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# ST. BARTHOLOMEW'S HOSPITAL JOURNAL

Vol. LXII

SEPTEMBER 1958

No. 9

## EDITORIAL

'Holiday fever' has been endemic, for the last three months, amongst all sections of the Hospital Staff. Symptomatically this disease is more severe than 'Skiingitis' which affects annually a minority of people during the latter winter months. Long and humid hours have been brightened by the anticipation of pleasurable days spent in this, or some other country, and yet unclouded by the documentation so recently declared an essential prelude to the medical undergraduates' vacation.

With the completion of the holidays, many refreshed and active minds have begun to assess the opportunities presented by the future months. The Journal—which receives always its share of criticism—is itself taking stock of its literary assets and contemplating its future policy.

A Journal must be neither complacent nor conservative regarding the type, quality and quantity of its material. This Journal exists—it is hoped—to provide pleasurable and informative reading for its fifteen hundred or more subscribers. Potential authors are derived almost entirely from the ranks of our readers, yet the medical undergraduates, who constitute one of the largest sections, contribute the least. To improve upon its present standard and punctuality, the Journal requires a selection from larger quantities of literary material.

Recent allegations of student apathy are amply justified when applicable to the present undergraduate attitude towards the Journal. Although more student authors of

the longer type of article are required, other equally important contributions are necessary. To instil more light relief and life into the Journal we urgently require more letters to the Editor, more quotes, candid cameramen, poets, cartoonists, artists, etc. Several sports clubs make little or no effort to report their activities. No publication can adequately report or advertise any event without the co-operation of all those concerned.

The Publications Committee is very grateful to all those people who conscientiously completed the Questionnaire. In this manner these people will have contributed to a future series of articles based upon the results of this survey. Perhaps these anonymous contributions will be augmented in the near future by more personal efforts.

All sections of readers must feel entitled to contribute to their Journal. With the reintroduction of a Nurses' Representative (Miss P. R. Skinner) we look forward to more contributions from the Nurses Home. Recent letters to national newspapers and advertisements in the *Nursing Times* and *Mirror for Staff Nurse* positions at Bart's may stimulate a literary response.

The Fountain will celebrate shortly its centenary. Although it is hoped to publish a short history of this structure, it is felt that this would do scant justice to so important a part of Bart's life. The Fountain has witnessed many amusing, romantic and tragic scenes. It is hoped that some of our older readers will share their anecdotes relating to the Fountain.



Dr. I. S. Ravdin presents the first "Pennsylvania Award" to Mr. F. C. W. Capps  
(See letters to the Editor)

#### PERPETUAL STUDENT

On July 23rd Dr. Frank Gerbode of Stanford University, San Francisco, was enrolled as a perpetual student of the Medical College. The ceremony took place before a large audience in the clinical lecture theatre and was held on the occasion of a lecture by Dr. Gerbode on Cardiac Surgery. Mr. F. W. Capps introduced Dr. Gerbode and Sir James Paterson Ross explained that the perpetual studentship was the highest honour that the college could confer and described how Dr. Gerbode had stimulated laboratory surgical research in the hospital during his visit here in 1949. Sir James also mentioned the exchange at postgraduate level between Stanford and St. Bartholomew's that had become established as a result of Dr. Gerbode's efforts. The Dean (Mr. D. F. Ellison Nash) invited Dr. Gerbode to sign the college register and the new perpetual student, who was warmly received by his audience, then gave a brilliant account of recent developments in cardiac surgery with

particular reference to his experience with the pump oxygenator. The lecture was followed by a fascinating film which showed clearly the precise intracardiac operations made possible by the use of an extra-corporeal circulation.

The proceedings concluded with the presentation to Dr. Gerbode by Mr. J. B. Hume of the "History of St. Bartholomew's Hospital" by Sir Norman Moore.

#### STUDENTS' UNION COUNCIL MEETING

At the meeting held on Wednesday, June 16th, C. G. Beardwell was elected Senior Secretary and R. M. Hadley, Junior Secretary.

Mr. Silverstone reported that he had bought and read a copy of "Sennet," as requested by the Council, and considered that it was not worth obtaining copies for the Abernethian room. Mr. Thornton's request for the loan

of club minute books was brought to the attention of the Council and it was decided that club secretaries should be asked to co-operate by lending him their minute books.

The award of Honours Colours to Messrs. D. S. Wright and D. Godwin for Hockey was approved.

Mr. Bootes requested the Council's permission to proceed with the printing of a new and revised edition of the Students' Union Guidebook, this was granted. A grant of £30 to the Boat Club to cover the expenses of the crew sent to Henley was also approved.

Other matters raised were the need for repairs to the piano at Charterhouse Square and the desire of some members of the S.U. for the provision of iced coffee, sandwiches and bread and butter in the refectory. The Senior Secretary was instructed to look into these matters.

#### CONGRATULATIONS

We would like to extend our sincere congratulations and good wishes to Dr. Hilary Titterington on her graduation at Edinburgh in July.

Miss Titterington while on her long "visit" to us in Henry, made many friends, all of whom admire her achievement in overcoming so many difficulties after her accident, and finally qualifying this year.

#### FAREWELL DINNER

It is proposed to hold a farewell dinner for Dr. Geoffrey Bourne in October. Any of Dr. Bourne's previous housemen and registrars who would like to attend please contact David Weitzman in the Cardiac Department.

#### 10th DECENNIAL CLUB

The 10th Decennial Contemporary Club annual dinner will be held on Wednesday, 29th October, at 7 p.m., for 7.30 p.m., at

the Royal Thames Yacht Club, 60 Knightsbridge, S.W.1. Members of the 8th and 9th Decennial Clubs would be welcomed. Would all members wishing to come send their acceptances together with their cheques for £2 2s. 0d. to Dr. Geoffrey Bourne, 20 Harley House, Marylebone Road, London, N.W.1.

Dr. Gervas C. Wells-Cole will take the chair.

#### CLINICAL VISITORS

We extend a welcome to two more Bristol Clinical Students, A. M. Wilson and H. Steiner.

#### JOURNAL OFFICERS

J. Chapman has succeeded M. I. D. Cawley as Manager to the Journal.

J. E. Cawdery has been appointed Assistant Manager to the Journal.

Miss Pamela R. Skinner has been appointed Nurses Representative.

#### 50 YEARS AGO

Cost 6d. per copy. A Doctor as Editor

The new Pathology Laboratory nearing its completion.

Mr. C. Gordon-Watson appointed Surgeon to St. Mark's Hospital for Fistula.

An article by E. C. Morland on the new "Conjunctival Tuberculin Reaction."

A description of the new Orthopaedic Department, which at that time excelled any other similar department to be found in a London Teaching Hospital. Together with this department went the Physical Exercise Room or Medical Gymnasium. Exercises were controlled by (a) Two men trained in Sweden for the men (b) An English lady trained in Sweden, assisted by the hospital nursing staff, for the women. The Orthopaedic Surgeons were allowed the

use of eight beds, four in Charity Ward and four in Lawrence Ward.

The students were presented with a new notice board for the use of the amalgamated clubs. They preserved their usual good relationship with the police force by beating "D" Division of the Metropolitan Police by 6 goals to 5 at water polo.

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## CALENDAR

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### September

- Sat., 6th.—Medical and Surgical Units on duty.  
Mr. G. H. Ellis on duty.
- Sat., 13th.—Dr. Geoffrey Bourne on duty.  
Mr. J. B. Hume on duty.  
Mr. F. T. Evans on duty.
- Sat., 20th.—Dr. A. W. Spence on duty.  
Mr. C. Naunton Morgan on duty.  
Mr. R. A. Bowen on duty.
- Sat., 27th.—Dr. R. Bodley-Scott on duty.  
Mr. R. S. Corbett on duty.  
Mr. R. W. Ballantine on duty.

### October

- Sat., 4th.—Dr. F. R. Cullinan on duty.  
Mr. J. P. Hosford on duty.  
Mr. C. Langton Hewer on duty.
- Sat., 11th.—Medical and Surgical Units on duty.  
Mr. G. H. Ellis on duty.

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## OBITUARY

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### SYDNEY ATKIN, M.B., B.Chir.

Dr. C. Sydney Atkin, who died recently at the age of 69 and whose obituary notice appeared on page 152 of the Journal, belonged to a long line of doctors.

His father, grandfather and great-grandfather all practised in the City of Sheffield and his son has taken on the family practice.

He was educated at Marlborough, Caius College and Bart's.

He was a member of the Cambridge University Hockey Team in 1909 and 1910. He played hockey for England against Wales, Scotland and France in 1913 and in 1920 he took part in the Olympic games.

He served as a Captain in the R.A.M.C. in the British Expeditionary Force in 1914, and in 1921 he joined the family practice.

He was one of the outstanding athletes of his generation at the Hospital. His friends will always remember him as a man who radiated health, happiness and sympathy.

Throughout his long and busy professional life he lived up to the fine traditions of his early training. In his native city he will always be remembered as one more of a long line of doctors whose lives were spent in selfless service.

R.M.V.

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## ANNOUNCEMENTS

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### Engagements

**BACKHOUSE—FERGUSON.**—The engagement is announced between Dr. Ian Backhouse and Janet Ferguson, and the wedding will take place at Port Elisabeth, Cape Province, South Africa, on October 25th.

**FARMER—JACKSON.**—The engagement is announced between Dr. Rex Farmer and Margaret Anne Johnson.

**GOODWIN—BRUCE.**—The engagement is announced between Dr. Charles Stewart Goodwin and Jean Elizabeth Bruce.

**HAYWARD—COWAN.**—The engagement is announced between Ian Alistair Craufurd Hayward and Sheila Elizabeth Alma Cowan.

**POCOCK—TRESIDDER.**—The engagement is announced between Eric William Pocock, M.R.C.V.S., and Dr. Angela Margaret Tresidder.

**WILLIAMS—BRIND.**—The engagement is announced between Dr. David Knapman Williams and Frances Rosemary Brind.

### Marriages

**KIELTY—SPENCER.**—On May 24th, Dr. Michael Gerard Kielty to Patricia Mary Spencer.

**MCMMASTER—TAYLOR.**—On July 12th, Albert Brian Malcolm McMaster to Elizabeth St. Denys Martin Taylor.

**MILLARD—TROUGHTON.**—On July 26th, Dr. John Millard to Dr. Rosemary Troughton.

### Births

**BETHELL.**—On July 15th, to Aline, wife of Dr. M. F. Bethell, a sister for Amanda and Guy.

**BEVAN-JONES.**—On August 4th, to Muriel, wife of Dr. H. Bevan-Jones, a sister for Bruce, Penny and Hilary.

**DOUGLASS.**—On August 6th, to Eleanor Mary (Molly), wife of Dr. Donald J. Douglass, a daughter.

**MELOTTE.**—On July 5th, to Kathleen, wife of Dr. G. Melotte, a son.

**MORLEY.**—On August 10th, to Elisabeth, wife of Dr. David Morley, a son (Jonathan David).

**OSTLERE.**—On July 29th, to Mary, wife of Gordon Ostlere, a daughter (Katharine Mary).

**PEARCE.**—On July 23rd, to Patricia, wife of Dr. James Pearce, a son (Nicholas John Mark), brother for Paul James Martin.

### Deaths

**BEDDOW.**—On August 11th, Dr. Harold Josiah Beddow, aged 79. Qualified 1907.

**MCCULLOCH SMITH.**—On August 2nd, Anne McCulloch Smith, a former sister of the Massage Department.

**THOMAS.**—On July 12th, Dr. I. Ben Thomas, aged 60. Qualified 1923.

**WAY.** On July 15th, Dr. Leslie Ferguson Kennedy Way, D.S.O. Qualified 1910.

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## NOTICES

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### Appointments

**BRITISH MEDICAL ASSOCIATION.**—The Gold Medal for Distinguished Merit has been presented to Lord Adrian.

**UNIVERSITY OF EDINBURGH.**—Dr. K. W. Donald has been appointed to the Chair of Medicine at Edinburgh University.

**ROYAL COLLEGE OF SURGEONS.**—Sir James Paterson Ross has been re-elected President of the Royal College of Surgeons of England. Sir Archibald McIndoe was re-elected Vice-President.

**ROYAL SOCIETY OF MEDICINE.**—Dr. F. Parkes Weber has been elected an Honorary Fellow of the Royal Society of Medicine.

**UNIVERSITY OF LJUBLJANA.**—Sir Harold Gillies has been elected Honorary Doctor of Medicine of the University of Ljubljana, Yugoslavia.

Professor K. J. Franklin has been elected an Honorary Member of the Renal Association.

The Eli Lilly Travelling Fellowship in Medicine has been awarded to Mr. J. D. Griffiths. M.S., F.R.C.S.

### Changes of Address

**PROFESSOR K. J. FRANKLIN** (after Mid-Sept.), Llanberis, Yarnnton, Oxford. Tel.: Kidlington 3104.

**DR. W. D. NICOL**, The Lord Chancellor's Visitor's Office, Staffordshire House, Store Street, London, W.C.1.

**BRIGADIER R. B. PRICE**, Hindover, Furze Hill, Seale, Nr. Farnham, Surrey.

**MR. R. HARVEY WILLIAMS**, F.R.C.S., Carrig More, Youghal, Co. Cork, Eire.

**MR. H. W. WILSON**, M.S., Chevington Lodge, Flixton Road, Bungay, Suffolk.

## A PIONEER IN THE ATTACK ON CANCER

by R. S. CORBETT

I have chosen as my title for this Lecture, "A Pioneer In The Attack on Cancer," for two reasons.

I have used the word "Pioneer" for if one looks up a definition of this word it states "one of a party of soldiers who clears the road before an army—one who goes before to prepare the way for others." I am sure that what I have to tell you about Gordon-Watson will amply justify this word being applied to him.

The second half of the title "The Attack on Cancer" came to me when I was looking through his writings, and found that the farewell Lecture given to the students at the invitation of the then Sub-Dean, Dr. Harris, was titled "The Attack On Cancer."

I feel it would not be out of place to run over briefly his earlier life, before making special reference to his work on the Honorary Staff of this Hospital, and pointing out the progress in treatment of diseases of the colon and rectum in which he was particularly interested.

Charles Gordon Watson, later assuming the name Charles Gordon Gordon-Watson by deed poll in 1920, was born on the 18th of April, 1874. He was the eighth child and the fifth son of the Reverend and Mrs. Henry George Watson, Vicar of St. Leonard's, Buckinghamshire. Although this family of twelve was brought up in the English Church he joined the Roman Catholic Church early in life. In this connection there are two very handsome stained glass windows in the Chapel of St. Andrew's Hospital, Dollis Hill, in his memory. He served this Hospital for many years as a Consultant. His association opened the door for many of us Bart's men to enter. We are grateful to him for this association.

He was educated at St. Mark's, Windsor, and St. Bartholomew's Hospital Medical School. His ambitions were to be a soldier and not a doctor, yet in May, 1893 he says

"I interviewed the Dean at Bart's and entered the school, I knew not why!"

His reactions at this time and subsequently, are well told in 3 volumes of typescript which he left to the Hospital entitled "Forty Years In Surgical Harness." He wrote this during his retirement, and I have made full use of it.

As a medical student the tragedies of life and the gratitude of the poor were brought home to him. He enjoyed the community life, the sport, the Hospital Smoking Concerts—so popular at that time, and the "rags." To illustrate this he records that on one afternoon some twenty or more students organised a rat hunt in the old Smoking Room downstairs. A sack of rats was secured from Billingsgate Market, and three smart terriers were produced. The tables were ranged round the sides and the students armed themselves with sticks. A few rats were released and the terriers unleashed. Soon there was pandemonium as more and more rats were let loose—chairs were broken, tables collapsed and the noise was terrific. When the turmoil was at its height, in walked the Dean, and some rats escaped with the terriers in full cry. Later on the students assembled before the Discipline Committee and the unfortunate man who brought the rats was regarded as the instigator (quite erroneously), and was sent down for the rest of term.

Watson qualified in April, 1898, and after serving six months as House Surgeon at the Norfolk and Norwich Hospital he was appointed House Surgeon at Bart's to Howard Marsh and Lockwood the following October.

Abdominal surgery was very limited at that time. Intestinal resections and anastomoses were rarely carried out, as they were often fatal, so that a carcinoma of the stomach or colon was not often removed. In 1899, eleven cases of carcinoma of the stomach were admitted—five were operated upon.

In one case a pylorotomy was performed, and in two gastro-jejunostomy only. The remaining two were submitted to exploratory laparotomy only. One gastro-jejunostomy only survived, and this was on account of the use of Murphy's "Anastomosis button" devised in 1892.

**Carcinoma of the stomach** is still a problem to us a palliative sub-total gastrectomy is considered the more reasonable treatment. We have carried out five jejunal replacements after total gastrectomy since 1955, and four are alive and well. One is extremely well—doing a full days' work as a furniture remover, one year and eight months after his operation.

**Carcinoma of the Colon and Rectum** was usually treated by "Colotomy," as it was then called. The operation was performed in 20 cases of which 10 died. Excision of the rectum was only carried out in 4 cases and 1 died.

**Acute Appendicitis** at that time was more usually treated by waiting for an abscess to form, when incision and drainage effected a cure. The first appendicectomy with recovery carried out in Bart's was reported in 1889. When Watson was a House Surgeon there were 35 cases of acute appendicitis admitted, three died. The remainder had incision and drainage and frequently a washout of the peritoneal cavity.

**Antiseptics** were the order of the day, but tribute is paid to Lockwood, the Junior Assistant Surgeon, as being a "Pioneer" at Bart's in Asepsis.

**Anaesthesia** was in its infancy. In 1899, 6807 anaesthetics were administered, of which 2504 were chloroform, 2382—Gas and Ether, and 1706,—Gas alone. Harrison Cripps used to say that there were only three forms of anaesthesia—Chloroform, Ether and Straps! Could we not bring this up to date and say, Pentothal, Curare, and Ice!

There were no telephones in those days, and the Night Porter was quite an institution in himself. He always diagnosed the night emergency for the House Surgeon on duty. He had to fetch the Surgeon in a cab, and it was not uncommon for the Chief to borrow half a crown for the cab fare to take him home!

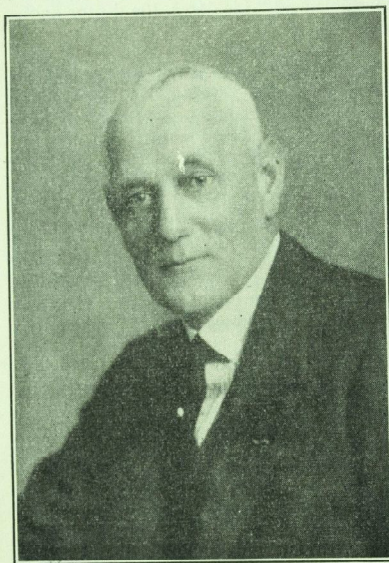
The "drunks" were treated with large doses of Senna, and there is the delightful story of the "dead drunk" who was brought in by the police. The Dresser on night duty turned to the constable and said "I think he is dead"—the drunk suddenly sat up and said "I am not dead"; whereupon the constable said "Lie down, the doctor knows best."

In July 1899, towards the end of his year's service as House Surgeon, Watson went in company with Jamieson—a House Physician and nephew of the well-known "Dr. Jim," of Jamieson raid fame, to secure an interview with the D.G. of the Army Medical Service. His pioneer spirit showed itself, and he was anxious to volunteer to serve in South Africa in the event of War. He was delighted to be accepted for one year as civil surgeon, the terms being £1 per day and a horse to be provided. He left on the first troop transport the *Roslin Castle* in October. On this journey Watson learnt to play bridge, though most of the Officers played Whist. This game he always enjoyed and in the latter part of his time at Bart's he looked forward to a game at the Garrick Club before dinner. This transport had the distinction of putting up the first "black out" in War, on the 25th October, 1899. They pasted brown paper over the port-holes and dined by candlelight, and he was reprimanded by Kitchener's brother for striking a match to light his pipe on deck.

He was detailed to Wynberg, a suburb of Capetown, where the barracks had been converted into a Hospital, and in the course of his duties amputated the leg of General Pretorius. He was here six months, and during this time made some interesting and helpful associates. The Duke of Portland's Hospital was formed at a later date in Rondebosch—a neighbouring suburb. Here, Anthony Bowlby, whom he had left as an Assistant Surgeon at Bart's, was the Surgeon in Charge, and Cuthbert Wallace from St. Thomas's was his second string. Both of them served in the first World War as Consultants, and each received a Knighthood, and in the course of time, each became President of the Royal College of Surgeons.

He refers to his early morning rides in very attractive country, the great Constantia district and visit to a well-known Cape

family, the Cloetes, who happen to be distant relations of mine. At their historic and attractive Dutch homestead—"Alphen," surrounded by orchards and vineyards, he enjoyed a tea-party at which they feasted on mulberries and magnificent peaches.



Sir Charles Gordon Gordon-Watson

In May, 1900, he left Wynberg and went up country and was transferred to Colonel de Gallais' force, and became M.O. to the Burma Mounted Infantry. He was present at the battle of Bothaville near Kronstad, where de Gallais won a V.C. in the defeat of the Boer General De Wet (but where he himself fell in the moment of victory). Watson was present in the farmhouse where this gallant Colonel died, but could not save him. He returned to England after serving his year with a three month extension, bringing with him a trophy—an astragalus of a Boer buried at Spion Kop. This he presented to Hallett, our good and faithful dissecting room attendant at that time. For his services in this war Watson was awarded the Campaign medal with three clasps. He kept his

"Sam Browne" and Frankis Evans recalls that at his last operation in private, when as a Major-General he was putting on his uniform and tightening his belt, said "The same holes as in the Boer War, Frankis!"

Looking back on his experiences in the South African War he quotes Cecil Rhodes: "So many worlds, such things to be, So little done, so much to do."

How similar was the utterance of Sir Winston Churchill (another Boer War Veteran) in the second World War.

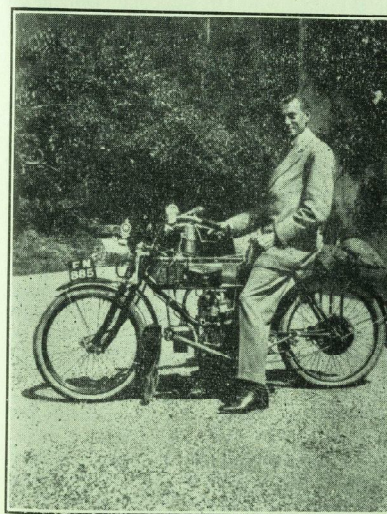
During the ten years following his return from South Africa he prepared himself for the Staff. He adopted the standard formula of being first a Demonstrator in Anatomy, which post he held for four years, to gain teaching experience, and then a Surgical Registrar. There was only one Surgical Registrar to the Hospital in those days. This had its advantages and disadvantages. The advantages were that he gained great clinical experience. At one time owing to sickness or leave periods he acted for three Assistant Surgeons. In this office he was also responsible for the post-mortems, and he claimed to have done over a thousand. This he says was of the greatest value to him. The great disadvantage was that he got no operative experience at all—in fact he said he had not done a single major operation in Bart's until he got on the Staff. This I think explains the title of Assistant Surgeon (now given up) for a Surgeon when appointed to the Staff, actually assisted his Chief on one operating day a week.

He was fortunate in being appointed to the Metropolitan Hospital in the same year that he passed his Fellowship which was two years after his return from the Boer War. This gave him operating experience. He was instrumental in getting two Surgical Registrars appointed owing to the volume of work entailed in being responsible for all records as well as the morbid pathology and some teaching in wards and out-patients.

How things have changed! We now have five Surgical Registrars and are wise to retain the title of Chief Assistant for them, as that is in fact what they are to us. Sir Charles rectified the error in his training by making me responsible for the night emergencies the whole time I was on the firm. The swing

of the pendulum has possibly swung too far now, when one realises the amount of operating that the Senior Registrar gets when he leaves his Teaching Hospital and serves in a Sector Hospital. He gets very little time to sleep, and less to think!

Turning to the lighter side, he was a keen sportsman. He indulged in racing, fishing and shooting. His pioneer spirit was shown in his enthusiasm for motoring. He took part in the motor-cycle trials to Edinburgh and back (see picture of the famous motor-cycle).



Later he invested in a motor car. It caused quite a stir when he drove up in a motor car to the Hospital. Our Librarian has reminded me that Lockwood was the first member of the Staff to come to Hospital in a motor car. He owned a scarlet Panhard known as the "Red Peril."

Watson's pioneer spirit again attracted him to the Army, and he was commissioned as Surgeon to the 3rd Middlesex Royal Garrison Artillery Volunteers. Afterwards he transferred to the Territorial Army as Captain, R.A.M.C., on its foundation in 1908. I

would like here to refer to Michael Gordon-Watson, now Colonel in the 1st Brigade of Irish Guards, who has served his country with such distinction. How proud Sir Charles would be to see him now.

In 1910 Watson was elected Assistant Surgeon to St. Bartholomew's Hospital and he served with Howard Marsh. This gave him a great interest in Orthopaedics. He liked the treatment of fractures and made contributions to the literature, which included a revision of Howard Marsh's text book on Diseases of the Joints and Spine.

In 1914 came the first World War, and this brought him back to the battlefield again on which his pioneer spirit thrived. Watson was posted to the No. 1 British Red Cross Hospital, the Duchess of Westminster's at Le Touquet, where he served from September, 1914, to November, 1916. Then, as Colonel A.M.S. he became Consulting Surgeon to the 2nd Army in France and afterwards to the Italian Expeditionary Force. He was mentioned in despatches, created a C.M.G. in January 1916 for military operations in the field, and a Knighthood (K.B.E.) was conferred on him on 3rd June, 1919.

After the War, Sir Charles, as he now was, noted great changes for the Consultant. Doctors returning from the War were confident of their powers to operate, and engaged in surgery in their Cottage Hospitals. These multiplied and improved and much emergency surgery was done locally. Their enthusiasm carried them too far, and the pendulum swung back, and in consequence general practice suffered and the reputation of the Hospital was not often improved. There is no doubt that as a result, when the National Health Service was formed, the Ministry of Health took the drastic action of abolishing the majority of the so-called "Cottage Hospitals."

Specialisation became evident to Sir Charles, and as a result of being appointed to St. Mark's Hospital, his interest in orthopaedics waned, and that for rectal diseases grew.

St. Mark's Hospital was founded by a Bart's man—Frederick Salmon, in 1835 in Aldersgate Street, and it became firmly established in the City Road in 1854. Sir

Charles was a very loyal member of this Hospital, and I am sure he would be proud to know, as we all are, that this link with Bart's is even stronger than it was when he retired in favour of Naunton Morgan—I refer to the appointment of Ian Todd to the Bart's Staff next October.

Sir Charles was the last adherent to the clamp and cautery method of treating piles, and Oh! what anxieties the Theatre Sister had to keep the "fiery furnace" going.

There was a popular prejudice against colostomy. The story is told of Sir Charles after going to great lengths to describe the details of a colostomy to a patient, said, "Well! what do you think of that?" The patient turned to Sister and said, "Fetch me my trousers."

This operation was first recorded in Bart's in 1887, and the mortality at that time was 45 per cent. Sir Charles said it was 101 per cent, and when asked what the 1 per cent was for, he said, "For the patient who died when he heard of it." (The popular site was the lumbar region in those days, but today the iliac site is no longer attended by any fears or danger to life.)

#### Cancer Research

In the field of Cancer Research he had two outstanding colleagues at St. Mark's with whom he worked.

The first was **Lockhart-Mummery**—Sir Charles recognised that research must be organised, stimulated by adequate funds and co-ordinated. He was in favour of the education of the public to recognise pre-cancerous conditions, and the early signs of cancer. With this idea he joined Lockhart-Mummery and fifteen others, and founded the British Empire Cancer Campaign. These men agreed in 1922 that the complexity of the cancer problem had been so clearly demonstrated that its solution would not be found in any one field, or in any one institution. They saw the need for an organisation whose primary function would not be to own Laboratories, and conduct its own researches therein, but to utilise the brains and facilities of the already well-established research institutions, such as those associated with the teaching Hospitals and Universities.

The Campaign was to co-ordinate and initiate, encourage without direction, filling up gaps and advising against unnecessary duplication. This was their policy. Time has fully justified and paid tribute to the far-sightedness of those founders. Sir Charles was Chairman of the Investigation Committee for twenty years, and unfiring in his work for the Campaign. Up to the time of his death in 1949, he was a very active member of the Grand Council, and of the Executive Committee.

It pleases me to feel that I have been able to follow, as Chairman of the Cancer Department Committee, the work in this field, and to serve on the Grand Council of the B.E.C.C. with Dr. Malcolm Donaldson at the present time. I can report to you that there has been a swift increase in the post-war income each year, and this has meant a correspondingly swift increase in activity. In the pre-war era, the income rose from thirty-five thousand pounds (£35,000) to sixty-five thousand (£65,000) and at all times research was supported to the limit of these figures. We were informed at the Annual Meeting of the Campaign, two weeks ago, that the income has risen to seven-hundred and sixty-three thousand pounds (£763,000) excluding the funds raised by the autonomous Councils, and that in the thirty-five years since it has been established five million pounds have been received and spent on research. How gratified Sir Charles would be to know this!

The other member of St. Mark's Staff to whom I wish to refer is **Dr. Cuthbert Dukes**. In all his writings Sir Charles pays the greatest tribute to Cuthbert Dukes. In the Pathological Department at St. Mark's he has always given masterly guidance and advice to the Surgical Staff. His detailed investigation of every rectum excised showed that there was a direct spread through continuity of tissue starting in a mass of a typical epithelium. This may resemble a protruding epithelial mass from an area of hyperplasia, or a papilloma or an adenoma. The proliferation spreads more transversely than longitudinally, and its depth increases by infiltration. From this he formulated his **three grades of carcinoma of the rectum**, now universally accepted, which depend upon the depth of the spread by direct continuity. The 'A' case is a raised mass of cells, which only extends down to the sub-mucosa. In the 'B' case, there is an extension into the mus-

cular coats, and in the 'C' case there is a spread of the peri-rectal tissues with ulceration and invasion of lymph nodes.

In 1926 I was appointed Chief Assistant to the Gordon-Watson firm on my return from a year's work in America as Instructor in Surgery at the University Hospital of Michigan. I have very happy recollections of the four years that followed, acting as Sir Charles' Assistant both in the Hospital and in his private practice. They served as a most valuable part of my training, and in fact introduced me to the field of colon surgery. I became a member of the Proctological Section of the Royal Society of Medicine, which sprang from the Proctological Society founded by Gordon-Watson and Lockhart-Mummery. In 1945 I was elected President of this Section and in my Presidential address reviewed the surgical treatment of Chronic Ulcerative Colitis, in which disease very little major surgery had been done.

We all admired Sir Charles' unbounded energy and great enthusiasm. He had a great capacity for friendship, and always had a friendly smile. He was a strong supporter of all student activities, presiding over most sports. The Inter-Hospital Boxing Competition was an occasion when he took his Staff to dine at the Garrick Club first, and returned to drink cold lager afterwards. On one occasion he sent me a post-card which caught the midnight post and was delivered at 8 a.m. the next morning, which said, "In case of beer fog, remember 9 a.m. Weymouth House."

He was an enthusiastic golfer and with the aid of Dr. George Graham and myself we founded the Bart's Golfing Society in 1928. His motto in this game was "Beer for distance, and port for accuracy."

#### CANCER OF THE RECTUM

On the firm we realised that apart from sport his absorbing interest was Cancer of the Rectum. He followed in the footsteps of Harrison Cripps a Bart's surgeon who was awarded the Jacksonian prize in 1877 for his Essay on the "Possibility of Cure or Relief of the Rectum by Excision." Sir Charles in 1909 advocated a radical form of treatment for this disease on the same lines as

the radical treatment for cancer of the tongue and breast. He was a strong supporter of the perineal operation. He contended that perineal excision was preferable to an abdomino-perineal excision, as it was attended by a lower mortality, which outweighed the possible increase in the recurrence rate. This I think was true at that time.

He was very speedy and dexterous in performing this operation and he used two aids—the Egg and the inflation Bag. The Egg was a piece of wood shaped like an egg with a small staple at one end to allow for ligature attachment. The egg was pushed into the rectum before the anus was sewn up and tethered to it. He found this of great assistance during the separation of the anterior wall of the rectum from the male urethra and prostate, or from the vagina.

The **Inflation Bag**—this was inserted into the perineal wound before closing. The bag had a tube and tap attached to it for inflation. It was intended to support the pelvic floor after excision, also for the control of haemorrhage, and to act as a drain. It could be deflated to allow for irrigation of the wound and subsequently inflated. It was usually removed after 4-5 days. At the end of a perineal excision he would turn to the Theatre Sister and say—"Sister, my balloon."

Gordon-Watson's figures for operative mortality rate came down from 23 per cent to 13 per cent at this time.

It is of interest to compare present-day figures which were given at the Proctological Section of the Royal Society of Medicine on June 19th, 1957.

The communication was made by Dr. Cuthbert Dukes giving the St. Mark's Hospital statistics for the 25-year period, 1928-1952 inclusive. The operative mortality rate dropped in 25 years from 12.8 per cent to 6.8 per cent.

The resectability rate has also shown a tremendous improvement from 46 per cent to 92 per cent.

The five-year Survival rate of the 'A', 'B' and 'C' cases also gives us figures for 'A' cases 99.6 per cent; 'B' cases 81.5 per

cent and; 'C' cases 40 per cent.

I would like to pay tribute to Gabriel on his mortality rate of only 2.6 per cent in a total of 422 personal cases over a ten-year period (1947-1956).

Lloyd-Davis and Morgan have popularised the "Synchronous-combined" operation with a saving of time and an ability to deal with the advanced bulky growth involving the other contents of the pelvis.

Naunton Morgan has given us his results of the high rectal growths suitable for "restorative resection," relieving the patient from having to live with a colostomy for the rest of his life. These constituted 27 per cent of his series of 523 cases reviewed last year. The operative mortality was the same for synchronous-combined excision and restorative excision 4.2 per cent.

The scope and achievement of rectal surgeons has therefore become greater since Sir Charles' time. We congratulate them and must add our thanks to our Anaesthetists for their advances, and our Assistants for the excellent pre- and post-operative care of the patients, which has contributed to these excellent results.

#### RADIUM TREATMENT OF CARCINOMA OF THE RECTUM

The application of interstitial radium in the treatment of carcinoma of the rectum was the outstanding pioneer work of Gordon-Watson, and was mainly carried out in my time.

He was inspired by the work of Neumann, following a visit to him in Brussels in 1925. Sir Charles felt that in operable growths excision was preferable, but if this was refused or contra-indicated, radium offered a promising alternative.

Accuracy and adequate dosage was the problem. At that time there was no absolute unit of dosage in radium treatment—the use of the Röntgen as a radium dosage unit did not come until about 10 years later. However, a yardstick for measuring dosage was obtained by endeavouring to apply 1 mg. of radium to each cubic centimetre of the irradiated volume. With 30-60 mg. of radium, a 10-day irradiation time was usually

adopted, although it was still uncertain whether it was better to apply a large dose over a short period or a smaller dose over a longer period. In the abdomen, the susceptibility of the peritoneum necessitated the use of a shorter irradiation time. Deep X-ray therapy was tried in a few inoperable cases at Sir Charles' instance in 1925, but was soon abandoned, as, with the quality of ray then available, little or no benefit was obtained.

The following methods were used:

**1. The Posterior Barrage**—a perineal approach was made to the rectum by removal of coccyx and division of levatores ani muscles, giving a free exposure of the ampulla of the rectum. The needles were attached to the threads which were withdrawn in 10 days through the wound to facilitate removal. The perineal wound took about six weeks to heal.

**2. The abdominal radiation**—this was applied to lesions entirely above the peritoneum. The needles were removed after five to eight days. The dose varied from 2,500 to 6,000 milligram hours. The needles had the disadvantage that they had to be removed and were apt to produce necrosis along the needle track and so encourage peritonitis.

Radon seeds were tried as an alternative, as they could be left *in situ*, but the results with needles were better. Radon seeds were associated with a diminishing intensity of radiation as the "radium emanation," as it was then called, decayed. The seed lost half its strength in four days—there was thus a tendency to under dosage which led to an inhibition of the growth rather than to its destruction.

In these cases a colostomy was performed at the conclusion of the radiation, but not necessarily opened until after removal of the needles.

**3. Vaginal Radiation**—this was an advantageous route in anterior growths of the rectum, and could be combined with a Posterior Barrage and abdominal radiation.

**4. Intra-rectal and Peri-rectal radiation**—this was difficult to apply. A variety of tubes were tried in the lumen of the rectum in order to apply the radium to the exact site, but it

was difficult to fix, and on the whole the results were poor.

For **epitheliomata of the anus** however, the perineal and peri-rectal application of the radium needles was easy and results excellent.

#### RESULTS

Sir Charles treated 93 cases of carcinoma of the rectum with radium during a five-year period up to the end of 1929. He decided that his results were too uncertain to justify its use for the operable case—except when the radical operation is contra-indicated on general grounds. In several instances he reduced the fixed inoperable growth to a state of complete quiescence, *if not cure*. This is suggested in the two cases to which I will refer. Some of the patients remained in good health for periods varying from 7 to 10 years. The outstanding cases were:

**1. Bertie Bispham**, the postman, aged 44 who presented with an inoperable carcinoma of the rectum—with adhesions to pelvic colon and bladder, in December, 1927. There was an annular mass extending for two inches from the anus upwards and with supra-peritoneal extensions. **Intra-peritoneal radium** was used (Dose 2357.5 mg. hrs.). A loop of colon was exteriorised but not opened, and it never had to be used as a colostomy. The patient was alive and reported well when he came up to have a hydrocele tapped in April, 1946—**nineteen years after**.

**2.** The other remarkable case was **Edward Weekes**, a masseur, aged 37, who had an enormous dosage distributed by **intra-peritoneal radium** in October, 1928 (Dose 2499 mg. hrs.) followed a month later by **radium needles** (Dose 8524.5 mg. hrs.) and two months after that, **radon seeds per rectum** (Dose 4389 mg. hrs.). He was apparently cured. He died from heart failure in April, 1945, **seventeen years after**.

These two cases are remarkable and rewarded Sir Charles for his courage and foresight in applying a new form of treatment in which he showed that radiation in some forms had its place in the treatment of malignant disease, and did appear to effect a cure. The potentialities of radiation had now become well established.

#### FURTHER PROGRESS IN RADIATION THERAPY

St. Bartholomew's Hospital have led the field in High Voltage research under the able guidance of Doctors Finzi and Levitt since 1924. In 1936 the million volt machine was installed as a gift of the Sassoon family, and applied for the treatment of patients under Dr. Levitt and Mr. Ralph Phillips.

In 1946 we contemplated a linear accelerator and a year later a ten-million volt machine was decided upon under the guidance of Professor Hopwood and Mr. Williams. In 1950, however, this was extended to a fifteen million volt machine similar to one already under construction for Harwell.

The Cancer Department Committee persuaded the Governors of this Hospital to purchase this machine. Having overcome the difficulties with the Ministry of Health, I wish to thank our Treasurer Sir George Aylwen, for his personal interest in this project.

On April 27th, 1955, the inauguration of the Linear Accelerator was carried out by the Duke of Gloucester. This machine is now about to be moved to a new site adjacent to the Hospital in order to apply it to the treatment of patients. This, together with a Cobalt Unit on the same site, will, we trust, keep Bart's in the forefront in the field of radiotherapy.

If only Sir Charles could see today what has grown out of his pioneer work.

#### CONCLUSIONS

I have reviewed the life of a man—a man we all loved. A great sportsman—hard worker and one who showed great kindness to everyone, especially to me. He had many honours, all of which he justly deserved. He was at heart a soldier—serving in three wars with great distinction. His pioneer spirit was shown not only in his fight for freedom in war, but also in his attack on cancer and his efforts to find a cure.

It has given me great interest and pleasure to look into his life and recall some of his

works. I hope you will forgive my many omissions.

He was above all a Gentleman with strong religious principles which guided him throughout his life until his death at York on the 19th of December, 1949, at the age of 75.

I wish to thank the Council of the College for the honour in being asked to give this

Lecture, and all his friends and relations who helped me, and the Photographic Department for their great co-operation.

#### NOTE

This lecture—the first Gordon-Watson Memorial Lecture—was delivered before members of The International Cancer Congress on July 16th 1958.

## A CASE OF CORONARY EMBOLISM

by GEOFFREY BOURNE

Coronary embolism is a rare condition, and survival from it is uncommon. In a case report (ref. *Circulation* 2, 434, 1950.) in 1950 Shrader had collected 45 examples from the literature. Twenty of these resulted from subacute bacterial endocarditis, others from such rarities as thrombi detached from atheroma or syphilis of the aorta, from extracardiac mural thrombosis, from the systemic veins by paradoxical embolism through a right to left patency between the auricles, and from pulmonary vein pathology

In subacute bacterial endocarditis the heart suffers from minor or major embolism in the same manner as do the kidneys and other organs. Multiple small lesions may produce widespread progressive degeneration, or larger masses of clot may cause visible and clinical local infarction. Multiple minute embolism of the heart is probably the cause of the progressive myocardial failure which is responsible for a percentage of the deaths during the later but still active stages of subacute bacterial endocarditis. But when recovery from infection has occurred, provided the patient's heart has not then been severely affected in this way, myocardial functional recovery is also good. The second and larger type of cardiac embolus lodges in a medium sized coronary branch, occluding it, and causing either sudden death or an infarct. The associated pain is identical in

position, type and radiation with classical cardiac infarction due to atheroma, and the electrocardiographic changes are similar. The case reported here belongs to this latter group.

The patient was a man aged 42 whose chief complaints were palpitation and fatigue. The report to his doctor reads as follows—

“ He had pneumonia at the age of 11 which involved the left lung. He was ill for about three weeks. It is unlikely, although possible, that this was in fact an attack of rheumatic pericarditis since the two illnesses clinically are frequently very similar. In 1938 he had palpitation. He was investigated at St. Thomas's Hospital and was told that there was no need for him to worry about his heart. In 1944 he was placed grade III by a medical board, presumably because of the presence of a murmur. He remained well until the end of February 1956 when he began to notice cough, severe night sweats, and loss of appetite. He was admitted to St. Helier Hospital where a diagnosis of subacute bacterial endocarditis was proved bacteriologically. After successful treatment he returned home. One week before his discharge from hospital, while convalescent, he had an attack of unpleasant pain and a sensation of pressure across his upper chest which did not radiate to the arms. It was

at its worst on the first day. It lasted for three or four days in all and has not re-appeared. He returned to bed for three days during this incident. Since then except for palpitation he has had no symptoms. The palpitation was noticed after his discharge from hospital. It has progressively subsided since. There has been no recurrence of sweating or other symptoms suggesting serious trouble

On examination he looked well. The heart rate was 80, the rhythm was regular except for the presence of frequent ventricular premature beats. The diastolic blood pressure was a little raised (142/100). The typical systolic murmur of mitral regurgitation was audible at the apex, into the axilla, and towards the left sternal border. No aortic murmur and no murmurs of mitral stenosis were audible. The lungs and abdominal organs were normal. The urine contained no albumen. The electrocardiogram showed a number of ventricular premature beats. It also showed the typical changes of posterior myocardial infarction. The Q wave was enlarged in leads 2, 3, and VF, and the T wave sharply inverted in these leads. The T wave was also inverted from V4 to V7 indicating some ischaemia of the lateral ventricular muscle. Radiologically the heart was slightly enlarged, the transverse diameter being 14.0 cms. by orthodiagraph. The normal figure for his height, weight and age is 12.8 cms. The enlargement chiefly involves the left ventricle. There is no sign of enlargement of the pulmonary conus, and a normal barium swallow excludes any measurable auricular dilatation.

He clearly has recovered from subacute bacterial endocarditis superimposed no doubt upon an old rheumatic mitral scar. The degree of mitral regurgitation is slight. The interesting point is the clear evidence of postero-lateral myocardial infarction, which I have no doubt was due to embolism from a clot in his mitral valve. The date of the cardiac embolism is doubtful, for the abnormal electrocardiogram was noticed four days after his admission to hospital. The attack of chest pain which occurred a week before his discharge may have been due to a local extension of the lesion. The infarct is now well healed. Its aetiology suggests that it will remain so and that no further trouble will occur. The outlook therefore on all counts is good. The premature beats

are of no significance and can be ignored. He may resume his normal activities which may include carpentry, light engineering, and sensible garden work. He should not try to dig heavy soil against time.”

Re-examination of the patient a year later showed persistence of the physical signs and of the posterior infarction electrocardiogram. Symptoms were absent. The blood pressure was 128/90.

Two practical points need consideration. The first is that coronary embolism produces electrocardiographic signs of infarction in a heart muscle otherwise hitherto healthy. Furthermore the coronary arteries and their branches are free from disease up to the moment of embolism. From the point of view of prognosis this is important. It means that the injury to the myocardium can be considered as purely traumatic, that the heart muscle in other ways is healthy, and that healing of the infarct is likely to be more perfect than in the case of a patient who has had a myocardial infarction superimposed on more or less diffuse coronary atheroma.

The second clinical point of importance is that the electrocardiogram of typical myocardial infarction—in this case a posterior one—may remain for many years or indeed for the rest of the patient's life. If at some future date he suffers an attack of dyspepsia, gall stone colic, or even acute intercostal fibrositis simulating coronary pain a thorough examination might then reveal the electrocardiogram of posterior myocardial infarction which would have no basic association with the pain then complained of. This would inevitably lead to a wrong diagnosis, to unjustifiable pessimism, and to a serious interference both psychological and physical with the patient's subsequent life. In the present case this possibility was explained in detail to the patient, who as a precaution was given copies of his own electrocardiogram and of the clinical report.

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#### ACKNOWLEDGMENT

I am indebted to Dr. C. P. Petch for information about the patient when under his care in St. Helier Hospital, Carshalton.



## AMATEUR AND PROFESSIONAL PAINTING

Some notes on the forthcoming exhibition of painting in the Great Hall

by G. W. DUFF N.D.D.

"ART IS UPON the town, to be chucked under the chin by the passing gallant": (Whistler. The Ten O'Clock Lecture.) Art is (or will be) upon St. Bartholomew's Hospital, and why not? An exhibition (for charity, of course), not to be derided, but to be admired. All doctors, nurses, hospital staff, porters and medical students, who paint in their spare time, will be exhibiting. A few of the exhibitors will be professional A.R.C.A.s, N.D.D.s, but the majority are amateurs. These hospital exhibitions are not just another art show, but a collection of pictures painted by people who do not do it for a living; an amateur exhibition.

"An amateur," said Sir Max Beerbohm, "with innate talent may do, must do, more exquisite work than he could if he were a professional. His very ignorance and tentativeness may be, must be, a means of especial grace."



Here, we will have art from all parts of the hospital. The porter, in the brown coat asks the artist, "Now you're an artist, Gerry, how do you mix brass colour?" And a nurse paints because of the bright colours. Doctors may do it to relax, and

I do it because . . . well, it's my job. So the blank-faced, white-coated porter, answering the 'phones, "Surgery Bart's, here", is an artist who fills in forms and delivers messages to the hard-working doctors (who on occasions put "W.H." on the board to show that, for a brief moment, they are not working hard at their jobs of mending and curing but are having a deserved rest in the "White Hart").

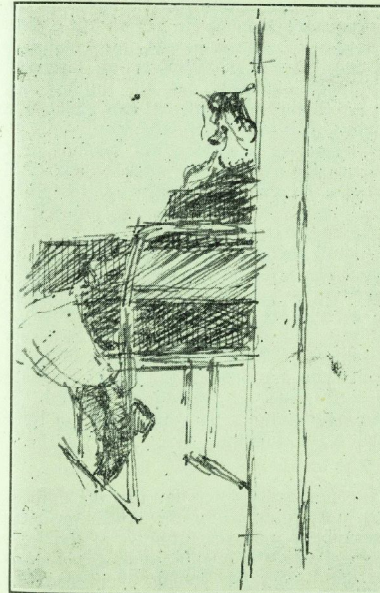
This porter, who has once at three o'clock in the morning, woken up the wrong doctor (how very nice he was about it!), is an artist, who, in spare moments, in relating tones, drawing heads and seeing Manet's and Degas' all about.

In professional painting the artist will often try to put all of himself into a picture; to the amateur, who leads a separate life, it is but a small part of his personality. These happy people devote spare time, spare money, and care to painting; with especially made small palettes. It is the main job of these persons that makes their paintings so interesting.

Even if the picture be below par technically, the reason why the picture was painted will still be evident; a story that is always personal, often charming and sometimes exquisite comes out. They please themselves and make no concession to the avoidance of sentimentality. "The roses round the door," certainly still, make them love mother more.

How fascinating to see the landscape painting that is the second string of a surgeon's bow, hung next to a porter's pre-occupation with painting the Prince and Princess. How strange to think that the efficient staff, who greet and cure the sick, are those who in off-duty hours take up brushes and canvas to put down thoughts in colour.

In this type of exhibition, one never knows what variety of subjects there will be to see. With professionals their pictures may be much of a standard, perhaps merely a variation in the usual style. Non-professional painters become intimate, in that one sees where the yearly holiday has been spent, charming in that we see what appeals to them; perhaps it is the Bay of Naples or Tibby the tabby cat. The quality that makes, as a rule, each picture a new adventure, makes them unique and gives them their distinguishing character.



I am sure that the paintings in the Great Hall ("I'm not exhibiting in the Great Hall," said a startled 'stripe.' "Sell it for £10; it's not worth tenpence. I thought the show would be in the 'colostomy'"), will be as exciting and fresh as non-professional paintings usually are, and that the virus of abstract or tachiste art has not invaded the sanctuary of St. Bartholomew's Hospital.

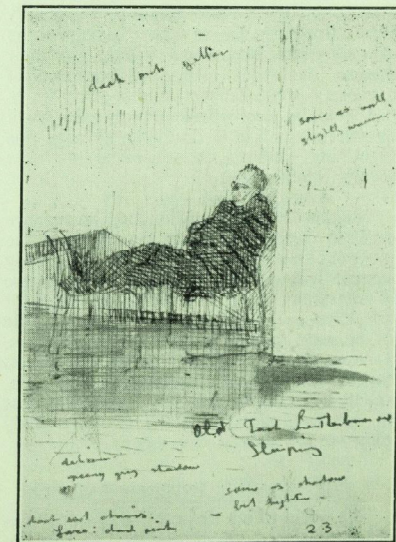
Remember the sad example of the amateur, who once painted delicate, detailed and fresh portraits. He started blotching his sitter's face (on the canvas) with green dots

and bright red stripes; he had seen Delauney's paintings, and was experimenting.

The hospital is a wonderful subject; is full of wonderful subjects: the surgery with its endless stream of multi-coloured card-clutching, shrivelled, shawled and scaring old ladies, screaming children, bustling people, figures that cannot walk waiting under the clock for transport; untidily booted, dirty kneed urchins, idling while their mothers have treatment.

All this is raw material for the professional artist, but the exhibition, as it is an amateur show, will be, I think, far removed from hospital subjects and, judging by the titles in the 1955 exhibition, most of the work will be of landscapes, still lives and portraits, competently, charmingly, excitingly and interestingly painted. How do the doctors and nurses and porters paint? And what do they paint?

A porter once said to me: "Some are very talented, I'll tell you that. I've been about some of the best art galleries in the world I'm a bit of a connoisseur about it."



## SMELL

by W. V. CRUDEN

If you say the word "Smell" in front of a looking-glass, you will probably find that you instinctively turn up your nose a little bit, as if, like the man of Baroda, you thought you perceived a bad odour. But all smells are not nasty. Some of them are perfectly delightful, although we prefer to call these latter "scents" or "perfumes." We can indeed hardly imagine a lady going into a Beauty Parlour and asking for a three-guinea bottle of "Smell." But in the semantic and scientific senses, the word should include both pleasant and unpleasant sensations. The dictionary<sup>1</sup> defines smell as "the sense peculiar to the nose, the quality perceived by this," and that comprises every conceivable kind of odour.

"The number of different and distinct smells is legion"<sup>2</sup> but, unlike tastes, they cannot be classified on any definite basis. Several schemes have been suggested, however, and Crocker and Henderson<sup>3</sup> actually reduced all smells to four basic odours—sweet, sour, burnt and goaty. In their scheme the scent of a rose consisted of 6 sweet, 4 sour, 2 burnt, and 3 goaty units. "A rose by any other name would smell as sweet," and it is doubtful whether this surprising analysis is welcomed by rose lovers in general!

There is a whole world of smell experience open to us, and its range extends from the most exotic perfume to the most nauseating stench. It is strange that this extensive sphere of sensation, with its primitive powers of attraction and repulsion, is almost the whole of the sense experience of the lower creatures, and yet means so little to us human beings. But in spite of our tendency to neglect it, smell plays a fundamental and subtle part in our lives and is worthy of more study than we are apt to give it.

### THE SIGNIFICANCE OF SMELL

The world which we perceive by our senses reaches us through varying degrees of com-

plexity. (1) *Smell* is the simplest and most intimate sense, for here the actual molecules of the outside world impinge directly upon a sense organ which is situated in the primary neurone itself. "Here as nowhere else the nervous system is in direct contact with the external environment."<sup>3</sup> (2) In the senses of *taste and touch* the outside object impinges on the peripheral receptors of taste-bud and touch corpuscle, but the impulse has to travel thence before it can reach the primary neurone. (3) In the senses of *sight and sound* the outside object remains at a distance and merely emits waves which travel through the air to the peripheral receptors, after which they too have to proceed as impulses towards the nervous system. (4) If we admit the existence of a sixth sense of *parapsychology* (and it seems as if Science is beginning to accept this<sup>6</sup>) we may imagine an even more complicated and abstruse pathway for this strange "extra-sensory perception." Thus does our consciousness receive the messages of the senses (perhaps in their order of evolution) through increasingly complex pathways. And of these smell is the simplest.

It is not surprising to find that the simplest and most primitive of the senses produces the simplest and most primitive of reactions. Our response to a smell is an almost immediate and instinctive feeling of pleasure or displeasure, of attraction or repulsion. It is what Selye<sup>7</sup> calls a "yes-or-no response." Seldom are we undecided and indifferent in our judgment. Our interjection either is "Ah!" or "Ough!" (perhaps two of the earliest sounds emitted by primitive man) and rarely if ever the more thoughtful "Oh!" Because of this quick reaction we do not linger over smells in the way that we do over the other senses. "I gazed—and gazed" wrote Wordsworth; but we could not expect him to say "I smelt—and smelt." No—one sniff is often enough. Even nice smells do not hold our attention for long. We do not bury our noses in even the most

fragrant of blossoms for more than a brief space of time.

This simple division of smells into pleasant and unpleasant sensations must be a basic defence mechanism, for as a general rule nice smells are good for us and nasty ones are bad for us. Food that smells attractive is generally wholesome, whilst food which has an offensive odour is generally unpalatable, putrefying and even poisonous. Cheese is a curious exception, and enthusiasm for ripe Stilton seems an odd perversion of nature. (Incidentally one of the best smell stories is the tale of the cheese in "Three Men in a Boat"<sup>8</sup>). The repulsive odour of decaying organic matter and excrement prevent us from taking these useless or poisonous matters into our systems, whilst polluted atmospheres with their fetid unpleasantness immediately urge us to seek the wholesomeness of fresh air, and the repugnant smells of bacterial sepsis tend to isolate disease. The nose is the leading part of our anatomy, the prominence which first encounters the world into which we advance. It is "the advanced observation post" in our struggle for existence. In the lower animals with their long snouts it is of even greater strategic importance, for in these "nose-brain animals" the role of smell in their defence and security is paramount. But even in man the first cranial nerve still keeps its age-old function of distinguishing between safety and danger, between what should be absorbed and what rejected, the most instinctive and simple analysis of what is good and bad for us. These critical and primitive experiences of smell are of importance in early childhood development and must make a lasting impression on the maturing brain, for it has been said that nothing in later life can recall our earliest childhood memories so vividly as smells. "Olfaction is paramount among the senses in its power to awaken a train of association in consciousness."<sup>4</sup> Moreover Aldous Huxley<sup>5</sup> goes so far as to claim that "the sensations most heavily charged with emotional content are sensations of smell." In view of these considerations therefore we cannot surely doubt the importance and significance of smell in our lives.

### THE EVOLUTION OF SMELL

The simplest and most primitive form of life, the *unicellular amoeba*, has an amazing ability to discern what is good and bad for

itself. As it swims about in its watery environment it comes across substances in solution and matter in suspension, and by some mysterious smell-like reaction rejects the harmful and accepts the wholesome. "The introduction of many kinds of chemicals into water causes amoeba to move away from them, showing that it possesses a chemical sense such as we know (immensely more developed) as the senses of taste and smell."<sup>10</sup> On the other hand, when it comes into contact with suitable food it moves towards it, and as the result of this primitive olfactory discrimination amoeba ingests, digests, absorbs and defecates with an efficiency comparable with our own (often more troublesome) digestive systems.

We are apt to think that *fishes* taste, rather than smell, their watery surroundings, but in fact smell is the most important of their senses. A large part of the brain of the dog-fish, for instance, is taken up by the olfactory lobes. Substances dissolved in water are carried into the fishes' nostrils where the hairs of the olfactory sensory cells convey smell impulses along the olfactory nerves just as they do in man. In this way they sense their food, their security and their danger. Salmon, for instance, will not swim for hours on end if they scent the smell of a human hand in the water.<sup>11</sup> One wonders what strange unknown smells greet the noses of fishes in the dark unexplored depths of the oceans.

In the *lower animals* smell is again paramount. A large area of the brain is olfactory in function, and the sense is "almost incredibly acute," especially in the snouted animals like dogs and elephants. Smell guides them to their food, warns them of enemy approach and motivates their sex reflexes. Animals use their own smells for laying trails, marking boundaries, and mating. How extraordinary it is to know that the female of the Great Peacock moth can attract a male who is more than a mile away by the alluring scent of its secretions, or on the other hand that the skunk produces its revolting smell to repel its enemies! The role of the olfactory organs situated in the antennae of insects is, of course, well known, with its double function of guiding the insect to its drinks of nectar whilst at the same time fertilising the flower.

But evolutionists tell us that this sense

of smell, so important in fishes and animals which nose their way along the ground, becomes of far less account when *the primates* climb up into their trees. Sight and sound are now paramount, for the monkeys up aloft can see much further than grounded animals, whilst the smells which hover around the earth are less in evidence up above. Hence the arboreal primates lose their long noses, and by foreshortening the facial region their eyes look forward in stereoscopic vision instead of peering sideways on either side of the snout. In association with these changes the large olfactory areas of the "nose-brain" creatures diminish whilst the optic areas increase in what is now an "eye-brain" animal.<sup>12</sup> Similarly, the birds of the air have a poor sense of smell, except for those (like the petrels and albatrosses) which fly far out at sea and have corresponding difficulty in getting food.<sup>11</sup>

*Homo Sapiens* continues this dependance on sight rather than smell. It would be facetious to suggest, however, that when he left his monkey cousins and climbed down from the trees on to the ground again his nose began to sprout once more, but it has certainly been suggested that the longer a man's nasal organ, the more of an inquisitive nosey-parker he will be!

What of the future of smell? Who (to use the apt word) can prognose? It would be useful if our olfactory cells, in this new atomic age, could evolve a kind of geiger counter which could "smell" out nuclear radiations in the way our noses sense out other dangers. But, of course, such evolutionary adaptations take time!

#### THE MECHANISM OF SMELL

The olfactory area is confined to a blind pocket at the top of the nose, well above the main air channel. This small narrow niche is formed by the superior nasal concha, the upper part of the nasal septum, and the roof of the nose (the cribriform plate of the ethmoid). Thus whilst the greater part of the breath passes directly through the nose to proceed down to the lungs, some of the odorous particles are carried upwards into the olfactory area. This occurs partly by diffusion but chiefly by eddy currents formed by the mixing of the cooler ingoing air with

the warmer air already in the nose. If we are particularly anxious to smell something we aid this mechanism by lifting our heads ("turning our noses up") so that the ingoing air will more easily reach the olfactory area, and then sniffing. Each sniff, (as opposed to a snort) compresses the septum and the outer wall of the nose at the front of the respiratory passages, so as to direct the air towards the cul-de-sac. Obviously, any marked swelling of the mucosa of this narrow niche by inflammation or vaso motor reaction will obstruct the passage of air, thus producing anosmia.

Only substances which are volatile and emit particles into the atmosphere produce any odour, and even then it is only some of these that are capable of stimulating the sense of smell. On reaching the olfactory area the odorous molecules first impinge upon a thin layer of serous fluid secreted by Bowman's gland, and they have to penetrate this before they can reach the olfactory hairs which are bathed with it. Thus the molecules make contact with the smell-receptor in a fluid medium, just as they do in the lower aquatic forms of life. But before they can stimulate the sense organ it would seem that they must also be dissolved in the protoplasm of the olfactory hairs, and as these are mainly lipid material, the particles must presumably be soluble in oil as well as water. (This may explain why oily substances are particularly odouriferous.) Having thus made contact with the olfactory receptor, the smell impulse passes up the hairs to the granules in the "olfactory vesicle" from which these arise, and then proceeds up the length of the bipolar olfactory cell, through the cribriform plate, to end its first cellular journey in the synapse of the grey matter of the olfactory bulb. Here it crosses the synaptic gap to the dendrites of the mitral cell, through whose length its second cellular journey occurs in the olfactory tract towards the smell-centre in the uncus and pyriform area. The remote connections and associational tracts whereby the smell impulse is recognised are still obscure.

Although most smells approach the olfactory area by the front entrance through the nostrils, those liberated by the chewing and swallowing of food come in by the back entrance through the posterior nares and are

smelt by the eater before being expired into the outside atmosphere.

By what strange physico-chemical processes we can so easily distinguish the intensity, origin, quality, nocuousness, significance and memories produced by the inhalation of these various odouriferous particles is largely unknown. But Lord Adrian states that electrode-discharge experiments show how "different substances in threshold concentration will employ different mitral cells for signalling the stimulus": as the mitral cells are anatomically connected with the olfactory cells it would seem that adjacent groups of the receptors have some subtle selective sensitivity, although the millions of olfactory cells show no histological difference amongst themselves.<sup>13</sup> No doubt molecular configuration, solubility in water, and solubility in lipid, play their part, together with this selective sensitivity, in the differentiation and recognition of smells.

Pungent, acrid, irritating and cooling sensations are not conveyed by the olfactory system but by the trigeminal nerves. They are closely associated in our minds with smell, as also is the sense of taste. The flavour of food is, of course, a combination of tastes and smells, and this is the reason why we lose pleasure in eating if a coryza temporarily cuts off our sense of smell and leaves us with only the four primary tastes of sweet, salt, sour and bitter. But if we are healthy the smell of good victuals plays an important part in our digestion, not only by increasing our relish for food but by the olfactory reflexes of salivation in the mouth and secretion of appetite juice in the stomach. "Aha!" says Powys<sup>14</sup> as he describes "rich roasted flesh, well baked in an oven that glows as a fiery furnace... the odour of the hog's puddings... a scent as though mushrooms fry in butter... as the kitchen king draws him indoors." Such are the powers which whet our appetites!

We quickly become insensitive to smells—fortunately so when they are unpleasant ones. This rapid adaptation of the smell-sense is not due to a general fatigue of the olfactory nerves, for the power to smell other odours is retained when we have become insensitive to one particular one.

This rate of adaptation varies for different smells, and previous exposure makes us less sensitive. Moreover, smells affect each other, for the introduction of a strong one abolishes a weak one, whilst some odours antagonise others (ammonia and acetic acid, for instance). These facts are used to counteract the social ostracisms of halitosis and "body odour" by remedies often advertised by dramatic picture stories in magazines and newspapers ("Harry had looks and an exciting car, yet couldn't find the road to happiness..." until he used the advertised deodorant!)

#### HUMAN SMELLS

Recognition amongst animals is mainly a matter of scent, but this is rarely the case in human beings. It is probable, however that we each have our own *individual smell* but are not sufficiently sensitive to appreciate it. Helen Keller<sup>17</sup> was compensated for blindness and deafness by such a highly developed sense of smell that she says "The dear odours of those I love are so definite, so unmistakable, that nothing can quite obliterate them. If many years should elapse before I saw an intimate friend again, I think I should recognise his odour instantly in the heart of Africa as promptly as my brother that barks." With our concentration on the sense of sight we lose this acute consciousness of smell, but may there not be some olfactory sensation which subconsciously causes our otherwise inexplicable aversion or attraction to certain people? "I do not love thee, Dr. Fell, the reason why I cannot tell," may perhaps be continued by the lines "but my subconscious knows full well that I'm allergic to your smell." It has been suggested too that odd infatuations may have a similar basis, but to say that "love at first sight" is sometimes "love at first smell" sounds rather unromantic! Yas Kuno<sup>16</sup>, however, considers that axillary apocrine sweat has a definite sexual attraction. In our everyday speech we do, moreover, suggest that we can recognise certain traits of character and motives by smelling—"the odour of sanctity," for instance. "Mrs. Dibbin," says Powys<sup>15</sup> "had a fine nose for sin. She would sniff about a village as though she suspected a cat of misbehaviour..."

But although we do not normally recognise each other by smell, there are certain people who make their presence known to us by some *acquired odour*. Sarah Gamp was one such person. "It was difficult," says Dickens, "to enjoy her society without becoming conscious of a smell of spirits." ("Leave the bottle on the chimney piece and let me put my lips to it when I am so disposed," said Sarah.) Don Quixote warned Sancho "Eat not onions nor garlic, that thy peasantry be not known by thy breath." Tobacco, too, is another offender. Sheer dirt produces its own peculiar odours. We are told of Rasputin that "he seldom waded and he smelt vilely," as no doubt did those ancient ascetics described by Dean Inge as being "one hideous mass of clotted filth." Caliban had "a very ancient and fish-like smell." Indeed, from the days of the end of the Roman Empire up to the recent reintroduction of hot baths it is probable that many, at any rate of the more plebeian members of society, emanated smells which soap and water would have banished. At the other extreme people may deliberately acquire pleasant scents, and although Ben Johnson had his suspicions that, in the lady who is "still to be powdered, still perfumed... all is not sweet, all is not sound," the beauty culturists insist on the value of their products. "You must be all-one-fragrance," they say, "from tip to toe." This art of perfumery is an ancient one. The writer found a mud-encrusted Babylonian vessel on an ancient tell in Iraq. On washing away the desert mud a scent of very sweet and unusual fragrance was apparent for a few seconds and then disappeared. He had been smelling an ancient Babylonian perfume used by some fair lady perhaps three thousand years ago. . . . Such are the pleasant and unpleasant smells which may be acquired as supplement to our own mostly unrecognised individual scents.

*Certain diseases* produce their own smells. Although putrefaction anywhere on the surface of the body may be offensive, especially in frank gangrene, it is mainly in the smell of the expired air that we become conscious of disease. Halitosis is usually due to some local condition in the mouth or nose, but the smell may originate further down the respiratory tract, in the stagnating pus of bronchiectasis or lung abscess, for instance,

One of the most insufferable stenches is that of ozoena, where the odour from the foul-smelling crusts in the nose "may be so severe as to render the sufferer an outcast from society."<sup>18</sup> Fortunately for himself the patient is anosmic and is not conscious of the smell. In most other cases of halitosis the offensive odour is also unknown to the subject, hence the deodorant advertisements which stress the social hazards of this predicament.

Although stagnating putrefaction which opens somewhere on the surface of the respiratory passages is the main cause of unpleasantness, it seems that the breath can also excrete certain products of purely "internal" disease. The smell of acetone in ketosis, of mercaptan in liver necrosis, and of uriferous odours in uraemia can surely only be explained on this basis. Whether people who say they can "smell T.B." or "smell cancer" can really do so is open to question. Clinical acumen along such lines may be a disappearing art.

Mention must finally be made of the smells which do not really exist. Olfactory hallucinations are a feature of the strange uncinatate fits in which temporal lobe lesions produce the aura of smells (and tastes) which are usually of an unpleasant nature (like acetylene or the monkey-house at the zoo). It is interesting to note that such hallucinations are often accompanied or followed by a dreamy state in which memories of far-off events are recalled and curious licking movements and smacking of the lips are observable. Further research on these uncinatate attacks may throw valuable light on the more abstruse physiology of olfaction.

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#### LETTERS TO THE EDITOR

*Hospital of the University of Pennsylvania,*  
Philadelphia 4.

June 9, 1958.

Editor,  
St. Bartholomew's Hospital Journal.

Dear Sir,

I am happy to send to you, for publication, a copy of the letter mailed earlier this month to the director of your medical unit, Dr. E. F. Scowen. Dr. Scowen may have additional information for you about this project.

If a small ceremony is planned for presentation of the first "Pennsylvania Award," I should like to have copies of any photographs taken by your staff.

Cordially yours,  
ROBERT E. JONES, M.D.

June 4, 1958.

Dr. E. F. Scowen,  
St. Bartholomew's Hospital,  
London, E.C.1, England.

Dear Dr. Scowen,

The Medical School and the Hospital of the University of Pennsylvania have wanted to find some appropriate way to express their gratitude to you and to St. Bartholomew's Hospital for the cordiality and generosity with which your staff and your students have received students from this school.

It is my pleasure to inform you that we are now prepared to present to a student at St. Bartholomew's Hospital a gift to be known as the "Pennsylvania Award," inviting a student representative from your hospital to study at the Hospital of the University of Pennsylvania during the next school year and offering him free tuition, room and board, and a sum of five hundred dollars for transportation. The free tuition is offered through the interest of the deans and faculty of the medical school; the room and board will probably be arranged through the kindness of our students themselves; and the money represents gifts from Pennsylvania students who have studied at St. Bartholomew's and from

other interested people, including a large sum from the Mary and Albert Laker Fund. Although the details of this plan are not yet completed, we assume that the student will be a second-time clerk who will visit us for a period of three months. We prefer to leave the method of selection of the student to the directors of your medical and surgical units (Sir James Patterson-Ross and yourself), and we shall let you determine the qualifications of your candidate.

Dr. I. S. Ravdin, John Rhea Barton Professor of Surgery, will be in London this month and is looking forward to presenting the first award sometime during his visit.

We hope that this award will serve to express our gratitude as well as to strengthen the association between the oldest medical school in this country and the oldest hospital in Great Britain.

Very truly yours,  
ROBERT E. JONES, M.D.

July 4, 1958.

Dear Mr. Jones,

I write on behalf of the Medical College of the Royal Hospital of St. Bartholomew to express the very deep appreciation which is felt towards your Medical School and Hospital of the University of Pennsylvania for their most generous award. This will make possible a liaison between our two Colleges which will surely be a pattern for the future. We have not yet been able to contact Dr. Ravdin, who is in Stockholm, but we hope within the next few days to make the necessary arrangements for his reception here. I would like to assure your Medical School and Hospital that we shall do our very best to ensure that this award is used to the very best advantage.

Yours very Sincerely,  
D. F. ELLISON NASH.

Dr. Robert E. Jones,  
Hospital of the University of Pennsylvania,  
Philadelphia 4,  
U.S.A.

The Editor,  
St. Bartholomew's Hospital Journal.  
HOCKEY

Dear Sir,

May I, through your columns, make an appeal to those who have played hockey for the hospital?

During the last three winters, the 1st XI has played a match against a Past Bart's XI. It seems that either not enough people know of this fixture, or else the title of the team is taken too literally, former players considering themselves *passé*, and it was very difficult to raise a team last year. Unless would-be players make themselves known, a fixture, most pleasant on and off the field, is doomed.

The match this coming season will be on Sunday, March 8th. Would any who even might be available for this or future years, write to:—

Dr. G. Hurst,  
316 Brigstock Road,  
Thornton Heath.

Age, girth and family do not form a bar—bring them with you.

Yours sincerely,  
DAVID S. WRIGHT,  
*Captain of Hockey.*

Dear Sir,

I enclose a photo of the late Professor George Gask—taken in the stocks at the 800th Fair held at Barts. I came across it today, and wondered if it would be of interest for the *Journal*.

Yours faithfully,  
HAROLD C. J. BALL.



Professor G. Gask

#### TRAINEE ASSISTANT WANTED

Trainee Assistant wanted by Suffolk practitioner for a year commencing in November 1958. Unfurnished flat. Car essential. Write Box No. 1, St. Bartholomew's Hospital Journal, London E.C.1.

#### BOOKS REVIEWED

PHYSIOTHERAPY IN SOME SURGICAL CONDITIONS by Joan E. Cash. Price 25/-.

The second edition of this excellent text-book has been extensively revised and has additional sections on athletic injuries and surgery of the knee. The chapter on Thoracic surgery has been re-written in much greater detail.

Throughout, this book is clearly arranged, well illustrated, and the rationale of treatments is always explained. All together it is a comprehensive and practical book, and should continue to be of great use to all Physiotherapists, and also of real value to any members of the Medical Profession who wish to have up to date information on Physiotherapy techniques.

TRUDA WAREHAM.

THE NURSE AND THE DIABETIC by Joan B. Walker, M.D., M.R.C.S., L.R.C.P. Publishers: Nursing Mirror, by Hife & Sons Ltd.

Though this book is specifically addressed to the nurse, medical students and even general practitioners might read it with profit. It surveys every aspect of the diabetic's life in hospital and outside it. The treatment of all complications is fully given, but the methods of preventing them and of maintaining health are given their correct place of primary importance. The differing methods of management are fairly stated, but the author does not hesitate to give firm and detailed advice on all practical points. The price seems a little high for the size of the book, but small books are comparatively more expensive than large ones, and this one can be most thoroughly recommended to anyone interested in the welfare of the diabetic.

W.E.H.

PRINCIPLES OF MEDICINE AND MEDICAL NURSING by J. C. Houston, M.D., F.R.C.P. and Marion Stockdale, S.R.N., S.C.M., R.S.C.N. Published by the English University Press Ltd. Price 25/-.

The Modern Nursing Series of textbooks is written

by authors distinguished in their own field, and aims at a high level in presentation, style and content. Each appears to be the product of a teaching hospital, and this one on medical nursing from Guy's. It surveys the whole field of experience in this country, except for the medical illnesses of children, and includes brief chapters on diseases of the skin and psychiatry. The latter is by Dr. Stafford-Clark, and is a description of mental states, and is both lucid and elegant; one could only wish it were longer. The skin section should be expanded to cover the common conditions (e.g. acne vulgaris, psoriasis) if it is to merit inclusion.

The presentation of all subjects is clear and accurate, and alternative forms of treatment are fairly stated. The nursing problems of all states are considered, and principles given. The general tendency is conservative; for instance, the dressing is changed every time an ileostomy works (page 80) and the bags which have revolutionised life for these people are not mentioned; no anti-leukaemia drug more modern than urethane is described; collapse therapy in the treatment of tuberculosis (page 58) is given considerably more space than resection, and there is no hint of the trend of opinion against collapse.

W.E.H.



## SPORTS NEWS

As mentioned in a previous Viewpoint, the Sports Editor decided to undertake a limited survey of the sporting activities of the student body. Its objects were to discover what percentage of students were active sportsmen, to what extent, and whether there were any notable differences in the answers to these questions when the London, and the Oxford and Cambridge groups were compared.

Information was obtained, almost entirely by direct questioning, about all the male members of a clinical year, including both March and October intakes. All were asked:

1. Whether they had represented the Hospital at any sport, and if so how regularly, and for how long?
2. What games they had played for their own enjoyment?
3. Whether they had held office in any of the Bart's societies, been an officer of the Students Union, or been on the staff of the Journal?

Eighty-four people were included in the survey, of whom 39 were from Oxford or Cambridge, and 45 from London. In the following tabulations of the results, R represents regular players, here taken to be synonymous with those who are regular members of a team, C represents casual players, or those who play the game for pleasure but may have represented the Hospital occasionally, and O represents those who could give a positive answer to question three.

It will be appreciated that the casual group includes people who have played the game to very varying extents. The scope of the survey was not, however, sufficiently great to avoid this. The O group was included to discover whether those who were not active sportsmen, gave their time to the Hospital in other ways.

Table V sets out a list of the possible sports, and the total numbers playing each. From it, it can be concluded (if these results are representative) that the Athletics, Fencing and Table Tennis clubs get their members almost entirely from amongst the London students, and the Shooting club from amongst the Oxford and Cambridge students. The apparently greater proportion of London students playing Rugger may be explained by the fact that many who as Preclinicals played the game regularly, have since ceased to do so, or it may in fact be the case.

Taken as a whole, the survey shows that there are no great differences in the activity of the two groups, or in their interests, and that the proportion of what might be termed malignantly inactive students is quite low.

## Results

TABLE I

	London	Oxford and Cambridge	Total	%
Play no games .. .. .	11	7	18	21.5
Some disability .. .. .	1	1	2	—
O .. .. .	2	2	2	—

TABLE II

	London	Oxford and Cambridge	Total	%
C. 1 sport only .. .. .	1	5	6	7
C. 2 or more sports .. .. .	2	2	4	5
O .. .. .	1	1	2	—

TABLE III

	London	Oxford and Cambridge	Total	%
R. 1 major sport .. .. .	14	8	22	26
R. 1 minor sport .. .. .	5	7	12	14
O .. .. .	5	6	11	—

TABLE IV

	London	Oxford and Cambridge	Total	%
R. 2 major sports .. .. .	5	1	6	7
R. 2 minor sports .. .. .	2	3	5	6
R. One of each .. .. .	3	3	6	7
O .. .. .	3	2	5	—
R. Three or more .. .. .	2	3	5	6

In the above tables the different sports have been classed as major or minor. The ones included in the former group are Rugger, Soccer, Hockey, Cricket, Rowing, and Athletics. In each table, the letter O refers to the people in that group only. The percentages given are of the total included in the survey.

TABLE V

No. who play the sport	London		O. and C.	
	R.	C.	R.	C.
Rugger .. .. .	17	1	5	2
Hockey .. .. .	2	—	6	—
Soccer .. .. .	4	—	3	—
Squash .. .. .	2	18	5	16
Fives .. .. .	—	—	1	—
Fencing .. .. .	5	—	—	1
Shooting .. .. .	—	—	6	—
Rowing .. .. .	2	—	1	—
Cricket .. .. .	3	3	2	1
Tennis .. .. .	2	10	5	13
Golf .. .. .	2	4	4	5
Athletics .. .. .	6	—	—	—
Table Tennis .. .. .	2	6	—	—
O .. .. .	13	—	13	—

## Analysis

From Table I it will be seen that about 20 per cent of the total are completely inactive. Of these only two suffer from a disability which prevents them from playing games, and both are among the 4 who give their time to the Hospital in other ways. A further 12 per cent play one or more games for pleasure only (Table II). Thus one-third of the students do not represent the Hospital at any sport.

Table III might be said to include the average group, those who represent the Hospital at a single sport, major or minor, and almost all of whom play other games for pleasure. It was interesting to note that for the majority playing one major sport, the sport was Rugger, and that this group included the largest number giving a positive answer to question three.

Table IV includes the remaining 25 per cent, the highly active members of the community. Of these the majority played one Summer and one Winter game. A smaller number than was anticipated (6 per cent) played more than two games regularly.

event which was not spoilt for them, in part at least by this atrocious summer.

## BOAT CLUB

For one Hospital club, at least, the wet summer has not meant the consistent cancellation of fixtures. Competitive boating defies all the elements except ice. Unfortunately the spectators are not so fortunate and, looking back, it is difficult to recall one

The last Saturday in March saw the annual Tideway Head of the River race. The Hospital entered three VIII's, of which one, having trained assiduously for some weeks, gained some ten places to finish in 72nd position. The other two VIII's were scratch

crews in the most sporting sense of the term and, despite their gallant efforts, some 250 rival crews managed to insinuate themselves between the Bart's Gentlemen and the first boat home. The day was marked by a somewhat uneven duel between the Treasurer and the Secretary in an Austin Seven saloon and a native of Bermondsey in a large articulated lorry. In the best traditions of the sea, the smaller craft fought until completely disabled, only to be abandoned where it fell in the heart of Battersea.

The club then set about the task of training two crews for the United Hospitals' Bumps. In preparation, and to gain some racing experience, the first and second VIII's raced at Thames Ditton Regatta. The first boat lost by half a length to Emmanuel School, without showing the cohesion which they had displayed on occasions in training. The second boat rowed with considerable fire and determination, but were defeated by Imperial College, the verdict being only four feet.

On the following Saturday, the first VIII visited Twickenham Regatta, where a stiff cold headwind conferred a wintry mantle to a beautiful setting. Having given their opponents, University College School, the accustomed half a length on the start, Bart's progressed to overhaul their young rivals by the halfway mark. However, due to some misunderstanding, the Bart's crew plodded steadily on to the finish, whilst the school crew sprinted furiously to win by four feet. This was indeed unfortunate, as U.C.S. went on to win the event without serious challenge.

Thus to the Bumps. The Hospital entered five crews once again, including one composed of members of the Rugger club. This crew finished the course twice with the aid of a strong ebb tide, and its members certainly made their mark at the ensuing Bump Supper. The last night of the races was marred by the misfortune of the first VIII. Having rowed over in third place, and having come close to the Guy's rudder on the first two nights, the VIII was surprisingly bumped by Westminster twenty strokes from safety on the final night. Some consolation may be gained from the fact that the crew were rowing with a substitute, but since that substitute was Colin Dale, little excuse can be offered. In the lower divisions the situation is still sorting itself out and many over-placed Barts boats fell to faster crews, often hospital first boats.

As the VIII had not tasted success, it was decided not to keep it together, but to form instead a IV, it being generally agreed that the standard of opposition in the IV events is lower. The IV made its first appearance at Walton, in the Junior-Senior event. Having defeated a crew from Thames by four feet and another from Strode's School easily, it lost, also easily, to St. Thomas's Hospital. The following week, in a similar event at Reading, the IV defeated Lensbury and Quintin before losing by three and a half lengths to Caius College.

Their next visit was to Marlow, that most pleasant of regattas. Here the IV went Senior in preparation for Henley, but they were defeated in the first round by Trinity College, Dublin. And so, on to the climax of the season, Henley. The crew stayed in a house rented at Nettlebed, some five miles from

Henley itself. Their first race was against Corpus, Oxford, whom they defeated by one length. Corpus hit the booms just before the finish, although some doubt was cast as to whether this affected the result, as the crews were almost level when the accident occurred. On the following day the Bart's crew was once more defeated rather easily by Caius College, Cambridge, having disputed the race up to the half-way mark.

Finally, a word of appreciation to those gentlemen who gave up their valuable time to assist the club; notably Chris Hudson, Bill Atkinson and John Curry. If the club can claim any success this year, it is that a fair number of keen beginners have been trained and will prove of great value in future years, and with that thought we wish the new officers, Tom Meade and Basil Middleton, a good season.

★

## GOLF

After a good start, the club has been having a somewhat disappointing season. This has been due both to the cancellation of several matches on account of the weather, or because either we or the opposition could not raise a team, and to the considerable difficulty often experienced in turning out a reasonable side. The club has, however, played several enjoyable, if not successful, matches recently. As the season does not end till the middle of October, it is hoped that there will be a late return to earlier form.

★

## CRICKET

1st XI v. U.C.H. at Mill Hill on July 2nd, 1958.  
Second Round Cup match. WON by 46 runs.

Fielding a weakened side for this match, Bart's batted first. The early batsmen scored steadily, but forfeited their wickets in doing so, and at lunch the Hospital were 68 for 5. Drinkwater opened, and lasted until 3 p.m., scoring 57, bringing the total to a respectable level.

On the damp wicket, taking some spin, the opening U.C.H. batsmen looked confident, but after a breakthrough by Garrod, Davies bowled two violent off-cutters to dismiss the two most dangerous U.C.H. batsmen. The U.C.H. tail was hard hitting, but never looked like reaching the Bart's total.

Bart's 144 (Drinkwater 57).  
U.C.H. 98 (Garrod 4 for 30).

1st XI v. U.C.S. Old Boys at Chislehurst on July 5th, 1958. LOST by 80 runs.

On an excellent batting wicket, U.C.S. lost a quick wicket to Whitworth, but Hetherington, batting very strongly for U.C.S., was scoring quickly and soon reached 50 and, with two steady partners, reached his century. U.C.S. were able to declare at 166 for 2. Bart's started well with Pagan and Davies opening the innings scoring slowly, but Bart's lost five quick wickets while only scoring five runs, leaving over 100 runs to win. Juniper and Harvey, with a stand of 42, brought the total to 81, but the later batsmen failed to play out time, the last wicket falling in the final over.

U.C.S. Old Boys 166 for 2 dec.  
Bart's 86.

Past XI v. Present XI at Chislehurst on July 6th, 1958. Match DRAWN.

On a very pleasant, blustery day, the Present again played the annual fixture against Mr. J. O'Connell's XI. The Present, batting first, quickly lost a wicket,

but then Mitchell and Pagan dug in and, scoring slowly, increased the total to 49, when Pagan gave a sharp catch to Mr. O'Connell. Juniper soon being dismissed by a catch to Dr. Oswald at mid on, Whitworth joined Abell in a stand of 58. Finally, the Present declared with a total of 175-8, Whitworth being unbeaten with 53.

The Past quickly lost a wicket, but when Tomlinson joined Murley, the score rose quickly. Tomlinson batting brilliantly right through the Past innings for an unbeaten 103. The Past, scoring against the clock, lost wickets rapidly, but could not reach the Present's total, the last scoring stroke being a sharp single by Dr. Oswald off pace bowler Whitworth. Again Mr. O'Connell must be thanked for arranging this most enjoyable match.

Present 175-8 dec. (Whitworth 53 not out, Mitchell 44).  
Past 169-8 (Tomlinson 103 not out, Whitworth 3 for 47).

(See photograph over page)

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“Just wait until we bat”

**1st XI v. Incognito at Chislehurst on July 12th, 1958.**  
LOST by 5 wickets.

Bart's batting first, lost Davies quickly, but Pagan batted steadily, and with Harvey, put on a stand of 75. A quick-scoring seventh wicket stand between Mackenzie-Ross and Abell of 55, left the Incognitos to get 186 in 150 minutes. The Incognitos started excellently and, batting flawlessly, put on 114 in even time, they lost five wickets in scoring fast and reaching the Bart's total with time to spare they never looked like losing.

Barts 185-7 dec. (Pagan 54, Abell 37).  
Incognito 186-5 (Drinkwater 3 for 58).

**1st XI v. Hampstead at Chislehurst on July 13th, 1958. Match DRAWN.**

Bart's batted first and had a very chequered start. The first five batsmen on the easy wicket struggled for runs and gave their wickets away. Barts were 44 for 5 when Harvey came in and played a very resolute innings of 71, with Drinkwater he had a useful stand of 42; and he was finally last but one out. The last wicket pair had an adventurous, but unexpected, stand. Hampstead had 176 to get in

140 minutes, they started slowly, but scored slowly and slipped behind the clock, and found that they needed 65 in the last half hour. By effective and scientific hitting they scored very fast, and needed four runs in the last over, of which they scored three, the result being a draw.

Bart's 176 (Harvey 71).  
Hampstead 176 for 5.

**1st XI v. Nomads at Chislehurst on July 19th, 1958.**  
WON by 4 wickets.

Nomads were made to bat first, four of their wickets fell quickly, but a fifth wicket stand of 72 brought their score very slowly to a respectable level. Their next three putting on more runs brought their total to 147. Due to very slow batting they declared at 5.20 p.m., giving Bart's 110 minutes to win, having taken 170 minutes themselves. Barts opened well, the first wicket putting on 38. Then a series of hard-hitting stands, including Davies, Whitworth Abell and Drinkwater, brought the total within reach; Robson, with a classical square cut for four, brought Bart's victory in the third but last ball.

Nomads 147 for 8 dec. (Whitworth 5 for 29).  
Bart's 148 for 6 (Davies 56, Abell 33).



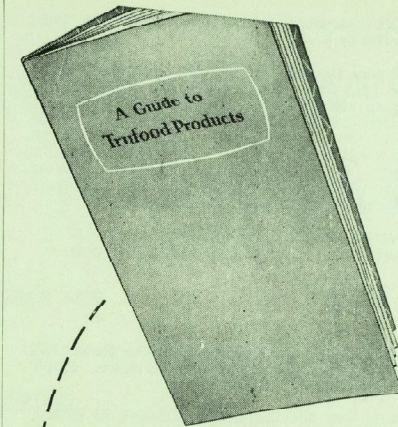
## WHAT'S THE USE

A famous mathematician once proposed a toast: “To the higher mathematics, and may they never be of any damned use to anybody.” Another mathematician said more recently that the subject had no practical value—that it could not be used directly to accentuate the inequalities of human wealth, nor to promote the destruction of human life. We do not know whether the early biochemists held such a pleasantly detached view of their researches, or whether, if anyone said, “What's the use?”, they would hopefully reply, like Faraday, “What use is a newborn baby?”

Whether their words were modest or not, useful value has, in fact, come from their work. Spectacularly so in the matter of the functions of vitamins. Take vitamin B,—in other words, thiamine. It has now been established that thiamine is essential for the oxidation of pyruvate. When thiamine is lacking, pyruvate accumulates. This can cause very unpleasant, even serious symptoms. Various neuropathies (for example, tobacco-alcohol amblyopia with its alarming blindness) are associated with thiamine deficiency. Even today in diet-conscious Britain, minor degrees of thiamine deficiency are by no means uncommon. Those who eat much carbohydrate need extra thiamine, as well as riboflavine and pyridoxine—indeed all the B-complex vitamins; and so do children when they are growing fast, and lactating and pregnant women, and girls slimming on slender diets. That is where Bemax is so useful. Being pure stabilized wheat germ, it contains all the B-complex vitamins, and is rich in iron and protein. You just sprinkle it on your food; Bemax goes well with cereals, curries, and a host of other dishes.

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1st XI v. Dartford at Chislehurst on July 20th, 1958.  
WON by 5 wickets.

Playing Dartford for the first time, Bart's made them bat. They scored slowly, but effectively, the opening stand putting on 91, then the following Dartford batsmen brought the score to 168 for the loss of five wickets. A very generous declaration gave Bart's even time in which to make the runs for victory. A useful opening stand put Barts on the way to victory, and a hard hitting 55 by Abell gave Bart's victory ten minutes before time.

Dartford 168 for 5 dec. (Whitworth 3 for 37).  
Bart's 169 for 5 (Pagan 33, Abell 55 not out).

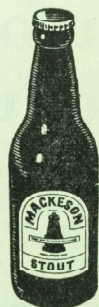
1st XI v. King's College Hospital at Dog Kennel Hill on July 25th, 1958. Semi-Final Cup match. LOST by 172 runs.

Barts won the toss and put King's in to bat.

They started indifferently, their first two wickets falling for 31 runs. The two dangerous County 2nd XI batsmen from King's were now together, and looked very menacing, but they were both dismissed for 60 runs. With the loss of one more wicket, King's were 132 for 5 at lunch and Bart's were in a hopeful position. King's lost two quick wickets after lunch but, as so often happens in Cup matches, the fortune changed, and the last three wickets put on 100 runs, during this period Bart's missed four catches and three easy run outs. King's were finally dismissed for 250 runs, the last hour being played in continuous drizzle. To avoid a replay, Bart's batted, playing in rain, and started disastrously by losing four wickets for nine runs. The rest of the innings was fighting the inevitable end, and Bart's were finally out for 78, Pagan batting throughout the innings for an undefeated 32. With the worst of the weather and playing well below their form, Bart's were beaten by a side who are very well balanced, but should not have lost so disastrously.

King's 250 (Whitworth 4 for 67, Drinkwater 3 for 36).

Barts 78 (Pagan 32 not out).



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# ST. BARTHOLOMEW'S HOSPITAL JOURNAL

Vol. LXII

OCTOBER 1958

No. 10

## EDITORIAL

Mention of the problems of medical education seldom fails to stimulate some form of lively discussion. Few other subjects are of such equal concern to all sections of the medical community. Widespread interest in this subject may account for the continual reviews and gradual, albeit conservative, alterations of the various educational systems at present practised in this country.

Conservatism is often mistakenly confused with tradition when attempting a reformation of any such venerable institution as our own Royal Hospital. The rapid scientific advances of the mid-twentieth century present a challenge to teacher and pupil alike. Undue procrastination in such a changing era could terminate in oblivion within a sea of ignorance and prejudice. It is a sincere hope that the pre-clinical and clinical departments of this Hospital will continue to keep abreast, if not ahead, of the current trends in medical education.

It appears common knowledge, amongst the junior members of the Hospital, that the Medical College is anticipating a change of the present curriculum. However, the intimate details of this revision are matters for conjecture and speculation. Now, when it may still be possible to influence the ultimate decision of the formulators of Hospital policy, the *Journal* is in a position to publish the first results of the Questionnaire ; namely those regarding education.

naire ; namely those regarding education.

Perhaps the most far-reaching single change so far envisaged would be the inclusion of Pathology and Bacteriology in the Bart's pre-clinical course. Extension of the pre-clinical course may lead to natural resentment amongst the London students. Apart from personal and teaching considerations, such a course of action would lead to easier integration and more satisfactory teaching of the clinical students who are derived from the three main pre-clinical sources ; London, Oxford and Cambridge. Furthermore, instruction in clinical Pathology and Bacteriology could then become more constructive and not, as at present, restricted to a compromise because fifty per cent of students have already completed an intensive theoretical course in these two subjects. The present unsatisfactory state of affairs is reflected by the lack of enthusiasm, as shown by the results of the Questionnaire, for the teaching of these two subjects.

An even more complete integration of clinical and pre-clinical subjects was hinted at in the Questionnaire:

" In some medical schools the teaching of clinical and pre-clinical subjects has been integrated ; i.e., the clinical conditions and associated pathology produced by diseases of an organ or system are studied at the same time as its Anatomy and Physiology. Do you think the teaching at Bart's should be."

Results : 38 for complete integration.  
141 remain as at present.  
187 partially integrated.

Two other results may influence future decisions. Two hundred and ninety-seven people were in favour of an individual tutorial system as part of the teaching, whereas only 40 were undecided, and 39 against. Three hundred and thirteen people thought that a course in General Practice, giving practical experience of the duties of a

G.P., was an essential part of the curriculum. Twenty-four people opposed such a course of action, and 39 were undecided.

College authorities might be interested to know how and why people voted for the best and worst taught subjects. The departments of Gynaecology and Obstetrics may well be proud to learn that 47 people in their third clinical year voted these departments as the best for teaching. Only 10 votes were collected by the other 30 departments.

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### EXTERNAL BEAUTY

A great deal of time, money and effort are being expended in an attempt to "brighten up" the entrance hall of the Hospital Library. Those people who venture past the entrance hall and enter the main body of the library will anticipate that the Hospital's aesthetic sense will extend to include the much needed improvement of the library itself.

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### CALENDAR

#### October

Sat., 4th.—Dr. E. R. Cullinan on duty.  
Mr. J. P. Hosford on duty.  
Mr. C. Langton Hewer on duty.

Sat., 11th.—Medical and Surgical Units on duty.  
Mr. G. H. Ellis on duty.

Sat., 18th.—Dr. Graham Hayward on duty.  
Mr. A. H. Hunt on duty.  
Mr. F. T. Evans on duty.

Sat., 25th.—Dr. A. W. Spence on duty.  
Mr. C. Naunton Morgan on duty.  
Mr. R. A. Bowen on duty.

#### November

Sat., 1st.—Dr. Bodley-Scott on duty.  
Mr. A. W. Badenoch on duty.  
Mr. R. W. Ballantine on duty.

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### OBITUARY

#### JACK DOO

It is with regret that we report the death of Mr. Jack Doo, a Surgery Staff Porter, on Sunday, August 31st, after a long and exhausting illness.

"Jack," as he was best known, had been in the service of Bart's for 38 years, 25 of which were spent in Surgery.

He was associated for many years with the Orthopaedic and Children's departments, and will be remembered best for his charming personality and jovial manner, both to staff and patients alike.




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### ANNOUNCEMENTS

#### Engagements

COOK—WATFORD.—The engagement is announced between Richard C. M. Cook and Ann V. Watford.

LANGDON—FOGGON.—The engagement is announced between Dr. Thomas Cecil Langdon and Susanna Joyce Foggon.

#### Marriages

CAMPBELL—THOMAS.—On August 30th, Dr. Euan Campbell to Dr. Susan Thomas.

FARROW—SENIOR.—On September 6th, at St. Bartholomew's-the-Less, Dr. Lewis Jesse Farrow to Ann Senior.

HODGSON—GRAY.—On August 2nd, at St. Bartholomew's-the-Less, Gordon Hewett Hodgson to Pauline Audrey Gray.

PARRISH—CORLETT.—On August 23rd, Dr. John Anthony Parrish to Elizabeth Jane Corlett.

TUCKWELL—NEWTON.—On August 30th, Barry Tuckwell to Dr. Sally Newton.

#### Births

KINSMAN.—On September 3rd, to Margaret (Meg), wife of Dr. F. M. Kinsman, a son.

NEWILL.—On September 4th, to Patricia, wife of Dr. Robert Newill, a daughter (Angela), a sister for Heather.

#### Deaths

BURN.—On August 28th, Dr. John Southenden Burn. Qualified 1910.

MILLS.—On August 16th, Dr. C. W. Mills, aged 56. Qualified 1936.

WATERHOUSE.—On September 1st, Dr. Rupert Waterhouse, aged 85. Qualified 1897.

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### NOTICES

#### Changes of Address

DR. and MRS. BAMFORD, 24 St. Mary's Street, Ely, Cambs. Tel.: Ely 2256. Surgery as before: 40 St. Mary's Street. Tel.: Ely 2233.

DR. A. O. CAIRNS, 8 Canons Close, Edgware, Middx. (for the next six months).

#### MEDICAL STAFF

The following appointments to the medical staff take effect from the dates mentioned:—

**Dr. Cullinan's Firm**  
*Registrar (Chief Assistant)*  
Dr. J. A. Parrish, 1.9.58 (replacing Dr. Campbell).

**Anaesthetic Department**  
*Senior House Officers*  
E. F. Brooks, 1.7.58; E. Clissold, 27.8.58 (replacing Mr. Stainton-Ellis).

**Mr. Hunt's Firm (1.10.58)**  
*Registrar (Chief Assistant)*  
Mr. P. Knipe, 1.10.58 (replacing Mr. McGrigor).

**Pathology Department**  
*Senior House Officers*  
Mr. A. J. Salisbury, 1.9.58; Mr. B. A. I. Hurn, 1.9.58.

**Mr. Corbett's Firm**  
*Junior Registrar*  
Mr. J. E. A. Wickham, 1.9.58.

**Dr. Hayward's Firm (1.10.58)**  
*Registrar (Chief Assistant)*  
Dr. G. H. Aphorpe, 1.10.58—or possibly before; (replacing Dr. Picton Thomas.)

From Monday, September 1st, 1958, Mr. D. A. Macfarlane will carry out the duties of Casualty Surgeon every morning.

In the afternoons, the duties of the Casualty Surgeon will be carried out by the Junior Registrar attached to the Duty Firm.

## EXAMINATION SUCCESSES

## UNIVERSITY OF LONDON

## Special Second Examination for Medical Degrees, July, 1958

Bhagat, B. B.	Brown, J. K.
Buzady, T.	Collier, L. J.
Gallop, A. M.	Hood, C. A.
Jones, J. R. L.	Jones, N. O.
Kark, A. M. R.	Kielty, P. A. M.
Lewis, J. M.	McNeill, C. A.
Miller, A. J.	Moynagh, P. D.
Sinclair, A. M.	Watson, J. U.

## Special First Examination for Medical Degrees, June, 1958

Gleadle, R. I.	Lageard, V. M. E.
Savege, P. B.	

The following General Certificate of Education Candidates have qualified for exemption from the First Medical :-

Austin, A. J.	Bousfield, J. D.
Glover, D. N. C.	Hadley, D. A.
Jennings, M. C.	Lotfi, D.
Phaure, T. A. J.	Powles, R. L.
Rolfe, M.	Stuart, J. G.
Wan Ping, I. H.	Whyatt, N. D.

## M.Sc. Examination, July, 1958

Bradshaw, A. L. (Physics)	Simmons, J. A. (Physics)
---------------------------	--------------------------

## Ph.D. Examination, July, 1958

Faculty of Science  
Lofts, B.

## SOCIETY OF APOTHECARIES

## Final Examination, July, 1958

## Pathology

Haslam, M. T.	Tooth, J. S. H.
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## Medicine

Haslam, M. T.	
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## Surgery

Haslam, M. T.	Tooth, J. S. H.
---------------	-----------------

## Midwifery

Haslam, M. T.	Tooth, J. S. H.
---------------	-----------------

Haslam, M. T., completed the examinations for the Diploma of L.M.S.S.A.

## Final Examination, August, 1958

## Pathology

Casson, A. J.	
---------------	--

Casson, A. J., completed the examination for the Diploma L.M.S.S.A.

Brunner, P.
Crawhall, J. C.
Irvine, R. J. M.
Jones, V. M.
Langford, E. M.
Metten, A. D.
Prosser, D. I.
Welch, D. M.

McGrath, K. W. G.
-------------------

Dudley, N. E.
Hardy, J. D.
Owen, D. G.
Powles, T. J.
Tam, Y. D.

## PERSONALITIES

by GEOFFREY BOURNE

Among my first recollections as a small boy, aged about 4, was that of sitting next to the driver on the outside of a horse-bus. He was shrouded in a shining mackintosh cape. As I watched the skill and agility with which the sparrows flew up from the little heaps of horse manure that were scattered about the roads I was entranced by their ability to avoid the hooves of the advancing horses. Therefore my earliest desire was to own a sparrow. Of course I never did, but I was once taken to see Sir Thomas Barlow, the famous Victorian physician, and I remember walking with my mother down the long passage to his Harley Street consulting room. During the consultation I noticed, outside the window, some trees on which sparrows were hopping about, and I remember asking Sir Thomas whether he thought he could catch me one. Fifty years later there was a night telephone call to my home. Could I go to see Sir Thomas Barlow who was very ill. I drove down to the same house, walked into the same hall and remembered the same passage. This time I was the administrator and he, poor old fellow, was at the receiving end. He was well on in his nineties and dying of pneumonia. It was an interesting and tragic reversal of rôles, and a measure of the passage of time.

After my childhood visit to Harley Street I had no particular association with the medical profession until I happened, by good luck, to obtain a scholarship in classics at St. Bartholomew's Hospital. I had been brought up as a classical scholar, with a small 's,' and that accident determined my coming to this hospital.

The first personality I remember was the Dean, Tommy Shore, as we used to call him. He had a Victorian appearance of the more frightening and magnificent type. His beard was grizzled, and his hair curly and grey. From his rubicund face looked out a pair of striking pale blue eyes. Tommy

Shore knew how to control the medical students of those days. He held every potential disturber of the peace in the palm of his hand. His assistant in the Biological Department—for he lectured in biology—was a certain Dr. Cunningham whom I also knew and respected. Poor Cunningham, equally a vassal, always used to start laughing five or six seconds before the annually recurrent jokes in Tommy Shore's lectures. Tommy was no man to be trifled with.

I think that today the pressure of existence imposes a certain external discipline upon medical students, but then we were a more rowdy and financially undisciplined crew. One poor fellow named Bailey arrived at Tommy Shore's demonstration without his microscope, and Tommy knew perfectly well that the instrument had been pawned, but I remember him looking up and booming out "Do you mean to tell me, Bailey, that you have the damned impertinence to come to my Biology Class without your microscope? Go home and fetch it, sir." Bailey got up and went out with his tail between his legs. He did not return with his microscope.

It used to be a common sight first thing in the morning to enter the Abernethian Room and to see there three or four slumbering figures shrouded under *The Times* or the *Morning Post*. They would revive from their coma just in time to creep over to the "White Hart" for a refresher. They well merited the title of Perpetual Student which has since been bestowed on more eminent members, not only of our own staff but of the Public also. The title in their case was no misnomer, for they were students for years. The nights following the successful winning of the Hospital Cup on the rugger field were memorable. The Fountain was not long without a tenant or two, and songs and other sounds of triumph rang round the Square. I always thought of R.L.S.'s remark that he wondered where the horrible dirty

drunken medical students went to and where the dear old respectable family practitioners came from.

Another memorable character was Dr. Hurlley, our lecturer in chemistry. He was a tall, lanky Yorkshireman with a kindly personality, and a clear lecturing mind. If there should be some slight disturbance in his lectures, he would look at us with such benign reproach that always the turbulence would subside. He was a fine chemist and he did valuable original work on the Ketone bodies. Unfortunately during the early days of the first world war his place was taken, during a period of illness, by an assistant, K. He, poor chap, did not look impressive, had something of a squint, and in the most serious company would have evoked a smile. You can imagine the scene in the lecture room when he tried to lecture instead of Hurlley. Many of the audience on the back row had armed themselves with beer bottles and some on the roof outside with paper missiles of all kinds. At a given signal there began a bombardment from the open skylight of paper and other objects. Beer was taken in therapeutic quantities on the back rows, and the bottles rolled and bumped down the steps. The poor chap struggled with his first lecture, and got halfway through the second, but never tried again.

It was about then that I developed diphtheria and simultaneously a systolic murmur was discovered, and attacks of paroxysmal tachycardia began. From my still being here it is apparent that neither of those two conditions is necessarily fatal. In actual fact they probably saved my life for many of my contemporaries who had not by 1914 achieved the wards, joined the combatant services in that war and were killed. This disability also had limited my athletic activities, which I will not dwell upon for reasons of modesty, and forced me to turn my attention more seriously to the academic side of hospital activities, and in due course I entered the wards. Without any doubt the most fascinating and interesting personality I met there was Dr. J. H. Drysdale, or as he was known, Dropsy. He was once asked why he was so called. He explained that he was changing once after a game of rugger at Cambridge and a friend of his began taunting him with his

adiposity. Some other wit stated that it was not fat, but dropsy. The name stuck.

As to appearance, he was of medium height, his hair was very smoothly brushed back, he wore a stiff collar with a little bow tie, an ordinary morning coat with tails, striped trousers—in fact, the full uniform of a consultant of those days. His face was mobile, his skin shone and he used to roll his eyes when surprised. Our hospital laureate, R. B. Price, in one of his humorous verses in "Round the Fountain" refers to Dropsy's 'india-rubber grimace,' and indeed he had an india-rubber face. He used to take a Bath bun and a cup of coffee for lunch. He was an inveterate smoker of "State Express" cigarettes.

Drysdale was a superb teacher. He insisted upon accuracy in everything. "If you learn to express yourself in an accurate manner you will learn to think accurately," he said. He would never allow such a loose phrase to be used as "There is nothing inside the chest." If told this he would reel with amazement and would totter back on his heels as if stunned. He did this once too often, just outside the bathroom door of the ward. He disappeared as the door swung to. It did not make any difference to old Dropsy, he just walked out again. There was another thing he could not abide, the statement in a note "Nothing relevant." "What you mean," he would counter, "is that you have been unable to discover any pertinent fact." This technique may sound finicky but, in fact, it made one extremely precise, and accurate.

In taking a history he would always insist on the routine, as you all know it so well—"What did the patient first complain of," or turning to the patient he would ask "When were you last quite well?" The patient would say, "Well, of course this pain has been very bad for the last four months." The Old Man would say "Yes, but when were you last perfectly well?" He would insist on obtaining an exact list of the symptoms, in their chronological order, getting a full description of each in turn. Sometimes he came up against this complication—the patient would say, "Well, Doctor, I never have been well" and his retort to that was "When were you last in your usual state of health?" and he might

qualify this by saying, "Of course, there are some people who enjoy ill-health."

He was wealthy. He was born in the Argentine. He once met a citizen from the United States in the Square, who approached him saying "I am an American." "So am I," said Dropsy. "Ah, what was your State?" "The Argentine Republic," said Dropsy. He did not see why the Argentine should be regarded as non-American.

Because of his wealth you would have thought that he might have lived a rather ostentatious life, but not a bit of it. His habits were frugal. He did not even own a motor car. His whole life was the Hospital. I do not know what he did in the morning after breakfast. I think he probably read *The Lancet* and other journals. He would appear at Barts at lunch, and he enjoyed his Hospital work and teaching to the full. He would consent to see a private patient if a really great effort were made to obtain his opinion, but avoided this as far as possible. When he retired one of the drawers in his house was found to be full of cheques that the Hospital had paid him, which were then of the nature of honoraria. He had never cashed them because he did not want to obtain financial reward for his services. Being a wealthy man he was immune from the results of free criticism. He did not care what his colleagues thought about him. Needless to say he was not popular with some of them. For instance, one of the gynaecologists had operated upon a patient who appeared later in the post-mortem room. Old Dropsy was there, as he always was, looking about most carefully. When the unfortunate gynaecologist appeared he said, "Tell me, is it customary when doing a hysterectomy to tie both ureters?"

On another occasion when I was his house physician he was asked to see a patient for Macadam Eccles. Macadam Eccles was a fine teacher and a good surgeon, but he enjoyed a monumental self-satisfaction. He was also an active and vociferous teetotaler. A request came up to the ward, would Dr. Drysdale go to see this most interesting case. The old man rolled his eyes and looked round, and we all moved off to Eccles' ward in procession. There was Macadam Eccles sitting beside the bed. "Ah, Drysdale, I am glad you came down,

and I hope that you have brought your physiological experts with you. This is a most unusual case. You see when I draw my finger nail sharply across the surface of the abdomen, instead of the usual red mark there is a white one. We want to know what will happen when we operate upon this man. Shall we get no bleeding?" "Well," said old Dropsy, "I do not think anything much will happen. Your trouble will be from secondary haemorrhage" and walked out of the ward.

A further Eccles story comes to mind. This time the protagonist was Sir Anthony Bowlby. Bowlby had a rather forlorn look, a slightly droopy moustache, a pair of steel rimmed spectacles, and a first class clinical mind. He was one of those people who had a superb memory, and in the pre-laboratory era a memory for the clinical details of individual cases was of inestimable value. Eccles sent for him. "Ah, Sir Anthony, I am so glad you have come to see this patient. We would greatly value your opinion." Bowlby did not say much. He walked up to the bed, looked carefully at the chart, made a quick but from his point of view a thorough examination of the patient, and walked to the other end of the ward. "Well, Eccles, there is only one thing for this man, beer." "Oh, but Sir Anthony, we would not dream of using alcohol in this ward. We do not believe it does any good at all." "B-I-E-R, Eccles," replied Bowlby, "B-I-E-R."

Morley Fletcher, one of Drysdale's colleagues, was a debonair, well-dressed, and handsome man. He had won the inter-University quarter-mile, it was unkindly said, in the slowest time recorded, but nevertheless he beat his Oxford rival. One of Dropsy's quips was still ranking when, one day, Morley found the "Old Man" standing in the Square with his House Physician, who at that time was a rather short gentleman with a little black beard and dark eyes. Morley Fletcher said "Do you know Drysdale what you remind me of?" "No," replied Dropsy, "tell me." "Well, you remind me of an Italian organ grinder and his monkey." Dropsy rolled his eyes and paused. "Well," he replied, "this is the first occasion upon which I have ever been mistaken for an Italian organ grinder."

À propos of Morley Fletcher, he was walking down Bond Street one day and his stethoscope happened to be dangling from the tails of his smart morning coat. A man ran after him and tapped him on the shoulder. "Excuse me, Sir, but I think your 'catheeter' is hanging out."

There was another character with whom Drysdale used to bandy words. Sir Robert Armstrong Jones was the Superintendent of Claybury Asylum. He was an alienist, psychiatrists not having then been invented. He was a pioneer in the parole system for harmless lunatics, and his measures were valuable in helping their return to normal outside existence. Dropsy one day had a morose and mentally rather queer patient. "I suppose we shall have to ask Sir Robert to see this woman." In due course Sir Robert appeared. He had an ingenious and lively mind and Drysdale was determined to pin him down to a definite statement. "Sir Robert," he said, "this woman is a problem," and with Churchillian deliberation and emphasis, "What we want to know is this, is she or is she not out of her mind?" Sir Robert replied quickly "And what is mind, yes?" He turned to the assembled residents and clerks and said "You have to be so careful with Dr. Drysdale, he is so able and yet so cynical." He interrogated the patient at some length and then he turned round. "She is, you know, entering a stage of life in which women are passing through the shoals. Some of them wet their feet." After a few more comments, and having received Dropsy's thanks for coming, he moved off towards the door of the ward. Drysdale called after him "Mind you don't wet your feet."

Sir Girling Ball, to whom the medical school owes such a debt in the acquisition of the Charterhouse site, was another of Dropsy's sparring partners. In the First World War the visiting staff of the Hospital also attended No. 1 London Military Hospital and for purposes of discipline there they were given military rank and wore uniform. Ball was a captain and Drysdale was a major. One day the Old Man rose in rank to become Lt. Colonel and that very day he received a written request from Ball, "Will Major Drysdale please see this case?" Dropsy rolled his eyes and off he went to the surgical ward. He inscribed his opinion

and, instead of departing home, to my surprise returned to his own ward. He industriously searched around and eventually found a patient concerning whom he thought he might legitimately ask for a surgical opinion. He wrote down on the request form "Will Lt. Ball kindly see." During the Second World War Ball, who was a bluff hearty character, full of energy and vitality, was in charge of the North Eastern sector of the Emergency Medical Service of London. One evening I returned home and was given the appropriate message by my maid—a disciple of Mrs. Malaprop—"If you please, Sir, Sir Goring Bull telephoned."

I once, as a student, went round with Ball's firm. He came up to the bed of a patient—an old man with blue eyes, sparse hair and an uncertain vacant smile, "Well, Daddy," said Ball, "do you want to get up?" No response, except for the raising of a hand to an ear. Louder Ball asked, "Do you want to get up?" Still no response. Eventually, at the top of his voice Ball shouted "DO YOU WANT TO GET UP?" The old chap delightedly nodded and grinned. "Well, YOU CANT!" bellowed Ball in reply.

Rawling was the first of our cranial surgeons, and the author of a still famous book on surface markings. He had a racy-looking brown motor car and always looked smart and debonair. He was superb in uniform. There was a patient in Drysdale's ward who had some sort of tumour, it may have been an adenoma of the breast. She had heard of Rawling's name and wanted him to do the surgical operation. "Jumpy" Rawling was sent for and arrived spick and span in his dashing Savile Row uniform. Drysdale proceeded to introduce him to the patient. "This gentleman, who looks like a soldier, is in reality a very famous surgeon. He will cut out your lump for you with his sword."

You can see what a marvellous time we had as his residents. He was unpredictable, incisive, and as salty in his personal sallies as in his teaching. To leave the lighter aspect of his character, he had a superb facility for obtaining the wheat and separating it from the chaff. He knew straight away the sort of value the electrocardiograph would be likely to have in the future, and

he actually himself bought and presented to Barts an early prototype, which for all I know may still repose in the Physiology department. There were only three or four in London, one at University College in Lewis's department, one at the London Hospital and another at the Heart Hospital. He realised equally well both the fundamental value and the exaggerated claims made for the newly introduced renal function and liver function tests. Those facts that he sifted out as useful forty years ago have not been disproved, the chaff he rejected then has similarly blown away in the wind of time.

There was one patient I remember well, à propos of the electrocardiograph, and that was an old Jew named Jacob Begner. He was a patriarchal old fellow. He was admitted with auricular flutter, probably the first case to be treated in this hospital by the still modern methods of full rapid digitalisation. On his discharge I used to go down to Bow with my little polygraph and so follow his progress. I remember his once rising up like a prophet and saying "One day you will be a three-guinea heart specialist." He was not right about the three guineas. He was a dear old man. I once went to see him at Bow during the Passover Week and he asked me to sit down and accept the honour of being the official "stranger within the gates."

Drysdale never made fun of juniors, however cutting he might be to his equals and although he was a wealthy man he was a very generous one. When I asked permission to apply for the post of Chief Assistant or Registrar, he acquiesced. But a few days later he approached me saying that he would like to take on for six months I. L. Braun who intended to practice in Johannesburg. Would I mind deferring my appointment? "Continue to work in the pathology department," he added, "Go round the wards and assist unofficially in the work of the firm." This I did. Eighteen months later he approached me in the Square one day and handed me an envelope. "This," he enunciated, "has nothing to do with the Inspector of Taxes." It contained a cheque for £100, the sum which I would have received officially if my appointment had not been deferred.

When he retired I went round to see him

at his house in Devonshire Place. He said, "I do not know if there is anything here that you would like." There was a box of large Havana cigars which I accepted and a number of useful books. Then he offered me, with a grin, a small porcelain chamber-pot for collecting specimens, unique in the possession of a small spout. I still possess this unusual memento.

I have a few memories of housemen. A very old friend of mine, Frank Gordon Watson, second cousin of Sir Charles Gordon Watson, was the hero of a perfectly true story. Frank was clerking for Sir Thomas Horder. His patient, a young man, had some gastric symptoms. He read out his note of the history and the results of his physical examination. "Well, Watson," said Horder, "What do you think is the matter?" "I think, Sir, that he has a sarcoma of the stomach." Horder's reply was sarcastic in a devastating but a kindly way. Three or four weeks later the man died, and of a sarcoma of the stomach. Horder walked up to Frank in the Square, "Watson," he said, "what on earth made you make that diagnosis?" "Well, Sir," seriously replied Frank, "it was revealed to me in a dream."

Frank, then house surgeon, was the audience on another occasion. A poor old Mrs. Smith was under the delegated care of an Egyptian dresser. The student was the sort of whom I once heard another patient say, "'E's a proper doctor, 'e is, 'e don't mind, 'e 'urts yer." Mrs. Smith had varicose ulcers, and Frank Watson instructed the dresser to treat the ulcers with hypertonic saline. Mrs. Smith was never seen again, but Frank Watson remembered her. "What did you do to Mrs. Smith?" "Oah! I gave her the hypertonique!" "Well, what did you do?" "Oah you know, the hypertonique." "What-exactly-did-you-do?" "Oah I took a handful of salt. I clap it on her leg and bind it up queeck. She jump up and she run out with a great cry, and I have not seen her since."

Joyce from Cardiff was a first-class house surgeon to Sir Holbert Waring. Waring was as gruff as a bear and his temper was never good. One day in the theatre Waring standing on one side of the abdominal incision, said to Joyce, "Hold that," "Take that," "Hold that," "Why can't I get a

decent house surgeon?" "Excuse my mentioning it, Sir, I am not a bloody octopus." He had no further trouble with Waring.

Waring was also the central figure in a situation in which Mervyn Gordon was involved. Mervyn Gordon was an extremely charming man, and a fine research pathologist, an archaeologist, a good historian, and equipped with a delightful humour. He had a monkey named Rahere which had survived some of his experiments, and which lived on the fourth floor in Mervyn Gordon's laboratory in the Pathology Department. Gordon always took Rahere a banana from lunch. One day he entered the Pathological block, banana in hand, pressed the ground floor button. No lift. He walked up to the first floor, pressed the button. No lift. He walked up to the second floor, and there visible through the lift grid were the top halves of Waring, his house surgeon, and one or two other trapped and uncomfortable individuals. To Waring, nearly speechless with rage, Gordon, gently smiling, pushed the banana through the bars.

Waring could not abide the idea of women medical students. He was once examining in surgical pathology for the final conjoint. Opposite to him sat a poor girl. He pushed a specimen at her. "What's that?" No answer. "Hmph. Then what's that?" Again silence. "Hmph. What's that?" "Don't you know anything?" The girl broke down and through her tears protested, "I think you are a nasty, horrid old man and I don't want to see you again." Waring looked at her for a moment. "You won't have the chance for six months."

About the Sisters I have not got very much to say. It is perhaps Sister Powell who stands out in my mind. She was on the surface a hard, thin little person. The psychiatrists now would say that she was a frustrated individual. I do not think she was. She had an intense love of the profession, and was an excellent teacher of her nurses, and, if you were wise enough to learn, of her house physicians also. One case I remember in her ward, who was seen by several physicians in consultation. Diagnostic aids were not then as good as they are today and the diagnosis remained obscure. Within two or three days of the patient's admission Sister Powell had re-

marked "typhoid fever." The patient lingered for a week or two, developing among other things a pleural effusion. At the post mortem the typhoid ulcers were found.

She used to collect young starlings that fell from the trees in the Square, and had other unusual pets. It was alleged that she smoked a clay pipe in bed. She could not stand old Dropsy. There was something about his apparently unsympathetic exterior that blinded her to his generosity and his other fine qualities. It so happened that Dropsy and Langdon Brown—whom she adored—had, at one time, patients in the same ward. Drysdale was the senior. The Old Man started his round with the "Blue Belt." No sister appeared. He guessed that sister was waiting for Langdon Brown's round, due later in the afternoon in the back ward. He said to the "Blue Belt," "Would you please give Sister my compliments and tell her that I am in the ward." The Old Man continued his round, but not one word did he address to sister the whole afternoon. She never repeated her error. I, however, as house physician received the full brunt, as you may imagine. But although I suffered until she relented she retained her full co-operative efficiency, and even several times gave anaesthetics for me to patients who needed a lumbar puncture or chest exploration. Eventually, as I say, she thawed.

**Students.** One hesitates to say much about students. Jennings of Jesus was a Cambridge character, pre First World War. He was a black-avised individual with big rimmed glasses, semi-bald, and of poor physique, but Jennings of Jesus had been up to that time in two wars, both in the Balkans. He also had an arm injury which was obtained by the game he used to play with his brother—shooting at one another with .22 rifles in the woods.

Mellowes is still somewhere about. He was an extraordinary character. Horder was giving a lecture in the old anatomy theatre; through the door to the passage there resounded a popular song, rendered with power. Horder stood it as long as he could. But eventually he paused and went out. "Mellowes, I am trying to teach these chaps some medicine." "Good luck to you, Sir," said Mellowes.

A student from the Near East had a self-assured personality, curly black hair, full lips and a broad grin. He, I think, gave the shortest clinical note I have ever heard in surgical out-patients. Pointing to his astonished patient, he declaimed, "He laugh—He smile—He got syphilis—He no care a damn!"

I have noticed that students are very quick on the uptake, so did George Graham. George was examining a buxom good-looking young woman with mitral stenosis, high-coloured in the face, and with well-rounded contours. George Graham put his hand on her left breast, looked over to the class and with a dreamy look said, "I feel a distinct thrill."

I was ending a practical medicine talk one day on orthostatic albuminuria and had explained the importance of testing two specimens, the first passed before rising and the second later in the day. I then referred to the observation of Dukes, doctor to Rugby School, who had noticed that orthostatic albuminuria was common in boys who fainted in school chapel. These cases were few, I continued. Had it been otherwise it would have been a tragedy of the first water. The roar of applause aroused by this unconscious witticism caused me, fortunately, to seize the opportunity for using it as a closing peroration.

**Patients.** I think one of the things that has impressed me most is the courage of patients. There was a young fellow of 23, just before the days of insulin, who was a severe diabetic. He just avoided coma several times, and by courage and determination, and rigid adherence to his diet, survived until insulin suddenly appeared and saved him.

Then there was another patient with cirrhosis of the liver. I took 14 to 16 pints out of his abdomen in two taps. He asked, "What shall I do in order to avoid this returning?" He had worked in Covent Garden from the ages of 12 to 50 taking increasing nips of gin to keep the cold out. I pondered the chances, and replied that he should absolutely cut out alcohol. I never expected to see him again. A year later he turned up. I did not recognise him. He said "I have been visiting my favourite pubs and meeting my sporting friends, and

I have stuck to soft drinks. Would it be safe to take something stronger occasionally?" I said to him "You ought to be dead by all the laws." He smiled. "All right," he said, "I understand." Two years later I saw him again but this time he had relapsed and was going downhill. He had lost his wife in the meantime and did not want to live. I learned that one should never take the pessimistic view.

Senor Marconi came to see me years ago, complaining of anginal pains. He usually suffered most just before his speeches in the Italian Senate. My electrocardiograph broke down, presumably suffering from stage fright. He said, "Can I help you to put it right?"

I went to see a famous and eccentric Duke. His apparel was outré. He wore a purple dressing gown, pyjama trousers, and a boiled shirt devoid of collar.

Ernest Bevin made a great impression upon me. He had had at least two coronaries, and in spite of this travelled by plane and by train regardless of distressing pain and disability. His physical condition was, in comparison to his service to his country, a secondary consideration.

I once had to take an electrocardiogram of a spirit. This being periodically inhabited the body of a large fat American bovine-looking blonde lady hung with jade and bangles. She had been investigated at a University in Carolina, and the electrocardiogram, as well as the blood picture and the basal metabolic rate, was said to vary according to the spirit which at the moment possessed her. She was accompanied by two people interested in spiritual phenomena, who introduced her. She got up on the couch and I took a control electrocardiogram. She then rolled up her eyes, began over-breathing and went off into her trance. "Is by any chance Abdul there?" She thought so. Eventually Abdul spoke in a deep resonant voice. "Oh, yes, how do you do?" To one of the people in the room he remarked, "I think we have met before, wasn't it at Lady X's? You see I always was one for the ladies," and he went off into a hoarse laugh. It was explained to Abdul that I wanted to take his electrocardiogram. "I don't care what you do," he replied,

"it is the medium's body, not mine." Again a deep laugh. Then he added, "I have got diabetes, I don't know whether this makes any difference." Spiritual diabetes was a new one to me, but I reassured him. I took the electrocardiogram of Abdul, who departed. The medium eventually returned to terra firma, and I took a further electrocardiogram of her. Needless to say all the tracings were the same.

The trouble with such reminiscences is that in the deathless words of Ramsay MacDonald, one can go . . . on . . . and . . . on . . . and . . . on . . . until . . . the . . . end . . . is . . . reached. I think, gentlemen, that this quotation is apposite.

## HILL-END—A COMING NOSTALGIA

by A. M. HALL-SMITH

The new building matures in Smithfield, its white-washed eyes opening, the gaunt frame now red bricked and angular. "When we move back to Bart's" rings daily round Hill End, and to most of us here it will be a sad day. Perhaps the time will come when they will be saying "When we were down at Hill End" with shining eyes and a wry smile—the stories will have made it into an idyll, a green sonorous placid tableau, with cows lowing and the residents scattered here and there beneath trees, asleep in deck chairs. Let them, then, read this *Journal*—for it was never so, yet it is as near an idyll as most housemen know.

Hill End is different. More peaceful, more embedded, more intimate; surrounded by the green lawns and trees whose presence is felt along even its longest and most clattering corridor. There are few duty admissions; the day's course is planned. Tranquil lists are jarred into excitement by

great operations—the Gods themselves peer in, and are silent as each theatre in turn twists the rules of nature in a surgical fantasy. In the Nurses Only the coffee jugs plopple and pop, boiling on their stoves. Firm by firm the green-frosted forms gather round the table, discussing the day's news, their own daring, sister's geraniums; before moving off to the wards, full of fat sandwiches (blessed be the theatre thirds). A drowse of anaesthetists collects and disbands, and from down the corridor, sheathed in X-rays, a familiar voice intones.

Lunch time in the M.O.Q., Mary badgered and bustling. Surgeons white-coated next to students, Hill End proper and Hill End Bart's, sustaining themselves in rows, trafficking over the white tablecloth. Next door, the perennial click of billiard balls; shouts of anguish leavened with steady snores from the sitting room. Sundays in summer—spring and volley from the tennis court, the lazy gossip of sunning nurses, visitors flocking, queuing and querulous. Housemen under their motor cars, save one, beneath the *Observer*, asleep.

In the grounds, the different peoples—the lawns of the Infirmary wards scattered with persons, sitting or shuffling, shapeless and appealing. The lonely nurse strolls by dreamily, opened letter in hand; others hurry past, dressed to kill and laden with suitcase, labouring to the bus stop on days off. In the wards tragedy stalks among the inert forms, balancing a riot of recovery. Modifying its terrors, but none of its solemnity, flowers wait still on the patients' lockers, and are moving in the garden outside. Squirrels dart about on the verandas, graceful and hasty for chocolate. Cats, dogs, tortoises, birds, all are seen in the wards; the stranger looks twice, the children are delighted.

And what of this shall we miss, when we are again city fast, looking back at the idyll? Two things at least—friendliness and fields. Starch and pomp are not much worn here; the pro is a person, the Mess has a oneness unknown in town. And which of us will not miss most the maze of paths and fields, still and balmy in the evening, daily green and peopled, even grey and sodden, but always there, outside the window. Bart's had been fortunate to know Hill End.

## A PORTUGUESE JOURNEY

by A. T. SEATON

The thought of visiting a new country which promised to be colourful, hot and near enough for a fortnight's round trip, occurred to us in the depths of last winter, and consequently we found ourselves at Lydd airport at the start of out-patient's holiday.

Our transport was a Morris 1000, painted in a vivid enough blue to rival the brightest colour in the South, and extract at least one very audible "Oh, quelle couleur" in a remote French village. It carried three people, their light luggage, camping equipment and a formidable medicine chest carried at the insistence of medical parents. As competition was rumoured to be hot, we regretfully decided not to masquerade as itinerant stone cutters.

As 4,000 miles in all were to be covered, and as much time as possible was desirable at the destination, some long non-stop runs through France and Spain were envisaged. The airport at Le Touquet was left at 6.30 p.m., and French cooking was gratefully sampled once more in Rouen at 9 p.m. As far as possible we attempted to stop during twilight hour when driving is most difficult. Midday following found us at Hendaye, on the Spanish border, when strange noises in the engine heralded the first hitch in the plans. Diagnosis of burnt-out valves was correctly made, and it was a major piece of luck that a Morris agency was only 20 miles back in Biarritz. Here, Gallic shrugs and voluble protestations gave way to engineering efficiency when we were able to produce new valves from our spares kit—an essential item. However, 24 hours were needed, and thankfully realising that the misfortune couldn't have happened at a better place—a magnificent beach instead of an arid Spanish road, we settled down to an afternoon's surfing and sunbathing, a huge meal (with no need to limit the driver's alcohol) and a good night's sleep à pension.

On the resumed journey, we were able to make good time through San Sebastian and across the 2,500 feet high pass to Vitoria, which (under the present conditions of blazing heat) is often surprisingly blocked by snow during the winter. A quick look at Burgos Cathedral, and then westwards, leaving the Madrid road, towards Portugal. We decided to cook our own evening meal and sleep a few hours on the camp beds before making a really early start on the last lap of the journey. We heard the occasional whir of mosquitoes, but despite our mutual reassurances that they only bite at dusk, their hunger got the better of our willpower. We lost interest in swotting them, and finally, in any idea of sleeping, but not before our bacteriologist assured us that their sucking angle was not that of malaria carrying species! Camp was hurriedly struck at 2.30 a.m. We observed then that the combination of pine trees and slowly flowing irrigation streams in the nearby field was very favourable for mosquitoes, and that aerosol sprays are useless in the open air.

Some compensation was gained two hours later, when we got an unforgettable sight of Salamanca by moonlight. Because of the semi-darkness and the complete absence of people, everything seemed larger, and left a tremendous impression. The floodlit Cathedral was particularly beautiful. The Spanish-Portuguese border was reached an hour before it opened, but the time was pleasantly spent with two Portuguese students returning from London and an American biochemist and his wife. The latter couple fooled us completely by stepping out of a French car, and only after we had congratulated them on their fluent English, with its quaint accent, did they say they were American.

There was an amazing difference in atmosphere and scenery as soon as we crossed the border. The baking, extensive plain gave

way to mountains, and the long flat road to an exciting series of hairpin bends, with visibility rarely more than 50 yards. It was very strictly no sight-seeing for the driver on this stretch.

After three hours of this, the road flattened and we reached Coimbra, the old university town, and the Portuguese equivalent of Oxford and Cambridge rolled into one. The University buildings are at the highest point of the city, and we were especially impressed by the huge library with its sumptuous carvings, and the magnificent new medical school—a vast modern building faced in white marble, with excellent lecture rooms and laboratories, obviously built regardless of cost. Frescos and statuary representing the history of medicine and surgery confronted one on all sides, and it would be interesting to know if the teaching equals the environment; unfortunately, the medical school was closed for vacation, so we couldn't sample a lecture.

Lisbon was reached in time to check into an hotel and luxuriate in a cold bath before eating. Thus refreshed, we were able to look at the night life with renewed interest. The broad, shady Avenida de Liberada, with its outdoor cafes and black and white mosaic pavement, would do justice to any European capital. Off this, however, were the narrow side streets with numerous fish shops and restaurants, which remind one that Portugal is still mainly a seafaring nation. We watched fascinated, as in one restaurant window, lobsters by the dozen were expertly blinded, bound over double so that they couldn't flip, and finally piled vertically on top of each other to a height of many feet, still wriggling to guarantee their freshness! Our own meal showed us that while the fish courses are almost unlimited in number, and usually excellent, the meat and vegetables are relatively uninteresting.

While the car was thankfully being oiled and greased next day, we returned to the centre. Under the economic guidance of Salazar (an ex-professor of Coimbra), the Portuguese Escudos has become one of the hardest currencies in the world, comparable to the dollar and Swiss franc. In the commercial quarter, the exchange houses have piles of gold coins in all currencies, which anyone can buy—providing he has ready cash.

It was quite strange to see huge piles of gold sovereigns openly for sale in a window. Here we also came across the Bank of the Holy Spirit and Commercial! Another day was spent looking at the environs of Lisbon, Belem and Estoril, and the night was spent camping on the coast near the artists' colony of Sintra. While bathing before dinner, we suddenly discovered that we were now south of the gulf stream, and that the water was really cold. There and then, we decided to speed down to the south!

At this stage, one of the party developed a high temperature and pain in the maxillary sinus, due, we thought, to some water which he had felt enter while bathing. He, a Thomas's man, for some reason distrusted the high qualifications with which nearly a year's clinical experience at Bart's had endowed me, and steadfastly refused the detailed and thorough examination which we thought his condition merited. Preferring the empirical use of oral penicillin, he was quickly cured, but not, we hastened to tell him, without a detrimental effect on his natural immunity.

Travelling south involved the ferry across the estuary of the Tagus, and enabled us to get the famous view of Lisbon from the sea.

With some trepidation we headed south on what was marked on our map as a secondary road. Having some experience of Spanish secondary roads (and even main roads), we expected the worst, but found an excellent macadamised surface the whole way. Our only excitement on this trip was a sudden blow out from a front tyre. The report was enough to wake the whole village (which was in the middle of its Siesta). I'm sure they expected us to be there several days at least from the fuss which went on, but we impressed them all (and ourselves!) by being back on the road in eight minutes.

On the South coast, we stayed at a tiny resort called Praia de Rocha, and as we were there some days, were able to absorb more of the atmosphere and get to know more people. The obvious friendliness of everyone was immediately apparent. The waiter at lunch got into conversation in a mixture of English, French and Portuguese, and hearing that we had nowhere to stay, insisted on finding us a little pension, where we had rooms for 3s. a night. He also insisted on inviting us to

lunch at his house with the following invitation: "Three my friend . . . fish . . . wife . . . sup . . . my house." As can be imagined, conversation was somewhat limited in expression, but the excellent fish and vast quantities of wine quickly removed any inhibitions we had about carrying out a conversation in sign language. His wife, a charming girl who couldn't have been more than sixteen, didn't join us at table, but kept beaming and popping through a curtain with new dishes of cooked fish. We met him for a drink the next day and, to our surprise, received an extra glass of everything. In explanation, he indicated a lady sitting by herself in the corner, and repeated several times, "Miss after." We gathered that "Miss" was after a husband, and that this was one of the ways of attracting people! On the beach, we were often surrounded by children wanting to learn English words and play games the equivalent of noughts and crosses.

We all wanted to see Cape St. Vincent, having had the poem commemorating Nelson's victory drummed into us as children, and we were not disappointed with this place which was, for so long, the edge of the known world. On the west side, the Atlantic beats against the 200 ft. cliffs, sending spray high in the air, and on the south side all is calm and hot and beautiful bathing. Here we spent many happy hours painting, reading and walking, as well as being shown all over the lighthouse.

Our little pension was an amusing place, with straw mattresses, water which was turned off at midday, and a loud chiming clock in the bedroom which beat the quarters as well as the hours. Incidentally, this didn't equal the experience in Dublin, when the

clock struck the whole of "Ave Maria" each hour, and one verse each quarter! The pension was owned by a dyspnoic lady whose husband ran a vin-hos—or back street bar—that might have been transferred direct from London in Dickens' time. A huge gloomy cave, with vast barrels of wine in the back-ground, and inhabited by the filthiest imaginable characters from the docks in various stages of inebriation, all spitting more or less (usually less) expertly into the sparsely distributed spittoons. Here, however, we were introduced to a local sparkling white wine called Vino Verdas, which was excellent, and our sole accompaniment to meals thereafter, as it went so well with fish.

Unfortunately, time passed quickly, and we soon had to set out north. The car was washed, and, in a fit of enthusiasm, the garage washed the engine as well. However, the hot sun quickly dried it out. We decided to return via a different route, as from the south, Madrid was no further than back via Lisbon. Another very pleasant all night run was undertaken—we never got over the luxury of a long drive with headlights full on the whole time. The co-driver and navigator were invariably asleep the whole time, and it was a very pleasant feeling, by oneself, travelling fast across the dark country. Madrid was reached at dawn, and the face of the night-watchman at the Prado Museum had to be seen to be believed as the mad English arrived for their sightseeing at 5.45 a.m.

That night we camped in the forest south of Bordeaux, having covered 970 miles virtually non-stop. The next two nights were spent with friends in Paris (where we saw clouds for the first time in eleven days), and then back to England.

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★

P.C. 3-7-11

This very introspective and absent-minded young policeman has piles. He complains that they "come down" while on point duty, and he is unable to push them back "like other people," as his arms are otherwise engaged! He certainly has some degree of piles, and I would be grateful if you would see him.



## MEDICAL PROBLEMS OF HIGH PERFORMANCE FLIGHT

by EUAN D. R. CAMPBELL

The title, high performance flight, has been chosen in order to include discussion of problems arising from high speeds and high altitudes. High speed in itself causes no special physiological problem, so long as it is constantly maintained in both amount and direction: however, change in speed or change in direction both constitute an acceleration, and it is the body's low tolerance to acceleration which imposes far greater limitation on performance than the danger of structural failure of the aircraft.

Measurement of acceleration is by rather loose use of the mathematical symbol  $g$ : if an acceleration of 3  $g$  is applied to a mass (say a lead weight being swung in a circle) then the force acting on that mass would be three times the weight of the mass at rest.

Thus, if a person is being accelerated in a vertical direction at 3  $g$ , the column of blood between his heart and brain will "weigh" three times as much, and the stresses and strains on muscles, ligaments and bones will similarly be increased three times. The sensations aroused are those of rapid ascent in a lift, together with a feeling of heaviness of the limbs.

The effects of " $g$ " depend both upon its intensity and duration. After three to five seconds at 4  $g$ , the effects of mild cerebral anaemia become apparent: the retina is most rapidly sensitive to deficient oxygenation, and at first there is a loss of visual acuity, followed by a failure of colour vision (grey-out), followed in turn by failure of all vision (black-out). If 4  $g$  is maintained for longer than ten to fifteen seconds, unconsciousness follows the black-out. All these phenomena are reversed as soon as the acceleration ceases, and are caused by pooling of the blood into

the abdominal and limb veins, inadequate filling of the right auricle and eventual deficiency of cerebral blood flow. These effects occur during such manoeuvres as steep turns, or pulling out from a dive.

The reverse effect is seen during the top part of a loop where blood tends to pool in the head, causing redness of vision (red-out), conjunctival and possibly cerebral haemorrhages.

For shorter periods of time man can withstand much higher amounts of  $g$ , the limiting factors here being the ability of bone (particularly the vertebral column) to resist the crushing strain upon it. Thus, when an ejector seat is fired, the pilot has to be shot up to eighty-three feet in one second. For one-tenth of a second, forces up to 21  $g$  are encountered, above this level crush fractures of the vertebrae occur (see Fig. 1).

General fitness has some bearing on " $g$ " tolerance, and such factors are over-indulgence in tobacco or alcohol, tiredness or poor abdominal musculature can all reduce tolerance by about 1  $g$ . However, modern combat aircraft have performance potentials well above 7  $g$  and, obviously, other measures are needed.

So far, discussion has been limited to " $g$ " forces applied along the head to the axis of the body: much greater forces can be tolerated if they are applied through different body axes, and this can be arranged by having the pilot lying prone instead of sitting upright. The disadvantages of this as a flying position however, are overwhelming; the pilot would have restricted upward vision, would need extensive retraining in this new position, and would be more liable to injury in a clumsy

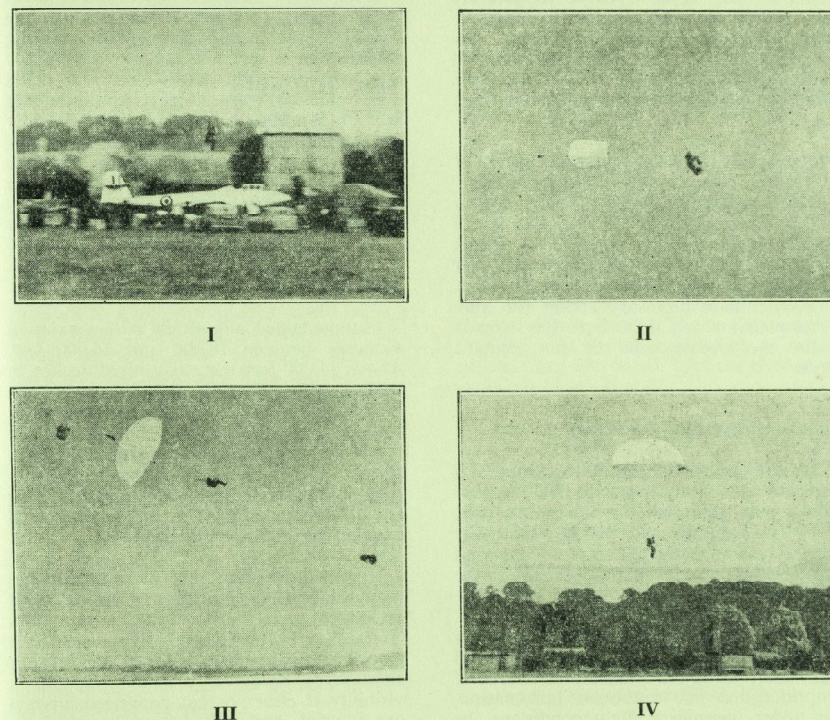


Fig. 2

### EJECTION AT LOW ALTITUDE

landing. However, this position will have to be reconsidered when man-controlled or man-occupied rockets become available.

A G-suit helps to improve tolerance by a further 2 or 3  $g$ , and it consists of an inflatable pad strapped tightly across the abdomen. Air is automatically forced in when 3  $g$  is reached, and this helps to prevent abdominal pooling.

One of the more amusing effects of acceleration can be to abolish the effects of gravity: this can be achieved by flying in an upward circle at a set speed. So far, it has

not been possible to extend this beyond ten or fifteen seconds, but human observers find a gravity-free environment frighteningly unfamiliar, with absent proprioception and clumsy, poorly co-ordinated movements. This again will be an important problem to overcome in space travel.

As previously stated, speed per se causes problems for the designer rather than the physiologist. Passing the sound barrier in a supersonic aircraft can only be detected by instrument readings: there are no physical disturbances or difficulties of control. At speeds above 1,000 m.p.h. the frictional air

resistance may cause a cabin temperature near 100°C and refrigeration is necessary (even though the outside temperature may be minus 50°C). The higher take-off and landing speeds need quick reactions from the pilot, but nothing more complicated than that.

Interception, even at present-day speeds of 1,300 m.p.h., poses a more difficult problem: the latent period of perception in the cortical association areas may vary from 0.3 to 0.4 seconds under different conditions. Radar information fed into an electronic computer can present advance information to the pilot, or even initiate necessary action for him. Development along these lines has already meant the obsolescence of the manned fighter.

#### Disorders of sensory perception

Normal perception of position in space is a summation of proprioceptive and sensory information from the four limbs and skin, vestibular impulses and vision. Normally these correlate, but if there is an apparent contradiction, visual sensation over-rides the remainder.

Orientation in the air is supplied in exactly the same way; under conditions of visual flight the pilot is only vaguely conscious of proprioception and vestibular information, but under instrument flight conditions, he has only these latter to rely upon (apart from his instruments) and they can be distinctly misleading.

A constant rotation in the plane of one of the semicircular canals will produce no sensation of turning, but when the rotation ceases, the semicircular canal will impart a sensation of rotation in an opposite direction, thus urging the pilot to re-enter his original manoeuvre. This may be particularly dangerous in a spin. Movement of the head during a turn may again cause completely false impressions of a change in attitude with consequent attempts at "correction."

It was previously stated that visual impressions were reliable, but conditions can occur in which this is not so. At high altitude the sky is darker than the "ground," and this is a disturbing sensation, particularly after aerobatics which give a series of dis-

ordered and unusual impressions. It is quite a habit of fighter pilots to take the "doc" for a ride, and leave him not knowing whether he is on his ear or his elbow! Similarly, at night with restricted visual fields due to oxygen lack, commonplace lighting patterns may be difficult to interpret and a totally wrong assessment of altitude is made. In all these difficulties complete reliance on the instrument readings are essential, and the instruments should over-rule all other impressions.

#### Altitude

Piston-engined aircraft fly with maximum economy between 18,000 and 24,000 feet. Above 24,000 feet there is a rapid decline in performance. Propellers themselves become less efficient after 25,000 feet, and are almost useless above 33,000 feet. The jet engine, however, can only begin to function efficiently above 25,000 feet, it reaches maximum economy in the 40,000 range, and begins to fall off above 55,000, due to the very small oxygen tension at these heights.

High altitude flight has other advantages besides increased speed (due to decreased air resistance) and economy of fuel consumption. Areas of turbulence are greatly reduced once cloud ceiling has been reached, so that air sickness is hardly a problem any more, visibility is clear so that congested airways are avoided, and well defined layers of air travelling at speeds of 100 m.p.h. or so (jet-streams) may be utilised—providing the direction is helpful.

Thus the development of high altitude flight would have evolved independently, without the influence of military or strategic considerations.

The psychological problems involved stem solely from the decrease in oxygen tension as altitude increases.

At sea level the partial pressure of oxygen in the atmosphere is 150 mm Hg, at 16,000 feet it has fallen by half to 75 mm, and at 30,000 feet to 40 mm. The partial pressure of oxygen in the alveoli must be maintained in the region of 100 mm to prevent anoxic symptoms. This level is reached at about 10,000 feet, so that above that height the air must be progressively enriched with oxygen.

There is, however, an upward limit to this, for at 32,000 feet the total atmospheric pressure is 187 mm Hg.; in the alveoli the combined partial pressures of CO<sub>2</sub> and water amount to 87 mm, so that breathing pure oxygen will only just maintain a sufficient partial pressure in the alveoli. As further altitude is gained so the partial pressure of alveolar oxygen drops, until at 64,000 feet, the atmospheric pressure equals the partial pressure of water vapour in the lungs, or, in more dramatic terms, the blood would boil at normal body temperature.

Pressure breathing (oxygen admitted under pressure to a tight-fitting face mask) helps a little above 32,000 feet, but expiration becomes an effort and the chest becomes progressively overfilled. This can be overcome by the wearing of a pressure waistcoat, filled at the same pressure as the incoming oxygen, however, it is uncomfortable, particularly around the neck and the venous and lymphatic return to the thorax is hindered. A full-scale pressure suit attached to a "bone-dome" or spaceman-type mask is more satisfactory, but causes oedema and deficient circulation in the hands and feet when worn for long periods. Furthermore, when a pilot is wearing flying clothes plus a G-suit and pressure jacket, he is considerably restricted in his actions, and cooling by insensible perspiration is retarded so that air has to be blown between his skin and the first layer of clothing.

In civilian aircraft these difficulties can be overcome by cabin pressurisation, whereby the cabin altitude is kept well below the true value. In large passenger-carrying aircraft considerable structural reinforcement is required to withstand the internal pressure: for instance, a Viscount at 20,000 feet usually maintains a cabin altitude of 6,000 feet with a pressure differential of about six pounds per square inch. This does not appear to be great until it is realised that one window has a surface area of roughly 300 square inches, so that a force of nearly one ton is being withstood by each window.

In combat aircraft it is impracticable to maintain a low cabin altitude, because puncture of the cabin would result in an explosive disintegration. Some pressurisation is necessary above 32,000 feet to avoid the need for a pressure-suit, and the cabin

altitude is usually maintained somewhere below 30,000 feet.

#### Methods of escape

Escape from an aeroplane, such as a Spitfire, was relatively easy: the pilot would jettison the canopy, roll the aircraft and fall clear. At speeds above 400 m.p.h., however, the slipstream acts as a barrier holding the pilot in; even if he managed to get clear of the cockpit he would be likely to be struck by the tail.

Ejector seats were designed to overcome this and now have reached a remarkable stage of development. The basic principle is that the seat contains a charge of cordite which, when detonated, fires the pilot in the chair out of the aircraft.

Under present day circumstances ejection may be necessary at high altitudes such as 50,000 feet. At this height, unpressurised and without oxygen, a person is capable of only a few seconds' consciousness, so that all actions after the moment of ejection have to be performed automatically for the pilot. He is first freed from his seat and allowed to fall free to about 10,000 feet: by this time he will have slowed down to the free-falling speed in normal air density of 120 m.p.h. The parachute is automatically opened, and the pilot should regain consciousness by the time he has dropped to 3,000 feet.

The automatic devices have reached such a stage of efficiency that it is now possible to eject from an aircraft just at take-off and land safely: previously, a parachute would not have time to open if a pilot baled out below 500 feet. (Fig. 2.)

The main dangers of ejection at high speed are the effects of meeting the blast of the slipstream, unless the arms and legs are securely held in the knees and elbows are blown outwards, with dislocation of the hip and shoulder joints. The face is protected by a blind which is drawn down in order to fire the seat: even so, eyelids may be lacerated or torn off, the cheeks blown out and mouth split. Two or three pilots have survived ejection when travelling at supersonic speeds, but at the expense of considerable injury.

Ultimately, a design will be produced

which allows the pilot to be ejected in a pressurised capsule which is jettisoned once safe levels have been reached.

#### Explosive decompression

This occurs when pressurisation is suddenly lost through such occurrences as loss of the canopy or partial destruction of the cockpit, or, of course, when ejecting at high altitude. The main brunt of this is borne by the air-containing sinuses and the middle ear. Pressure equalisation between the sinuses and the atmosphere occurs fairly quickly when the pressure inside the sinuses is greater than the surrounding atmosphere. Equalisation is not so rapid, however, in the middle ear, and the eardrum may be burst by excess pressure.

#### Development for the future

Heights of 60,000 feet are now almost banal, and future problems are more concerned with travel in an environment which is gravity free, at a temperature of absolute zero and without any ambient atmosphere. Of these three problems, absence of gravity is undoubtedly the most difficult to overcome: nevertheless, there is more time in which to resolve these difficulties than the daily papers would have us believe.

ACKNOWLEDGEMENT to Martin - Baker Aircraft Co. Ltd., for permission to reproduce the above photographs

#### FIFTY YEARS AGO

The Editor congratulated all Freshmen on their excellent choice of Hospital. The list of educational and sporting activities was very similar to our present system.

"Publication on the 1st of each month" was the Publication Committee's new academic year resolution.

With an increased number of dressers, the hard-worked House Surgeons were relieved of the burden of doing all the dressings in Surgery.



(Fig. 1)

#### VERTEBRAL CRUSH FRACTURE AS A RESULT OF EXCESSIVE G

Announcement of the recommencement of the German Class.

Articles:

"The Nature and Significance of Rigors in Disease," by Sir Dyce Duckworth.

"Notes on Persia of Today," by Dr. A. R. Neligan.

"A Case of Calculus Pyonephrosis Complicating Pregnancy," by H. Blakeway.

"A Strangulated Hernia containing the Appendix," by R. V. Favell.

#### LETTERS TO THE EDITOR

The Editor,  
St. Bartholomew's Hospital Journal,  
St. Bartholomew's Hospital,  
London, E.C.1.

Sir,

While the quality and vigour of the medical profession in any country is not necessarily to be judged from the number of its publications, the statement of your contributor, Dr. Dobbin (*St. B.H.J.*, August, 1958, page 218) that, "in the whole of Australia, there are approximately eight medical journals," does less than justice to the journalistic activities of our colleagues in that Commonwealth.

Excluding those devoted to such paramedical sciences as biology, odontology, pharmacy and veterinary medicine, the 1957 edition of *World Medical Periodicals* lists no fewer than 20 journals published in Australia, to which may be added at least one other which has appeared during the past year. Of these 21 journals, eight are in the category of "General Medicine," while the remainder are concerned with surgery and the various specialities.

Yours faithfully,

DONALD CROWTHER,  
B.M., B.Ch.,

Editor,

*Abstracts of World Medicine.*

To the Editor,

St. Bartholomew's Hospital Journal.

Dear Sir,

#### Gordon-Watson Memorial Lecture

I have received a letter from Mr. W. B. Gabriel referring to a patient—George Thomas (aged 32 in 1931), treated by Sir Charles for carcinoma of the Rectum by Radium. He recently attended the Out-patients at St. Mark's Hospital, City Road.

In 1931 a trans-rectus colostomy followed by a Radium and Radon needling was carried out. He was seen at that Hospital again in 1938 with a tight fibrous stricture of the rectum, and nothing more was seen of him until the beginning of September, 1958. He is reported as being very well, with no clinical evidence of recurrence, and his only complaint is some rectal discharge.

Mr. Gabriel says it seems clear that he has been cured for 27 years by Radium.

Yours,

RUPERT S. CORBETT.

The Editor,  
St. Bartholomew's Hospital Journal,  
London, E.C.1.

Dear Sir,

I thought you might be interested to see the enclosed letter which came from a 64 year old patient of mine suffering from diabetes mellitus, thyrotoxicosis and heart failure with fibrillation: I enclose a copy of the prescription she required!

Yours sincerely,

MICHAEL A. WELLER,  
*St. Bart's, 1943-1949.*

#### Letter

Dear Sir,

Please will you send me on a Subscription one for brown & White Tablet & one for Testing in the water.

Your Truly  
F.B.

#### Prescription

Tab. Digitalis folia grs 1. 1 B. d. 100  
Tab. Phenobarbitone grs. ̄. 1 t. d. s. 100.  
Clinitest Refill Tablets 2107 mitte. 36.

Aldboro House,  
Thaxted,  
Essex.

Sir,

We are greatly troubled by the fact that a large number of nurses do not consider it worth their while to complete what should be a beneficial fourth year.

Contrary to popular belief, it is agreed that our salaries and length of hours are not subjects of discontent.

We feel that unrest arises when a nurse is sent to a department where she feels she is not personally suited.

We would like to feel that "belts" had a little choice in their appointment, perhaps the institution of a system whereby the nurse would apply to work in the branch of nursing of her choice.

Eight months spent in one department would instil a greater sense of contentment and loyalty in any new "belt" who, although living in an institution, would feel that she had been given some consideration as an individual.

These factors, and others of a lesser degree, are to some extent influencing nurses in their decision to leave the hospital after they have taken their State Examinations.

Yours faithfully,  
JENNIFER A. BRETT and  
F. NOBLE.

Nurses Home,  
St. Bartholomew's Hospital,  
London, E.C.1.

#### BOOK REVIEWS

AN INTRODUCTION TO SURGERY. By the Surgical Staff of the Middlesex Hospital, ed. by David H. Patey. Published by Lloyd Lake (Medical Books) Ltd., London. 17/6. pp. 228. Figures 54.

This little book is edited by one of London's most distinguished surgeons, authors and teachers. It sets out on a specific task—to be the text-book of the introductory course which bridges the gap between full clinical training and the pre-clinical instruction in anatomy, physiology and pharmacology. It is fair to say that this book has succeeded in being an illustration of such an introductory course, and will probably free the student from the burden of taking notes; it might, in fact, free the teachers from the responsibility of giving lectures in such a way that they can be recorded.

The book is published at a price of 17/6, but there is a cheaper student's edition at 9/6 with a paper cover, issued, in the words of the publishers, "as an answer to the friendly challenge contained in a *Lancet* annotation of 31st August, 1957." Apart from the difference in the covers, I can see no distinction between the two editions, and it seems a pity that the stiff cover at a cost of 8/- is almost the equivalent of the whole of the rest of the book.

Much of the book is a repetition of anatomical and physiological fact. This illustrates once more the unsatisfactory nature of the present pre-clinical course of instruction. If it is necessary to re-instruct students in the basic facts such as the presence of vaginal fornices and the vital capacity of the lungs, then the pre-clinical course has largely failed in its purpose of preparing students for clinical instruction.

The introduction and the glossary at the end are outstanding highlights of usefulness in the book. It is rather surprising that there is only a page and a half on shock, in view of the fact that shock is one of the most important states to be prevented, watched for and treated in all forms of surgery. Many of the line drawings are excellent, but some are, to my mind, a little pointless. For instance, there is a complete page of dotted rectangles illustrating blood loss, acute and chronic. As the legend is on the opposite page, the point of the illustration is largely lost and it is difficult to follow. In spite of the fact that this is for the introductory course, two operations are described in detail, circumcision and the removal of the sebaceous cyst. The technique advocated for the removal of sebaceous cysts certainly does not illustrate good surgical principles, and it is rather the method of the rural consulting room—that of cutting into a cyst, and then peeling it from its surrounding structures. Circumcision is an operation which should never be performed by a student, and which requires the most careful technique since, again, the methods in common use do not illustrate good surgical principles.

In conclusion, this book is an excellent one for the use of students in the introductory course, but we should look forward to the day when such a book would be acquired by students at least a year earlier in their course, so that some of their anatomical and physiological learning would appear to have a clinical application. Surely by the time the students takes the 2nd M.B. he should have some idea of the way in which the body adjusts itself physiologically to a loss of blood? If the publishers could produce this book with its stiff cover at 9/6, it would certainly have a wide sale.

D. F. ELLISON NASH, F.R.C.S.

**A HANDBOOK FOR WARD SISTERS** by Margaret Scales, S.R.N., S.C.M. Published by Bailliere, Tindall & Cox. Price 21/-.

This is the only book about ward management, and it must be welcomed as a serious and careful effort to formalise all the information that ward sisters hand on to each other verbally. No problems are avoided, and practical advice is offered on compiling schedules of work and arranging off duty. Reference is made to recent investigations into the work done by different nursing grades, and Miss

Scales is very sound on planning and placing of rooms, cupboards and sinks, and on details of ward hygiene.

Recommending lists of equipment is difficult in a situation where new techniques are constantly being evolved and old ones linger, but it seems unlikely that the ward sister will need to stock Burrell's flask, electric heat cradles or cyanide gauze. The suggestion that assorted stimulants be kept together on a emergency tray (page 178) is not in accordance with the Central Health Services Council's report on the care of drugs, neither does that report, which has been approved by the Minister, like medicine trolleys (page 179). The intravenous equipment (page 174) does not include needles and ligatures.

Such minor criticisms can be made of any textbook which sets out to give detailed practical advice, and do not detract from the value that the book has for any junior ward sister, or any senior one who is interested in knowing what her colleagues elsewhere are doing.

W. E. HECTOR.

**EYE SURGERY**, 3rd Edition, by H. B. Stallard. Published by John Wright & Sons Ltd. 916 pp. Price 95/-, postage 2/3.

The first edition of this book was published in 1946, and advances in technique in most branches of ophthalmic surgery have necessitated a second and, now, a third edition, which is considerably more comprehensive than its predecessors.

The character of the presentation is unchanged. A short account of the indications for operation is followed by a detailed description of a sound surgical procedure employed by the author, and then by descriptions of alternative operations of proved value. Dogmatism is thus avoided, and every section has much to offer both the novice and the experienced operator. In addition to the purely surgical chapters there are valuable sections on therapeutics, anaesthetics and sterilisation, and the information supplied throughout is detailed and up to the minute.

Illustrations are numerous, but some of the photographs of certain surgical procedures do not show up the points of technique with anything like the clarity of the author's own excellent line drawings.

This edition fully justifies the immense energy and patience which have gone to its compilation, and is a signal contribution to world ophthalmic surgery.

J.H.D.

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\* *Reprints received and herewith gratefully acknowledged. Please address this material to the Librarian.*

## SPORTS NEWS

### VIEWPOINT

The writer has previously found it necessary to comment in "Viewpoint," on the reluctance shown by the secretaries of some clubs to submit reports to the *Journal*. Most of them, however, although at times a little tardy, have been very co-operative during their terms of office, and he would like to thank them for that. There have, unfortunately, been exceptions, and the total absence of reports in the Sports News from the only women's club active during the Summer is most regrettable. May he, therefore, make an appeal to the new secretaries of the Winter clubs on behalf of his successor. It is to the advantage of their clubs, as well as helpful to the Sports Editor, for their activities to appear in print frequently, and the ideal would seem to be short reports from each club monthly.

★

### THE ALPINE CLUB

Four members of the Bart's Alpine Club have recently returned from a very rewarding and exhilarating fortnight in Chamonix, where several good rock ridges and snow climbs, including Mont Blanc itself, were achieved.

It is proposed to have a "beginner's meet" probably in North Wales, centred at the Climbing Club hut in the Ogwen Valley, during the second week in November. Any Spartans, who feel the call of the hills, will be very welcome, and should communicate with J. S. Mather, College Hall.

Every calibre of climber will be catered for, and a knowledge of the game of bridge and a taste for Worthington E would make any prospective climber doubly welcome at the meet, though these latter qualifications are not essential.

Prior to the meet, the club will have two or three of its habitual day trips to the sandstone cliffs near Tunbridge Wells for loosening up.

★

### CROQUET

The fate of Mr. Ellis's magnum of champagne has now been decided. It was won by Haslam and Davies, who beat Bowles and Sugden in a final which lasted almost six hours, and was spread over two days. Contrary to expectations, there were no surprising results during the earlier rounds, and the winners were undoubtedly the best pair in the competition.

Few aspects of the final could be called outstanding croquet, and both sides missed many short shots. This was not surprising, since the game was played on ground which changed its appearance and texture from that of a clay field, to that of a lush pasture between sessions, but never at any time resembled a lawn. The exception was the defensive play of both sides, which was very tight, and was responsible for the length of the game.

At the start it looked as though the eventual winners would have an easy passage, for their opponents quickly found themselves 12-2 down and out of play. From then on, however, fortunes changed, and by the end of the first session the position had been corrected to 13-11, with Davies and Haslam in play. At the resumption, then went to 15 and then out, and their opponents used their chance to draw level, but could not get ahead, and when put out were not given a further chance until both of the winners' balls were on the post. They, however, did not manage to peg out for a further hour, and at one time it looked as though they could lose. Finally a shot by Haslam, who took an optional lift and had, unfortunately, been left a double ball target, decided the matter.

★

### RIFLE CLUB

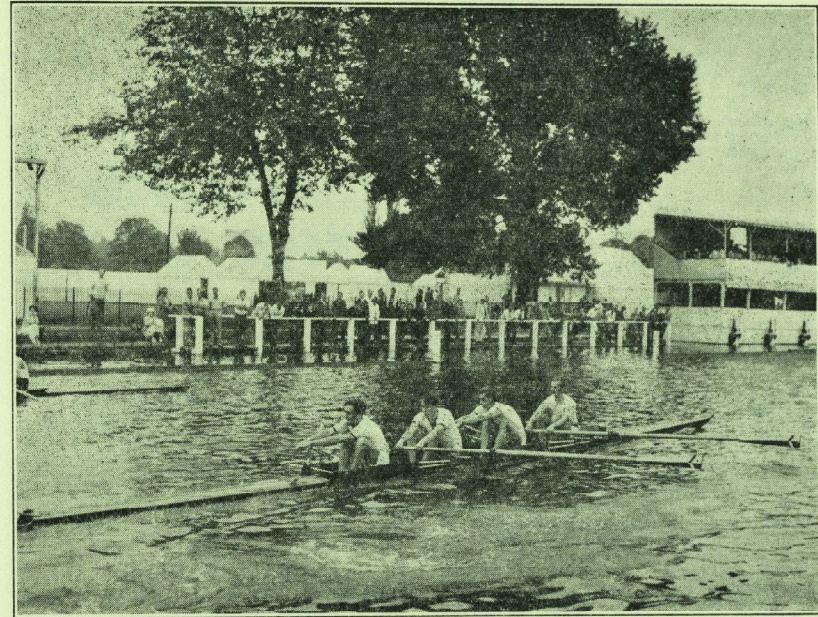
A full report of the seasons shooting will appear in the November issue of the *Journal*.

★

### CRICKET

Sussex Tour, August 3rd to 8th

v. Hurstpierpoint on August 3rd, 1958. DRAWN.  
Hurstpierpoint 162 for 9 dec.  
Barts 127 for 9 (Harvey 42 n.o.).



St.B.H.B.C. Wyfold IV. Henley Royal Regatta

(Printed by permission of Geo. Bushell and Son)

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v. St. Andrews on August 4th, 1958. LOST by 23 runs.  
St. Andrews 143.  
Bart's 120 (Davies 35).

v. Ditchling on August 6th, 1958. DRAWN.  
Ditchling 114 for 9 dec.  
Bart's 98 for 9.

v. Barcombe on August 7th, 1958. WON by 126 runs.  
Bart's 184 for 7 dec. (Davies 42, Pagan 57).  
Barcombe 58 (Garrod 4 for 16, Davies 4 for 9).

Once again the Cricket Club made its annual excursion into Sussex to renew many acquaintances, both on and off the field. The weather on this occasion proved very much against us so that, of the six matches, two were washed out and two others interfered with.

A side of mixed talents took the field against Hurstpierpoint, doing its best to throw off the effects of refreshment consumed on the journey from London. After an undistinguished effort to bowl the opposition out, Bart's batted equally ineptly, until Harvey rescued the side's fortunes with an excellent 42 not out, which enabled the match to be drawn. The following day, against St. Andrews, that com-

petent side was bowled out for 143, but again our batting failed, and only Davies succeeded in reducing the bowling to its true level.

At this stage the rain struck in earnest, and the match we had most been looking forward to, against Rottingdean, was cancelled.

Our efforts to record a win received a further setback when, having limited Ditchling to 114, we were forced, after a bright start, to conform to the progressively deepening gloom of the weather, by playing out time with our last pair at the wicket 16 runs short.

At last, despite the weather which did its best to foil our attempt at the last moment, a weak Barcombe side was overwhelmingly defeated, to provide the side with its only tour victory.

As a result of the rain, the social side of the tour was much increased. Indeed, on one occasion, the festivities were so violent and protracted that one may anticipate some difficulty in persuading landladies next year that Bart's students are not as black as they paint themselves. Of the vehicles available for our transport, one consistently boiled at every

opportunity and another was so lacking in spare parts as to be unusable, except in an emergency. In this context we must extend our thanks to our old Bart's man from Brighton, without whose timely appearance some of our number must have been stranded for the night on one of the highest points in Sussex.

In conclusion, our thanks are due to Mr. Dear for his services as umpire, and to our long-suffering hosts in Rottingdean for the unflinching welcome they give us each year.

1st XI v. Bromley on 17th August, 1958. LOST by one wicket.

For our final match we were privileged to play in sunshine, on a hard true wicket, both of which commodities have been badly lacking during most of the season. Winning the toss, Bart's batted, and although scoring rapidly, lost wickets at regular intervals to some seemingly inaccurate seam bowling. Only Pagan seemed at ease and scored well until, aiming to drive, he pulled a half-volley on to his wicket. The final total appeared respectable was due in no small measure to judicious hitting on the part of the lower order batsmen.

Despite the paucity of bowling, Bart's were able to limit the early Bromley batsmen to a relatively low rate of scoring, and reaped their reward when the opposition collapsed from 51 for 3 to 86 for 7 wickets. Once again, however, the advantage was not pressed home, and with one wicket left, Bromley needed but three runs to win. At this point the match was won and lost, when Bart's wicketkeeper, over anxious and, no doubt, overwhelmed by stentorian appeals from all around him, dropped what for him, seemed an easy catch. Once again, as in our Cup defeat, it was adequately proved that a side which does not take its catches cannot win, however strong it may be in other departments.

Barts 140 (Pagan 32, Price 23).

Bromley 142 for 9 wickets.

1st XI v. R.N.V.R. on 27th July, 1958. WON by 7 wickets.

Batting first on a damp, slow wicket, the R.N.V.R. batsmen were soon in trouble against the medium-paced attack of Whitworth, Mackenzie and Davies. Apart from Cox, whose 49 was the mainstay of their innings, they showed little fight, and were dismissed for 131 by 3.30 p.m. Bart's had no difficulty in passing this total, Pagan contributing a solid and patient 48 and Whitworth a very quick 53. Indeed, the only threat to Bart's superiority lay in the inclement weather, there being four intervals for rain during the match.

R.N.V.R. 131 (Whitworth 5 for 31).

Bart's 132 for 3 (Pagan 48 n.o. Whitworth 53).



## WHAT'S THE USE

A famous mathematician once proposed a toast: "To the higher mathematics, and may they never be of any damned use to anybody." Another mathematician said more recently that the subject had no practical value—that it could not be used directly to accentuate the inequalities of human wealth, nor to promote the destruction of human life. We do not know whether the early biochemists held such a pleasantly detached view of their researches, or whether, if anyone said, "What's the use?", they would hopefully reply, like Faraday, "What use is a newborn baby?"

Whether their words were modest or not, useful value has, in fact, come from their work. Spectacularly so in the matter of the functions of vitamins. Take vitamin B<sub>1</sub>—in other words, thiamine. It has now been established that thiamine is essential for the oxidation of pyruvate. When thiamine is lacking, pyruvate accumulates. This can cause very unpleasant, even serious symptoms. Various neuropathies (for example, tobacco-alcohol amblyopia with its alarming blindness) are associated with thiamine deficiency. Even today in diet-conscious Britain, minor degrees of thiamine deficiency are by no means uncommon. Those who eat much carbohydrate need extra thiamine, as well as riboflavin and pyridoxine—indeed all the B-complex vitamins; and so do children when they are growing fast, and lactating and pregnant women, and girls slimming on slender diets. That is where Bemax is so useful. Being pure stabilized wheat germ, it contains all the B-complex vitamins, and is rich in iron and protein. You just sprinkle it on your food; Bemax goes well with cereals, curries, and a host of other dishes.

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# ST. BARTHOLOMEW'S HOSPITAL JOURNAL

Vol. LXII

NOVEMBER 1958

No. 11

## EDITORIAL

The retirement of an admired and respected senior member is always a great loss to an institution, and the occasion of final departure, after a long and close association, is both nostalgic and sad. Bart's is, in reality, a close-knit community and one which is jealous of its long history, its proud traditions and its Staff. During September, Bart's lost the permanent services of not one, but of five senior members of its staff—namely Professor K. J. Franklin, Dr. Geoffrey Bourne, Mr. J. B. Hume, Mr. R. S. Corbett and Mr. S. L. Higgs. Furthermore, the next year will witness the disappearance of even more names from the staff indicator board.

An Act of Parliament, embodied in the National Health Act of 1948, and reinforced by Hospital legislation decrees, that on attainment of a specified age, a doctor must relinquish his appointment. There exists no final Court of Appeal against such rulings. It is ironical that a doctor, whilst possibly yet in his mental prime, should be debarred by a stroke of the pen from further participation in the Health Service. It is not unnatural to ruminate upon the philosophy and wisdom of such laws when, in other spheres of life, age constitutes no barrier, even in those men who control the destinies of millions of people.

Whilst realising that it is essential to safeguard the interests of patients, it is difficult to accept, without any question, so dogmatic a method of assessing professional ability. Practical alternatives to the above scheme are, however, fraught with many difficulties. Perhaps at hospital instigation, services may

be re-engaged for further short periods, at the conclusion of which time, further re-engagement may follow, or the association terminated at the request of either party. A further solution, although perhaps invidious, would be the routine Medical examination of senior members as comparable with the examination of other senior civil servants.

The work of the various members of the Hospital Staff is very often taken for granted. Only after the departure of such people does the full extent of their activities become apparent. Few Hospital societies and clubs, the *Journal* amongst them, have been unaffected by the recent retirements. Many Chairmanships, Vice-Presidencies, etc., have fallen vacant, and such gaps are very difficult to refill. It is a tribute to the greatness of such men that they have devoted so much of their valuable time to extra-occupational activities, both within and without the Hospital walls. The Hospital, and its many societies, are indeed fortunate in being able to enlist the services of these men at some future date, albeit in a consultant capacity.

It is realised that all professional activities will not cease as from October 1st, for we expect such active men will continue practising the arts to which many of their years have been devoted. However, the *Journal* wishes these five men, and their wives, a happy and most successful retirement.

In conclusion, the *Journal* wishes the successors, and the new members of the Staff, a long, successful and even prosperous, continued association with the Hospital.

## FRESHMEN

We extend a welcome to all Freshmen—both pre-clinical and clinical—who, during the month of October, joined us at Bart's. They don't need reminding that the endeavours of the career of their choice will be long and arduous, and of the uncertainty of ultimate rewards. However, we will hasten to point out that there are compensations. For those who are sound in wind and limb there are ample opportunities and facilities for sport. For the fortunate socialites there will be the invitation to the Grosvenor, and for the affluent ones there are scores of potential partners for the View Day Ball.

Apart from certain restrictions, which safeguard the community as a whole, life at Bart's will be what you, the Freshman, wishes to make it. Good luck to you all, and a sincere wish that within a brief span of time, you will become a happy member of, and a contributor to, the Bart's community.

★

## DRAMATIC SOCIETY

This year the Society is producing Emlyn Williams' well-known play, "A Murder Has Been Arranged." The performances will be on Monday and Tuesday, November 24th and 25th, at the Cripplegate Theatre. All seats are bookable in advance. Tickets: prices, 2s. 6d., 3s. 6d., 5s. and 7s. 6d., will be on sale in the Hospital and at the door. Requests through the post should be addressed to K. J. Sugden, The Abernethian Room, St. Bartholomew's Hospital.

★

## RECENT LECTURES

Dr. E. F. Scowen gave the College of General Practitioners Second Annual Pfizer Lecture on Wednesday, October 15th, 1958, at Charterhouse Square. The subject was "Some Difficulties in Prescribing."

Professor J. Rotblat gave the annual B.M.A. Lecture on Tuesday, October 28th, at B.M.A. House, Tavistock Square. The subject was "Electrons in Medicine."

## RAHERE CHOIR

The Rahere Choir was again invited this year by the Rev. D. Rutter to sing an evening on the eve of St. Bartholomew's Day, August 23rd, in St. Paul's Cathedral. The choir, under the able direction of Mr. Richard Sinton, sang well on the whole, though they became a fraction sharp at the end of the anthem "Rejoice in the Lord" by Purcell. The solo parts were sung by Miss W. Donaldson and Messrs. N. C. Roles and G. R. Hobday. The choir sang the responses to the William Smith setting. It is to be hoped that this service will continue to be an annual event.

★

## GILBERT AND SULLIVAN

The Gilbert and Sullivan Society are giving a concert performance of "The Pirates of Penzance" on Friday, November 21st, at 8.30 p.m., in the Hall of Gresham College. Programmes may be obtained from the Students' Cloakroom or the Nurses' Home.

★

## SOCIAL SEASON

The Bart's winter social season commenced on Saturday, October 4th, when the Rugger Club held the first of their informal dances.

The Rugby Club Ball will be on Friday, December 5th, at College Hall. Dancing will be from 9 p.m. till 2 a.m., and there will also be Buffet, Bar and Cabaret. Tickets, at 17s. 6d., are available from the Secretary of Rugger.

★

## THE CALENDAR

It is intended to make the Calendar a more comprehensive list of forthcoming events. Would all secretaries of Hospital societies who desire to advertise their forthcoming attractions, please send a comprehensive list to the Assistant Editor.

## JOURNAL STAFF

It is with regret that we announce the retirement of Dr. Geoffrey Bourne from the Chairmanship of the Publications Committee of this *Journal*. For many years Dr. Bourne has displayed a very keen interest in all the *Journal's* activities. Rarely has he missed a meeting of the Publications Committee, and many generations of Editors have found him readily accessible at any time. No committee could have been better served by its Chairman, whose members will long remember his diplomacy, his wisdom and his remarkable memory of the *Journal's* past. At times he must have been the sole champion of our cause within the four walls of the Staff Common Room. The Staff of the *Journal* wish Dr. and Mrs. Bourne a most happy and successful retirement.

Dr. A. W. Franklin, a former Editor, has kindly accepted the Chairmanship of the Publications Committee. We wish him a long and successful term of office.

J. D. Scobie has been appointed Assistant Editor to the *Journal*.

J. J. D. Bartlett has succeeded K. J. Sugden as Sports Editor.

★

## ART EXHIBITION

The Bart's Art Exhibition was opened by Sir Philip Manson-Bahr at 2 p.m. on October 6th. It is hoped to publish a full account of the exhibition in the next issue of the *Journal*.

★

## G.P. LECTURE

The next lecture on General Practice will be given by Dr. Lindsey W. Batten on Wednesday, November 19th at 12.0 noon, under the title "The Essence of General Practice."

★

## XIII DECENNIAL CLUB

This year's dinner will be held on Saturday, December 6th, at the Connaught Rooms. Further details may be obtained from the Secretaries, St. Bartholomew's Hospital.

## CALENDAR

## November

Sat. 8—Dr. E. R. Cullinan on duty.  
Mr. J. P. Hosford on duty.  
Mr. C. Langton Hewer on duty.  
Rugger v Old Cranleighans (A.)  
Soccer v Middlesex Hospital (A.)  
Hockey v Sevenoaks (A.)

Tues. 11—Squash v Middlesex Hospital (A.)

Wed. 12 Fives v Glove Club (A.)

Sat. 15—Medical and Surgical Units on duty.  
Mr. G. H. Ellis on duty.  
Rugger v Old Paulines (H.)  
Soccer v Old Chigwellians (H.)  
Hockey v Bexleyheath (H.)  
R.U.F.C. Informal Dance.

Tues. 18—Squash v St. Thomas's Hospital (H.)

Wed. 19—United Hospitals' R.C. winter regatta, Putney.  
Soccer v Middlesex Hospital, Cup (A.)  
Boat Club Dinner.

Sat. 22—Dr. R. Bodley Scott on duty.  
Mr. A. H. Hunt on duty.  
Mr. F. T. Evans on duty.  
Rugger v Old Alleynians (A.)  
Hockey v Old Cranleighans (A.)

Wed. 26—Soccer v London Hospital (A.)

Sat. 29—Dr. A. W. Spence on duty.  
Mr. C. Naunton Morgan on duty.  
Mr. R. A. Bowen on duty.  
Rugger v Stroud (A.)  
Hockey v U.C.H. (H.)  
Boat Club Informal Dance.

## December

Sat. 6—Dr. G. Hayward on duty.  
Mr. A. W. Badenoch on duty.  
Mr. R. W. Ballantine on duty.

Sat. 13—Dr. E. R. Cullinan on duty.  
Mr. J. P. Hosford on duty.  
Mr. C. Langton Hewer on duty.

Sat. 20—Medical and Surgical Units on duty.  
Mr. G. H. Ellis on duty.

## ANNOUNCEMENTS

## Engagement

LUMLEY—ARNOLD.—The engagement is announced between John Stuart Penton Lumley and Jean Arnold.

## Marriage

MACKENZIE—ROWSWELL. — On September 20th, in St. Bartholomew-the-Great, Dr. James Campbell Mackenzie to Dr. Elizabeth Frances Dudley Rowswell.

## Births

ARTHUR.—On September 26th, to Valerie Ann, wife of Dr. Bruce Arthur, a daughter.

BUTTERY.—On September 11th, to Penelope, wife of Surg.-Lieut. David Buttery, R.N., a son (Jonathan Robert).

MACDOUGALL.—On September 15th, to Rachel, wife of Dr. Iain MacDougall, a daughter.

## Deaths

JONES.—On September 19th, as the result of a road accident, Dr. Pauline Miriam Jones. Qualified 1956.

LANDOR.—In Sydney, Australia, Dr. Joseph Victor Landor, aged 61. Qualified 1920

MADDEN.—On September 24th, Dr. Cyril Paul Madden. Qualified 1928.

SCOTT.—On September 20th, Lt.-Col. Herbert Bodley Scott, O.B.E., F.R.C.S., I.M.S. (Rtd.). Qualified 1904.

★

## UNIVERSITY OF LONDON

M.S. Examination, September, 1958

Birnstingl, M. A.

## NOTICES

## University of Cambridge

Lord Adrian has been re-elected Vice-Chancellor of the University of Cambridge.

Vishnu Sarma—M.D.

The William Julius Mickle Fellowship for 1957-8 has been awarded to Professor J. B. Kinmouth.

★

## Change of Address

Mr. Morton Whitby will be practising at 62 Queen Anne Street, Cavendish Square, W.1.

Tel. : Welbeck 3262.  
Res. : Esher 3646.

★

## Hospital Staff

Dr. M. deB. Daly has been appointed as Professor of Physiology as from October 1st, 1958.

Dr. A. G. Spencer has been appointed as Reader in Medicine as from October 1st, 1958.

Mr. J. O. Robinson and Mr. I. P. Todd have been appointed surgeons.

★ ★ ★

## FIFTY YEARS AGO

The somewhat sombre Editorial consisted of a review of the proposed Officers' Training Corps—a preparation for any future war. A Gazette list of officers whose services were available in event of war, included many famous Bart's names :—e.g. Bowlby, Lock-

wood, D'A. Powell, Waring, Drysdale and Gask.

This issue contained a review of the Pharmaceutical Department. In 1614, the first Apothecary's shop was built, and the last "shop" being demolished in 1906 to make way for the new department. Prescriptions were dispensed at the following windows, "Urgent Cases," "Women," "Diseases of Children," "Diseases of Women," "Men," "Diseases of the Eye," "Diseases of the Throat" and "Diseases of the Skin." The Article contained a full description of the Waiting Hall, Main Dispensary and Manufacturing Laboratory. Each week, 5,500 prescriptions were dealt with. Pipes of Port Wine were kept on special tilting apparatus. Wines were first given out from the Apothecary's Shop in 1699.

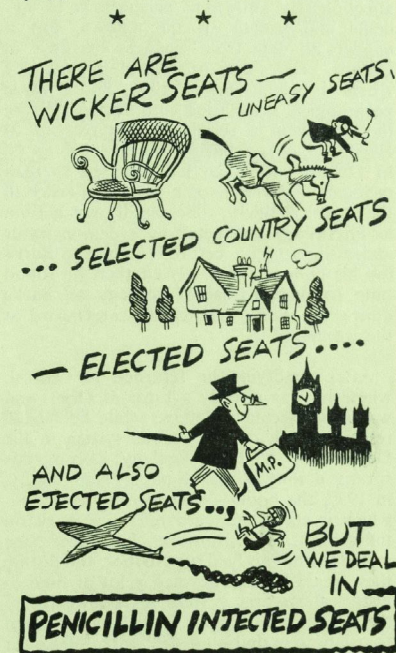
Quantities of drugs used per year included :—Boric acid, 52 cwt. ; Glycerin, 2 tons ; Gentian Root, 4 cwt. ; Soft Paraffin, 21 cwt. ; Magnesium Sulphate, 2½ tons ; Sodium Bicarbonate, 17 cwt.

Mr. J. R. Elliott, lecturer in Pharmaceutics and Practical Pharmacy, writes :—

The description of the premises of the dispensary and manufacturing laboratory of the pharmaceutical department, which were opened in October, 1907, would have been equally accurate, except in minor details, until the end of 1951.

The information concerning the work done and the things used in the department now reads like ancient history, although the presence of an autoclave for sterilising "physiological fluids" serves as a link with modern pharmaceutical practice.

Gone are the days when pipes of port wine were hung on this special tilting apparatus and spt. vini rect. was stored in 100 gallon vessels. Senega rhizome is no longer purchased and rhubarb root is only required at the rate of about 20 lbs. per year, and only three or four leeches are purchased each year. The large steam pans are no longer required for the preparations of decoctions and the old Bramah press—which is still in working order—is only needed once or twice a year.



## ★ QUOTES OF THE MONTH

"By the time a stool is passed it is quite a long way from the top."—DR. SH ——— R.

EDITOR : "Why did you choose to come to Bart's?"  
"STRIPE" : "Because I knew a houseman here!"

"Now that Mr. N. has that new Dauphine, can we call him the 'Red Dean of Barts'?"



## Professor K. J. FRANKIN

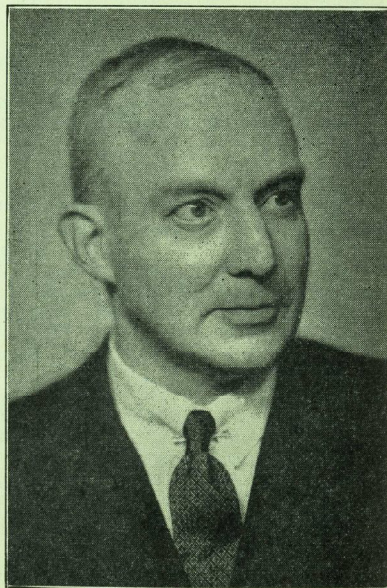
F.R.S., D.M., F.R.C.P.

Kenneth James Franklin was born on November 25th, 1897. At what age he became K.J., the name by which he is affectionately known to generations of students and friends, is not known, but it appears to date from early in his days at Oxford. He went to school at Christ's Hospital (which, up to 1900, had a close geographical association with Bart's). From there he won a scholarship in classics to Hertford College, but before he could go up to Oxford, where he had decided to read medicine, he served some years in France in the Royal Artillery. He rapidly got a First in Physiology and acted as a demonstrator under Sherrington before he came to Bart's for his clinical years. Even then he found time to demonstrate physiology at Bart's during the week, and teach it at Oxford at the weekends.

After qualifying he returned to Oxford, where he was already a tutor at Oriol, and was soon elected a Fellow, while he started research work on the venous system in the Department of Pharmacology. From this sprang a long series of papers and finally, in 1937, the book—*A monograph on veins*—which is still a standard reference work on the subject. K.J., however, has never been a man to limit his field of activities, and during these years he also devoted a lot of time to historical research. Here his knowledge of the classics was used to produce elegant translations, notably of the works of Lower and Fabricius. Recently he was persuaded to return to this arduous work, to give us superb renderings of Harvey's writings on the circulation for the Tercentenary celebrations in 1957.

Towards the end of 1938 he moved to the Nuffield Institute for Medical Research, in Oxford. He had already done some pioneer work with Dr. Robert Janker in Bonn, on the use of X-rays for venous physiological studies. At the Nuffield Institute, in collaboration with Dr. A. E. Barclay, the technique of rapid serial radiography was

developed, which was used in their classic investigation (with M. M. L. Prichard) into the changes in the foetal circulation at birth. Sir Joseph Bancroft and Donald Barron used to come over from Cambridge for this work, which was first published in a series of papers by Barclay, Bancroft, Barron, Franklin and Prichard—this delighted K.J., for, as he said, it was only fitting that work



on sheep should be done by three "Baas." With the blitz in 1940, the problems of crush injury and vascular spasm became very important, and Joseph Trueta consulted K.J. about the possibility of using the radiographic techniques developed at the Nuffield Institute. This culminated in that famous set of investigations into the renal circulation,

and the discovery of what Prof. John Fulton christened the "Oxford shunt."

The book on the renal circulation was published in 1947—shortly after this appeared K.J. was appointed to the Chair of Physiology at Bart's. This return to his old hospital always pleased him very much, although the administrative work and relative lack of facilities and technical assistance, in a department still suffering from the destruction of its building in the war and from the return from exile in Cambridge, limited his research work. Nevertheless, during his time at Bart's, he has made many interesting studies on the physiology of pregnancy and parturition, especially in relation to changes in the renal circulation. He also produced a monumental biography of his old friend and colleague, Joseph Barcroft. It is very sad that ill-health has compelled him to retire

prematurely, but I feel sure that he is pleased that he was able to finish the translations of the work of Harvey—a Bart's man.

These brief notes must necessarily omit mention of much of his activities, for K.J. has always been a man of many parts. His election to the Fellowship of the Royal Society and his other academic honours are generally known. Less well known, perhaps, are the fact that he was Dean of the Oxford Medical School for many years, and that he has had the unique (to my knowledge) distinction of being simultaneously an author, a publisher (as director of Blackwell Scientific Publications) and a librarian (of Oriol College). Even so, to those of us that knew him it is K.J. the man that we remember with affection. We wish him and his wife, Ethel, a very happy retirement among their friends at Oxford.



## Mr. J. B. HUME

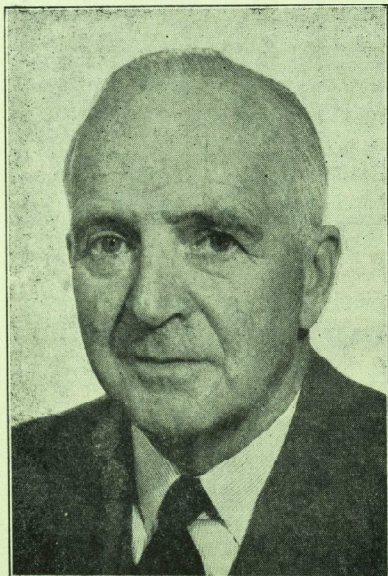
M.S., F.R.C.S.

Basil Hume retires at the end of September, after a surgical career continuously associated with Bart's. A Yorkshireman, born in Whitby and educated at Bootham School, York, he came up to London and Bart's and qualified in 1916, at the age of 23. He went into the army and served in East Africa in the first German war. In 1919 he returned to Bart's as demonstrator of anatomy, gaining his F.R.C.S. (England) and M.B., B.S., with honours and distinction in medicine, in 1920. In 1923 he became chief assistant to Sir Holburt Waring, a post which he held till the end of 1926. During this period, he spent a year at Ann Arbor, Michigan, U.S.A., under Hugh Cabot and Fred Collier, where his surgical experience was considerably broadened, especially in urology. M.S. 1925, Brackenbury Scholarship, Kirkes' Gold Medal, Luther Holden Scholarship, Basil

Hume was all set for early appointment on to the staff; but there was no vacancy at Bart's. He was appointed as surgeon to St. Andrew's Hospital, Dollis Hill in 1926, and became surgical curator of the museum in 1927. He was by now examiner in anatomy for the Primary F.R.C.S. at the College of Surgeons, and leading a busy academic and practical life. He added further to his claim for recognition by being awarded a Hunterian Professorship at the Royal College of Surgeons for his dissertation on the Anatomy and Embryology of the Diaphragm in relation to Diaphragmatic Hernia. In 1931, his opportunity came when Sir Holburt Waring retired. He was appointed Assistant Surgeon on the Yellow Firm. He became full surgeon during the Second World War and senior surgeon to the hospital on March 26th, 1947. Another

appointment was Consultant Surgeon to the Finchley Memorial Hospital.

He had married in 1925, and he and Mrs. Hume were blessed with four daughters, who have obeyed the Mendelian law by netting between them two firsts at Cambridge, one in biochemistry, one in English, and other honours. His delightful home, looking out on to the northern part of Hampstead Heath, has given him much pleasure and comfort, and contributed in no small way to his sincere, kindly, religious and



humane outlook. He has proved beyond doubt that the finest method of propagating a way of life is by example and, in keeping with this, he has been a prominent member of the Rahere Lodge, the oldest of the Hospital Masonic Lodges. He succeeded Geoffrey Evans as Treasurer, and has been a member of Grand Lodge for many years.

His surgical interests have been extensive and diverse, as shown by his articles and

observations on the diaphragm, toxic goitre, hind quarter amputation, sympathectomy for essential hypertension, gastro-oesophagectomy by the combined abdominal and thoracic approach, adrenalectomy for metastatic carcinoma of the breast, to mention but a few. He was never interested in pursuit of financial gain, but practice inevitably came his way, and we hope he may continue his interest in practical surgery for many years yet.

The training of surgeons and nurses and the administration of the hospital have also been matters of great concern to him, as may be judged by the number of active and advisory positions he has held in the Medical College and as a member of the Board of Governors of the hospital. Lectures to nurses and nurses' examinations always gave him pleasure. On retirement it is likely that he will find himself well occupied as a member of the Senate of the University of London, on the General Nursing Council of the Ministry of Health, as a member of the Pensions Appeal Tribunal and completing his second term as examiner for the Primary Fellowship of the Royal College of Surgeons. A matter which cannot fail to give him satisfaction is that of the 91 people who have been house surgeons, chief assistants or registrars under him on the Yellow Firm (including those in transit for the house physician jobs), 37 have become surgeons, 23 of whom are already consultants, six on the surgical staff of Bart's. The general surgeons and general practitioners have dispersed themselves all over the country, and even the world. Others have become anaesthetists, gynaecologists, pathologists and anatomists, one a D.Phil.

Fly fishing, wherever he can persuade salmon or trout to rise, has always been his recreation but, for the last twelve years, he has travelled extensively and often left his fishing rod at home. His own character and association with Bart's have imbued him so thoroughly with the spirit of a perpetual student that, even in his relaxation, his studies go with him. He must learn the language of the country he is travelling in, and this he does from gramophone records, books and test papers. It is rumoured that he got a "very good" for his last Italian prep.

We from Bart's wish Mr. and Mrs. Basil Hume good health, good fortune and great

happiness in "retirement," which will, for some time, be no more than a shift of emphasis in professional occupations. They are still going to live in London, and Basil

will be seen in the Hospital, but not so often as before. He will be as approachable as ever, and we will all welcome him when he comes to see us.

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## Mr. R. S. CORBETT

M.Chir., F.R.C.S.

Rupert Shelton Corbett was born in Rondebosch, near Cape Town, South Africa, in 1893. He spent the first two years of his life, and a subsequent period from 1903 to 1906, in South Africa, but for most of his time he has lived in England, and during the greater part of 44 years has been associated with Bart's. He received part of his early schooling in South Africa, and there learned to play Rugby, being Captain of the "under 13" side. This stood him in good stead, for he was Vice-Captain of Bart's in 1915-16.

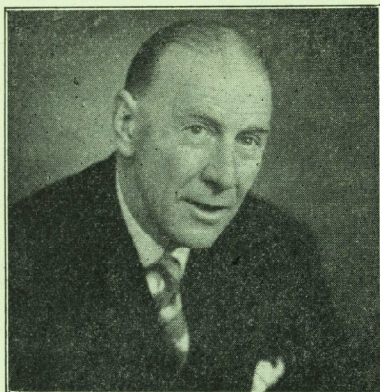
He returned to England in 1906 on account of having contracted typhoid fever; entered Foster's school, Stubbington, and remained there until he went up to Caius College, Cambridge, in 1912. On the outbreak of the Kaiser's War, he came down as a dresser on the Waring firm in the Long Vacation and, during his final year at Cambridge, he worked as a dresser at the 1st Eastern General Hospital. This enabled him to take an Honours degree before returning to Bart's in 1915. He won the Surgical Brackenbury in 1917 and, having qualified, was commissioned in the R.A.M.C. and seconded for duty as Sir Holburt Waring's House Surgeon. He remained at the Hospital until August, when after some preliminary training at Blackpool, he was

posted to Mesopotamia. There he served until 1920, and for six months before demobilisation he was surgical specialist at No. 3 British General Hospital, Basra.

After a short period of Post Graduate study in Vienna, he was appointed Demonstrator of Anatomy, which post he held for three years. He obtained the Fellowship of the Royal College of Surgeons in 1922, and in June, 1924, he was appointed Chief Assistant to Waring. He held this for a year, and then went to Ann Arbor, as Instructor of Surgery at the University of Michigan. In this respect his career was parallel to Basil Hume's. Returning to England in 1926, he was appointed Chief Assistant to Sir Charles Gordon-Watson, and held this post for four years.

His experience so far had helped to form some of the interests and characteristics which have been so well developed; enthusiasm in teaching, meticulous care of his patients and a consummate interest in the surgery of the alimentary tract. He obtained the M.Chir., Cambridge, in 1927, and in 1929 he was appointed Honorary Surgeon to the newly opened King George's Hospital, Ilford, and to St. Andrew's Hospital, Dollis Hill.

The year 1933 was a momentous one; he was appointed to the Staff of St. Bartholomew's Hospital, and he married. These two events allowed him to employ his many gifts to the fullest, and for the last twenty-five years, they have helped him to a full and happy life. It was not possible for him to do justice to his appointment to King George's Hospital, Ilford, and, with much regret, he resigned. Thereafter, most of his



hospital work was concentrated at Barts.

His interests have been catholic, and during the ensuing years he has contributed many interesting and instructive papers. Cholelithiasis, ulcerative colitis, tuberculous lymphadenitis and the undescended testicle have each been subjects of particular interest. More especially, he has contributed much to the management of ulcerative colitis and was a pioneer in re-establishing the continuity of the bowel after the removal of the colon. He has always been interested in Meckel's diverticulum and the pathological lesions with which it can be inflicted. He has interested his students and his colleagues

with his enthusiasm but, even more important, his patients are also enthusiastic about his methods.

He has kept himself fully informed of all the most recent works in a wide range of general surgery. He is interested in people, in knowledge and the application of knowledge to people. I think that is one reason why he has always been so persevering and has never given up whilst there was the slightest chance of saving a patient.

He has been Examiner in Surgery to the University of Cambridge, and a member of the Court of Examiners of the Royal College of Surgeons. He has worked hard at the Hospital, other than in the clinical field. He was Chairman of the Medical Council for the year 1948, President of the Paget Club, 1954, and Chairman of the Cancer and Surgery Committees for many years. He is still serving on the Grand Council of the British Empire Cancer Campaign, and on the Council of the Association of Surgeons.

In 1944 he was appointed President of the Proctological Section of the Royal Society of Medicine. In 1955, during a tour of the U.S.A., he delivered the Mayo lecture at Ann Arbor and, only this year, he delivered the first Gordon-Watson Memorial Lecture.

Although he has reached the retiring age in years, he is virile and active in his surgical acumen and practice, and he has still much to contribute to surgery and to humanity. His intensely enthusiastic make-up has found other outlets. For some years he has been a keen farmer, with an especial interest in Ayrshires, and this he will, no doubt, develop further. A leaning towards horticulture must also result in some form of specialism, and we hope both he and Mrs. Corbett will continue to enjoy these and their other interests.

We will miss Rupert on the Green Firm, but his enthusiasm, his humanity and his high sense of duty will remain with us.

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It is hoped to publish an appreciation of Dr. Geoffrey Bourne in the next edition of the *Journal*.

## BOTH SIDES OF THE FENCE

by J. C. CRAWHALL

This year's 2nd M.B. is now over, and in October I shall be commencing medicine in the Hospital. After two years of study in the pre-clinical school, I felt I would like to record some impressions of the course, although I am afraid these will be rather coloured by the fact that I had previously taught there for three years as a demonstrator.

Looking back to the early days of the course, I can still remember the sudden impact of the work which had to be done. In that one term the whole of Physiology was covered from "Winton and Bayliss," as an introductory course. Organic Chemistry was revised from a university standpoint, which differs considerably from that which is generally taught in the schools, and in Anatomy the first limb was dissected and the basis laid of general anatomy. This rate of work was continued for two more terms, that is, whilst we were juniors, but in the final two terms, whilst we were seniors, the pace imposed by the physiology and biochemistry departments slackened considerably. The reason for this was probably that two terms were then left to make the subjects more interesting, by covering special topics and to leave some time for revision. On the other hand, the less academically minded students would have preferred more time to have been spent discussing the fundamentals of the subject at the expense of hearing about the finer points. In fact, when I took 2nd M.B. in July, practically half the entrants did not pass in one subject or another, and these included 15 per cent of the March entrants, who had now failed for the second time. One or two of these students would admit that they had only worked rather sporadically, but the majority had worked fairly steadily but had failed to keep up with the teaching at each stage. If the course could have been taken a little more slowly, I have no doubt that many of the students who did in fact fail, could have reached 2nd M.B. standard.

This brings us face to face with one of the

great difficulties of 2nd M.B. teaching, which is the large range of ability and application within the class. I am sure it is far greater than is normally found in a university class, and there is no weeding out during the course. This means that each department and each teacher has to make the choice of whether to teach at an optimum speed to suit the best, the middle or the worst students. If either of the latter courses is chosen, the top students will not get the maximum benefit from the course and, later in life, may find themselves competing with men who have had a more comprehensive pre-clinical education. On the other hand, if the best are to receive the best teaching, the slower individuals will certainly be left behind. This dilemma has been partly overcome by the Physiology department, who have accepted eight students to study for an extra year for the B.Sc. Special in Physiology. This will enable them to benefit from education at an honours degree level, and acquire a more lasting understanding of physiological processes.

I suppose that most students contemplating a medical career wonder how they will fare in the study of anatomy. We expected that there would be plenty of work to do but, for many of us, it was the new discipline as well as the quantity of information that presented difficulties. What did the anatomists consider to be important and, therefore, to be memorised, and what was considered trivial? The distinction in many cases seemed arbitrary, and about two terms were required before I understood the pattern.

Perhaps some of the younger people avoided this delay, for their ability to memorise seemed unending, although it was often rather transitory. It scarcely needs to be recorded that about 80 per cent of our study time was spent in trying to catch up with the anatomy, as the dominant feeling in the pre-clinical school was that your performance in anatomy would determine whether or not you would become a clinical student. Little time was left to reflect that

this might not necessarily be so. I do not wish to dwell too long on the role of the anatomist except to make it clear that the real drive and rule of iron was felt there. The impact there between student and staff was greatest, and even the junior staff themselves were controlled with a strong hand from above. In a certain aesthetic way, I found it fascinating. Previously, I had always studied the sciences, the classics only at a very junior level, and now I had an opportunity to partake in a most memorable form of teaching. The dissection, which must be carried out in a careful and decorous manner; the statement of anatomical dogma that had been built up over millenia, and behind it a certain fierceness which did, of course, emanate from our teachers, but which one felt was part and parcel of the whole thing. This attitude seemed essential to the tradition, so that most of my fellow students were absolutely disgruntled if they did not have a hard "viva"; all those hours of study the previous night could have been avoided. To help to meet these emergencies, one man used to recite passages from Gray's *Anatomy* to a tape recorder the night before, and play it back to himself whilst shaving next morning. It is unfortunate that this tough line, whilst stimulating many students, does not suit all temperaments, and led some people to a considerable dislike of anatomy and anatomists. As a result, a lot of ingenious effort was put into misleading the demonstrators during the "vivas," which might have been put into more profitable channels. It cannot be doubted that as a result of this system, the standard of detailed knowledge of the average student at the examination was higher than it would have been under a more lenient system, but whether this leads to any lasting benefit is doubtful.

On the more constructive side, I should say that the anatomy course was a most valuable training in observation, in the building of memory pictures and in carefulness of expression. When 2nd M.B. has faded quietly out of our minds, probably these three qualities will remain with us accompanied by some understanding, if not memory, of how the tissues of the body are put together.

It is interesting to speculate on how the structure of the pre-clinical course came to

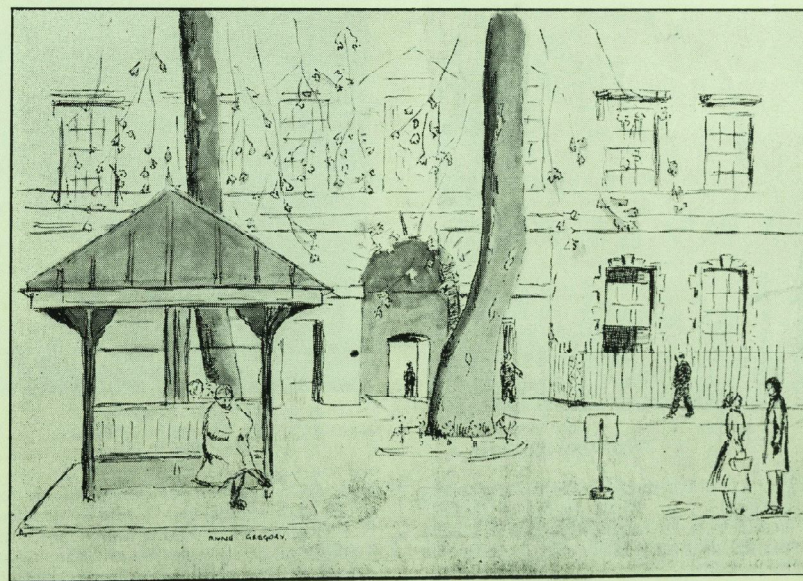
be built up. I imagine that it was conceived that the subjects basic to medicine were in the first place anatomy, then anatomy and physiology, and finally anatomy, physiology and biochemistry. Even today, it does not seem to be universally accepted that this is true, and various conflicting stories quickly circulate among the students, so that any of these subjects can come to be regarded as an unnecessary obstacle between the student and his natural goal of medicine. Of course, in certain cases, there is no goal at all in sight, and this makes the pre-clinical course even more irksome. There is still a feeling amongst some of the students that if they completely disregard their 18 months work in the pre-clinical school and eventually scrape through 2nd M.B., this will have no adverse effect at all on their progress in the hospital or their career in medicine. If this were so, then there would be no benefit in holding a pre-clinical course at all, and it should be discarded. On the other hand, I am sure that most clinical teachers do not seriously hold this view and would be very surprised if they found themselves teaching medicine to students with no knowledge at all of the three pre-clinical subjects. Whereas this attitude is certainly dead, it seems that it won't lie down, and I think certain students would have a much easier passage to 2nd M.B. if it were impressed upon them at an early stage that their pre-clinical studies would be of value to them later in life. As opposed to this approach, there are a certain number of students who are academically able, and come with traditions of hard work behind them. They work conscientiously through the course, and find 2nd M.B. relatively simple, but even for them it does not seem possible to develop that deep interest in any one subject that characterises the science student, and in the medical school such people are very rare indeed. This lack of fundamental interest in the subject, which even includes most of the B.Sc. students, has itself an adverse effect upon the staff. These men, who have good academic records themselves, are teaching students who either have not the will or the opportunity to develop a real interest in that subject, and this lack of stimulation can be very frustrating to the teaching staff. In addition to this situation, there is the difficulty that the only postgraduate students who come back from the hospital, come back on the whole as teachers rather than as research workers. This creates a different situation from that

found in most university departments where plenty of post-graduate research students are available to assist their established staff in carrying out research. This in turn helps to stimulate the established teacher, who may have had to teach much the same curriculum for twenty years. This lack of stimulation of pre-clinical teachers can lead to a dimming of enthusiasm after many years which, though unfortunate, is very easy to understand.

The choice of junior staff also shows an interesting variation from other university departments, in that the Anatomy and Physiology departments choose their demonstrators from the junior medical staff of the hospital. These then return to the Medical College to teach subjects which they only studied to 2nd M.B. level themselves at a minimum of four years before. We are told that this is of great value to them in revising these subjects, but it is of very little value to the students they are teaching, for their

first twelve months. It is sometimes overlooked that a working knowledge of a subject is insufficient basis for teaching if it is not accompanied by a certain amount of understanding coupled with some experience at teaching. These demonstrators are usually held for two years, unless higher exams prove a great obstacle, and this means that most students at the college spend half their time under demonstrators who are learning rather than teaching.

In case I have left you with the impression that I am only able to see the shortcomings of the pre-clinical teaching system, I should like to say that I found the whole course most interesting, and have derived great benefit from it, and would like to thank the staff of other departments who received me, not only gracefully but cordially, at their lectures. When the new term starts, fresh students will enter the pre-clinical school, and I am sure that they, too, will be given a friendly welcome.



## OPERATIVE CHOLANGIOGRAPHY

by N. ALAN GREEN

Operative cholangiography has been in use as an aid to biliary surgery for some 26 years, and Mirrizi of Argentina (1932) appears to be the first to have utilised this method of investigation. Its main use is in the detection of stones in the common bile duct, and the protagonists of cholangiography during operation have claimed that it has led to a reduction in the number of residual stones, particularly in the common bile duct.

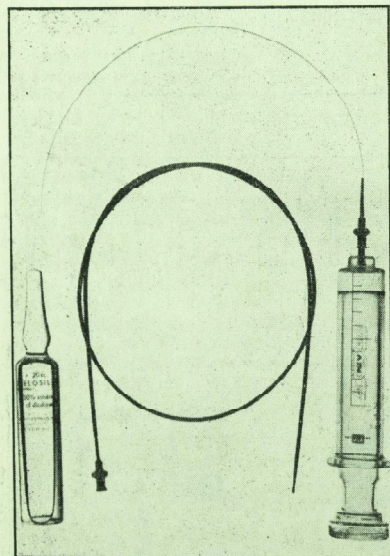


Fig. 1

Figure 1.—Polythene tube about 25 cm. long attached by an Alban Andrews' ureteric nozzle to a 20 ml. syringe. Also shown are the ureteric catheter and the ampoule of diodone.

Published figures for stones left behind, even after a very careful duct exploration, average about 5 per cent, and Nurick (1956) remarks that the higher figures of 20 per cent are almost certainly a reflection on the skill of the surgeon. Most general surgeons, however, will admit to some experience of this humiliating mishap, brought about either by failure to explore a duct when stones are present or by not removing all of them on

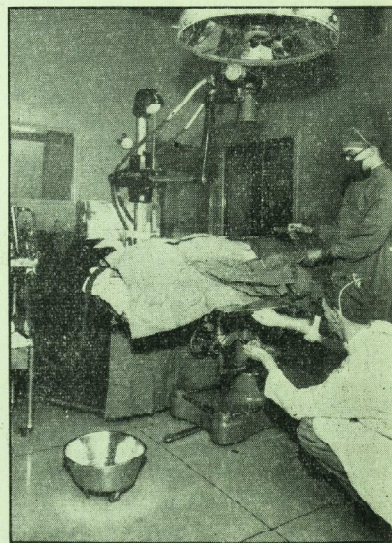


Fig. 2

Figure 2.—Note the rotation of the patient. The portable X-ray machine has been centred on the radiographic field and injection is taking place. The theatre orderly is removing the X-ray plate.

opening the common bile duct. In an attempt to reduce the number of residual stones, and conversely to minimise unnecessary duct explorations, many surgeons and radiologists are advocating the routine use of operative cholangiography.

It must be emphasised that ideally surgeon, radiologist and anaesthetist should work as a team in order to produce a satisfactory radiograph, and many poor results have resulted because the surgeon accepts poor quality films, or fails to appreciate the finer points of technique, and also does not realise the variations in normal and abnormal patterns of the biliary tree.

Operative cholangiography may be used before (or in place of) duct exploration, and after exploration through a T-tube to detect any missed stones. Very little extra time is added to the operation, particularly in the pre-exploratory cholangiogram, since the gallbladder may be removed during the time taken to develop the films.

### Technique

Injection of a water-soluble iodine derivative such as a 35 per cent or 50 per cent diodine is made, preferably into the cystic duct through a polythene tube or ureteric catheter (Figure 1). The tube should be tied in and be completely free of air before insertion. Some surgeons prefer to inject into the gallbladder (or common bile duct) by a syringe and fine needle, but there is, in this method more likelihood of extravasation of dye and a distinct danger of pushing small stones down the cystic duct. By the same token, the cystic duct should be palpated very carefully before the catheter or tube is inserted. The more dilated the ducts, the more dilute the solution of dye should be in order to get better definition of small stones which tend to be missed in denser shadows. This dilution is effected by adding suitable quantities of normal saline.

The positioning of the patient, portable X-ray apparatus and cassette, the surgeon and theatre orderly, are shown in Figure 2. It is essential to tilt the table to the right side through at least 15°-20° in order to avoid superimposition of the ducts on the spine. The X-ray tube should be centred carefully on the junction of the cystic, common bile and common hepatic ducts, and all instru-

ments removed from the radiographic field. At the time of exposure the anaesthetist is careful to control respiration and on an average two films are taken during the injection of 5 and 10 ml. of dye, since a better view is obtained of the ampullary region if exposures are made as the dye is introduced. The larger the ducts, the greater the quantity of diluted dye will be required, often up to 40 mls. The orderly removes the X-ray plates from the cassette, which is placed at the right level between segments of the operating mat before the operation is commenced.

It is much more difficult to obtain a satisfactory post-exploratory cholangiogram because of the presence of air, both in the extrahepatic biliary system after exploration and also in the T-tube. Air bubbles can be reduced to a minimum by inserting a T-tube already filled with normal saline, and by irrigating the ducts well through this tube before injecting the dye. One should continue irrigation until the returning fluid along the vertical limb of the T-tube is free of air bubbles. The T-tube is then clamped at a point just away from the radiographic field, and the dye injected by needle and syringe into the vertical limb.

The points of a good operative cholangiogram may be noted:—

1. Good filling of intra- and extrahepatic radicles.
2. Good view of the lower end of the common bile duct.
3. Flow of dye into the duodenum.

Unsatisfactory radiographs are obtained when any of the following features are present:—

1. Insufficient dye.
2. Inadequate exposure.
3. Patient breathing.
4. Insufficient rotation of the patient.
5. Too much operative equipment and the surgeon's hands in the radiograph.
6. Air bubbles.
7. Extravasation of dye.

### Examples

A normal cholangiogram is obtained in the vast majority of cases. A typical result is seen in Figure 3. Good filling is evident

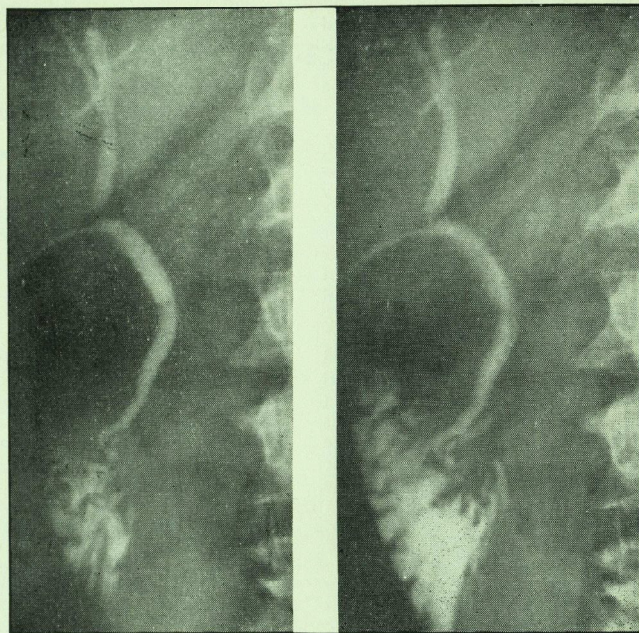


Fig. 3

Figure 3.—Normal cholangiogram. Two exposures with 5 ml. and 10 ml. of diodone. The ureteric catheter used can be seen in the common bile duct, particularly in (b). A good view of the ampullary region is obtained and pancreatic reflux has taken place from the ampulla. Good flow has occurred into the duodenum.

by injecting 5 mls. and then 10 mls. of 50 per cent diodone through the cystic duct. The ducts are not at all superimposed on the spine, due to adequate rotation of the patient, and a good view of the ampullary region is obtained. The second part of the duodenum is outlined and from the ampulla reflux has occurred into the pancreatic duct. This phenomenon occurred in nine out of 40 cases on the Light Blue Firm recently, although Liedberg (1941) records pancreatic reflux in as many as 50 per cent of his cases.

An unexpected stone was found in four cases when not suspected, on whom there were no indications to explore the common bile duct on either the history or after palpating the duct carefully at operation.

Figures 4 and 5 show representative films of these cases. The first cholangiogram was performed through the gallbladder. It may be argued that injection into the gallbladder may force a stone down the cystic duct, but the same reasoning may apply to any case in which there are small stones in the gallbladder and cystic duct. During mobilisation of the gallbladder these may dislodge and remain as a residual stone in the common bile duct. In both these cases dye is seen to enter the duodenum; non-entry, particularly in a large duct, should make one suspicious of the presence of a stone.

A false positive is seen in Figure 6a. Clinically there was no indication to explore the common bile duct. The filling defect present turned out to be an air bubble. A

post-exploratory cholangiogram through a T-tube (Figure 6b) is normal.

### Conclusions

Is operative cholangiography justified in every case? In the vast majority of cases there is no indication, particularly in the presence of large stones, a normal sized common bile duct and no previous history of jaundice. Walters (1955) expresses the opinion that careful exploration and washing of the ducts will reveal most stones, and that small ones will pass through a dilated sphincter of Oddi. Maingot (1952) regards operative cholangiography as unnecessary and at times misleading.

In a series of 40 recent operative cholangiograms, four unsuspected stones have been revealed, and it has also been our experience that in cases with known stones in the common bile duct, the exact number can be demonstrated before opening the duct. Post-exploratory cholangiogram on one occasion has shown a stone missed on exploration and on careful palpation; and, in a further case, stones in the common duct were suspected, all were shown in a pre-exploratory cholangiogram, and one was missed on exploration. Post-exploratory cholangiogram may have prevented a second operation in this instance, but was not performed.

Therefore, if the common bile duct has been opened, a post-exploratory film should follow, although it is more difficult to perform because of the danger of "false positives" due to air bubbles. There is nothing so humiliating as having to perform a second operation to remove residual stones.

But it would seem that in all cases with small stones, or stones smaller than the cystic duct, operative cholangiography should be performed, if there are adequate facilities available. Stones may be found in otherwise normal ducts, and it is interesting to note that in a series of 100 cases by Corff (1957), 27 per cent had stones in the common bile duct without previous history of jaundice.

Certainly when the accepted indications for opening the common bile duct are present, this should be done in spite of a negative cholangiogram. Some surgeons had hoped that operative cholangiography would

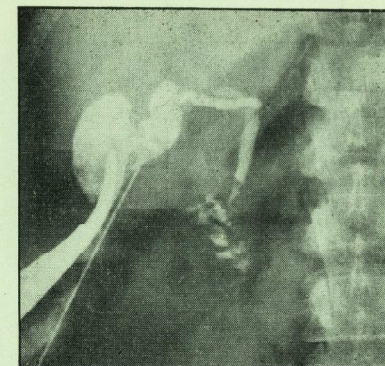


Fig. 4

Figure 4.—Cholangiogram obtained by injecting 50 per cent diodone into the gallbladder. A small stone is seen at the lower end of a normal sized common bile duct.



Fig. 5

Figure 5.—A similar unsuspected stone at the lower end of the common bile duct in a boy aged 10 years.

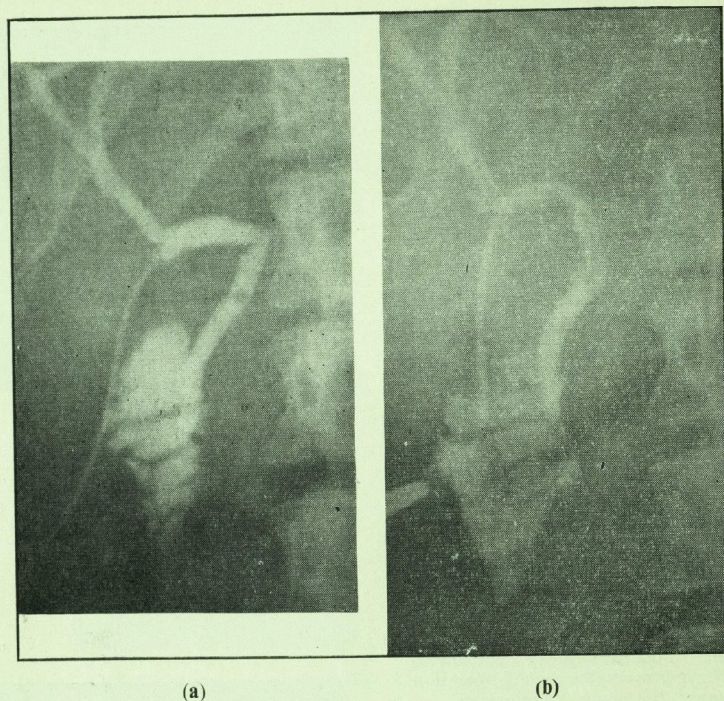


Fig. 6

Figure 6.—(a) Shows an air bubble with its typical rounded appearance. An unnecessary exploration was performed, and (b) shows a post-exploratory film through a T-tube.

reduce the number of negative explorations, but it is realised that even with perfect technique small stones may be missed in a dilated duct. Nothing is to be lost by performing a cholangiogram in these cases, and there does not appear to be any definite increase in morbidity on account of the investigation. However, it cannot and should not replace the skill of the surgeon and his judgment in the treatment of stones in the common duct.

My thanks are due to Mr. John Hosford for permission to record impressions of the operative cholangiograms performed on his cases, and also to Dr. Brian Hale, with whose help the series of cholangiograms was reviewed recently in the Paget Club. In

addition, I am indebted to the Radiographers who gave such excellent service, and to Mr. N. K. Harrison and his colleagues in the Photographic Department for their reproduction of the radiographs.

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## TEACHERS OF CHEMISTRY AND CHEMICAL PATHOLOGY AT SAINT BARTHOLOMEW'S HOSPITAL

by A. B. ANDERSON

The Medical School and Hospital have had a number of famous chemists amongst their teachers, and it is the purpose of this note to give some idea of these men and of their work while at Bart's.

In 1836, W. T. Brande, F.R.S., Professor of Chemistry to the Royal Institution, and Thomas Griffiths, Esq., who was then Lecturer in Natural Philosophy, were elected conjointly to the Chemical Lectureship in the Medical School.

Brande, the son of an apothecary, was originally intended for the Church, but he preferred the profession of medicine, and was apprenticed to his brother, a member of the Society of Apothecaries. He studied chemistry at Guy's Hospital and the Royal Institution, and was elected a Fellow of the Royal Society at the early age of 21. As well as his lectures at the Royal Institution and St. Bartholomew's, he also lectured to the Society of Apothecaries. The substance of his lectures was incorporated in his *Manual of Chemistry*, by which he acquired a European reputation, and which was, in its day, one of the most popular in the English language. On the resignation of Mr. Brande in 1841, Thomas Griffiths was appointed sole Lecturer and, on his resignation in 1851, John Stenhouse, F.R.S., was appointed. Stenhouse was a graduate of Glasgow, and had studied under Liebig at Giessen. He was obliged to resign in 1857, owing to a severe attack of paralysis, but recovered and continued with his chemical researches, becoming, in 1865, one of the non-resident analysts to the Royal Mint. He was chiefly interested in what, in those days, was called the chemistry of compounds found in organised bodies, and particularly in the compounds found in plants. He was one of the founders of the Chemical Society, and it was said of him that his general conversation and fund of anecdote rendered him a most pleasant companion. We are indebted to Prof. Wormall for drawing attention to the fact

that Kekulé, one of the greatest organic chemists of the nineteenth century, who was responsible for the concept of the benzene ring of six carbon atoms arranged to form a regular hexagon, worked as a young man as assistant to Stenhouse on the recommendation of Liebig. His duties were to carry out qualitative and quantitative analysis between the hours of 9 a.m. and 4 p.m., excepting Sundays, with no lecturing, at a salary of £60 a year. He came to Bart's in 1853, and stayed nearly two years.

On Stenhouse's resignation, Edward Frankland, F.R.S., Professor of Chemistry in Owen's College, Manchester, was appointed. He was one of the most famous of our chemists, being responsible for the theory of the law of valency, communicated to the Royal Society in 1852. He did fundamental work on water analysis, and was a member of the River Pollution Committee. In 1877, he was elected the first President of the Institute of Chemistry. Frankland found his original work seriously curtailed by the combined duties of his lectureship at Bart's and chair at the Royal Institution, and resigned a portion of his duties in 1863, when Dr. Odling was appointed joint Lecturer. In 1864, Frankland found that "even the short course of lectures delivered at a distance from my laboratory so materially interferes with the time devoted to research that I feel obliged to withdraw from them." Dr. Odling was appointed sole Lecturer on Frankland's resignation.

William Odling, 1829-1921, was an interesting character and a distinguished chemist. A student at Guy's, he graduated M.B. in 1856, and in 1859 was elected a Fellow of the Royal College of Physicians and a Fellow of the Royal Society. Before coming to Bart's, he had worked as Medical Officer of Health for Lambeth, and taught chemistry at Guy's. He worked on the classification of elements by their atomic weights, and in 1864 made an arrangement

of all the known elements into groups based on their atomic weight, with gaps left for some of the undiscovered elements. This was very advanced for his time. While at Bart's, Odling did an important piece of work on the preparation and vapour densities of aluminium methyl and ethyl—work done to determine the valency of aluminium. He held the appointment of Lecturer until 1868, when he requested a joint lecturer to share his duties, and Dr. Augustus Matthiessen, F.R.S., was appointed. Odling had been appointed Fullerian Professor in the Royal Institution, succeeding Faraday and, like Frankland, he found it impossible to fill both posts, and resigned in 1870. Two years later he was elected Waynflete Professor of Chemistry at Oxford. After his retirement from this chair in 1912, Odling, who had already published many chemical texts, produced *The Technic of Versification*, written in his favourite style, without the use of any principal verbs. During Odling's time at Bart's, a new chemical classroom, to accommodate 130 students, was built above the waiting room and apothecary shop. Previously, the practical classes had been held in the dissecting room, which had been temporarily fitted up for the use of students during the summer months, a most unpractical performance.

On Odling's resignation, Dr. Matthiessen was appointed sole Lecturer in July, 1870. Shortly after this, Matthiessen, who had a partial paralysis of his right hand following infantile paralysis, fearing that he was liable to further paralysis, took his own life by drinking prussic acid.

Dr. William J. Russell, F.R.S., Professor of Natural Philosophy at Bedford College, and also Lecturer in Chemistry at St. Mary's Hospital, was appointed to succeed Matthiessen. He had been a pupil of Frankland at Owen's College, Manchester. In view of the activity in smog research at present in Bart's, it is interesting that Russell, in 1880, was one of a committee undertaking an investigation into the chemical and physical properties of London fog. Russell made several analyses of the carbon dioxide content of the air in the region of Bart's, and these were published in the Hospital Reports. On one occasion, during a thick white fog, the carbon dioxide concentration rose to 14.1 parts per 10,000

(normal 3 parts). He set up "Observation Posts" at St. Bartholomew's Hospital, St. John's Wood and Hackney. In the course of this work, he developed a new method for the volumetric analysis of small samples of gas.

It was during Dr. Russell's time that a very famous investigator, Mr. Sherlock Holmes, was reported to be working in the Chemical Department, and to have discovered a reagent which was precipitated by haemoglobin. In the room now occupied by the Curator of the Museum, may be seen a plaque with the following inscription:—

"At this place New Year's Day, 1881, were spoken these deathless words, 'You have been in Afghanistan I perceive' by Mr. Sherlock Holmes in greeting Dr. John H. Watson at their first meeting."

In 1895, Dr. F. D. Chattaway was appointed Lecturer in Organic Chemistry and, on the resignation of Russell in 1897, Lecturer in Chemistry. He had originally proposed to study medicine but, finding it distasteful, turned to chemistry as a career. While at Bart's, Chattaway did a very considerable amount of research work dealing with nitrogen-halogen-substituted anilides. He described the preparation and properties of so-called nitrogen iodide in 1900. It is of interest that in 1905 he made the chloramines which years later were found to be suitable disinfectants. In 1906 he resigned from Bart's and went to Heidelberg as a student. Elected F.R.S. in 1907, he entered the scientific life of Oxford in 1908, as Demonstrator and later head of Chemistry in the Queen's College laboratory.

On the resignation of Chattaway, various regulations relating to the duties of his successor were passed. These included having charge of the Chemical Department and teaching of chemistry, and holding a class in toxicology, besides which "he shall arrange for the examination of morbid substances sent to him for that purpose from the Hospital, any members of the Medical Staff or by the Lecturer on Pathology." This was the beginning of routine chemical pathology in the hospital laboratories.

A little before this, in 1902, Dr. Garrod was allowed to deliver a course of lectures in

chemical pathology, thus inaugurating this new subject in the Hospital.

Chattaway was succeeded by W. H. Hurtley, who had been Demonstrator since 1899, and who was to serve the hospital and school faithfully until his death in 1936. Hurtley was an excellent teacher, and those who knew him describe him as the most modest and the kindest of men. Despite his arduous teaching duties, he carried out important research work, which at first was in pure chemistry: later his interests became more biochemical, and in collaboration with Sir Archibald Garrod, he worked on cystinuria and alkaptonuria. Other work was on methods of detecting acetoacetic acid in urine, including a new test depending on the formation of a highly coloured ferrous salt of isonitrosoacetone. Some of his more important work was done on the excretion of ketone bodies by diabetics. He also developed a modified procedure for estimating the iodine in blood, and in his last years was working on the bile acids. In 1920, the title of Reader in Chemistry in the University was conferred on him.

With Hurtley's death in 1936, we come to modern times, and the appointment of Professor A. Wormald, F.R.S., to the Chair of Chemistry and Biochemistry.

Turning now to that younger branch of the subject, chemical pathology, we have already noted that Dr. Garrod had begun to give lectures in this subject in 1902. He was appointed Lecturer in Chemical Pathology in 1904, and continued as lecturer until he resigned in 1919. In this note one cannot attempt to do Sir Archibald Garrod justice. One can only remind the reader of his great contributions to chemical pathology, particularly in the studies on alkaptonuria and cystinuria which were embodied in his book *Inborn Errors of Metabolism*, first published in 1909.

Dr. Hurtley had for many years been carrying out investigations of a chemical pathological nature for members of the staff, at first in an unofficial capacity and, since 1905, with the title of Demonstrator. In 1909 he was thanked by the staff for his past services and replaced by Dr. J. G. Priestley as a full time Demonstrator. Dr. Priestley

acted as Demonstrator from 1909 to 1911 without remuneration and, in 1913, a Demonstrator of Chemical Pathology was appointed in the person of Mr. Mackenzie Wallis. On the resignation of Sir A. Garrod in 1919, Mackenzie Wallis was appointed Chemical Pathologist to the Hospital and lecturer in Chemical Pathology. With the assistance of the Demonstrator, Dr. H. E. Archer, he built up the routine laboratory from scratch. Mackenzie Wallis was chiefly interested in diabetes and pancreatitis, and did much work preparing extracts of pancreas in an attempt to obtain the active principle. He also developed a very extensive private practice. After a period of ill health, he died in 1929 at the early age of 43.

With the appointment, in 1926, of Dr. G. A. Harrison to be Chemical Pathologist and Lecturer, we end our survey. Dr. Harrison had formerly been Chemical Pathologist to King's College Hospital and to the Hospital for Sick Children, Great Ormond Street, and he will always be remembered for his book *Chemical Methods in Clinical Medicine*, first published in 1930, with later editions, and for many years the leading British textbook on practical chemical pathology. This book was not a compilation, but embodied the author's actual experience with all the methods described, and for this reason is all the more valuable. It is still a mine of information on many of the obscure bypaths of chemical pathology.

Looking back over this period of 120 years, we see that chemistry at Bart's has been well served by its teachers, and that the school has a fine tradition of both teaching and research.

In conclusion, I wish to express my thanks to Mr. Thornton, without whose help in providing extracts from the House Committee minute book this note could never have been attempted.

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## LETTER TO THE EDITOR

To the Editor of the Journal  
Dear Sir,

"Several sports clubs make little or no effort to report their activities. No publication can adequately report or advertise any event without the co-operation of all those who are concerned."  
*Editorial*, St. B.H.J., Vol. LXII, p. 235

In June, the Rifle Club submitted reports of matches fired at Bisley in May and June, including the report of the London University Championships, which were won by a team from this Hospital. Since then several reports have been submitted for publication in the sports section of the *Journal*, of which only one has yet been published.

Whilst appreciating the need for economy of space, there is considerable discontent among members of the Club who deplore this treatment, particularly as the delay is now of the order of four months.

Following your statement in the Editorial of the September issue, I cannot see how you expect to obtain a response from clubs which do not report their activities if you withhold the reports of those which do—nor do I see how you can reconcile your words with your actions.

Yours sincerely,  
R. P. ELLIS,  
*Captain of Shooting.*

Abernethian Room,  
St. Bartholomew's Hospital.

Sir,  
I readily concur with your remarks, and furthermore, I appreciate your advertisement of the September Editorial. As you are already aware, your first

report was lost somewhere between Bart's and the printers. The carbon copy of this report was, unfortunately, too long for inclusion in the October issue. However, perhaps you will be appeased by the large section on Rifle Club Affairs in this issue—almost enough for a Rifle Club supplement.

May we offer you, and your team, our congratulations on your success in the Hospital's Cup. In addition, it may interest you to know that in 1908, the club was allowed to shoot daily between the hours of 12-2 p.m. and 4-6 p.m.

EDITOR.

## BOOK REVIEWS

AN INTRODUCTION TO GENERAL PRACTICE  
by Denis Craddock. Second Edition, 1958.  
Published by H. K. Lewis. 584 pp. Price 42/-.

First published in 1953, the success of this book has produced a second, expanded edition, which endeavours "to include some reference to all conditions which the average general practitioner sees once a year."

Although bearing the title *Introduction*, it is more of a textbook of general practice. The introduction provides extensive information on the work of the general practitioner, including a section on "Paper work," and chapters are then devoted to types of patients and their complaints. Sections are devoted to Mother and Child and Family Planning, while the chapters on Problems of life and death, Pain and its relief, Drugs and poisons, Dietetics and the Doctor and the Law, all contain information of particular significance to the general practitioner. But the book can be read to advantage by all students and housemen. It provides references at the end of each chapter for those in search of fuller information, and contains numerous apt quotations. That of Sir Robert Hutchison is worthy of careful consideration by all potential "specialists": "No one is too good to be a general practitioner."

THE KIDNEY. An Outline of Normal and Abnormal Structure and Function by H. E. de Wardener. Published by J. & A. Churchill. Price 45/-.

This book sets out to present an outline of the structure and function of the normal and diseased kidney. As such it is not to be regarded primarily as giving a descriptive account of the disorders of the kidney, but rather as providing a complete and up-to-date explanation of the various biochemical and clinico-pathological methods of studying renal behaviour; and, in particular, the application of these methods to the investigation and treatment of disease.

Important sections are devoted to the nephrotic

syndrome, acute renal failure, chronic renal failure and the acute nephritic syndrome. The general presentation of the subject matter and the arrangement of the various sections (thirty-nine in all) is liable to be a little confusing to the student. Thus, the acute nephritic syndrome is considered in one section and, in a later one, acute glomerular nephritis is discussed under the heading of allergic diseases of the kidney. Despite this criticism there is much valuable information to be found in the more detailed sections, and Dr. de Wardener does well to present the various renal disorders in their proper perspective. Of these conditions, renal vein and artery thrombosis, renal abnormalities in diabetes and other endocrine disorders, in alkalosis, and in pregnancy, to mention only some of them, are dealt with in separate short sections. The account of acute renal failure is particularly helpful. There are useful appendices on diuretics, diets and normal biochemical values; but some of the diagrams are elaborate without necessarily helping to clarify the text.

This is a stimulating book and can be recommended, particularly to the postgraduate and to anyone interested in the kidney.

W.E.G.

THE CIRCULATION OF THE BLOOD. Two anatomical essays by William Harvey, together with nine letters written by him. The whole translated from the Latin and slightly annotated by Kenneth J. Franklin. Published by Blackwell, Oxford. PP. xxiii, 184. Price 22/6d.

The reception accorded to Professor Franklin's translation of *De motu cordis*, published last year, and the entreaties of his numerous friends, have prompted him to continue his scholarly translations. His obvious first choice was Harvey's *De circulatione sanguinis*, the two anatomical essays addressed to Jean Riolan, jr., to which have been added Harvey's correspondence with certain other distinguished medical men. Preceded by a brief biography of Harvey, the letters are arranged in chronological order, which reveals the progress of Harvey's trend of thought from 1636 to 1657, when he admits in his letter to Jan Vlackveld: "But it is useless for you to spur me on and for me to gird myself for some new research when I am not only ripe in years but also—let me admit—a little weary."

Harvey's book of 1628 is recognised as a landmark in medical history, but his letters reveal more of his character. We do not encounter the traditional fiery-tempered individual with hand clapping the hilt of his dagger, but the scientist keen to offer logical explanations to those doubters whom he thought worthy of the honour. Couched in simple language that is as readily understood by the layman as by the scientist, Harvey explains his experiments, which he suggests can readily be repeated: "You will be able to make the same observation daily during the outflow of blood in phlebotomy. For if you press on the vein with a finger a little below the opening, the outflow of blood is satisfactorily arrested but, on release of the pressure, it flows out again in abundance as before."

This book is the natural companion to Professor

Franklin's translation of *De motu cordis*, and he is to be congratulated on both productions. It is to be hoped that his retirement from the Chair of Physiology will permit him the leisure necessary to complete the trio of Harvey's outstanding contributions to medical literature. *De generatione*, overshadowed by his first book, and underestimated by many embryologists, is worthy of translation by the hand that has already provided such lucid interpretations of Harvey in a manner that William Harvey himself would comprehend.

J.L.T.

PRACTICAL CLINICAL BIOCHEMISTRY by Harold Varley. Published by Heinemann. 635 pp. Price 42/-.

The author states in his preface "the present book is a survey of the whole field of this subject from the standpoint of workers in hospital laboratories." It should be said at the outset that the author has achieved this object, and his book is the most comprehensive of those published in Britain. In fact, the chief criticism one makes of this book is that in some directions it is too comprehensive. For example, it seems unnecessary to describe six methods for the determination of blood sugar, and while there is a short comparison of the methods, the beginner will be left still in doubt as to which method he should use. One would like to have had more of the author's personal views and experience, which is such a valuable part of earlier works on this subject, for example, the early editions of "Chemical Methods in Clinical Medicine" by G. A. Harrison. Harrison's book is still a mine of information, and a book of which Bart's may well be proud.

In a comprehensive book of this nature, one would have wished for a fuller treatment of the porphyrins, as the estimation of these is one of the most difficult with which the chemical pathologist is faced. The book is essentially a practical one, and of interest chiefly to the technician, but medical students can profit by the short summaries of the findings in health and disease under each of the headings.

It has been brought well up-to-date in this second edition, and one can thoroughly recommend the book to all workers in hospital laboratories.

A. B. ANDERSON.

THE PHYSICAL TREATMENT OF VARICOSE ULCERS by R. Rowden Foote. Published by E. & S. Livingstone, Edinburgh.

This small manual consisting of 138 pages and 120 illustrations is, as far as production is concerned, of the usual high standard expected from Messrs. Livingstone. As stated in the preface, this book has been written essentially for the physiotherapist and nurse. I feel, however, that it will find its way into the hands of many practitioners and students and, furthermore, I feel that many patients could read this book with advantage.

The author is a Bart's man and has given up most of his life to the study of varicose disease, and

presents to us a most useful manual in conjunction with Miss T. Wareham of our physiotherapy department, who writes a very clear and concise account of electrical adjuncts to treatment.

Recently the treatment of varicose ulcers has tended to be by radical surgical methods following the original teaching of Linton of Boston.

The author attempts, with success, to explain how physiotherapeutic methods can, in the vast majority of cases, make extensive surgery of secondary importance. Those of us who have to deal with the ulcer problem, and it is indeed a very big one, know that even after operative interference results are not necessarily satisfactory, and supportive measures have to be continued, sometimes indefinitely.

Although Mr. Rowden Foote admits the necessity for surgery in a small number of cases, he shows how even under these conditions, the skill of the physiotherapist is all important in preparing the field for the surgeon.

This is the first book to give us massage technique in conjunction with active physical exercises. I feel assured of its success, and can thoroughly recommend it to all who are interested in the subject.

**FUNDAMENTALS IN CARDIOLOGY** by John B. Wild. Published by Blackwell, Oxford. 80 pp. + index, 16 figs. Price 34/-.

In his introduction the Author points out that little attempt is made during undergraduate teaching to correlate physiology with clinical medicine. In this short volume he sets out to explain the physiological mechanisms underlying the physical signs elicited in clinical examination of the cardio-vascular system. He has succeeded admirably in his purpose, and the value of the book is obvious; the student is far more likely to get the signs of (say) mitral stenosis right by understanding why they occur than by committing a list to memory.

A few minor criticisms were noted. The electrocardiograms would serve their purpose better if the leads chosen were indicated. It is inconsistent to call the early systolic sound in pulmonary stenosis a "split first sound" when, later, it is correctly pointed out that the mitral opening snap is *not* a split second sound! The signs of tricuspid disease are described for normal rhythm, but their alteration by atrial fibrillation, which is usually present, is not discussed. In the earlier chapters the text does not correspond to the figures on the facing pages; the publishers should rearrange this in subsequent printings.

This book is recommended both to students and post-graduates. The reviewer hopes that its publication will lead to the appearance of similar works on other topics, and stimulate the closer integration of preclinical and clinical teaching in medical schools.  
D. WEITZMAN.

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## SPORTS NEWS

### VIEWPOINT

How many Inter-hospital trophies find their way into the peaceful surroundings of the Library? The reply is, alas, all too short.

Apart from that most excellent and stimulating, albeit sedentary, pastime, Bridge, the activities of the sportsmen of this hospital are distinguished for their inability to obtain any visible reward for their efforts. The ladies, let it at once be said, have covered themselves with glory on the Hockey field, and the loss of that trophy, which has been resident here for the past seven years, would indeed leave the cupboard bare.

It may be, perhaps, appropriate to consider some causes of our apparent failure near the commencement of another academic year.

A recent survey showed that one-third of the people here are either unable physically, or do not consider it worth their while attempting to represent the hospital at any sport. As lamentable as this state of affairs may be, at least it should enable us to take stock and plan accordingly. There appears to be far too diffuse an effort (in fact, through over twenty clubs), to achieve any measurable success. Surely it would be better for us to concentrate preferably on two or three or, at the most, six clubs, and put our whole effort into these. It is much better to have a first team that really is a first team, and not just a collection of those people who are available at the time. The point is obvious without being over laboured. To this end, first it would help if the individual is sure, that although he himself is not in the first, he is, nevertheless, by his action of trying to get into it, helping to keep up the standard of play. Similarly, it would help if future members contemplate joining an already established club rather than helping to create a large number of weaker clubs.

It has been maintained by some that there are not enough talented performers available.

Certainly it would be pleasant to find more than having to depend on a mere handful as at present but, in this connection, it is to be regretted that some whose prowess elsewhere has earned them high honours, should consider that any similar activity here beneath their dignity. This certainly makes the action of the person who takes the opposite view to be the more commended.

There is no doubt that the two most genuine difficulties for sportsmen in this hospital, are time and expense. As regards the latter, the Students' Union have been most helpful, and there is no reason to suppose that they will not continue to be so. The former nut is far harder to crack. One of our chief difficulties is the time spent travelling, often more time is taken in actually getting to Chislehurst or Chiswick than is spent on the field or in the boat. Two things might be done to alleviate the position. First, that the College authorities and clubs can further the improvement of the facilities at Charterhouse Square. Secondly, that a means of transport may be obtained for the use of clubs on some of their more arduous journeys.

Platitudes and vain imaginations are the criticisms to be easily levelled at this, but unless some attempt is made by all concerned, the present predicament will continue, if not actually worsen. Instead, let us look forward to a return to that which was recently said of our Rugger: "A return to the palmy days of the early thirties!"

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### RUGBY FOOTBALL

1st XV v. Reading. Away. Saturday, 27th September. Won 11—8.

In their first game of the season the 1st XV managed to gain a narrow victory over Reading. It was evident that the Bart's players lacked understanding in their play, although this was somewhat understandable due to lack of match practice and the unfamiliarity with the new law changes.

Bart's won the toss and kicked off into a fairly strong breeze. The Hospital at this early stage in the game, looked much the better team, and the summer-like conditions, conducive to open rugby, should have suited the Bart's style of play.

A scrummaging offence on the Reading 25 resulted in a penalty being awarded, which J. H. Pennington had no difficulty in kicking. Bart's were unlucky not to add to this score when an attempt at a pushover try was disallowed. Soon after this, Reading began to improve, and were successful in scoring from a penalty awarded for obstruction by a Bart's player.

Just before the interval M. Phillips received a head injury and had to leave the field, and W. Boladz was then moved out to the wing.

The second half showed an improvement in the Bart's line-out work, due to some good jumping by L. R. Thomas, and the ball continued to be hooked well from the tight scrums.

Pennington did well to kick a 35 yard penalty goal, which brought the score to 6—3 in Bart's favour. Reading then retaliated by charging down a drop out from the 25, and the ball was passed out quickly to their wing who scored in the left corner. The try was converted.

Towards the close of the game, just when defeat seemed unavoidable, Richards broke from a lineout on the Reading 25, passed to L. R. Thomas, who finally sent B. O. Thomas romping over for a try.

The conversion by Pennington was followed immediately by the final whistle.

**Team:** M. Britz, R. M. Phillips, A. B. M. McMaster, J. K. Bamford, G. J. Halls, R. R. Davies, A. P. Ross; B. O. Thomas, J. W. Hamilton (Capt.), B. Lofts; W. P. Boladz, J. H. Pennington, D. A. Richards, L. R. Thomas, R. P. Davies.

1st. XV v. R.M.A., Sandhurst. Away. October 1st, 1958. Drawn 6—6.

The conditions at Sandhurst did not

encourage fast, open play, the ground having taken a severe soaking earlier in the day.

However, both sides did well to throw the ball around, and the frequent handling mistakes were perhaps to be expected.

Sandhurst pressed strongly from the kick-off, and the Bart's defence had a few anxious moments before the initial assault was repelled. Britz distinguished himself with some courageous dives, and returning kicks under pressure. The Bart's forwards soon warmed up, and they began to dominate the line-out, maintaining this throughout the match. Boladz jumped high and successfully, and was well supported. With a plentiful supply of the ball, the backs, R. R. Davies excepted, showed some lack of speed and enterprise, quite understandable with three players having their first game of the season.

Sandhurst opened the scoring. From a line-out near their line, Bart's got the ball back, but the pass to the full-back went astray, and the Sandhurst wing-forward scored an opportunist try which was not converted.

Bart's replied with a fine penalty from Pennington from near the half-way mark. The score remained level until half-time.

After the interval, the Bart's pack began to dominate the loose play, and also improved their tackling. However, Sandhurst came back strongly, and for ten minutes they besieged the Bart's line. They threw away innumerable scoring chances with gay abandon, and Bart's were fortunate in holding them to an unconverted try from the left winger. Then Hamilton urged on his pack to greater efforts, and from a loose Maul, Plant was given the ball. He cross-kicked. The forwards regained possession, and Stevens took the final pass to score wide out. The conversion was missed, and there was no further score.

It was impossible to single out any particular player in a very fine pack, while outside, R. R. Davies played one of his best games for Bart's.

**Team :** M. Britz, J. Stevens, J. C. Owen, A. B. McMaster, J. C. Plant, R. R. Davies,

A. P. Ross ; B. O. Thomas, J. W. Hamilton (Capt.), B. Lofis ; W. P. Boladz, J. H. Pennington, S. H. Rendle, D. A. Richards, R. P. Davies.

#### RUGGER RESULTS

Sat. Oct. 4	Bart's v Trojans	won 12-6
Sat. Oct. 11	Bart's v Woodford	won 16-0
Wed. Oct. 15	Bart's v LX Club	lost 9-0
Sat. Oct. 18	Bart's v U.S. Chatham	draw 8-8
Sat. Oct. 25	Bart's v Old Blues	won 10-0

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#### SAILING CLUB

##### Regatta, 1958

This year the traditional Regatta very nearly had to be cancelled, due to unexpected resistance at departmental level. Thanks to the Dean, however, all ended well, and many hours of work by the Club Secretaries were allowed to come to fruition, the Regatta being held as planned on May 21st to 23rd.

On Wednesday morning, in a rather fresh wind against tide conditions knocked up quite a steep sea, and early arrivals, who went out in the Club's three remaining B.S.C.O. 16 footers, had an invigorating, if somewhat wet, sail.

Later in the afternoon the wind moderated, and everyone was able to go cruising.

Thursday saw the Regatta in full swing, blessed by ideal weather conditions. Ten crews were arranged, five racing in the International Twelve Square Metre Class, five crews in the B.S.C.O.'s. In the afternoon the order was reversed, and thus two heats were sailed for the Commodore's Trophy. The latter saw a sudden drop in wind force such that none, except the winner, was able to stem the strong ebb tide.

In the evening the Club held its Annual Dinner at the Royal Bernham Y.C., followed by a very successful Dance in the Submarine Bar. Although Dances of this sort are a regular feature of U.H.S.C. weekends, Bart's is the first Hospital to hold a Dance at this Regatta.

Unfortunately Friday was marked by a stormy wind, which kept most of us ashore, but Tony Ellens and David Wells went out in well reefed B.S.C.O.'s. It was not possible to sail a final for the Commodore's Trophy, and this remains unawarded for this year. Prizes were awarded to the two heat

winners, other prizes were awarded to the two Housekeepers and Miss Sheila Jones—picked by chance from amongst the occupants of the two tiniest bunk rooms.

Despite the difficult weather, the Regatta was again a great success. One was very pleased to see several Physiotherapists and a Nurse present, and hope more will come next year. Thanks are due to Sally Weeks and Brenda Shaw for their excellent catering, and to Wendy Donaldson and Mike Benninger for their meticulous organisation.

#### RESULTS

##### Commodore's Trophy—Not awarded

##### Heat I

1. D. Wells
  2. R. C. Burt
  3. A. J. Ellison
  4. Miss W. Donaldson
- R. R. Gabriel

##### Heat II

1. Miss B. Thomas
- R. Miss J. Darmedy
- R. B. Duff
- R. K. Walker
- R. D. Welsh

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#### ROWING

The following officers were elected:—

**President :** Prof. L. P. Garrod.

**Vice-Presidents :** Dr. M. Donaldson, Dr. A. W. Spence, Mr. O. S. Tubbs, Dr. J. H. Coulson, Dr. E. F. Scowen, Dr. A. G. S. Bailey, Mr. J. C. M. Currie, Dr. C. N. Hudson.

**Captain :** T. W. Meade.

**Secretary :** B. R. Middleton.

**Treasurer :** G. M. Besser.

**Committee :** J. J. D. Bartlett, N. E. Dudley.

The United Hospitals' Winter Regatta for small boats and junior oarsmen will be held from The London Rowing Club on Wednesday, November 19th.

The Boat Club Dinner will be on the evening of the United Hospitals' Regatta, as usual, to which all old members are welcome. Please write to the Secretary.

#### ASSOCIATION FOOTBALL

**St. Bart's 1st XI v. R.N.C. Greenwich.** October 8th. Lost 0-4. (Played at Chislehurst).

This was the first game of the new season. Our forwards missed a number of chances, and play was more even than the score suggests. Downer and Phillips were playing in the team for the first time, and both performed well.

**Team :** J. D. Mercer ; R. C. Kennedy (Capt.), D. I. Prosser ; C. P. Juniper, G. Haig, I. Downer ; P. B. Savage, A. Andan, P. Watkinson, M. Phillips, M. I. M. Noble.

**St. Bart's 1st XI v. Lancing College Old Boys.** October 11th. Won 3-0. (Played at Chislehurst).

From the kick-off Bart's went into the attack, playing much more forcefully and directly than in the previous game. Forwards and halves were ever-ready to try a shot, and the Lancing goal was under heavy pressure. Their defence played well, and Bart's had a number of goal-worthy efforts scrambled away. At half-time we led only by 1-0, scored by left winger Kuur, with an astute lob over the goalies head into the far corner of the net. Kuur added a second goal after half-time, and Prosser scored a third with a mighty drive from 35 yards. Juniper, at centre half, dominated the centre of the field. Gletsu and Downer played strongly at wing half, and Savage and Kuur were powerful on the wings. In all, an encouraging start for a good season.

**Team :** J. D. Mercer ; R. C. Kennedy (Capt.), D. I. Prosser ; I. Downer, C. P. Juniper, A. Gletsu ; P. B. Savage, A. Andan, P. Watkinson, H. Phillips, J. B. G. Kuur.

##### Cambridge Tour—October 23-25

Trinity Hall	..	4	St. Bart's	..	1
St. John's	..	1	St. Bart's	..	2
King's	..	1	St. Bart's	..	0

★

#### THE ALPINE CLUB

Four members of the Bart's Alpine Club have recently returned from a very rewarding and exhilarating fortnight in Chamouix, where several good rock ridges and snow climbs, including Mont Blanc itself, were achieved.

It is proposed to have a beginners' meet, probably in North Wales, centred at the Climbing Club hut in the Ogwen Valley, during the second week in November. Any Spartans who feel the call of the hills will be very welcome.

Prior to the meet, the club will have two or three of its habitual day trips to the Sandstone cliff near

Tunbridge Wells.

Any enquiries should be sent to J. S. Mather College Hall.

★

### RIFLE CLUB

University of London Rifle Meeting, May 10th, 1958.

Although this was primarily an individual event, coaching not being allowed, a team of four was entered for the University team championships' event. Two sighting shots and ten shots to count were fired at 300, 500 and 600 yards.

Despite a cold cross-wind, conditions were excellent, and the visibility improved throughout the day. Some ominous clouds were in evidence when shooting started, but these had dispersed by lunch-time and failed to reappear.

At 300 yards we had a lead of three points over Imperial College and Guy's Hospital, but by the conclusion of shooting at 500 yards, this margin was reduced to two points by Imperial College. Our position was restored at 600 yards, and the Team Championship won by three points.

Scores were :-	
R. P. Ellis .. .. .	138
G. R. Hobday .. .. .	135
J. D. Hobday .. .. .	130
R. W. Gabriel .. .. .	124
Aggregate .. .. .	527
Imperial College A .. .. . 524	
Guy's Hospital .. .. .	518
Imperial College B .. .. .	517
St. Mary's Hospital .. .. .	499
Westminster Hospital .. .. .	Retired

In the Individual Championship, R. P. Ellis was placed second after an exciting shoot at 600 yards, where the first and second places were in doubt until the last three shots. G. R. Hobday was placed ninth.

**Bart's Prize Meeting, May 18th.**

This meeting was the last practice shoot before the United Hospitals meeting. We were very glad to see Dr. Aumonier, a Vice-President, at the shoot, and also to see him perform very ably on the firing point.

The II. Waring Cup for the highest aggregate score, was won by G. R. Hobday with a score of 93/100. (2ss+10 at 300 and 600 yards.)

The Messrs. Benetfink Handicap Cup was won by M. Bascombe, with a gun-score of 78/100 plus 11 bonus points.

Handicaps were awarded prior to shooting on the following basis :-

- Class 1. Scratch score.
- Class 2. 25 per cent of points dropped added to gun-score.

Class 3. 50 per cent of points dropped added to gun-score.

Conditions were good, with an easy wind and excellent visibility at 300 yards. At 600 yards, however, the wind became erratic and tended to "fishtail." It was at this range that G. R. Hobday made his lead certain, as he was the only competitor able to master this variation.

United Hospitals Armitage Cup Meeting, June 1st.

As the holders of the Challenge Cup and winners of the University Championship for 1958, all boded well for the same team to retain its position at this meeting. These hopes were, unfortunately, not fulfilled, and of the two teams entered, neither the "A" team or "B" team won their respective competitions.

A tendency to reduce the number of practices was apparent at the Hospital meeting, and this meant that the teams were not in as good a state of training as they had been at the University meeting. This is not unexpected for, following the cessation of production of .303 ammunition by the Government, the cost of shooting has doubled compared with last season. Because of this, individual members found that after a few early practices which led up to the success of the University Meeting, they had to reduce drastically their activities at Bisley.

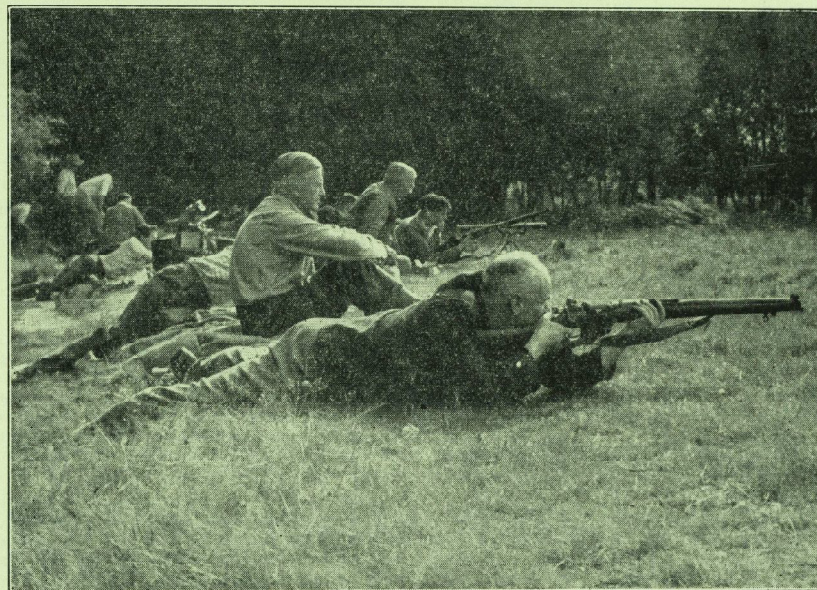
Secondly, it is a fair criticism that we were, in fact, over-confident following our previous successes and rather "trigger-happy"! Temperament has much bearing on the performance of a team in this sport, and many an over-confident shooter is struck-down from time to time in this manner. It is, however, unfortunate that it should have been allowed to happen, despite the fact that Guy's the winners, produced an exceedingly high score.

Conditions were relatively tricky, with a gusty wind angling from 7 to 9 o'clock and patches of shadow running across the targets as clouds passed over. There was a short shower at 200 yards which caught the last pair, and may have resulted in a few shaky shots. Nevertheless, the five point deficiency on the leaders at 200 yards was steadily increased to one of 13 points by the completion of firing at 500 and 600 yards.

The highest score of the day by a Bart's man was made by R. G. Miller, who fired consistently well to gain the Bart's Donegall Badge, and F. A. Strang is to be congratulated on his 33/35 at 200 yards, which won him a tankard.

Scores were as follows :-

<b>A Team</b>	
G. R. Hobday .. .. .	94
J. D. Hobday .. .. .	94
R. P. Ellis .. .. .	93
R. W. Gabriel .. .. .	87
Aggregate .. .. .	368
Guy's .. .. . 383	
St. Thomas's .. .. .	380
London .. .. .	375
Westminster .. .. .	369



Staff v. Students Match 1958.

<b>B Team</b>	
R. G. Miller .. .. .	95
F. A. Strang .. .. .	92
A. M. Holloway .. .. .	83
M. Bascombe .. .. .	75
Aggregate .. .. .	345
Guy's B .. .. .	359
St. Thomas's B .. .. .	355

#### Smallbore Individual Trophies

Lady Ludlow Challenge Cup for the highest seasonal average to

- J. D. Hobday, 98.62 (1957 holder)
- G. R. Hobday, 98.20.

Mrs. Waring Handicap Cup, awarded for the greatest increase in average over the previous season, or first two month's shooting for new members, to :-

- Miss A. M. Holloway, 100.384
- D. Hobday, 100.142

#### Match v. The London Hospital, September 7th.

A fullbore match was fired against the London Hospital on the Hurstpierpoint Range at Hassocks,

on September 7th. Weather conditions were ideal until evening, when the sun is at rather an awkward angle above the targets. Shooting took place at 300 and 500 yards, and at the conclusion, we had a comfortable lead over our opponents.

<b>Scores</b>			
	300	500	Aggte.
R. P. Ellis .. .. .	46	47	93
R. W. Gabriel .. .. .	43	43	86
F. A. Strang .. .. .	42	43	85
J. D. Hobday .. .. .	44	40	84
M. T. Barton .. .. .	40	42	82
Miss A. M. Holloway .. .. .	37	40	77
	TOTAL .. .. .		507

London Hospital .. 484

#### Staff v Students Match

The Staff v Students match was fired at Bisley on September 14th, and the Staff are to be congratulated on their victory, which is only the second on record since 1908. Teams of eight competed under conditions which can only be described as unique, and much apology should be made for the deficiencies of the N.R.A. markers, and for the voluble discourse

which rolled unceasingly from the club using the neighbouring targets. Because of these it was impossible to complete a shoot of 2ss+10 at 300 and 600 yards, although the staff had adequately demonstrated their superiority at 300 yards, and the Students could only make a gesture of a recovery at 600 yards.

## Scores

STAFF	300	600	Aggte.
Dr. J. E. Craddock-Watson	46	18	66
Mr. N. A. Jory	42	20	62
Mr. R. C. Farrow	41	21	62
Mr. C. M. Vickery	40	17	57
Mr. H. Jackson-Burrows	37	16	53
Mr. R. I. D. Simpson	40	4	44
Dr. F. J. Aumonier	48	—	48
Mr. F. A. J. Alment	46	—	46
TOTAL			446

STUDENTS	300	600	Aggte.
R. W. Gabriel	44	21	65
P. N. Riddle	40	18	58
Miss A. M. Holloway	38	19	57
J. D. Hobday	42	13	55
C. J. Griffiths	39	16	55
J. B. R. Parker	33	16	49
R. P. Ellis	45	—	45
F. A. Strang	43	—	43
TOTAL			427

The Club is most grateful for the hospitality extended to it by the Staff at the North London Rifle Club and, in particular, to Mr. Jackson-Burrows for the lunch, and to Mr. Alment and Dr. Aumonier for their organisation of the Staff team.

These matches conclude the 1957-58 shooting season, which has been a very successful one for the club. Throughout the year teams from the Club have fired in matches, both fullbore and smallbore, of which 28 were won and 10 lost.

Some of the individual achievements so far not reported are as follows:—

G. R. Hobday has fired for United Hospitals and London University teams throughout the year, and was placed 12th in the Grand Aggregate at the N.R.A. Imperial Meeting at Bisley in July.

R. P. Ellis has captained the United Hospitals' Rifle Club for the past year, and was placed 2nd in the London University Individual Championships in May.

J. D. Hobday has fired for United Hospitals' Small-bore teams.

Miss A. M. Holloway was elected Smallbore Secretary to the United Hospitals' Rifle Club for the 1958-59 season.

R.P.E.

## What is in a name?

**T**he present-day cult of impersonality discourages the use of eponyms; and while the medical historian will brush away a nostalgic tear, the hard-pressed student is unlikely to mourn. It needs a feat of memory to answer the question: "What muscle is supplied by the nerve of Bell?" But happy the student whose examiner asks, "Which muscles are supplied by the eighth cervical nerve?"

Many eponyms are downright misleading. We might picture Christmas Disease as a surfeit of turkey, or mistletoe blush; but it is so called because the first patient reported was called Christmas. Similarly caesarean section was not first done by the redoubtable Caesar Hawkins, nor (it is now thought) by some Roman surgeon who, thus, delivered Julius Caesar; the word comes from the Latin for "cut". Bornholm is not a big, blue-eyed Scandinavian physician, but an island, and Pink was not a celebrated Victorian paediatrician with ruddy cheeks and side-whiskers, but the colour of the hands of children with Pink Disease.

But not even the most enthusiastic eponymoclast can claim that the alternative names for diseases are always crystal-clear; thus "pellagra" and "beri-beri" are terms which convey a masterly paucity of information. Then there are the conditions which do not claim a name of any kind—for example, the milder B vitamin deficiencies. But if we cannot name them we can often infer their presence (after serious illness has been excluded) when a patient takes an inadequate diet (e.g., an old person living alone) or has extra needs (e.g., in pregnancy and lactation), and complains of such mild symptoms as loss of appetite, fatigue, constipation and paraesthesia. And we can treat them in a very pleasant fashion by prescribing Bemax. All the B-complex vitamins are contained in wheat germ, and Bemax is pure stabilized wheat germ; it is the richest natural vitamin-protein-mineral supplement. You just sprinkle it on your food.

Issued in the interests of better nutrition by

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# ST. BARTHOLOMEW'S HOSPITAL JOURNAL

Vol. LXII

DECEMBER 1958

No. 12

## EDITORIAL

These pages of this December issue conclude the present volume of the St. Bartholomew's Hospital Journal—LXII. Another *Journal* completed, the termination of another year, and soon this copy will share the fate of its predecessors and find its way either into a waste paper basket or on to some dusty shelf, or even into the darker recesses of some cupboard or drawer. Three hundred and fifty pages of news, views, articles, photographs, sport, letters and reviews—the contributions by the few for the perusal and enjoyment of our many (we hope) readers. December, the logical time to sit back and review the *Journal's* year. How many Editors must have wondered how, and from where, all their material originated? Still more surprising, is the constant last minute inspiration, the germ of an idea, the salvation which is transformed eventually into an Editorial. Another source of wonderment is that relatively few people genuinely are offended for, at times, the Editor appears to be the only fox in the Hospital Hunt.

An outstanding feature of the 1958 editions has been the relatively large number of travelogue and foreign-type articles. This month is no exception, for you are invited to take a peep at Peru. It is hoped to publish similar articles in the future editions, because they, and the all too few humorous articles, provide the light relief from papers of a more clinical bias. A pleasing feature of recent months has been

the increase in sports news and of Letters to the Editor—particularly from old Bart's men.

Research for historical articles has necessitated the reading of the *Journals* of forty fifty and sixty years ago. These *Journals* constitute very interesting reading matter and leads us to speculate which of our 1958 names will demand some recognition by future generations of readers; even an Editor, who in 2008, prepares a "Fifty Years Ago."

December is here, and Christmas is not far removed, and now the hustle and bustle becomes more intense. Since early October a subconscious reaction to the inexorable approach of Christmas has made its presence felt, like the uneasy stirring of a troubled beast. No other occasion appears to have such a profound effect upon all members of the Hospital. Whereas outside the Hospital walls people associate Christmas with family reunions, here within the confines, the demands of Hospital life transmutes our activities and energies into the communal channels of pleasure.

For several months the Sisters have adopted a mellow attitude towards the the blight of their lives—the clerks and dressers. We can only assume that the countless attendant disadvantages associated with unleashing such "high spirited" young gentlemen upon the wards, are outweighed by the advantage of the young male when it

comes to Christmas decorations. For which sister would admit to another ward being superiorly decorated?

Those ill-disguised cocoa tins, resplendent upon the tea trolleys, and inviting contributions for the children's Christmas Party, are as indicative of the approach of Christmas as the decorations outside Selfridges.

Many hours of "head scratching," usually devoted to crosswords, have been deviated recently to the study of lyrics for the Ward shows. What rhymes with Pro? Is that too obscene? Will the patients understand it? Will D----- recognise himself in this sketch?

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#### SUCCESS STORY

The Department of Medical Photography of St. Bartholomew's Hospital scored a hat-trick of awards at the annual exhibition of medical photography organised by the Medical Group of the Royal Photographic Society.

They gained the award for the best teaching series of photographs, with a mount showing a series of pictures of involuting cavernous naevus in a patient over several years; the award for the best colour print, with a dye transfer print of a thoracic duct shown by patent blue, made by A. L. Wooding, of St. Thomas's Hospital Medical School, from a colour transparency taken by the St. Bart's department; and the award for the best quality print—made by Miss A. E. Milne, chief assistant in the department.

Of the 65 entries selected for exhibition, the Department of Medical Photography was responsible, in part or as a unit, for eleven.

#### XIV DECENNIAL CLUB

The third Annual Meeting of the Fourteenth Decennial Club is being held this year on Friday, December 12th, at 6.30 p.m., in the White Hart (opposite the Giltspur Gate of the Hospital).

More and more the talk is of Christmas. Firms consult the duty roster. The nurse complains that this will be her third consecutive Christmas on night duty. Many more look wistfully at their bank balances. Faster and faster turns the vicious circle.

Finally, the members of the *Journal* staff wish all our readers a very happy—and not too busy—Christmas and a successful 1959. This Editor extends his gratitude to all the very many people who have been so considerate and co-operative and who have tolerated all his humours during the past six months, and without whose help his task would have been impossible.

Anyone who entered Bart's between 1945 and 1955, and who is now qualified, is eligible to be a member of the Club.

The Secretaries have sent an invitation to the Meeting to as many members as possible; there are, however, still some addresses we do not have, so would those who wish to attend this meeting and be notified of future ones, please get in touch with J. A. Parrish, St. Bartholomew's Hospital.

#### RECENT LECTURE

Dr. G. F. Abercrombie delivered the fifth James Mackenzie Lecture on "The Art of Consultation" in the Great Hall, B.M.A. House, Tavistock Square, W.C.1, on November 22nd, 1958, at 11.30 a.m.

#### A KENT RAHERE SOCIETY?

Are there any Bart's men living in Kent and who are interested in forming a Kent Rahere Society? If so, please read "Letters to the Editor."

#### ART EXHIBITION 1958

The Art Exhibition of 1958, held in the Great Hall from October 6th to 11th, seemed to be the best ever, and as memory is notoriously kind, it probably was. Certainly its 180 paintings, drawings, sculptures and miscellany was the largest representative collection from its artists the Hospital has seen. The advantage such an occasional collection has over the annual exhibition of an art club or society, is that it is informal, often whimsical and largely uninhibited. Even the prices listed in the catalogue seemed to speak the sorrow of separation rather than commercial egoism. There was food for most tastes here, and if the selection chosen by this critic for appraisal is not yours, bear with him and remember that "the good critic is he who relates the adventures of his soul among masterpieces."

Still life often betrays the painter-philosopher, and Mrs. Spence with her quiet, competent lantern and oranges, nuts and wine, induced a quick serenity, sustained by Gerald Duff's deceptively simple "Water Jug." D. M. Shaw's cleverly framed composition and W. G. Scott Brown's delightful harmony of summer flowers. Amongst several flower subjects, Woodhouse Price seemed to achieve informality best with his anemones, whilst Bryan Brooke returned this year with another great cry for the plant in its setting: his oasis of lace-leaved succulents amongst the bricks.

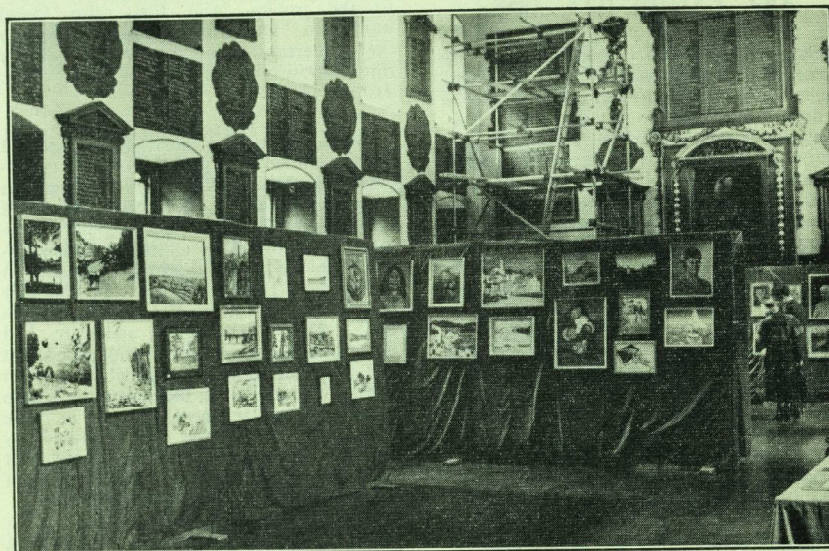
The landscapes invited stern criticism, chiefly because of the standard set amongst the oils by Duff's "Manningtree" and "Fifi Goes for a Walk"—space, grace and movement in the idiom of the expert. There was space, too, in Ogier Ward's "Studland Bay" and Hall-Smith's "Breckland"; in Dr. Bourne's "Wiltshire Landscape" he captured the immense feeling of the chequer-board under the foot of the downs, while Reginald Morshead caught well the harmony of winter tones in his Sussex scene. Amongst the few seascapes, A. P. Bentall's "Ile de Cézembre" breathed the grey sea-wrack of the Breton coast, so that one shivered and turned to the warmth of Sir Harold Gillies' landscapes. His paintings always bear the mark of a traveller who has mastered subtle, unfamiliar colouring, ranging from the arctic

to the tropics. Ann Elias also found warmth in "Dubrovnik Harbour," asleep in the Mediterranean manner, and J. S. Malpas a riot—almost a commotion—of colour at St. Tropez.

Intense clarity in a subject that demanded it was achieved by Prys-Roberts in his mountain top study, and other happy combinations of colour and clarity were Brian Ballantine's "Goldfinches" and "Pied Wagtail." Few of the smaller outdoor subjects had the lightness that was so strikingly effective in Jephcott's "Derelict House," or the airy grace of the trees in W. V. Cruden's "Fountain." This latter subject, naturally, had many treatments, and most emphasised that it is a portentous and traditional rather than a lovely object. Rhoda Biffen gave the Square a more realistic treatment, however, in "The Red Umbrella." "The Charterhouse" by Barbara Barnard, was an ambitious, but successful, view from the upper fastness of College Hall.

The urban scene calls for imaginative expression, and Ann Cowper showed it in a blue "Bryanston Mews East," which was highly effective. Gillian Portwood's "Man Made, Salford," spared no blushes in its portrayal of the black crucible of industry, and her paintings have a critical quality which is very promising. So, too, were the clever planes and perspectives of Ann Gregory's "Canonbury." Portraiture seldom features large in these exhibitions, and amongst the few Bryan Brooke's "Lucy Harwood" was outstanding. Henry Poirier's "Lady with Viola" caught the mood of concentration, while Richard Strong's "Demi-Nuc" was a lively and impressive sketch of the relaxed model. The grouped subjects of Geoffrey Sparrow were wonderfully nostalgic, and his "Pony Sales" deserved the red label it quickly won. Francis Boston conveyed a sense of hectic gaiety in "Le Club Contemporain," and some of his breathless urgency caught on at "The River at Battersea" and amongst his autumn trees.

Beth Jukes showed "Richard and Julio," and in them her familiar and even greater mastery of the form and grace of the child. What a pity it was that one could not handle the ivory carving of Sparrow's "John Jorrocks," because the skill, humour and



character in its detail were enchanting, and John's face would have made the ghost of Hogarth smile. There was humour, too, in the lines of Miss Hector's pelican and the fishbones on Angela Boston's plate; these items of pottery were beautifully finished.

Abstract painting is especially a matter of subjective experience, and, therefore, frequently suspected and ridiculed. It is, of course, open to the same technical criticism as realistic subjects, and on this score Jepicott's "Composition" came off well. In his "Study," one could feel a certain sense of pity for the predicament of "Les Morts," but they lacked the impact of Geoffrey Theobald's "Compositions" (which had been skilfully hung in their correct positions), especially "II," which conveyed a most uncomfortable feeling of some violent caged experience. A viva perhaps. But the pain didn't last; there was so much humour at hand in Bridgit Guy's "House that Jack Built" (what she could do to a chap's socks!), in the cats on George Innes's rooftops, and in that curiously realistic incarnation of the elusive but

"Rightful Duke of Hampshire." And, on that note of optimism and escape, it seems proper to end an October day's journey in the company and the imagination of the sixty-two artists who contributed to the fifth Art Exhibition, organised by an energetic Committee, whose chairman, Dr. Geoffrey Bourne, will be most sadly missed by all those in the Hospital for whom Medicine is an art and Art a medicine.

E.A.J.A.



#### JOURNAL OFFICERS

Applications are invited for the post of Assistant Editor to the Journal.




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Mr. R. S. Corbett's last round (on right)

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#### ANNOUNCEMENTS

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##### Engagements

GOODLIFFE—GRAM.—The engagement is announced between Dr. David Goodliffe and Helga Gram.

THOMAS—FORSTER.—The engagement is announced between Dr. Gareth E. M. Thomas and Dorothy M. M. Forster.

##### Marriages

HARCOURT—SILK.—On August 30th, Richard Brian Harcourt to Dorothy Margaret Silk.

PATTERSON—STOKES.—On October 25th, Mark Jonathon Lister Patterson to Jane Stokes.

##### Births

BEXON.—On October 10th, to Muriel, wife of Dr. Wallace H. Bexon, a daughter (Alison)—a sister for Fiona.

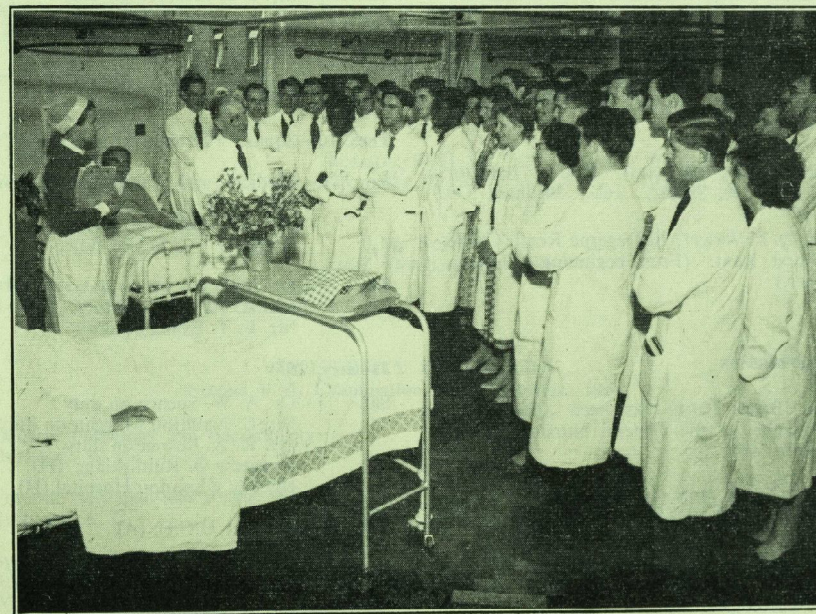
DAVIDSON.—On May 15th, to Edith, wife of Dr. John K. Davidson, a son (Alistair).

DURHAM.—On September 25th, to Mabel, wife of Surg. Lieut. Cmdr. P. D. A. Durham, R.N., a brother for Anthony (Jonathan Mark).

EVANS.—On October 10th, to Sheila, wife of J. W. G. Evans, M.B., M.R.C.O.G., a brother for Elizabeth and Philip.

MENON.—On October 20th, at Sibul, Sarawak, to Mary, wife of Dr. J. A. Menon, a sister for Jane.

WYATT.—On October 13th, to Margaret,



wife of Dr. Arthur Powell Wyatt, a son,  
John Henry Aldworth.

### Deaths

CRUDEN.—On October 31st, Dr. William  
Victor Cruden. Qualified 1927.

WILSON.—On October 21st, Dr. John Stephen  
Herbert Wilson. Qualified 1935.

★

### NOTICES

#### Changes of Address

DR. COLIN W. COOLE, 6 Hurst View Road,  
South Croydon. Tel.: Cro. 5979.

DR. A. W. MARRISON, M.B.E., 66 Canford  
Cliffs Road, Westbourne, Bournemouth.

DR. and MRS. F. G. MORSE, The Knoll,  
Gillingham, Dorset. Tel.: Gillingham  
148. Surgery as before: Clive Vale,  
Gillingham, Dorset. Tel.: Gillingham  
16.

DR. BRIAN R. WHITTARD, "Cobbs," Itchenor,  
Chichester, Sussex. Tel.: Birdham 535.

DR. A. P. WYATT, 20 Degerna Road, Chisle-  
hurst, Kent. (From beginning of Decem-  
ber.)

#### Appointments

MR. BASIL HUME has been appointed a  
member of the General Nursing Council  
until 1963.

JOHN ASTON, F.R.C.S., has been appointed  
Orthopaedic Surgeon to the Hospital.

R. CAMPBELL CONNOLLY, F.R.C.S., has been  
appointed Consultant to the Dept. of  
Neurological Surgery.

## CALENDAR

### December

- Fri. 5—Rugger Club Ball
- Sat. 6—Dr. Graham Hayward on duty  
Mr. A. W. Badnoch on duty  
Mr. R. W. Ballantine on duty  
Rugger v Esher (H)  
Soccer v Caledonians (H)  
Hockey v Lloyds Bank (H)
- Mon. 8—Chess v U.C.H. (A)
- Tues. 9—Squash v I.C.I. (A)
- Wed. 10—Soccer v St. Mary's Hospital (H)  
Ladies' Hockey v Guy's Hospital  
(H)  
Abernethian Society, "Symposium  
on A.I.D."
- Sat. 13—Dr. E. R. Cullinan on duty  
Mr. J. P. Hosford on duty  
Mr. C. Langton Hewer on duty  
Rugger v Saracens (A)  
Hockey v Westminster Bank (A)  
Ladies' Hockey v Middlesex Hos-  
pital (A)
- Tues. 16—Squash v Jesters (H)
- Sat. 20—Medical and Surgical Units on  
duty  
Mr. G. H. Ellis on duty  
Rugger v U.C.S. Old Boys
- Sat. 27—Dr. Bodley Scott on duty  
Mr. A. H. Hunt on duty  
Mr. F. T. Evans on duty

### January, 1959

- Sat. 3—Dr. A. W. Spence on duty  
Mr. C. Naunton Morgan on duty  
Mr. R. A. Bowen on duty  
Rugger v O. Ruitlishians' (H)  
Hockey v London Hospital (H)
- Wed. 7—Soccer v U.C.H. (A)
- Sat. 10—Dr. Graham Hayward on duty  
Mr. A. W. Badewoch on duty  
Mr. R. W. Ballantine on duty

## EXAMINATION SUCCESSES

### CONJOINT BOARD Final Examination, October, 1958

<b>Pathology</b>		
Roles, N. C.	Haslam, M. T.	Smith, R. G. L.
Warrander, A.	Davies, D. G.	Birt, A. M.
Bonner-Morgan, R. P.	Wills, G. T.	Sime, M. O.
<b>Medicine</b>		
Roles, N. C.	Haslam, M. T.	Davies, D. J. C.
Price, D. J.	de Alarcon, R.	Smith, R. G. L.
Robinson, T. W. E.		
<b>Surgery</b>		
Haslam, M. T.	Davies, D. J. C.	de Alarcon R.
Cawley, M. I. D.	Bannerman-Lloyd, F.	Matthews, T. S.
Seeman, H. M. I.	Simons, R. M.	
<b>Midwifery</b>		
Davies, D. J. C.	Price, D. J.	Cawley, M. I. D.
Bannerman-Lloyd, F.		
The following have completed the examinations for The Diploma:—		
Davies, D. J. C.	Cawley, M. I. D.	Bannerman-Lloyd, F.
Matthews, T. S.	Seeman, H. M. I.	Simons, R. M.

### CONJOINT BOARD First Examination, September, 1958

<b>Pharmacology</b>		
Marshall, R. D.	Thomson, R. G. N.	John, R. W.
Donaldson, W.	Warrander, A.	Roden, A. T.

### L.M. S.S.A. Final, October, 1958

**Medicine**  
Tooth, J. S. H. (Diploma conferred)

### UNIVERSITY OF OXFORD Second B.M. Examination, Long Vacation, 1958

<b>General Pathology and Bacteriology</b>		
Burke, C. W. A.		
<b>Forensic Medicine and Public Health</b>		
Branfoot, A. C.	Lyon, D. C.	Wells, D. P.
<b>Special and Clinical Pathology</b>		
Branfoot, A. C.	Ellis, R. P.	Lyon, D. C.
Wells, D. P.		



## UNIVERSITY OF LONDON

General Second Examination for Medical Degrees, September, 1958  
Diamond, J. G.

## ROYAL COLLEGE OF SURGEONS

The following Candidates were successful in the Fellowship Examination of the Faculty of Anaesthetists in July, 1958:—

Keil, A. McL.

Muir, B. J.

Stanton, T. J.

## FIFTY YEARS AGO

The Editorial announced that Lord Sandhurst had been appointed Treasurer of the Hospital. Prior to becoming Hospital Treasurer, Lord Sandhurst's career had included a Commission in the Coldstream Guards, being a Lord in Waiting, Under-Secretary of War and Governor of Bombay.

Mrs. Boyd bestowed £1,000 to provide scientific apparatus for the then new Pathological Laboratories, as a memorial to her husband Alfred.

It was found that charging admission to the Rugby ground at Winchmore Hill was proving far more successful than had been anticipated. Two members of the Hospital XV were selected to represent London v. Australia.

## Articles:

"Notes on Persia of Today," by Dr. A. R. Neligan.

"Big Game Shooting," by Dr. Percy Rendall:—an abstract of a very successful lecture given to members of the Students' Union and the Nursing Staff.

"A Case of Lymphatic Leukemia Treated by Atoxyl and X-rays," by A. J. Kendrew.

Hither Green. Fever or fervour? (on right)

## CANDID CAMERA



Is this ethical?

★



## THE MOUNTAIN INDIANS OF PERU

by PIERS RECORDON

Our chief aim, when we went to Peru in 1956, was to catch a large number of house mice alive. It was a splendid chance of experiencing life at high altitudes and of catching a glimpse of the fascinating social, physiological and medical problems posed by an unusual environment.

The purpose of our expedition was to investigate the effect of altitude on the mutation rate of living organisms, with especial reference to the accumulation of mutations in populations exposed to a raised background of radiation. In Peru, there are populations established at altitudes of 15,000 feet and above. At this altitude there is a six-fold increase in cosmic radiation, which should cause a two- or three-fold increase in total background radiation.

Direct measurement of the mutation rate was to be made by our third member, using the biochemical mutants of the maize Smut fungus. These mutants differ from the wild type in requiring certain amino acids for growth. The rate of back mutation to the wild type was to be measured at various altitudes.

The accumulation of mutations was to be estimated in populations of house mice, living at various altitudes. Samples were to be taken back to Cambridge for inbreeding experiments. An increase in mutation rate was likely to lead to a larger accumulation of deleterious mutations. These would be unmasked by inbreeding and would cause a more rapid decline in viability (litter size, percentage of young surviving to maturity, etc.). Thus, the rate of decline in viability of the high altitude stocks was to be compared with that of sea level controls.

During our mouse hunting Sydney Harland and I came into close contact with the Indian people, and we got to know them quite well from an unusual point of view. I should like now to record some of our impressions of their way of life, and to sketch

briefly some observations made by physiologists and doctors, many of whom we were lucky enough to meet.

Geographically Peru is divided into three distinct but contiguous zones. The populations merge imperceptibly from the dry coastal zone into the high altitudes and thence across the Andean watershed, to the humid rainy forests of the Amazon basin.

## The Coastal Zone

Life in the coastal zone is unhealthy. Irrigation streams flow along terraced mountain sides, bringing drinking water and refuse from one village to the next. As sanitation is usually entirely lacking, people tend to defaecate wherever they choose. Under such conditions, with flies everywhere, with children roaming around and with dogs, poultry and guinea pigs wandering into the houses as they please, it is not surprising that Typhoid fever, Pasturella, worm infestations and many other diseases are endemic.

In one hut, a mother showed me her baby, which had obvious signs and symptoms of Oxyuris infection. Her husband was in bed with severe diarrhoea and fever; while she herself had collected a specimen of her stools, in which I later identified numerous segments of *Taenia solium*. She seemed far more worried about these than about all her family's "common-place" maladies.

## The High Altitude Zone

The mountain populations are almost purely Indian. Wheat, lupins and potatoes are grown up to 13,000 feet, but above this height vegetation is sparse, due to anoxia and cold (average night temperature,  $-15^{\circ}$  Centigrade). In Morococha, 15,000 feet, a lettuce takes a year to mature, and annuals seldom flower within three years, even when grown in a warm room.

Between 13,000 feet and 16,000 feet there are vast areas of grassland, lakes and rock, where Indians make a living from herds of llama, alpaca and sheep, selling meat and wool in exchange for maize, potatoes and coca. Although the population is mainly agricultural, there are many mining communities in which the standard of living ranges from appalling squalor to relative comfort, depending on the generosity of the employers.

Most workers come to the mines from the agricultural villages. Sometimes they bring their wives and families with them, but often the wife is left behind to till the village land. Much of the land is communal, and the villagers are responsible for looking after it. At harvest time there is a general exodus from the mines to the villages.

Wherever we went, our fame spread. We visited the houses of all the people who thought that they had mice. In fact, there was always great competition amongst the housewives to see who had the most mice in her house. We were invariably followed by a procession of children carrying our traps, food and torches. It was a comic sight to see the entourage streaming into some tiny hut until it was so full that the despondant owner had to turn away the stragglers, who would stand outside howling.

Huts, in the sierra countryside, are thatched with hay. There are no windows, and smoke from the fires escapes through the door or percolates through the roof. In less remote districts, houses are built of adobe and have corrugated iron roofs. They usually have one room. In it live the whole family, from grandparents to grandchildren, guinea pigs and sometimes chickens, rabbits and pigeons as well. Guinea pigs are a great asset; not only do they run around and eat whatever is dropped, they also provide delicious meat.

The rooms were often dark, so we had to bend low to avoid getting caught in llama meat, maize cobs and skins hanging from the ceiling, and take care not to tread on babies or guinea pigs. We would search with our torches for small black mouse droppings, and lay our traps in the most inaccessible places, out of reach of meddle-

some children. This involved crawling under beds and delving beneath many strata of belongings, such as old tins, sacks, empty bottles and sundry odds and ends which constitute the family's great possessions. Nothing must ever be thrown away. The smells were very unique and very powerful—similar from house to house. Our contacts scarcely could have been closer, yet we picked up no lice, fleas or ticks during our long stay at high altitudes.

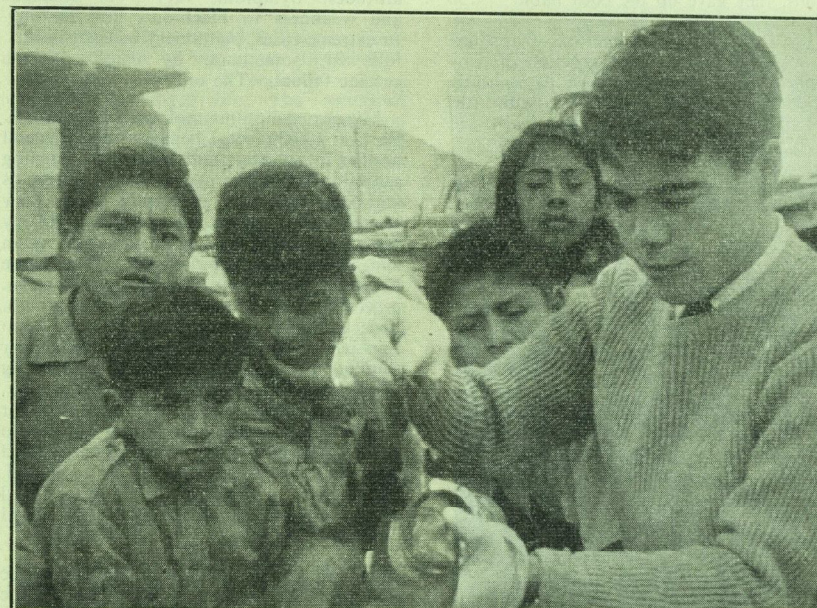
We used to tell the parents to forbid their children to touch the traps, because the doors shut very easily. Too often, however, we found the trap door closed, but no mouse inside. Then the parent would ruefully confess that a mouse had gone inside and had made such a noise that the father, unable to resist the temptation, had opened the door for a peep inside. Whereupon the mouse had dashed out at high speed and, although he had been lucky enough to catch it again, it had bitten him so severely that he was obliged to let it go.

With three notable exceptions, Indians are not born mouse catchers. We used to offer rewards for each live mouse caught without a trap. The problem was beyond the children, but one man brought us fourteen mice in an evaporated milk can; another came with six mice in a tea pot, and a third with seven mice tied together by their hind legs.

Indians have a cruel attitude towards animals. Dogs seem to exist only as targets for stone throwers. Their attitude towards children is scarcely any better. I once watched a mother thrashing her three-year-old daughter with a double leather strap. After repeated, vicious strokes, the child toddled off howling, only to be pursued and again thrashed soundly. In extreme cold, children run about with bare feet, and it is not uncommon to see a naked child standing in the snow while its mother washes its garments.

They seem almost indifferent to cold and fatigue. One night, when we were returning home in heavy snow, we stopped our truck for an Indian woman and her six-year-old child. They had walked eight miles to market and were returning home again.

The struggle for existence is apparent



Sydney Harland caging a coastal mouse

enough; only the fittest can survive. Infant mortality is high. Most die from bronchopneumonia, following influenza or whooping cough. Frequently, we found sick, febrile children, but their mothers' attitude was invariably one of casual disregard; for a child is hardly considered one of the family until it is seven.

In general, the healthy appearance of the mountain Indians surprised us. Children had rosy, slightly cyanosed cheeks, cracked by the dry air and ultra-violet light. Their lips and gums were healthy, and their teeth white. We saw no obvious cases of malnutrition in people under 25.

#### The Coca Habit

Older people looked less healthy. Most chewed coca leaves. These leaves are brought

up from the jungle and are distributed throughout the country. Their sale is particularly large in the high altitude villages. The active principle, cocaine, is released when a small amount of lime is added to the mouthful of leaves. It numbs sensation in the mouth and cheeks, and is said to dull sensations of hunger and fatigue, inuring the body to hardship. The workers' powers of endurance are remarkable, and they can work for several days on very little food. Their faces become expressionless and haggard; their intelligence flags. By encouraging the use of coca, the Spaniards were able to enslave the people cheaply.

People with experience amongst the Indians told us that addiction to coca was the result of their degenerate condition, rather than the cause of it. When natives were given adequate nutrition and better living con-

ditions, they gave up the coca habit.

Coca is not without its merits. It fortifies those who work under the cruellest of conditions, such as those who drive llama trains across nearly impossible country with little more than a handful of parched maize for sustenance.

Alcoholism is also a problem. Life is so hard that many Indians, whenever they have enough money, drink themselves into a stupor. On many farms, part of the wage is paid in liquor. We were told that increasing the salary merely has the effect of lessening the amount of work done, since they can afford to get drunk on less work. But, considering the hardship under which they live, refuge in alcohol is understandable.



A flask of *acquadiente* (90% alcohol), widely drunk in mining communities

#### Some Physiological Aspects of Life at High Altitudes

In Peru, it is possible to reach altitudes of more than 16,000 feet in less than six hours driving from the coast. The rapidity of ascent brings with it some characteristic symptoms.

#### Mountain Sickness

Many people suffer from temporary mountain sickness when they first reach high

altitudes. Symptoms vary from headache and weakness to black-outs and fainting. In extreme cases, pulmonary oedema occurs, followed, sometimes, by death due to cardiac failure. The only cure is oxygen.

My own symptoms took an unusual form. First, at 13,000 feet, I began to get pins and needles in my arms and legs, and a tingling sensation below the eyes. Then, my hands and feet started to get cramp. This grew steadily worse, spreading upwards, until my forearms were fixed in carpopedal spasm and my legs were immobilised. At the same time, my facial muscles went into spasm, especially those around the eyes and mouth. Speech became inarticulate. Yet my brain remained perfectly clear, and I remember thinking I was going to die and considering what a nuisance that would be. Meanwhile, the cramp had spread into my anterior abdominal muscles, and I was obliged to stop hyperventilating. The attack passed off within twenty minutes of its onset and, apart from a marked hand tremor, all symptoms had disappeared by the time I had reached 15,000 feet.

The whole episode was undoubtedly due to hyperventilation, causing a fall in the partial pressure of carbon dioxide in the blood, accompanied by a rise of pH in the tissues. The hyperventilation was due partly to psychological factors and partly, presumably, to the hypersensitivity of my carotid bodies to anoxia. Even after a fairly long stay at 15,000 feet, I experienced milder symptoms whenever I made a rapid ascent between 13,000 and 15,000 feet. On these occasions, I had to make a conscious effort to breathe more slowly and, sometimes, even to hold my breath. At sea level, curiously enough, I did not respond in the same way to hyperventilation. It took far more effort and, apart from some twitching of the facial muscles, dizziness was the predominant feature.

On reaching high altitudes for the first time, I felt weak and shaky. The forceful, rapid frequency of my heart made sleeping very difficult. We all had most unpleasant nightmares. After a day or so, the acute symptoms of mountain sickness usually disappear, although mild consumption of alcohol, smoking, a heavy meal or a hot bath may cause a relapse during the first few weeks of acclimatisation.

#### Adaptation

Whereas foreigners seldom become completely adapted to life above 14,000 feet, Indians seem to live a perfectly normal, energetic and hard life. The American mining engineers said that their physical performance was always inferior to the natives. Even after long periods of acclimatisation, they could not indulge in strenuous sport such as soccer, a game particularly popular amongst the Indians, who played it with great zest. Foreign children, born and brought up in Morococha, (15,000 feet) seemed to be as energetic as the native children.

In exceptional cases, adapted foreigners can equal the natives in physical performance. Dr. Balke, an American scientist working at the Morococha laboratory, said that in work output tests there was no significant difference in performance between himself and the native subjects. However, the inferior nutrition of the latter must be taken into account. In another test, Dr. Balke subjected himself to an equivalent altitude of 30,000 feet in a decompression chamber. He said he was able to stand these conditions for half an hour without losing consciousness. His respiration rate was five times normal. Native subjects, under the same conditions, could not be subjected to an altitude of more than 22,000 feet owing to severe attacks of cramp.

When an acclimatised man is removed from his environment, the extent of his adaptation is revealed. Mountain Indians do not settle readily on the coast, because they are said to develop a form of "down-hill" sickness. Also, their large lungs make them very susceptible to infection. Although large numbers of people move down to the coast in search of work, about the same number return to the hills.

Many animals are physiologically mal-adapted to high altitudes. Rats are abundant at 12,000 feet, but are not found at 14,000 feet. Cats, when taken there from sea level, die in convulsions. Until recently, there were no cats at 15,000 feet, but apparently they are becoming adapted, for we saw several there. House mice thrive: they are longer and twice as heavy as those on the coast. We brought twenty coastal ones to 15,000 feet, and they survived without ill effects. Laboratory mice are sterile at that altitude.



The sale of coca leaves

#### Sterility

When the Spanish Conquistadors first set up their capital at 13,000 feet, it was found that their horses would not breed there, neither were any live children born to their wives. After several decades, the first child was born, amid much rejoicing. Rather than continue to suffer these inconveniences, the Spaniards moved their capital to Lima on the coast. But a few Spaniards did breed at high altitudes, although an astute priest noticed that those Spanish with a higher proportion of Indian blood tended to have larger families than the purer European stocks.

One of the outstanding features of the Incas, whose civilisation was centred in the high altitudes, was their understanding of the facts of acclimatisation and their general biological outlook. They were practising eugenesis as well. The ruling class, especially, had various customs designed to keep up the vigour of its members. One

such custom was the fertility races. The young men were required to chase the eligible, naked girls across a field; those whose sexual prowess was unimpaired by the efforts of running were logically best suited to propagate their race, which they did, on the spot.

The problem of sterility only crops up nowadays when new stocks of sheep are brought up to the high altitude grassland. Fertility in such stocks may be as low as 12 per cent, although fertility in the second generation is usually nearly 100 per cent.

#### Some Mechanisms of Adaptation

At sea level, arterial blood is 96 per cent oxygenated. After a rapid ascent to 15,000 feet, it is 78 per cent and, at 18,000 feet, only 60 per cent oxygenated. The body adapts itself to the stimulus of anoxia in several ways.

#### Ventilation

(a) Increased depth and frequency of respiration.

(b) Morphological changes. A physiological emphysema, with barrel-shaped chests and low diaphragms, is found in all native Indians at 15,000 feet. Vital capacity is increased. True clubbing of the fingers is observed in many healthy natives.

(c) Hyperplasia of capillary beds and diminished arteriolar connective tissue in the alveolae.

(d) Two-fold increase in the concentration of myoglobin in diaphragmatic muscle.

#### Blood Changes

During the first three to four weeks, the red blood cell count usually rises to about 9 million/cu.mm. and the haemoglobin to about 20 gms./100ml. Thus the oxygen capacity of the blood is increased and, in fact, more oxygenated blood reaches the tissues than at sea level. Even in acclimatised man, oxygen saturation in arterial blood is only 82 per cent at 15,000 feet, and 74 per cent at 18,000 feet. So about 25 per cent of the arterial blood is deoxygenated, compared with 4 to 5 per cent at sea level.

The raised red cell count leads to a raised blood viscosity, and a greater burden is placed on the heart. The fact that a number

of fit, acclimatised Indians and Europeans show no increase in their red cell count might suggest that the overall advantage of a physiological polycythaemia may be a slender one.

Llama and vicunia blood is interesting, as it shows a greater affinity for oxygen at a lower partial pressure than other animals. (The oxygen dissociation curve of their haemoglobin is shifted to the left.) So, at 15,000 feet, their arterial blood is 92 per cent oxygenated. These animals are seldom found below 9,000 feet—except in zoos.

#### Alkali Reserve

Falls slowly during the first three weeks, thereby compensating for the lowered partial pressure of carbon dioxide in the blood due to hyperventilation. As this loss coincides exactly with the period of acclimatisation, it may be an important mechanism.

#### Tissue Acclimatisation

No one has established for certain that the tissues themselves can become acclimatised to anoxia. A few facts are suggestive. As already mentioned, a healthy man can thrive at 18,000 feet without a raised red blood count, whereas a newcomer would experience symptoms of mountain sickness.

Another puzzling fact is that during very strenuous exercise, the lactic acid concentration in the blood decreases with altitude until, at 18,000 feet, practically none can be detected. Theoretically, lactic acid is formed when muscles are working anaerobically. Some argue that as no lactic acid is produced during exercise at high altitudes, the body cannot perform any exercise hard enough to build up an oxygen debt. They suggest that it is a kind of safety mechanism to prevent over-exertion. In practice, this is not true. I found that I could sprint 100 yards at high altitudes as fast as at sea level. The respiratory distress and palpitation which followed were so unpleasant and startling that I did not repeat the experiment. The safety mechanism is more probably a psychological one. There are reliable reports of death due to over-exertion in the mines. Tennis used to be played in Morococha until a Canadian engineer collapsed and died during a game.

It seems more likely that alternative metabolic pathways may predominate at high altitudes.

#### Exercise and the Pulse Rate

The native Indian's heart is hypertrophied. In 54 per cent of acclimatised Indians, Monge found a resting pulse rate below 60 per minute. During a 700 kilogrammeter work test, 27 per cent showed no tachycardia. When work was increased to 1,400 kilogrammeters, an actual bradycardia was recorded, the pulse becoming slower and then accelerating slowly to its resting level. The other subjects showed only a slight increase in pulse rate with sporadic episodes of rapid irregular paroxysmal beating.

Most unacclimatised people find their maximum pulse rate reduced by about 20 per minute. Mine was definitely increased. At 16,000 feet, my resting pulse was raised from 48 to 66. Short bursts of climbing produced pulse rates of 180 and over, with numerous extrasystoles.

It is clear that acclimatisation is not a stereotyped process. Different individuals react in a variety of ways to the same stimulus. There are some with remarkable powers of acclimatisation, yet there are others who never achieve that goal.

#### Health

We obtained some impressions of high altitude life from Dr. Hellriegel, who has been working with Indians for six years, as chief surgeon of the Cerro de Pasco Hospital at Chulec (12,200 feet).

The hospital cares for 18,000 native employees and their families, as well as the foreign community at Oroya. It was very well equipped, and Dr. Hellriegel said that he could perform satisfactorily all the usual operations, in spite of the altitude. Indeed, the altitude seemed to have a beneficial effect, cutting down the period of convalescence considerably. For instance, he said that a patient usually got up two days after a partial gastrectomy and walked out of the hospital on the third day.

Another unusual factor was the low incidence of cancer amongst the Indians.

Sites of cancer	Detected cases in six years	
Skin, Lips, Eyelids	NONE	
Tongue		
Oesophagus		
Stomach		
Colon		
Rectum		
Kidney		
Prostate		1
Breast		2
Pancreas		2
Sarcoma of the Mesentery	4	
Lung	5	
Leukaemia	(in foreigners) 0	

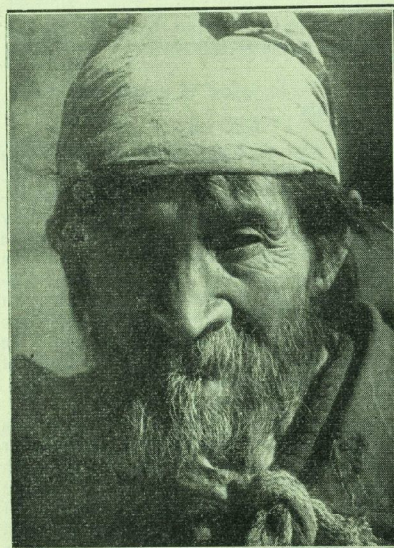
The most frequent cancer amongst the Indian woman was Cervical Cancer. Dr. Hellriegel's impression that cancer was infrequent amongst Indians was confirmed by Dr. J. Jackson, working on the coast in the Lobitos Hospital, although he had seen cases of skin cancer. Dr. Hellriegel suggested that the absence of skin cancer at high altitudes might be connected with the high incidence of ultra violet light. He thought that the average age of death of his employees was between 45 and 55.

Some work which Dr. Mori Chaves was doing at the Morococha laboratory may bear on the general question of the effect of high altitude on cancer. On comparing the incidence of cancer in susceptible strains of mice, Dr. Chaves was finding that the high altitude stocks tended to be less susceptible than the low altitude controls.

Severe polycythaemia occurs in a proportion of natives and foreigners. It was first described by Monge, who observed how closely its presenting symptoms resembled those of Polycythaemia rubra vera. Its aetiology is undoubtedly anoxia, causing an exaggerated erythrocytic response. (White cell count is moderately increased also, with a predominance of monocytes.) In the natives there is a tendency for it to run in families.

Patients present with severe dyspnoea of exertion, often with haemoptysis, weakness and sleepiness, or with dizziness and fainting. They may also suffer from neuroses, or strange memory behaviour, or from peripheral neuropathies. On examination, the

patient looks cyanosed; the capillary beds of his sclera are dilated and his tongue enlarged. There is usually clubbing of the fingers. The spleen is not often enlarged. Haemoglobin may rise to about 27 gms./100 ml. The best cure is a long holiday at sea level.



A Shepherd, 16,000 feet

Unlike polycythaemia vera, Monge's disease does not apparently lead to thrombotic complications. Indeed, coronary thrombosis is a rarity. Thrombophlebitis in newcomers to the altitude usually disappears within a few days. Loss of weight is common, and may be so severe that people are forced to leave the heights. Fat people are a rarity at high altitudes.

The rate of still birth is about 1.6; but, in the absence of controls, it is impossible to assess the significance of this.

Typhoid fever, malaria and amoebic

dysentery are extremely rare, due perhaps to the cold and the sparsity of flies—certainly not to the conditions of sanitation. The commonest diseases are those of the respiratory tract. Silicosis and pneumoconiosis occurs frequently amongst the mine workers. Tuberculosis has a characteristically short onset.

About 1 in 10 Indians have syphilis, a disease which came with the Spanish. Conjunctivitis is a common complaint; we had it ourselves and attributed it to the dry air, bright light and dust.

Finally, I must mention the disease *Verruga peruana*, a particularly lethal Andean curiosity. It is strictly localised between 5,000 feet and 9,000 feet, and occurs only in certain valleys. It is transmitted by a fly (probably *Phlebotomus verrucana*), which comes out at sundown, and unless adequate protective measures are taken, a single night spent in the area is usually enough to contract the disease.

In foreigners, *Verruga* is very often fatal. Its onset is sudden and is characterised by pyrexia and a rapidly fatal anaemia (Haemoglobin 30 per cent within 14 days). If the patient survives, the disease goes into its secondary pustular phase, and leaves him with a pitted and pock-marked skin.

Children born in the district are said to suffer from a mild or subclinical infection, although the disease is liable to relapse after long intervals, and ultimately causes death. Certainly, while we were mousing in the district, we were surprised at the number of sick people in the houses we visited. Such carriers are believed to form a reservoir of infection. Penicillin has proved effective when given early enough.

#### Conclusion

I hope that some of this may have been of interest. Naturally we realise that, as observers, we were inexperienced and that some of the observations may have been incorrect. However, they may suffice to show that there is a lot of work waiting to be done under the special conditions which Peru offers.

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## THE END OF HILL END—WITHOUT NOSTALGIA

by EXSUL

Mr. Hall-Smith's poetic eulogy about Hill End, in the October number of this *Journal*, is a refreshing review of a resident's "salad days." As I have never had time in 6 to 7 hours operating sessions at Hill End to play billiards, nor to lie in happy reflection on its lawns, the only association I have comparable to Mr. Hall-Smith's enjoyable experiences, is a hurried tea with the theatre staff.

There is, however, a grimmer picture of Hill End, as seen by many patients, their relatives and some consultants, the last now passed from middle-age into the elderly decades during their long exile at Hill End. In the department I serve our ward, for many of the 13 post-war years, has been improvised in cramped cubicles, made of hard-board and set in a squalid corridor facing the sluices of two wards, this corridor serving a constant day and night line of communication for the rumbling kitchen and operating theatre trolleys; resounding with the recurrent flushing of sluices; the various weights of human tread; the decerebrate sounds of the neuro-surgeons' victims in the adjacent ward; and the patter of Hill End cats in pursuit of mice. It is little wonder that patients whose post-operative course requires absolute tranquility and air as free from pathogenic bacteria as possible, should refuse forthright to face such bedlam again when a bilateral operation necessitated re-admission.

The necrotic ward kitchen sink grew by 1958 many colonies of streptococcus faecalis, *Ps pyocyaneus* and proteus, and only the weighty ultimatum of these bacterial masses brought about its eventual excision. Conditions were infinitely safer in the fields of Normandy in 1944.

Only the superb nursing of our "Pink" (now Sister), together with a large element of luck, has averted the major post-operative disasters likely to be excited by such conditions. We have no House-surgeon at Hill End. A ward 20 miles remote from London

and such circumstances have compelled us to send our emergency surgery and much else of an interesting and varied kind to another hospital, valuable teaching material is thus lost to the students.

Past representations to the Bart's administration about these disadvantages, invariably brought the frustrating answer, "Bart's is not responsible for Hill End." Entering the Hill End Medical Superintendent's featureless ante-room to sign the attendance book for more than the 500th time, how could one feel other than the unwanted guest in a County Mental Hospital, and not as a consultant on the staff of an ancient hospital 20 miles away. For the majority of the exiled, most of their consultant career has been spent at Hill End.

The journey there is a tiresome expenditure of time and money for patients' visitors. For the consulting staff it has the added misadventures of delay in floods, snow and fog—nearly 1,000 wasted hours during the last 13 years. There is no compensating rural beauty left now that the final ravages of "road improvement" have felled avenues of trees, avulsed hedges and scarred the fields with wide strips of hideous tarmac.

Has this long exile, its end now awaiting the completion of the essential swimming pool in the nurses' new home, been really necessary? More than once statements which suggested promises of return have come to nothing, for units already at Bart's increased their size and occupied more wards when these became available. Could not this long time, now 13 post-war years with probably two more to come, have been reduced by administrative energy and enterprise, and by a better spirit of giving and not taking.

Returning to Bart's at the end of 1945 from the Army, where in France and Belgium we had been accustomed, in the winter, to con-

vert any building with a water supply into a 600-1,200 bedded hospital in a matter of two weeks, it was difficult to understand the inertia that allowed wards with beds and water at Bart's to remain unoccupied by patients for 2 to 3 years and, indeed, longer, for today the West Wing wards are still used for a nurses' extra lecture room, by statisticians, scribes and sundry lodgers, and the isolation wards are residential flats. In the cause of the patients, the occupants of all these could surely be extra-mural, without effecting the efficiency of the hospital.

Wards were also used for physiotherapy and occupational therapy (today the ground floor of the old casualty wing), both of these activities could have been accommodated in spacious Nisson huts (price £200 in 1945) set in the waste spaces along Little Britain.

Among the still unused spaces today are the ante-chambers to the roof solarium, the area behind the East Wing, the Clerk to the Governor's house and, surely, the empty Great Hall could accommodate some of the legion of scribes and statisticians. A hospital is a workshop, and should not be a place for the preservation of historic monuments if unused in its service.

In a few years we will be in the new accommodation adjacent to St. Bartholomew's the Great. I hope that its name will not retain the featureless architectural description "block," nor the dull morphological term "L shaped." Perhaps "The Cloister" would be an appropriate calling, because of its proximity to the Priory church and because it would signify the pleasant isolation which Mr. Hall-Smith and other young residents have enjoyed at Hill End.

## A REMISSION

by J. GRIFFITH EDWARDS

The patient, a 75-year-old man, was first seen at Bart's in April, 1958. He came to an outpatient clinic, but was so ill that he was immediately admitted to the Ward.

He said that for 18 months he had been having difficulty passing his water; for nine months he had been having pains in the back between the shoulder blades; for 3 months there had been increasing dyspnoea, and for one month there had been ankle swelling.

But the patient's real complaint—the one which had taken him to his doctor—was that he was feeling terribly unwell. All his life he had been an unusually healthy and active man, and now he knew, for the first time, what it was like to be wretchedly unfit.

On examination, the immediate impression was of an old man dying of cancer. He was doddery and rambling, and breathless at rest.

There was a mass of malignant nodes in the left supraclavicular fossa. Oedema had cleared with his own doctor's mersalyl injections; there was a B.P. of 120/60, and no valvular lesion. The prostate was enlarged and nodular. Clinically, therefore, there was evidence that the patient had a diffuse carcinomatosis with the prostate as the primary site, and the investigations confirmed this diagnosis.

Surgical relief of the obstruction was not thought justified. However, it was decided to give stilboestrol, initially 5 mgs t.d.s., but with the dose rapidly increased to 20 mgs t.d.s. At first he continued to deteriorate, and he lay dozing in bed, mildly disorientated and entirely uninterested in his surroundings. But, after only 10 days of treatment, his appearance began to brighten. Before long he was reading a paper, and started to smoke his pipe again.

During the next few weeks he changed from being an old man with terminal carcinomatosis and uraemia to being a man who was young for his age, and who was active and smartly dressed. It was now easy to believe that he had once been a Navy P.T. Instructor. After two months he was discharged from the ward, and as an outpatient the stilboestrol had been reduced to 5 mgs t.d.s. The stilboestrol caused oedema, but this has been controlled by chlorothiazide. The table below summarises the response to treatment.

### Discussion

The prognosis for this man was thought to be death within a few days, and now, six months later, he is leading an active and enjoyable life. The moral would seem to be that, even in geriatrics, one is never justified in abandoning treatment until every reasonable treatment has been tried. In this case, the dramatic response was because the stilboestrol not only made the secondary deposits regress, but by causing the prostatic primary to involute, it relieved the post-renal uraemia.

Some features of the secondary deposits were unusual for prostatic cancer. The bone secondaries were osteolytic rather than sclerotic. The lung changes were also unusual, and there was discussion as to how much of the X-ray shadowing was due to pneumonia or oedema, as opposed to carcinomatosis. Lung function tests were done (Dr. H. G. Aphorpe), and CO<sub>2</sub> diffusion showed considerable alveolar-capillary block, which would have been compatible with carcinomatous infiltration; the CO<sub>2</sub> diffusion improved after stilboestrol treatment. Furthermore, the leg oedema at the beginning of the illness may have been due to a cor-pulmonale caused by malignant pulmonary infiltration.

The patient says that he can't see what all the fuss was about. He attributes his recovery to a strong constitution, and this seems a sound observation.

### ACKNOWLEDGMENT

My thanks are due to Dr. G. W. Hayward, for permission to publish this report on a patient who was under his care.

	AT WORST	SIX MONTHS LATER
SYMPTOMS	Breathless at rest, full of aches and pains, no appetite, much difficulty in passing water, feeling extremely ill.	Active, no pain, slight difficulty passing water, good appetite, feeling well.
SIGNS	Carcinomatous nodes in neck. Hard nodular prostate.	Nodes not palpable, prostate enlarged but not nodular.
BLOOD UREA	120 mg %.	28 mg %.
ACID PHOSPHATASE	350 K-A u.	7.5 K-A u.
E.S.R.	102 mm/hr.	26 mm/hr.
Hb.	42% (6.2 G). 70% (10.4 G) after transfusion.	80% (11.8 G).
C.X.R.	Diffuse mottling	Clear except for one small circular shadow.
PERIPHERAL BLOOD	1 normoblast and 4 myelocytes/100 WBC	Normal
BONE X-RAYS	Miliary osteolytic lesions.	Considerable re-calcification.

## LETTERS TO THE EDITOR

The Editor,  
St. Bartholomew's Hospital Journal.

Having recently attended the East Anglian Rahere Society dinner, I formed the opinion that we in Kent might well form a similar Society.

If any old Bart's men in the County of Kent are of the same opinion, perhaps they will write to me at the address given below.

Yours faithfully,  
RAYMOND G. BIRCH.

The Chestnuts,  
70 East Street,  
Sittingbourne,  
Kent.

Dear Editor,

The enclosed is written by a very old man with a fairly old memory, and if you think it worth printing and are unable to read it—please hand it back and mark any pieces that don't make sense.

Good luck to you, from  
MATTHEW H. G. FELL.

Is Douglas Harmer, the Elder, still alive and, if so, would you send his address?

Flan How,  
Ulverston,  
Lancs.

Dear Editor,

Seeing in your September number an article by R. S. Corbett, based on Gordon Watson's Memoirs, and also suggestions that you would welcome more copy for the *Journal*, I thought that I might venture on a letter.

Gordon Watson and I joined at Bart's and qualified at the same time, or very nearly so. We became friends, and continued so up to the time of his death. He was my "best man" when I married in 1908 and, having only recently celebrated our golden wedding, my wife and I have often mentioned him. After my retirement from the army, he used periodically to stay here for some shooting and many rubbers of bridge in the evenings, and we wrote each other at intervals up to his end.

At Bart's, in Round the Fountain talks, as to what we wanted to do when qualified, he was always quite definite that his ambition was to get on to the surgical staff, however long he might have to wait.

I had no particular ambitions and, as my two eldest brothers were soldiers, I wrote and asked them what they thought about the Army Medical Service, as there was a good deal of talk about changes which were likely to be made in the Medical

Service. One replied that I might do worse, and the other that it might give me a chance of shooting a lion, elephant or sable antelope.

The new warrant for the R.A.M.C. came out about the time that I qualified, and the autumn of 1898 found myself, and four or five other Bart's men, at Netley, and the following autumn all on Transports headed for Cape Town.

Gordon had joined as a civil surgeon on a twelve months' contract.

I was attached to the Bearer Company of the Highland Brigade, and went up country with Lord Methuen's Forces, and I heard nothing of Gordon for several months.

After the relief of Kimberley, Lord Methuen's column was sent over into the West of the Orange Free State to chase up some commandos. Two or three weeks after leaving Kimberley, I was ordered down to the Modder River, as the M.O. down there had developed Typhoid. I was there about three weeks, looking after some sick and wounded awaiting Transport to Cape Town. Whilst there, a letter from Gordon reached me telling some of his doings, and also orders from my own unit to rejoin them at Kronstadt, where they were going for supplies. I was told to leave Modder River as soon as my relief appeared.

Eventually I got to Kronstadt, and on reporting to the P.M.O.'s office for further orders, saw a list of Officers in Hospital, and among them Gordon Watson. He was in an Hotel—so called—which mostly consisted of a row of corrugated iron cubicles, and was recovering from his attack of dysentery. We had a long talk, and I tried to get him to sell me a case of whiskey which I saw under his bed. He utterly refused to part with it at any price, but wrote me later that he regretted it because when opened, every bottle contained only dirty water, probably the work of his own batman.

And now some recollections of his arrival in France in 1914: I had gone out from Aldershot in August to the Surgeon General's Office in Amiens.

After the hectic closure of all hospitals and base units, only just opened at Rouen and Marne, to the Loire Valley and St. Nazaire, the office was opened at Le Mans, and later at Villeneuve St. George's, the great railway junction east of Paris, through which reinforcements and supplies were being sent to the army then on the Marne, after the retreat from Mons. One morning a telegram arrived from a channel port, in French, saying that Sir Thomas Lipton's yacht had arrived with a Bed Installation of the Croix Rouge, in charge of a Madame Phillippe, and that they wanted accommodation in Paris to open up a Hospital.

No one knew anything about Madame Phillippe, and there seemed no object in opening the unit in Paris, as the British Army was in process of moving north again, based on Calais and Boulogne, so a cooling note was sent in reply. The following morning a French Gendarme came to the tool shed in the garden, where the office was, and said that they had an officer who wished to see the Surgeon General,

but who had no papers to verify the statement that he had made.

I told him that I would see him first. He then walked in with Gordon.

He told me that he had come over on the yacht, that the Hospital was the Duchess of Westminster, and that Madame Phillippe was the wife of Dr. Phillippe, whom I had known in Cairo, and had been a sister at Bart's.

After telling him confidentially why I thought they would be wasted if they opened in a hotel in Paris, I advised him to look out for some suitable accommodation further north with good railway access—and that was that. When the Red Cross got organised a bit, this hospital became No. 1—and a very good job it made of it.

★ ★ ★

Dear Sir,

I have read with much pleasure and considerable interest, Mr. R. S. Corbett's lecture "A Pioneer in the Attack on Cancer"; the First Gordon-Watson Memorial Lecture. It brings back to me many memories of bygone years.

Watson and I were appointed House Surgeons at Bart's in 1898, he to the firm of Howard Marsh and Bowly, and I to the firm of Hutlin and Lockwood. At that time he was a marked personality; his square lower jaw indicative of resource and firmness of character. At the time of taking up the post of H.S., October, 1898, duration of appointment was six months as Junior H.S. and six months as Senior; the pay for the Junior was NIL, no board, no lodging, and for the Senior, £12, with board and rooms in the College.

He was certainly a great sportsman. Among other sports mentioned, he was very keen on beagling. On occasional Saturday mornings Watson would arrange with a colleague to look after his Saturday morning duty and embrace the opportunity of a run with the Harriers at Berkhamstead.

The H.S. appointment ended for us on September 30th, 1899; on October 11th, Kruger's ultimatum expired, and we were at war with South Africa; in which month we both embarked from Southampton as Civil Surgeons, landing in South Africa in early November. (Civil Surgeons were drawn from medical men outside the R.A.M.C., and we were engaged for 12 months; with re-appointment if desired by both sides. Their pay was £1 per day and allowances, with a gratuity at the end of Service.) Watson was posted to Wynberg, and myself to Pietermaritzberg.

A story told me at the Imperial Hotel, Maritzberg, at Christmas, 1899, by the late Sir Frederick Treves, F.R.C.S. (who, together with Sir Wm. MacCormac, had been appointed Consulting Surgeon to the Army), is illustrative of Gordon-Watson's resource and confidence as a Surgeon. It appears that Watson, who had finished his house surgeon's appointment two months previously, had under his care at Wynberg a Gordon Highlander who had

sustained a severe wound in his thigh at Magersfontein, in the "Black Week" of the South African Campaign.\* The patient was seriously ill. Watson sought Mr. (as he then was) Treves and Sir Wm. MacCormac's opinion and advice regarding treatment: both concurred with Watson's view, and advised amputation.

Having thanked them both, Watson said, "I will do the amputation this afternoon," asked Mr. Treves to sponge, and also Sir William MacCormac to control the artery and Surgeon General Wilson, Director General of Army Medical Services in South Africa, to hold the leg.

Thus, two months after finishing his job as H.S. at Bartholomew's, Gordon-Watson did the operation in the afternoon with the assistance of two Consulting Surgeons and the then Director of the R.A.M.C. Treves was much impressed by the whole incident, and predicted a very successful career for the Surgeon concerned.

I can visualise Charles' long lolling stride, and welcoming smile as he walked across the Square.

During the last war, as recounted in Mr. Corbett's lecture, he was Consulting Surgeon to Northern Command and, in that capacity, his advice and help was frequently sought by Surgeons and Civil Practitioners working in various hospitals in that Command.

His friendliness and understanding were widely appreciated. His memory will long be held in high esteem.

\* The "Black Week," so called, began on Monday, December 9th, 1899. In that week the South African Field Force sustained three heavy reverses. The Highland Brigade at Magersfontein, under the command of Lord Methuen, attempting the relief of Kimberley, was defeated. Two days later, December 11th, General Gatacre (so called "Backacre" by the troops) trying to cross the Vaal, was also forced to retire. Two days later still, December 13th, at Colenso in Natal, General Sir Revers Buller, attempting to cross the Tugela River for the relief of Ladysmith, was also heavily defeated, and thus ended the "Black Week."

Yours, etc.,  
W. T. ROWE.

8 The Ropewalk,  
Nottingham.

Dear Sir,

Relics of "Bart's" in Wiltshire

Your readers might be interested in the enclosed photograph of an old lead trough from St. Bartholomew's, dated 1753, which has been at Church Hayes, Lea, near Malmesbury, Wilts, since 1912.

I have attended this house for the past twenty-nine years, through many changes (it is now a Private Nursing Home), and only recently had an opportunity of examining it and noticing the Coat of Arms.



Probably from Gibbs North Wing, the one which includes the Great Hall, which was finished in 1732-33.

I find the house was bought by the late Dr. Bruce-Clarke as a "weekend Cottage" at that date, as evidenced by the lead water-heads, but died before the alterations were completed.

It would be interesting to know from what part of the Hospital this came, and how such a heavy article came to be moved down here.

A dear old patient of mine; one Jesse Moss, died at the age of 94 about ten years ago. He lived in a nearby village of Upper Minety, and claimed to have been Butler to Sir James Paget (1814-99). He must certainly have been in his employment, as he had several drawings and water colours done by Sir James, which I had hoped to have obtained for the Hospital, but I am afraid they were either destroyed or dispersed at his death. His method of dress and manners remained those of "Jeeves."

Yours faithfully,  
B. L. HODGE,

Gloucester House,  
Malmesbury.

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

Dear Editor,

I have read, with some interest, your editorial in this month's *Journal*. I enclose a short description of a very recent experience of mine, which has made me wonder whether all the teaching which I received

at Bart's wasn't so much waste of time.

Yours sincerely,  
ROBERT HUNT COOKE.

20 Brampton Grove,  
Hendon, N.W.4.

#### Should Medical Education be Revised ?

or  
Is Medical Education Really Necessary ?  
A Recent Experience in a London Suburban Practice

My patient is a man of 80, extensively crippled by ankylosing osteo-arthritis of both hips, but still able to get to his office two days a week, with a car and two sticks. In the last five years he has had (and recovered from) two severe duodenal bleeds, the second needing transfusions. For the last three months he has had two small trophic ulcers on his external malleoli, which have resisted all measures to heal them. There is some oedema of both feet, partly accounted for by the rigidity of his limbs and lack of muscular action, and partly, in my opinion, by an early myocardial inefficiency. He has also complained of an increasing pain radiating down the right thigh from his buttock. Eventually, I asked him if he would agree to my having a consultant opinion as we did not seem to be going anywhere very fast. He gave me the name of a friend who had treated other members of his family with great success, and I agreed to this. The man he named is a senior consultant on the staff of a well known London hospital. We met. I related the history of the case in some detail, and he listened very

courteously with an expression that I now realise was amused tolerance. We went upstairs to see the patient, whom I had told to be in bed, thinking that this would facilitate examination as his crippled condition made dressing and undressing a tedious business. I need not have worried. No clinical examination whatsoever was made. The Consultant extracted from his pocket, from a carefully wrapped metal foil wrapper, a piece of absorbent paper and, holding it carefully in a pair of forceps, applied it momentarily to the patient's right lower eyelid, saying as he did so, "I will now take a test. I always use the tears as they are the purest secretion of the body." After further pleasantries we left.

Three days later I received the following letter :

"Dear Dr. Cooke,

"I am pleased to say that we were able to make a complete examination of your patient's test. We found that his general condition was really very good and this should stand him in good stead to make a satisfactory response to the course of treatment I have sent him with the medicine we were able to select for him."

When I consider the laborious hours that I have spent making complete clinical examinations prior to attempting to make a diagnosis, in order to decide on the treatment and prognosis, this struck me as a wonderful thing. One of us is wrong, and I am beginning to wonder if it is I (or me).

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\* Reprints received and herewith gratefully acknowledged. Please address this material to the Librarian.

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## BOOK REVIEWS

**TEXTBOOK OF SURGERY.** Edited by Guy Blackburn, M.B.F., M.Chir., F.R.C.S. and Rex Lawrie, M.S., F.R.C.S., M.D., M.R.C.P. Published by Blackwell, London. 1,122 pp. Price 84/-.

This book is intended primarily for undergraduate instruction and, as such, it succeeds admirably. It is written by the teaching staff of Guy's Hospital, under the editorship of Mr. Guy Blackburn and Mr. Rex Lawrie. The editors have wisely refrained from attempting to cram too much into one text, and have deliberately omitted detailed description of surgical pathology and surgical technique. In consequence, there is more scope for the clinical problems of surgery, which are dealt with in a refreshingly clear and concise manner. It is particularly pleasing to see that prognosis is discussed fully and factually in most sections. Despite multiple authorship, an even balance and high standard has been maintained throughout the book, and the text is nicely set out and clearly illustrated. It is a safe prediction that this book will quickly win approval from both teachers and students, and it can be recommended with confidence.

G. W. TAYLOR.

**BASIC SURGERY.** Edited by Leslie Oliver. Published by Lewis, London. Price £6 6s. 0d.

This is, on the whole, quite a good book. The editor, Mr. Leslie Oliver, a neurosurgeon, has written the section of neurosurgery himself. This is a full and lucid account of neurosurgical practice.

Generally, the book is as full a treatise as one can get between two covers, and if the student wants to buy and read one book, and one only, then it falls into that group. To choose one out of this is entirely a matter of personal opinion. I can, however, find little that, to me, raises it above its fellows in the group.

With changes in prices and values generally, our ideas on book value must come up to date, but even so, £6 6s. 0d. is still, I think, a lot of money for a student, and for that he wants a book which will not only last through his student days and longer, or be still sufficiently up to date to fetch a good secondhand price when he qualifies. With the present rate of growth of surgical knowledge, I would think that this last point is doubtful. This, however, is no special criticism of the book itself, but rather the present system.

The other parts of the book are written by specialist authors or general surgeons with a special interest in the particular subject. On the whole, they are quite good. "Mistakes" in the text of a book may be no more than difference of opinion between the author and reviewer, on page 1,002, the description of the ankle perforating veins, however, does not seem to faithfully follow Cockett's description.

With so much information it is disappointing to see no references, so that the serious student can go further into work that interests him, in the library.

**TEXTBOOK OF SURGERY.** By Patrick Kiely. Second Edition. Published by H. K. Lewis, 1958. 1,158 pp., 605 illus. Price 63/-.

The first edition of this book appeared in 1949, and much of it has been rewritten to suit the students' requirements. The chapters on Anaesthetics and the Female Genital Tract have been omitted, but new material brings the book up to date. However, it is not the ideal surgical text for students, several better having appeared almost simultaneously. It is poorly printed (in Dublin), on bad paper, and many of the illustrations are too small to be useful. Bibliographically it is most confusing. The Preface to the first edition, which is reprinted, is dated January, 1958, the title-page bears the date 1958, but the date of copyright is 1959. The index occupies ten pages, and is most inadequate for a book of over eleven hundred pages.

**CLINICAL INVOLVEMENTS; OR THE OLD FIRM.** Being running commentaries on the round. By H. Gardiner-Hill. Published by Butterworth, London. 200 pp. Price 32/6.

"This is not in any sense a textbook of medicine and not in the ordinary sense a book at all. It is a collection of running commentaries on cases seen with the Firm in the Wards, the commentary being dictated after the Round." So explains the author in his Preface. Some of the cases were seen twenty years ago, and this is primarily a record "of the Firm for the Firm."

Dr. Gardiner-Hill is Consulting Physician to St. Thomas's Hospital, and the running commentaries presented in this book illustrate selected cases observed during an extensive active career. The illustrations consist of humorous line-drawings.

This book presents a new approach that has distinct advantages over the normal dry-as-dust textbook. It makes interesting reading, and one learns much without the tedious process of setting out in anticipation of a difficult task. Much common sense underlies a light-hearted approach, and the fluent style camouflages a breadth of experience which should be shared by all readers.

**SURGEONS AT ARMS.** Daniel Paul with John St. John. Published by Heinemann, 1958. 227 pp., illus. Price 16/-.

Many of those who served during the last war are anxious to forget the noise and squalor of the battlefield, the stench of dead cattle, the mud, the whine or mortars, the desolation of destroyed homesteads, the pitiful plight of the refugees and the general turmoil which accompanies warfare, where man is portrayed at his very worst. Others have been anxious to tell the world of their heroic exploits on land, sea and in the air, possibly because they are proud of themselves and their comrades; perhaps to remind the present and future generations that such things happened; and sometimes to make money. Whatever the reason, these books occasionally represent unique material for future historians, for history cannot adequately be written through the eyes of one person. It is unnecessary to mention the controversies that have arisen over the publications of some of our outstanding war figureheads, but time will sort out wheat from chaff, fact from fiction.

The book under review is not written by a brass-hat, but represents the story of a surgeon in the First British Airborne Division who was dropped at Arnheim, captured working in a Dutch hospital and, after assisting in the escape of some of his charges, himself escaped from a prisoner-of-war camp, aided by members of the Dutch underground movement. Several names on the included map bring back memories of experiences pleasant and unpleasant, the former being particularly associated with the Dutch people. This book presents, without exaggeration or glorification, the story of an army surgeon in wartime Holland. It might be classed as just another war book; in fact, it is better than most of that type of literature.

**BAILLIERE'S POCKET BOOK OF WARD INFORMATION.** Ninth Edition. By Marjorie Houghton, M.B.S., S.R.N., S.C.M., D.N. Published by Bailliere, Tindall & Cox Ltd. Price 6/6.

This is a new edition of an old favourite, which is the right size for carrying in the pocket, and contains instructions for the student in urine testing, preparation for examinations, enema solutions and drug dosage, and graduate information on such subjects as blood chemistry, electrolyte balance and radioactive isotopes.

W. C. HECTOR.

**IT'S HEALTHY TO BE HUMAN.** A Family Doctor book, by F. R. C. Casson. British Medical Association (1958). Pp. 160. Price 10/6

The current interest displayed by laymen in medicine continues to be fostered by a spate of popular books on the subject, many of which are "cranky" and unsuited to their purpose. The Family Doctor book fills an obvious need. They are written by experts, contribute usefully without emphasis on subjects above the heads of their readers, and educate to the point of satisfaction without stimulating an unhealthy interest.

Dr. Casson is a Bart's man, and his contribution to the series is of particular value. The first section deals with the nature of instinct; the second with the way in which instinct operates in humans from infancy to old age; section three with the concept of human nature and the variability of three main instincts, hunger, sex and self-assertiveness; and the fourth part is concerned with our instincts in our relationships with our fellow men.

This book is well-written, which implies that information is conveyed, in suitable language, to those for whom it is intended, and it can be read with profit by most humans. According to the answer implied in Chapter 7 ("Are doctors human?") this includes doctors.

## SPORTS NEWS

### VIEWPOINT

The Rugger Club have begun their season in good form, winning four of their opening seven matches, drawing two and losing only, so far, to a strong LX Club team from Cambridge. May their success continue and this be but an opening salvo for things to come.

Many sportsmen, whatever their particular field of activity, must have been seriously disturbed by the much publicised wrangle in Oxford University rowing circles this year. Eight of the most powerful men in rowing there, although some may be tempted to ask sceptically "are there any?"—flagrantly flouted the lawful authority of the President and intended to form their own crew, although to what end is not exactly clear. It is not my intention to cause it further embarrassment where enough already exists, but

to look at some of the underlying causes for such worthless action. And let us be quite sure that such actions are not limited to a pleasant distance of fifty miles away.

Everybody knows that to be a captain of a Club is a position of greater responsibility than any other member of the team. Accordingly, if he is to be able to discharge his duties effectively, he must have the unqualified support of his members at all times. To doubt that authority is to bring about a lowering of all the activities of the club to a level where it is not the game that matters, but the people who are taking part. Such theoretically at present seems to be the state of affairs in the example chosen.

The crux of the matter rests upon the individual's idea of a captain. If he is to be regarded as wielding the power of an Eastern potentate or medieval despot, then it is natural that his followers will revolt at a point of issue. If, however, it is realised that the captain is a leader who is trying to take the best line of action in order to gain the victory that all seek, surely it is far better to abide by his decisions to gain that end. The captain's position is above all one of extreme responsibility and never supreme power.

There must be some, however, who would have liked to lead the club, but fate has decided otherwise. Theirs is indeed, the harder lot, but it is on their actions that the fortunes of the club may well depend. They may feel they have a grievance, do not put everything into their game; "if only they had been in charge, things would have been different." Who, indeed, has not felt like that at some time or other? Indeed, but if that is our prevailing thought, far better to give up sport and take up something like politics. No one would deny that things are sometimes difficult and hard to take, but if we are prepared to make the effort and forget our own ideas for the present—the result is infinitely worthwhile. Surely one of the answers the games player has to the sceptic who sits around and does nothing, is that by putting everything into his game unreservedly he accepts the demands of others in order that all may benefit.

We welcome to the pages of the *Journal* the first report of the newly-formed Bridge Club.

## RUGBY FOOTBALL

1st XV v. Cambridge University LX Club. Home. Wednesday, October 15th. Lost 0—9.

The LX Club brought a powerful team to Chislehurst, and under ideal playing conditions, the game was always entertaining. Bart's showed two changes from the previous match, MacKenzie and Pennington coming in for Lofts and Randle.

The LX Club kicked off, and rapidly established themselves inside the Bart's half. The first few attacking moves of the game showed that they had a fast set of backs, and Bart's did well to weather the early storm. However, the home pack fought well and were soon on even terms with their heavier opponents. Though out-jumped in the line-outs, Bart's got a good share of the ball from the tight, where Hamilton hooked well against his opposite, who was a Blue last year. It was in the loose play that the Bart's pack showed how dangerous they could be, and they dominated this department throughout the game.

The first score came from the LX Club. After a good passing movement had been stopped, their scrum-half rapidly changed direction, and provided an opening for the left-centre to score a try, that was unconverted.

The Bart's threequarters were getting a fair share of the ball, and they frequently used the reverse pass to open up gaps in the defence, but their backing-up was poor, and handling erratic. Stevens made one fine break in the centre, and was unfortunate not to score.

The second half began slowly, but at this stage the home pack were threatening to take control of the game. MacKenzie, playing a fine game, was causing the opposing outsiders to fumble, and L. R. Thomas, Hamilton and D. Richards were swiftly up on the loose ball. However, it was noticeable at this stage that missed tackles by Bart's were allowing their opponents to counter-attack dangerously. Bart's were penalised, and LX Club increased their score by a penalty goal. Stevens and R. R. Davies twice threatened to score with elusive runs, but last-second handling errors prevented a score. Just before "no side" Pennington made a fine attempt at a long-range penalty, which the LX Club gathered under their posts and set off for the Bart's line. Most of their team handled the ball, which was grounded wide out for an opportunist try.

Bart's did well against good opposition, and the score was an unfair reflection of their share of the play. However, there is still a tendency to "half-tackle" opponents, which is fatal against good backing-up. The backs are still slow into the tackle, but on the whole the side seems to be blending into a well-balanced unit.

Team : M. Britz, J. Plant, J. Stevens, A. B. M. McMaster, G. Halls, R. R. Davies, B. Richards, D. A. Richards, J. W. Hamilton (Capt.), B. O. Thomas, W. P. Boladz, J. Pennington, R. P. Davies, L. R. Thomas, J. MacKenzie.

1st XV v. U.S. Chatham. Saturday, October 18th. Drawn 8—8.

Bart's, still feeling the effects of a hard game on the previous Wednesday, did well to hold a strong U.S. Chatham side to a draw. The game showed up the Bart's weakness of not recovering quickly after a tackle, and this was accentuated by the speed at which the Services side took advantage of the Hospital's mistakes.

Chatham scored in the first ten minutes of the game, when one of their players broke through a line-out near the Bart's line. The rest of their pack followed up very quickly and, in spite of some vain attempts at falling on the ball by the Bart's defence, one of the Chatham players went over to score. The kick, taken a long way out, was successful.

The Hospital were then stung into action, and the forwards gave a very quick heel from a loose maul on the Chatham 25 and, after drawing the inside centre, Charlton passed the ball to Halls who dived over to score near the corner flag. The attempt at a difficult conversion failed.

Just before half-time, D. A. Richards received a knee injury, and had to go off for attention. As is often the case when a man short, the Bart's seven forwards pushed with much more determination in the tight scrums. However, shortly after the interval a grub kick ahead by the Chatham fly half gave the wing a good opportunity of scoring. There was a sigh of relief when the kick hit the far post and bounced back into play.

At this stage the tackling of the Bart's backs began to improve, and the forwards were quicker on to the loose ball. Charlton, at scrum half, made some good breaks from the base of the scrum, and his defensive kicking to touch was of very high standard. Another quick heel, this time from a tight scrum, resulted in R. R. Davies making one of his characteristic defence-splitting breaks and sending J. Stevens over to score under the post. The kick, taken by Stevens, went straight and true between the posts, making the score eight points each.

Team : M. Britz : G. J. Halls, A. B. M. McMaster, J. Plant : R. R. Davies, G. A. C. Charlton ; B. O. Thomas, J. W. Hamilton (Capt.), B. Lofts ; L. R. Thomas, W. P. Boladz ; R. P. Davies, D. A. Richards, J. C. Mackenzie.

1st XV v. Old Blues. Saturday, October 25th. Won 10—0.

Under conditions suitable to fast open rugby at Fairlop, Bart's scored early on in the game. P. C. Delight, the Old Blues' fly half and Captain, was caught in possession near his own line. His pass back to the full back went astray, and A. B. M. McMaster pounced on the ball to score near the posts. The try was converted by J. Stevens.

After this both sides played well, the forwards heeled well, giving their backs plenty of room in which to move. Rees Davies kicked well in defence and was helped in this by consistently long and accurate passes by scrum half B. Richards.

The second Bart's score came in the second half

with a try from R. M. Phillips, who was making a welcome reappearance in the side. The try stemmed from a quick heel from a loose maul, sending R. R. Davis through a gap in the Blues' defence. He passed to MacMaster, who gave an overhead pass to Phillips, who ran inside to score ten yards from the posts. Stevens again converted.

This game again showed the importance of the quick heel as the initiation of an attacking move, and ability to take advantage of one's opponents mistakes.

Team : M. Britz, R. M. Phillips, J. Stevens, A. B. M. MacMaster, G. J. Halls, R. R. Davies, B. Richards, B. O. Thomas, J. W. Hamilton (Capt.), D. A. Richards, L. R. Thomas, W. P. Boladz, R. P. Davies, R. Jones, G. Randle.

1st XV v. Woodford. Won 16—0.

This was the team's most impressive display so far this season. Both forwards and backs played with more understanding than in the previous games, and the result of two goals, a try and a penalty goal to nil, was a fair reflection of the Hospital's superiority.

Right from the start the pack dominated both the tight and loose play, heeling the ball quickly and cleanly, giving the backs ample opportunities. The first score came after ten minutes, when a cross kick from the touch-line found B. O. Thomas up to touch down between the posts, and give Stevens an easy conversion. Inspired by these early points, Barts continued to press and, a few minutes later, a brilliant combined movement between forwards and backs resulted in Boladz being given a clear run in from ten yards. Once again Stevens converted. After this, Woodford tried to close the game up, resorting to spoiling tactics rather than any constructive play, but the Hospital went further ahead when R. R. Davies and MacMaster engineered a very effective dummy scissors, to send Stevens over half way out. This time, the attempt at conversion failed. There then followed a period of rather scrappy play, but just on half time, R. P. Davies gathered the ball from a loose maul and, after a good run, passed to R. R. Davies, who was prevented from scoring only by a late tackle after he had kicked over the line. From the resulting penalty, Stevens brought the score to 16—0.

After the interval, Woodford's spoiling tactics began to pay dividends, and Bart's were content to close up the game. Only occasionally during the second half did the Hospital backs show their previous penetrative powers, although throughout they enjoyed a territorial advantage.

It is comforting to see the great improvement in the fire and vigour of the pack, and the straight running and handling of the backs. Hamilton heeled the ball consistently from the tight scrums, and Boladz and L. R. Thomas dominated the line-out play.

Team : M. Britz ; G. J. Halls, A. B. M. MacMaster, J. Stevens, J. Plant ; R. R. Davies, B. Richards ; B. O. Thomas, J. W. Hamilton (Capt.), B. Lofts ; L. R. Thomas, W. P. Boladz ; R. P. Davies, D. A. Richards, G. Randle.

## ROWING

The United Hospital's Winter Regatta took place at Putney on Wednesday, November 19th. Bart's entered for the following events: Senior Fours (2 crews), Senior Sculls, Pair Oar, Junior Eights, Junior Fours, Junior Sculls and Rugger Fours (2 crews). A full report will appear in the next issue.

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## ASSOCIATION FOOTBALL

## Cambridge Tour, 1958

The Cambridge Tour this year will be remembered for the generous hospitality we received, and the friendly spirit of the games. We explained to several of our opponents that Bart's was obviously the place for their further medical studies and, therefore, have high hopes for the future.

Many members of the team preferred relaxation after the game, but in spite of this, we spent a pleasant evening with Trinity Hall and a party held in a certain hotel was a memorable event.

The results were disappointing, in view of our confidence at the beginning of the tour. There is some consolation, however, in that we did defeat St. John's, one of the strongest college sides. In this game, J. Mercer was playing against his old college, and our victory was largely due to his inspired goalkeeping.

Three matches in three days means hard work, but it is excellent intensive training at the beginning of the season.

**St. Bart's 1st XI v. Trinity Hall.** October 23rd.  
Lost 1—4.

Bart's opened their tour of the ancient University in the vein of uncertain but well mannered guests. We continued wholeheartedly to flatter our hosts. Unfortunately, we were all too successful, they were made to look a fine team, and we received a good hiding. They opened the scoring soon after the kick-off. Their centre forward collected a pass outside the penalty area and, from close to, shot goalwards. Mercer seemed quite fascinated by his display, and watched the ball bounce into the goal.

From the kick-off, Bart's looked as if this had put some spirit into them, and launched several attacks on the Trinity Hall goalmouth, although always the finishing touch was missing. However, Iregbulem played determinedly at centre forward, and was unlucky to see one of his shots deflected for a corner. Trinity Hall scrambled another goal, and it was only then that Bart's made any reply. Phillips smashed a loose ball first time and it flew into the corner of Trinity Hall's goal. He was some thirty yards out at the time, and it was undoubtedly the best goal of the match.

In the second half we failed to make any improvement on our play, and Trinity Hall added two more

to their score. Halfway through this half we were reduced to ten men when J. Mercer was kicked in a goalmouth melee. M. Williams deputised, but Bart's were severely handicapped by the loss and failed to reduce the lead.

**Team:** J. Mercer; R. C. Kennedy, D. I. Prosser; M. Williams, C. Juniper, M. Noble; F. Amponsah, P. Watkinson, L. Iregbulem, J. Phillips, J. Kuur.

**St. Bart's 1st XI v. St. John's College.** October 24th. Won 2—1.

A much better display by Bart's, who immediately moved into a sustained attack down the right flank. St. John's soon came more into the game, and it was they who opened the scoring with a long range shot which caught Mercer by surprise. Bart's, however, continued to play constructive football, and scored a well deserved equaliser when Phillips headed in a corner by Andan. The play remained even in the second half, with the Bart's inside forwards, Savage and Phillips, keeping the attack moving. The defence were given some anxiety as St. John's made frequent dangerous raids, but they held out well. The winning goal was a fine opportunist effort by Iregbulem, an overhead kick which sailed over the St. John's goalkeeper's head.

**Team:** J. Mercer; R. Kennedy (Capt.), D. Prosser; I. Downer, C. Juniper, A. Gletsu; A. Andan, P. Savege, L. Iregbulem, H. Phillips, J. Kuur.

**St. Bart's 1st XI v. King's College.** October 25th.  
Lost 0—1.

This was the last match of the tour, and it proved to be the most disappointing. We had heard from many sources that our opponents had a weak side, and we were probably over-confident. The conditions were ideal, as they had been throughout our stay, but, in spite of this, the team produced very little in the way of good football. King's on the other hand, pressed us hard with determined bursts, and the defence was often in trouble. Only Amponsah, our right back, showed the coolness usually associated with the Bart's rearguard. The whole team looked tired and jaded from the three matches and social festivities of the tour. In the closing minutes of the game our opponents forced the goal they deserved. A shot from the left wing was deflected twice on its course, and our goalkeeper was given no chance.

**Team:** J. Mercer, F. Amponsah, D. I. Prosser; I. Downer, C. P. Juniper, A. Gletsu; P. Savege, A. Andan, L. Iregbulem, H. Phillips, M. Noble.

**St. Bart's 1st XI v. Swiss Mercantile College.** October 29th. Lost 3—4.

The annual match with the Swiss Mercantile College is one of the notable events of the season. The Swiss, with their quick and delicate continental passing, make a marked contrast with the more robust and direct style of Bart's. In spite of this, the game is always a close and enjoyable one. The language difficulties are usually overcome with

gesticulations and broad grins, although sometimes our English referee is hard put to it to explain a legal point.

This year, the conditions appeared ideal at the start of the game. The Bart's forwards moved the ball easily from man to man, and the defence looked sound and confident. In spite of this, the Swiss led 2—1 at half time, Downer having taken a good goal for the Hospital.

The second half had barely started when a thick fog descended. Visibility was reduced to a minimum, and our opponents, flitting like wraiths in the gloom, stole two more quick goals. Fortunately, these events stung the Bart's team into action and, with a good solo by P. Watkinson and a penalty by A. Gould, the arrears were reduced. Now the Swiss were in trouble, and we pressed their goal continuously and, on many occasions, we were unlucky not to score. We were unable to draw level, but it was comforting to see that we finished the stronger team.

**Team:** J. Mercer; F. Amponsah, G. Alaki; R. Kennedy, C. Juniper, D. Prosser; P. Savege, J. Downer, P. Watkinson, H. Phillips, A. Gould.

R.C.K.

★

## BRIDGE

On Monday, October 20th, a strange silence, broken only by the rumbling of many bids, settled over the Recreation Room at College Hall, where the newly-formed Bridge Club was holding its first Duplicate Bridge Competition. In the midst of the company, two ladies and sixteen gentlemen, the bald head of Tony Lederer, Master Player and proprietor of a leading London Club, gleamed purposefully. Most generously he had offered to organise an evening for us, an offer which was eagerly and gratefully accepted, and he and his partner, Mrs. Jill Gatti, provided expert opposition for the keen but inexperienced to try their skill upon.

The Competition was narrowly won by A. F. Stewart and R. England, with the secretary, D. J. Gray, and K. J. Sugden one point away, second. It was most encouraging that the winning pair were not among the fancied runners, and they are to be congratulated on a fine and consistent performance in their first competition.

Perhaps the most exciting incident of the evening occurred on the following hand:—

SOUTH	NORTH
S. A J x	S. x x x
H. x	H. A J x x
D. Q J x x	D. A K x x
C. K 10 x x x	C. A J x

One pair played in four Diamonds, and another in three No Trumps. A third pair were more ambitious and bid six Diamonds, but declarer (South) unfortunately went wrong in the play, and after ruffing a Spade in Dummy and a Heart in Hand, fell foul of a four-one trump break to go one down. The fireworks, however, occurred at the fourth table, where seven Diamonds were bid on the following sequence:—

S.	W.	N.	E.
1C	1S	2S	—
3D	—	4NT	—
6S	—	7D	All Pass

North's bid of 2S is conventionally forcing to game, and his second bid of 4NT inferentially agrees diamonds as the trump suit, and asks his partner to Cue Bid his aces. On the lead of the King of Spades, South was faced with a tricky problem, which he solved brilliantly. At trick two he cashed Dummy's Ace of Hearts and then ruffed a Heart in his own hand. Returning to Dummy by finessing the Jack of Clubs, which held, he ruffed another Heart in his own hand and then played the Queen and Jack of Diamonds. Crossing again to Dummy with the Ace of Clubs, he drew East's remaining trumps with the Ace and King, and claimed the last three Clubs in his own hand for his contract. A most efficient performance, but onlookers aver that as he took the Club finesse on which so much depended his hand trembled visibly, and his cigarette quivered between his lips. The hand is an interesting one, for it illustrates the power and flexibility of the four-four trump fit, allowing ruffs to be taken in either hand. Eleven tricks is the absolute limit in the superficially more attractive Club Suit, as East will overruff the third Spade.

That the evening was so enjoyable was solely due to the presence of Tony Lederer, who shepherded us all from table to table with a firm and fatherly eye. We were most proud and grateful to have him as our guest.

G.F.A.

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## WOMEN'S HOCKEY

## Committee for Season, 1958-59

*Captain:* I. Tomkins.  
*Vice-Captain:* J. Hall.  
*Hon. Secretary:* J. Hartley.  
*Match Secretary:* J. Arnold.  
*Treasurer:* E. Knight.  
*Committee Member:* J. Chambers.

Trials were held on Wednesday, October 8th, at Chislehurst. There were 22 people present, most of these were pre-clinicals, which was most encouraging.

**v. Royal Holloway College.** Wednesday, October 15th. Home. Won 4—1.

This was a very good start to the season. The defence played very well from the start—stopping, clearing and covering well. The forward line had never played together before, and it was not until the second half that they really got going. S. Minns played very well at left inner, scoring three goals.

Goals scored by S. Minns (3) and R. Berison.

**Team:** I. Tomkins (Capt.); J. Tuft, T. Coates; M. Child, J. Hall, S. Cotton; V. Nash, S. Duckes, R. Berison, S. Minns, A. Sinclair.

**v. St. Mary's Hospital.** Saturday, October 18th.  
Home. Won 8—1.

This was a decisive win after a rather shaky start, Mary's breaking through right at the beginning to score their only goal. The forwards muddled each other at the beginning, but as soon as they were used to their positions, they played well and we were 4-1 up at half-time. Bart's had scored one goal in the second half when J. Tufft had to go off with an injury. The forwards, however, took control of the game, with the halves backing up well, and three more goals were scored before the final whistle.

Goals scored by J. Chambers (3), S. Minns (2) and J. Hartley (3).

**Team :** I. Tomkins (Capt.) ; J. Tufft, T. Coates ; M. Child, B. Barnard, E. Knight ; M. Goodchild, J. Hartley, S. Minns, J. Chambers, M. Tinsley.

v. **Reading University.** Wednesday, October 22nd. Home. Drawn 2-2.

This was the best match so far this season, being very fast and open. Reading pressed hard at the beginning and the defence played very well to keep them from scoring. After some fast play midfield, the Reading forwards broke away to score the first goal. Just before half-time, S. Minns scored for Bart's after a very good run. Reading started the second half with another onslaught, and scored to give them the lead. Bart's soon scored again to equalise. The game slowed down considerably towards the end of the second half, and the final score was still 2-2.

Goals scored by S. Minns and J. Hartley.

**Team :** I. Tomkins (Capt.) ; J. Tufft, T. Coates ; S. Cotton, J. Hall, M. Child ; J. Arnold, J. Hartley, S. James, S. Minns, V. Nash.

v. **Charing Cross Hospital.** Saturday, October 25th. Away. Won 4-3.

This was not a very good game of hockey, but it was quite exciting. In the first half, Charing Cross were on top, and the score was 3-1 to them at half-time. The defence were not stopping and hitting the ball quickly enough. In the second half, however, they played much better, and our forwards were able to have more of the ball. We managed to get the ball into the goal twice to level the score at 3-3. Then, just before the final whistle, we scored from a corner, and so managed to scramble home as the winners.

Goals : J. Arnold and J. Hartley (3).

**Team :** I. Tomkins (Capt.) ; J. Tufft, S. Cotton ; E. Knight, J. Hall, M. Robertson ; G. Green, A. Sinclair, J. Arnold, J. Hartley, L. McPhail.

v. **University College, Oxford.** Friday, October 31st. Away. Drawn 2-2.

We played this match with eleven regular Bart's players and one Oxford Occasional—the umpire, armed with an umbrella and whistle he was a match against all the wiles of our opponents. Although played in a light-hearted manner, a fairly high standard of hockey was maintained throughout.

We survived natural and unnatural hazards of the game to eat a vast tea at University College afterwards.

Goals : J. Hartley (2).

**Team :** I. Tomkins (Capt.) ; J. Tufft, S. Cotton ; E. Knight, B. Barnard, M. Childe ; J. Swallow, S. Minns, V. Nash, J. Hartley, J. Arnold.

v. **Oxford University.** Saturday, November 1st. Away. Lost 1-5.

Both sides soon got into the game, and to begin with the ball moved quickly from end to end, and we thought this was going to be a really good match. Oxford, however, got even better, and Bart's did not, and just before half-time, they scored twice. Our defence was not accurate enough in stopping and hitting, neither did the forwards combine very well. After half-time, although each forward line had the same amount of the ball Oxford got three goals. The game then slowed down, and just before the final whistle Bart's, in a despairing attempt, scored.

Goal : J. Hartley.

**Team :** I. Tomkins (Capt.) ; J. Tufft, S. Cotton ; E. Knight, B. Barnard, M. Childe ; J. Swallow, J. Chambers, S. Minns, J. Hartley, J. Arnold.

★

#### RIFLE CLUB

##### Lloyd Cup, Round I

Bart's Lloyd Team A v. St. George's Hospital	
F. A. Strang	.. 97
J. D. Hobday	.. 96
M. J. Barton	.. 95
R. P. Ellis	.. 95
G. R. Hobday	.. 92

St. George's Total .. 475  
.. 434

Won by .. 41 points  
J. D. HOBDAY.

★

#### SAILING CLUB

The Club's racing activities this year have been as follows :-

##### Sherren Cup

Won by Westminster. Bart's 5th. This race was memorable inasmuch that it was sailed in pouring rain. The set of the Bart's mainsail, never good, was decidedly poor under these conditions.

*Helm,* A. H. Ellison. *Crew,* R. C. Birt.

##### Bannister Trophy

In this series of Inter-Hospital races, Bart's came 1st, 2nd, 3rd and 6th, and missed one race. The series was won by Westminster, Bart's final placing being 6th, which entitled us to race in the Harvey Wright Gold Bowl.

*Helm,* R. R. Smith. *Crew,* F. Stacy, R. C. Birt.

*Helm,* D. Welch. *Crew,* D. Howell, D. Colin-Jones.

*Helm,* R. C. Birt. *Crew,* R. Gabriel, A. N. Other.

*Crew,* Miss Bethen Thomas, Owen Thomas.

##### Harvey Wright Gold Bowl

The racing for this trophy was marked by numerous rescues, consequent upon failure of gear. Unfortunately it proved impossible to sail an unequivocal race before the end of the season. A committee decision awarded the Cup jointly to London and Westminster.

Bart's came 3rd in the only race that was satisfactorily finished ; this, however, was marred by the fact that London broke a mast.

*Helm,* R. C. Birt. *Crews,* Mrs. J. Darmady, J. Holland ; B. O. Thomas, Nevil Davies ; J. Mather, Miss L. Pharon.

##### Castaways Cup

This is an intercollegiate knockout team racing competition, organised by the Castaways, who are ex-members of the University of London Sailing Club. In the past it has been dominated by U.C. This year, however, teams were entered by the majority of Hospital Sailing Clubs, with the result that the London Hospital beat University College Hospital in the final.

Two races were sailed in each heat between teams of three, boats were changed between races to ensure fairness.

Bart's drew U.C. "B," and were eliminated in the first round, coming, 1st, 5th and 6th in both races.

*Helm,* R. C. Birt. *Crew,* Miss Frances Rose.

*Helm,* Nigel Salisbury. *Crew,* Miss Rachel Fisher.


*Helm,* D. Welch. *Crew,* Miss Deanna Layton.

##### Burnham Week

The firefly was again trailed to Burnham. This year, we were very fortunate in being able to borrow Mr. G. Hadfield's truck.

Although no startling success was attained—9th out of 20 being the highest place during the week. However, it gave those who sailed invaluable experience of keen competition in a large fleet.

In conclusion, although the results may seem poor to those who remember the Bart's supremacy in this field two to three years ago, it must be pointed out that there were 13 Hospitals racing at Burnham and that one outstanding helmsman can dominate the whole series. Although St. Bart's S.C. has some 50 initiated members, we have no outstanding helmsman, unless such a person be found amongst the new intake, we can hardly hope to do any better next year.



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