart's man. There is an atmosphere about the whole place which is unique and infinitely precious.

I remind myself that in only a couple of years from now, in 1973, there will occur the 850th anniversary of the foundation of our ancient Rahere Institution of Church and Hospital. I feel sure it is not too early for a committee to be formed in order to plan a series of historic and memorable events, which one would hope could merit a visit by the Queen, our Royal Patron.

Your most sincerely,
J. B. GURNEY SMITH.

OBITUARY

SIR ALEC MARTIN

By the recent death of Sir Alec Martin, K.B.E., on April 15, 1971, St. Bartholomew's has lost one of its most faithful and generous friends. By profession an auctioneer, primarily concerned in obtaining the maximum price for artistic treasures belonging to other people, he used his position and knowledge to further the interests of a number of public institutions. He had entered the celebrated firm of Christie's at the tender age of twelve in 1896, subsequently rising from the position of office-boy to that of Managing Director in 1940, retiring at the age of 64 in 1958. He possessed no advantage beyond his native wit, integrity and shrewd judgment, yet became one of the most widely trusted experts of his time in the world of art, and delighted to use his special knowledge, not for his own profit, but for the service of others. For many years he was Hon. Secretary of the National Art Collections Fund, Chairman of the Trustees of the Wallace Collection, and Governor of the National Gallery of Ireland. These were some of his main preoccupations outside Christie's, but nevertheless he was able to give much of his time to the interests of St. Bartholomew's. It is probable that his first service to the Hospital was given many years ago when the great Hogarth murals demanded expert advice for their cleaning and preservation. Later, in 1935, he was elected a Governor and served for a number of years on the House Committee. When the Archives Committee was first formed in 1947, he was elected Chairman and served for eleven years. In 1940 he gave valuable advice for the protection of the Hogarth paintings. After the war and again in 1959 he was consulted about the cleansing of their surfaces, a technical problem of great difficulty. In 1946 he had also contributed essential advice for the repair of the Henry VIII, or Charter, window in the Great Hall. On many other occasions Alec Martin gave unobtrusive help in Hospital affairs, his outgoing friendliness endearing him to everyone with whom he came in contact. Over the years our debt to him was continually mounting and it was natural that, in his last illness, which led eventually to his death in his own home, he turned to St. Bartholomew's for help. He spent many weeks in Dr. Scowen's ward literally fighting for his life with extraordinary courage and tenacity. He was among his friends, who knew that it was friendship and affection that had motivated so much of his activities during a long life.

G. L. K.

Announcements

Engagement

The engagement is announced between Mr. Richard Henderson and Miss Margaret Macpherson.

Marriage

GARNER—HUSKISSON—The marriage took place on Saturday, May 22, 1971, between Mr. Graham C. Garner and Dr. Adrienne Huskisson.

BURLEY—RUDD—The marriage took place on Saturday, May 1, 1971, between Mr. Terence Kenneth Burley and Miss Jane Lynn Rudd.

O'CONNOR—BAGLIN—The marriage took place on Saturday, June 19, 1971, between Mr. Brendan H. O'Connor and Miss Pamela Joan Baglin.

Deaths

BEILBY—On May 13, Dr. Francis John Beilby. Qualified 1932.

BRYAN—On April 22, Dr. William Eric Bryan. Qualified 1947.

GELDART—On May 10, Mr. Richard Morton Geldart, M.R.C.S., L.R.C.P. Qualified 1953.

STEVENSON—On May 7, Dr. W. A. H. Stevenson, T.D., M.A., B.M., B.C.H. Qualified 1939.

Change of Address

The new address of Dr. Adrienne Garner is The Princess Margaret Hospital, Nassau, Bahamas.

The new address of Dr. W. M. Castledon is 26, Waiatura Road, Remuera, Auckland, New Zealand (until January, 1972).

The new address of Dr. A. W. Spence is 23, Brockley Avenue, Stanmore, HA7 4LX. (Tel. 01-958 7718.)

Appointment

Mr J. A. Parrish, M.D.Lond., M.R.C.P., has been appointed consultant in general medicine at St. Anthony's Hospital, Cheam.

FINAL F.R.C.S. DAY-RELEASE COURSE

(August 4 to October 20, 1971)

Mr. McColl will be organising the next Final F.R.C.S. Course on twelve consecutive Wednesdays between the hours of 9.45 a.m. and 5 p.m., commencing on Wednesday, August 4.

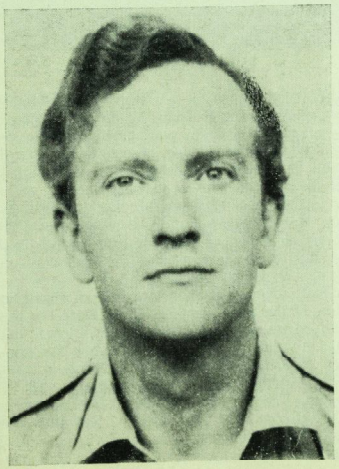
Application forms and further details may be obtained from Miss Machan, Assistant to Mr. McColl, in Room 4 of the Finance Block. (Hospital Extn. No. 7258.)

IAN HOWAT PRIZE IN MEDICAL MICROBIOLOGY

This Prize is in two parts, both of which may be awarded to one candidate or each of which may be awarded to two candidates as follows:

Part I A Prize of £50 for research in Medical Microbiology.

Part II Travel expenses in this country or abroad awarded for the furtherance of research in Medical Microbiology.



Eligibility

Students of The Medical College of St. Bartholomew's Hospital or graduates (within five years of qualification) who obtained their medical qualification at The Medical College of St. Bartholomew's Hospital.

Examiners

Professor and staff of the Department of Medical Microbiology together with one or more of the holders of Chairs in the other disciplines of Pathology to The Medical College of St. Bartholomew's Hospital.

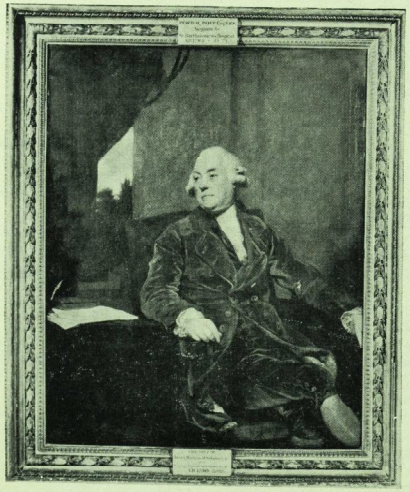
Further details can be obtained from the Sub-Dean's Office.

(Ian Howat qualified at Bart's in 1965, and was tragically killed in an air crash in October 1968 whilst working as a locum to the Oxfam Flying Doctor Service in Africa. The Journal of March 1969 printed an obituary. Mrs. Howat has now endowed monies to be used in a prize in memory of her son.—Ed.)

PICTURES IN THE HOSPITAL

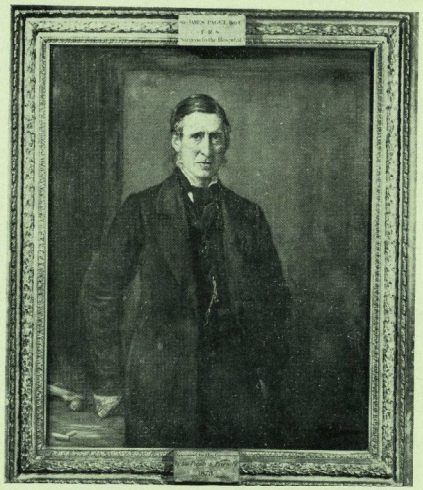
By NELLIE J. KERLING

The North wing of the quadrangle designed by James Gibbs, was officially opened in 1734. It contained two rooms for the examination of new patients on the ground floor, a wide staircase leading to the Court Room on the first floor and to a special room for the Treasurer almost opposite the Court Room or Great Hall as it is now called. This Hall was designed to receive visitors, to hold dinner parties and meetings of the General Court of the Governors. Visitors and dinner parties were of great importance as anyone who was interested in the Hospital and its work among the poor and who offered to become a Governor was asked to pay £50. Their names were put on the walls of the Court Room, a practice which continued until 1905. The number of Governors was not limited, for money was always welcome and when a General Court was held to pass resolutions of importance and to confirm senior appointments, sometimes as many as 200 Governors were present. The custom of meeting in the Great Hall has now been discontinued as the Hospital has at present only 28 Governors but one can see how the large meetings were arranged in a drawing by Hanslip Fletcher of 1922



Percival Pott, painted by Sir Joshua Reynolds.

which hangs in the Treasurer's room. The ceiling of the Hall was made by Jean Baptist St. Michele. We still have his bill for this work, amounting to £192 16s. 0d. As far as we know he was a completely unknown plasterer who does not seem to have left any other ceiling work in England. Judging by his name he came



Sir James Paget, Bart., painted by Millais.

probably from France. In 1737 a picture of Henry VIII was presented to the Hospital by Benjamin Sweet. It is a copy of part of a larger painting by Holbein showing Henry VIII with his Queen Jane Seymour and Henry VII with his Queen Elizabeth, destroyed in the fire of Whitehall in 1698. The Governors decided to have it put up in the Great Hall and Mr. James Gibbs and Mr. William Hogarth, two of the Governors, were "desired to see the large picture properly framed and fixed with decent and respectful ornaments". The result of their plans can still be seen today.

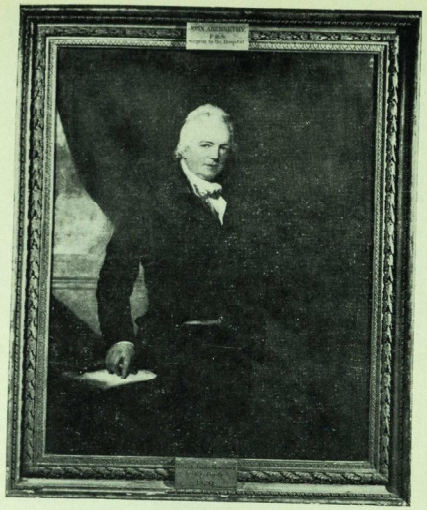
The Hall now also contains portraits of physicians and surgeons of the past. Among others there are portraits of John Abernethy, surgeon from 1815 to 1827, by Sir Thomas Lawrence; of Sir James Paget, surgeon from 1861 to 1871 and of Luther Holden, surgeon from 1865 to 1880, by Millais and of Lord Horder by Sir William Nicholson. The portrait of Percival Pott, surgeon from 1749 to 1787, painted by Sir Joshua Reynolds, hangs in the so-called Guildroom at the back of the Hall. Apart from portraits there are two statues in the Hall, one being

The Wounded Sailor.

the wounded sailor and the other one the wounded soldier, formerly standing in the Steward's Office. They are supposed to represent men of the 17th century forces when the wounded of the Army and Navy were nursed in this Hospital. They are made of plaster, painted afterwards, and though they are rather primitive, their faces are very realistic and moving. It has always been a puzzle why the sailor has no legs and is much smaller than the soldier. I have never found an account of money paid to the maker nor an entry of them being presented to the Hospital. Both seem to have held something in their right hand. Was it a collection box for the poor sailors and soldiers who were patients here, or were they originally designed for another building? One of my correspondents who is connected with Jerusalem University, pointed out the similarity of these figures with the continental figures of St. Rochus, the saint who gave protection from the plague. They were popular as late as the 17th century and the statue of St. Rochus by Veit Stoss, now in Florence, shows him with a bent left leg, a pilgrim's staff in the left hand where our statue has a crutch while the right hand points at a plague bubo on the upper left leg instead of holding something. The hat of the soldier is almost the same as the one of St. Rochus and also his face with a beard and an expression of suffering is almost similar to that of the saint. Did the maker of our statues copy two examples of statues of St. Rochus and were they originally designed as a protection against the plague?

On the staircase leading to the Great Hall, Hogarth painted two murals. William Hogarth was born in 1697 in St. Bartholomew Close and was baptized in St. Bartholomew the Great. He had two younger sisters, Mary born in 1699 and Ann born in 1701. In the first half of the 18th century they had a milliner's shop in the precincts of the Hospital, in Long Walk, a path which extended from the cloisters, roughly between the church of St. Bartholomew the Less and the present North wing, to the present goods' entrance. In 1727 Mrs. Hogarth, then a widow, joined them but in 1730 they had to move as all the houses along Long Walk were demolished

The Wounded Soldier.



John Abernethy, painted by Sir Thomas Lawrence.

to make room for the new buildings designed by James Gibbs. William was therefore not a complete stranger to the Hospital but when he offered to paint two murals he was not yet the well-known artist of his later years. The work was finished in 1737 and on 21st July of that year the Governors expressed their pleasure in a vote of thanks "for his generous and free gift . . . performed by his own skilful hand in characters, taken from Sacred History, which illustrate the charity extended to the poor, sick and lame of this Hospital". Hogarth saw also to the ornamental painting on the ceiling over the staircase. In the picture of the Good Samaritan Hogarth followed the story as told in the Bible, painting the Levite and the Priest in the distance while the Samaritan comforts the wounded traveller by pouring oil into his wounds. The artist tried to make the scene more lively by adding a man, prostrated before the Levite, a dog wounded like his master and a horse which looks on the scene with great interest but which is certainly not the best part of this painting.

In the Pool of Bethesda, so-called because there were five porches according to St. John's Gospel chapter 5, Hogarth found more scope for his imagination. Everyone near the Pool was supposed to be ill, hoping to get cured if he managed to be the first to step into the water after an angel had touched it. Examples of sick people Hogarth could easily find and one recognises a mongole child with an old mad woman, a blind man, a man with a sore or perhaps a broken arm clumsily bandaged, a woman with an abscess of the breast, a woman holding a sick baby, suffering from rickets, being attacked by a man who is told to leave the scene by a kind of Roman guard, a woman who may have suffered from malnutrition and a man apparently suffering from syphilis. In the centre near the Pool sits a man with ulcers on his leg looking up at Christ who does not seem to be a person who inspires confidence or expectation of healing. One realises that the artist was interested in the suffering of mankind rather than in the religious part of the story.

Below these two murals are scenes taken from Rahere's life as it is told in *Liber Fundacionis ecclesie Sancti Bartholomei*, now preserved in the British Museum. They are painted in various shades of brown so as not to distract the eye when one wants to look at the large murals. We see Rahere dreaming of his future foundation, receiving gifts for his buildings, the first stage of the Hospital buildings and a patient on a stretcher being received by two of the Brethren.

Hogarth himself painted all the main figures in his murals but the background was filled in by a minor painter, called Lambert, who was apparently employed by Hogarth for he was certainly not paid by the Governors. To the Good Samaritan Lambert added some trees, a blue sky and it may be also the arches behind the central figures according to the description of the Pool in the Bible "which is called Bethesda having five porches". Perhaps Lambert painted also the scenes taken from Rahere's life but one cannot be certain.

The best way to look at the murals is to stand on the ground floor and turn on the lights of the chandelier. This is another of the Hospital's treasures. In 1735 it was presented to the Hospital by Mr. John Freke, the first Hospital surgeon to be asked to take care of diseases of the eye. The designer and maker of this chandelier are unknown but it is an interesting example of 18th century wood carving.

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THE GLOMUS TUMOUR

By J. S. P. LUMLEY, F.R.C.S.

The glomus tumour is a rare, benign, soft tissue lesion of vascular origin. It probably would have remained a pathological curiosity but for one important associated symptom—namely that of severe paroxysmal pain. The tumour is being reviewed here on account of its rarity, its curability and the persistent suffering that can follow a missed diagnosis.

The word glomus can be defined as a ball, tuft, cluster or conglomeration of small blood vessels. The tumour has appeared in the literature under many names including:— angioneuroma, angiomyoneuroma, angioneuromyoma, angiomyoneurome arterial glomus, Tumeur de glomus neuromyo-arteriel, tumour of the neuromyoarterial glomus, subcutaneous glomal tumour, painful subcutaneous tubercle, perithelioma, glomangioma and Popoff's tumour.

Painful tumours of the extremities were known to Hippocrates and Galen (Greig, 1928) and were described by a number of 18th century surgeons and anatomists (Camper, 1760; Morgagni, 1762; Bisset, 1792). In 1812, Wood, an Edinburgh surgeon, produced the first clear description of the clinical features of the glomus tumour in eight patients. Believing the condition to be previously unreported he termed the lesion "the painful subcutaneous tubercle". Later the same year Wood reported further cases and discussed some of the earlier literature that had been brought to his notice. Wood's description of the clinical manifestations of the tumour cannot be bettered, but it is interesting that none of the lesions he described were of the common subungual variety. Both Kolaczek (1878) and Kraske (1880) described a form of subungual angiosarcoma commenting on its benign nature and lack of invasion; Müller (1901) renamed this lesion a perithelioma.

In 1920 Barré, a French neurologist, reported a painful subungual lesion in a young girl. Barré presented the excised tumour, and that of another similar case, to his associate Masson for histological study. Masson had in his possession a third subungual lesion, which he had obtained in 1916, and noted that the symptom of paroxysmal pain was common to all these cases. Masson (1924) considered the tumour to be a hypertrophied organ and after sectioning many normal fingers was able to prove the existence of a cutaneous arteriovenous anastamosis with a rich neuronal mechanism. Masson named this apparatus the neuromyoarterial glomus, the normal glomus being less than 1mm in diameter. The tumour of the apparatus consisted of branching vessels surrounded by a variable thickness of regular polygonal cells which Masson termed epithelioid cells.

The glomus was extensively studied by Popoff (1934), who traced the original description of the cutaneous arterio-venous anastamosis to Sucquet (1862) and Hoyer (1877). Popoff introduced the term Sucquet-Hoyer canals to describe the anastamosis. The canals were found in abundance under the nails and although imperfectly developed at birth they matured in young adulthood. The function of these canals remains uncertain. Masson (1924, 1935) considered them as circulatory regulators controlling blood pressure but they have also been described as temperature regulators (Lewis, 1930), as having a secretory function (Schumacher, 1955) and, more recently, as being chemo-receptors (Cauna and Mannan, 1958).

Following the publications of Barré and Masson (1920, 1924) an increasing number of reports on the glomus tumour appeared in the literature. Stout reviewing 67 cases in 1935. The distribution of the lesions was found to be more widespread than the nailbeds and limbs, tumours being reported of the face (Butz, 1940), auricle (Fernández and Monserrat, 1931), eyelid (Kirby, 1941), nasal cavity (Pantazopolous, 1965), neck (Kirchberg, 1936), trunk (Touraine, Solente and Renault, 1936), penis (Grauer and Burt, 1939), buttocks (Lendrum and Mackey, 1939), knee joint capsule (Hoffmann and Ghormley, 1941), subfacial, tendon sheaths and within bone (Bergstrand, 1937) and within muscles (André-Thomas, 1933). The lesions were occasionally multiple (Andre-Thomas, 1933; Adair, 1934; Stout, 1935) and in these cases were subcutaneous rather subungual in position (Bergstrand, 1937).

Visceral tumours were described in the uterus (Durante and Lemeland, 1928), kidney, trachea, mediastinum and vagina (Shugart, Soule and Johnson, 1963) and in the stomach (Busscher, 1948; Kay *et al*, 1951).

Masson (1935) considered ectopic tumours, i.e. tumours not situated in the dermis or subcutaneous tissues, as being either heterotopic in origin or as arising from an as yet unidentified glomerular apparatus. In 1942, however, Murray and Stout, by means of invitro

tissue culture techniques, demonstrated that the glomus or epithelioid cell was identical with the capillary pericyte of Zimmermann (1923). This finding thus provided an explanation for the existence of visceral glomus tumours in the absence of a demonstrable glomerular apparatus. In spite of this evidence, a number of workers on the gastric tumour considered it to arise from a gastric glomus, since it was constant in its position in the pyloric antrum and since glomus tumours had not been demonstrated elsewhere in the alimentary tract (Weitzner, 1969).

Recurrent tumours have been reported infrequently in the literature (Lewis and Geschickler, 1935; Kirby, 1941) and some of these may be due to incomplete excision or to the presence of another tumour. Occasionally infiltrating tumours have been demonstrated, these being more common in children (Murray and Stout, 1942; Kohout and Stout, 1961). Two other reports of an infiltrating tumour of the pectoralis muscles (Soiland, 1937) and of a metastasing omental tumour (Kirshbaum and Teitelman, 1939) were considered by Murray and Stout (1942) not to be of glomic origin. Vascular invasion by the tumour is a rarity (Babbini, Castane Decoud and Martin, 1944, Lumley and Stansfeld, 1971).

PATHOLOGY

Glomus tumours were found to comprise 1.6% of 500 soft tissue tumours of the extremities analysed over a 2½-year period at the Mayo Clinic (Soule, Ghormley and Bulbulian, 1955). The tumours are situated predominantly over the extremities, 73% being in the upper limbs (Shugart, Soule and Johnson, 1963) and from 20-66% being reported as subungual (Phalen and Mouroulis, 1966).

Although the lesions are more common in men, the subungual tumours are predominantly in women, the average age of presentation being 25 years in the subungual lesions and 41 years in the remainder (Stout, 1935), the age distribution ranging from birth to 85 years (Harvey, Dawson and Innes, 1940; Shugart, Soule and Johnson, 1963).

The tumours are commoner in Jews and are predominantly found in the white-skinned population although they have been reported in the American and African negro (Grave, 1969).

Multiple tumours present 10-15 years earlier than the isolated lesions. They occur in only 2.3% of adult cases (Kohout and Stout, 1961) but in approximately one-third of cases presenting before the age of 20 (Sluiter and Postma, 1959). Multiple lesions are limited to one limb; they are usually less than 10 in number, but as many as 90 have been recorded (Eyster and Montgomery, 1950). The localisation of multiple tumours around the ankle led Bergstrand (1937) to consider the condition a distinct clinical entity.

Subungual tumours are 3 to 5mm in diameter while cutaneous lesions are usually under 1cm and rarely more than 3cm in diameter. The largest recorded lesion measured 10cm and was a gastric tumour into which haemorrhage had occurred. The cutaneous lesion is the shape of a flattened pea, is soft, and coloured various shades from blue to red. Its cut surface is greyish and bleeds freely. A capsule is usually present but is less distinct in the multiple lesions. Microscopy reveals the

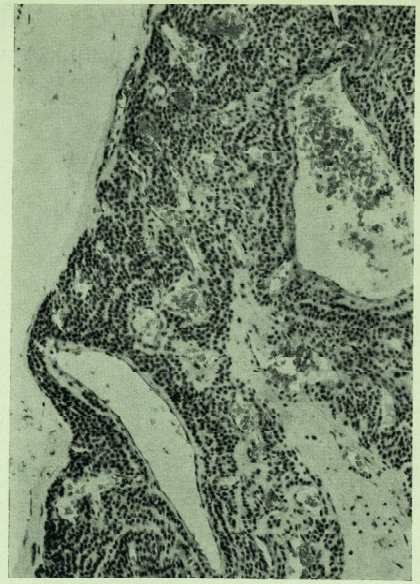

FIG. 1. *Photomicrograph of a glomus tumour showing typical glomus cells around numerous sinusoidal blood vessels (magnification* x 150)

characteristic, and diagnostic, polyhedral glomus or epithelioid cells. These cells are 7-10μ in diameter with large dark staining nuclei and clear cytoplasm, they are arranged in even layers or irregular masses around branching vascular channels. Most authors report a large number of non-myelinated nerve fibres ramifying through the tumours (Masson, 1935) although Shugart, Soule and Johnson (1963) were unable to demonstrate this network. The latter workers were, however, in agreement with other reports that a rich innervation was present in the tumour capsule. A few basophil leucocytes and haemosiderin laden phagocytes have been reported in the tumour (Stout, 1935) and myxomatous degeneration is said to commonly occur (Lendrum and Mackey, 1939).

Masson (1935) divided the lesions, on histological grounds, into four types—epithelioid (solid), angiomatous, neuromatous (typical) and mucoid, he also classified a transitional type with large vascular channels with epithelioid cells but no nerve fibres. This classification has not been used extensively since it bears no relation to the symptomatology of the lesions (Shugart, Soule and Johnson, 1963).

The behaviour of the tumour is that of an overgrowth of a neurovascular end organ (Masson, 1935; Bailey, 1935) and Willis (1967) considered the lesion to be a hamartoma. Certainly its course is almost invariably benign. Some authors considered the tumour to be congenital in origin and familial tendencies have been reported (Harvey, Dawson and Innes, 1940; Gorlin, Fusaro and Benton, 1960). Frykholm (1945) suggested that the tumours were due to a developmental defect in early embryonic life, and the association of glomus tumours with other malformations has been reported (Sluiter and Postma, 1959). Trauma has been suggested as an aetiological factor to a varying extent by different authors. Bailey (1935) reported a history of a single marked focal episode of trauma over the tumour site in 50% of cases. Shugart, Soule and Johnson (1963) reported a 16% incidence of crushing or lacerating injuries associated with the onset of symptoms, whereas Phalen and Mouroulis (1966) stated that a history of trauma was seldom found in the tumour. Laymon and Peterson (1965) reported one case in which the development of a number of glomus tumours of the hand was closely linked with successive pregnancies. These authors considered that oestrogens played a role in the development of these lesions.

SIGNS AND SYMPTOMS

The clinical features of the glomus tumour makes it one of the most exciting entities in medicine, since awareness of the condition can produce one of those magical diagnoses which have astounded everyone at some stage in their medical education.

The patient complains of paroxysmal excruciating pain in the region of the tumour, the description of the pain being "agonising, stabbing, burning, lancinating or like a red-hot poker". These symptoms usually appear exaggerated and out of proportion to the lesion concerned. Most large series include patients who have been labelled neurotic and many who have requested, and some who have received, amputation of the affected area.

The pain is initially insidious in onset and often preceded by mild discomfort of the limb. The tumour has usually reached its full size before the onset of severe symptoms (Wood, 1812) and the average duration of the pain before treatment varies from 8½ to 14 years in different series (Adair, 1934; Bailey, 1935; Shugart, Soule and Johnson, 1963). The tumour may remain painless (Bailey, 1935) and when multiple tumours exist they are not all symptomatic; only two of the 90 lesions in Eyster and Montgomery's (1950) case were painful. The attacks of pain last anything from a few moments to three days, coming on at any time of night or day. At a later stage in the history, proximal radiation of the pain occurs and this can be misdiagnosed as of root origin or as angina.

The pain is usually precipitated by minor trauma or temperature changes and rarely occurs spontaneously. The trauma, however, is often minimal, the patient avoiding washing the area and any contact with clothes or bed clothes. Coats have been shortened to prevent contact with lesions around the knee joint, sleeves shortened, or even cut off completely, kid gloves have been worn by some patients while others avoided gloves altogether, abnormal postures were sometimes assumed and crowds and hand shaking avoided. Employment has been changed if involving typing, or standing on a lesion. Exercise of the affected limb was often stopped and consequent disuse atrophy and osteoporosis of the region have been reported. The patient will commonly refuse palpation of the tumour. When the lesion is temperature sensitive it may be resultant on either a rise or a fall in temperature and relief of pain has been reported with both hot and cold applications.

The pain is sometimes accompanied by sympathetic effects, the involved limb being warmer or colder than the remainder of the body. Parasthesia and weakness of the limb during an attack have been reported and the skin may be delicate, thin, transparent and pigmented, with prominent veins and subject to localised sweating. An associated Horner's syndrome was reported in Barré's (1920) first case. The tumour often changes colour in an attack (Wood, 1812) and this is pathognomonic of the lesion.

The pain associated with a glomus tumour is probably related to changes in blood flow within the lesion. Hildreth (1970) showed that the application of a proximal arterial tourniquet in one patient prevented the onset of pain which could previously be produced by focal trauma to this lesion. Shugart, Soule and Johnson (1963) considered the pericapsular nerve plexus to be the important factor in pain production.

Visceral glomus tumours are not accompanied by the pain of the peripheral lesion, the importance of the gastric lesions being in their differential diagnosis from carcinoma and their occasional ulceration and haemorrhage.

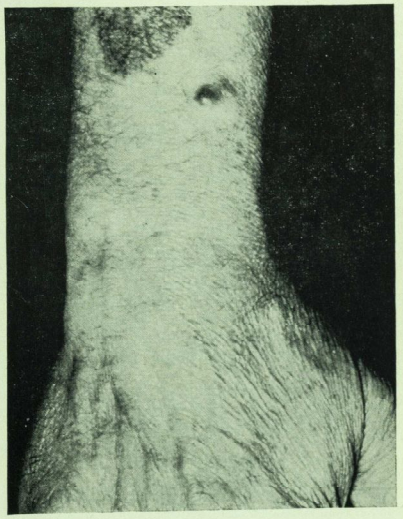

FIG. 2. *Subcutaneous glomus tumour of right forearm (reproduced by kind permission of Mr. E. G. Tuckwell).*

DIFFERENTIAL DIAGNOSIS

Diagnosis of the established peripheral lesion, with its paroxysmal and radiating pain, is not difficult once the diagnosis has been considered. In such cases diagnostic aids such as Love's (1944) pin test or the ischaemic test of Hildreth (1970), described above, are not particularly relevant.

A number of other soft tissue tumours can be painful but they lack the severe and radiating pain of the glomus tumour. Painful lesions include—leiomyoma, neurilemoma, neuroma, amputation neuroma, haemangioma, neurofibroma, nodular hydradenoma, Dercum's lipomatosis, lipoma doloroso, fibrosarcoma and vascular myoma (Stout, 1937, 1953; Shugart, Soule and Johnson, 1963; Nickel, 1965).

Subungual lesions may present as a bluish area of discolouration or may be demonstrable on transillumination of the digit. Other painful subungual lesions such as exostoses and enchondromata may be demonstrable radiologically and the glomus itself may produce a bony erosion.

Final confirmation of the diagnosis is by excision and histological examination of the lesion.

TREATMENT

The treatment of the glomus tumour is surgical excision. Results are excellent with immediate and permanent relief of the symptoms in the vast majority of cases, few minor operations can claim so grateful a patient.

Whatever form of anaesthesia is used, preliminary localisation of the lesion, particularly of the more deeply seated tumours, possibly with a pin (Love, 1944), is essential. Larger than normal quantities of local anaesthetic agents are required for local infiltration (Adair, 1934) although this is not so for regional blocks; a tourniquet may be helpful.

Residual symptoms are unusual, although they have been reported. On record is one case in which typical symptoms developed for the first time after removal of the tumour (Picard, 1931). Love (1944) reported some temporary hypersensitivity following removal of the tumour. Shugart, Soule and Johnson (1963) reported the surprisingly high figure of residual symptoms in 11 of 74 cases reviewed at the Mayo Clinic. This report is not in keeping with the remainder of the literature on the glomus tumour and regrettably nine of these patients were lost to follow up. Residual symptoms have been occasionally due to incomplete excision, local recurrence, further tumours, painful scars and neuromata.

Three cases of infiltrating tumours have been collected by Kohout and Stout (1961) and a further case reported more recently (Lumley and Stansfeld, 1971), all required local amputation.

Attempts to treat the glomus tumour with caustic (Bisset, 1792; Wood, 1812), electrocautery (Shugart, Soule and Johnson, 1963) and radiotherapy (Adair, 1934) were all unsuccessful. Sympathetic effects were not relieved by sympathectomy (Barré, 1920) but they improve after excision of the tumour.

It is hoped that by drawing attention to this fascinating tumour, the frequency and accuracy of its diagnosis will increase and early curative measures will be undertaken.

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A TAKE-OVER BID

By ARNOLD BARNSLEY, M.A., M.D., F.F.A.R.C.S., D.A.

Last night I had a most vivid dream. I was presiding as Chairman at a Board Meeting, seated at the head of a long mahogany table. Around it sat my Co-Directors, who were my Vital Organs.

I got up.

"Gentlemen," I said, "I have called this Extraordinary Board Meeting at the request of one of our Directors—Brain. I have taken the liberty of co-opting some of our junior colleagues—notably Thyroid, Pituitary, and the Suprarenal brothers—and will call upon them in due course. I will now ask Brain to put forward his complaint."

"I'll come straight to the point, Mr. Chairman," Brain began. "I resent the fact that for centuries Heart over there has been looked upon, both by poets and others, as the seat of the emotions, and not I. Perhaps you are not aware that in the Oxford Dictionary of Quotations Heart is mentioned 500 times and I a meagre 52? I, who am the only non-disposable and non-transplantable major organ in the body and the seat of all art and learning? And yet this—this glorified grandfather clock takes all the credit. I think it's monstrous, and I know that my two little lodgers Pituitary and Pineal do, too; though I admit that Pineal got a bit big-headed when it was thought that he was the seat of the human soul, but he's got over that."

"That's forceful talk, Brain," I said, "and before we ask Heart to reply, perhaps we ought to consult Liver for his opinion."

Brain snorted. "No use asking *him*," he said. "He's drunk already. Gall-bladder told me only yesterday that he's got dozens more hobnails on him than a month ago."

"Well, Heart, what have you to say?"

"The whole thing is ludicrous," said Heart. "Would my big-headed friend, who thinks that the late Lord Brain was named after him, like us to speak of being 'brain-broken', one's childhood's 'sweetbrain', or to address our girl-friend as 'Dear Brain'? And what about 'wearing one's brain on one's sleeve'? Let me remind my brainy colleague that I, assisted by my friends the Lungs, never sleep, whereas Brain has his regular eight hours kip every night and most of the others only work part-time after dark. I have been doing a little sum while he was talking, and may I remind you, Mr. Chairman, that by the time you reach your birthday next July I shall have been working whole-time for 75 years? My normal rate (and *I* should know) is seventy per minute at rest, greatly increased in infancy, illness and exercise; and I have put the average at eighty."

He referred to his notes.

"This will show that I shall have contracted 3,308,370,000 times; not a bad record, in spite of your thirty cigarettes a day, plus alcohol; nothing can alter that."

"Oh, yes it can, old grandfather clock," chirped in Thyroid. "I can alter your rate at the drop of a hat until some idiot excises me, *and* make you pack up eventually."

"This is getting us nowhere," shouted Heart, his rate rising to the nineties. "If it should come to a vote, may I suggest that all disposable organs should leave the room? I include the Kidneys, of course, and Spleen over there."

"That's all very well, Heart," said R. Kidney slyly. "But what about our little hats, the Suprarenals? You couldn't do without *them*."

At this point there came an interruption. The door flew open and standing on the mat was my Skeleton.

"You are all talking a lot of nonsense," it said. All structures have a scaffolding, and without me you'd be a heap of cat's meat, the lot of you."

I woke up in a cold sweat, frenziedly searching for my pulse.

MATRON'S BALL

Once again your intrepid reporter staggered along to the Grosvenor House, but before getting down to business, a few words to clear the air and dispel any misapprehensions.

The rumours about this Ball being cancelled were, as usual, circulating and the fact that the date this year was early May and not January as in previous years, no doubt added fuel to this much discussed subject. So to put the record straight I will tell you, and this is straight from the horse's mouth so to speak, that a new date was primarily necessary because the Grosvenor House were unable to confirm a provisional booking made for January. In choosing an alternative date it was considered that a time later in the year would move the Ball away from the busy Christmas period and that there would be less absenteeism due to illness thus enabling a greater number of nurses to attend. Opinions as to whether this new date is better than the old one vary, but for my money I think it is, and then for those who are worried about next year's Ball, it is anticipated that this will also be held in the Spring.

Somehow the lack of a stinking cold and the fine warm evening seemed to make it all more enjoyable, and enjoyable it certainly was.

The menu was good although the Soufflé Glacé à la Crème de Menthe didn't really get me going—at least not mentally. The contraband wine as usual went down well and was somewhat cheaper than that served by rather out of work wine waiters. Music was excellent, a point made by many people: there was just sufficient steel band and the orchestra's versatility was of great merit. I do say however that more people should be able to dance and I refer here to the ballroom variety, but I suppose the Eightsome Reel did go rather well, the main drawback being the lack of room available for getting rid of one's inhibitions and I've still got a scar to prove it.

I think that most of those who went this year would look forward to going again next year—that is if they are lucky enough to be asked—or taken!

ROGER LAMBERT.

DUTCH ART

at The Queen's Gallery, Buckingham Palace

Dutch artists were essentially realists and specialized in *genre*—the painting of scenes from everyday life. The exhibition of Dutch Pictures at The Queen's Gallery invites the onlooker to step into this everyday life of seventeenth century Holland.

The paintings include charming interiors by de Hooch, Vermeer and Steen; landscapes by Cuyp and Ruisdael; and five portraits by Rembrandt. The concentration and development of *genre* in Holland was caused by several factors: the new-found freedom and democratic outlook of a Protestant people who were not interested in religious art; the lack of influence of other schools on the Dutch; and the pride of the people in their country.

1579 had marked the "parting of the ways" in the Netherlands—the northern provinces broke away to form Protestant Holland whilst the southern provinces still remainded under the domination of Catholic Spain.

1. JAN STEEN
THE MORNING TOILET
(Reproduced by gracious permission of Her Majesty The Queen)

Jan Steen (1625/6-1679) was an acute observer of life, and his *Morning Toilet* (see illus. no. 1) is full of interesting detail. The young Dutch girl sits on the edge of the four-poster bed and pulls on her blue stockings. Her small pet dog has curled up in the warm patch of the recently vacated bed. An open jewellery box stands on a table which is covered by a richly patterned cloth. The onlooker feels that this is an exact representation of the scene. Even the chamber-pot has not been omitted for aesthetic reasons!

A warm golden light pervades the paintings of Pieter de Hooch (1629-1684(?)). As in *The Card-Players* his interiors often show an open door through which can be seen a vista of a courtyard or street. This warm convivial scene may, however, shortly be upset by the cheating that is in progress—the pipe-smoking gentleman (standing) is making signs to the card-player in the black hat!

Dutch artists were outstanding for their delicate technique and variations in the rendering of light. These qualities reached a peak with the work of Johannes Vermeer (1632-1675), The *Lady at the Virginals* is lit by a cool, silvery-blue light. The calm serenity and beauty of Vermeer's work is achieved by a careful harmony of the whole—light, colour, perspective and design are carefully harmonized, and the forms of figures, furniture, pictures, etc., are balanced with almost geometrical precision.

Occasionally when genius appears in art it cannot easily be fitted into a group or school of painting. The artist must be placed in a class of his own. Such is Rembrandt van Rijn (1606-1669). His art expresses the complex contradictions of life—sorrow, beauty, goodness and tragedy—particularly in his portraits of old people whom he painted with great sympathy and understanding. *The Artist's Mother* is an exquisitely painted masterpiece which seems to portray all humanity rather than one particular old lady. *The Shipbuilder and his Wife* (see illus. no. 2) also shows Rembrandt's depth of understanding. The shipbuilder turns anxiously from his plans as he listens to the news his wife brings, and takes the message from her. Two of the qualities which made Rembrandt so great an artist can be seen in this painting—the richness of texture and the dramatic use of light and shadow.

The Dutch, who were very much at the mercy of the winds and the sea, accurately observed the changing atmospheres in their landscapes and seascapes. *The Windmill* by Jacob van Ruisdael (1628/9-1682) has a melancholy mood with its overcast sky, in contrast to the *Evening Landscape* by Aelbert Cuyp (1620-1691) which is bathed in a glowing golden sunlight. *The Passage-Boat*, also by Cuyp, is a fine example of Dutch seascape.

2. REMBRANDT
THE SHIPBUILDER AND HIS WIFE
(Reproduced by gracious permission of Her Majesty The Queen)

The seventeenth century was the Golden Age of Dutch art, and the mirror of *genre* painting has left a portrait of a society rarely shown with such clarity in art.

[The exhibition will be open until next year. Hours of opening: Tues.-Sat., 11 a.m.-5 p.m. (closed Mondays), Sun., 2-5 p.m. Admission 15p (students 5p.)].

YVONNE HIBBOTT, A.L.A.

MUSIC SOCIETY CONCERT, 27th MAY, 1971

Was it not Rossini, in whose memory Verdi composed the Libera Me, who said, "Give me a laundry list and I'll set it to music"? However, it was fortunate that Verdi was sufficiently parsimonious to include the epitaph for one man in the Requiem for another. Moreover, the generosity of his invention in the remainder of the existing work allowed the Bart's Choral Society to demonstrate their considerable talents. Our expectation of a high standard of singing was more than fulfilled by the chorus, particularly in the pianissimo passages. It was perhaps regrettable that the flamboyant Mr. Anderson did not subscribe to the common adage, "ne pas encourager the Brass".

The overall result was a somewhat unbalanced and monochromatic interpretation, notable for some fine orchestral playing and soloist singing. Miss Oriel Sutherland (contralto) indeed contributed a rare degree of intelligence and warmth, matched only in clarity and accuracy by Mr. Geoffrey Chard (bass). Inevitably in any performance by a group of musicians who are largely strangers to each other, mishaps of ensemble singing and playing will occur. However, even these few events, which were curiously more in evidence in the second half of the work, detracted little from the opulence of the evening. The Cannon Street trains did their best, but they could not mar the tranquillity of the Kyrie; indeed they succeeded in lending a certain subterranean quality to the Dies Irae.

ALEX STORBY.

BOOK REVIEWS

"Cancer Ward" by Solzhenitsyn (Penguin, 50p).

Originally published in two parts, Alexander Solzhenitsyn's Cancer Ward tells the story of a group of patients in a provincial hospital in the Soviet Union.

In Part I he presents the patients of the ward: people drawn from all spheres of Soviet society, whose only common ground is the fear of cancer. Rusanov enters the story a frightened but arrogant man, as a member of Stalin's Secret Police he is a privileged member of society who has achieved this position by putting "loyalty to the State" above all other considerations. He soon finds his power does not extend into the overcrowded cancer ward and that the politics of his fellow patients leaves something to be desired. The realisation that cancer can strike even Party Members is the first of many enlightenments he is to receive in the course of his treatment.

Kostoglotov is the type of person who would cause a headache in any hospital with his continual questioning of the right of the doctors to subject him to treatment which he considers worse than his original disease. Arriving at the clinic after an arduous journey from exile, Kostoglotov's crude and blunt character upsets most of the patients, and it is through frequent and often heated debates with his fellow inmates the author brings out the personality and deeply human qualities of his minor characters. They all have a story to tell and their indirect presentation coupled with the subtle insight into life they provide, make for excellent and easy reading.

Part II follows Kostoglotov's struggle against his cancer, and through his continual friction with the staff and patients Solzhenitsyn provides us with a startling insight not only into Russian life in general, but into the workings of the Stalinist police state, an insight made all the more ominous by the news of the resurrection of Stalinism by the Soviet satellite countries. On leaving, Rusonav and Kosloglatov go their separate ways, Rusonav returns to the world slightly shaken but hardly apologetic. Kostoglotov returns to his exile with a new awareness of life and the hope that his remaining years of isolation will not be wasted.

The blunt matter-of-fact way in which Solzhenitsyn presents us with a penetrating analysis of the social order of Russia in the time of the Stalinist Dictatorship shows no trace of bitterness although he himself suffered under the regime. His acute awareness of the seemingly trivial episodes of every day life provide the necessary vitality and realism to his characters. By the choice of his principal characters, Rusonav and Kosloglatov, he reveals the struggle between the liberal and conservative elements of Russian society.

Twice decorated while serving in the Red Army, Alexander Solzhenitsyn spent eight years in labour camps having been charged with making derogatory remarks about Stalin and, like his main character Kostoglotov, he was moved from there into a cancer ward. After spending three years in exile he was then allowed to return to Russia.

Cancer Ward was awarded the Nobel Prize for literature in 1970.

PETER A. F. SMITH

"Fifty Years of Communism". By G. F. Hudson (Pelican, 30p).

For all us staid old reactionaries at Bart's, G. F. Hudson's book "50 Years of Communism" is a must. In his book he aims at a review of Communism, both its theory and practice since 1917 when the bolsheviks captured power in Russia.

He introduces the book with an account of the basic origins of Marxism and how it grew until it was ushered into Russia in time to catch the revolution. He patiently explains the rather confusing transition from the democratic doctrine of the original French Revolution, to the collectivism of nineteenth-century radical thought which was to become known as Socialism or Communism. At one time Marxism was only one among several variants of social political thought and in the early chapters of the book it is shown how these various other ideologies had a profound influence on Marxism itself. The book goes on to provide an account of the rise of Communism in Russia and China with its various internal consequences. The latter chapters trace its influence in what the Marxists classify as colonial or semi-colonial countries, they also try and answer the question, What would Marx think of "Marxism? . . ." As one who had so little success in his lifetime he would certainly be pleased to find that fourteen countries now consider themselves Communist, although he would probably be disturbed by the fact that those countries, which according to his doctrine were ripe for a proletarian revolution, i.e. the United States, Germany, Britain, still "thrive" under a Capitalist rule.

Although not definitive, this book provides an interesting and useful account of the growth of a major political ideology.

PETER A. F. SMITH.

Penguin Modern Stories 8 (Penguin, 25p).

A collection of short stories is always difficult to review, as people's ideas on what makes for a good story differ so widely. The latest collection of Penguin Modern stories is no exception.

The first two stories by William Trevor, "Grass Widows" and "A Choice of Butchers", are hardly what one would describe as thrilling reading. The only way I can describe them is that they would both make rather poor Thirty Minute plays. Mr. Trevor has in fact written numerous television plays and his adaptation of "Grass Widows" should appear sometime this year. In direct contrast the three stories by A. L. Barker are simple and neat; she has a very witty style of writing which make all three amusing reading.

"False, Impossible Shore", written by C. J. Driver, is the story of "Mike", a young South African whose actions are dictated by something other than self interest. Driver examines the character of Mike through the eyes of his friend, who after 90 Days Detention has opted out of the South African political scene, and seems to have given up his youthful liberal ideas. Mike, however, after six years in Pretoria Central Prison for a political offence, is drawn towards more drastic action and one is left to judge what his motives are. Although only twenty-five pages long, Driver manages to portray the very deep and complex character of Mike in a sensitive fashion. It is worth buying or stealing this book just to read this story.

PETER A. F. SMITH.

Baldry, P. E. The battle against heart disease. A physician traces the history of man's achievements in this field for the general reader. Cambridge, *University Press*, 1971. 189 pp., illus. £3.

Dr. Baldry qualified from Bart's during the war, and has previously published a popular historical work, *The battle against bacteria*, 1965. This has been translated into Japanese and Norwegian, and other translations are in preparation. Heart disease has been very much in the public eye during recent years, and Dr. Baldry's latest book traces the development of our knowledge of the subject from the early Greeks, through the Renaissance with Leonardo da Vinci, Vesalius, Realdus Columbus, and Servetus. Harvey has a chapter to himself, to be followed by a section on Respiration and its purpose, featuring Malpighi, Stephen Hales, Priestley, Lavoisier, J. S. Haldane, Joseph Barcroft and L. J. Henderson. The Structure and function of the heart chapter mentions the contributions of Claude Bernard, Augustus Waller, Gaskell and Langley, Dale, Bayliss and Starling, among others. Withering and the foxglove; auscultation and percussion, with Auenbrugger and Laennec; the use and misuse of the stethoscope, featuring James Hope, D. J. Corrigan, Austin Flint and James Mackenzie; and chapters on the Generation of electricity in the heart, and Disorders of rate and rhythm, follow. We then encounter sections on diseases of the heart recounting the observations of Heberden, Parry, John Hunter, Adam Hammer, Allbutt, Osler and Lauder Brunton, who, incidently suggested the possibility of heart surgery. The modern period brings us to the recent widely publicised operations and operators, which may suggest to some of us that "prevention is better than surgical interference".

This book is well-produced and suitably illustrated. Although it is intended for the general reader, it will interest any medical man with an enquiring, historically-slanted mind. The addition of some references, or even of lists of books and articles for further reading, would have transformed it into a more useful study for the serious medical historian. But it is more difficult to find a publisher for a well-documented historical book, and the author is to be congratulated on contributing a "popular", but authentic history for those interested in the development of our knowledge of heart disease.

JOHN L. THORNTON.

The New General Practice 2. British Medical Journal. £1.25.

This book is a collection of articles that have appeared in the B.M.J. during the last two years and as such call for little criticism. There are however twenty-seven of them and taken together these set forth much of what can be done, is being done and is contemplated for the general practice of the future. The man of "with it" ideas may learn that some of his notions are more easily mooted than brought about. It is a great pity that there is not a paper pointing out that Health Centres can easily become third rate Outpatient Departments staffed by pseudo-specialists; that there is a

Parkinson's Law in the employment of more and more ancillary staff, computors and equipment, and that even an appointment system (too old hat a subject for this collection of papers) is not an unmixed blessing for the patient. Such a paper would prove a useful antidote to this heady dose of the shape of things to come.

Recommended reading for the enthusiastic G.P.—as well as some of the less enthusiastic Medical Officers of Health.

A. LEWIS.

Anaesthetics for Nurses by Joan Hobkirk, S.R.N. Nurses Aids Series. Price 90p. Baillière, Tindall & Cassell Ltd.

Anaesthetics is a subject almost completely disregarded during a nurse's training. Miss Joan Hobkirk, presently Sister in Charge of the Nuffield Department of Anaesthetics at the Radcliffe Infirmary, Oxford, has produced a readable and concise book aimed at stimulating the nurse's interest in this fascinating aspect of medicine. Included is much practical advice which will make the time spent in the Anaesthetic room, frequently frustrating and bewildering for the nurse, more enjoyable as well as more useful to the anaesthetist. Important reference material on drugs, apparatus and techniques is well presented.

This is a very useful and interesting book, though unfortunately not an essential part of a nurse's background reading.

E. A. FAIRCLOUGH.

"Textbook of Orthopaedic Nursing" by Robert Roaf and Leonard J. Hodkinson. Blackwell Scientific Publications. Price £3.00.

In writing this textbook of Orthopaedic Nursing the authors have provided a stimulating book on the subject: stressing the importance of maintaining a high quality of nursing in routine procedures. This book is primarily intended for Student Nurses, Physiotherapists and Occupational Therapists. It would be useful for ward reference on both Orthopaedic and General Wards because the text includes conditions which are not exclusively met in a Specialized Ward or Hospital.

The first part of the book is concerned with the science of Orthopaedics disabilities and the principles of Orthopaedic diagnosis and treatment. The second part gives in detail those parts of the Orthopaedic treatment the nurse needs to know, the practical aspects, application of splints and plasters, use of conservative methods and treatment and pre and post operative care for Orthopaedic patients. Each chapter commences with the basic Anatomy and Physiology followed by the Pathological changes and includes treatment. The material is well organized into paragraphs, facts ennumerated and very clearly presented in a distinct print which is easy to read although the pages are rather shiny to read under electric light.

It is an attractive book with plentiful illustrations, including x-rays, photographs and many line diagrams intended to emphasize in a simple and most effective fashion the salient facts.

The authors lay stress on the comprehensive nursing care of the Orthopaedic patient including rehabilitation and social care. Information not only useful whilst nursing in an orthopaedic ward but also in many different departments of the hospital. There are useful chapters on Multiple Injuries, the Paraplegic patient, safeguards against wrong operations, amputations and prosthesis, and affections of the brain and spinal cord. There is also a comprehensive Orthopaedic Glossary and Index together with advice on "cross references" in the main text.

Unfortunately the price at £3.00 may be thought rather high by the Student Nurse in training in a General Hospital.

E. G. ROWLAND.

BARTS SPORT

RUGBY CLUB REPORT

Apart from a few sparks of life, the season drew to a rather sad close with the combined effects of exams., vacations and dwindling enthusiasm taking their toll on playing strength of the Hospital. Add to this a number of reasonably serious injuries and the result is the usual Bart's inimitable end of season blues. Premonition of impending disasters came with the fiasco against Aldershot Services, who in their worst season for many years managed to beat us narrowly. Admittedly it was an early kick-off and they had a few Army "stars" playing, but that is little excuse for a bad Bart's performance. This was followed by a victory over Westcombe Park, then another win against Woodford, then a dreadful performance against Civil Service. As far as teams were concerned, Keith McIntyre made a world of difference to the pack when he played his first game of the season for the 1st team against Woodford, but against the Service a number of the team were at a wedding, so a poor team that any normal Bart's side would have demolished actually beat us. A rather bizarre mixture of conscripts included veteran John Gibson and Nigel Findlay Shinas, both of whom played very well. Incidentally the very daunting front row of Tommy Joy (the animal), Nick Best and Shane Sullivan demolished their opposition much to the amusement of the rest of the side, but the rest of the scratch pack did not fit very well together.

Against the Met. Police the following week another poor side strode on to the field rather like lambs to the slaughter. There was no really tall player in our side so no line-outs were won, and when Mick Martin retired with a kick on the head the backs were unable to stop the countless police attacks. At one time Bart's held their own for about 25 minutes, but were indiscreet enough to put over a penalty and this started another spree of police scoring. In future this game must be played early in the season; to play this fixture late in the season when there is never any chance of putting out a good side is just suicide, and the quickest way of losing a better fixture.

Welsh Tour, 1971

Apart from two really Beautiful People who went direct to Wales from Devon, the Tour party, reduced by two eleventh hour cry-offs, set off on Good Friday morning. For the first time in living memory, the Glynneath game actually started on time. So used to us arriving late are the crowd that some of them were still arriving at half-time, confident of being in time for the kick-off! The Tour Party was a weak one with no recognised scrum half (apologies, Fenton) and the service to the backs was always poor. John Capper and Nick Best were the only two to play really well, however, and we lost by 18-5 after a reasonably open game.

Against Treorchy the next day there was no score in the first half, but 15 points were put against us in the last few minutes of the game. The match took place on a beautiful day in front of a large holiday crowd, nearly all of whom saw Laidlow's nose broken by a Treorchy fist midway through the first half. He later came back on to the field on the wing but was obviously rather pre-occupied with his smashed nose. The Treorchy winger then scored a good try to open the Treorchy account, and what had been a very closely fought game degenerated when Bart's gave away two more easy tries. Final score 19-0.

The Treorchy dance after the game provided the usual amount of amusement. John Capper was unanimously awarded the Wooden Spoon—there were no other contenders. Nick Best, much to everyone's surprise, retained his flowing locks and Mason his moustache, and Jack Davies at the Dunraven Hotel looked after us very well. Rumour has it that he is giving up at the Dunraven this year, but things are still in the balance and we hope it remains no more than a rumour.

Sunday morning arrived in due course, and it was fifteen very quiet people who drove away from Wales. On the next day, Easter Monday, our home game against Huddersfield took place in brilliant sunshine. Several newcomers to the side played above themselves, particularly Dick Firmin and Dick Fowler, and John Wellingham had a brilliant game at scrum half. They were a very good side, but brought out the best in nearly everyone in the Bart's team, and in the end after a very exciting game, Huddersfield won by 6-3. Jeremy Sowden should be playing in the 1st XV next year, and there will be plenty of talent around if only it can be directed on the proper course. This year Bart's has suffered from being the left overs from a doubly victorious Cup side. Next year a completely new approach by a committee of young players can start building again, and it remains for the right people to be elected at the A.G.M. in May.

JOHN LAIDLOW.

BOAT CLUB REPORT

Races against Guy's. 10th March.

1st VIII's race—May and Baker Trophy.

For this race we combined our senior IV with three ex-university oarsmen and one member of the Leander Grand VIII. On paper the best crew ever fielded by Bart's (with three Henley medallists and three Youth Internationals on board), we were beaten by 1½ lengths—only proving once again that fitness is what counts in modern rowing.

2nd VIII's race—World Medicine Shield.

The Junior VIII had trained hard for this event and got the bit between their teeth, striding right away from Guy's to win by 1½ lengths.

3rd VIII's race.

This year we had an inaugural race between our beginners crews, which we hope will be continued in future years. Our novices surprised us once again this season by setting a splendid rhythm and winning by a length and a half.

Kingston Head of the River Race. 6th March.

The senior IV and Junior VIII entered for this event, and owing to transport difficulties were the last crews to go afloat. The IV had a thoroughly uncomfortable tow, in a borrowed boat and did very well to finish 9th in the fours division, 5 seconds ahead of our old rivals St. Thomas's. (Result—9th out of 24, time—23'36.)

The VIII, rowing a substitute stroke, had a reasonable row and finished 47th equal out of 73.

Tideway Head of the River Race.

We had intended to enter the Junior and Novice VIII's for this event, the senior IV rowing in a scratch Thames R.C. crew; however, in the end half the Junior crew were unable to row for various reasons so we put out a scratch senior/junior VIII and a novice VIII.

The "A" crew, with only one practice outing, were not expecting to do brilliantly. However, we passed four crews and had a very good row—we thought. Unfortunately, we were obviously rowing amid some very feeble competition which led us into a sense of false security, since our final placing was 193rd out of 320

entered. The captain discovered the following week that he had been rowing with a slipped disc! The Novice VIII in their first major Tideway event put up a fine performance to beat 23 other crews.

Hospital Results

76th	Guy's I	Time 19-14
82nd	St. Thomas's	19-16
193rd	Bart's I	20-03
259th	London I	20-38
275th	Royal Dental	20-47
277th	London II	20-49
283rd	Guy's III	20-56
297th	Bart's II	21-17
320th	Guy's II	25-51

SAILING CLUB

Harvey Wright Golden Bowl. 3rd and 4th April.

Team: John Shaw, Dave Patuck, Charles Russell-Smith, Richard Gabb, Pete Meade and Richard Wells.

The Harvey Wright Golden Bowl was sailed at Burnham-on-Crouch on the weekend of the 3rd and 4th April. Six teams from the London hospitals took part sailing in the club's Enterprises.

Bart's were drawn against St. Thomas's in the first round on the Saturday in what were quite blustery conditions—wind force 4, occasionally 5. As usual, it took some time to find six boats with all the correct gear, and even longer to find the Bart's team—who believing themselves to have been drawn last had repaired to the nearest ale house. However, we managed to be on the water on time for the 10 minute gun!

On the Saturday evening the annual United Hospitals Sailing Club dinner was held at the Royal Burnham Sailing Club. This was an excellent end to an exhausting first day, with a grand finale when Charles Russell-Smith succeeded in winning one of the serving wenches' garters.

After a rather crowded and uncomfortable night in the U.H. "house" we took to the water against the London Hospital. We beat the London convincingly to find ourselves against a strong Guy's team in the finals.

It was decided that the finals should be raced on two points races. The first race put Guy's in the lead by a short margin. In the second race, due mainly to some excellent sailing by John Shaw, we picked up sufficient points to win the trophy.

A thoroughly good weekend was had by all and the trophy was returned to Bart's after an absence of one year.

RICHARD GABB.

MEN'S TENNIS CLUB REPORT

Last season proved exceptionally successful for the Club. We won the U.H. Cup, reached the final of the U.L.U. Cup, and were second in the U.H. League (1st Division). There is obviously still a little room for improvement and it is hoped that this will be accomplished this season. The team has lost a couple of its senior players but has been strengthened by a very promising new intake of students and we now have three Junior Wimbledon players.

The regular features of the tennis season, namely the Oxford Tour, mixed, and 2nd VI matches, have been adhered to, and in addition this year we have fixed Singles Tournaments for Sports Day.

Unfortunately we have already met with the problems of other hospitals not turning out teams for matches fixed with them. Thus our record is five friendly matches played at Chislehurst amongst ourselves and two victories: 9-0 v. King's College Hospital and 7-2 v. Downing College, Cambridge.

On tour our match v. Pembroke College was rained off and the one v. Lincoln College cancelled. However, we managed to team the Captain of Pembroke with Kevin Jennings, and Andy Young and John Howell beat them 6-3, 6-2, to gain us our only victory.

Our other achievement on tour was not to lose Andy Young, as well as his punting pole.

This year we hope that we can take both the U.H. Cup and the U.H. League. It would be the first time a Bart's tennis team had done so. It is likely that such a success would enable us to improve the quality of our 1st VI fixture list.

J. WELLINGHAM.

HOCKEY CLUB REPORT

Semi-final of U.L. Cup v. King's College: won 1-0

King's College sportingly agreed to play this fixture at 11.00 a.m. on Saturday, 6th March, Bart's being unable to play on the previous fixture date. Bart's started the match with only ten men. Price making his dramatic entrance at half-time. Almost from the start, Bart's were under considerable pressure from a King's forward line-up containing a Welsh International. During this time, Reid and Fraser (as uncompromising as ever) did well to prevent King's from scoring. In one of Bart's few sorties out of defence, a cross from Smallwood on the right found Robinson unmarked on the left of the D; his first-time shot gave the goalkeeper no chance. A few minutes later a similar incident resulted in Robinson shooting inches past the far post. The game in the second half continued in much the same vein, with Bart's conceding six short corners, one awarded as a result of a Jack Nicklaus type drive from Fraser which failed to connect with the ball. These things happen in moments of tension!! For brief periods in this half, Bart's attacked the King's goal; prominent in these sallies were Lunt and Smallwood who used his stickwork to good effect on the right flank. Eventually, to sighs of relief from the Bart's players, the final whistle blew—Bart's were in the final of the Cup.

Team: Price, Reid, Fraser, Yates, Coleman, Tweedie, Smallwood, Young, Lunt, Ashton, Robinson.

Final of U.L. Cup v. Guy's: 10th March. Score 0-0 after extra time. Guy's won on long corners.

The final of the U.L. Cup was played in beautiful conditions on the pitch at Motspur Park. Bart's/Guy's matches have always been "needle" affairs and it soon became apparent that this match was going to be no exception. Bart's were the first to settle down after a scrappy opening few minutes, and soon forced a short corner: Reid was only just wide with the answering shot. Soon after, Robinson was just short in getting to a cross from Edmondson. Guy's then forced two short corners which somehow were scrambled out of defence. The teams changed ends with the first half honours just about even. The second half saw Bart's take command of the game, with good running off the ball and short passing. As in some of our previous matches, however, the build-up of attacks was good, but bad finishing let us down. Ashton at right half distributed the ball well, and Yates and Coleman as centre backs commanded the middle. Fraser and Tweedie played with an understanding which sealed up the left side of the defence. Despite ample possession the all-important goal eluded Bart's. Extra time was played, and one long corner awarded to Guy's decided very unsatisfactorily where the Cup would reside for the next twelve months.

Team: Price, Reid, Fraser, Ashton, Yates, Coleman, Tweedie, Smallwood, Young, Edmondson, Robinson.

J. TWEEDIE.

A TRAGIC PILGRIMAGE IN 1180 A.D.

A case for Diagnosis and for suggestions as to treatment on modern lines.

(Sent in by Dr. J. A. Struthers)

In the twenty-third year of his Abbacy, it came into Abbot Hugh's mind to go to the shrine of St. Thomas to pray; and on his way thither, upon the day after the Nativity of the Virgin (9.IX.1180), he had a grievous fall near Rochester, so that his knee-cap was put out and lodged in the ham of his leg. Physicians hastened to him and tortured him in many ways; but healed him not; and he was carried back to us (at Bury St. Edmunds) in a horse litter and was devoutly received as was his due. To cut a long story short his leg mortified, and the pain ascended even to his heart, and by reason of the pain a tertian fever laid hold on him, in the fourth fit of which he died and gave up his soul to God on the morrow of the day of St. Brice (14.XI. 1180). Before he died, everything was pillaged by his servants so that nothing was left in his house but three-legged stools (tripodes), and tables which they were unable to carry off. The Abbot himself was scarce left with his coverlet and two old torn blankets which someone had placed over him after removing those that were whole. There was nothing worth a single penny that could be distributed to the poor for the benefit of his soul.

The Chronicle of Jocelin of Brakelond. (Translated from the Latin by H. E. Butler, M.A., D.Litt.) P. J. London: Thomas Nelson and Sons, 1949.

SAINT BARTHOLOMEW'S HOSPITAL JOURNAL

Founded 1893. Vol. LXXV No.8

Editorial

It has been an accepted fact since the inauguration of the National Health Service in 1948, that a doctor may choose whether or not he confines his practice of medicine solely within the boundaries of the Service: this applies whether he be a general practitioner or a consultant. It is also a widely held opinion, that anyone who cares to pay extra for their medical care should be free to do so. By paying from his own private pocket, a man has the choice of doctor, nursing home, and, to a certain extent, time of treatment: indeed, there are many who consider that anyone earning above a particular income should be made to pay for these services. Similarly, there are available in some hospitals amenity beds, where a patient may pay for the privilege of his own room, but without the special attention given to private patients.

The whole question of the moral correctness of private practice has hit the headlines again with the allegations by the JHDA of abuses of the NHS by certain consultants in the interest of their private practice. Whilst this is undoubtedly true for a minority, and it has been stressed by the JHDA that this is a minority, it is engendering a feeling amongst the protagonists of a totally Health Service doctor, that the whole of private practice is determining the welfare of the common man. Thus we have the great waiting list controversy.

It is inevitable that there will be a waiting list for any consultant surgeon's attention. What is not commonly known is that to have a viable hospital operating list, there must be a minimum of some fifty patients of varying pathologies, severity and operation time. Multiply this by the number of surgeons, including Orthopaedic and ENT surgeons, not to mention the gynaecologists and ophthalmologists, and the figures become seemingly astronomical. No surgeon is deliberately going to keep his waiting list as long as possible, there are few who would willingly watch a patient suffer, for whatever the cause, and private gain from this would be minimal, but it is often surprising to see the reactions of the general public to the letter summoning them for operation. Many do not bother to reply: others have organised their summer holiday, or their birthday party, for the date in question, and if it is a choice between the bank holiday celebrations and their piles, there is no doubt about which comes out on the winning side: it is a matter of priorities. People in general have their own ideas about who they would like to perform their operation, "the one who did Mrs. X's gallstones and made a lovely job of it, Doctor," is far better than any other: thus the popularity of an individual will to a certain extent dictate

his waiting list. How often are letters sent to people who repeatedly refuse to attend? Must the surgeon keep on inviting them, or will a letter to the GP suffice, explaining the non-attendance and offering ONE further appointment, as for outpatients? Few surgeons can organise their list several weeks in advance, and the shortness of notice is explained to patients when they are added to the list: if they are not on the phone, there is no way of filling any gaps left by refusals, and consequently the whole plan is sent awry. Doctors, alas, are public servants, and treated as such. Furthermore, as more disease is discovered, or discovered early enough to be operable, and as people live longer, the number of, say, arthritic replacements is bound to increase.

Recently, a letter to the national press from a GP stated that he regarded his private practice as his proper practice, since only then could he spend the time with his patients that he felt he should: the NHS is automated medicine where the enormous number involved makes the ideals impossible to fulfil. An interesting comparison is that of a doctor doing extra duty and earning approximately 50p for each call he made, and his television engineer charging £1.50 for his. The question of time spent in each situation was not mentioned.

The obvious answer to all this is more doctors. Easier said than done. One cannot help feeling, however, that the Ministry is getting bogged down in trivia, and the answer is to let the man who so chooses pay for his troubles.

Letters

WARD SHOWS

49 Brockley Road,
Kings Stanley,
Stonehouse,
Glos.

Dear Sir,

Your editorial in February invited opinions on the continuance of Ward shows at Christmas, and I feel sure that after Miss Jones' statement in this month's Journal and the figures from the questionnaire to nursing staff, you will feel inclined to revise the last line of your editorial.

May I refer to the first line of your third paragraph: "Patients are not the only people in hospital over Christmas." I agree, but the important fact is that everyone else is only there because of the patients' needs. Surely we can wait till we have gone off duty to have our fun.

I consider the time has at last come, rather late, to stop ward shows, along with radio loudspeakers and television sets (unless the sound is "piped" to earphones). The convalescent patients who might enjoy these things can manage without them more easily than the poorly ones to whom they are a disturbance.

To prove that actual harm is done may be difficult, but the staff who are most constantly with the patients and whose duty it is to anticipate their needs and wishes should be accorded their sapiential authority.

Yours faithfully,
MARGARET GIFFORD,
(Still a Matron.)

2, Chessel Avenue,
Bitterne,
Southampton, SO9 3LJ.
June 3rd, 1971.

Dear Madam,

Matron's letter in your June issue prompts me to add another excellent reason for the cessation of the Ward Shows. In the past I have enjoyed taking part in them and although the humour could be classified as "medical" yet the shows were for all to enjoy.

I came this year to see the "pot-pourri" and hoped to spend an enjoyable evening with you. True, there were two excellent items which proved that to delight an audience it was unnecessary to descend to the gutter. The type of mind which would appreciate most of the others could see them done far better at any sleazy show in the West End. They were a disgrace to any dirty-minded immature fourth-form schoolboy and were not funny even at this level. I shall certainly not be coming again, and I am sure few patients will remember them with any pleasure. The sooner such type of performance was dissociated from the good name of Bart's the better.

Yours sincerely,
A. OAKLEY JOHN.

(We would like to point out to Dr. Oakley John that the "Pot-Pourri" is very different from the Ward Shows, and makes no claim to being the same.—Ed.)

The Students' Cloakroom,
St. Bartholomew's Hospital,
West Smithfield,
London, E.C.1.
11th June.

Dear Sir,

The Chief Nursing Officer's rather overdue statement of her views does seem to me to be rather two-faced. The article (in your May edition) as a whole, seems to be a straight-forward plea to remove the ward-shows from the wards (although admittedly no precise statement to that effect is made); and yet simultaneously the Chief Nursing Officer "would wish as *many* people as possible to be able to enjoy themselves". Surely the chief effect of moving the ward shows to Gloucester House or the Lay-Staff Canteen would be to drastically curtail the number of patients able to see the shows (or am I labouring under a misapprehension that the shows were to amuse and entertain the patients!).

Certainly those people (including myself) in the shows last year, could vouchsafe how much and how wholeheartedly, the patients enjoyed them. I personally was told by many patients how much they had made Christmas away from home more bearable. Indeed, one enthusiast confided in me that she was planning to induce a recurrence of her right inguinal hernia in about eleven months' time, to enable her to return for next year's shows!

Obviously the need for sobriety and the careful planning of which wards are best suited to avoid the very ill patients are of paramount importance.

However, since probably more than 90% of the patients are not very ill, and the term "care of the sick" must include mental as well as physical well-being, I would have thought that this form of entertainment (in these secularized days especially), was just the thing to help patients recover from the mental blow of being kept in hospital over Christmas, largely separated from their families and friends.

Yours faithfully,
D. A. ISENBERG.

NURSES' REPORT

Dear Editor,

As Secretary of the Nurses' Representative Council, I would like to express my great interest in the letter written by "our correspondent", namely the Nurses' Report of the June Journal.

Our Council has existed for many years and each successive committee has had one aim in common, that is, to listen to the new ideas and the new problems which are bound to arise in an institution of intelligent young people. One of our successful ventures is the coffee lounge mentioned in the report.

It is certainly true to say that apathy could be described as "endemic" at our hospital: however, the more one becomes involved in the organization of groups, the more one finds it is the minority who are active and the majority who are contented to "let the water flow under the bridge". How valuable these two groups are in a community, and who are we to disturb the latter folk? However, let the few of us join forces and work together as the responsible people described in the letter.

Therefore, may I say to those who wrote this letter that I am delighted at their enthusiasm, but I must point out to them that it is the follow-up of this report which will bring results. A little more than the initial outburst is required to achieve your goal, therefore "follow the strength of your convictions" and come to our representative Council meetings, where we can all contribute constructively towards investigating these problems.

DAPHNE L. KNIGHT,
Secretary, N.R.C.

College Hall,
Charterhouse Square.
June 12th, 1971.

Dear Editor,

After due consideration of the last number, it is felt that the "Rifle Club Report" should have been entitled "Shotgun Club Report". On the subject of Student/Nurse relationships, I believe Bart's men have always understood the advantages of a united front with the Nursing body.

C. R. RUSSELL-SMITH.

Announcements

Engagements

DARKE—PALLIN—The engagement is announced between Mr. G. H. Darke and Miss E. S. Pallin.

LIBBY—HARWOOD-YARRED—The engagement is announced between Dr. G. W. Libby and Miss J. Harwood-Yarred.

KAVANAGH—PABLOT—The engagement is announced between Mr. Thomas Gerald Kavanagh and Dr. Susanne Mary Pablot.

Marriage

CURRUTHERS—MEDVEI—The marriage took place on May 22nd between Dr. Richard Stuart Curruthers and Miss Victoria Medvei.

SALT—SULLIVAN—The marriage took place on June 19th between Dr. John C. Salt and Dr. Brigid D. Sullivan.

Deaths

BUTTERY—On April 27th, Mr. J. W. D. Buttery, M.A., F.R.C.S.Ed., F.R.C.O.G. Qualified 1925.

DAHNE—On June 12th, Mr. S. F. L. Dahne, M.D., F.R.C.S. Qualified 1927.

GORDON—On May 29th, Mr. C. J. Gordon, M.A., M.B., B.Ch.Cambs., F.R.C.S. Qualified 1936.

GUPTA—On May 22nd, Dr. H. C. Gupta, M.B., B.Chir., M.R.C.S., L.R.C.P. Qualified 1943.

PEARCE—On June 5th, Mr. Harry Pearce, M.B., F.R.C.S. Qualified 1937.

Change of Address

The new address of Dr. and Mrs. A. N. Crowther is 77, Church Street, Tewkesbury, Glos.

Dinner

The Annual Dinner of the Tenth Decennial Club will be held in the Guild Room of the hospital on Wednesday, October 20th, 1971, at 7 for 7.30. Dinner jackets should be worn.

For further information please contact Dr. George Rossdale, 36 Montagu Square, London, W1H 1TL.

The Journal has vacancies on the editorial side. If anyone is interested, would they please leave a message in the Journal tray in the Students' Cloakroom.

Awards

Mr. John Ward has been awarded the "Order of Hipolito Uranue", Peru.

Birthday Honours

K.B.E. (CIVIL DIVISION)

Professor Douglas Hubble, C.B.E.

Bart's Drama

The Drama Society will be performing "The Bird Garden" by Paul Swain and two "Ubu" plays by Alfred Jarry in the Edinburgh Fringe Festival, August 23rd to September 11th.

Tickets from Hospital Library or Janet Dinwiddie in W.S.C.R.

SWIMMING TIMES AT GLOUCESTER HOUSE POOL

Monday
*Men: 12.30 p.m.—2.30 p.m.
**Women: 3.30 p.m.—6.0 p.m.
Mixed: 7 p.m.—8.30 p.m.

Tuesday
Nursing Staff only: 9 a.m.—12 mid-day.
**Women: 1 p.m.—3 p.m.
Mixed: 4 p.m.—5.30 p.m.

Wednesday
Nursing Staff only: 9 a.m.—12 mid-day.
*Men: 1 p.m.—4.30 p.m.

Thursday
**Women: 2.0 p.m.—4.0 p.m.
Mixed: 5 p.m.—6.30 p.m.
Nursing Staff: 7.30 p.m.—9.0 p.m.

Friday
Nursing Staff only: 9 a.m.—12 mid-day.
**Women: 1 p.m.—3 p.m.
Mixed: 3.30 p.m.—5.30 p.m.

SATURDAY AND SUNDAY POOL CLOSED.

** Open to all Resident Staff and to Physiotherapists, Radiographers, Dieticians, Lay Staff and Medical Students.

* Open to all Medical Staff, Lay Staff and Medical Students.

Recent Papers by Bart's Men

To ensure that your papers are recorded here, please send reprints to the Librarian. Although we look through the journals received in the Library, it is not always easy to identify Bart's personnel, and contributions to other periodicals will not be seen unless reprints are received.

ARBAB, A. G., and TURNER, P. Comparison of propanolol and LB46 (prinodolol) on hyperthyroid tachycardia. *Postgrad. med. J.*, 47. 1971. pp. 329-331.

BACKHOUSE, K. M. (with others). Tendon involvement in the rheumatoid hand. *Ann. rheum. Dis.*, 30, 1971, pp. 236-242.

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BRISTOW, Christine, *see* LETCHWORTH, A. T., and others.

BURMAN, J., *see* TURNER, P., and others.

CASTLEDON, W. M. Meckel's Diverticulum in an Umbilical Hernia. *B.J.S.*, 57, 12, p. 932.

*CATTELL, W. R. Diuretic therapy for the control of oedema. *Brit. J. Hosp. Med.*, 5, 1971, pp. 819-835.

CHAMBERLAIN, D. A., *see* COLTART, D. J., and others; GIBSON, D. G., and others.

CHARD, T., *see* LETCHWORTH, A. T., and others.

CHERRINGTON, N. K., *see* TURNER, P., and others.

*CLARK, J. B. (with others). Metabolism of rat brain mitochondria. Studies on the potassium ion-stimulated oxidation of pyruvate. *Biochem. J.*, 123, 1971, pp. 83-95.

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*COLTART, D. J., and others. Effect of cardiopulmonary bypass on plasma digoxin concentrations. *Brit. Heart J.*, 33, 1971, pp. 334-338.

——, see also GIBSON, D. G., and others.

CROWTHER, D. Intensive treatment of acute leukaemia. *Brit. J. clin. Pract.*, 25, 1971, pp. 271-277

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——, *see also* CLARK, J. B., and others.

FRASER, Donald. Cracked pitchers (President's address). *Proc. Roy. Soc. Med.*, 64, 1971, pp. 629-632.

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*HAVARD, C. W. H. (with others). Effect of diazepam (Valium) on dialysable thyroxine. *Postgrad. med. J.*, 47, 1971, pp. 326-328.

HICKS, Deborah C., *see* TURNER, P., and others.

HOFFBRAND, A. V. Recent advances in the megaloblastic anaemias. *Brit. J. clin. Pract.*, 25, 1971, pp. 257-262.

HOWARD, M. R., *see* COLTART, D. J., and others.

KEELE, K. D. The uses of medical history. *Medicine Today*, 4, 1970, pp. 205-207.

KETTLEWELL, M. G., *see* COLTART, D. J., and others.

*KEYNES, W. M. Body-distribution of ammonium-nitrogen in liver failure. *Ann. Surg.*, 173, 1971, pp. 604-612.

*——. Hemodialysis of ammonium nitrogen. *Surg. Gynec. Obstet.*, 132, 1971, pp. 657-661.

KNILL-JONES, R. P. (with others). Treatment of Parkinson's disease with amantadine and levodopa. *Lancet*, May 29, 1971, pp. 1083-1087.

LANDON, J., *see* LETCHWORTH, A. T., and others.

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MACKINNON, J., *see* TURNER, P., and others.

MERCER, J. L., *see* COLTART, D. J., and others; GIBSON, D. G., and others.

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*ROUSSEAU, B., *and* SLADEN, G. E. Effect of luminal pH on the absorption of water, Na+ and Cl− by rat intestine *in vivo*. *Biochim. Biophys. Acta*, 233, 1971, pp. 591-593.
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——, *see also* ARBAB, A. G., and ——.
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WOOLNOUGH, M., *see* TURNER, P., and others.

*Reprints received and herewith gratefully acknowledged.

HOUSE APPOINTMENTS

1st July, 1971 to 30th September, 1971.

Consultant Staff	House Officers	Wards *Male*	*Female*
Sir Ronald Bodley Scott Dr. W. E. Gibb	J. H. Scarffe D. H. Matthews	Harvey	Luke
Dr. G. W. Hayward Dr. H. Wykeham Balme	Mrs. G. M. Vanhegan P. A. Dieppe	Smithfield	Mary
Dr. K. O. Black Dr. A. M. Dawson	R. T. B. Rogers W. E. J. Leverton	Rahere	Colston
Dr. N. C. Oswald Dr. G. Hamilton Fairley	J. M. Winner K. McIntyre	Dalziel	Annie Zunz
Professor E. F. Scowen Dr. A. G. Spencer	H. R. Tubbs R. C. Froggatt	Stanmore	Garrod
Mr. E. G. Tuckwell Mr. M. A. Birnstingl	J. F. Burman N. McI. Johnson	Rees Mogg	Paget
Mr. D. F. Ellison Nash Mr. J. D. Griffiths	W. A. P. Hamilton D. M. Davies	Waring	Abernethy
Mr. J. O. Robinson Mr. H. B. Ross	Miss J. Begg P. J. Ciclitiria	Bowlby	Heath Harrison
Mr. Ian P. Todd	J. F. Redden Miss H. Andrews	Fleet Street	Harmsworth

Professor G. W. Taylor Mr. I. McColl	Miss J. A. Almeyda M. G. Britton	Percivall Pott	Lawrence
Dr. K. O. Black	C. I. V. Franklin	Casualty House Physician	
Mr. J. O. Robinson	W. R. Tingey	Casualty House Surgeon	
Department of Child Health Dr. P. J. N. Cox	N. Thatcher T. R. Tickner	Lucas Kenton	
Ear, Nose and Throat Department Mr. J. W. Cope Mr. R. F. McNab Jones Mr. A. P. Fuller Mr. L. N. Dowie	M. T. A. Williams T. M. O'Carroll	Henry Butlin	
Eye Department Mr. J. H. Dobree Mr. M. A. Bedford	P. A. G. Payne D. C. Gibbons	Radcliffe	
Department of Obstetrics and Gynaecology Mr. D. B. Fraser Mr. Gordon L. Bourne Mr. David Williams Mr. C. N. Hudson	D. R. Taylor (O) J. W. Blake James (O) A. J. Breeson (G) S. W. Hammersley (G) (G)	Martha Elizabeth Sandhurst Pitcairn Harley	
Dental Department Mr. T. T. Schofield Mr. F. R. Coffin Mr. B. D. Markwell Mr. D. Winstock	C. S. Power (until 31-7-71)	Bowlby	Heath Harrison
Orthopaedic Department Mr. J. N. Aston Mr. C. W. S. F. Manning Mr. A. W. F. Lettin	R. M. Kahane Miss M. Stewart R. J. Lambert	James Gibbs Henry	Hogarth
Department of Thoracic Surgery Mr. O. S. Tubbs Mr. I. M. Hill	S. B. J. Sutcliffe T. A. N. Waller	Vicary	
Department of Neurological Surgery Mr. J. E. A. O'Connell Mr. R. Campbell Connolly	M. A. P. Spencer	W. G. Grace	
Skin Department and Special Treatment Centre Dr. P. F. Borrie Dr. D. D. Munro Dr. C. S. Nicol	C. M. Booth	Smithfield Rahere	Mary Colston
Department of Neurology and Psychological Medicine Dr. J. W. Aldren Turner	R. C. Staughton	Stanmore Harvey Radcliffe	Garrod Luke
Professor W. L. Linford Rees Dr. C. M. B. Pare		Dalziel	Annie Zunz
Department of Urology Mr. J. E. A. Wickham Mr. C. A. C. Charlton	F. M. Graham	Fleet Street Waring	Harmsworth Abernethy

A LOOK AT PHYSIOTHERAPY -- AN ATTEMPT TO ANSWER SOME OF YOUR QUESTIONS

By MISS D. M. VALLOW, M.C.S.P., S.R.P.
(Superintendent Physiotherapist)

Physiotherapy stems from the Greek "therapeuo" meaning "heal", thus the whole word may be interpreted as "healing by physical or natural means".

We have been in existence in one form or another for well over 2,000 years—on occasions it feels all of that! I do not need to tell Bart's readers that, as a hospital, we have led the world in many fields of work. It may be of interest to know that Bart's was well to the fore with the development of physiotherapy in this country. It is recorded between the years 1123-1144 that one "Adwyne from the town of Dunwych in Suffolk" was admitted to this hospital. He had "no power of his limbs", and it would appear that with the help of the Apostle Bartholomew and various excercises, this gentleman progressed through the stages of rehabilitation which would, today, bring him to the Occupational Therapy and Physiotherapy Departments. He left the hospital as a carpenter: how's that for resettlement?

We, of course, understand that the definition of a physiotherapist is "One who works her fingers to somebody else's bone." En passant, the original unadulterated quotation also obtains!

Training

The requirements for acceptance for training in this country have not been laid down for quite the 2,000 years previously mentioned. They include: having a good academic and practical standard; being capable of accepting a very high degree of discipline; being physically graded A.I. + and having both gymnastic and sports ability. Personality is essential to a career which demands such an active, yet sympathetic, approach to patients.

Can such a being exist? Apparently the answer is yes, but they are few and far between.

At the present time, officially, the pre-educational requirements laid down for acceptance to training are

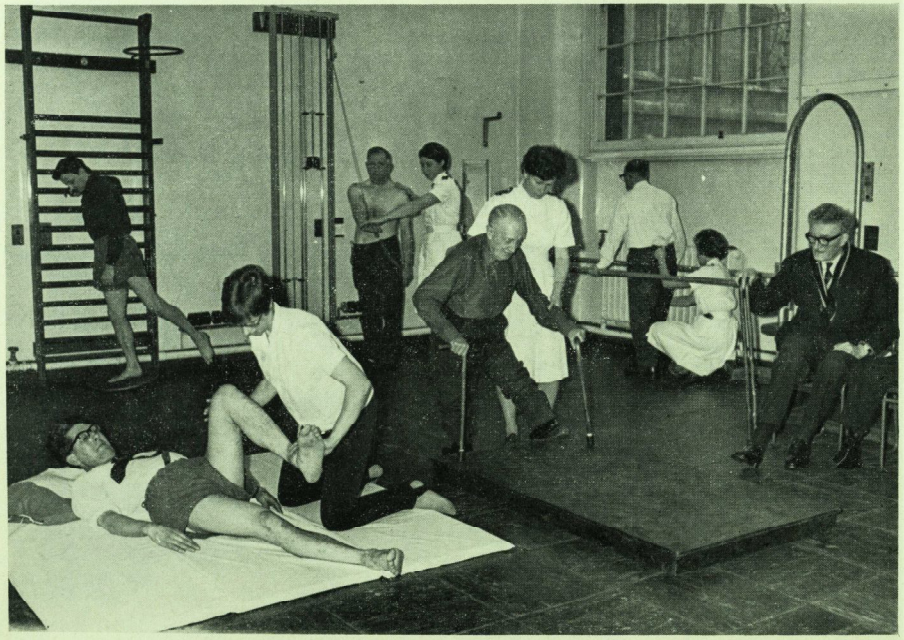

Fig. 1. *Rehabilitation—Various Gym activities.*

five G.C.E. subjects at "O" level. Factually, however, almost all schools require seven subjects and the majority also require "A" level study.

Once accepted, the physiotherapy student embarks on a three year, full-time course of study, culminating in examinations which provide her with a diploma and membership of the Chartered Society of Physiotherapy. If she is to work in the National Health Service, she must also become State Registered. There is now in Britain no course of training or qualification (for the purpose of State Registration) other than those of the Chartered Society of Physiotherapy which is recognised by the Physiotherapy Board of the Council for Professions Supplementary to Medicine.

Teaching faculties for physiotherapy are always set in a major teaching hospital having also a medical teaching faculty and associations with university staff. The subject matter of such a training covers a very wide field, and many facilities are necessary. For example, the physiotherapist's knowledge of anatomy must equal that of the medical student if she is to re-educate the function of anything from a single tendon suture to a complete quadriplegia accurately (see fig. 1). Likewise, her knowledge of mechanics and body mechanics must be absolute, relating to the normal in order to re-habilitate the abnormal.

Physical clinical assessment is of paramount importance. Upon her skill in physical treatment, and her accuracy in physical assessment, will rest many medical decisions as to the final management of a patient. Whether he will: —

1. Gain full physical recovery and return to his normal work.
2. Gain partial recovery and, depending upon his occupation, return to his normal work.
3. Undergo industrial re-habilitation, re-settling him into society as a wage earner in an alternative capacity which he can fill despite disability.
4. Gain sufficient independence to return to his own home to be cared for.

Every physiotherapist qualifying today holds an electrical qualification—always a help when she needs to make the sparks fly! Joking apart, she must know the exact physiological effects of every piece of apparatus that she uses, and the reason for these effects. She must be sure that other forms of medical treatment, for example radiotherapy or drugs, are not in fact contra-indications to the treatment she has been asked to carry out.

Hydrotherapy (see fig. 2)—hitherto a separate certificate—is now in the general syllabus. The need for an adequate knowledge of neuroanatomy and neurophysiology is self-evident when one realises the involvement of the physiotherapist as a member of the team dealing with intensive care, neurosurgery, neurology and the many allied fields of work.

The Role of the Chartered Physiotherapist

"Diagnosis is not the physiotherapist's realm—that is for the doctor—but she must know the pathology, signs and symptoms of all the conditions she is likely to treat, i.e., most of the conditions and disabilities to which a human being is prone, and not a few mysteries besides! She must have sufficient knowledge to be able to observe immediately any alteration in her patient's clinical pic-

Fig. 2. *Rehabilitation by Hydrotherapy.*

ture, during, or as a result of treatment, and report these at once to the physician or surgeon in charge of the case. A knowledge of ward routine and administration is also a necessary adjunct to her work.

Probably the physiotherapist and occupational therapist are the only two members of the re-habilitation team who see the patient for a long period of treatment time, regularly, and at frequent intervals. They are, therefore, in the best position readily to obtain his confidence. In many cases, this calls for 'patience' spelt the other way, and a knowledge of psychology. The physiotherapist by talking, or more important by listening, makes a great contribution to the patient's general recovery. However busy she is, she must always find time to get to know her patient, not just as a patient, but as a human being, maybe one with social and economic problems. When this is reported to the doctor, he may well decide to call in other members of the team: to name but a few—the medical social worker, the appliance officer, the home help, etc."[1]

Without this liaison initiated by the physiotherapist, many outpatients would never have these problems solved because they would never come out into the open. Few hospital doctors—except perhaps the psychiatrist—see their patients regularly enough, or have the time to interview them for long enough, for information of this nature to be spoken of by the patient.

As with all professions associated with the medical world, the importance of the physiotherapist as a member of the team has become more apparent in recent years. No longer from the general point of view can essential patient care be covered by nurses and doctors alone: every member of staff, both professional and non-professional, are of equal importance to the recovery of the patient. The consultant makes the final decisions, but he cannot do this without the supporting services of both professional and lay staff.

No longer from the specific point of view can physiotherapy be considered a luxury service. We are essential to the system: our physical rehabilitation returns patients to work in a much shorter time, and we have a direct bearing on helping to free hospital beds more quickly. We are necessary and in very short supply. Our work has become more and more skilled and complicated. No qualified physiotherapist may accept a patient for treatment unless he is referred by a doctor, but we can no longer expect the medical profession to be in a position to direct our every treatment. The modern

approach by enlightened doctors is to refer patients to our department stating quite clearly what results are required, and requesting the physiotherapist to treat accordingly and report regularly on progress. This brings increased responsibilities to us in the accurate choice of treatment procedures, and underlines the absolute necessity for close liaison with those who send cases to us.

"Physiotherapists specialise in the treatment of medical and surgical conditions by the use of therapeutic exercise, heat, cold, light, water, massage and electricity. Among the aims of treatment are the relief of pain, the increase of circulation, the prevention and correction of deformity and disability, and the maximum return of strength, mobility and co-ordination. Physiotherapy also includes the performance of manual and electrical tests to determine the amount of impairment of muscle strength and nerve supply, tests to determine functional abilities; measurement of range of joint movement, and measurement of vital capacity, all diagnostic aids for the physician and for recording progress. Many new forms of physiotherapy treatment require the physiotherapist to undertake her own full physical clinical examination of the patient after she has received the medical diagnosis, in order to have a clear picture of her treatment requirements. Only the physiotherapist can decide which form of treatment is necessary. In some fields of work she must also be able to draw conclusions from X-rays.

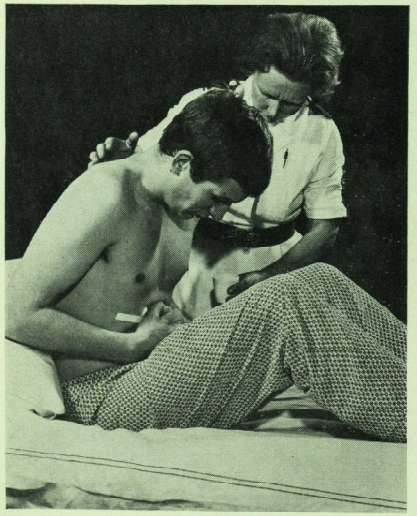

Fig. 3. Chest Care. Post operative "encouragement".

Rehabilitation as it relates to the work of the physiotherapist, is the use by the physiotherapist of the above mentioned modalities with the object of correcting the patient's physical disability or deformity, so that he achieves his *maximum potential recovery*."[1]

Our work involves us with patients from every age group, beginning with the ante-natal world. It is impossible here to quote chapter and verse case histories. Let it suffice for me to say that any student caring for a patient having physiotherapy is more than welcome to visit the department to observe and discuss that patient's treatment. Please contact me first and I will always make the necessary arrangements for you. Out-patient treatment is often the most important aspect of a patient's rehabilitation when he is a long-term disability problem. We are one of the few hospitals left who have a sufficient number of staff to give useful service in every unit in the hospital. Of particular value is the work we carry out for orthopaedics, casualty and recent injuries, skins, amputees, neurosurgery, intensive care, medical and surgical chests (see fig. 3), the cardio-vascular unit, C.V.A.s and neurology, antenatal, urology, gynaecology and children. Certain treatments in our field were devised, and the original research work was undertaken, here at Bart's. We have undertaken research work with the psychiatric department, and, it would appear at this stage, that here may be another field of work in which we can be of value.

Salaries and Politics in Physiotherapy

Just over 10,000 people appeared on the State Register in December, 1969. The whole time equivalent figure working in the National Health Service in England and Wales was 4,405, and in Scotland 568. It can clearly be seen that we have not nearly enough physiotherapists to give an adequate service to the community. We are now almost completely bereft of male physiotherapists: most have been forced to leave the profession and seek other outlets for their qualifications. No man can marry and bring up a family on a salary which no longer supports a single person, let alone one with added responsibilities.

Fortunately we suffer a very high percentage loss to the profession through marriage. Not enough students are being trained, but many shortages would be helped if we could call upon married staff to return. So long as these fully trained members of society have to pay their baby-sitters more than they themselves earn by returning, so long will we continue to waste this expensive and valuable knowledge and experience. One wonders whether society can afford this luxury? In addition to this, we are losing a very high percentage of unmarried members. Many are going abroad where the British qualification is known to be of the highest standard and we are always welcome. Our profession in other countries is recognised as one of the most important factors relating to patient recovery, and both status and salary-wise is accepted accordingly.

The number of physiotherapists who, unable to go abroad, yet leave the profession has increased alarmingly over the past two or three years. A six month shorthand and typing course will secure a salary higher than that of a senior physiotherapist having a three year training and at least three years post-graduate experience. Many of those who continue to give marathon service do so only because they subsidise their income by extra part-time work, other than physiotherapy, in the evenings. We are not alone: all paramedical professions are in the same boat; a fine reflection of the values set on our services to this country!

The day after writing this, I had notification of salary increases. This is a step in the right direction and is more than welcome; I have not altered my original comments, however, we still have a very long way to go, both salary-wise and structure-wise, if we are to stem the flow of qualified staff away from the National Health Service.

The future

We have moved into an era of the active, rather than the passive approach. With this has come an awareness of the necessity for research and continuing increase of detailed knowledge. We are indebted to the medical profession for their help and guidance in these matters. We have high hopes that a selected few will be given the opportunity of further degree course study which will strengthen our work.

At Bart's itself, we are slowly and steadily progressing towards rehabilitation streams in addition to the all-important and highly-skilled individual treatments. Both areas are inter-dependent on each other and are essential to the patient. We hope to redesign or renew the whole department to make this absolute necessity available to more and more patients. This will take time, but we look forward in anticipation to the day when we can really provide the full facilities required.

My main message to future doctors—Do please use our service sensibly. When you are not sure as to whether physiotherapy would benefit a patient, ask advice from the physiotherapist. Our main problem now, and for a long time to come, is that there is a minimum availability of staff. *Never* use our department as a placebo treatment to keep a patient happy: this is still being done in many hospitals and the departments are blocked by useless treatments for months, with the consequent lack of time for intensive treatment.

With the expansion of intensive care units and neurosurgery, you will need to be able to call on the emergency services provided by a physiotherapist. We are too few in number to supply night staff—all such work is undertaken by staff who have already completed a full day's duty and have another to face. This is why here we only attend such cases if the consultant or registrar orders it. The standard of the department depends upon the standard of those referring cases to us.

Conclusion

"Rehabilitation has four main component parts, medical, educational, social, and vocational, and no one of these provides the complete answer to the patient's problem. He may need some or all of these services to enable him to return to the community with the highest possible degree of independence. The physiotherapist is a member of the team dealing with the medical aspect of rehabilitation which is only the first stage in a patient's programme. She is only too well aware of the fact that she does not, and cannot, work in isolation, and the successful rehabilitation of the patient will depend upon the full co-operation of all those concerned in his total programme."[1]

REFERENCE

1. Vallow, D. M. *"The Physical Therapist in the Rehabilitation of Patients of all ages."* "Rehabilitation"—*Journal of the British Council for Rehabilitation of the Disabled." July-Sept.*, 1962.

PERSONAL VIEW

By ANTHONY BRETT

The earliest known record of the office of Steward (confirmed by no less an authority than the Hospital Archivist), was in the late 12th century, when one "Gilbert" attended to the victualling of the patients. No easy job, even then, though it is doubtful if the patients then exceeded 25 in number. The present Steward knows little of the duties of the Steward in those by-gone days. The Clerk and the Archivist are possibly the only hospital officers who could enlighten one on the mysteries of the Stewards' responsibilities through the ages.

The Author's brief was not, however, to trace the honoured and worthy ancestry of the various Stewards through the ages; rather was it to enlighten the reader as to how the Steward slots into the general administration of the Hospital in the 1970s. The short answer is, of course, that he does not!

About 15 years ago, the then Ministry of Health sent to Bart's a team of men with a brief to discover, if they could, how the Hospital ran its affairs. These men were not an Organisation and Method team, nor were they a work-study team. They were, supposedly, rather grander than either. The author cannot, however, recall their official title; it matters not. It is however rumoured (and the Steward would wish to emphasise this word, for he has no official confirmation of this), that, as a result of this visit, a recommendation was made that the office of Steward should cease, once the present holder of that office had "blown up", passed out, or (improbably) retired. To what extent this was an instruction from the then Ministry, as against a recommendation, and to what extent the Board of Governors paid any attention, is quite unknown. Suffice it to say that this was the first occasion on which the Steward was introduced to those chilling phrases "Job Content" and "Job Satisfaction".

Since it is easier to dispose of, let us deal first with the question of "Job Satisfaction". With the exception of two individuals: Capt. C. H. Power, who was appointed Steward in 1919 and who left Bart's to become Secretary of the Westminster Hospital, and also of Capt. Mason F. Scott, who held the Steward's post during 1947/8 before being promoted to Assistant Clerk to the Governors, there have been only four Stewards, namely Mr. Mark Morris, Mr. A. Watkins, Mr. Cecil Powditch and Mr. Anthony Brett, in the last 110 years. This in itself would appear to be sufficient proof of the high quality of "Job Satisfaction."

There is little doubt that the reason why each of us has derived such enormous satisfaction from our job is that the "Job Content" beggars description! It was this fact which so stumped, nettled and ultimately infuriated the Ministry of Health investigation team. Let it be said immediately that, since Nationalisation in 1948, the staff of the Steward's Office has been reduced by two. The Steward no longer has an Assstant, or a Secretary/typist. Moreover, his authority and responsibilities have been greatly reduced. In 1948 the Steward was responsible, inter-alia, for:

(i) assessing what each In-Patient could afford to pay towards the cost of his treatment (it normally amounted to shillings rather than pounds, per week), and accepting and recording these sums of money.

(ii) keeping detailed In-Patient records as well as an overall responsibility for Out-Patient records (the storage and movement of patients', files etc.) and

(iii) the purchase and issue of most non-technical supplies—all the dreary stuff such as cutlery and crockery, bed-pans, toilet rolls, beds and bedding, and dustbins. Today, most of these responsibilities rest upon the strong shoulders of the Medical Records Officer and the Supplies Officer.

It would seem, therefore that, apart from maintaining a Patients' Waiting List of about 1750, apart from keeping records of the Admission and Discharge of all In-patients; apart from reassuring the Department of Health, Department of Social Security (let no one think that these two completely separate bodies are one and the same just because they come under the same generic heading: they are not!), and the seemingly endless Medical Officers to the Treasury; apart from satisfying all these gentlemen that our patients are not a pack of liars, by confirming on endless forms that the patients were indeed in the Hospital between any two dates (already stated by the patients themselves): apart from all this it would seem that the staff of the Steward's office have little to do. Yet they have to answer the gormless questions of the average member of the public, either over the telephone or face to face and please do not think that these gormless questions are limited to the less well educated strata, for they are not! The stewards have to receive, with, if possible, an unforced smile, the many members of the public who arrive at the hospital not knowing who or what they want, nor where to go, rest assured, they are legion.

In the meantime, the Steward himself, each morning, is attempting to mollify the sense of shock, grief and incompetence that a death in any family brings. Experience teaches one how to play "by ear" the treatment of shock and grief. Only true understanding and tact can tell one how to restore a man's self assurance and pride, without, of course, appearing to do so, when he has lost confidence by having to admit his own helplessness when faced with the death of a relative. To shame a man in front of his women-folk when all of them are tensed-up and sad is unforgivable. Yet the inability of many to take a helpful hint, even to accept a decision made on their behalf, is remarkable. If the Steward is able truly to help these people, then this surely is in itself sufficient reward. "Job Content" seems to fly out of the window. Yet how can one explain to officials of the Department of Health that twenty minutes spent with any family under such circumstances qualifies one as a good or mediocre administrative officer?

Apart from interviews such as those already mentioned, it is not unknown for Ward Sisters to build up their emotional reserves to a point where they simply must blow their top. Not always, of course, but frequently it is the Steward who finds himself at the receiving end. Most times, it is the "thoughtlessness" of the doctors that sparks off such calls. "O.K., he may be in pain, he may be jolly ill, and I'm sure Mr. X can do the trick for him. Of course I'm sorry for the poor old boy; who wouldn't be? But where am I going to put him? Who is going to nurse him once Mr. X has dealt with him and gone off home? Mr. Brett, you must cope because I cannot! . . ." and so on and so on. Obviously the Steward cannot always cope, and does not, but it is good that there is someone on the receiving end; the important thing is that the gasket has blown. "Job Conent"? Who mentioned those words.

The Steward's job envelops patients' complaints, calm and reasonable; patients' complaints, violent and unreasonable; press enquiries, urgent and immediate, and press enquiries calm and sly; patients from overseas who must pay for their treatment, and who, when approached on such a subject, are, unaccountably, found quite incapable of "speaking da Eengleesh"; Police Officers demanding statements from victims (or aggressors) of an affray, or an accident, yet the patient is under sedation or is too ill and in no fit state to give a balanced or true account (who decides?). All these are everyday tasks with which the Steward is confronted.

American Doctors, with their incredible wives, crew-cut sons and dumb friends (I am not talking about dogs) on their European turnabout decide, after viewing St. Paul's, that they simply must take a look at Bart's, the home of Harvey, Percivall Pott and countless others whom they have know from their student days. These people turn up without any previous warning. The younger ones want to see an operation, ("I'm particularly interested in heart surgery") or a Psychiatrist, a Paediatrician, or even a Dermatologist (forgive me Dr. B.). Endless bleeping and telephone calls result. The older ones have heard that we have some "fine pictures by a feller named Hogarth" and they also understand that we have a church dating back to 1123 (Bart's-the-Great); "Could this possibly be true"? Thus, for an hour or more, all office work, appointments and planned visits to the wards must go by the board whilst the Steward displays the glories of Bart's. Remembering the ecstatic descriptions of our own Medical Staff on their return from an exchange visit to the U.S.A., of the generous welcome which they received wherever they went, how can one refuse such visitors? Moreover, who else can the Steward ask to take over such a task? How many people in the Hospital, one wonders, know enough about the Hogarth paintings, the history of the Great Hall, the memorial stones of George Balcroft and the Bodleys in our own little Church, to be entrusted with the duty of escorting these unexpected visitors?

A young House Officer, having at last mastered those exams, is now appointed to a House job in the Hospital. Of course he is cocky, but then he has every right to be. Then, one day, whilst attending his Chief in M.O.P.s/S.O.P.s he is told to admit an important patient that very day. "All right, he can go home to collect his things, but I want him back in bed by 6.0 p.m." says the Chief. The Houseman knows, as does his Chief, that Sister is already looking after 27 patients in a 25 bedded ward; the Houseman cannot ring up the Sister to ask her to get ready to receive her 28th patient. The Steward takes the call. He does the explaining to the patient, who has just arrived that, for tonight, he will be in X ward, but that tomorrow he will be in Y ward for a couple of nights, before going to Z ward, where he should have been in the first place. Does it matter that, in spite of excellent attention, the patient feels unwanted in the first two wards? That it does matter to the Author probably costs the Hospital many thousands of pounds in lost revenue from the Department of Health, for the size of our budget grant appears to be assessed on our annual "patient turnover". Blessedly, we are not sited at Dagenham.

Although this article has conveyed only partially the absorbing variety of the Steward's work, it is hoped that it may have proclaimed his continued determination to serve the Patients and Professional and Nursing staff of the Hospital; the Steward, as an office is not outdated.

A SURGICAL BUSMAN'S HOLIDAY

By A. P. J. ROSS

"Would you like to spend part of your holiday working in a hospital in the Middle East?" asked Julian Neely.

"No!" I replied.

"The money is good," he said.

"It would have to be to get me there," I said with an obvious lack of interest in the subject. He then told met the rate for a Locum Surgeon with an Oil Company, and, after some quick mental arithmetic, I realised that he was talking of a salary approximately twice that which a Full Time Consultant with an A plus merit award earns in the N.H.S.! Suddenly I became interested. On top of my salary, I would be given free board and lodging and a kit allowance.

About two weeks later I found myself walking into 33 Cavendish Square, a very impressive modern building on the south side of the square, which is the Head Office of the Iraq Petroleum Company (I.P.C.). This company is really concerned only with oil drilling and its capital is divided almost equally between B.P., Shell, Standard Oil, and Compagnie Francaise des Petroles. This leaves about 5% of the shares which I gather are owned by a certain Mr. Gulbenkian. As its name suggests, the company's main operational area is Iraq, but there are associated companies operating down in the Gulf. Their largest oil field is in Northern Iraq with Kirkuk at its centre.

I was ushered, via a lift which rose at about the speed of a moon rocket, to Personnel Administration on the thirteenth floor, where I was told that I would be Locum Surgeon Specialist in the Company's hospital in Kirkuk. I had presumed that I was to be paid so much as I was going out to a white man's grave, and that if the sun didn't get me then the flies or the marauding natives would. Wondering if I had any choice in my impending demise, I asked what were "things" like out there. I was shattered when I was told that there was an active social club with tennis, squash, badminton, bridge, a full size swimming pool and a cinema and, oh yes, I mustn't forget my golf clubs as the golf course would be at its best in early April!

At this stage, I would have willingly stepped on to the next plane heading East, but there were one or two administrative details to be settled before I could depart. On one of my subsequent visits to Cavendish Square. I was given a medical (and various injections!) by a doctor with the marvellous name of Colenso Colenso-Jones. He was an ex-Chief Medical Officer of the company and also an ex-Captain of Boxing at Bart's in the 1920s.

Eventually April arrived and it was time for me to leave for Iraq. However, I didn't go straight from Bart's but had a brief taste of what Jet-Set living must be like. On Thursday, April 1st, I flew over to Belfast to present a paper at the British Orthopaedic Association Meeting, flew back to London on Saturday morning, April 3rd, took in the Vicarage Club Dinner at Simpsons that evening, and found myself back at London Airport for the third time in four days on the morning of Sunday, April 4th! Before we were allowed on board the plane all passengers and their baggage were searched very thoroughly by a team of "British Bobbies". This seems to be standard practise now on Middle Eastern flights as I was searched again in Baghdad and Cairo on my return flight.

I now encountered some of the frustrations of air travel for, having bidden a fond farewell to my family, I boarded the plane at noon ready for take-off in half an hour. One hour later, we were still firmly on the ground when we were told that there was a "technical fault" and asked to disembark; lunch was served in the Air Terminal. Later it transpired that the "technical fault" was caused by one of the service lorries driving into a wing and damaging one of the flaps.

At last we departed five hours late and, as I was due to change planes in Beirut, I had visions of missed connections and being stranded in the Lebanon with the Oil Company wondering where I was. I was then told that the Beirut-Baghdad flight was being held for us. This impressed me immensely and I was feeling quite important until I was told that the Managing Director of I.P.C. and his entourage were also travelling on the plane and that the connection was being held for them rather than me! Apparently they were meeting the Iraqi Government early next morning in one of several rounds of vital talks dealing with the price of oil. We eventually landed at Baghdad Airport at 3 a.m., and I was just wondering how I could explain to Customs why I had brought my golf clubs to the desert in the middle of the night, when an Iraqi introduced himself to me. He was from the I.P.C. office in Baghdad and it was his turn on the duty roster to meet any Company personnel arriving that night! He took my passport and in no time at all he had talked me through Passport Control and customs, put me and my luggage in a taxi, and delivered me to my hotel with details of what time I would be collected in the morning. This, I soon learnt, was typical I.P.C. efficiency and throughout my time with the Company I found this administrative efficiency a refreshing change from what I have been used to for the last eight years.

The next morning I was woken up by the sound of car horns as though there was a traffic jam outside the hotel, but when I looked out of the window there didn't seem to be any hold-up. I soon learnt that everyone in Iraq drives with one hand on the wheel and the other on the horn. The reason for this is that the standard of driving is diabolical with no pretence of any Highway Code. It is the survival of the fittest, but discretion is exercised if one's opponent is a military vehicle! It seems that cyclists are not bound by any rules, and they are frequently encountered travelling the wrong way down a one way street. But that is nothing! Their most alarming habit is to go round roundabouts by the most direct route in relation to their intended exit. I can cope with most traffic problems but not with meeting a cyclist head-on on a roundabout when I am trying to adjust to driving on the right hand side of the road!

Kirkuk is 150 miles north of Baghdad and it was an effortless journey for me sitting in the back of a Chevrolet Impala with the speedometer seemingly fixed at 120 kilometres per hour. This was my first daylight view of the Middle East. I was amazed by its vast emptiness, lack of vegetation and flocks of sheep and goats without anything apparent to live on. Wherever there was a patch of green, there would be a cluster of dwellings made out of dried mud.

Kirkuk is higher than Baghdad and is about one thousand feet above sea level. The surrounding country is broken up by large rock outcrops and is quite green with vegetation in Spring time. As soon as I arrived I was issued with a pass which had to be carried at all times. The oil process plant is vital to the economy of the country and is guarded like a military installation. In fact the Kurds mortared the process plant two years ago and caused damage estimated to have cost one million pounds to repair. At the height of the attack, burning oil under pressure was spraying out of one of the pipes through which the oil is normally pumped. Apparently it was only by good fortune that the plant was not a complete write-off.

The Kirkuk oil field is about eighty miles long and there are about forty production wells in operation at the moment. The crude oil comes out of the ground under pressure and is then piped to the process plant. The reason for the plant is that the Kirkuk crude contains a high percentage of hydrogen sulphide and other volatile gases. These are corrosive but also come out of solution as the oil pressure drops, and would take up valuable space in the oil pipe lines besides causing pumping difficulties. A lot of hydrogen sulphide is removed at "degassing stations" before it reaches the process plant and this excess is burnt off as it is a poisonous gas and cannot be released free into the atmosphere. The oil field at night is a most dramatic sight with flames up to sixty feet high visible at the degassing stations which stretch for miles into the distance. At the process plant, the crude goes through many purifying processes until it is acceptable for commercial use. It is then pumped through massive 32-inch diameter pipes to the oil terminals on the Eastern Mediterranean coast more than 500 miles away. There are a number of pipelines and they are a monument to the engineers who built them, as they cross mountains and rivers such as the Tigris and Euphrates. Roughly every 70 miles along the pipelines are pumping stations where massive engines boost the pressure in the pipes sufficiently for the oil to reach the next station, until eventually the oil terminals in Syria and the Lebanon are reached.

While in Kirkuk, I lived in the Guest House which has about twelve bedrooms, each with its own bathroom, besides a suite for the Managing Director or other visiting directors. It is staffed by Iraqis who wait on one in a style that I was sure went out with the Raj in India. My first evening in the Guest House I decided to have a bath before dinner and left my shoes by my bed. While I was in the bath, I heard one of the servants come in to turn my bed down and leave a jug of iced water for the night, and when I went back into the bedroom I found a pair of highly polished shoes waiting for me! I was awakened each morning with a tray bearing a silver tea service and a glass of superb chilled fruit juice. There was no menu at breakfast, one just asked for what one wanted and got it in duplicate! This included boiled eggs and no matter how I tried to explain that one egg was sufficient I was invariably served with two. For lunch, there was a four course set meal always served impeccably with as much or as little as one fancied. During the late afternoon one of the waiters would come to ask me what I would like for dinner, and, giving notice of an hour or two, one could have whatever one liked: meat, fish, chicken, grills, steak, omelettes, salad, etc., etc.! It took me quite some time to get used to this carte blanche, and it is amazing that my waist line did not suffer more.

One of the perks for being the Surgeon Specialist is that one has a Company car to drive 24 hours a day. This is a great advantage as the main recreational facilities are about five miles from the Guest House. I had a 3-litre Vauxhall which was kept topped up with free petrol by a little man who appeared from nowhere without my ever asking for more petrol.

The Company hours in Kirkuk are seven a.m. to noon, then one p.m. to four p.m. The "week-end" is Thursday and Friday with normal working days on Saturday and Sunday. The hospital where I worked was ten kilometres from the Guest House. It contained about one hundred and forty beds but half of these were usually not in use, being held in reserve for cholera or any similar epidemics. The hospital had more than adequate radiological and pathological services. There were six expatriate nursing sisters who worked a rota system so that there would be one of them on duty in the hospital throughout the twenty-four hours in a day. They were all qualified midwives, much to my relief! The Senior Medical Officer in the hospital was a delightful Australian but the rest of the medical and nursing staff were Iraqis. I found them all most co-operative and was greatly indebted to my Iraqi Surgical Assistant who acted as my interpreter on ward rounds. In England I am called a General Surgeon, but I soon learnt what General Surgery really means, as I was the Obstetrician, Gynaecologist, E.N.T., Orthopaedic and Thoracic Surgeon in Kirkuk. Fortunately there was an excellent selection of modern text books in my office including a full set of the latest edition of Rob and Smith's Operative Surgery. Otitis media was common and I looked in more ears in those three weeks than I had done in the whole eight years since a qualified. I achieved a dramatic cure in one patient, who was complaining of unilateral

deafness of recent onset, when I removed a piece of foul smelling cotton wool which was impacted in his external auditory meatus. The patient had not realised that it was there! I also found that my ante natal examinations were a bit rusty at first. The pathology in Iraq seemed much the same as in the U.K. During my three weeks in Kirkuk I carried out three major operations. They were a ureterolithotomy, vagotomy and pyloroplasty and an extended partial gastrectomy for a carcinoma of the stomach. Besides this there were hernias, haemorrhoidectomies and other minor operations that were carried out by the Surgical Assistant. One interesting point concerning the less well educated Arabs is that if they have a pain they cauterise themselves in the area where they feel the pain. If someone has had abdominal pain intermittently for years there may be four or five scars, each about the size of an old fashioned penny in the appropriate part of the abdomen. Another point, which I found less interesting, is that the majority seemed to have a haemorrhoid fixation complex!

The social life was very pleasant and I was made to feel part of the community by the Iraqis and expatriates from the moment I arrived in Kirkuk. I was very impressed when I walked into lunch on my first day in Kirkuk to find three Iraqis sitting at the table discussing architecture, it transpired, in Iraqi. When I joined them, they welcomed me and then carried on their conversation, but now in English! During my stay I found that the manners of the Iraqis put the average Englishman to shame.

I arrived in Kirkuk shortly before Easter, which was when the Iraq Open Golf Championship was being held on the I.P.C. course. The championship was played off scratch but was open to players with a handicap of eighteen or less. Seeing this as a great opportunity to get one up on my golfing colleagues in the U.K., I entered.

I then had to play 72 holes of golf over three days with the temperature reaching 80° in the shade on two of the days. I lived to tell the tale although I must confess I finished much nearer the bottom than the top of the final order. The course is more than six thousand yards long and is the only eighteen hole course with grass remaining in the Middle East. The tees and greens were grass and thanks to liberal watering were in beautiful condition. The fairways were like baked clay and to achieve success the ball had to be struck cleanly without a "divot". I never quite came to terms with this technique and usually produced a mini-sandstorm with considerable loss of distance on my shot! However I had better luck on the short holes and surprised no one more than myself when I won a tankard for the lowest total net score on the par 3 holes during the Championship.

Besides the sun and the local conditions, which included the odd poisonous snake and passing vulture, one had to cope with a hectic round of social activities over the Easter week-end. On the first night there was a cocktail party for all the competitors followed by a buffet supper, at which four whole roast sheep were served on a mountain of rice containing nuts, raisins and other goodies. The following evening there was a private dinner party which meant another late night. However, the major obstacle in this endurance test was Easter Saturday. We had to play 36 holes of golf in the scorching sun starting at half past seven in the morning. After the golf, I reduced my hyperpyrexia by collapsing into one of the most inviting swimming pools I have ever seen. No sooner was I in the water than it was time to get out and change for the cocktail party which preceded the Company's Easter Dinner/Dance. This latter event meant "doing one's thing" to a superb group from Baghdad who played last year's Top of the Pops over and over again. The dance went on until 4 a.m. and no sooner had I got to bed than it was time to get up to be on the first tee by 7.30 a.m. for the final round of the Iraq Open! By now my sole objective was to finish the course and to avoid the humility of having to tear up my card. This I just managed although I think the fact that my partner looked even worse than I felt spurred me on to the end!

Other social activities during my stay included some bridge evenings and visits to the company's cinema (admission equivalent to five new pence).

Eventually my three weeks in Kirkuk came to an end and it was time to say goodbye to some of the nicest people I have ever met. I gave a farewell party in "The Feathers", a large garage which has been converted to look exactly like the interior of a typical English pub complete with dart board. The following day, the car which was to take me back to Baghdad arrived dead on time together with my passport and all necessary travel documents. For my last night in Iraq I stayed in the I.P.C. mess in Baghdad. This is a modern building fronting on to the Tigris river. Each "room" consists of a bedroom and a sitting room, both having huge picture windows overlooking the river; also a bathroom and kitchenette. There is a small swimming pool in the mess and the food served in the dining room is reputed to be the finest in Baghdad. The following morning I was woken again by the sound of traffic. When I drew back the curtains I was greeted by a most spectacular sight. The Tigris, which is about 200 yards wide, was flowing slowly past. On the opposite bank were several palm trees and a brilliant coloured mosque above which the sun was rising into a cloudless blue sky. I stood on the balcony of my room just watching the water flow effortlessly past until the car arrived to take me to the airport.

The return flight was on a B.O.A.C. V.C.10 via Cairo.

The approach to Cairo Airport was another memorable sight with the pyramids clearly visible below us and then the Nile itself meandering through the desert to the sea. At the Airport I only had time to try to barter with an Arab over a toy camel that I had promised my elder daughter, before we had to board the plane again. I have a nasty suspicion that I got the worst of the bargain! I dozed most of the way back and then suddenly we were circling over Heathrow prior to approaching the runway. My visit to Iraq already seemed like a dream from which I had just woken.

What did I think of my spell in Iraq with I.P.C.? I appreciated visiting a part of the world that otherwise I might never have had the opportunity of seeing. I enjoyed almost more than anything the efficiency with which this commercial enterprise carries out its business. I enjoyed the clinical responsibility that I had to take on, and finally, I shall never forget all those people who did so much to make my visit to Iraq so memorable.

FROM CONVENT GIRL TO MISTRESS

By GILLIAN KAHANE, M.A.

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It was relatively recently that I became fully aware of all the implications of being a graduate on the Arts side —compared with my brother products of the Faculties of Science and Engineering, and in particular with those who had completed professional training in Law and Medicine. I was singularly ill-fitted to face the world outside the bastions of King's College.

These feelings of "apartness" were no doubt intensified by the fact that I was at the time a guest at a celebration gathering for graduates of a well-known London teaching hospital in West Smithfield.

On the eve of the swearing of the hippocratic oath, "Have a drink, Doctor", was an oft-repeated invitation. There was a curious note of disbelief and wonder in the last word, the mere use of which implied a minimum of 5 years toil in the hostelries, nurses' homes and rugby fields of the area.

Wine flowed freely and one of the more energetic participants managed to pour his plonk down his pin-striped trouser leg. Expletives followed and the miscreant was reduced to abject apology. Carefully explaining his fall from grace to the only member of the fair sex present, he elaborated: "Anglo-Saxon terminology can often be used with impunity, under extenuating circumstances . . .", an apology he hoped would pass unchallenged. It had however been addressed to probably the only person in the room who could have judged whether his expression had been truly representative of Ancient English as she was spoke.

The atmosphere was genial—post-finals mutual cordiality reigned benign—even the anatomy professor, who had previously kept his sense of humour (if he ever had one) remarkably well-concealed, smiled at the stone-age joke about the student, who, when presented with an unrecognisable part of the human skeleton, remarked that it was "a bone". When asked to give a somewhat fuller account, he replied that his aim was merely to pass finals, not try for honours.

Imagine the scenes of social chaos if, for instance, a good class degree was as important to dental and medical students as to their artistic counterparts.

"You mean your G.P. only has a lower second?"

I wonder how many would-be undergraduates are realistically aware of what the degree of their choosing entails, both during, and far more important, after the prescribed course of study. From the time we first leap on to the academic bandwagon at the age of 11+ until we tumble off in our early twenties, only a chosen few have an exclusive clear-cut vision of a future career.

"A" Level options, the first major division into artistic sheep and scientific goats, are all too often undertaken with the minimum of forethought. I had no positive pressure either way—the negative reasoning guiding my hand as I wrote English, French and German on the options slip was my dislike of the smell of formalin and distrust of the "A" Level Chemistry nun. Practically all the vital decisions I was called upon to make during my formative years in the academic world were governed by a similar frightening lack of positive reasoning.

Both Cheltenham and Malvern Ladies' Colleges were finally denied the pleasure of counting me among their numbers because neither pale-green nor maroon uniform colours seemed particularly enhancing shades.

What subject to read and at which university to read it, depended wholly upon whom you happened to be going out with at the time of the completion of UCCA forms. The unsuspecting young man in my life during November 1965 was a law student in London. "Law" and "London" duly appeared in computerised type on my form. Clotho, Atropos and Lachesis would indeed have applauded my logical system of choosing a college. Oxford and Cambridge did not figure because "A" Level Latin was demanded of all women Law Students and I felt that two more years slaving over a hot Brodie translation, Gaul having been divided into three parts and Aeneas still roaming the underworld was just not on.

Next decision—Kings or L.S.E.? Places had been offered at both, but Kings Ladies' Cloakroom was definitely superior and the view of the river was excellent, so Kings it was.

Wrapped in pleasant daydreams of returning to the old Convent in future years as one of England's leading Q.C.s (let it not be thought that apparent lack of logic necessarily implies lack of enthusiasm or ambition), I went abroad clutching my prescribed pre-course legal reading material in my prospectively undergraduate sweaty palm. Amidst the peaceful mediaeval hills of Assissi, all things were viewed in truer perspective. Last November's law student, set books and the whole legal system were now all rejected as profoundly lacking in imagination.

Now what was to be done? Follow father and big brother in the footsteps of Galen and Hippocrates, Kildare and Finlay? No, I still didn't like the smell of formalin and too many doctors in one family can't be healthy. Read a language? My German and French were reasonable, but my English was fluent. So English it was. A last-minute assault was made on the most over subscribed department of the college, my persuasive powers employed to the full and copies of the complete works of Geoffrey and Will firmly grasped in hand. I "went up" to Kings.

No sooner had I begun to find my way around Kings' interminable corridor systems, and before I had discovered what J.E.G.P. and M.L.N. stood for (let alone in what dusty corner of the English library they lay hidden) the Queen Mother was telling me that the world was my oyster and I was to go forth (or was it upper second?), eternally enriched by the experiences of the last three years.

Honours Graduate . . . Be an Income Tax Inspector./ Become a punch-card operator./Be a grad, girl temp. sec. The lure of the adverts was compelling. Somehow I resisted. Another, more remote kind of romanticism was now claiming my imagination. I had applied to read for an M.A. in Mediaeval English. Arthurian literature was to be my special study. We females are all allowed to dream of knights on white chargers—I could do so with the legitimate blessing of the Board of Studies. The spirit of Arthur brooded over the house. My enthusiasm survived even Richard Harris' vocal assault and not even a Yank Sir Lancelot with a phony French accent in a Hollywood epic failed to arouse my melting sympathy for one of the most moving stories of fated love.

A year later armed with my new degree and title of Mistress of Arts and shrouded in mediaeval mysteries, it was time to face up to the idea of earning my living. Unanswerable but inevitable questions were put to me by prospective employers. Why English? Why mediaeval studies? Why should I have to justify my four years within the Arts Faculty to all comers accusing me of irrelevant studies and virtual time-wasting? True, unlike the medics whose graduation means so much more in terms of immediate employment and earning power, I was qualified for nothing without further training. But is it not possible for an Arts degree to be accepted for what it is in itself?

Another recent discovery of mine was that while a rather drab brown is the colour of Arts Faculty gowns, medics wear purple. Now if someone had pointed that out to me six years ago . . .

(Gillian Kahane is the sister of Richard Kahane who recently qualified from Bart's. The intrigue of medicine eventually won the day as she is now working as a medical social worker at the Middlesex Hospital.—Ed.)

NIGHT SHOOTING

By OLIVER BASTARD

Night shooting is one of the most exhilirating pastimes I know. It is carried out in many parts of Africa, but my experience of it has been on my father's farm in Kenya. It is done not for sport, but as a means of pest control, to maintain the grazing wildlife at such a level so as not to destroy all the pasture on the farm, and leave enough for the domestic animals. The introduction of domestic animals and the eradication of the indigenous carnivores has caused the destruction of the natural ecosystem. The result of this is that the farmers have to perform for themselves the functions of the natural predators in keeping down the numbers of the local game.

The principal offenders in this are the Thompson's and Grant's gazelles, which though small are very numerous, and compete with the sheep for the grazing. The larger antelope, the Impala, Topi, and Eland, are not nearly as numerous and do not present such a problem. They graze among the thorn bushes in the uncleared areas of scrub. They are more intelligent, and if a group moves out of the scrub to feed on the grazing land only one animal has to be shot before they move back, and they will stay there for some weeks.

It is quite easy to shoot game in the day time, but the animals are understandably shy of man and after each shot the herd disappears. This means that shooting on the scale required to keep the wildlife population down would be a full-time occupation. It is for this reason that night shooting has developed. It is carried out at night (curiously) in a Land-rover, or similar cross-country vehicle, with a spot-light and a rifle. The rifle may be fitted with a telescopic sight, or the sights may be picked out with luminous paint. The rifle need only be of small calibre, for example .22 or .273, since all the shooting is done at close range. In fact, a high velocity rifle may be a disadvantage since the bullet may pass right through the animal without mortally wounding it. The result is that the animal may escape, only to die in the next few days of haemorrhage or septicaemia.

The animals appear to be mesmerised by the light and will not move as long as they remain fixed in the beam of light. The hunters drive around until they come across a herd of gazelle, their eyes reflecting the light like drops of brilliant fire. The headlights and spot-light are trained upon them, and it is then possible to drive up to within a short distance of the animals and shoot them. In this way it is possible to shoot half a dozen before the rest of the herd takes fright and runs off. The carcasses of the dead animals are thrown aboard the car, and the hunters then move on to find the next herd. In this way it is possible to shoot thirty or forty gazelle in one evening. In order to keep the wildlife population in check it may be necessary to do this two or three times a week.

The thrill of this pastime does not lie in the shooting, which as I've shown, is pretty ruthless, but in the outing. It is the joy of riding across open country on the back of a Landrover under the southern stars; the rush of the chill wind past you as you bounce along the murram tracks, clutching the rifle in one hand, and hanging on to the roof of the cab with the other. All around you is black except for the pool of light from the headlights. Then as the spotlight sweeps across the bush, it comes bright alive with pairs of glowing eyes which die as the beam moves on.

A single jewel of light in the road bursts into the headlights as a nightjar suddenly flies up and is gone again. We pass a bushbuck, standing motionless besides the road. He looms up at the edge of the beam of light, and for a moment seems huge, and then we are past, and he has gone. Now we are passing some thorn trees. We see a pair of large eyes at the top and stop. They belong to a tiny, furry bush baby caught in the beam of the light and trying to find out what it is all about. This is Africa at night. It has an atmosphere so foreign to those of us from Europe. So quiet, yet pulsating with life, as all the animals interweave their life patterns to fit into one enormous whole.

The shooting done, we return to the house, leaving the carcasses at the yard to be skinned in the morning. Once inside, the evening's happenings appear unreal and dreamlike, but these, for me, are the most vivid memories of my time in Kenya. While day to day life in Kenya changes, Nature does not, and I'm sure that if I ever return I shall once more be entranced by the wonder of Africa at night.

ABUSES AT ST. BARTHOLOMEW'S, 1828

To the Editor of the Lancet.

Sir,

At this hospital tardy movements seem to be the order of the day; and changes, advantageous to the pupils, almost invariably meet with opposition from its medical officers. I am induced now to trouble you, lest you should be ignorant that notwithstanding your laudable endeavours to effect an alteration in the management of the *post mortem* examinations here, which for a short time appeared to rouse from their lethargy the *dormice* of this establishment, those animals have nevertheless soon sunk again into their accustomed state of stupour. We now never hear of such an event as a morbid inspection; if it does take place, its performance is veiled in impenetrable secrecy. The dressers are probably the chief cause of this unfair and dishonest practice; but I suspect, Sir, that another obstacle to the examinations being publicly performed arises from a certain medical officer of this institution deriving pecuniary emoluments by their being effected secretly. If this be really the case, it reflects disgrace on the individual, who thus debars the pupils from their rights for the sake of his own private interests; and he can expect to meet with nothing less than the contempt of all those students who do not form a part of his *grinding band*.

I am sorry to add, that the business of the dissecting rooms demands also your attention: the demonstrators have, of late, greatly relaxed in their exertions, and it has several times happened that neither of those gentlemen has been present more than an hour during the whole day; and consquently those who are beginning the study of anatomy, and require assistance, knew not where to apply for it. Moreover, there is no perfect skeleton to which they can refer; it is true, there was one, but the greater part of it has gradually disappeared and never been replaced. At the Medical School in Aldersgate-street, there are no less than four, always open to the inspection of the pupils. Let the boasted school of St. Bartholomew beware, it has a rival at its gates.

Hoping you will, with your usual justice, notice these abuses in your next number,

I remain,
Your obedient humble servant,
DISCIPULUS.

St. Bartholomew's Hospital.
Feb. 9, 1828.

(Reprinted by kind permission of the Lancet.)

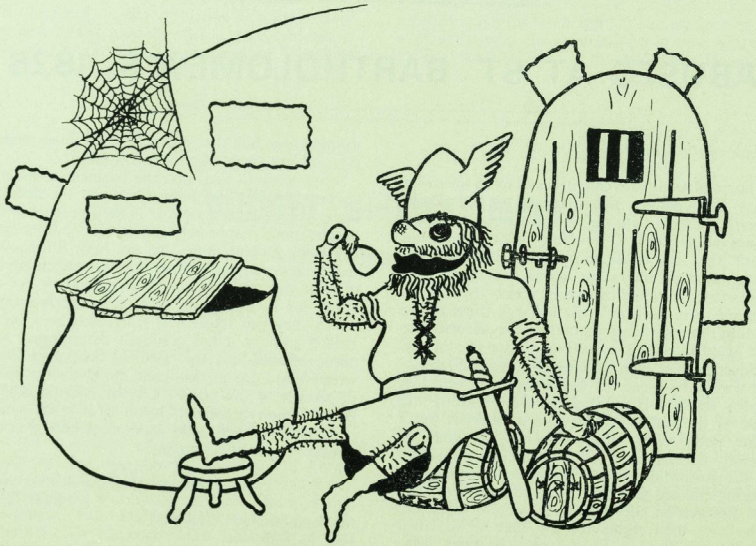
HOW TO GROW A HAIRY CHEST

By TIMOTHY BUNKER

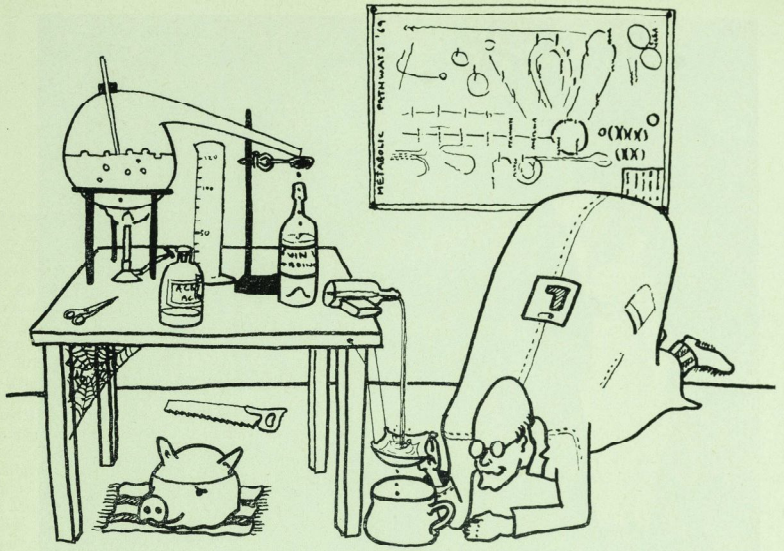
Summer is here and all men's thoughts are turning to the perennial problem of The Hairy Chest. Thus, I thought, a short discussion on the growth of a hairy chest might be instructive.

This pastime it seems was very popular in the dark ages; but with the invention of armour it went out of fashion and has only recently, with the advent of "the permissive society" come back into favour. Thus there are two ways of growing a hairy chest, the old and the new.

The first references I could find of the old method are in the "Druid's Pharmacopoeia" (out of print). More



DRAWING ONE
(Viking in a cellar)



DRAWING TWO
(Scientist in lab.)

numerous details are to be found in the writings of the Court Physician Merlin of Camelot. He states (liberally translated from the old English):—

"At the second full moon in the month of July boil water from the darkest part of a lake, and when cool add sugar beet and all manner of sweet tasting things. Sprinkle on some leaven from the bakery then cover the cauldron and hide it in a warm place for a month and a day. Remove the grown leaven from the top of the liquid, then drink three goblet-fulls a night. Within a year you will be astounded by the lush growth and lustrous proportions of the hairs on your chest."

This method became extremely popular during the dark ages but recent research has shown that in small quantities (three goblets a day) it causes impaired judgement, observation and attention. In large quantities (four goblets or more) it tends to cause bad co-ordination, reduced visual acuity and reduced sensitivity to sound, taste, smell and pain, nystagmus and slurred speech. There is also some doubt as to whether it actually does cause growth of chest hairs.

The new method is much more sophisticated. All one needs is some acetic acid, a pair of scissors, a tea strainer, some old bottles, a saw, some carboxymethylcellulose and a freshly killed pig (a cow will do but is a bit big).

Having sold all the bacon at extortionate prices, one takes the saw and opens the skull. Under the brain in a hollow in the base of the skull is a pea-shaped body which one removes with the pair of scissors.

Sixteen volumes of glacial acetic acid are now mixed with this lump and heated to 70 degrees centigrade. The mixture thus produced is filtered (tea strainer) into a bottle. Eight volumes acetone are added and some ether and the precipitate is collected (scraped out of the bottom of the bottle). This precipitate is purified by adsorption on the carboxymethylcellulose (ask your Pharmacology tutor). The purified substance is filtered (a handkerchief will do at this stage (clean please!)), and the resultant mixture is dried forming a white powder. Dissolved powder is then injected intravenously for two weeks.

Females are requested not to take this powder. Recent research however shows that the powder may cause excessive muscle growth, increased libido, deposition of fat on the face and back, hyperglycaemia, hypertension and hair on the soles of the feet!

Thus there is only one further question to be answered, "What kind of nut wants a hairy chest anyway?"

For further details enquire at Cage Eleven, The Ape House, Regent's Park, London.

THE BARBECUE BALL

Despite an inauspicious start to the day, the evening of the 11th June was dry though hardly warm. Once again the ballgoers were welcomed by the two Scots pipers playing on the lawn in the middle of a replica of Stonehenge. A quick tour revealed that the rest of College Hall had undergone its usual thrice yearly metamorphosis.

A rural atmosphere was introduced in the hall which was set as a village green shaded by a huge chestnut tree. From here we wandered to the old pub, the Fanny Hill, to sit in front of the glowing embers and rest, while the bacchantes, though not Bacchus, passed us by. However, passing on, the scene changed to a Mississippi river steamer of a century ago. This room was well decorated but lacked reinforcement by further detail.

The bar lounge continued the theme of transport. The lower part was decorated as the inside of a railway carriage and was well done; the upper part was done as a railway station. It had a good model of a steam locomotive and the rest was covered with vintage railway posters supplied by British Rail. The plan of the room was good but somehow lacked the co-ordination of design to carry it off. The refectory was cleverly disguised to look like the refectory. The gym was well decorated as a black temple, the atmosphere of which was conveyed with UV light, and it was here that the discotheque was professionally operated by Lady Jane. I have just one suggestion—Please could we have the floor polished next time? Huge and uncompromising, the marquee was undecorated.

All in all, the decorations were very impressive and I'm sure reflected the hours of hard work that had gone into their preparation.

Clement Freud was the cabaret, and though a little late, was well received. His distinctive brand of humour was perhaps not well suited to his audience, but he was very slick and professional, and managed to descend to the pitch of the hall. The rest of the entertainment was also of a high standard, and for this our thanks must go to Oliver Else.

Harmony Grass appeared for the second year. Wild Angels were a reviving experience for those flagging at half time, and a more sophisticated type of music was supplied by Terry Lightfoot and his Jazz Band, and the Irelanders Irish Show Band. Magna Carta were wildly received, and so were Crystal Blend and Barley. The Original Cinnamon Steel Band who were otherwise good, came in for some criticism from some die-hards because they stopped playing at 5 a.m.!

I thought that the food arrangements were better this year—the buffet was quite simple but plentiful and the queues not too long. Last year I wasn't able to go to the Ball, but I should imagine that this year's Ball has continued the tradition of annual improvement.

Altogether it was an enjoyable and memorable occasion and our thanks must surely go to the members of the Wine Committee and all their helpers for this their annual *tour de force*.

OLIVER BASTARD.

BOOK REVIEWS

The Universe, Isaac Asimov, Pelican Books (55p).

Isaac Asimov is Professor of Biochemistry at Boston University, and is already well-known for his superb science-fiction stories. His non-fiction book "The Universe" fully conveys the obvious fascination he has for matters of astronomy and cosmology; and the reader cannot help but be carried along on his wave of enthusiasm.

The first section deals with the evolution of Man's ideas concerning the relationship of his World to the rest of the Universe. It begins with the Ancient Greeks who by 350 B.C. had firmly established that the Earth was a sphere and not flat, as was previously thought. By 150 B.C., early Greek astronomers such as Hipparchus, Eratosthenes and Aristarchus, had accurately determined the shape and dimensions of the earth, and the distance of the Moon; and developed the idea of a huge spherical Universe, placing at the centre an Earth-Moon system possessing dimensions we still accept today.

Asimov then goes on to tell of Copernicus, who developed the idea of a heliocentric Universe; Kepler, who worked a highly accurate model of the Solar System, and Galileo, who made it possible to work the distances of the stars with his invention (or reinvention) of the telescope in 1608. He describes very lucidly the methods by which later astronomers set about estimating the distance of the stars, particularly after the discovery of the importance of the Cepheid Variables in 1912, and eventually evolved the idea of our Solar System as occupying an eccentric position in a lens-shaped Galaxy 80,000 light years across, and containing over 100,000,000,000 stars.

He then sets out to unravel the complexities of modern astronomy, telling of the discoveries of countless other galaxies, and theories of stellar and galactic evolution. With adroit perspicuity he explains the various theories postulated and why some were rejected and others accepted. I found however the chapter on receding galaxies rather abstruse. This chapter deals with theories on the shape of the Universe such as those of Lobachevski and Reimann, and requires the ability to visualise the four-dimensional analogue of a sphere, a "hypersphere", for full comprehension!

The chapter on the beginning of the Universe deals with Gamow's once-again popular "Big-Bang" theory; and also with Fred Hoyle's contradicting steady-state universe, so constructed to fit the "perfect cosmological principle". Asimov also introduces the concept of matter and anti-matter, and contributes his own personal theory of a Universe and Anti-Universe permanently separated and pulsating in balance.

The last chapter, entitled "The Edge of the Universe" concerns the abandonment of the colliding galaxies theory, and the introduction of the exploding galaxies theory. It also hints on the future importance, as yet unknown, of quasi-stellar sources of "quasars". Asimov tells with some humour of how Fred Hoyle accepts the "Big-Bang" theory but speculates that the "Big-Bang" theory may be merely a local phenomenon within a much larger steady-state Universe adhering to the "perfect cosmological principle".

Throughout this book, the reader is aware of the intelligence and good humour of a man who shows his modesty by dedicating his book "to Fred L. Whipple and Carl Sagan who know much more about it than I do." I suggest that anyone immersed in great medical tomes will certainly find that reading "The Universe" broadens their horizons.

MARY HICKISH.

Biochemistry for Medical Students, by W. V. Thorpe, H. G. Bray and S. P. James. Churchill, 9th Edition. 1970 (£3).

It is of interest that the 1st edition of Professor Thorpe's book published in 1938 was associated with Bart's because Professor A. Wormall, professor of Biochemistry here from 1936-1962, persuaded Thorpe to write the first book, originally on his own. This book has now spanned 33 years and 9 editions. It is difficult to appreciate that when the first edition was published it was almost unique, because at that time there were virtually no other Biochemistry texts of any description. As a consequence, most medical students of that era, and many following, learned their Biochemistry from "Thorpe".

Extensive developments have taken place in Biochemistry since then and present day students might wistfully reflect on the fact that the 1st edition contained no details of glycolysis, the citric acid cycle, electron transport, oxidative phosphorylation, subcellular organelles, nucleic acid structure, or protein synthesis! Few students outside medical school studied biochemistry in 1938 and thus the specialised title, which is still retained, was justified. The rapid development of the subject and the spread of Biochemistry teaching through many Universities has resulted in the appearance of many other excellent Biochemistry texts, mainly of U.S. origin and "Thorpe" must now be judged in an entirely different situation to that originally prevailing. It is almost inevitable that a book trying to span so many years and to incorporate so many changes in the subject must

suffer in comparison with some of its more recent rivals.

The page size of the 9th edition has been increased but the pattern of the book which is divided into three main sections remains much the same as it was in previous editions. The first section deals with the components of the body, their chemical composition and physical properties, the second section with metabolism and the third mainly with nutrition and excretion. Although a case can be made in favour of this, the traditional, approach to the subject, several difficulties arise. For example, "Hormones" and "Vitamins" in the 1st section are dealt with before the metabolism in which they play a major role. An integrated approach would be preferable.

In the preface to the 1st edition Professor Thorpe states that "In view of their importance in medical diagnosis prominence has been given to blood, urine and faeces. Special attention has been paid to the principles of nutrition. . . ." The author does not deviate from his original view in the latest edition and extensive coverage is still devoted to these topics, the section on nutrition being treated in a manner which is probably superior to most textbooks of comparable size. Other topics of medical relevance, for example, bacterial decomposition in the intestine are also described. The inclusion of topics of this nature deserves commendation because, all too frequently, they are omitted from many other textbooks of Biochemistry, but the author rightly believes that they are basic and essential knowledge for medical students.

In contrast the more recent developments in Biochemistry, such as the roles of subcellular organelles, oxidative phosphorylation, nucleic acid structure, protein synthesis and its control, biochemical genetics, are dealt with in a manner that is somewhat superficial by modern standards.

From many viewpoints this book epitomizes the dilemma for those teaching a rapidly developing subject such as Biochemistry to medical students. On the one hand, the teachers feel that they should teach basic subjects of medical relevance, but on the other hand, they, and the students themselves, also feel that more recent and exciting developments in biochemistry should be included in the course.

In summary the book will be useful in helping medical students to acquire an excellent background of medically relevant biochemistry, but it should be supplemented in several rapidly advancing areas by other textbooks of biochemistry.

E.D.W.

Programmed primers of anatomy and physiological functions, by Dr. A. E. Hugh, Butterworth, 1971. Set of five titles (£2.50).

1. Formation and function of basic body tissues.
2. Cardiovascular system.
3. Locomotor system.
4. Nervous system and endocrine glands.
5. Respiratory, Alimentary, Genito Urinary and Lymphatic systems.

Dr. A. E. Hugh has composed an interesting series of books on the Basic Medical Sciences, which have been programmed to assess the reader by questioning at the end of each chapter.

This undoubtedly provides an excellent way of remembering dogma and essential facts for aspiring members of the para-medical sciences. I do not find it a critical or a complete enough account for postgraduate reading other than for a very preliminary account to refresh the memory.

The complete lack of any diagrammatic format causes concern in relation to the usefulness of visual studies to complement the written word.

However, for the needs of radiographers, physiotherapists, research aspirants, it does provide an excellent definitive account of various terms, which we should all be very familiar with.

A. SIMPSON.

Laboratory Aids Series, General Editor: F. J. Baker, Butterworth & Co. Ltd., 1970 (60p each).

1. **Enzymes and the Determination of Enzyme activity,** by R. A. McAllister.
2. **Steroids: Principles and Techniques,** by D. Kilshaw.
3. **Chromatography: Principles and Techniques,** by D. I. Edwards.

These three little paperbacks are new members of a series devoted to various aspects of modern laboratory medicine. Now that no one book can possibly cover the field of Clinical Pathology, an attempt is being made to solve the problem by publishing a series of monographs.

The current titles are selected from Chemical Pathology and are themselves witness to the fact that this subject alone comprises at least eight sub-specialities. With these thoughts in mind, the reviewer is inclined to adopt a less critical opinion of these attempts to supply a need, for in spite of their confident titles, it is quite clear that they provide a rather limited account of their subjects. In a text of eighty pages, it is not possible to cover any of the topics except in outline and to this extent the books may be regarded as lecture notes which require supplementary reading. These books are most likely intended for Medical Laboratory Technicians who are studying for a Higher National Certificate in their speciality. They are definitely not suitable for medical students largely because the clinical aspects are inadequately discussed.

J. C. B. FENTON.

4. **Electron Microscopy: Preparation of Biological Specimens,** by R. E. Nunn.
5. **Electron Microscopy: Microtomy, Staining and Specialised Techniques,** by R. E. Nunn.

These two handbooks on practical Electron Microscopy under the headings of Preparation of Biological Specimens and Microtomy, Staining and Specialized Techniques, are a welcome addition to the, as yet, still small bibliography of general practice in biologically-orientated electron microscope laboratories.

The Preparation of Biological Specimens begins with the factors which limit the choice of material for electron microscope investigation; stresses the importance of small specimen dimensions and why; discusses the many fixatives which have been investigated; describes in detail the more successful ones; and goes on to washing, dehydration and link reagents which are all vital steps towards ensuring perfectly preserved fine structure. Chapters 3 and 4 on embedding techniques is a most comprehensive review of the popular media complete with the usual formulae; local variations of these and the tissues which each is best suited for. Also included are the sort of useful hints which up to now have been discovered by individual trials and errors, and needed cataloguing for general use.

The second booklet, Microtomy, Staining and Specialized Techniques, takes one through the theory and practice of glass knife breaking; diamond knives; various models of microtomes and their essential differences of mode; block trimming; section cutting (successful and otherwise); collection on grids coated and uncoated; and on to staining and histo-chemical methods. Many of its points are illustrated with good line diagrams and these always occur on the relevant pages (!! other authors please note). The author willingly acknowledges the limitations of these small and necessarily brief handbooks and therefore includes comprehensive references on most topics to encourage the interested reader to study them more deeply, without the booklet itself becoming too involved.

In the reviewer's opinion these two additions to the Laboratory Aids Series succeed in giving a well-informed view of the current state of the art of electron microscopy at a level where novice and expert alike will find much to refer to.

PAULINE MACFARLANE.

6. **Virology—Tissue Culture,** by Hamish Cummings.

This book would be useful as an introduction to basic virology tissue culture for the medical student who requires a compact outline of the techniques involved. This subject has however been adequately covered by a number of standard virology text books and for that reason it is of limited value in established virus laboratories.

GILLIAN V. MARTIN.

Medicine for Nurses, by W. Gordon Sears and R. S. Winwood, Arnold, Eleventh Edition (£2.25).

The author in this eleventh edition of Medicine for Nurses has included two new chapters namely, Autoimmune and Collagen Diseases, and Intensive Care and Resuscitation; thus showing just one aspect of how this book fulfils the present needs of the student nurse in providing up-to-date information. The chapter dealing with respiratory diseases has been preceded by useful physiology of the system, presented in not too much detail and using the terminology to which the nurse will become accustomed.

This book has in the past contained many excellent line drawings and these have been continued in this new edition, it is unfortunate that the new chapters have not benefited in this way, as diagrams of the apparatus for dialysis or the position of the patient and nurse when cardiac compression is being carried out would be helpful to the nurse new to these procedures. Dr. Sears has written a helpful chapter on Intensive Care, although to head the list of apparatus in use for respiratory failure with the tank type respirator and to give such little explanation of the positive pressure machines seems to me a reversal of the order, and not in keeping with the type of equipment that the nurse is likely to meet when working in this particular area.

The section on Leukaemia has been enlarged, also that on Immunity, plus the inclusion of a suggested Immunization programme, two areas in which increased knowledge will be of value and interest to the nurse.

Medicine for Nurses will continue to be a useful book for many nurses whether training for the General Register or the Roll—the latter may find the comparative lack of detail but the concise, clear explanations sufficient to answer many of their queries.

HELEN E. GRIBBLE.

Pharmacology for Nurses, by J. R. Trounce, J. & A. Churchill, Fifth Edition (£1.20).

Pharmacology for Nurses in this new edition will continue to be as useful a book as its predecessors. The description of the various drugs in common use are adequate, although the nurse may find it rather time consuming to have to read the entire text in order to find the average dose. The physiology which precedes the drugs in each chapter relating to a system of the body will prove valuable in helping the nurse understand how drugs work, their distribution and excretion. One appreciates the author's reasons for the inclusion of so few proprietary names in the text, but many nurses would find it helpful if a list of page references for these were appended.

It is a pity that Drug Regulations have been omitted from this new edition, particularly when so many trained and student nurses working in this country are from overseas and may not be familiar with our methods of drug administration; likewise, the use of abbreviations such as γ benzene hexachloride—an unfortunate inclusion when all medical practitioners are being encouraged to prescribe drugs by writing in full their name and dose.

The usefulness of the diagrams is variable and a few would have reproduced better had they been accurately drawn and had typescript labels, whereas they appear as rough sketches one might expect to find in a lecture notebook.

This book has much to recommend it, not least the chart concerning the actions of the antibiotics and chemotherapeutic agents also the general and adverse effects of steroids.

Pharmacology for Nurses should maintain its popularity with the profession.

HELEN E. GRIBBLE.

Essentials of Pharmacology in Clinical Nursing, by Frances N. Douglas, Butterworth Group (£4.00).

This attractively set out pharmacology book contains some useful information regarding the action, clinical

uses and side effects of the various groups of drugs. Unfortunately its use would be limited with student nurses in this country owing to its being based on the United States Pharmacopoeia, where the terminology of many of the approved and proprietary names quoted are just sufficiently different for them to be confusing. This book contains the names of many drugs not commonly administered in this country, and this further increases the limitations of the text. The section on Toxicology is well presented, and includes a useful table of poisons, their manifestations and antidotes.

The format of Essentials of Pharmacology in Clinical Nursing is clear and the names of drugs and their doses are easily found. It is disappointing that it is of so little value here in Britain.

HELEN E. GRIBBLE.

An Insight into Health Visiting, by Mary K. Chisholm, Ballière Tindall & Cassell (60p).

In her book, Mary Chisholm tries to give the Student Nurse some insight into the kind of problems a Health Visitor may come across in her day-to-day work in the community. Obviously she cannot mention every type of problem, but she does manage to illustrate a fair cross section in this book.

On page nine, Miss Chisholm gives the description of the work of the Health Visitor as put out by the Council for the Training of Health Visitors in its booklet "The Function of the Health Visitor (1969)". At this point I think Miss Chisholm could have included the Health Visitor Training Syllabus, for time after time, she refers to the training given to the Health Visitor Student, but she tells us nothing about it or how it is designed to help the Health Visitor to deal with the many aspects of her work and the problems which come her way. References to the syllabus would make the description of the work far more meaningful.

The meaning of the "At Risk" register could have been explained more fully and examples given of the conditions which pre-dispose to deviations from normal development.

This is a useful book for the nurse who is thinking of taking up Health Visiting; it does fulfil its aim in giving the nurse an insight into Health Visiting. However, I think it should emphasise that many hospital nurses find the transition from being a "doer" to a "thinker" somewhat difficult unless they are very adaptable.

B. D. SARSON, S.R.N., S.C.M., H.V., R.N.T.

SPORTS DAY

Sports Day was held at Chislehurst on the 5th June, but despite widespread publicity was marked by a poor turnout. This was probably due to the weather which seemed more like February than June. However, for those who did brave the weather and turn up, it was a very enjoyable day.

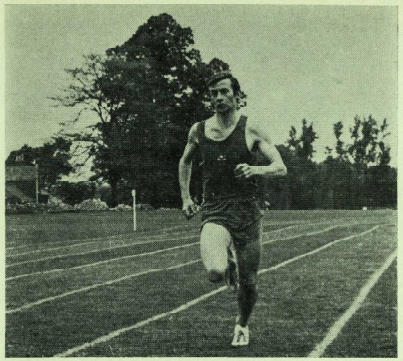
The Three-legged Race

As well as the bona fide athletics events there were several novelty events for spectator participation. These included Target Golf and Croquet, as well as the inter-year Tug-of-War. This was won after some very machiavellian machinations by the Bart's Veterans rugger team, who were somehow ruled to have beaten the first year Second M.B. team without having pulled against them! Other events of note were the Consultants' 100 yards, won for the second year running by Mr. Ian McColl, and the Consultants' 4 x 440 yards relay.

Commentaries, which were not always strictly relevant, were supplied by David Baker and Bruce Campbell, who had availed themselves of the free beer provided.

At the end of the day, the prizes were presented by Mrs. Charlton. Altogether a worthwhile day. This event could benefit from greater attendances in the future.

OLIVER BASTARD.



John Brooks winning the Mile

Sports Day Results

100 yds.	C. Noon	10.5 secs.
220 yds.	A. Corbin	24.3 secs.
440 yds.	A. Corbin	55.5 secs.
880 yds.	B. Campbell	2 min. 16.4 secs.
1 mile	J. Brooks	4 min. 46.8 secs.
3 miles	J. Brooks	15 min. 45 secs.
120 yds. hurdles	N. Millard	20.8 secs.
Long jump	C. Zane	18 ft. 1 in.
High jump	G. Mees	4 ft. 11 in.
Shot put	A. Wood	38 ft. 2 in.
Javelin	P. Millard	147 ft.
Discus	J. Muir	105 ft.
Victor ludorum	A. Corbin	
Ladies' 100 yds.	Christine Smith	11.8 secs.
Consultants' 100 yds.	Mr. I. McColl	11.2 secs.
Three-legged race	Andrew Weir and Jos Glanville.	
Children's Race	David Clark.	
Inter-firm relay	Royal Dental Hospital.	
Tug-of-War	Bart's Veterans rugby team.	

BARTS SPORT

TENNIS CLUB REPORT

At the time of writing ten 1st VI matches should have been played, but owing to some rather poor weather in May and in mid-June only half have been played. The season started well with victories against Downing College, Cambridge (7-2) and K.C.H. (9-0), the latter in the league. However, following the Oxford tour, four consecutive matches had to be called off because of rain. The dampness evidently affected the play of the First VI and we lost our next two matches 2-7, against St. Thomas' and L.S.E. The Thomas' match was unfortunately a league game in which we were soundly beaten by a stronger team on a cold, blustery Saturday morning. L.S.E. fielded the side which beat us last year in the U.L.U. Cup Final and succeeded in repeating the result. Things improved with our next match, a league game against the London Hospital which, fielding a stronger side we won 9-0. In the U.H. Cup we were offered a bye for the 1st round and meet the Royal Free in the 2nd. Thus our record to date has been:—

Played 5. Won 3. Lost 2. Cancelled 5.

On sports day this June some relief was provided in the form of a tennis tournament organised for the occasion; regular 1st VI players were excluded. Weather conditions favoured more wintry pastimes and it was perhaps fitting that it was a member of the rugger club, John Laidlow, who battled out a very close final with Hugh Simpson, only to lose narrowly in the final game.

With the fixture list now half completed it is hoped that the weather will be somewhat kinder for our remaining matches, and that we can repeat last season's successes in the U.H. Cup and the League.

ALAN KLIDJIAN.

JUDO CLUB

After a shaky start to the season, the Bart's Judo Club enjoyed one of its best successes in a long time by reaching the semi-finals of the inter-college cup competition held in the Union building in Malet St. The teams were of five men each, and fighting for Bart's were John Davies, Mark Podkolinski, Roger Tackley, Eric Moren and Hugh Jones.

We started well by defeating Chelsea College, Davies, Podkolinski and Moren all winning their contests convincingly. In the next round we met the Imperial College team. John Davies had a bye, but Mark Podkolinski did well to beat his opponent. Roger Tackley was unfortunate to lose, but Eric Moren drew with an equal opponent. It was then up to Hugh Jones to give us a

victory which he did with a magnificent win.

This put us into the semi-finals, where we faced the holders, University College, who eventually reached the final to lose to West Ham College. However, John Davies was overpowered by his opponent (a black belt). Mark Podkolinski fought magnificently, also against a superior opponent, and almost won when he was within millimetres of securing a strangle. Unfortunately his opponent held on, escaped, and then came back to win with a rather lucky throw. Roger Tackley could not avoid defeat against a much heavier contestant. By now the match was lost; Moren retired through injury but Hugh Jones prevented a blank score by a superb victory against a bigger and more experienced opponent. Well done, Hugh!

It was a very good team effort to reach this stage, and all the five fighting for us deserve praise, especially, I think, Mark, whose fighting spirit typified the determination of the whole team. Bart's is probably the best hospital for judo, and our result in the above competition proves that we are one of the best colleges in the University. The only thing preventing us from being the best is lack of practice sessions and enthusiasm to train. Next year it would be nice to see everyone coming along at least once a week. That way we will all get better and enjoy our judo more.

ERIC MOREN.

ATHLETICS CLUB

The Club has suffered again this year from the generalised apathy which seems to plague University athletics. At Bart's there are undoubtedly some fine athletes hidden among the Rughy Club, who miss out on Summer sport because the incentive is lacking. If this could be overcome, we would have problems in arranging inter-collegiate matches, as a similar attitude is present at most other colleges. Fixtures can be arranged, however, against Banks and Insurance Companies, which usually develop into highly sociable evenings, as well as providing regular athletic matches, if a reasonable team can be put up.

This year we will be arranging Winter training sessions at a local track, where anyone interested in athletics or keeping fit will be welcome, so that next year we will perhaps be able to put out a team for weekly fixtures.

In the matches we have entered this year we have put up better performances than in previous years, due largely to the stalwarts of the Club, but several Freshers have competed to a standard that suggests we will do even better in succeeding years.

U.L.U. Championships: Motspur Park

At this match, two new team members, Chris Noon and Jan Maciolek, made their debuts in the 100 metres and 400 metres, but neither was placed in the Finals. Mike Erith ran an impressive race in the 800 metres, winning his heat convincingly and being placed second in the Final.

U.H. Championship, Motspur Park

We welcomed another new member, Alvin Corbin, at this match—a sprinter of ability well demonstrated on Sports Day. Unfortunately Alvin was not on form at this match and was unplaced in his races. Mike Erith won the 800 metres and Richard Moody was placed fifth. John Brooks repeated his success of last year in winning the steeplechase.

Sports Day—June 5th, Chislehurst

This was intended largely as a social event and an unbiased report of the afternoon appears elsewhere in this Journal. Athletic performances are somewhat limited at the Chislehurst track but two worthy of mention are Alvin Corbin's wins in both the 440 yards and the 220 yards, against tough opposition, and Chris Noon's impressive victory in the 100 yards. John Brooks put up his usual high performance and thrashed allcomers in the 3 Miles, despite Dave Jackson's gallant challenge.

Finally, the Club congratulates Mike Erith on gaining a well-earned place in the U.L.U. team, and would like to thank Mr. McColl for his support for the Club in his years at Bart's, as he is leaving to take up a position at another Hospital on the other side of the river.

GUY ROUTH. *Captain.*

ST. BARTHOLOMEW'S HOSPITAL GOLFING SOCIETY

The 37th Summer Meeting was held at Worplesdon Golf Club on June 23rd. Twenty members played and enjoyed a splendid afternoon's golf on this lovely Surrey course.

The Winners were as follows:—

Gordon-Watson Cup (Hcp.), B. H. Goodrich, 34 pts.
Gillies Trophy (Scr.), C. J. R. Elliott, 22 pts.
Corbett Trophy (Hcp. 18 or more), D. Pedersen, 33 pts.

The Autumn Meeting will be held at Hadley Wood Golf Club on Thursday, 30th September, 1971.

The Society is open to any doctors who have qualified at Bart's or who have been working at Bart's. New members will be very welcome.

I. KELSEY FRY,
H. B. ROSS,
Hon. Secretaries.

CRICKET CLUB REPORT

Sat., 1st May, against Crishall, away. Won by 49 runs.

This enoyable annual fixture was the opening game of the season. Bart's batted first and made 140, mainly due to a fine knock of 63 by Berstock. In reply the local side made 91.

Sat., 8th May, v. Southend, away. Match drawn.

Southend batted first and had made 177 for 7 when they declared. With a somewhat weakened side, Bart's struggled to 111 for the loss of 8 wickets despite a welcome 35 from the opening bowler, Edmondson.

Sun., 9th May, v. Hampstead, away. Won by 46 runs.

This was a very encouraging performance. Against the strongest side on our fixture list, Bart's made a steady start to their innings. Then Davies, a fresher, joined Furness at the wicket, putting on 70 between them, and our side were all out for 178. After a poor start, Hampstead recovered well but were eventually out for 132—the first time Bart's have ever defeated Hampstead on their home ground.

Sat., 15th May, v. Jesters. Match abandoned due to rain.

Sun., 16th May, v Old Ardinians. Lost by 7 wickets.

Batting first, Bart's scored 204 for 7 declared, mainly due to Purcell, Furness and Reid. Having lost their first two wickets for 70, the Old Boys paced their innings well, and won with 10 minutes to spare.

Sat., 22nd May, v. Incogniti, home. Won by 7 wickets.

After a slow start, the Incogniti declared at 160 for 9. In reply, the opening partnership of 96 between Purcell, who eventually made 75, and Cooper (46) enabled Bart's to cruise comfortably home with the loss of 3 wickets.

Mon., 31st May, v. Burgess Hill, away. Lost by 2 wickets.

On this very hot Bank holiday, Bart's travelled to Burgess Hill with a mixed array of cricketing talent. Mainly due to a fine 112 from Furness, Bart's declared at 216 for 9 wickets. Despite Rowland taking 5 for 38, the home side scored the runs with ten minutes to spare.

Sun., 6th June, v. Blackheath, home. Lost by 157 runs.

Against a strong Blackheath side whose opening batsmen put on 152, the side eventually declaring at 254 for 4 wickets, a weakened Bart's side batted badly and could only manage 97.

Mon., 7th June, 2nd round U.H. Cup. v. Charing Cross Hospital, away. Won by 2 runs.

Having won the toss Bart's elected to bat on a good though somewhat slow wicket with a slow outfield. Runs came quickly and at lunch Bart's were in a strong position at 152 for 2. After lunch wickets fell rapidly but with help from the tail, Bart's were all out for 232. Furness had contributed the bulk of the runs, with useful contributions from Rowland, Reid and Sloan.

Charing Cross started disastrously in their innings, losing half their wickets for 56 at tea, but their No. 5 batsman started hitting the ball very hard though in the air, and by 7 p.m. Bart's total was not far out of reach. The match became very tense indeed when this player was caught eventually at 7.30 p.m. for 130. So with half an hour to go, they had 3 runs to win with 1 wicket left.

After five consecutive maidens, Edmondson took the last wicket so that we won by 2 runs. Mention should be made of some fine bowling by Martin who took 7 for 67.

SCORE CARD

Bart's

P. Cooper, ct. John, b. Sinnet	19
P. Furness, ct. Kaye, b. John	83
E. Rowland, l.b.w., by Fleming	21
C. Reid, b. John	30
A. Davies, b. John	7
R. Griffiths, b. John	2
D. Sloan, st. Westerby, b. Bishop	27
I. Hann, ct. Sinnett, b. Bishop	21
M. Martin, st. Westerby, b. Bishop	4
T. Dudgeon, b. Sinnett	1
D. Edmondson, not out	8
Extras	9
TOTAL	232

Bowling

Weatheral, 23-3-74-0. Flemming, 4-0-22-1.
John, 17-6-35-4. Raser, 6-1-20-1.
Sinnett, 15-2-32-2. Bishop, 9-1-42-3.

Charing Cross

Westerby, ct. Hann, b. Martin	6
Moss, b. Martin	15
Raser, b. Martin	15
Sinnett, b. Martin	0
Riley, ct. Hann, b. Martin	130
Bishop, ct. Griffiths, b. Martin	1
Kaye, b. Dudgeon	9
Weatherall, ct. Martin, b. Dudgeon	19
Flemming, b. Martin	7
Newcombe, not out	22
John, b. Edmondson	0
Extras	6
TOTAL	230

Bowling

Edmondson, 19.5-2-83-1. Rowland, 4-3-34-0.
Martin, 22-4-67-7. Hann, 3-0-19-0.
Dudgeon, 11-3-34-2.

Mon., 21st June. Semi-final of U.H. Cup v. St. Mary's Hospital, home. Won by 38 runs.

Having won the toss, the St. Mary's captain decided to put Bart's in to bat. After a solid start, runs came easily despite the accurate attack. Rowland batted well for his 87, and with the help of Furness and Reid, Bart's reached 221 when they declared for 7 wickets.

After a good opening partnership worth 69 runs, Mary's appeared to have the game under their control. However, with the score at 182 for 5, they lost P. Goodwin, who was the main danger to Bart's, and their momentum was checked. Mary's still appeared to have a good chance of winning, since with 30 minutes to go

they only required 40 runs with 4 wickets in hand. Two wickets fell in consecutive overs, and from then on the remaining batsmen obviously attempted to play out time. It was then a question of whether Bart's could capture the final two wickets with less than ten minutes to "stumps".

The ninth wicket fell, leaving Bart's to remove the last batsmen with five minutes to go. With the pavilion clock at 2 minutes to 8 o'clock, the final batsman was caught off the bowling of Martin, to win Bart's a place in the final for the fourth time in the last five years—this time against St. Thomas's.

Bart's

P. Cooper, l.b.w., b. McCleod	13
P. Furness, ct. Goodwin, b. McCleod	50
F. Rowland, ct. McCleod, b. Vaughan	87
C. Reid, l.b.w., b. Vaughan	40
R. Firmin, ct. McCleod, b. Vaughan	2
A. Davies, run out	10
J. Capper, st. Williams, b. Goodwin	6
M. Martin, not out	3
Extras	10
TOTAL for 7 wickets declared ...	221

I. Hann, J. Sowden, D. Edmondson, did not bat.

Bowling

Vaughan, 17-4-56-3. Goodwin, 25.3-6-51-1.
McCleod, 22-7-57-2. Colburn, 13-0-47-0.

St. Mary's

Evans, ct. Furness, b. Martin	60
Rance, run out	34
McCleod, ct. Reid, b. Rowland	32
Goodwin, b. Rowland	23
Williams, run out	13
Bulow, ct. and b. Hann	2
Schneerson, l.b.w., b. Hann	13
Mosten, b. Rowland	1
Glynn, b. Edmondson	1
Vaughan, ct. Reid, b. Martin	0
Colburn, not out	0
Extras	14
TOTAL	193

Bowling

Edmondson, 11-2-37-1. Rowland, 13-2-55-3.
Martin, 16.2-1-54-2. Hann, 15-4-33-2.

Sun., 4th July, v. Bart's Past, away. Lost by 6 wickets.

Bart's Present batted first on an easy paced wicket against a useful attack. A. Whitworth used the humid atmosphere to good effect and soon the Present side were struggling at 50 for 4. Eventually, the side was all out for an undistinguished 127. In reply, after the rapid dismissal of Purcell, the Past, with time on their side, accumulated the runs for the loss of 4 wickets.

As usual, this was a most enjoyable game.

COLIN REID.

NURSES' SWIMMING

Once again Bart's nurses have been in the fore of Inter-Hospital Swimming. The first competitive events were the heats of the Summer Gala and these were held at the Middlesex Hospital on June 15th. This involved all the London hospitals and the fastest five for each event qualified for the final. Bart's did well in every event so at the final held here on June 29th, we were well represented, and figured in the first three of each event. The result is that we have gained the most points in the Summer Gala. The Autumn Gala will be held at the Iron Monger Row Baths, E.C.1, on September 29th and the overall winners of both galas will be presented with the Nursing Mirror Swimming Shield, which incidently has been at Bart's for the past three years and must stand a good chance of staying here for a fourth.

DAPHNE POLSON,
Swimming Captain.

Results in Summer Gala Final
Individual Medley: 1st, Janet Lodge.
Freestyle: 2nd, Daphne Polson.
Breaststroke: 3rd, Caroline Wilcock.
Diving: 3rd, Janet Houlton.
Backstroke: 2nd, Daphne Polson.
Freestyle Relay: 1st, Caroline Wilcock, Janet Lodge, Janet Houlton, Daphne Polson.
Style Contest: 2nd, Daphne Polson.
Medley Relay: 1st, Janet Lodge, Janet Houlton, Daphne Polson, Caroline Wilcock.

Sponsored Swimming

A chance for all swimmers who do not wish to swim competitively will be on September 25th when a sponsored swim will be held at the Bart's pool in aid of the St. Bartholomew the Less Restoration Fund. Details of this swim will be posted nearer the time but it is hoped that many people will support the event.

Swim for Fun

An amusing evening of swimming and general chaos is promised on Tuesday, August 24th, at 7 p.m. at the Gloucester House Pool. All are invited from the most junior nurse to the most senior sister and from consultants to students. Events between all the aforesaid will include pyjama, egg and spoon and mixed pairs races (tied together!), diving for plates, etc., and many other attractions, refreshments and prizes. Fuller details of this occasion will be posted around the hospital.

SAINT BARTHOLOMEW'S HOSPITAL JOURNAL

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Editorial

Filtering back down the grape-vine come criticisms of the *Journal*: it's dull, too parochial; it contains too little non-clinical material, too much clinical material; there is insufficient discussion on life outside Bart's (for present students), and insufficient information on life inside Bart's (for past students); it displays to small advantage the talents of the few, and to even less the dearth of talent among the many. The list is endless. It is, however, a continuing source of amazement to us, that in this emancipated, free-speaking world, no one (with one notable exception, and even that was not signed) is prepared to put his comments in writing.

The *Journal* was first published on October 14th, 1893. Briefly, its aims as stated in the first editorial, were to put on permanent record such clinical and other work as is done in the hospital, enabling the student and practitioner to keep in touch with the Science and Art of Medicine in Hospital and School; to promote and extend the feeling of *esprit de corps* among students, past and present, to give non-active members some idea of the means by which the name of this great Royal Hospital is being maintained, and so, by example, to rouse them to activity; to record clinical and other lectures; to give publicity to anything original and so to act as a means by which those who write may learn to perfect themselves in that art, to bind as much as possible the past with the present.

Times have changed, and with them the format of the *Journal* and to a certain extent its contents. The Abernethian Society, then the primary society of the Hospital, is of a bygone age. The Amalgamated Clubs, with whose benefit the *Journal* was to a large degree concerned, are still around under the auspices of the Students' Union. The *Journal* is as yet an independent publication, and is striving to remain so. Yet, in the quest to continue to ensure that the *Journal* has a universal appeal, it is remarkable that so few people are prepared to swell its pages with the glowing articles full of fascination for all and sundry, of which they so deplore the lack. Perhaps they are just shy . . .

The time has come when we must consider whether perhaps the Journal has fulfilled its purpose. With an unbroken record of monthly publication since its inception, shall we now go the way of the other London hospital journals and produce an issue four times each year? The apathy endemic in this hospital is obviously not confined solely to the students; considering the countless hundreds who have marched with their stethoscopes from under King Henry's benevolent gaze, an external circulation of around 1,100 copies is something scandalous. The subscription to this *Journal* for students and practitioners alike is far less that of other medicals schools, and its quality is acknowledgedly superior.

Is it worth the struggle to maintain?