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HERALDRY

Not long ago an irate gentleman wrote from South Africa to enquire the significance of the device at the top of this page. We wrote and told him. Angrier still, he demanded an explanation of the vandalism that could dare to substitute a meaningless hieroglyph for his revered black-and-white, and threatened further action. We looked him up in the book, and were surprised to find that it was a bare ten years since he qualified and left these walls!

Now the controversy about the Hospital Arms has been current at least since 1933, when many letters on the subject appeared in these pages. There was a recurrence in 1938, and the decision to use the present Arms on the title page was made in 1947. Since then, a few fresh facts have come to light, and in view of the use of these Arms (in their correct heraldic tinctures) to decorate the cover of the new edition of *Round the Fountain*, it may be useful to recapitulate.

The coat of PARTY PER PALE ARGENT AND SABLE A CHEVRON COUNTERCHANGED, which we will call the "Hospital" Arms, has been in use for several centuries, and is lavishly displayed today. But it was never really the property of the Hospital. Sir Norman Moore traces its origin to a seal first used by John Wakeryng in 1423, the first year of his Mastership of the Hospital. There the shield appears surmounted by a crucifix, with a tree at each side, and an Agnus Dei at the apex. The document on which this seal was first used, an agreement with the Prioress of St. Helen's as to a drain and waterfall in Mugwell Street in the Parish of St. Olave, has since disappeared; but the use of the seal throughout the 39 years of Wakeryng's Mastership may indeed have led to the adoption of those Arms for the Hospital. They are shown alone, above the illuminated capital in Cok's *Cartulary* which depicts Brother John Cok, his arms, and three angels supporting a crucifix. The painting appears to be contemporary, and the *Cartulary* was in progress from 1456 to 1468. But John Wakeryng's family device was a Pelican and his Arms so different from the "Hospital" Arms that there is no clue to the reason for his use of the latter in his seal as Master of the Hospital. The usual Hospital Seal, in use from 1308 to 1534, bears the lions of England on two small shields on either side of a figure which presumably represents one of the Kings or Queens of England.

The earliest known use of the "Hospital" Arms is on a thirteenth century tomb of the Lillebone family in Winchester Cathedral, and under the same name in an Arms Roll of the reign of Henry III. But this family seems to have died out shortly afterwards, nor is there any record of any connection between it and the Hospital.

The Arms also appear in a fifteenth century book of Venetian Arms in the College of Arms as those of a Venetian family named Renier: this is probably the source of their display on a castle in Cyprus. But once again, no connection of the family with the Hospital is known.

In the year 1558, Norroy King of Arms granted the "Hospital" Arms to Lawson, of Usworth, Co. Durham. The family still exists, and a memorial window to one of its sons in the Church of St. Cross at Winchester displays these arms.

The family of the Earl of Caledon, beginning with a Barony created in 1770, also

bears the "Hospital" Arms, differenced by a crescent in the base, and various other devices in subsequent generations. The original Grant of Arms was probably made by Ulster King of Arms, which might explain the similarity to those already borne by the family of Lawson.

It is true that the Arms appear in a sixteenth century MS at the College of Arms as those of the Hospital (*c.* 1535): and in the same book are the Arms of GULES TWO LIONS PASSANT GARDANT AND IN CHIEF AS MANY CROWNS OR for the priory of Saint Bartholomew. That is the blazon of the Arms which we now use on this page, and on *Round the Fountain*.

They first appear on Rahere's tomb in the Priory Church of St. Bartholomew the Great: the tomb was probably made about the year 1405. They are prominently displayed on the side of the tomb and on a shield borne by two angels at Rahere's feet, and there is little doubt that they must then have been accepted as the Arms of the Priory.

Now the Hospital was founded jointly with the Priory, and the Master used to swear fidelity to the Prior. Since the Dissolution, the Hospital alone has survived from the Foundation, and would be justified in succeeding to the use of the Priory Arms.

It should be made clear that the use of Arms was at first regulated only by priority of usage, under the periodic supervision of the King's Heralds. The Heralds were particularly strict in the reign of Henry V (1413-22), when the Priory Arms were presumably already acceptable by right of ancient usage. No amount of usage after that time will ever again carry any such right, so that, even if the black-and-white Arms were intended to represent the Hospital, John Wakeryng began to use them too late to establish them by usage alone. When the College of Arms was founded in 1483 it would no doubt have been possible to obtain a Grant of these Arms for the Hospital, but their allocation to Lawson of Usworth in 1558 implies (unless the College was mistaken) that they were not in use by any other person at that time: nor should they have been used subsequently by anyone else.

There was a suggestion, in 1933, to incorporate the two Bearings in a quartered Coat, with Supporters such as a monk and a nun. This found little favour. Unofficial heraldic opinion today suggests that it would be impossible to confirm to the Hospital the use of the black-and-white Arms, unless they were clearly differenced from those borne by the Lawson and the Alexander (Earls of Caledon) families: they would then lose their admitted attraction of simplicity. The Priory Arms, on the other hand, might well be allotted to the use of the Hospital. They are more decorative, just as simple, and they commemorate the Royal influence in Rahere's Foundation and the Second Foundation. Most important, a Patent for their use from the College of Arms would avoid the unauthorised and vulgar display of those "Hospital" Arms which belong elsewhere—a display which, for all its ubiquity and five centuries duration, can never be justified.

ABERNETHIAN SOCIETY

The meetings to be held from January-March are:—

January 12 Medical Films.
1. The Medical Applications of Sulphonamides.
2. The Use of Thiopentone Sodium in Intravenous Anaesthesia.

February 2 Dr. Geoffrey Bourne on "The Place of Optimism in the Treatment of Heart Disease."

February 23 Mr. G. Russell Vick, K.C., Chairman of the Bar Council, on "The Bar of England."

March 2 Rt. Hon Lord Moran on "Conscription."

All meetings will be at 5.30 p.m.

The meeting on January 12 will be held in the Physiology Lecture Theatre, Charterhouse Square: all others will be held in the Clinical Lecture Theatre at the Hospital.

Meetings will probably be arranged on February 16 and March 16.

RADIO-ISOTOPES IN BIOLOGY AND MEDICINE

By PROFESSOR A. WORMALL

WHEN Hevesy, in 1923, first used a radioactive isotope to study the transport of lead in plants, I wonder if he or anyone else could visualise the tremendous developments which would later take place in this field of work. In those early days the choice of radioactive isotope was limited to those which occur naturally, such as those of radium, and it was not until artificial radioactivity had been discovered by the Joliot-Curies in 1933 that the great potentialities of radio-isotopes as tracers began to be realised. In this renewed attack starting about 1935, Hevesy was again in the forefront, and soon he was joined by dozens and later thousands of other scientists who had an urge to use these new weapons.

At present, thanks to the physicist, the cyclotron and the atomic pile, about 600 different radioactive isotopes have been characterised and many are available in fair quantity for research and the treatment of disease. There is a never-ending stream of publications on the use of these isotopes in investigations in medicine and general science. My own bookshelves contain six largish text-books on radio-isotopes, four of them published since the begining of 1948, and many hundreds of reprints and pamphlets. Each year there are thousands of published papers to be read or at least noted, and as yet the stream is a mere trickle compared with what is to come. In 1975 perhaps, if we survive until then, the biochemist, the physicist, the clinician and, above all, the patient will be able to judge in true perspective the relative gains and losses resulting from the developments in nuclear physics which incidentally produced the atomic bomb. It may well be that when the balance sheet is prepared the profits will greatly exceed the losses.

In almost every branch of scientific investigation the knowledge is rapidly spreading that isotopic tracers can profitably be used to study problems which appear to be insoluble by the ordinary classical methods of chemistry and physics. During the past few years my colleagues and I have, for example, been consulted about the labelling of such diverse compounds and materials as penicillin and sulphapyridine, starch in growing wheat, tsetse flies, red blood cells, plasma proteins, bacterial antigens and "marked" bank notes. Quite recently I have read reports on the use of radioactivity determinations (a) to "date" the ancient Egyptian tombs, and (b) to give a more precise figure for the age of the earth, apparently there seems to be some doubt as to whether the earth is 3.3, 2.4 or 2.1 x 10^9 years old, and I hardly need to add that it is a matter of great moment to some people. Another report which aroused my interest described the labelling of mosquitoes with radio-phosphorus for the study of the distribution and habits of the yellow fever-carrying mosquitoes in West Africa.

The applications of this technique to medicine are manifold, and so far there has been merely a token contribution from nuclear physicists and biochemists. Blood volume, circulation rate, the fate of transfused red blood cells, the physiology of the placental transfer, absorption from the alimentary tract and through the skin, and the metabolism of a wide variety of compounds including that of carbon monoxide in man have all been studied by the radio-isotope technique. Diseases of the thyroid have been studied in the human subject with the aid of radio-iodine, and peripheral vascular diseases with radio-sodium. Therapeutic applications of a few radio-isotopes such as those of iodine and phosphorus are now fairly well established, and several others, including strontium, manganese and zinc, are now being tested in connection with the treatment of certain malignant conditions.

Advantages and disadvantages of the radioactive isotopic tracer method

When properly used, isotopes are excellent labels or indicators for attachment to molecules of foodstuff or drug, tissue protein or metabolite. Both radioactive (i.e., unstable) and stable isotopes can be used for this tracer technique, and it is unwise, in my opinion, to attempt to assess the relative merits of the two types of label. It is fairly obvious, however, that radioactive labels which can be traced in the living animal will generally be more useful than are stable isotopes for investigations on man, and furthermore the radio-isotopes give off powerful rays which

in some cases may be put to beneficial use. This article deals almost exclusively with the radioactive isotopes, but it should not be forgotten that the stable ones, such as deuterium (heavy hydrogen) and N^{15} (heavy nitrogen), have proved extremely valuable in biochemical research.

A molecule of a compound labelled with an isotope is, for all practical purposes, identical with the normal unlabelled molecule, and indeed the radioactive compounds used in tracer work usually contain many thousands or even millions of ordinary molecules for each one which is radioactive. Also, experiments can be made under purely physiological conditions. There is no need to produce a pathological condition, i.e., it is not necessary to remove the animal's pancreas, liver or pituitary, or to dope the animal with phlorrhizin, alloxan or a diet deficient in vitamin X. The animal can live normally throughout, and usually after, the experiment, and the compound under investigation can be given in normal or even subnormal amounts. Where a radioactive isotope is used, its appearance in the circulating blood and in urine, faeces and expired air can readily be detected; furthermore, particularly when the isotope used emits penetrating gamma-rays, the deposition of the labelled compound in tissues lying some distance beneath the skin can often be detected by a suitable Geiger-Müller counter held near the surface of the body.

This catalogue of advantages sounds almost too good to be true, and we must look for the shortcomings. Fortunately they are few in number. The label must, of course, be one which can be attached firmly to the molecule under consideration, for it is usually a waste of time to trace a label which is detached from the labelled compound as soon as this is introduced into the body. Firm attachment can, however, usually be accomplished without damaging the rest of the molecule, and in our own work on immuno-chemistry, my colleagues and I are introducing the radio-isotopes of iodine, sulphur and phosphorus into antibodies and antigens in such a way that the label is only removed when the protein is hydrolysed. When using these isotopic tracers, one must always remember that one merely detects and estimates the label.

Another disadvantage, and a serious one in many cases, is the possible serious ill-effects of the radiations produced by the radio-isotopes. For a long-term experiment or for any experiment on a normal animal, one should avoid the use of an amount of radio-isotope which will cause damage to the tissues. Fortunately one can usually ensure that a safe amount of radio-isotope is used in tracer investigations.

The choice of suitable isotopes for a particular experiment is often strictly limited. The isotope one would like to make use of may have a very short half-life period. This half-life period is the period during which half the radioactivity is lost, and it varies from a few micro-seconds for some isotopes to thousands of years for others. A radio-isotope which decays very rapidly will naturally be almost useless for most types of biological work; F^{20}, for example, one of the radioactive isotopes of fluorine, has a half-life of 12 secs., i.e., half the radioactivity is lost in 12 secs., 75% in 24 secs. and about 97% in one minute. Obviously this isotope would not be very helpful in studies on the deposition of calcium fluoride in teeth, or in most other biological investigations. Other radio-isotopes are very long-lived. C^{14}, one of the isotopes of carbon, has, for example, a half-life of about 5,100 years, and it should be used very cautiously in investigations on man, particularly if there is a possibility that it might become attached to some compound which is stored in the body. Fortunately there are a few radio-isotopes which are almost ideal for metabolic and other tracer investigations on man and other animals. Three of the most interesting in this group are phosphorus, iodine and sodium, with half-life periods of 14 and 8 days and 14.8 hours respectively.

These few limitations should be kept in mind, but they do not seriously detract from the outstanding value of a new technique which has already helped to solve some of the most difficult problems of biochemistry and physiology. It should be emphasised, however, that investigations of this type, and their planning, are jobs for the expert, for the radio-isotopes can be very dangerous to the experimental subject and to the health and reputation of the investigator.

The preparation of radioactive isotopes and radioactive compounds

Each chemical element is now known to exist in the form of two or more isotopes, the various isotopes of any one element having the same electrical charge on the atomic nucleus but having different masses. Carbon, for example, can exist as isotopes of masses 10, 11, 12, 13 and 14, i.e., as C^{10}, C^{11}, C^{12} (the most abundant of these isotopes), C^{13} and C^{14}. Of these isotopes, C^{10} C^{11} and C^{14} are radioactive, i.e., undergo spontaneous decomposition with the emission of particles or rays.

Radio-isotopes are prepared by the action of neutrons, protons, deuterons or alpha particles on stable isotopes, i.e., on normal compounds, and often the required isotope can be made by two or three different methods. Radio-phosphorus (P^{32}), for example, can be made by neutron bombardment of P (as inorganic phosphate) or of S (as roll sulphur or carbon disulphide) or of Cl (as NaCl, carbon tetrachloride, etc.), or by deuteron bombardment of S or P.

Most of the radio-isotopes can be produced most readily and most economically by the atomic pile, but the cyclotron still has its share of these duties. The two "instruments" should be considered complementary in this respect, though the atomic pile can quickly produce certain radio-isotopes in amounts many thousand times as great as those which can be made by the cyclotron in a reasonable time. Both types of plant are costly to build and maintain, and cheap portable "sets" which can readily produce large quantities of various radio-isotopes should be suspect until their performance has been measured in a properly controlled test.

Having received a supply of the radio-isotope, the investigator often wants to introduce it into a compound whose biological properties he proposes to study. On the other hand, he may simply wish to study the fate of the substance he has been supplied with, and all he has to do is to trust the label on the bottle and go right ahead; usually this is fairly safe, but occasionally the label may be wrong, for the preparation of chemical compounds on an ultramicro-scale with "carrier-free" or "weightless" isotope preparations is not a simple matter. For example, the amount of iodine in a sample of "carrier-free" iodine supplied for research and therapy is well below that which can be detected by the most sensitive chemical test.

For many investigations, clinical as well as laboratory, we want to introduce the radio-isotope into a drug, a protein, a fat, a red cell, a bacillus or a yeast. Sometimes this is easy, but more often it requires considerable knowledge of what is almost a new chemical technique. Red blood cells can be labelled with radio-phosphorus fairly easily by keeping the cells for an hour or so in a solution containing radio-phosphate. Bacteria and other organisms can be labelled by adding radio-phosphate or radio-sulphate to the medium in which they are growing, and in this way P^{32} can be introduced into nucleoprotein and phospholipid, and the S^{35} into proteins and other sulphur-containing compounds (e.g. penicillin and vitamin B_1) which the organism normally produces. This biological synthesis of radioactive compounds is one which will, I feel sure, be used more and more in the future. It is of limited applicability, but it can be efficient and economical, and, above all, it gives a radio-active, biological compound chemically indistinguishable from the normal non-radio-active product. During the past three years, we have found it excellent for the preparation of a labelled or tagged antigen. We give P^{32} to our hens and they obligingly introduce it into the lipovitellin and phospholipin of the egg yolk; we can then separate these labelled compounds, and inject the lipovitellin into rabbits to see where injected antigens go, or use both compounds in our precipitin tests. Other workers have introduced radio-iron into red cells by giving the isotope to man or some other animal, and the cow and goat have been persuaded to introduce radio-phosphorus into the milk protein, casein.

Frequently, however, the biochemist must do the work himself, and here he is faced with the problem of introducing the radio-active label without seriously altering the chemical and biological properties of the compound he is investigating. Fortunately, the difficulties are not always insuperable. For example, my colleagues and I find it possible to attach radio-iodine to serum proteins without causing any significant change in the biological properties of the proteins. The amount of iodine which enters the protein is far too small to be detected chemically, but one drop of a 5% solution of these iodinated proteins is quite sufficient to make our counting recorders "click" very excitedly.

Occasionally one meets a snag, for some chemical reactions which work well on the ordinary laboratory or works scale seem to become temperamental when carried out with very small amounts of reagents.

Recently we had synthesised for us some radioactive suramin, a drug used for the treatment of human trypanosomiasis (sleeping sickness) in tropical countries. The first sample prepared was radioactive, but only a small fraction of it was suramin. Fortunately we had a chemical test which enabled us to spot this or otherwise we might have been seriously led astray. If we had wanted 10 grams or 10 lb. of suramin, I am sure that we should have received a perfectly pure sample, but the specific activity of the preparation would have been far too low for our investigations.

The detection and estimation of the radio-isotopes

The radiations from a radioactive isotope are usually detected and measured by a Geiger-Müller counter, an ionization chamber or a sensitive electroscope. In most tracer experiments the radioactivity of a weighed amount of the tissue studied is compared with that of the starting material used for the experiment. Photographic methods can also be used, and this autoradiographic method is capable of showing in which minute structure the labelled element or molecule is deposited.

Measurements on the living animal can be made easily by using a portable Geiger counter set, with the counter held near the surface of the body. This equipment is now available in our Hospital and with its aid it is possible to detect and estimate radio-iodine entering the thyroid after administration of the isotope (as potassium iodide), or to detect the appearance of radio-sodium in various parts of the body following its intravenous injection as NaCl. This type of investigation on patients is, of course, most satisfactory when the isotope used emits gamma-rays (similar to X-rays) or other penetrating rays. Iodine and sodium are very suitable for these studies and phosphorus is moderately good.

A few examples of the use of radio-isotypes in biochemistry and medicine

In this short review it is impossible to mention more than a few typical investigations in this field. These I have arranged in three groups, but this division is quite arbitrary and merely made for convenience. For reference purposes a few commonly used radio-isotopes are listed in Table 1, together with their atomic weights or masses and their half-life periods.

Table 1.—A few radio-isotopes useful in biochemistry and medicine

Element.	Radio-isotopes	Half-life period
Carbon	C^{11}	21 min.
	C^{14}	5,100 years
Sodium	Na^{24}	14.8 hr.
Phosphorus	P^{32}	14.3 days
Sulphur	S^{35}	87 days
Iron	Fe^{55}	4 years
	Fe^{59}	47 days
Strontium	Sr^{89}	55 days
Iodine	I^{131}	8 days

Tracer experiments

These have included studies of practically every type of biochemical problem where a labelled molecule can be of service. The tagged molecule is injected into an animal, or given by mouth, and the label is subsequently traced in the various tissues of the body and in the separated individual constituents of these tissues. The isotopic tracer method is almost ideal for many metabolic experiments; in fact, I feel certain that no biochemist would have dared to believe, prior to 1933, that such an excellent method would ever become available.

The results obtained with isotopic tracers, both stable and radioactive, have shown that the body constituents, even those of the most stable tissues like bone and teeth, are in a state of dynamic equilibrium. The proteins of plasma, and at a slower rate the calcium phosphate of bone, are gradually and continuously being broken down and replaced by protein and calcium phosphate respectively.

In other tracer experiments, Dr. Francis, Mr. Mulligan and I, in collaboration with Dr. Banks of our Physics Department, are studying some chemical aspects of immunity. By using antigens labelled with P^{32}, I^{131} or S^{35} and antibodies labelled with I^{131} or S^{35} we are able to determine the amount of antigen and antibody in very small amounts of antigen-antibody precipitates. In some of our experiments we have actually used three different tracers and these, together with total nitrogen determinations, tell us quite a lot about the composition of the specific precipitates. Our results suggest that, with the antibodies we have been studying, each antibody molecule has only one group which can combine with the antigen molecule; in other words, our evidence supports the view that the antibody is "univalent" in this respect.

Whipple and his colleagues in the U.S.A. and many other investigators have used haemoglobin labelled with radioactive isotopes of iron to study the formation and life-span of red blood cells. In this case a double label can be attached by using a mixture of two radio-isotopes of iron, Fe^{55} and Fe^{59}.

Diagnostic purposes

These are essentially tracer experiments, but it is perhaps more helpful and illustrative to group separately those tracer experiments which are primarily designed for studies of the body tissues and the functioning of various organs in man, rather than a study of the precise chemical fate of an administered compound.

Many experimental tumours are known to take up greater amounts of P^{32} than do normal tissues, and it has been found possible in some cases to use this difference for the diagnosis of breast tumours. The beta-rays emitted by the P^{32} are detected by holding the counter near the skin, but it seems probable that this diagnostic use of radio-phosphorus will have only a limited value.

Radio-iodine (usually the I^{131} isotope) has been used for the determination of the level of thyroid function, and it has been claimed that the isotope helps to distinguish between simple hyperthyroidism and the ophthalmopathic type. Many authorities believe that this isotope may possibly be used more often in the future for diagnostic purposes. Radio-sodium, usually given as NaCl, is now being used extensively and very successfully for the diagnosis and study of a number of circulatory diseases. The penetrating gamma-rays emitted by this isotope can readily be detected by a Geiger - Müller counter applied to the surface of the body, and the distribution of sodium in the blood and tissue fluids can readily be followed. Somewhat similar investigations are now being made with radioactive inert gases.

Therapeutic uses

P^{32} was the first artificially produced radio-isotope to be used in therapy, the first tests being made in the U.S.A. in 1936, and since then it has been tested very extensively. According to many experts, the use of this isotope, administered as a solution of sodium phosphate and given *per os* or intravenously, is the "treatment of choice" for many cases of polycythaemia (rubra) vera, and at least as satisfactory as X-rays for the treatment of many chronic leukaemias. Clinical tests are also being made with a colloidal chromic phosphate containing P^{32}, but the results do not appear to have been published as yet.

The use of radio-iodine for the treatment of hyperthyroidism has usually given satisfactory results, but it is probably too early as yet to assess the value of this type of treatment. The same isotope has been used for the treatment of thyroid malignancies, and although the early results were not encouraging, the more recent reports have been more favourable. It is suggested that radio-iodine therapy can be of value for those thyroid malignancies in which iodine is concentrated in the malignant tissue.

Although P^{32} and I^{131} (or sometimes I^{130}, with a half-life period of 12.6 hr.) are the only radio-isotopes which have been used at all extensively for therapeutic purposes, a few others are being tried. For example, radio-strontium and radio-calcium have been tried in the treatment of some bone tumours, and radio-zinc (the short-lived Zn^{65}) and radio-gold (Au^{198}) for the treatment of certain other malignant conditions.

The therapeutic use of radio-isotopes to produce localized irradiation of tissues is still in its infancy, and even the most optimistic workers in this field are cautious in their reports and also in their development of this line of investigation. It is recognized that the ionizing radiations themselves may induce malignant changes in tissues, and indeed it has been shown that both radio-strontium and plutonium can produce bone tumours in mice.

Radio-isotopes and the future

Biochemists, physiologists, pharmacologists, and indeed the majority of those engaged in medical research will probably find in the near future, if they have not already done so, that many of their most difficult problems can profitably be studied with the aid of isotopes. Usually the radioactive ones are more satisfactory than are the stable isotopes for investigations on the living animal. Radioactivity determinations require complicated apparatus and experts to make the measurements, but the difficulties are still greater in the case of the stable isotopes; their determination is best made by a mass spectrometer, and very few instruments of this type are available in this country. Fortunately we shall soon be equipped with one in my department, and

it is hoped that this equipment will be useful to many others in our College besides my colleagues and myself. Perhaps with its aid we may learn more about the pharmacological action of the nitrogen mustards in relation to their use for the treatment of Hodgkin's and other neoplastic diseases, and there are many other nitrogenous drugs which can be studied by this technique.

As far as research is concerned, it is tolerably certain that many investigators will profitably use radio-isotopes for the study of chemotherapy, bacteriology, diet, immunity and cancer research, to mention only a few of the subjects which are of special interest to the readers of this Journal. Penicillin, sulphapyridine and vitamin B_1 have all been labelled with S^{35} for tracer investigations, and we ourselves are studying radioactive suramin. We hope, for example, that we shall be able to say how many molecules of suramin enter each trypanosome and how many are required to inhibit a molecule of hexokinase, succinic dehydrogenase, trypsin or some other enzyme; perhaps we are too optimistic, but it is fairly certain that no method other than the radio-isotopic tracer method will reveal these secrets. Bacteria, viruses and other organisms can readily be labelled with P^{32}, S^{35}, C^{14} and other radio-isotopes, and it is not difficult to see great possibilities in this field.

As far as therapeutic uses are concerned, one of the greatest hopes must, of course, rest in the possibility that radio-isotopes might be useful for the diagnosis and treatment of cancer. Whilst we must show the utmost caution in this respect, it would be unwise to ignore the possibility that some day a means might be found whereby isotopes might be used to give localized irradiation of malignant tissues. One should not exclude the possibility that some investigator of the future might find that a certain radio-isotope, or more probably a compound containing the isotope, is selectively deposited in tumour tissue, with destruction of that tissue by the radiations emanating from the isotope. This may be a "will-o'-the-wisp," but it is one which we must follow.

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ROUND THE FOUNTAIN

FROM the beginning of this Journal in 1893 it has been the custom to publish, from time to time, light verse and humorous articles, Snatches of conversation, "howlers" and witticisms also made their appearance, often under the heading *Round the Fountain*. There is no record in the minutes of the Publication Committee of the original decision to publish a collection of these in book form. The Editor at the time was R. B. Price, whose verses, then and in all subsequent editions, have been unrivalled. We have been unable to find a copy of this first edition of 1909, but it would seem to have been a paper-covered volume of about 100 pages, probably sold at half-a-crown.

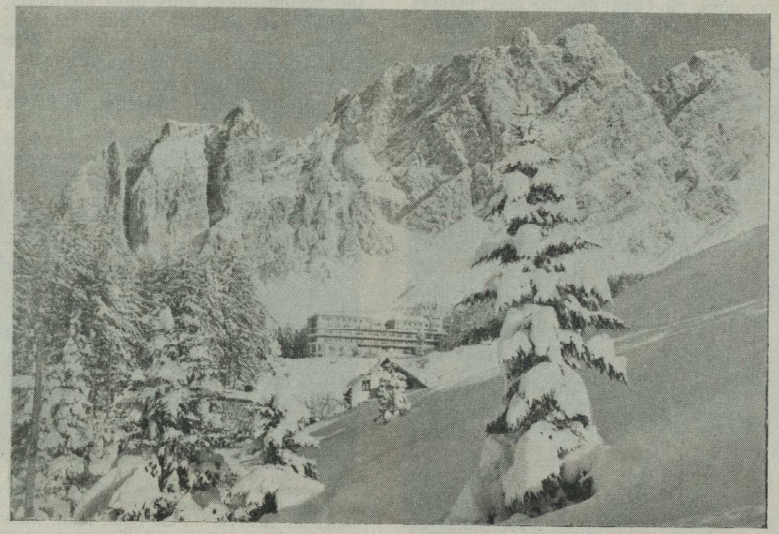
There were new editions in 1912 and 1922 (the latter reprinted in 1923), each one adding new material—forty pages in the case of the third edition. The editors at that time were proud to announce that there had been no increase in the pre-war price of two shillings and sixpence. With this edition there disappeared the aim of making a profit to be devoted to the Nurses' Home.

The fourth edition (1927) was more ambitious. Many line illustrations for it were specially made, and these, with the usual addition of new matter, brought the size up to 200 pages. The paper-covered edition was now sold at three-and-six, but other copies were bound in dark blue cloth, with a paper label on the spine, to be sold for seven shillings and sixpence. This edition was sold off during the last war, when there was an acute shortage of storage space—so effectively that it was difficult to find copies of it for the preparation of a new edition.

This, then, is the fifth edition, and stands on a firm base of previous popularity. Some of the verses in *Round the Fountain* have become known all over the world. They have been reprinted, with and without permission, in medical journals as far afield as Canada, Australia, and the United States, probably in many other places. Such as "The Battle of Furunculus" are now classics of light medical literature: they appear again, their wit undimmed by the passage of years.

For the rest, we have eliminated some that were no longer topical, revised one or two, and added what seems to be the best of the material available since 1927—to a total of 243 pages. The whole is arranged in chronological order, and decorated with some of the old drawings, some refurbished, and some new. The frontispiece is taken from a pen-and-wash drawing by Hanslip Fletcher, which hangs in the Clerk's Office. The binding is red cloth boards, with gilt title stamped on the spine, and on the front the Arms which appear at the head of this column.

The quality of paper, typography and binding we believe to be above that of previous editions, and we are exceptionally fortunate to be able to offer the book for sale at the moderate price of four shillings.



INSTITUTO PUTTI, CORTINA D'AMPEZZO. Completed by the Italians in 1938. Used by the Germans during the war in Italy, and subsequently by the British for the treatment of ski-ing accidents, 1945-46. (See "Ski-ing Injuries," by E. D. Vere Nicoll, in the December issue.)

MACKENZIE'S

By W.G.W.

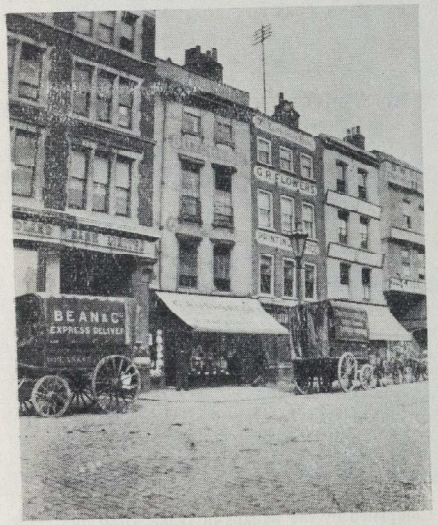
On August Bank Holiday, 1887, I entered Mackenzie's to " do " my 20 midwifery cases, fortified by some classes held by W. S. A. Griffiths, and by following Matthews Duncan around his ward " Martha " as his clinical clerk.

There were about ten of us and we had to stay on one month, so that I had about 30 births, within an area bounded approximately by the City Road, Moorgate, the River, Fetter Lane, and the south side of King's Cross, with Clerkenwell the main area. One husband came all the way from Caledonian Road because his wife wanted a " Bart.'s " doctor.

The high birth-rate, the dense population, and the rareness of maternity homes ensured that we were all kept busy. It was our earliest real responsibility, and though unqualified we were known and addressed as " Doctor."

On the night of my arrival I was called out, and attended my first case. I found the woman in bed with four children, the latest just born, rather to my relief, and only the placenta awaiting attention.

" Mackenzie's " was a house between St. Bartholomew the Great and the meat market (*see photo*), and opposite was a large drinking trough for horses, in which the urchins of the neighbourhood used to bathe naked, with a scout or two watching for police.



" Mackenzie's " is the whole of the house over the butcher's shop; the entrance being inside the archway, in Cloth Fair.

The alternative to " Mackenzie's " for the students was a nursing maternity home, but this was rather scorned by the "Mackenzie's" folk. There were too many pupil midwives, and it was alleged that the men too frequently saw only the " breech presentations " of the midwives leaning over the labour bed and obstructing the view. Responsibility was lacking.

There was much poverty, and we often had to obtain and supply milk and other necessaries for mother and child, and sometimes to wash the mother and the baby. We were reimbursed from a " Samaritan Fund " at the Steward's Office.

Some of the District was rough and disreputable—on one occasion a policeman told me not to go down alone an entry from Barbican: I did go, and never heard of any molestation of any of us, but much gratitude.

How the patients avoided Puerperal Fever is difficult to explain. As a rule the surrounding circumstances were most insanitary, and vermin were plentiful. I think there was no case of Puerperal Fever among the two to three hundred cases that hot August.

At our call we had not only our fellow students but the Obstetric H.P. in the hospital, and beyond him the Obstetric Physician. We seldom had to send for these No maternity cases were taken in Bart.'s at that time.

Triplets at " Mackenzie's," 1905. On the left the proud father; centre, the extern, H. Gauvain (later Sir Henry); on the right, Scott, whose case it was. There was a ten-shilling sweep on triplets, only paid if the student in charge made an ante-natal diagnosis.

(These photographs were kindly lent by Dr. Philip Gosse.)

The second Great War obliterated " Mackenzie's," but those of us who worked there will always remember the interest and advantage of acquiring our first responsibilities in the Profession, in such a rather romantic fashion and place.

August 2, 1949.

" Mackenzie's " is mentioned several times in " Round the Fountain." " The Journal of Dr. Revlyn-Blood " (p. 83) is a Pepysian description of the work there; and " The Passing of Mackenzie's" (p. 23) a lament for its dissolution.-Ed.

BARTS IN THE BELFRY

THERE is but little belfry in this play; it is all bats. " Rat week in Rome " could not produce better organised confusion than did Bryan Bailey on whose shoulders the first drops of a veritable shower of laurels must fall. His raw material was moulded into the most ingenious of shapes in a manner faultless from in front of the curtain, whatever may have been the tangled skein behind. Nothing of the amateur appeared, even in that most exacting of professional gestures the feeling of the pulse which " Dr. Brown " performed in such a thumbless manner. He, at least, has not wasted a moment since leaving Charterhouse Square!

The play itself is of little consequence, the lightest of the very lights, written in 1937 as a deliberate vehicle for the art of Miss Lilian Braithwaite. At least, we thought, there must be some actress of great experience, in our midst. Aileen Ryan, perhaps? But, no. There she was, to be sure, but listed among the light weights: almost amongst that strange bunch of also-rans, bracketed together in a happy quartette of mere " Guests." The new Star appeared—Janice Owen: a newcomer to Bart.'s; almost a newcomer to the stage and, but for a mere score of years, a newcomer to the world itself. Playing the aunt she must take it as a compliment that she seemed much older than she is; perhaps not quite old enough, but Miranda was not elderly. Personality and poise were there; she held the audience, and the centre of the stage, as Miranda should. We wondered at her word perfection in such a long and exacting part; perhaps there was a slight monotony of tone, and she did not always wait for her laughs but these are criticisms of an excellent performance. The others played round their centre-piece unselfishly and capably. Edward Boyse seemed overwhelmed by his efforts in fathering such a brood and was convincingly self-effacing. Frank Almond as Jerry could not have been more natural. He seemed to live in the house and was undeterred by part or audience. Full marks for him. Janet Nye, and Carmen Rant, the Morton girls, were different enough to be sisters, and bold enough for the apocryphal parson's daughters. Laurels to them for their naturalness and skill. What a rascal Edward Morton had to be: Geoffrey Singer was most accomplished and capable, but not quite convincing. Lady Carnworthy probably chose the better of the two but Anne Crabtree was not the sort of girl to care twopence for either of them. Her faint was good enough to be true. Harold Shaw could never have won Nora; but he could never have won anything in that blazer—Denis Bartlett must get a new one—the pockets were way up out of his reach. He was the personification of " Saxon interbreeding " but the part was overdrawn by authors rather than actor. The Master of Gamaliel College and Sir Charles Carnworthy had more fun in the study than on the stage; Roy Dickman had spared a few minutes from his car exports at Coventry to enter the Belfry but Paul Biddell seemed more like his general manager than a Master! Blame the authors for that too.

What can I say of the others? Teddy Clulow gave us his views on engagement-breaking and went on with the party! Aileen Ryan, by a brillant momentary appearance, showed that " you can't keep a good girl down." The Guests enjoyed themselves and what more can you expect of guests. I have forgotten Peter Moyes — but he won't remember anything about it!

Everyone was splendidly audible. Nothing fell over—an ashtray now and then perhaps, but what of it—and the voice of the prompter was stilled — a pity, because Marjorie Franklin has a very pleasant voice. John Pittman was too busy to be on the stage but without him there would have been no play.

We missed the flowers at the end, or were they at the First Night? Perhaps my bouquets, given gratefully, will suffice.

V.P.

A CASE OF CHRONIC ULCERATIVE COLITIS

ASSOCIATED WITH SEVERE INTRACTABLE PYODERMA GANGRENOSUM

By FRANCIS M. SHATTOCK

THE term colitis indicates an inflammatory condition of the colon. This condition may be the result of either a specific or a non-specific infection. It may also be divided into an ulcerative and a non-ulcerative type, of which the non-specific ulcerative colitis is the type most likely to be referred for surgical treatment.

Next to cancer chronic ulcerative colitis is probably the most serious disease that attacks the digestive tract of man, and of those patients requiring hospital treatment for an alimentary disease between a fifth and a third of them are suffering from chronic ulcerative colitis. In this respect it is worth while remembering the ancient name for the disease—colitis ulcerosa gravis.

The **ætiology** is still somewhat obscure. The disease occurs usually between the ages of 20-40 years, the sexes being equally affected. Thus it is seen to be a serious economic liability.

Few cases were reported before 1919, when Logan reported a statistical survey of 117 cases, and in the following years it was regarded as a grave entity.

A number of views have been advanced as to its ætiology, which may be summarised, briefly, as follows:—

1. That it is an end stage of an infection by the coli-typhoid group of organisms.
2. That it is an infection with a variety of organisms, which are normal inhabitants of the bowel and become virulent in association with a failure of the body's defence mechanisms, such as mucosal injury.
3. That it is due to a deficiency of vitamins, minerals and other substances; but this theory appears rather to be "putting the cart before the horse."
4. That it is due to a disturbance of the body's metabolism. Thus it may occur in diabetes and goitre.

Various facts seem to destroy these conceptions of its ætiology, and the most that can be said is that there are some important factors in the causation of the disease : (a) a toxin, (b) a vitamin deficiency, (c) an irritant, (d) a preceding inflammation, (e) an allergy, and (f) an emotional disturbance.

Some authorities believe that the initial factor is psychological. Murray conducted a psychological investigation on a dozen patients and found that the outstanding traits consisted of an emotional immaturity and fearfulness—thus diarrhœa is an infantile response to fear. Seven of his female cases had mother traits and a conflict of marriage and mother tie, and five had vague sexual conflicts. Sullivan, in 1936, maintained that there was a psychogenic origin in 60 per cent. of cases—though not all of his cases could be proved to be chronic ulcerative colitis.

Wittkower, in 1938, examined 40 cases and found psychogenic abnormalities in 92.5 per cent, but probably they were not a representative group of patients.

Present evidence fails to convince one that a causal relationship has been established in the majority of cases.

The **complications** of the disease may be divided into three groups. The common complications consist of polyposis, strictures of the large intestine and arthritis. Less common are perirectal abscesses, cutaneous lesions, malignant changes and perforation. The least common are renal insufficiency, endocarditis, exanguinating rectal hæmorrhage, nutritional œdema and ocular diseases.

Primarily there is a diffuse inflammatory reaction in the mucous membrane of the colon beginning at the lower end of the rectum and extending upwards—though in 5—15 per cent. of cases it may be segmental with no evidence of disease in the recto-sigmoid segment. The second stage is characterised by an œdema of the mucous membrane which is diffuse, involving the previously hyperæmic areas. The mucous membrane now looks thick, red and boggy, and is easily traumatised. The third stage reveals the presence of ecchymotic spots which are yellowish and are miliary abscesses; finally these break down and form ulcers. There may also be co-existing secondarily infected ulcers. Healing occurs by the deposition of fibrous tissue in the mucous membrane, leaving pock-like scars, which may give rise to localised strictures or huge abscess cavities. The mucosal tags between the ulcers heal and become rounded, fibroblasts proliferate and cause contraction with subsequent cicatrisation. The pseudopolypi are the result of proliferation and œdema of the areas of mucosa remaining between the ulcerating areas.

Pyoderma (*Ecthyma*) *gangrenosum* is a dermatological lesion which when present is invariably associated with ulcerative colitis. It was originally described by Goeckerman and O'Leary in 1932 and many subsequent observers have reported a similar condition. The early lesions may be pustules, bullæ, or nodules, which rapidly break down producing ulcers, surrounded by a bluish-red halo, which spread rapidly and extend deeply. The advancing border is œdematous, purple-red, undermined and exuding pus.

The **differential diagnosis** of ulcerative colitis lies between amœbic, tuberculous and the so-called "mucous" colitis, food poisoning, typhoid, dysentery, polyposis and carcinoma.

On **examination** the patient presents typical facies, the face being drawn, anxious and sad, with a look of depression and exhaustion, and a grey-yellow pallor. There is also a noticeable loss of weight and anæmia. Occasionally there is a history of constipation, as the hard fæcal masses will not pass the diseased rectum, but usually there is a history of very frequent stools—since once food has passed the ileo-cæcal valve the remaining bowel consists only of a narrow tube. A history of straining, griping pain and tenesmus may also be obtained. There may also be a history of abdominal pain and of exacerbations and remissions of the course of the disease.

Care must be taken to get an exact description of the stool—its size and shape, the amount of control the patient has, the presence of blood, pus and mucus, whether the stool is liquid, mush, foamy or bulky, and also the presence, or absence, of bloody discharges in relation to defæcation.

Other aids to diagnosis consist in a microscopic examination of the stool for red blood cells, pus cells, acid-fast bacilli, parasites and bacteria, and also proctoscopy, sigmoidoscopy and X-ray examination. It is a wise course for a barium enema to precede a barium follow through, as in this way the presence of a stricture may be discovered.

Treatment : This may be either medical or surgical. Many patients respond well to careful medical treatment, but the intractable cases are in need of surgery—and often the patients are extremely ill by the time that the decision is taken to undertake surgical treatment.

In these cases pre-operative care is of great importance and consists in combating the anæmia, dehydration, protein and vitamin deficiencies, all of which are often gross, and also in the chemotherapeutic treatment of the bowel.

Various methods of surgical treatment are in use, some of which have been abandoned (such as appendicectomy), the underlying principle being that of excluding the affected bowel from the activity of the alimentary tract. This may be done by a cæcostomy; colostomy; ileo-sigmoidostomy — including colectomy with ileo-rectal anastomosis; ileostomy and colectomy—often associated with an ileostomy. A more recent form of treatment is that perfected by Devine, which consists in a four-stage sub-total colectomy.

Should the operation aim at offering a patient a life of reasonable comfort and probable semi-invalidism with an ileostomy, or should surgery aim at being more radical—with the chance of increased comfort for the patient? It must be pointed out that an established ileostomy is no more difficult to manage than a colostomy and often no more fluid in its discharges. In fact one patient who was recently in the Wards is leading a perfectly normal life with an ileostomy and has since married. On the other hand, a number of patients consider an ileostomy to be an over-heavy burden on their social activities and though willing to continue yet are anxious to have normal bowel function re-established.

Devine devised an operation which may be undertaken on fairly poor cases, involving a temporary ileostomy and a final sub-total colectomy.

The cases to undergo this type of operation must be carefully chosen. It is impossible if the rectum is badly diseased.

The case of P.C. will be described. He is the first case to have been treated by this operation in St. Bartholomew's Hospital, and probably the first case in London.

At the age of 17 the patient suddenly developed diarrhœa with blood and mucous, associated with severe pain, opening his bowels up to 12 times a day. Sulphaguanidine and blood transfusions brought about a slight improvement, which continued until he was symptom free in June, 1946, five months after the onset of the disease.

The next attack commenced in September, 1946, when he was treated with retention enemata of guiacol, heparglandol and sulphathiazole. At the end of the month abscesses began to develop on his left arm and right leg; they were incised and drained, but commenced to slough, necessitating grafting at a later stage. The colitis subsided and he was discharged in March, 1947.

In May he was re-admitted with a further attack, and it was noticed that the ulcers had again broken down. After seven weeks he was discharged with the ulcers still not healed, but the colitis having subsided.

In October, 1947, there was another attack of colitis and he was re-admitted during which time further attempts were made to heal the ulcers, which were re-grafted.

A right lumbar ganglionectomy was performed in April, 1948, and another graft applied to the ulcers on his leg. These slowly sloughed, and pinch grafts were applied at the end of May, by which time the colitis had improved sufficiently to enable him to be discharged.

In July he was re-admitted and the ulcers were once more re-grafted. The colitis had again relapsed. He was treated with injections of liver and folic acid. Sigmoidoscopy was carried out and showed the presence of numerous polypi. Barium enema showed that the colon was ragged in outline and also showed the typical loss of haustrations. At the end of July the ulcers had completely broken down and were discharging copiously. In view of the dramatic improvement with streptomycin it was decided that surgery was contra-indicated.

The patient was discharged and remained well, except for an attack of arthritis, until October, when the colitis returned and the ulcers again broke down. He also had an arthritis of the right ankle and the left elbow. The following month he was seen by a psychiatrist who reported "... This young man is of a mildly nervous and obsessional type. The background is what one expects very frequently in many psychosomatic disorders, including ulcerative colitis. There is nothing specific about it—it is part of the whole personality and I do not think that it could rationally be treated with any expectation of bettering the ulcerative colitis."

In November, 1948, the patient was admitted to St. Bartholomew's Hospital. He was grossly anæmic and weighed 8 st. 8 lbs.—during his attack of colitis his weight had dropped to 5½ st. Physical examination revealed nothing abnormal, apart from the scar of the ganglionectomy, and ulcerations on the right lower leg.

After admission a course of sulphathalidine with large doses of vitamins and protein—administered as Prosol—was commenced. Sigmoidoscopy revealed widespread pseudopolyposis in the rectum and recto-sigmoid flexure, with areas of bowel between the pseudopolypi denuded of mucosa. There was no active ulceration nor bleeding, and no excess of mucus. It was decided to undertake subtotal colectomy.

The first stage was undertaken on December 28, 1948. The abdomen was opened through a midline subumbilical incision. The terminal ileum was identified, mobilised and clamped with two De Martel clamps, fig. 1, A and B. The sigmoid colon was similarly treated, fig. 1, C and D. The ileum and sigmoid colon were then divided and the ends brought out through the incision, in the order shown in fig. 2. A and D were sutured together to form a spur, with A projecting 1½ ins. beyond D to act as a temporary ileostomy, and later supported with a vaseline

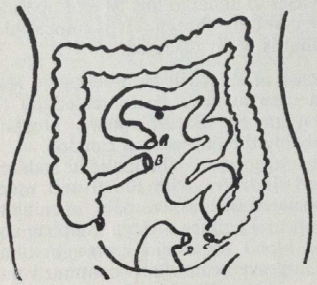


FIG. I

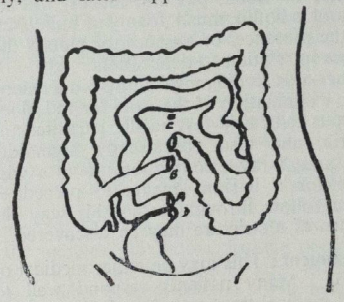


FIG II

gauze roll. The clamp was removed from C and a Paul's tube tied in. The abdomen was closed as far as possible about these stumps.

The next day a Winsbury White catheter was tied into the ileostomy, the catheter being cut off about three inches from its enteric end, and being connected to a plastic right-angled tube, to the other end of which was attached an open drainage apparatus. This method enables the angle piece being disconnected and a catheter inserted in cases of obstruction of the terminal end of the ileum.

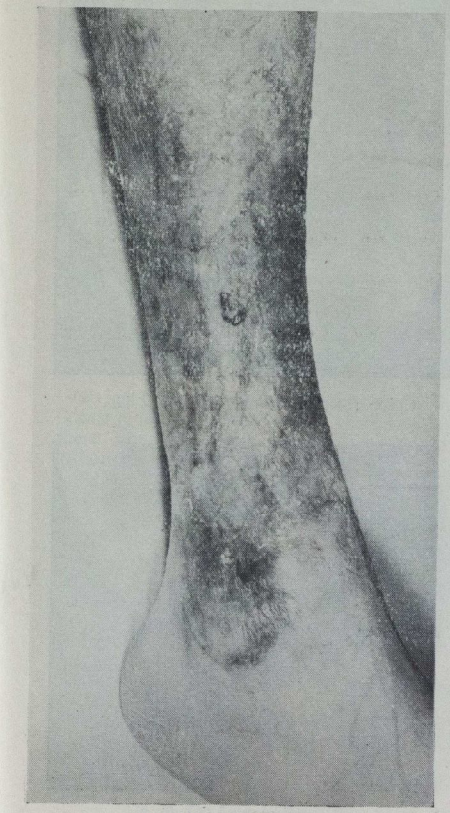
On January 2 the sigmoid clamp sloughed off, the Paul's tube on January 3, and the upper clamp on January 4.

On February 11, the patient was considered fit for the second stage, which consisted of the amputation of the ileostomy and the application of an enterotome, which was brought out through the upper hole of a colostomy box.

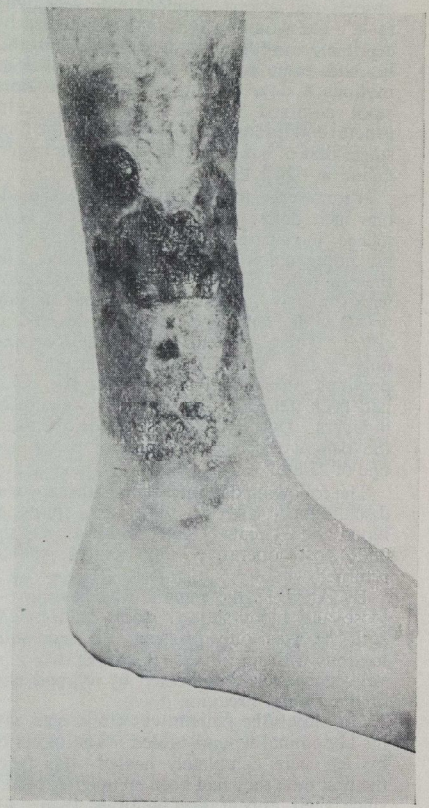
It was found that post-operative nursing was impossible unless the box was removed, which involved temporarily unscrewing the enterotome—this has now been made easier by the adaptation of a box allowing the enterotome to remain fixed.

A small semi-solid stool was passed per rectum on February 17, and after this date the patient passed from one to two semi-solid stools per rectum daily.

From the commencement of operative treatment the ulcers on the leg slowly improved.



Pyoderma, 3.11.48.



Pyoderma, 18.3.49.

The third stage—the closure of the ileostomy and sigmoidostomy was undertaken on March 3. The combined opening of the ileum and the sigmoid colon was freed by means of an incision encircling it. The lower end of the ileum and the upper end of the sigmoid were then freed from surrounding tissues and the exposed mucous membranes sutured in layers. The extraperitoneal anastomosis was thus effected and the abdominal wall closed in layers.

This operation meant that normal bowel function had been restored and that the patient was left with the equivalent of a double-barrelled colostomy—consisting of the isolated colon (C and B).

Post operative convalescence was complicated by the patient developing a small stitch abscess and also a sulphonamide sensitivity rash. The wound was completely healed by April 11, and for a few days previous to this he had been passing an average of four motions a day, which consisted of a loose stool admixed with a little blood. His general condition was very good, and the final stage, that of subtotal colectomy, was undertaken on April 12.

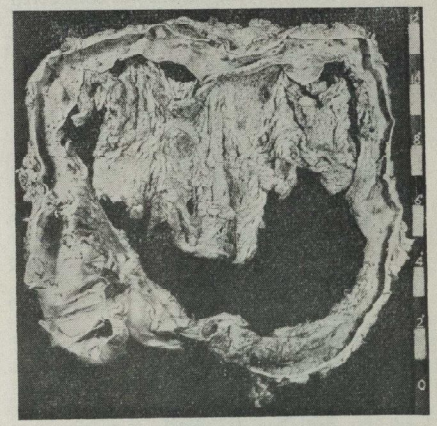
A transverse, transrectal incision was made one inch below the umbilicus, about eight inches in length. The right flexure and ascending colon were easily delivered, and their mesentry divided. The transverse colon was similarly treated. The splenic flexure was then delivered and finally the descending colon. There were no gross adhesions and only a few minor adhesions—around the previous operational site. After the colon had been delivered the abdomen was closed in layers. During the course of the operation the patient received one pint of blood and one of saline.

The following day intravenous therapy was discontinued, after a total of 2 pints of blood and 3½ pints of glucose saline. On the 2nd post operative day bowel sounds returned.

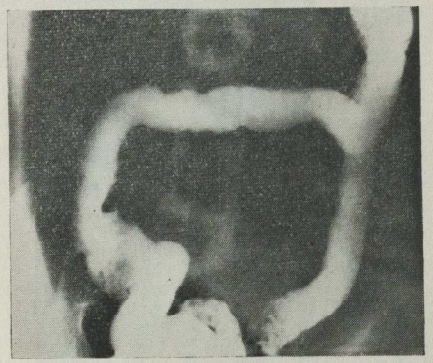
By April 17 the patient was passing 3-4 loose and blood-stained stools, and by the 25th he was only passing 2-3 semi-solid motions with no blood. Post-operative convalescence was complicated by a small area of the wound breaking down.

On May 9 the patient was discharged with his abdominal wound healed. The ulcers on his leg were completely healed—this being the first time they had been completely healed since their appearance in June, 1946. On discharge he was passing 2-3 solid to semi-solid stools a day.

He was seen again on July 11 when he was re-admitted for sigmoidoscopy. During the last two months he had put on 2 lbs. in weight and was feeling extremely fit—the day before his re-admission he had bicycled 50 miles. There was no evidence of recurrence of ulceration of his legs, all the scars being quite firm. He had complete rectal control, passing semi-solid stools twice a day, with no blood or mucus. Sigmoidoscopy showed a small ulcer at 3 o'clock above the ano-rectal ring and a papilloma was seen at 5 o'clock, high up in the rectum. This was excised and pathologically was shown to consist of



Colon removed at operation, 12.4.49.



Barium enema, 15.6.49.

normal rectal mucosa overlying connective tissue, in which a number of chronic inflammatory cells could be seen.

Summary: A case of chronic ulcerative colitis with associated severe pyoderma has been described with its treatment, which represents an advance in the surgical treatment of chronic ulcerative colitis. It not only restores bowel continuity, but since it is carried out in four stages it may be undertaken on patients who otherwise would be regarded as unfit for surgical treatment.

The case is also of interest on account of the severe and intractable associated pyoderma which healed completely once the primary cause had been effectively treated.

I am very grateful to Mr. Rupert Corbett for allowing me to report this case and for the assistance that he has given me.

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Photographs by the Department of Medical Photography, St. Bartholomew's Hospital.

THIRTEENTH DECENNIAL CLUB

The most frequent greeting at the Thirteenth Decennial Club's third meeting in Charterhouse Square was "My dear chap, are you married? And how you're losing your hair!" Emphasis on these two distinct, but perhaps not unrelated, natural phenomena is a reflection on the age of the club. It is mature enough for its members to be attacked by both eventualities but sufficiently junior for their occurrence to be of interest.

The meeting was as successful as a party congress, half as noisy, and a hundred times as cheerful. This was largely the result of hard work by the secretaries, Kingsley Lawrance and David Pugh, and the particularly praiseworthy efforts of their colleague Malcolm McIlroy. The constitution of the Club has been altered and difficulties with the licensing laws smoothed over. Unfortunately there are still some snags to be faced: although the Club voted decisively for a buffet-and-bar affair instead of a dinner, it may not be possible to hold the meetings in Charterhouse in future and members may have to take themselves off into the surrounding countryside.

Other contributors to the pleasure of the party were the Chairman, Iain MacDougall—a striking justification for the above greeting, on both counts—and Jimmy Smith and John Atteridge, who played the piano with the ingenuity they once demonstrated on the unco-operative instruments in R.S.Q. and the billiard room at Hill End. As the members reiterated the adventures of the straying Weaver, of O'Reilly's daughter, of the elderly highly immoral, but useful lady of Jerusalem, and of the inhabitants of Kerriemuir on that wild, rousing, and thoroughly psychopathic night—glancing round their companions they recalled the uncomplicated days when life was a straight fight with only the examiners and there was no one but the landlady to explain it away to afterwards.

ALAN TOIS

THE JOURNAL

Contributions must reach the Editor by the first Tuesday of the month for inclusion in the following issue.

We announce the resignation of the Editor, Mr. G. C. R. Morris. He will be succeeded by Mr. M. Braimbridge. Mr. J. A. Williams has been appointed Assistant Editor.

THE CLINICAL JOURNAL

From January, 1950 the *Clinical Journal* will be published monthly. A reduced subscription of 21s. per annum will be accepted from registered students.

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SPORT

RUGBY CLUB

November 12, v. Old Haberdashers. Home
RESULT: Won 8-6

This game opened in a heavy squall and the ball was blown around in a bewildering fashion. During the first five minutes the ball was well heeled from a loose scrum, was handled by all the three-quarter line, leaving Picttoll to touch down in the corner after a good run of 50 yards.

After this, the squall died down and so did the standard of Bart.'s play. After some scrappy play, Murphy and Clane enjoyed a fine piece of inter-passing and Clane scored beneath the posts, Murphy converting.

Nothing further can be said of Bart.'s play during the afternoon. Apathy set in, and all semblance of team work fell by the wayside. The forwards had a particularly bad day, and the least said about it the better.

November 19, v. Stroud
RESULT: Lost 0-14

The standard of play was better than last week but the shadow of five hard games played in eight days in Cornwall and Devon still hangs over the side.

The backs played well, but with little of the ball coming their way did not have many chances to form attacking movements.

The forwards are still not playing together and are allowing their opponents to break through in the line-outs.

Hard play and dash must be achieved if we are to do justice to our record on tour.

We are very pleased to record that G. Mears was selected by United Hospitals R.F.C. to play against Edinburgh University at Richmond and against Dublin Hospitals at Dublin.

November 26, v. Saracens. Home
RESULT: Lost 0-3

After a shaky start during which the Saracens scored their only try, Bart.'s settled down to the style of rugger which they played on tour.

There was no comparison between Bart.'s today and Bart.'s during the last two matches. The tackling was low and successful, the defence extremely sound. It was great to see the pack "going in" as eight men and gradually gaining the ascendancy over the Saracens pack. Heylings and John were outstanding and were always on the ball after following up hard. There was no doubt about our superiority during the last 15 minutes; play was inside the Saracens' "25" but their defence managed to hold out.

During the second half, Davies played at stand-off and was successful in getting his three's going. All the backs attacked in convincing manner and their defence was unshakable.

After this match we feel that the team has gained confidence and will go forward to greater successes.

HOCKEY CLUB

1st XI Results

Saturday, November 15, v. Emanuel College (home). Won 3-2

Saturday November 12, v. Lensbury (home). Lost 1-4

Saturday, November 19, v. Midland Bank (away). Won 2-0

This was a hard-fought, rather scrappy game, played under rather difficult conditions.

Bart.'s opened with a quick raid, but for the next quarter of an hour were pressed; last-ditch defence being the order of the day. Hicks, in goal, was continuously under fire, but succeeded in giving every bit as good as he got.

After half-time, when there was still no score, the situation was reversed. The forwards combined well, and it was not long before a good movement ended with Hurst running in to score from close range. The lead was increased by Roche ten minutes from time. Apart from Hicks, Ainley-Walker was outstanding in defence, and the forwards as a whole played together better than previously this season.

Saturday, November 26, v. Orpington (home). Drawn 1-1

It was pleasant to find in the ranks of the opposition, an old friend in Dr. M. D. Mehta, who played no mean part in helping his side to share honours with us in a very exciting, even game. Soon after the bully-off, the hospital defence was in difficulties, the chief trouble being slowness in clearing, and in the opening stages a pair of brand new white pads, with, of course, Hicks inside them, performed miracles in the goal-mouth. It was, however, Bart.'s who scored in the first half, when the 'keeper saved a hard shot from Whitting, only to be beaten by a first-time shot by Roche off the rebound. Orpington deservedly got the equaliser late in the second half, when both goals had several narrow escapes. The forwards on both sides were erratic in front of goal, but the Bart.'s right wing pair always looked the most dangerous.

Wednesday, November 30, "A" XI v. Inns of Court (away). Won 7-1

Saturday December 3, v. Ealing Dean (away). Lost 2-4

GOLF CLUB

2nd XI Results

Saturday November 12, v. Association of Architects 1st XI (home). Drawn 3-3

Saturday, November 19, v. Midland Bank II (home). Won 2-1

Saturday, November 26, v. Orpington II (away). Lost 2-4

Saturday, December 3, v. Ealing Dean II (home)

BEVERIDGE CUP WON BY BART.'S

The replay of the final of the Beveridge Cup between Guy's Hospital, the holders, and Bart.'s took place at Sundridge Park on Wednesday, November 16. After a very close match Bart.'s were successful by four games to three, with one halved, thus winning the trophy for the first time.

Conditions for play were good. The course was in fine order. There was no rain and only a little wind. The Hospital team included six of the players who drew the first final on October 26. M. Cassels and G. E. Thomas replaced D. Aubin and J. Graham-Stewart for the remaining two places.

The games showed a striking similarity in result to those of the earlier final, so that at one time it seemed yet another replay would be required.

In the top single L. R. Gracey again beat Ian Caldwell. Gracey had the advantage of playing on his home course, and thanks mainly to this local knowledge, won by 4 and 3. D. H. Rushton found J. Anderson in irresistible form and lost 6 and 5. In the next game M. Braimbridge showed his usual steady form and won easily against J. Wilson by 7 and 5. G. E. Thomas, handicapped by an injured wrist, put up a fine fight against J. Harrington but eventually lost 3 and 2, making the score two all. Soon R. Dreaper came in an easy winner against M. Quelch by 7 and 5, but this was offset by C. J. R. Elliott, who just lost a close game to J. Crolesworth on the 18th—3 all. Next M. Cassels scored a vital win against J. Mepsted. After being three down, Cassels squared the match, and eventually won it on the last green. The whole result now depended on the game between J. M. D. Grant, the Guy's Captain, and R. V. Fiddian. It was a match full of fine golf, with Fiddian the better up to the green, but unable to clinch the issue because of weak putting. Grant was one up with one to play so Fiddian had to win the last hole to halve the match. Both players reached the green in three. Grant was weak with his first putt and then missed the short one, leaving Fiddian with a two-footer for the hole, over which he made no mistake.

Consequently the whole match was won by 4-3 with one halved. This first victory in the London University Cup is a fitting conclusion to what has been a successful season.

BOAT CLUB

UNITED HOSPITALS BOAT CLUB REGATTA

This regatta was rowed off on November 16, from the Thames Rowing Club Boat House at Putney. Conditions were calm, but initially very foggy, delaying the start of the programme by about an hour. Last year Bart.'s met with great success, winning the Junior and Senior Eights, the Pair Oar, and Junior and Senior Sculling events. These results seemed to have stimulated our opponents to greater efforts, so that this year the general standard of rowing was much higher.

We can, unfortunately, only record one success, in the Pairs, won by J. C. M. Currie and D. C. H. Garrod. In the final heat of the Senior Eights Challenge Cup we were beaten by one length by St. Thomas's, who this year produced a very fast and experienced crew.

Results—
Senior Eights—St. Thomas's
Junior Eights—London
Senior Four—Middlesex
Junior Four—St. George's
Pair Oars—Bart.'s
Rugger Fours—St. Thomas's
Senior Sculls—R. R. A. Coles (St. Mary's)
Junior Sculls—J. E. Cullis (St. Thomas's)

Once again the First Eight did most of its training from the boat house of the Kingston Rowing Club and our thanks are due to them for their hospitality. We had a similar crew to that of last year, stroked by J. C. M. Currie, our last year's Captain, but it did not quite come up to the same high standard. The Second Eight, which trained from the University of London Boat House at Chiswick, suffered very badly from a lack of coaching. The Boat Club has now got many promising new members and it is intended to put two Eights into the Head of the River Race in March.

The Club is just about to collect from the boat builders a new Clinker Eight, costing £250, made possible by very generous contributions from official bodies, and from senior and junior members of the College. We wish to record our very sincere thanks that are due to these patrons, and most particularly to our President, Dr. B. W. Town, whose generosity initiated the Boat Fund, and whose enthusiasm and advice is a constant encouragement to our efforts. The new boat will be used for training and racing by our new members, in order that we may raise the standard of rowing throughout St. Bartholomew's Hospital Boat Club.

EXAMINATION RESULTS

UNIVERSITY OF LONDON

Third (M.B., B.S.) Examination for Medical Degrees

October, 1949

Honours

Montfort, F. G. (Distinguished in Medicine)

Pass

✓Bass, P. H.	✓Egerton, B. H.	✓Hooper, E. R. S.	✓Mendel, Dennis
✓Brown, H. S.	✓Facer, J. L.	✓Kazantzis, G.	✓Menon, J. A.
✓Butcher, P. J. A.	✓Frewen, W. K.	✓Koster, H. G.	✓Morley, D. F.
✓Crook, R. A.	✓Griffiths, J. D.	✓Leary, B. D. J.	✓Reiss, B. B.
✓Dickerson, R. P. J.	✓Hayter, R. R. P.	✓Mehta, J. S.	✓Rohan, R. F.
✓Dower, G. E.			

Supplementary Pass List

Part I			
Abraham, R. J.-D.	Hacking, S.	Liu, S.	Simmons, P. H.
Bouton, M. J.	Hibbard, B. M.	McCloy, J. W.	Smith, R. V.
Brest, B. I.	Hurter, D. G.	Marsh, G. W.	Stebbings, N. E.
Burn, J. I.	James, D. C.	Moore, G. J. M.	Studdy, J. D.
Carter, F. G. T.	Kaye, M.	Raines, R. J. H.	Wendell-Smith, C. P.
Chorley, G. E.	Lawther, P. J.	Rosen, I.	Wright, A. N. H.
Green, N. A.	Lewis, H. E.	Rothnie, N. G.	Zakon, R.
Part II			
Andrews, J. D. B.	Eve, J. R.	Rees, J. H.	Wimborne, D.
Capstick, N. S.	Jones, N.	Vercoe, M. G. S.	Woolfe, J. C.
Cox, J. S.	McCloy, J. W.		
Part III			
Brest, B. I.	Holland, W. G.	Rosen, I.	Tannen, G. P.
Hacking, S.			

BOOK REVIEWS

X-RAY DIAGNOSIS FOR CLINICAL STUDENTS AND PRACTITIONERS, by G. Simon. Heffer, 1949, pp x+207, 180 illus. Price 20s.

This new book on X-ray diagnosis will be of great use to medical students and others whose requirements are less than those supplied by a full text-book of radiology. The main function is to give to students the radiological features of the conditions with which he comes into most frequent contact during the years of clinical study. The correlation of clinical reading with the radiological features of these conditions should be of the utmost value to a student during his course of training.

The illustrations are excellently reproduced, the print and paper are of excellent quality and the material is laid out in a very practical manner. Certain minor errors of spelling and punctuation, which almost inevitably occur in a first edition, are fortunately few and there are only minor criticisms which can be made in an otherwise thoroughly well designed book.

It would probably have been better to include the oesophagus with the gastro-intestinal tract rather than in the section on the chest as this is the method customary in text-books and there is little to be said for the use of the word "Traumatology" which has unfortunately begun to appear in the literature.

There are excellent sections on the physics and technical aspects of radiology which are extremely valuable as an introduction to the understanding of the practical application of radiology.

The author in his description of the function and place of a radiologist in the hospital has stressed his handicaps rather more than his advantages, which perhaps was not altogether his intention, but may convey to the students a wrong impression of the value of the work of radiology to the clinicians.

These, however, are minor fault findings in what is an exceedingly practical, useful and well-produced book conveying to those consulting it an excellent basic knowledge of radiology.

R. A. K. H.

A PSYCHIATRIST LOOKS AT TUBERCULOSIS, by Eric Wittkower, M.D. N.A.P.T., 1949, pp. 152.

Dr. Wittkower, in his book, breaks new ground. He has submitted to psychological analysis about 785 tuberculous patients, to try to find out if there is any psychological reason why they had developed pulmonary tuberculosis and whether their psychological condition had a bearing on their re-action to treatment.

The title describes the contents correctly, for Dr. Wittkower describes his findings and does not claim to have come to conclusions, for he states that controls were not available, but he gives a clear analysis of the cases, and the patients seem to fall into definite classes. No previous experiment on such a scale has been made.

The book will be of great interest to all who have charge of tuberculous patients, however experienced they may be. It is written in a way which does not require psychological knowledge and should be read by all house physicians; they will find it of the greatest help in understanding and dealing with patients suffering from pulmonary tuberculosis.

OPHTHALMIC MEDICINE, by James Hamilton Doggart. J. & A. Churchill Ltd., 1949, pp. x+329, 28 coloured plates, 87 text figs. Price 32s.

Only a select few in this country have attempted the difficult task of writing a text-book on the medical aspects of ophthalmology. In the wake of the late Sir William Gowers and Foster Moore comes J. H. Doggart with this admirable book on "Ophthalmic Medicine" succeeding by 24 years Foster Moore's second edition of "Medical Ophthalmology," published in 1925. The qualities necessary to do full justice to this subject are considerable. The author of "Ophthalmic Medicine" has brought to this work the stored riches of his extensive clinical experience, a wide knowledge of his speciality and of its many contacts with the main body of medicine, the application of his philosophic mind to controversial matters, and an ease of expression in good English which makes the reader enjoy the book as an absorbing narrative. It is touched and enlightened here and there with advice which shows clearly the author's insight into the art, apart from the technique, of practising medicine. The book has achieved the author's purpose in its presentation of a comprehensive survey of the disorders and diseases of the eye in association with pathological changes in its adjacent structures and in remote parts of the body. In this work he has correlated recent discoveries with the traditional aspects of medical ophthalmology.

The physician will be much helped by four well-written chapters on the history of a case, symptoms, methods of examination and physical signs, and the ophthalmologist by the admirable dissertations on allergy; vitamin defects; inflammatory syndromes; focal, virus and fungus infections; metabolic disorders, disturbances in endocrine function among other topics of general medical interest.

This book is a praiseworthy attempt to compress into 300 pages all that is sound in the teaching of ophthalmic medicine. It is well illustrated and a fair bibliography is given at the end of every chapter. There is little to criticise adversely. It is evident that a mistake has been made in Plate XX, Fig. 2, where a tigroid fundus is printed instead of that of an albino. Plate 1, Figs. 1 and 2 could be more artistically executed and this also applies to the drawings of a pterygium and a dermolipoma of the bulbar conjunctiva.

The book is well produced and will be valued by physicians and ophthalmologists as a sound contribution to matters concerning both.

H. B. S.

FITNESS FOR GAMES, by F. A. Hornibrook. Heinemann, 1949, pp. 39. Price 2s. 6d.

This small handbook forms a useful introduction to attaining general physical fitness which is necessary if players are to enjoy their respective games to the full.

It is intended primarily for those who wish to develop a sound body as part of a full life.

It could be improved by giving more space to exercises and such useful aids as jogging over the countryside as part of basic training and less to such specialised injuries as synovitis, when medical aid should be sought.

ANKYLOSING SPONDYLITIS, by F. Hernaman-Johnson and W. Alexander Law. Butterworth, 1949, pp. 200. Price 25s.

This book is described as a practical guide to the diagnosis and treatment of ankylosing spondylitis. Its object is to marshall knowledge and experience about the disease and to show that properly applied treatment can bring considerable relief in even the advanced stages of the disease. The late Dr. Hernaman-Johnson, a physician with special knowledge of radiology is responsible for the first part of the book dealing with etiology, diagnosis and treatment; whilst Mr. Law describes the recent methods of conservative and operative orthopædic treatment.

The first part is written in a personal "chatty" style, and sometimes the reasoning is confused. The main criticism is the emphasis laid on wide field X-ray therapy as a curative method of therapy. This method although valuable, has a high incidence of failure and recurrence and has been proved by many authorities to be inferior to more intensive localised therapy to the spine and sacro-iliac joints. The statement that wide field radiotherapy can be carried out with a stop watch and a diagnostic X-ray apparatus is extremely dangerous. One important theme runs through the book, and that is that the proper diagnosis, treatment and care of these patients needs the combined knowledge and team work of physician, orthopædic surgeon and radiologist.

I.G.W.

BIOCHEMISTRY IN RELATION TO MEDICINE, by C. W. Carter and R. H. S. Thompson. Longmans Green & Co., 1949, pp. xi+442. Price 25s.

Seldom is it given to one to review a book which can be so whole-heartedly recommended to the medical student. This is a new book and within its 442 pages are mentioned almost every aspect of biochemistry of medical interest. It is up-to-date in its treatment but gives accounts which are often not as full as may be desired of such topics as Professor Frazer's work on the absorption of fats: the aerobic oxidation of carbohydrates and also biological oxidations in general; the lipotropic effect of choline and the function of methionine as a carrier of methyl groups. This brevity is made more bearable by a very comprehensive bibliography at the end of the book of which the conscientious student will be certain to avail himself. The book is characterised by a number of exercises in practical biochemistry at the end of each chapter which are well chosen and serve to illustrate the fact that the organism is in a continual state of flux. The chapter on physico-chemical considerations is far too fragmentary and while dwelling on pH and buffers extensively, fails to mention the Donnan effect or even to discuss the nature of the cell membrane and the orientation of polar molecules at interfaces. These are surely fundamental. However, as a text-book of biochemistry, the book is stimulating and should be read and pondered over by all medical students. In conclusion I should like to ask one favour of the authors and that is in the next edition, which the popularity of the book will ensure, that they will discontinue the practice of writing formulæ (e.g., the lecithins) in which nitrogen is depicted as a penta-co-valent atom.

B. W. T.

AVIATION MEDICINE, by Kenneth G. Bergin. John Wright, Bristol, 1949, pp. xv+447. Price 35s.

There has been much work on medical problems associated with flight, and the time is ripe for a review of the subject. Dr. Bergin is well qualified to undertake such a task; and he has succeeded in marshalling his facts to show their practical application. The sections of the book cover history, physiology, medicine, psychology and public health in relation to flying. That on psychological considerations is particularly valuable, in spite of the paucity of available information. The text throughout is lucid, there are many good illustrations, and references to the literature (some interesting studies on the effects of immersion are evidently the result of German work on prisoners). This is a useful book, which should help to make air transport safer and more comfortable, and service flying more efficient: and it is very well produced.

ELEMENTS OF FOOD BIOCHEMISTRY, by W. H. Peterson, J. T. Skinner and F. M. Strong. Staples Press Ltd., 1949, pp. xi+259, Figs. 21. Price 21s.

The title of this book encourages one to think that it deals with foods, their analysis and composition, especially with regard to their content of the accessory food factors and the trace metals. If the book really dealt with these points adequately it would have been a welcome addition to biochemical literature. As it is, in seeking to encompass too wide a field, it fails in its task. The style of writing is simple and lucid, but the book deals most inadequately, at least from the medical point of view, with almost every biochemical topic; from the oxidation of carbohydrate, the conversion of carbohydrate to fat, the absorption of fat from the intestine, ketogenesis, etc., to the structure of proteins—none of these topics is dealt with in sufficient detail even for the requirements of the London 2nd M.B. The chapters on the mineral elements in nutrition and on the vitamins are of greater value. The book contains a deal of information, and it is a pity that it could not have been kept within the field in which the authors' experience undoubtedly lay.

B. W. T.

MEDICAL EDUCATION, by Ffrangcon Roberts, M.D., London. H. K. Lewis & Co. Ltd., 1948, pp. 170. Price 12s. 6d.

Dr. Roberts surveys medical education as organised at present, discusses its organisation at the various stages, and makes recommendations as to its reform. The book, while being well written and very readable, too often tends to diffuseness. The conclusions could with advantage be stated more concisely and the arguments rounded off more completely. The book is full of interesting criticism.

Fundamentally the book is orthodox—it does not recommend changes outside the matrix of the present system of medical education. A reform such as the teaching of clinical medicine and the preclinical subjects in parallel to a much greater extent than at present is not advocated. The correlation of structure with function and body with mind is stressed as fundamental in the teaching of preclinical subjects. Dr. Roberts reminds one constantly that medical education does not cease on qualifying and that it is human beings who are being educated.

FRACTURES AND DISLOCATIONS IN GENERAL PRACTICE, by John Hosford. Revised by W. D. Coltart, Lewis, 1949, 2nd Edition, pp. 290, 87 illustrations. Price 21s.

Since the first edition of 1939 the management of fractures has largely been transferred from the general practitioner to the specialist hospital department—for three good reasons, which appear in every chapter of this book: the need for X-rays in diagnosis and in the control of treatment; the importance of correct application of plaster for immobilisation, and special apparatus for traction; and the growing emphasis on complete "rehabilitation," or reablement of the patient. But the G.P. still needs to know what is happening; and the student has to learn. For these purposes, here is an excellent text, readable, simple, well illustrated and up-to-date; admirable in itself, and a source of parochial pride in its authorship.

THE SULPHONAMIDES IN GENERAL PRACTICE, by Edward D. Hoare. Staples Press, 1949, pp. 90. Price 5s.

This little book explains the principles of sulphonamide therapy and the dangers attendant thereto in lucid terms.

The conditions in which they are indicated are considered in turn and where applicable particular emphasis is laid on the relative merits of sulphonamides and penicillin.

A useful work for those in or entering general practice.

NURSING, by Gladys M. Hardy, S.R.N. W. & G. Foyle, 1949, pp. 137. Price 2s. 6d.

This book is presumably meant for students for the Preliminary State, and covers Part 2 of the syllabus, except First Aid, for half a crown. There are too many errors, like "statum-immediately"; "crastino—tomorrow" (page 65); "maloena" (page 80); "dermos—the people" (page 131). Elaborate production at such a price is not to be expected, but the reviewer's copy came to pieces before it had been read. W. H.

BACTERIOLOGY AND PATHOLOGY FOR NURSES, by E. Irene Clark. Faber, 1949, 2nd Edition, pp. 320. Price 18s.

A nurse in training would use this as a reference rather than as a study book. It is the ward sister and tutor who would find it of most value. The scope is wide, and the answer to most questions that a nurse is likely to ask on this subject can be found here. For instance, there is an account of prothrombin values, and of the Rhesus factor. The viewpoint of the author is strictly that of the pathologist, so that sections such as tuberculosis are disappointing to a nurse who needs a wider view. The diagrams and coloured pictures are acceptable, and the style straightforward and convincing. W.H.

SHORT MANUAL OF REGIONAL ANATOMY, by J. A. Keen. Longmans, 1949, 2nd Edition, pp. 164. Price 10s. 6d.

This book should not be necessary: for the student should be able to remember such anatomical detail as he will later use. In practice, however, an aid to revision is often wanted. The method adopted here is to prefix a brief exposition of general principles to a condensed summary of regional detail, illustrated and amplified by excellent diagrams. Whether such shorthand is memorable depends largely on the reader: it remains only to comment that general principles, in anatomy as elsewhere, are often more valuable than details, and to bemoan the emphasis still placed on trivia.

OPERATIVE SURGERY, by Frederick C. Hill, M.S., M.D., Associate Professor of Surgery, Creighton University, Omaha, New York. Oxford University Press, 1949, pp. 698. Price 63s.

A new book on operative surgery is always welcome, especially when so well produced as this volume. But one is a little apprehensive when one finds in the preface that " . . . a different approach has been attempted whenever possible." It is a danger that a book by a single author covering the field of the general surgeon may be too idiosyncratic for general use.

Dr. Hill has written this book for "the intern, resident and less experienced surgeon." The operations chosen for description cover a wide field and are those on the whole usually practised in this country. The descriptions are mostly clear and well illustrated but in some cases do not give enough practical hints and details to help the young surgeon overcome the many and possible difficulties in his way. The book is thus not always the real help which it set out to be.

There are, of course, omissions and misleading practices advocated. Thus pre-operative bronchoscopy is not mentioned with regard to pneumonectomy for carcinoma of the bronchus, nor is the use of radio opaque oil and radiography in the description of the post-operative care of an enpyema. A course not generally adopted comes in the description of partial thyroidectomy. After the first lobe has been removed it is recommended that the patient "should be allowed to wake up and instructed to cough . . . to prove that the recurrent laryngeal nerve has not been injured."

HALE-WHITE'S MATERIA MEDICA, by A. H. Douthwaite. Churchill, 1949, 28th Edition, pp. viii + 532. Price 16s.

This is the first book to be published in revised form since the issue of the 1948 British Pharmacopœia. All the important changes contained in that volume have been included and it has been completely revised in this respect.

It is fortunate that this reputable book should be the first, because it is superior to many of the books which students use, and can be recommended to all; both for its treatment of the subject and because it is up-to-date.

Inevitably in the time interval between writing and publication certain advances are made and material becomes obsolete, but this does not detract from the value of the work as a whole, which is commended wholeheartedly.

The format remains the same as that of previous editions.

MEDICINE FOR NURSES, by W. Gordon Sears, M.D. Edward Arnold, 1949, 5th Edition, pp. viii + 472. Price 12s. 6d.

The purpose of Dr. Gordon Sears in writing this book was to produce one that would enable nurses to pass their Final State Examination. The result is that we are given good succinct records of cases, as in the account of peptic ulcer, but the patient that every nurse would recognise somehow fails to appear. However, most nurses buy a text-book to enable them to pass an examination, and for this purpose this is very good. The account of the infectious diseases, which the general trained nurse must know but never sees, is excellent. The publishers are to be congratulated on producing a book of this class, full of information and of good appearance, at such a price.

W. H.

RECENT PAPERS BY BART'S MEN

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*Christie, R. V. Penicillin in subacute bacterial endocarditis. *Brit. Med. J.*, Oct. 29, 1949, pp. 950-1.

*Evans, C. Lovatt. The eighteenth Stephen Paget Memorial Lecture. Physiological Research and the Vivisection Act. *Fight Against Disease*, 37, ii, 1949.

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*Tadros, V. R. A case of cutaneous horn of the arm. *Brit. Med. J.*, Sept. 17, 1949, p. 635.

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* Reprint deposited in the Library and receipt herewith acknowledged.

ST. BARTHOLOMEW'S

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WOMEN

It is not that one mistrusts women as a sex. It might be argued that they have their uses—in fact it is not profitable to wonder where one would be without them. The male medical student is no misogynist, but to have the ladies entering into competition for the carning of his very wage, with which he will have to support one of their sisters, is a cause for some anxiety. The male mistrust is rooted in the fact that women work—many a sin may be forgiven them but this. There is little more galling to the masculine breast than to sit in the midst of a host of affirmatively nodding female heads during the discussion of unintelligible medicine.

It is this ability to work, this perpetual keenness, that gives rise to the most concern. It is a fact that entry of women into academic pursuits has the effect of at once raising the standard of examination. Perhaps in some fields of intellectual activity this is of value. A doctor, however, is in a position where academic distinction takes second place to human knowledge and force of character. Many of medicine's greatest men have had trouble with their examiners—Ross of malaria fame being one such instance. This increase in difficulty of becoming qualified will debar men who, from greater natural aptitude for less scholarly pursuits, cannot attain the new standard, but who make often the better doctors than their more intellectually blessed brothers. Or sisters.

There is a matter more serious than any of these. If the future celebrity once had difficulty in completing his medical education, he now finds equal obstacles in the way of his beginning. It is laid down by London University that the Hospital will accept among its students 15 per cent. women. In October, 1948, 41 women (clinical and preclinical) were admitted to Bart.'s with 88 men: in October, 1949, 27 women with 88 men—rather under a half and a third respectively of the intake, therefore, being women. The ability of a Hospital to attract good calibre recruits to its ranks is often a measure of its student sporting prowess. To what an extent this ability is undermined can be readily imagined from the figures quoted.

There would be a greater case for the inclusion of so great a percentage of women were it known that, barring examination mishaps, all would complete their training and become practising doctors. The number that fall by the matrimonial wayside is not known, but of one, albeit exceptional, group, four of the five ladies are married or engaged. Should they complete their training, four of these five will be at once removed from practice and confined to tyrannising over their husbands' and childrens' ailments. Where are the men who could have filled their places? There is a dearth of qualified medical men in the British Isles. Thus do we attempt to fill the void.

The thin feminine end of a wedge has now been thrust into the hierarchy of the Hospital staff—the day of the housewoman has come. How much longer will the professorial chairs be occupied by men?

Let it not be thought that the entry of the ladies into medicine is one of unrelieved gloom—the discussion of nylon prices during lectures has its educational value. No case though is yet on record of an offer to darn socks. Attention, however, is continually distracted by visions of the French women at the guillotine, conjured up by the eternal clicking of knitting needles at Outpatients.

SWELLINGS OF THE SCROTUM

By C. V. BRAIMBRIDGE, C.B.E., M.V.O.

SCROTAL swellings are among the most common forms of pathological conditions met with among the native population of East Africa and the newly-arrived medical practitioner is apt to be considerably shaken by the remarkable phenomena which may be exhibited in this portion of the African's anatomy.

Like all Gaul, the main causes of these swellings may be divided into three parts, viz., elephantiasis, hydrocele and hernia. The really large swellings are practically always due to one of these three conditions.

Elephantiasis is probably the most spectacular of them and I shall never forget an occasion in my earlier days when an elderly African walked into the dispensary with his scrotum supported in front of him on a miniature stretcher carried by two small boys. This may sound an exaggeration but, according to Manson-Bahr, tumours of 40 or 50 lbs. are by no means uncommon and the largest on record is 224 lbs.

The condition is produced by certain nematode worms or filariæ, the adults of which live in the lymphatics, connective tissues or mesentery and produce live embryos or microfilaræ; these find their way into the blood stream where they live for a considerable time without further development. The adult filariæ living in the lymphatic vessels and glands draining the scrotum produce fibrotic changes which cause lymph stasis. This alone is not sufficient to lead to elephantiasis but the damage thus produced in the intima of the vessels so prepares the way that a non-suppurative secondary infection obtains a foothold. Further occlusion then takes place.

The tumour itself consists of two portions; first, a dense rind of hypertrophied skin thicker in the most dependent part; second, an internal mass of dropsical tissue resembling blubber. The testes, cords and penis are embedded in this mass and in the case of the larger tumours the penis is entirely hidden, only a small crater indicating its site. The blood vessels are of considerable size.

The only treatment of any value is operative removal. Various high-class techniques are described in the text-books but my own experience is that the job is best done by the light of nature. The most important point is to preserve any portion of skin which is not too heavily infiltrated, if possible finding an area which may be used at least partially to cover the penis. The blubbery mass is easily freed by gauze dissection, exposing numerous large vessels which must be carefully tied—with cotton for preference. There is no difficulty in separating the cord and testes but to fashion a new scrotum is not easy; by undermining the skin in the upper inner aspects of the thigh, however, much help may be gained. Skin grafting may be necessary, especially to cover the penis, but it is surprising how well the grafts take on what might be expected to be unhealthy tissue.

The gratitude of the patient after a successful operation of this nature may well be imagined and some of the gifts bestowed on the writer by way of thanks have at times been quite embarrassing. One particularly truculent goat took a lot of laughing off.

The type of **hydrocele** commonly seen in the African is very different from that one used to see in the Out-Patient Department at Bart.'s, where one of the functions of the dresser on duty used to be to tap a series of scrotums (or should it be scrota?) in old men with thin-walled sacs containing a reasonably small amount of fluid. Here it is no uncommon occurrence to see a patient with a scrotum the size of a football the thickened layers of which have a very similar consistency to its leather casing.

As regards etiology, filariasis is again often given the credit for its causation, but the writer has seen many cases in areas where the filaria is rarely seen and the condition may be fairly regarded (as elsewhere) as idiopathic in origin. As a rule many attempts have been made by the patient, his friends or the local witch doctor to cure the condition by application of hot cow-dung, counter-irritation with red-hot irons, scarification with rusty nails or other heathen methods. It is not surprising, therefore, that the coverings of the sac sometimes become almost cartilaginous in consistency and that treatment by tapping will get you nowhere.

The simplest and also the most satisfactory operation is incision and eversion of the sac. In his early days the writer made a habit of excising the sac within a short radius of the testis. It seemed not to matter however how great care was taken to attain hæmostasis either by multiple ligature or by continuous suture: despite drainage enormous hæmatomata used constantly to occur.

The skin and the outer layers of the sac should be incised. The inner layer should then be freed for a short distance with a dissector and the remainder of the clearance made by sweeping the finger firmly round the cystic tumour. A small incision is made through an avascular area and the fluid evacuated, following which the sac is eventrated. The incision is enlarged sufficiently to enable the sac to be turned inside out and a through-and-through stitch is passed through the mesorchium to prevent spontaneous reduction. The mass is returned into the scrotum and the skin closed. An important point to remember is to support the scrotum and this is best done by suturing it to the anterior abdominal wall. The formation of a hæmatoma rarely follows and it is surprising how soon the thickened sac wall shrinks up and the testicles return to a size which may be regarded as reasonable by any self-respecting male.

Hernia presents no different problems in East Africa to those encountered in more temperate climes other than that of size. Sometimes most enormous specimens are seen and only recently the writer was presented with one which, to pursue the sporting analogy, assumed the size of two Rugby footballs put together and contained practically the whole of the peritoneal contents with the exception of the liver, the spleen and the stomach. As could be expected, the omentum also was excessively large and fatty. I think this particular hernia was the largest I have ever seen and operating on a case of this sort requires considerable ingenuity and cannot be dealt with by any standard method.

Like most other surgeons I have tried out most of the techniques which have been described from time to time for the cure of inguinal hernia and again like other surgeons have found that I have worshipped at the shrine of false gods. Since 1946 my preference has been for various slight modifications of the procedure devised by Jacobson of Petersburg, Virginia, and I have found great satisfaction in dealing with all sizes and conditions of hernia by this intra-peritoneal route.

Its advantages are several. Two birds may often be killed with one stone and the appendix or other pathological abdominal viscus removed at the same operation. The size of the hernial orifice may be adequately estimated and much of the time formerly spent in dissecting the sac from the cord (very considerable in large chronic hernias such as described above!) is eliminated. Finally it gives one a most comfortable feeling to insert a finger into the peritoneal cavity after the herniorrhaphy has been carried out and satisfy oneself that a firm barrier has been erected against the insidious attacks of recurrent intra-abdominal pressure. For the actual repair when such is necessary I have for the last year been employing a nylon darn. Nylon is more easy to manipulate than stainless steel wire and seems to give just as good results. I also make all my patients do a month's course of "hernia exercises", beginning fourteen days after the operation; I *think* it helps though I don't know.

Swelling of the scrotum in East Africa can thus be seen to provide a variety of interesting and unexpected problems and any aspiring surgeon who feels disposed to sojourn in these outposts of Empire will certainly find plenty to amuse him in this and many other fields of labour.

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RETIREMENT OF PROFESSOR HOPWOOD

The President and Council of the Medical College held a reception in the Great Hall on December 22 in honour of Professor Hopwood, on the occasion of his retirement. One hundred and fifty guests were present.

We would like to take this opportunity of welcoming his successor, Professor J. Rotbat, who comes to us from Liverpool, and is distinguished for his work in Nuclear Physics.

FAT ABSORPTION IN MAN

By PROFESSOR A. C. FRAZER
(Department of Pharmacology, University of Birmingham).

ONE HUNDRED years ago Claude Bernard[1] published a series of pioneer observations on intestinal absorption of fat. He demonstrated the fine emulsification of fat in the intestinal lumen, the dependence of this emulsification upon the presence of bile and pancreatic juice, and the occurrence of milky lacteals and lymphatics and the systemic hyperlipæmia at the height of fat absorption. During the last part of the 19th century Immanuel Munk did much experimental work in this field; one of his most famous studies being that made on a girl with a lymphatic fistula from which he recovered some 60% of ingested fat.[2] During the second half of the 19th century, it was generally thought that fat was absorbed as a fine oil-in-water emulsion. However, at the beginning of the 20th century the importance of lipolysis as a necessary step in fat absorption gained increasing support, mainly due to the advocacy of Pflüger.[3] In 1929, Sinclair[4] introduced the view that phosphorylation was an important factor in fat absorption. The situation was eventually summarised in 1936 by Verzar and McDougall,[5] who further supported the conception that fat absorption was dependent on complete hydrolysis of glycerides. The object of this paper is to present some of the results of investigations on fat absorption which have been carried out with a number of colleagues in London and Birmingham during the last 15 years. These studies have been made in experimental animals, in human subjects, and also in some cases *in vitro*, since basic data were often required upon which biological methods could be based. However, this paper is mainly concerned with the methods we have developed, and the interpretation of studies we have made, in normal and abnormal human subjects.

DEVELOPMENT OF METHODS

(a) Estimation of the amount of fat absorbed.

Too frequently in the past assessment of fat absorption has been made upon the analysis of a single sample of fæces. A number of workers have pointed out the unsatisfactory nature of such investigations and it is now generally agreed[6, 7] that fat absorption can only be satisfactorily assessed by the use of a balance technique. The longer the period of this balance study, the more accurate the estimation is likely to be. We have now discarded these periodic balance methods in favour of daily determination of total fatty acid intake and output. This method was based on that described by van de Kamer, Huinink and Weyers (1949).[8] The fatty acid was estimated in each 24-hour sample of fæces and a three-day running mean of the fatty acid rejected was taken as the basis for calculating the difference between fatty acid intake and rejection. The use of a three-day running mean overcomes sampling difficulties in individual 24-hour specimens. Changes in the amount of fat absorbed are readily followed, which makes it particularly valuable as a research method and also in clinical practice as a means of assessing response to treatment. Samples of fatty acids are readily obtained for more detailed study, if required.

(b) Determination of tolerance to quantitative and qualitative loading of dietary fat.

The effect of increasing the fat in the daily diet from 50 g. to 100 g., or even 150 g. in suitable cases, was determined. The effect of changes in the type of fat was also studied.

(c) Characterisation of fæcal fatty acids.

The fatty acids in the fæces were separated and their iodine value, melting point, and mean molecular weights determined. With adequate samples separation and more detailed study of the constituent fatty acids was possible. Volatile short chain fatty acids, such as acetic acid, were also estimated. Special arrangements for the collection of fæces were necessary for these studies.

(d) Determination of general absorptive activity of the intestine.

The ability of the intestine to absorb other substances than fats was investigated. An intraduodenal drip technique was developed for the study of glucose absorption. 10% glucose solution was passed into the small intestine by tube in small quantities at minute intervals for one hour; the stomach was then drained and the tube withdrawn. Blood samples were taken at 5—10 minute intervals throughout, from analyses of which a blood sugar curve was constructed.

(e) Investigation of intraluminar conditions.

These were studied by intestinal intubation. A Miller Abbot intestinal tube was passed into the small intestine. Its position was checked radiographically. The bag was inflated and samples of intestinal contents were withdrawn. These were examined for pH by glass electrode and the presence of bile constituents and various enzymes determined. The enzymes normally studied included trypsin, amylase, lipase, phosphatase and lysozyme, which were investigated by standard methods. We have also searched for lecithinases and cholesterol esterases in many cases. The material obtained by intestinal intubation was also examined for the presence of bacteria. The level of blood sulphathiazole after a test dose of succinyl sulphathiazole was also determined.

(f) The study of intraluminar changes affecting ingested fat.

After the resting samples were collected the subject took 30 g. of olive oil by mouth. Samples were removed at regular intervals for the next five hours. These samples were examined for pH, enzymes and other materials, as described above. In addition, the fatty material was analysed and the quantity of fatty acids and lower glycerides determined. The degree of emulsification was estimated by examination under dark-ground illumination. The characteristics of the stabilising interfacial film were studied by investigating the protein flocculation pattern[9] and the effect of enzymes such as lecithinase on the stability of the particle.[10]

(g) The investigation of sequelæ to fat absorption.

(i) *Post-absorptive systemic hyperlipæmia.*

Normally after ingestion of a standard fat-containing meal there was an increase in the particulate fat in the systemic blood.[11] This was measured by counting the number of particles visible under dark-ground illumination.[12] A standard meal containing 30 g. of fat was administered, particle counts were made, and a chylomicrograph constructed. The systemic hyperlipæmia was also followed by micro-estimation of blood fat, using a method adapted from Schmidt Nielsen (1946).[13] For general purposes the chylomicrograph was quite satisfactory and much quicker than the analytical method.

(ii) *Gastric secretion and motility.*

It is well known that the secretion of acid by the stomach and the rate of gastric emptying time are both decreased by the ingestion of fat. The effect of a standard fatty meal on these two aspects of gastric function was determined by standard methods.

(iii) *Mucous secretion*

In experimental animals it was shown that fatty acids caused a marked increase of mucus secretion in the small intestine. It was also shown in man that fatty acids caused the appearance of a segmented radiographic pattern indistinguishable from the so-called "deficiency pattern."[14] It was also shown that this segmental pattern was induced by the presence of mucus, which flocculated the barium sulphate suspension. In these experiments radiographic appearances of the small intestine after the administration of a suspension of barium sulphate in water by mouth or by intraduodenal tube were noted.

RESULTS

In normal human subjects.

The amount of fat absorbed in a normal human subject was more than 95% of the quantity ingested. The increase of dietary fat from 50 g. to 100 g., or even to 150 g., made no significant difference to the percentage absorbed, which always exceeded 95%. Alteration of the type of fat had little effect on absorption, unless special non-dietary fats, such as tristearin, were administered. There may be little obvious relationship between the fat found in normal fæces and the dietary fat. If the fæcal fatty material found was derived from the diet the normal percentage absorption exceeded 95%; if the material was derived from other than dietary sources, the percentage absorption was nearer to 100%. Normal fæces usually contained less than 1 g. of volatile fatty acids in a 24-hour sample, but the quantity varied slightly from time to time.

Intraluminar conditions in the normal small intestine were reasonably constant. The reaction was usually acid in the upper part of the small intestine. Occasionally the pH was in the region of 7.0, but this soon changed to the acid side after feeding fat. The average pH in the small intestine was in the region of 6.5. The presence of tryptic, amylolytic and lipolytic activity was readily demonstrated in normal subjects. The resting sample of intestinal contents showed

* Based on a lecture given to the Abernethian Society on April 28, 1949.

a relatively low lipolytic activity. This was enhanced by the addition of bile salts, indicating that the apparent increase in lipolytic activity in samples taken after fat feeding was probably due to secretion of bile salts rather than lipase. Lysozyme and phosphatase were demonstrated. There was a marked increase of phosphatase following the administration of fat. Lecithinases and cholesterol esterases were not found in normal intestinal contents, contrary to other observations.[15] Intestinal contents withdrawn from the upper part of the small intestine sometimes contained bacteria — some thousands, or occasionally tens of thousands per ml. The administration of succinyl sulphathiazole to normal subjects in doses up to 6 g. did not give rise to blood sulphathiazole levels greater than 1 mg. per 100 ml. of blood.

After feeding fat by mouth, samples from the intestine were invariably acid and contained fatty material. The amount of fatty acid present was usually small—if there was more than 1 g. of oil the percentage hydrolysis was usually less than 10% with smaller quantities of fat the percentage hydrolysis was sometimes higher. The fat was finely dispersed as an oil-in-water emulsion with an average particle size of less than 0.5μ The analysis of the fatty material showed the presence of fatty acids, lower glycerides and bile salts. The particles behaved as though negatively charged and lecithin was not apparently essential for their stability.

Using the intraduodenal drip technique, the blood sugar rapidly increased for the first 30 min., after which the rate of increase declined; when the glucose injection was stopped and the stomach emptied, the blood sugar returned rapidly to the normal resting level.

The administration of a standard meal containing 30 g. of fat resulted in systemic hyperlipæmia. The maximum increase in particles was reached in 2½—3½ hours and the blood fat returned to normal levels in 5 hours. With 30 g. of fat no marked delay in gastric emptying was evident, but if 60 g. of fat were ingested delay occurred, the peak of the chylomicrograph being 6 hours or later. Small quantities of fat had little effect on gastric secretion. If larger amounts were ingested, however, there was inhibition.

Barium sulphate suspension in water was introduced by intra-duodenal tube. Radiographs showed the characteristic feathery pattern of the small intestine and visualisation of the mucosal folds. Fatty acids added to the barium sulphate suspension caused clumping of the barium and a characteristic segmental pattern. The change from the feathery pattern to the segmental pattern occurred in about ten minutes and was watched by screening. The mucosal folds were no longer visible. Fatty acids did not flocculate barium sulphate *in vitro*, but the addition of mucus to the barium sulphate suspension resulted in immediate and complete flocculation. Fatty acids were shown to be mucigenic stimuli. Moderate amounts of triglyceride did not give rise to the segmental pattern unless the fat was hydrolysed before administration. Large quantities of fat taken previous to the radiograph sometimes caused changes from the normal feathery pattern towards the segmental type.

In abnormal human subjects

A large number of cases of defective fat absorption have been investigated, but refererence will only be made here to the results obtained in the detailed study of 20 cases of non-tropical sprue, 10 of obstructive jaundice and 2 of pancreatic atrophy, subsequently proved at autopsy.

If the amount of fat absorbed was less than 90% of the quantity ingested, fat absorption was considered to be defective. In most cases of sprue in remission fat absorption was about 70%, and in some cases it rose almost to 90%. When exacerbation occurred, the fat absorption defect became more pronounced, and percentage absorption fell. In cases of pancreatic insufficiency and obstructive jaundice the fat absorption defect was more severe. Cases of pancreatic insufficiency may sometimes resemble the sprue syndrome closely, in which case the characteristic features of the simple pancreatic insufficiency described here may not be observed.

If the dietary fat was increased from the standard 50 g. to 100 g., the majority of cases of non-tropical sprue showed a proportionate increase in absorption; thus, if the case absorbed 35 out of 50 g. fat, the amount absorbed on a 100 g. of fat was 70 g. In bad cases of sprue, loading of the dietary fat did not necessarily increase the quantity absorbed. In pancreatic insufficiency and obstructive jaundice the addition of further fat to the diet resulted in a corresponding increase of fæcal fat. In cases of sprue in remission, fats containing large amounts of long-chain saturated fatty acids were not well tolerated. More unsaturated and short-chain fats were more easily assimilated. The fatty material found in the fæces in all these conditions was derived from the diet. If the dietary fat was drastically reduced, the fæcal fat immediately fell correspondingly. The fæcal fat in sprue consisted of long-chain saturated fatty acids, with a low iodine value and high melting point; sheaves of fatty acid crystals were commonly observed in the fæces. In sprue in exacerbation and in obstructive jaundice and pancreatic insufficiency a wider range of fatty acids were observed. Subjects with no demonstrable pancreatic enzymes and no active pancreatic alveoli at autopsy, showed normal (85%) hydrolysis of fæcal fat. Volatile fatty acids were greatly increased in some cases of sprue, sometimes more than 10 g. of acetic acid in a 24 hour sample.

Intubation studies showed no significant difference in the pH of the intestinal contents between these abnormal subjects and normal. In the sprue syndrome tryptic and amylolytic activity were usually normal. Lipolytic activity often appeared to be slightly depressed and the addition of bile enhanced activity in all samples. Phosphatase showed a dramatic increase after fat feeding as in normal subjects. Lysozyme was sometimes defective. Bacteria were present in large numbers in the upper intestine, especially in achlorhydric cases. Succinyl sulphathiazole by mouth gave rise to blood levels in some cases greater than 10 mg. sulphathiazole/100 ml. blood. The fat appeared to be adequately and normally emulsified. In obstructive jaundice phosphatase was absent, but the other enzymes were present. Lipolysis was feeble, due to lack of bile salts. The fat in the intestinal lumen was not emulsified; agitation of samples after the addition of bile salts resulted in fine emulsification. In pancreatic atrophy there were no pancreatic enzymes demonstrable in the intubation samples. The fat in the lumen was not emulsified, but the addition of lipase and subsequent incubation and agitation caused fine emulsification. In bad cases of the sprue syndrome the absorption of 30 g. of fatty material usually gave rise to no demonstrable post-absorptive hyerlipæmia in the systemic blood. In milder cases the lipæmia was also absent or greatly reduced. The absence of this systemic hyperlipæmia was confirmed by micro-estimation of blood fat. In biliary obstruction and pancreatic atrophy no post-absorptive systemic hyperlipæmia was observed.

In the sprue syndrome gastric hypochlorhydria was usual and there was marked delay in gastric emptying. In severe cases gastric delay became more pronounced and complete achlorhydria might occur. In biliary obstruction and pancreatic atrophy, on the other hand, gastric secretion and motility were usually normal.

Radiographic studies of the small intestine in cases of the sprue syndrome showed the so-called "deficiency pattern,"[16] due to clumping of the barium. Cases of obstructive jaundice or pancreatic atrophy showed the normal feathery pattern.

DISCUSSION

Normal fat absorption

The elucidation of problems in human physiology demands the study of both normal and abnormal subjects, since disease often provides the only opportunity for an adequate experimental approach. In normal circumstances nearly all the fat ingested is absorbed. Increasing quantities of fat, up to 150 g. or more, are well tolerated. Most normal dietary fats are well absorbed. 95—100% of administered fatty acids are absorbed by experimental animals, provided that the fatty acids are liquid at 37° C., or mixed with other oils. Long-chain saturated fatty acids, such as stearic acid, are poorly absorbed when fed alone. Thus, dietary triglycerides are almost completely and rapidly absorbed over a wide quantitative and qualitative range.

Intubation studies show that triglyceride fats are finely emulsified in the intestinal lumen in an acid medium. It has been shown by *in vitro* experiments that the only emulsifying system which works under these conditions is the triple combination of fatty acid, bile salts and monoglycerides.[17] It has also been shown that the fatty acids and monoglycerides are formed from the triglycerides during pancreatic lipolysis.[18] In normal subjects the chemical analysis of the fatty material shows the presence of fatty acids and lower glycerides, while the failure of intra-intestinal emulsification in cases of biliary obstruction and pancreatic insufficiency and efficacy of appropriate replacement support the conception that the essential emulsifying system consists of the products of lipolysis and bile salts.

The intubation studies also indicate that hydrolysis of long-chain fats may be restricted in the upper part of the small intestine. The quantity of fatty acid observed in the intestinal lumen at any time during absorption is small. For molecular absorption of fatty acid to occur, the fatty acid must be removed from the oil into the water phase. This is difficult under the conditions prevailing in the intestine. Fatty acid can be dispersed in water as a complex with bile salts, the molecular proportions being 5 of bile salts and 1 of fatty acid. The hydrotropic action of bile salts may work under artificial conditions, but we have not succeeded in demonstrating effective removal of fatty acid into the water phase by the addition of bile salts in normal biological amounts. In any case, the amount of bile salts available in the intestine is less than one-third of the amount required for the absorption of the normal quantity of fat in the form of fatty acid/bile salt complexes. So long as stronger acids, such as hydrochloric acid, are present in the intestine relatively little base will be available for the formation of soaps. Butyric acid is water-soluble and the hydrolysis of tributyrin is not consequently restricted by these factors. Tributyrin is absorbed as butyric acid and does not occur in the chyle or the fat depots. Tributyrin absorption resembles the absorption of fatty acid rather than the absorption of glycerides.[19] The absorption of fatty acids tends to be incomplete, especially if long-chain saturated fatty acids are present. Under normal circumstances, however, complete absorption of dietary glycerides, which contain long-chain saturated fatty acids, occurs.

If fatty acids are administered to animals or to man they give rise to no postabsorptive systemic hyperlipæmia. They are not deposited in the fat depots, but can be traced to the liver. Feeding an equivalent amount of triglyceride causes milky lacteals, fat-laden chyle and a systemic post-absorptive hyperlipæmia[20]. The addition of lipase to ingested fat in human subjects causes a suppression of the postabsorptive hyperlipæmia[21]. The occurrence of this post-absorptive systemic hyperlipæmia is indicative of particulate absorption. The passage of fat particles from the intestinal cell via the lymphatics into the blood stream is universally agreed. There is evidence in animals that particulate fat can pass from the intestinal lumen into the intestinal cell;[17] this, however, has not yet been finally proved in man. When fatty acids are fed there is a marked inhibition of gastric motility and gastric secretion, so that absorption is spread over a longer period of time, but with suitable fatty acids absorption is reasonably complete eventually. If glycerides are fed, however, containing an equivalent amount of fatty acid, there is no marked inhibition of gastric motility or gastric secretion and absorption is completed more quickly. Fatty acids can be shown to cause a marked increase in mucous secretion in the small intestine and in human subjects they can cause the radiographic segmentation pattern which has also been associated with mucous secretion. Triglycerides, on the other hand, do not stimulate mucous secretion, nor does the unhydrolysed fat cause radiographic changes in human subjects.

It is suggested that triglycerides are only partially hydrolysed and then finely emulsified in the intestine. Absorption may be in particulate form, in which case the absorbed material passes by the lymphatic pathway to the systemic blood, giving rise to the characteristic hyperlipæmia. Alternatively, if the fatty acid can be molecularly dispersed in the aqueous phase, absorption may occur in this form, and the absorbed material passes, like other water-soluble substances, mainly in the portal blood to the liver.[22] With most dietary fats, absorption is usually in particulate form. If there is interference with particulate absorption, more extensive fatty acid absorption can occur. This is made possible by alterations in intraluminar conditions, particularly the inhibition of gastric acid and decrease in motility. Glyceride absorption is very complete and rapid and is not affected by the presence of acid in the intestinal lumen. Fatty acid absorption, on the other hand, is slower, not so complete, and certain long-chain saturated fatty acids are not well absorbed. The absorption of all fatty acids may be affected by the presence of stronger acids in the intestinal lumen. Fatty acid absorption is associated with a decrease of gastric motility and secretion and an increase of mucous secretion.

Abnormal fat absorption

The first obvious cause of defective absorption is faulty emulsification in the intestinal lumen, which is observed in

obstructive jaundice and deficiency of pancreatic enzymes. In such cases particulate absorption of glycerides cannot occur, as there is no emulsification. Furthermore, lipolysis is also slow in the upper intestine, due to lack of lipase or bile salts, so that there is also interference with fatty acid absorption. Consequently, the fat absorption defect is severe and the sequelæ associated with both particulate and fatty acid absorption do not occur.

In the sprue syndrome, on the other hand, intraluminar emulsification appears to be adequate. There is, however, interference with particulate absorption, possibly due to mucus, and lipolysis continues. Fat is absorbed in this condition essentially as fatty acid. For this reason it is not so complete —saturated long-chain fatty acids are not assimilated. The sequelæ associated with fatty acid absorption—inhibition of gastric secretion and motility and increased mucous secretion, giving the radiographic segmental pattern—are evident. In mild cases the restriction on absorption is only connected with the presence of long-chain saturated fatty acids, so absorption is proportionate to the amount ingested and the long-chain saturated fatty acid content.

In more severe cases of the sprue syndrome a further factor is concerned—carbohydrate fermentation. This arises due to faulty carbohydrate digestion and absorption—hence it can also arise secondarily in pancreatic insufficiency. The acetic acid formed interferes with the absorption of longer chain fatty acids and may also give rise to diarrhœa. Carbohydrate fermentation may also be associated with an upgrowth of intestinal bacteria into the upper part of the small intestine. It is possible that these bacteria may compete with the host for common essential nutrients and this gives rise to certain vitamin deficiences.[23] Thus the sprue syndrome may consist of three parts: a "fatty acid syndrome," due to a change from particulate to fatty acid absorption, a "fermentation syndrome," which results from inadequate digestion and absorption of food materials, which are then acted upon by intestinal bacteria, and a "bacterial competition syndrome," consisting mainly of deficiencies caused by successful competition for nutrients by intestinal bacteria. The severe case of sprue exhibits signs and symptoms from each group—the milder case, however, may only show a few signs and symptoms from one group. A great deal more investigation is still required before we can understand all the problems which are raised in a single case of the sprue syndrome.

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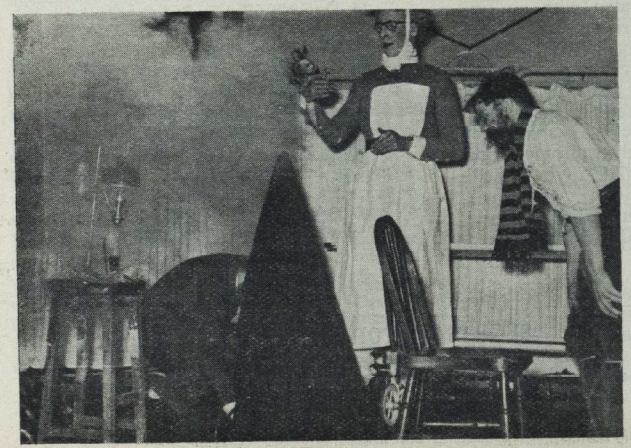
SPORTS EDITOR

P. D. Moyes has been elected Sports Editor in succession to J. D. W. Tomlinson.

THE CHRISTMAS SHOWS



Photos: H. Charles.

A MANUAL OF ANATOMY

ANON

1. BONES: OSTEOLOGY

(Latin: *logos,* I Study; *osses,* bones)

These fascinating organs form the backbone of the whole system and have a very interesting and varied development history.

There are three main types of bone: *long, irregular* and *flat.*

Long bones are often suprisingly short—hence their name. *Irregular bones* usually possess a highly symmetrical shape, whilst *flat bones* are rarely anything but curved. Thus it is easy to remember them by their terminology; but a very interesting mnemonic was invented recently by Professor Ostry-Gonham: *Long bones are short if irregular bones are not often curved but they are all somewhat flat.*

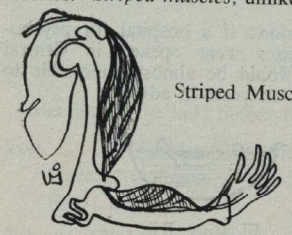
How easy it all seems now! For instance, the tibia, which is 11.3 inches long in short people is quite long in athletic subjects, particularly if they are tall, while "the second metacarpal of the left hand never varies in people of the same build." (*The Long and Short of It,* Q. Boyd). Now one can understand how logical the study of bones really is. Or is it?

2. MYOLOGY

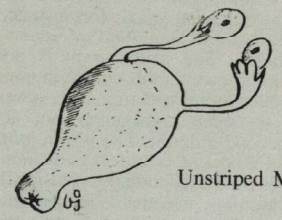
The study of muscles, or Myology as it has come to be known to the layman, is the study of the gross composition of the Human Figure. (How gross that figure often is!) Muscles form the meat extract of our bodies and are quite palpable and often pleasant to the feel. A graceful figure is the sum total of the multiple tonic efforts of every active muscle and one knows how really pleasant such a figure is to the feel. . . .

Now muscles are divisible, like bones, into several headings. There are all sorts of muscles, in fact, and these need not cause undue alarm.

Finally, there are *striped* and *unstriped* muscles. *Striped muscles,* unlike long bones (*q.v.*), are actually striped, and these do quite a considerable amount of work. *Involuntary muscles,* however, are lazy lumps of meat, and have to be stirred to action. These muscles are called into play on occasion, *e.g.* when something has to be passed, as in cards ("I pass").



Striped Muscle



Unstriped Muscle

Heart muscle, although striped, is involuntary, and that is where the logic of myology comes in.

3. EMBRYOLOGY

This tremendously important chapter should, by due rights, have opened the book. However, better late than never, as the old bridegroom said.

Now gentlemen, you will remember that in the beginning two cells connived to dedicate a new life: one cell from the active male, and another from a supine squaw in vigilant repose. The single produce proceeded to divide, redivide, and so forth, until a miniature replica of the adult form resulted. Eventually the growing parasite was ejected from the mother and developed outside the mother with great rapidity. (The most interesting developmental stage occurs at puberty: but embryology is limited to the intra-uterine phase of human existence.)

Little exciting happens before birth. The foetus (as the creature is called) goes on developing, acquiring a new set of organs here, or a pair of lungs there, and so on. As this process has been going on for thousands of years, why should modern anatomists bother with such an everyday occurrence, and spend so much precious time appraising the multitude of incidents which mark each latest stride in embryonic development? In certain respects the 17-year-old model is a far more wonderful product than the sex-starved brat of 17 weeks, and is certainly more helpful to the inexperienced medical student, groping after knowledge. . . .

4. JOINTS: ARTHROLOGY

Like osteology, the Study of Joints, or Arthrology, has a logical bent, and consequently presents certain discrepancies which are best dispensed with. There are numerous types of joint:—

a. synarthrodial
b. diarthrodial
c. Sunday

and (a) and (b) are subdivisible. But the nature of these joints goes beyond the scope of this book. *Synovial joints*, for instance (b), are bathed in lubricating fluid in order to assist movement. The piston joint is not technically a joint, owing to its complete non-bony, non-cartilaginous structure. It is never referred to in rival text-books, but its existence is beyond a doubt. The *piston joint* is a wonderful model of technical perfection, smooth, flawless and exceptionally pleasing in action. It is, perhaps, in order to refer to this joint as a thigh-arthrodial type of the diarthrodial variety.

The *Sunday joint* is ably dealt with in most competent text-books of cookery.

Piston Joint

5. NEUROLOGY

Neurology deals with the Study of Nerve Structure in all its intricate variations. The function of nerve bodies is so interesting that space does not permit of enlarging on the subject. However, living as we are in a world of neurotics, nervous wrecks and other psychological misfits, we must endeavour to probe into the annals of the unknown, and simultaneously take a leaf out of the text-books of physiology and psychology.

1. What is a *nervous wreck*?

The product of the 20th century is anything but perfect, and when he (or she) is unable to make ends meet, considerable flattery results from referring to such a person as a nervous wreck. The strains imposed by modern life are very acute, and strong, silent men are finding it increasingly difficult to live up to their reputation. In other words, a nervous wreck is the result of two trains of thought colliding along the same line of action.

Treatment: live alone and like it.

2. What is a *neurotic*?

Highly temperamental people: particularly continentals: are composed of most discordant neurological factors which continually run counter to one another. Instead of pursuing the same line of mental action, these factors bombard themselves so that the helpless creature is perpetually striving to follow an impossibly definite line of thought. Consequently they are miserable, introspective and strangely melancholic in outlook, and depress anyone they happen to meet. As lovers they inadvertently develop a splendidly suicidal atmosphere (Shakespeare's *Desdemona, Ophelia* and *Hamlet* studies) and end up the sooner the better.

Treatment: develop a communal instinct and work for others.

3. What is a *"highly-strung" individual*?

When the nervous system is overtaxed, the multifold axons become taut, and the individual feels mentally elated: hence a highly-strung sensation, eventually causing a feeling of false exaltation.

Treatment: let down the strings.

4. What is *nervous indigestion*?

This is a psychological complaint affording little hope of extra-medical cure. The cause and effect are so ridiculously elementary that only the "victim" can counter his phobia by readjusting his outlook on food.

Treatment: eat what you like, when you like—and be as sick as you like, where you like.

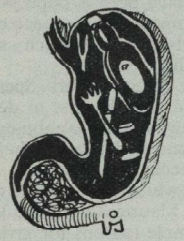
In conclusion: if a hospital for psychological illnesses were opened in Central London, it would be almost impossible to book a bed ten years in advance.

Floating Rib

6. SPLANCHNOLOGY

The study of organs, or Splanchnology, affords little of interest to the average intelligent man or woman in the street. Certain organs are of peculiar and entrancing interest, but as the intimate study of such organs embraces a highly successful profession on its own, we must stick to the lesser-known organs and leave the aforesaid profession to the pleasure-loving man and woman of the street (especially the latter).

All organs, with many exceptions, are capable of enlarging themselves to accomodate or be accomodated. There is one particular organ which is capable of enlarging itself several times a day, and that is the *stomach*.



Stomach

Another important organ is composed of spongy tissue and expands remarkably rapidly in the act of breathing—*wun-lung*, or the Chinese Organ. Of course, these are but a few of the very many (any offers?). There comes a time in the study of organs when logic comes into its own, so we will draw the line at this point

---

—and proceed with the study of that enormous by-product of Anatomy — PHYSIOLOGY.

WATCH FOR THIS NEXT MONTH

Erratum: Chapter 6, line 10; for *of* read ***in.***

* * *

* * *

PRESS COMMENTS

Cunningham goes well with this book. I strongly advise it.—***B.N.J.***

An excellent little publication. The anatomy is quite good, especially the chapter on sweat—*The Scalpel.*

* * *

ABERNETHIAN SOCIETY

Meetings to be held before Easter are:—

Feb. 2. Dr. Geoffrey Bourne, on "The Place of Optimism in the Treatment of Heart Disease."

Feb. 9. Clinical Evening.

Feb. 23. Mr. G. Russell Vick, K.C., Chairman of the Bar Council, on "The Bar of England."

Mar. 2. Rt. Hon. Lord Moran, on "Conscription."

Meetings will be held at 5.30 p.m. in the Clinical Lecture Theatre.

WILLIAM GIFFORD, MAN-MIDWIFE

By WALTER RADCLIFFE

THE fame of William Smellie so far overshadows all eighteenth century obstetrics that the valuable contributions of his less known contemporaries tend to drift into undeserved oblivion. Much of this is due to the fact that Smellie was an outstanding teacher, perhaps the most successful the profession has ever known, and his great merit has been enhanced by the brilliance of so many of his pupils such as William Hunter, John Harvie, R. Wallace Johnson, Thomas Denman and the two great Dutch professors, John Roederer of Gottingen and Peter Camper of Franeker, all of whom became leading teachers and passed on his accumulated wisdom. The most recent text-books still quote Smellie as an authority, though it is two hundred years since his school became famous, and indeed he is credited with advances in the art of midwifery to which he is not strictly entitled. This criticism may appear to be heresy to some, but I have no intention of belittling Smellie's influence, which stands supreme without any questionable embellishments.

In the year 1734, when Smellie was still an obscure rural doctor, Dr. Edward Hody, a fellow of the Royal Society, published the posthumous writings of his friend William Giffard, surgeon and man-midwife, under the modest title "Cases in Midwifery." This most interesting little volume is indeed just what the title indicates; a very personal record of over two hundred confinements of interest attended by Giffard from the year 1724-5 until his death in 1731.

We know very little about Giffard except what his friend Hody tells us about him in his preface, in which he eulogises him as a "plain man, remarkable for an honest, frank behaviour," and praises him for his skill, his kindness to the poor, and his aversion to all kinds of flattery. The text which follows bears out this view, for there is no boasting, and his failures are set down as faithfully as his successes.

In his first year he recorded only ten cases, but in 1730 he made notes of seventy-one, and in the first nine months of the year in which he died he described fifty-three. All these cases have some point of interest, and it is safe to assume that he has omitted the normal and less interesting ones, even though on some occasions he recounts two cases in the same day. There can be no doubt that he became a very busy man, and that he gained considerable practical experience of his subject. We do not know who his teachers were, but he states that "Dr. Chamberlain, the most noted practitioner in Midwifry in his time in England" always gave opium for uterine inertia, and repeated the dose if necessary in six hours' time, which, with the fact that he was the first to record the use of the Chamberlain forceps, suggests that he may have been a pupil of some member of that famous family, since none of them wrote a text-book in which such treatment is described.

The late Herbert Spencer claimed that Giffard was the first to describe the method of jaw-flexion combined with shoulder-traction for delivering the after-coming head in breech presentations. This is the technique which is described in most text-books as the Mauriceau-Smellie-Veit method. There are ample reasons for giving Giffard priority over Smellie, but room for doubt in claiming that he anticipated Mauriceau.

Francis Mauriceau published his text-book in 1668, and it was translated into English by Hugh Chamberlain soon afterwards, and ran into several editions. In this book he made no mention of this method of delivering the head, about which his instructions are indeed very scanty, but was more concerned with bringing down the arms. This was a novel procedure because in his day the accepted teaching had been to leave at least one arm extended alongside the head to prevent the cervix uteri from closing on the fœtal neck in a contraction ring. The obstetrician's nightmare then, and for many years to follow, was not locked twins, but the possibility that the body might be pulled away from the head, leaving the decapitated head free in the uterus and above the brim. Both Chapman and Smellie described cases in which an energetic midwife had so decapitated the child. Many years later Matthews Duncan showed that it requires a force of 120 lbs. to pull the fœtal head from the shoulders, though, of course, severe damage must be done long before separation occurs. Heroic midwifery was performed before the advent of safe Cæsarian section, but the heroines were not the midwives but the mothers, who endured all this without any form of anæsthesia.

But in 1710 Mauriceau published his second book, of which I know no English edition. In this book, which is mostly composed of case histories, he described the use of shoulder traction with two fingers of the other hand in the child's mouth to deliver the chin over the perinæum, because it was his belief that the chin was the chief cause of difficult delivery when the head was larger than usual. It would appear that he had stumbled upon the difficulties associated with an extended head without realising the full meaning of it. Mauriceau's views do not seem to have become generally known until they were extensively quoted by his countryman, Andre Levret in 1747, long after Giffard's death. It is impossible to state that Giffard did not know of them, though I am of the opinion that he did not, because he did not at first realise the importance of delivering the head with the face of the child turned towards the sacrum, an essential point stressed by Mauriceau. As Giffard's experience grew, he came to realise the value of turning the child into this position.

The following quotation is from one of his later cases, No. LXV:—

> "As soon as I had brought it as far as the breast, I passed up my hand and brought down first one arm, and afterwards the other, to give more room for the passage of the head; but finding it stuck there, I clapped one hand as usual under the breast, and the other behind above the shoulders to draw it out: but this would not do, so I was forced to pass up two fingers into the mouth; and at one and the same time gently pressing on the lower jaw, and pulling at the shoulders, I extricated the head."

Note that Giffard was very careful not to pull on the jaw, but to apply his traction through the other hand on the shoulders. It seems fairly clear that the fingers in the mouth were used only to produce flexion. On a previous occasion he had pulled on the jaw and produced a fracture, and it was fortunate for him that the child was already dead and indeed macerated, but no doubt the accident impressed itself on his memory.

Smellie taught Giffard's methods, and recommended his pupils to read Giffard's book, one of the few books indeed that he did advise them to read. But he does not appear to be satisfied with this technique, and when Peter Camper attended his lectures in 1749 he was advising a method of levering out the head by alternately raising and lowering the infant's trunk, and Camper copied a diagram of this method into his lecture notes. At the same time they discussed the relative merits of Daventer's method of delivering the head, which Camper had hitherto used, which was to draw the trunk towards the perinæum and deliver the occiput out from under the pubes.

Smellie's own contribution to the problem was his proposal to use forceps in breech deliveries. He first tried to do this in 1750 using his short straight forceps and was unsuccessful; but in the preface to his second volume he wrote as follows:—

> "In my first [volume] among the improvements and alterations that have been made in the forceps, I mentioned a long pair, curved to one side, which I contrived several years ago, for taking a firmer hold of the head in the pelvis when high; but I did not then recommend the use of them, because I was afraid of encouraging young practitioners to exert too great force, and give their assistance too soon. Of late, however, I have found them very serviceable in helping along the child's head in præternatural [i.e., breech] cases, after the body and arms of the fœtus were brought down, and it could not be delivered without destroying the child by overstraining the neck and jaw."

There is an excellent illustration of the forceps in use in this way in his volume of "Anatomical Tables."

I have quoted the above passage in full, as it is such a good example of Smellie's wisdom as a teacher, and his appreciation of the dangers of fœtal injury in the use of force.

I think I have quoted enough on this subject to show that Giffard deserves the credit usually accorded to Smellie for his share in the development of the accepted method of delivering the aftercoming head, which should perhaps be more accurately called the Mauriceau-Giffard method.

There are many interesting cases in Giffard's collection, but I will give one quotation from his comments on case CCXXIV.

> "I beg leave before I proceed to give any further account of the delivery, to give my opinion in a point of Midwifry, in which I differ from most authors that have wrote on

that subject. It is generally believed that the Ovum, after its impregnation and separation from the Ovarium, and its passing through the Tuba Fallopiana, always adheres and is fixed after some time to the Fundus Uteri; in this case the Placenta adhered and was fixed close to and round about the Cervix Uteri, as I have found it in many other cases, so that upon a dilatation of the Os Uteri a separation has always followed, and hence a flooding naturally ensues. It has been observed that the Ovum, if it is stopped in the Tuba Fallopiana, and does not readily pass through, will sometimes adhere to the tube (though 'tis very rarely it so happens) and there make its Nidus, and a Fœtus will be formed there; of which I have given an instance . . . "

Giffard is here describing a case of placenta prævia, of which he gives us other examples, and he is also referring to his case CLVII which was an ectopic gestation.

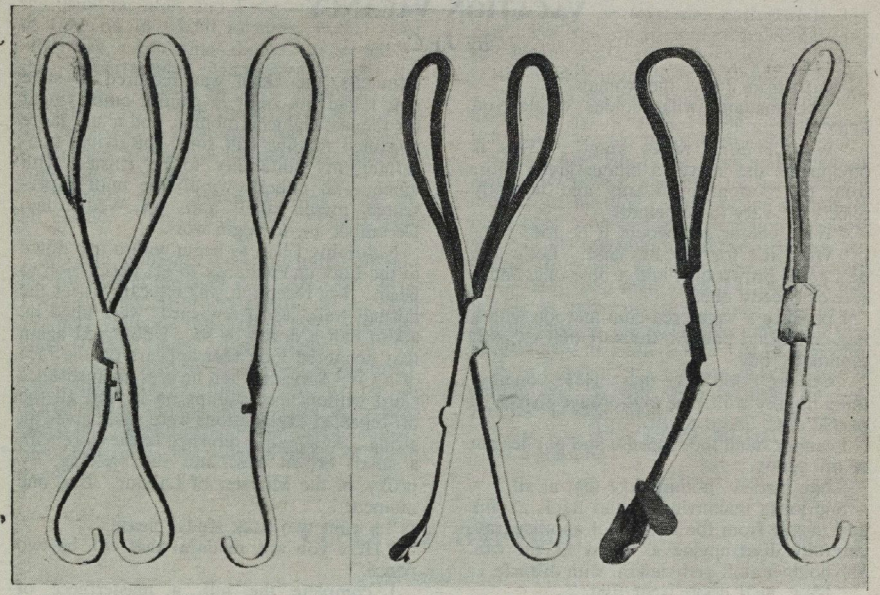
Placenta prævia had been scantily noticed first by Rueff in 1554 (McClintock), and it had been generally believed that the placenta always adhered to the fundus uteri, but that it might be dislodged early in labour and come to present itself before the fœtus. Indeed in Mauriceau's time there was a discussion as to whether it ought then to be pushed back, or be removed and separated by cutting the cord before delivering the baby. The first to realise that it might actually have become attached to the lower segment was Paul Portal in 1682, who stated " Le placenta ne s'attache pas toujours sur le fond de la matrice; quelques fois il peut s'insere au voisinage du col," and realised that hæmorrhage then became inevitable as soon as the cervix dilated. Giffard was the first Englishman to describe Placent prævia, and it is possible that he may not have known of Portal's description, which was not published in this country until 1763. Even if it is not an original observation, he deserves some credit for his thoroughness in reporting it.

The ectopic gestation to which he refers was a most interesting case, for the patient first had hæmorrhage about the third month, and then managed to carry the gestation until the sixth month, when the pelvic hæmatocele, which Giffard had felt per vaginam, burst through the anus, and the woman died six days later. Giffard then performed a post-mortem examination with the help of Mr. Nourse and Dr. Dodd, both of St. Bartholomew's Hospital. The case was reported to the Royal Society, and engravings of the specimen were made on the orders of the president, Sir Hans Sloane, and these are printed in the book. It would be interesting to know whether the specimen found its way into the museum at the hospital. This is the first full account of ectopic gestation of which I am aware, though Smellie stated that a case had been mentioned by Jean Riolan about 1648.

Giffard also described a case of hydatidiform mole in 1730, the first case recorded in this country. The condition had been described by Lamotte, of Valognes, in Normandy, in 1715. Smellie did not see a case in all his experience, and had to describe those recorded by others.

But perhaps the most interesting part of Giffard's book is his description of the use of forceps for the first time on June 28, 1728. The forceps he used, and of which there is an illustration, were substantially of the Chamberlain pattern, and I have already suggested that he might have known one of the Chamberlain family and obtained the secret in that way. Edmund Chapman, of Halstead, had described the use of the forceps the year before the publication of Giffard's book, but it was not until he brought out his second edition in 1735 that he published the illustration of his own instrument.

In addition to the engraving of Giffard's forceps, which he habitually called his " extractor," there is on the same folding plate an engraving of " The extractor as improved by Mr. Freke, Surgeon to St. Bartholomew's Hospital." This is a wonderful tool, with a concealed crochet in one handle, and a blunt hook on the other, the whole contraption made to fold up. Wallace Johnson said that Freke was a mechanical genius, but a poor obstetrician. He invented the probe pointed scissors, and made the first pair himself, so he may also have made his own forceps. He became the first curator of the hospital's museum, and was a member of the first Medical Society in London, founded by John Fothergill in 1752, which included amongst its members William Hunter and William Pitcairn. Peter Camper met him at one of the club's meetings on July 24, 1752, and tells us that Freke highly recommended Valerian for nervous disorders. The only portrait of Freke that I know is Hogarth's drawing of the anatomy



Mr. Giffard's Extractor

The Extractor as improved by Mr. Freke, Surgeon to St. Bartholomew's Hospital.

dissection at Surgeon's Hall, in which he is shown presiding over the meeting on a high chair.

We do not know whether Giffard had the drawing of Freke's forceps made for the book before he died, in which case he would probably have intended to write something about them, or whether this was an addition made by Dr. Hody, who should surely have added some comment himself. But it does lead me to suggest that Giffard may have had some connection with St. Bartholomew's Hospital and with its staff. In confirmation of this possibility is the fact that most of his patients seem to have lived in that part of London which became the old Bart.'s " district," namely, the western half of the City around Holborn, Fleet Street, Charterhouse and Bartholomew Close. With only this circumstantial evidence one cannot confidently claim him as a Bart.'s man, but it is pleasant to think that Bart.'s was clearly the hospital with which he was most closely associated.

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VACATION VACANCY

By J.F.C.

"I WANT a tie," says the woman.

"Yes, madam, what colour would you like?"

"Well, I don't really know." This is obvious as she heaves a bilious green effort from the bottom of a tray and instantly rejects it. I try to be helpful.

"What colour suit would it be for?"

"Well, it's for my husband. Let's see, he's got a brown one, and a blue one, and a sort of tweedy one."

I produce a vague red-cum-maroon with a non-committal pattern, the sort that she will eventually buy.

"Oh, no, I don't like that. Have you anything in grey with blue and orange stripes or purple dots, about seven . . . ?"

I cannot stand the suspense and put her out of my agony.

"No, madam, nothing like that at all."

She looks unconvinced, and hauls a pink and purple from the bottom of another tray, carefully disarranging as many as she can. She holds it aloft and views it with distaste.

"Now, he'd never wear that!"

At last we are getting somewhere. Only another few hundred samples remain to be eliminated. I place several more in front of her for rejection.

"It's very difficult," she says.

With a sigh, I agree.

"Men are such fussy creatures."

This time I cannot agree. I suppress my masculine instincts, and the obvious retort, and remain mute.

"Perhaps, I think I had better bring him along with me to choose it." She smiles. "I think I'll leave it, if you don't mind."

While I begin the fantastic game of snakes and ladders to straighten out the tangle, and my hollow laughter still echoes in my mind, let me explain that I am not doing this for the good of my health. We have heard a lot about the shortage of money, a state not unfamiliar, I believe, to students, and I am attempting to extend my exchequer as an assistant in one of the branches of a big London store.

The whole thing began in November, when I completed a form of governmental dimensions. Unwittingly, I started on its inevitable course a great and ponderous machine. While I was still in the throes of terminals, the Dean was required to state that I had not been in gainful employment for the last eighteen months, and a still more mystified relative had some misgivings concerning my suitability to be trusted with money—all unbeknown to me until I presented myself at 9 a.m. on Wednesday, December 14, to begin work.

Naturally, I had to begin with a trip down to the Labour Exchange to get permission to begin. My reception was typical. After the normal wait, just a few cards were filled in, about half a dozen or so. I observed again that delighted look that appears on the face of a Civil Servant when he sees an Insurance Card without any stamps on it, and all the oft-repeated explanations were again given an airing. At length, I returned to the store with a small brown card and the blessing, by proxy, of the Minister of Labour. But, one moment . . . .

"I want two back studs, please."

"Here you are, madam; that will be two pence."

I complete the bill, a masterpiece of ingenuity. As well as the studs, I note the date, department, my own number, the total amount of the purchase (2d.) and the vital information that the customer is going to pay cash and take the goods with her—in triplicate! For the first few days, I was not sufficiently responsible to be allowed to complete this document myself, but I am anticipating.

Thus, I entered the employ of one of Londons largest firms and became a retail operative. I was taken down to the Men's Wear department and introduced to the Departmental Manager, Mr. King. He, in his turn, introduced me to the other four assistants, and set me to work tidying up in order to learn the stock. In many places, the addition of a temporary would lead to some suspicion and rivalry, but I was most fortunate in being placed under Mr. King, for no one could be more helpful or co-operative; indeed, the whole spirit in the department is one of friendliness and courtesy.

I have been most impressed from the start with the *esprit de corps* of the whole store, from the executives down to some of the rather brittle females who are considered "Juniors." A good canteen is provided, with the usual facilities and a reasonable amount of time off in which to enjoy them. The other day, a Christmas dinner was served by the Departmental Managers to all the assistants. It was all very gratifying, but perhaps it is as well that trained waitresses are employed in the restaurant!

The ties are nearly all tidy now, and the *status quo* restored.

"Garters, sir? Three and six. Yes, sir, all elastic. Very good value. Thank you, sir."

All that remained was my initiation into the vagaries of the sales bill. After two days, I was summoned to the sanctum of the Staff Trainer, whither I repaired to meet a benign, black-frocked lady, grown elderly in the service of the firm. In this I was disappointed. The Staff Trainer turned out to be an extremely becoming young lady in a neat tweed suit, enthusiastically waiting to impart to myself, and two other trainees of more mature age, the mysteries entrusted to her care. Perhaps my attention wandered during this lecture; anyway, I afterwards felt that I really needed more Staff Training. Finally, I was given my own book of bills, the hallmark of the trusted servant, and stood behind my counter in my own right.

During the rush, I have been making about sixty sales a day, and that means a certain amount of hustling. Most of my customers have been women, and I am now learning more of the essential differences between the sexes. It is not so much that women are more fussy than men, than that they are just unable to make up their minds; very often, a little push in the right direction is all that is necessary to make a sale—or to lose one.

Here I stay until Christmas Eve. Time is getting on. It will soon be time for tea. Excuse me a moment. . . .

"Are you being served, madam?"

"I want a tie . . . ."

CELLS OF HARLECH

(*To that tune*)

By M. A. Smith

Fellow white cells on to battle, toxins on the surface rattle, telling us it's time to tackle
germs of evil eye.
Skim along peripheral serum, barging through until you're near 'em, fibrinate and do not
fear 'em, shake your pseudopods.
Enzymes call to action, pseudopod retraction,
Spread confusion by diffusion, change the pH fraction.
Forward now o'er fibrin lattice, driven on by courage, that is
Just the same as chemotaxis to us leucocytes.

See the germs, they're streptococci, all in chains yet round and stocky, little chaps yet
very cocky, don't know their own place.
For their enzymes lyse our fibrin, lyse our red cells, leucocidin is the lethal foe we've
tried in vain to neutralise.
Opsonins we need you! Monocytes we lead you!
Do or die we always cry as, made effete, we feed you;
Phagocyte them, plasma bite them, surface tension you invite them,
To their doom we shall indite them:—Cocci, clump in fear!

When we've done the macrophages come along by several stages, eat up all the cells and
debris with voracious maw.
Then Repair in all its glory presently unfolds its story, making new the tissues gory, once
a field of death.
Differentiation leads to maturation,
Every cell knows very well its true and proper station;
All combine in order blending, do their tasks with verve unending,
Strikes and stops are never pending—communistic state!

CORRESPONDENCE

THOUGHTS ON THE PRESENT DISCONTENTS

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

Dear Sir,

"Houses are very scarce, and the landlords are all gone mad, they ask such prices ——."* This apt comment upon the recent state of affairs was written by Charles Darwin in 1838 when, after his return from the voyage of the "Beagle," he was seeking a house in London, and his memorandum "Albany Street—No. 161, £100 premium" has a familiar sound today. Eventually he chose 12 Upper Gower Street, which was destroyed by a bomb in 1941.

But in some other respects the world has changed. The many students of Bart.'s who live in digs may be interested to know that a few years after Darwin was settled in Gower Street Charlotte Brontë told in her first novel, "The Professor," the story of a young Etonian who conducted the correspondence in French and German of a textile firm; his sole income was his salary of £90 a year (!), and on one occasion he rang the bell (!!) in his digs and was served with a meal of cold meat (!!!).

E. L. KENNAWAY.

December 7, 1949.

* "Charles Darwin and the Voyage of the Beagle." Edited by Nora Barlow. Pilot Press, London. 1945.

THE CAMBRIDGE GRADUATES CLUB OF ST. BARTHOLOMEW'S HOSPITAL

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

Dear Sir,

We would be grateful if you would allow us the hospitality of the Journal to say that the Cambridge Graduates' Club of St. Bartholomew's Hospital, which, with the exception of wartime gaps, has met annually since 1877, will hold a dinner on Friday, February 24, 1950, at Frascati's Restaurant, Oxford Street.

All Bart.'s men who are Cambridge Graduates, including graduates not yet medically qualified, are automatically members of the Club, and we should be grateful to hear from any who do not receive notices.

For the benefit of those who have recently joined the Hospital, and whom we would particularly like to see at our gatherings, we should mention that the Bart.'s Club is distinct from the Cambridge Graduates' *Medical* Club.

Yours faithfully,
H. J. BURROWS,
R. A. SHOOTER.
Hon. Secretaries.

December 5, 1949.

CORRECTION: P.U.O.

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

Dear Sir.

Might I be permitted to crave for the super luxury of placing on record how we in Ceylon, His Majesty's New Young Dominion (note the first three letters, N.Y.D.) have overcome the official mind of Hjs Armed Forces and more nappily Nature's classical attitude towards a vacuum?

We have been labelling our Tropical Fevers of obscure origin, of which there are still quite a number, as N.Y.D., "Not Yet Diagnosed."

I have no doubt that Osler, whose dictum in a nutshell, "Treat Typhoid Fevers with plenty of water outside and plenty of water inside," still holds sway in the Tropics, and also Sir Archibald Garrod, whose House Physician I had the honour to be at St. Bart.'s during World War 1, would both have hailed with approbation these new initials from Ceylon as an alternative for their "Pyrexias of undetermined origin."

We have also been constrained in rare cases to use three other letters when N.Y.D. patients reach the autopsy chamber and the Pathologist after repeated post mortem bacteriological, biochemical and microscopic examination is still unable to diagnose the disease. The cause of death is then entered as G.O.K.

I remain, Sir,
Yours faithfully,
GUNARATNAM COOKE, M.D.,
Acting Senior Physician.

General Hospital,
Colombo, Ceylon.
December 13, 1949.

THE FIRST ACCOUNT OF CALCIFIED PERICARDIUM?

Dr. George Graham has pointed out the following passage in the *Memoirs of the Duke of Sully*, 1597, p.35, D.2. The earliest account of calcification of the pericardium was thought to be by Morgagni (1681-1771).

Gaspard Shomberg, Count de Nanteuil. This disorder was a difficulty of breathing, which, on opening his body after death, was found to proceed from an ossification of the left side of the pericardium and some of the neighbouring parts. He was employed in drawing up the Edict of Nantes, as will be observed hereafter: and he did many other services to the State. M. de Thou highly commends his character and abilities, both as a warrior and as a statesman.

The book from which this translation is taken is: *Memoirs of the Duke of Sully . . . A New Edition . . . with . . . An Historical Introduction attributed to Sir Walter Scott, in four volumes. Vol II. London: Henry G. Bohn, York Street, Covent Garden, MDCCCLVI.*

SPORT

RUGBY CLUB

Dec. 3rd. v. Old Alleynians. Away. Lost 0—3.
Dec. 7th. v. Fighter Command. Home. Won 9—0.
Dec. 10th v. Rugby. Home. Lost 3—18.
Dec. 17th v. Old Millhillians. Home. Won 11—6.
Dec. 31st v. Middlesex Hospital. Away. Lost 3—8.

The game with the Old Alleynians was played during a full gale which blew straight up and down the pitch. This was an excellent game with honours going to Picthall and Jones, for grim determined tackling and neatly placed cross kicks. In the forwards, Moyes was outstanding for his hooking which completely subdued his opponent, the Surrey County hooker. Bart.'s were penalised in the second half and O.A.s scored with a penalty goal; this was the only score of the game and it was generally agreed that a draw would have been a good result.

Fighter Command provided noble opposition and a fast game resulted. Bart.'s triumphed because of good all-round play and determined running by the backs.

In the game against Rugby, Bart.'s were playing below form; we were very unlucky to lose Picthall with a torn rectus muscle after only 10 minutes play; he stayed on, however, but was obviously in pain.

The forwards were good in parts but we did not fall on the ball at all or tackle sufficiently well. A disappointing game.

After being down six points at half time against the Old Millhillians, Bart.'s got together as a good attacking force and won a hard-fought game.

Bart.'s gave the Middlesex Hospital a trying time on Old Year's Day. We were definitely unlucky to lose this match. All our backs played storming football with Mike Davies outstanding: his try in the first half was delightful, he kicked ahead and raced the full back for a distance of 40 yards or more to beat him to the touch down. In the second half Bart.'s were within 30 yards of the Middlesex line for most of the time and did everything but score. An excellent game.

Half Season Summary

	Games	Won	Drawn	Lost	Points For	Points Against
1st XV	18	5	2	11	105	154
A XV	14	10	0	4	268	60
XA XV	11	7	1	3	100	62
B XV	8	4	0	4	66	100

Members of the Club commenced to enjoy the "Great Game" once more with the start of the new season on September 10. Grounds were very hard and we suffered a heavy crop of injuries; the turnouts for practices, however, were excellent, and they certainly formed the basis for fit men and stamina during games.

The 1st XV now consists of players who play as a team and not as a bunch of individuals as was the case at the beginning of the season. They have played very well, always to the best of their ability and with much determination; a little luck here and there would have altered radically the number of matches won, since often only two or three points were in it.

Mike Gompertz has led the A XV to incredible feats, their best effort being 52—0 against the R.V.C. 268 points scored over only half way through the season is indicative of a very good reserve of players for the Hospital to call upon.

At one time it looked as if the XA XV were to be unbeaten; holidays and injuries decided otherwise, however. B. W. Foy has captained the side throughout and has cultivated a team spirit which has brought about these good results.

The B XV has taught a good number of non-players the rudiments of Rugger. Good material has been found for future years, and consequently this side has never been the same two weeks running. Alan Fuller has welded his team together and reports that all players have enjoyed themselves, which is the thing that really matters.

We are pleased to record that M. J. A. Davies and K. A. Clare played for United Hospitals on Boxing Day against Stratford.

We now look forward to the remainder of the season, and are eager to do battle in the annual affair of the Cup!

BOOK REVIEWS

HOW YOUR BODY WORKS, by Geoffrey H. Bourne. Sigma, 1949, pp. xvi + 228. Price 12s. 6d.

The Reader in Histology at the London Hospital Medical College here presents to the layman an entertaining description of human physiology. The book should also form a useful introduction for all intending entrants into medicine and allied fields, and it is adequately illustrated by plates and diagrams. Brief historical details, with names of the more prominent contributors to the development of physiology, are included. The name of the author ensures that the general public is not led astray by an amateur attempt at popularising a subject that should be of vital interest to everybody.

The index is arranged by an extremely corrupt version of the alphabet, and some of the entries are not only inept but inaccurate.

J. L. T.

SYNOPSIS OF MEDICINE, by Sir Henry Tidy. John Wright, Bristol, 1949. 9th Edition. pp. 1,264. Price 30s.

The principal criticism which has been levelled at this book is its lack of balance, in that the relative frequency and importance of a disease is not in proportion to the amount of space devoted to that disease. This is so, but is a cause for commendation rather than criticism for two reasons. Firstly, that the commoner diseases should be known adequately by the time a synopsis is needed; and secondly, that the more common diseases are better understood by readers than the less common, so that the author devotes space to explaining the latter. This is as it should be.

The scope of the book remains the same, but a thorough revision has been undertaken and much rewriting been entailed. All the established advances since the previous edition have been included and of particular note is the withdrawal of Hanot's Cirrhosis from the text, in accordance with current teaching.

An essential for the final year student, and a very useful book to others.

THE POCKET PRESCRIBER and Guide to Prescription Writing, by D. M. Macdonald, revised by A. G. Cruikshank. 14th Edition. Livingstone, 1949, pp. 275. Price 4s. 6d.

"The young practitioner's vade-mecum" would be a suitable sub-title for this invaluable booklet. It contains a very reasonable selection of remedies under the headings of the appropriate disorders, besides full posological tables for adults and children, diets, recent and proprietary drugs, poisons rules, hints on prescribing—and a few notes on medical etiquette, so rarely seen in print! The matter has been completely revised. Most of the prescriptions are written in English, and doses are given in both metric and Apothecaries notation.

A SHORT PRACTICE OF SURGERY, by Bailey and Love. H. K. Lewis, 1949, 8th Edition, V parts. Price 52s. 6d.

Opinions on this "classical" text-book are divided. Certain of the methods advocated therein—notably the Oschner-Sherren treatment of appendicitis and peritonitis; the reduction of intussusception by saline enemata, etc.—are not generally accepted in this country. On these grounds many surgeons condemn the book out of hand.

Students, however, for whom this book is intended, will continue to regard it as the best short standard text-book of surgery.

We regard the book with mixed approval. It is undoubtedly readable and in this present edition clarifying amendments have been made, but we add the caution that it is essential for any student using it to determine the "unacceptables." They are not numerous, but their source is easily recognised by examiners, who may fall into the category mentioned above.

The presentation in five parts is an innovation to be praised. The handy size and convenient arrangement are improvements on the unwieldy volume of the past, and we are assured that it means a more up-to-date edition. More pictures have been added and some of doubtful merit in previous editions have been improved or replaced.

In all, an improvement on what was already a good book.

GREEN'S MANUAL OF PATHOLOGY, Revised by H. W. Vines. Baillière, Tindall & Cox, 1949, 17th Edition, pp. viii+1,200, Figs. 730. Price 42s.

It is surprising that this book is not more generally popular among medical students. Perhaps its size—1,200 pages—is formidable. The section on general pathology occupies a third of the book, an amount of space warranted by this aspect. The chapters on inflammation and neoplasms are particularly clear and easy to follow. Of the special pathology sections perhaps the best is the treatment of the confusing subject of liver disease. Nephritis is still, however, classified under acute, subacute and chronic. Among the best features of this book are the illustrations; in their number and quality they are excellent.

AN INTRODUCTION TO CLINICAL SURGERY, by C. F. M. Saint. H. K. Lewis, 1949, 2nd Edition, pp. viii+384., Illus. 373. Price 45s.

This book, as the title states, is designed for the student entering upon surgery for the first time, and is excellent within its necessarily limited scope. It is an exhaustive aid to note-taking, and is invaluable in answering the eternal query, "And what shall I ask him now?" The chapters, each system being considered in turn, are arranged in similar pattern, enabling order to be maintained among a student's usual chaos of facts. It is profusely illustrated, some of the photographs being truly horrific, as only African pathology can be. The price, however, is prohibitive.

PENICILLIN, its practical application, Edited by Prof. Sir Alexander Fleming. 2nd Edition. Butterworth, 1949, pp. xiii+491. 63 illus. Price 30s.

The first edition of this book was published in 1946. Since then penicillin has become freely available and the more general experience gained from its use has led in this second edition to revision and a larger book. As before, it is produced under the general editorship of Professor Sir Alexander Fleming and it consists of a series of articles by various authorities covering every aspect of the practical application of penicillin. In it will be found, for instance, an historical review of the development of the drug, articles on its production, properties, laboratory control and administration and chapters describing the use of penicillin in a wide range of human and animal infections. A new chapter has been added on streptomycin and in an appendix chloromycetin and aureomycin are briefly mentioned.

While having the advantage of combining the views of many experts in one book, the assistance of so many collaborators is not without its drawbacks and, as the Editor stated in the first edition, is liable to lead to overlapping and differences of opinion. The second edition is no exception and there is a certain amount of unevenness between the various articles and, in a few places, factual errors.

For all that, this edition is likely to satisfy the needs of most readers, whether they wish to know more about the properties of penicillin or how to use it. What they fail to find in the text, they should be able to obtain through the lists of references, which, in most of the articles, are extensive.

TEXT-BOOK OF BACTERIOLOGY, by R. W. Fairbrother. Heinemann, 1949, 6th Edition. pp. 484. Price 20s.

This well-known book which has passed through six editions in twelve years, a fact which speaks for its popularity, has again been revised. The advances in this subject, other than antibiotics have been few, but those that exist have been included. The section on antibiotics has been extended to mention the newer discoveries and streptomycin is discussed in detail.

As an outline of medical bacteriology the book remains unsurpassed and its continued popularity is assured.

EXAMINATION RESULTS

UNIVERSITY OF OXFORD

Examination in Pharmacology for Medical and Surgical Degrees

Keil, A. McL. Wynne-Jones, A. P. J.

Final M.B. Examination

Part I Surgery, Midwifery & Gynæcology

Hodson, J. M. Mason-Walshaw, K. R. Muir, B. J. Turner, J. C.
Lester, J. P.

Part II Principles & Practice of Physic, Pathology & Pharmacology

Cathcart, D. B. Garrod, D. C. H. Roffey, P. J. Turner, J. C.
Cooper, M. B. S. Lester, J. P. Tomlinson, J. D. W.

UNIVERSITY OF CAMBRIDGE

2nd B.M. Examinations **Michaelmas Term, 1949**

Medicine, Surgery & Midwifery

Ainley-Walker, J. C. S. James, H. V. Tallack, F. V. von Bergen, S.
Bambridge, H. E. Munro-Faure, A. D. von Bergen, J. E. Wheelwright, J.

October, 1949

UNIVERSITY OF LONDON

Examination for the Postgraduate Diploma in Psychological Medicine

Brenman, E.

Part A only

Warren, H. de B.

D.Sc. for Internal Students

Franklin, K. J.

December, 1949

Examination for the Academic Postgraduate Diploma in Medical Radiology

Frazer, A. L.

CONJOINT BOARD

Pre-Medical Examination

Chemistry **December, 1949**

Humphris, P. N. A. Menage, J. A.

Physics

Greenwood, R. A.

Biology

First Examination

Anatomy **November, 1949**

Mellows, J. W.

Physiology

Mellows, J. W. Zilliacus, J. O.

Pharmacology

Albright, S. W.	Dick, D. G.	Matthews, P. D.	Taylor, W. N. A.
Apthorp, G. H.	Drysdale-Anderson, R. J.	O'Sullivan, D.	Thomas, G. E. M.
Barnes, J.		Picthall, G.	Thomas, H. A. J.
Bowers, K. E. J.	Fallows, L. G.	Power, G. H. D'A.	Trevan, A. C.
Carroll, D. S.	Haigh, P. G.	Reading, J. H.	Whittard, B. R.
Charles, H. P.	Holbrook, B. W.	Rosser, E. M.	Wilkinson, B. R.
Connell, P. H.	Ibbotson, R. N.	Ryan, J. F.	Williams, D. K.
Cox, W. H. A. C.	John, A. H.	Smith, D. P. Q.	Willis, P. F.
Dadswell, J. V.	Jones, K.	Tabor, A. M.	Wright, A. N. H.
Dean, D. W. J.	McKinna, C.		

SOCIETY OF APOTHECARIES

Final Examination

Pathology	Medicine	Midwifery
Bexon, W. H.	Griffiths, A. W.	Hewson, J. P.

HOUSE APPOINTMENTS

January 1 to March 31, 1950
At St. Bartholomew's Hospital

Dr. Bourne	M. Wilkinson	P. H. Bass
Dr. Cullinan	R. Buri	J. D. W. Tomlinson
Dr. Scowen	I. R. McWhinney	A. D. Munro-Faure
Prof. Christie	G. A. Court	Miss J. Wheelwright
Mr. Hume	W. L. Timmins	D. C. H. Garrod
Mr. Corbett	E. A. Cooper	J. S. Cox
Mr. Hosford	O. O. F. Ffooks	J. E. von Bergen
Prof. Sir James Paterson Ross	A. Bates	H. V. James
Casualty H.P.	J. R. Harris	
Children's Dept.	B. B. Reiss (B.2)	J. C. Turner
E.N.T. Dept.	B. J. Batt (B.2)	
Skin & Gynæ Dept.	G. A. Coombs (B.2)	
Eye Dept.	I. Monckton (B.2)	
Intern.	J. W. S. Harris (B.2)	
Anæsthetists	J. Q. Matthias (B.1)	W. G. Dawson (B.2) (B.1) (temporary)
Dental Dept.	D. Weinstock	
Orthopædic Dept. (Accident Service)	M. J. Kehoe	

At Hill End Hospital

		J. C. S. Ainley-Walker
Dr. Spence	J. W. Latham	M. B. S. Cooper
Mr. Naunton Morgan	M. E. Johnstone (B.2)	
E.N.T. Dept.	P. H. R. Hawkes	H. S. Brown
Orthopædic Dept.	H. W. Stanley (B.2)	
Thoracic Dept.	F. M. Shattock (B.2)	
Neuro-Surg. Dept.	R. A. Struthers (B.2)	
Intern.	I. Jackson (B.1)	W. J. Wright (B.2)
Anæsthetists		K. Orr-Hughes (B.2)

Alexandra Hospital

R.M.O.	M. Reckless

ST. BARTHOLOMEW'S HOSPITAL JOURNAL

Vol. LIV MARCH, 1950 No. 3

JUNGLE MEDICINE?

THE days of shooting leopard from one's front verandah between ward rounds are past. But for all that, Medicine in the Colonies has lost none of its interest and fascination. The established misconception that the black sheep of the medical family is handed a rifle, stethoscope and single fare to Kenya has been replaced by dreams of heroic exploits in epidemics of plague, malaria and the like among growers of the elusive groundnut. It is perhaps necessary to point out that neither of these ideas bears any resemblance to the truth.

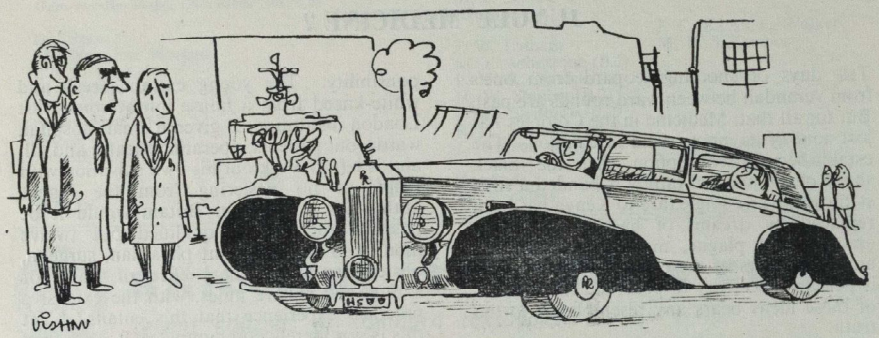
It is also commonly believed that Medicine overseas is a kaleidoscope of trypanosomiasis, bilharzia and elephantiasis, names conjuring visions of jungle, giraffe and juju. But it would be difficult to distinguish a diagnosis board in an African ward from its St. Bartholomew's counterpart except perhaps that Christopher Columbus, George Washington and Winston Churchill require treatment more often than would appear strictly necessary. Heart failure and pneumonia, nephritis and appendicitis are as common in Broken Hill as at Bethnal Green, but additional interest is continually stimulated by the more unusual tropical diseases. Physical signs however may sometimes differ—the identification of "rose spots" on a coal-black abdomen has its diagnostic difficulties.

The great advantage of practice in the Colonies, particularly in the Colonial Medical Service — a Government - controlled National Health Service that actually runs smoothly—is the early assumption of responsibility. The young entrant, fresh and white-kneed from a house job at some vast London institution, is given a small hospital, wards, out patients, operating theatre and all, and is left to work out his own salvation with help but no pestering from the higher authorities. Where in Britain would it be possible for a man qualified but twelve months to be consultant physician, surgeon, obstetrician and medical officer of health for a thousand square miles, with the extensive practical experience that this entails? Yet this is not merely commonplace, it is routine. Thymectomies and portal shunts become, not surgical curiosities, but practical necessities: to watch, at the age of twenty-five, one's toxic goitres' pulse rates drop to normal, gastrectomies eating, arthroplasties walking, must be one of life's greatest thrills.

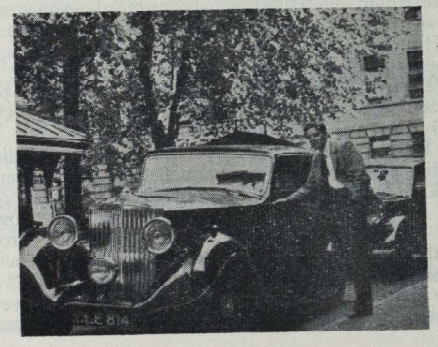
In one respect practice overseas differs markedly from the London hospital. The accustomed background of the massive phalanx of diagnostic machinery is lacking—hand and stethoscope do the work of E.C.G. and I.V.P. Except in the larger towns, elaborate diagnostic procedure is out of the question, and P.U.O.s have a habit of remaining U.

The Colonial Medical Service is not an intellectual backwater. Every facility is offered for the taking of higher examinations, with full pay and allowances whilst on study leave in England. Promotion is regular, pay adequate and an increase recently recommended, retirement pension available—a doubtful boon however in this age of devaluation.

The picture then is not entirely one of wandering nonchalantly through the jungle idly swinging a stethoscope, tapping a scrotum here, a chest there, the while wreathed in garlands by the grateful natives. It is a life of hard work—with this difference; that from the outset the results of one's labours, good or bad, are one's own. There is no "Chief" to take the credit or the blame.



"I don't care if he has won the pools. I can't have my House-surgeon turning up to Hospital like this."



YOUR PATIENT AND YOU

By Professor Sir James Paterson Ross.
K.C.V.O.

An Address to the Abernethian Society

If the terms of his appointment were to be interpreted literally, the duties of a whole-time Clinical Professor would be limited to his work within his own Hospital and Medical School and to the performance of certain functions in connection with the University. In fact he is called upon to take part in a large number of extra-mural activities, and as I often feel embarrassed when I have to sacrifice some of the time which should be devoted to teaching in order to satisfy these other demands, I feel that I would like to try to make amends by passing on to you some of the ideas which have come to me in the course of these experiences outside the Hospital.

I have chosen to talk to you especially about the necessity in medical practice for understanding the individual because this subject has cropped up so frequently in so many different places and circumstances. One of my duties, for which I am ill-fitted, is to represent the Royal College of Surgeons on the Council of the National Association for Mental Health. This body devoted a two-day conference in the Spring of this year entirely to our subject, and a little later on I shall refer especially to the contribution made at that conference by Professor J. C. Spence on "The Need for Understanding the Individual as part of the Training and Function of Doctors and Nurses."

In the early summer I was a guest of the Nuffield Foundation at a conference on "Social Medicine in the Training of Medical Students." Our friends on the Foundation seemed particularly gratified to feel that at last they were doing something to interest even surgeons in social problems—but listen to this:—

> "As no two persons are exactly alike in health so neither are any two in disease; and no diagnosis is complete or exact which does not include an estimate of the personal character, or the constitution of the patient.
>
> "There used to be a French saying that 'French physicians treat the disease. English the patient.' So far as this is true it is to the honour of the English, for to treat a sick man rightly requires the diagnosis not only of the disease but of all the manner and degrees in which its supposed essential characters are modified by his personal qualities, by the mingled inheritances that converge in him, by the changes wrought in him by the conditions of his past life, and by many things besides."

That quotation is not from a contribution to our conference in 1949, but comes from Sir James Paget's address to this Society in 1885!

Another external contact, which I inherited along with many other interests from my predecessor, Professor Gask, was the privilege of serving as a Consultant to Papworth Village Settlement which, as many of you must know, was one of the first great practical experiments in Social Medicine. Papworth should always be of special interest to us because Varrier-Jones, its founder, was a Bart.'s man—one whose enthusiasm in the cause of sufferers from tuberculosis had a profound and abiding influence upon all who came to know him well.

But the consideration of the human as distinct from the scientific aspects of Medicine is continually in our thoughts—at the celebration in July of the centenary of the birth of William Osler who in spite of his many claims to fame is remembered chiefly as a great humanist: in our constant watchfulness to try to ensure that in spite of the changes brought about by the National Health Service the right personal relationship between patient and doctor may be preserved: in our endeavours to select the best candidates for admission to our Medical College: and while we watch rather anxiously the swelling of the ranks of lay assistants in our Hospitals, as the old but hallowed methods of ministering to the sick poor are replaced by the business-like organisation of modern hospital administration. It is my thesis that while change is inevitable we have no reason to suppose that it must be a change for the worse, and that it is up to us to ensure that by preserving all that was good in the past we may succeed in making it a change for the better.

Understanding the Individual

Understanding the individual is insepar-

able from clinical responsibility on the one hand and the patient's confidence in his doctor on the other. I could have chosen any of these for the title of my address but preferred "Your Patient and You," not in the sense that I anticipate for any of you so small a clientèle as the title may suggest, but because it emphasises a mental attitude which every patient expects in a good doctor —that he should behave to each patient as though he were the only one, or at least the most important person in the world at that particular moment. It is the attitude that Lord Moynihan stressed by referring to the patient as "the most important person in the theatre"—a habit of thought which comes naturally to some, can be cultivated by most, but to a few, however learned, it seems to be a matter of no interest, something not worth worrying about. Of this last group Osler writes: "A bookish man may never succeed; deep versed in books, he may not be able to use his knowledge to practical effect; or, more likely, his failure is not because he has studied books much, but because he has not studied men more": and Professor Spence says: "They are more interested in things than in people, and they will find their place by working in laboratories or as technical therapists."

It is not my intention to try to teach you how to understand the individual patient. I am doubtful how much can be taught about such a subject by talking about it it's rather like religion in that it is caught rather than taught, caught from those who practice it, by association with them in their own contacts with patients; yet it is not always as easy as it sounds for the student to be able to enter upon this kind of discipleship in the course of the routine medical course. Every clerk and dresser on a ward round must realise that he and the houseman have far better opportunities than his chief of finding out about the patient's private affairs. Furthermore, it must be realised that visiting the patient at home offers the best opportunity of all for understanding his background, and that this special contact has never been experienced by, and in future will be denied to many "whole-time" University teachers—surely an important argument for perpetuating and appreciating the value of the contribution made to medical education by part-time clinical teachers.

In the out-patient department as we know it the size of the classes makes the approach to the problems of the individual patient almost impossible, and we are bound to give consideration to the suggestion made and carried into effect by Professor Spence that the out-patient session should be used to instruct very small groups of students, two or three, or even single students, in the technique of a private consultation. This is so important that I wish to consider the subject in detail, but the mere thought of the reorganisation of out-patient teaching to make it possible must be enough to break the heart of any Dean!

The Art of Consultation

In order fully to comprehend Professor Spence's views on the teaching of undergraduates we must begin with the idea that there are various instruments of teaching designed to fulfil certain functions—the didactic lecture to emphasise important principles in the study and treatment of disease; the clinical lecture to dramatise an episode; ward teaching for the study of phenomena; tutorial classes to review book work; and out-patient department teaching on the art of consultation.

"The essential unit of medical practice is the occasion when, in the intimacy of the consulting room or sick room, a person who is ill, or believes himself to be ill, seeks the advice of a doctor whom he trusts." It is because it falls so far short of this ideal professional relationship that many medical men find the issuing of certificates for corsets to well people an intolerable burden.

A medical man has special opportunities for assessing an individual because he sees him under the revealing circumstances of adversity. He needs clear vision, undimmed by pride or prejudice, and helped by sympathy, charity and magnanimity. The best observers of individuals and the shrewdest judges of men begin to acquire their critical faculties in childhood, among other children, especially under the guidance of wise parents, and it is for this reason that when we are selecting students for entry to the Medical College we try to find out what we can about their homes and "background."

In considering the art of consultation we may divide it into the greeting, the questioning, the examination, the diagnosis, and finally we come to the real purpose of the consultation, the explanation and advice. The first few moments of a consultation may be of the greatest importance in establishing

confidence, particularly if the patient can feel that his doctor and he have some experiences or circumstances or knowledge in common—ask about where he lives (you may know the district or you may find you have mutual acquaintances) and about his work, and get him to tell you some of the technical details, which may perhaps be of interest and importance to you, but will certainly have the effect of taking some of his attention off himself and his troubles. It is a great advantage to know something of the public services; to know, for example, that sailors don't have ranks but ratings, that there are subtle distinctions between the City and the Metropolitan Police, and that if you call a Guardsman a Private it will take you a little while to regain his respect, let alone his confidence. Children prefer a smile and a few words from the end of the bed to a sudden direct attack—bribery with pennies is a pleasant form of self-gratification rather than a help in establishing good relationships.

If you have met the patient before it is important to remember his, or especially her name, and something about her, apart altogether from her complaint. I met recently an old Bart.'s man, now a distinguished pathologist on the staff of the Medical Research Council, who told me that he regarded General Practice as the ideal form of medical service but that after he had been in practice for a few years he had been forced to give it up because he couldn't remember his patients' names. Many of us are bothered over names and have to make use of various dodges to meet the difficulty. Sir Robert Jones, who lives in memory not only because of his renown as an orthopædic specialist but because he was a very lovable man, had a series of consulting rooms in his house in Liverpool and every door had a little bracket on it into which his secretary slipped a paper before he arrived. These were not clinical records but personal memoranda, to enable him as he flitted from room to room to refresh his memory by a glance at the paper, and then to be able to add to his greeting enquiries about relations and friends. It was very flattering to think that so busy a man could remember all the little details about one of his innumerable patients—it may be a mild form of deception which is spoken of rather scornfully as a good bedside manner, or even as eye-wash, but is fully justified because it helps to gain the patient's confidence.

Any of you who clerked for Dr. Geoffrey Evans will know what I mean when I repeat his warning not to ask questions which engender self-pity or fear. After the preliminary conversation, "Well, now, tell me all about it" may be better than "What are you complaining of?" or "When were you last quite well?" And as you listen to the patient's answers to your questions, resist the popular fallacy that if the patient's demeanour is odd there must be a big element of psychological disorder underlying the whole thing and making her ill. Very often it is because a person is ill that emotional reactions are disturbed, and this you can prove by meeting the same individual again after the physical ailment has been cured and noting the return to normal behaviour. The inexperienced are often over-impressed by the influence of psychological factors: let them make quite certain about the organic elements in the disorder before assessing the importance of "a functional over-lay."

In clinical examination it is impossible to over-emphasise the importance of precision, since it is the only sure foundation for decision in giving advice. The conviction which comes from an efficient examination gains the patient's confidence more surely than anything else. It is for this reason that we lay so much stress in clinical teaching upon orderly systems of examination, repeated over and over again until after long practice all the senses are trained to make observations which are accurate and complete.

In diagnosis the first step must be the diagnosis of the disease, which can be made without taking any account of the patient's personality. This is simply a matter of naming the pathological process which can be inferred from the clinical examination, and some years ago Mr. Bernard Shaw gave a very amusing address to this Society on the risk that the orthodox medical profession was running by regarding patients as specimens of disease and not as diseased human beings. Unfortunately his address was entitled "The Advantages of Being Unregistered," and its early part was such a riot of fun that few of his hearers were able or willing to listen to the serious note on which he ended. We must all agree with Mr. Shaw's thesis that understanding the individual is a necessary adjunct to understanding the disease if the patient is to be properly treated; but the man who merely

understands the individual and particularly his weaknesses, without an understanding of disease, is well qualified to become the most outrageous charlatan.

The complete diagnosis, however, consists of three parts. First you must diagnose the disease; next you must diagnose what it means to the patient—what his conception or his fears of the disease may be; and finally you must diagnose the patient's capacity to understand your explanation of his condition and to follow your advice.

Telling the Patient

What is the patient to be told? In days gone by it was not uncommon for a patient to return home after a major operation without any idea of what had been done. This was due partly to ignorance on the part of the patients, and partly to the notion that it was as well for them not to know. Nowadays the popular Press, the broadcast and other educational influences are rapidly changing the patient's outlook and opinion on this matter, and particular attention is paid by our medical and nursing staff to seeing that the patient or the relatives are kept informed if any special danger is anticipated, and about the nature of the illness. It seems to me that if this is well done, so that those who ought to know feel they are taken fully into the doctor's confidence, only those who are mentally unstable will want to read their notes; yet we are going to a lot of trouble at the present time to prevent patients reading their notes. This must be the sole disadvantage of having notes typewritten—in days gone by there was very little chance of the patient being able to decipher the writing. The notes which ought to be concealed must form a small minority and, in my opinion, the system whereby a patient suffering from even the most benign disorder sees a sealed packet going from one department to another is sufficient to make him suspect that perhaps after all he is not being told the truth.

What *must* be kept secret is anything the patient confides to you or anything you find out about him in the course of your professional relationship with him. This is clearly laid down in the Hippocratic Oath to which we all subscribe:—

". . . And whatsoever I shall see or hear in the course of my profession, as well as outside my profession in my intercourse with men, if it be what should not be published abroad, I will never divulge, holding such things to be holy secrets."

In this respect also there may appear to the student to be some conflict between precept or practice, because the details about a patient's private affairs are freely discussed between him and his teachers and friends inside the Hospital. We must learn that this is a very different thing from recounting them to acquaintances outside the Hospital.

Furthermore, the demands of the public for clinical details of the illnessess of distinguished people in public life is as unreasonable as it is indecent. In my opinion, although a man may be commonly exposed to the glare of publicity, he has the same right as anyone else to privacy when he is ill.

Many patients like to be told the exact diagnosis because it flatters them to hear long names; but every one wants to know what his illness is going to mean to him in terms of his living as well as of his life. Of course he wants to know if he is going to get well, but to most people it is of the first importance for them to know whether they are going to be fit to return to their proper job or not. If an operation is contemplated he must be given a general idea of what it involves, how much pain and how much disability he is to expect afterwards and for how long. The anæsthetic is an anxiety to very many patients whose fears can often be allayed by a simple and frank discussion of the methods and the risks involved. Sometimes one has the feeling that there is still some cause for anxiety in the patient's mind after all the obvious things have been mentioned. Don't say "Really, you know, you have nothing to worry about," but "I feel you still have something on your mind—tell me what it is," and it often turns out to be some quite trivial or even imaginary fear which can be dispelled by frank and open discussion. Rarely it happens that in spite of all your candour and your most patient explanations you can tell that the patient still suspects that there is some dread secret which you are keeping from him—these are the poor souls who cannot trust you because they have never known what it is to have faith in anything or anybody.

What is the patient to be told if you believe his disease to be incurable? This is a question that cannot be answered by any sweeping generalisation, because every individual must be treated as a special problem. I would only warn you to be sure beyond peradventure before you tell a patient or his relatives that he is not going to recover—we must all have met the "octogeranium" whose mother was told by the specialist that he would never see his seventh or his fourteenth birthday! Circumstantial evidence is not always good enough to justify the diagnosis of malignant disease, and if you are suspicious enough to feel that the relatives ought to be warned, take care in such a case to indicate to them that there is a real hope of your being mistaken.

Another guiding principle is that the patient has a right to know what the outlook is provided he asks about it, but there is no reason to ram bad news down his throat. In my experience a large proportion of those afflicted by incurable malignant disease do not seem to want to be told about it, for they either know already or there is some merciful mechanism which dulls their comprehension and enables them to accept the inevitable without worrying about it. When a patient asks for the verdict it is not permissible to lie to him in order to keep him in ignorance, though it is possible, by taking care to choose the right expressions, to spare his feelings; and whether you tell him the whole truth or only part of it must depend upon your assessment of the individual and the effect it may have upon him. He may need to know in order to attend to his material affairs, and he may need to know for the good of his soul.

When we were working at St. Albans we made friends with some of the Cathedral clergy who were very interested in trying to establish closer collaboration between the priest and the doctor in the care of the sick. It must be recognised that many religious people regard sickness as sin—they consider that anyone who fails to live his life fully to the glory of God is guilty of sin, and because illness makes one fall short of this full life of service it is, therefore, sinful. Such thoughts can interfere seriously with a patient's peace of mind, and the comfort which a priest can afford may be of great benefit. It struck me in our discussions with our friends at St. Albans that some of them were more interested in helping a few patients to die properly than in encouraging the majority to live properly; for I am quite sure that the parishioner who is, for the time being, a patient can derive great benefit from the co-operation of his parson and his doctor, provided they have the inclination and the opportunity to work together.

Collaboration of Specialists

Illness can bring disaster into life which tries the courage and the spirit of the most faithful and stouthearted but a good doctor can minister not only to the physical and mental but also to the spiritual needs of his patient so as to help him through his fiery trial. The suggestion that in this task he may be assisted by an understanding priest opens up the whole question of the possibility of sharing the responsibility for the welfare of a patient, and I must say at once that while it is frequently necessary to call upon colleagues and other helpers for their expert advice or special assistance, the patient's own doctor must be his mainstay, and is in fact indispensable to co-ordinate the activities of the others.

In theory it should be possible for a patient to trust a Hospital, but in practice he sticks obstinately to his belief in one doctor rather than in the whole complicated organization which is provided to share the responsibility for his treatment. The development of the many social welfare services which have been added in recent years has tended to interfere to some extent with the old relationship which existed between a patient and a particular member of the staff, and the Ward Sister, as being the only people to whom he needed to apply for anything and everything he required. You must have heard many amusing but rather startling stories about the avarice of great consultants. There is the classical one about the surgeon who when asked how he came to have such an extraordinary fee replied that it was all the patient's relatives had in the house; and when pressed still further to explain the odd 3½d. said, "Oh, that came out of the child's money box." Quite recently I heard the other side of that story from one of that same man's old House Surgeons. Sometimes in the course of a ward round he would be touched by the sorry plight of some poor wretch who was being sent home to die, perhaps of cancer of the rectum, and as the firm moved on to the next ward he would tell the House Surgeon to take the men on for a few minutes while he slipped back to give Sister a fiver and tell her to try and get the woman something to make her more comfortable.

In those days the Ward Sister had to do the work which is now carried on much more extensively by the Almoners, and it would be impossible now for the Sisters to attend to all the details which are seen to

by the Dietitian, the Almoner, the Resettlement Officer, and the Psychiatric Social Worker. On the other hand it must be recognised that these special services can provide greater efficiency only if they are properly co-ordinated, and this function must still be undertaken by the Physician or Surgeon under whose care the patient was admitted to Hospital. There is a real risk of failure to achieve our main objective if too great a share of the responsibility is unloaded on to the shoulders of these able and willing and most valuable aides.

One Man's Responsibility

Thinking along the same line brings us to the "One - patient - one - doctor" principle which is the foundation of professional etiquette. With the growth of specialization there is a tendency for the patient to be referred rather light-heartedly from one department to another, without considering the importance of his remaining primarily under the care of one member of the Hospital Staff. It is of course essential that expert advice and skill should be sought whenever they are needed, but the responsibility for the final weighing up of the evidence and the decision about treatment should rest with one man. Furthermore I think it should be accepted as a rule that whenever a patient returns to the Hospital with the same complaint he should return to the care of the same member of the Staff, because he is bound to feel that the Firm that looked after him before must know more about him than strangers. In order to facilitate the working of that rule the patient is given a coloured card to get him back easily to the same Firm and I hope it may be a very long time before Firm colours are abandoned. Recently there has been a move to regard the coloured cards as being of minor importance, and even with the help of this system the number and variety of cards which some patients manage to collect in the course of a year or two is quite surprising, and deplorable.

The sense of personal responsibility for a patient's welfare and perhaps for his life may often give rise to anxiety—a clinincal concern which is quite distinct from administrative responsibility. This is illustrated by an incident in the wardroom of a great Naval Hospital where three Senior Officers were sitting behind newspapers after a forenoon of office work. In came a harassed young Surgeon Lieutenant with his thoughts so full of his latest clinical problem that he was thinking aloud—"What *can* one do for tuberculous meningitis?" The three newspapers came down as one, "Put him on the D.I. List!"—quite simple, no questions in the House, every reasonable precaution taken. For the anxious clinician it is often difficult to combat ineffective worry, but in my experience people worry because they are not sure of their observations, and the best remedy is to make the most precise examination that is within your power, then to decide exactly what is to be done, and finally to let the matter rest till the time of your next visit. It is, of course, harder to do this when you have had to decide to take no immediate action, for to follow the oldest inhabitant's advice to "Do good if you can, but do zummat" is an effective placebo, at least for the therapist.

In conclusion let us return to our title, "Your Patient and You." If you ever feel inclined to examine yourself to see whether you are treating your patient with proper consideration all you need to do is to imagine yourself in his place. This illness which to you is merely another "case" is to him an event of the first importance and may mean an upheaval if not a calamity in his career. His admission to Hospital is an experience which may have the most profound effect upon the relationships between himself and his fellow men, and the operation which to you is just No. x on the list is to him a milestone in his whole life. It doesn't really call for much exercise of imagination to stir our humanity and evoke our compassion. And if we do try to understand our patients as individuals what recompense are we to expect in return for our trouble? It may be that the answer to this question can be learnt only from experience, but in part it is to be found in the closing sentences of the Oration Lord Moynihan gave to the Medical Society of London in 1926.

"The surgeon may in some degree share his responsibilities with others, but the chief responsibility must always lie with him, and being his must be exercised not only during the operation but also before, perhaps long before, and also after, perhaps long after, the operation is performed. The operation itself is but one incident, no doubt the most dramatic, yet still only one in the long series of events which must stretch between illness and recovery. The patient, passing through the deep waters, may find them chill and bitter, but the thought of our labour in his service, when the toilsome days are ended, will lie as a glowing coal at his heart."

SOME RANDOM REMINISCENCES OF ANAESTHETIC PRACTICE IN AFRICA

By JOHN A. CARMAN, E.A. Medical Service.

TWENTY-FIVE years ago when there was already an efficient body of men of the Colonial Medical Service working in Kenya and a number of unofficial doctors were established in practice, the only anæsthetics in use were chloroform and ethyl chloride. It is true that a few bold spirits sometimes diluted their chloroform with more or less ether, but it was in fact upon the chloroform that they relied. It was universally held that ether could not be used at the altitude (5,600 feet) of Nairobi, just as a host of other unconnected phenomena, from free capillary oozing at operation, to inability to concentrate upon one's work after a late night, were attributed to the same cause. The tropical temperature was also blamed for the inefficiency of the drug, though shade temperatures in Nairobi seldom, if ever, reach 90°F.

It is very difficult to believe, but this condition of things went on for another 10 years. There was still no one either in the Service or outside it who gave more than superficial thought to the subject of anæsthetics and it is literally true that if a small abscess had to be opened, or a kidney required to be removed, the anæsthetic was the same, open chloroform on a lint mask. The only exception to this rule was that in some cases spinals were given for abdominal work or lower limb amputations. At the hospitals in Nairobi which were as they still are, the largest in the Colony, if an operation was decided upon, it was usual to call for the most junior medical officer available to give the anæsthetic and, of course, he never saw the patient either before or after and it would have been as much as his job was worth to suggest giving any form of anæsthesia other than that decided upon by the surgeon.

On one occasion in 1928 the writer was called upon in this way to give an anæsthetic to an obese patient for a nephrectomy. The surgeon, who never had an assistant, was methodical and slow; he was also very fussy about asepsis. His prospective anæsthetist had a biggish spot on the back of his neck with a yellow head to it and he asked the theatre sister to dab it with iodine so as to forestall critical comment by the surgeon. In mistake, the sister gave the spot a good hard rub with iodised phenol. I leave you to imagine the severe discomfort that had to be endured through three long hours while the surgeon removed that kidney. Both hands completely occupied the whole time holding up the chin of a fat woman on her side in the kidney position, with a sensation like a red-hot poker being pushed into the back of his neck. The resultant ulcer took a month to heal. But there was the other side as well. Sudden illness in his family caused the young M.O. some considerable financial embarrassment. The surgeon saw that something was on his mind and got the truth out of him. He offered a loan which was declined with grateful thanks but he was not to be beaten in his kind endeavour. He collected some seven or eight children, all of whom required tonsillectomy, arranged their operations on a single morning and called upon the writer to give the anæsthetics. He then wrote a cheque for all their fees in advance and handed it to him without comment. Such were the vicissitudes of Colonial life in the twenties when everyone knew everyone else and his joys and his troubles too. Alas! Nairobi has grown beyond all recognition. A Royal Duke is to raise her to City status next March and the old days of universal cameraderie are gone never to return.

In 1933 the question of anæsthesia became acute, at least so far as the Native Hospital was concerned. There was no one available to do this work who was even superficially competent. On his return from leave in England in November the writer went, as was the custom, to present his compliments to the Director of Medical Services and receive orders. He was greeted cordially and then almost in the same breath came the query, "Can you give anæsthetics?" to which the reply was given, "I could in years gone by but I have had no recent experience." Then came the order to report to the next senior pundit who asked the same question, still without any explanation and passed the wondering junior on to the Senior Medical Officer in charge of the Native Hospital. As was to be expected he also asked about anæsthetics but he too was the sort of person of whom one did not ask questions and eventually one arrived at the level of the surgeon. This was Mr. C. V. Braimbridge and he explained that for months the government had been paying

a local doctor to give all the anæsthetics and this accounted, as they say, for the milk in the coconut. So began a long and pleasant professional association, which has continued to the present day, for soon afterwards there was a change in Directorship and the importance of continuity in key positions was recognised. As a result of this new policy the confidence of Africans in European medicine was greatly enhanced and their fear of hospital and surgery evaporated in a surprising way. It was not very long before the number of patients in hospital exceeded the number of beds and the theatre was working to capacity to get through the cases which required operation. It may well be imagined that in such a field it was not very difficult to gain wide experience. The European community was, at this time, undergoing a phase of rapid expansion and was beginning to include increasing numbers of people who could not afford to go to Europe if they needed a major operation. Two private practitioners had by now imported anæsthetic machines but the view of the "high-ups" in the Medical Department was that what had sufficed for them in their young days was good enough for their junior colleagues. Chloroform was still the universal stand-by though it was now more commonly diluted with ether, a practice which although it gave the anæsthetist a feeling of security, was in fact so dangerous that it should have had the reverse effect. At high altitudes and raised temperatures, ether evaporates so rapidly from a mask, that before long the gauze becomes saturated with what is virtually pure chloroform, however little of that drug is contained in the original mixture. Pure chloroform, if it is carefully given, has its dangers, but if it is given under the mistaken notion that it is two thirds ether, then indeed those same dangers become acute.

It was at this stage that the writer was asked, or rather ordered, to take up the study of anæsthetics as a specialty and in spite of all protests on his part he had to do as he was told. There was no apparatus except a Shipway and an antiquated Clover with a perished bag and, of course, endotracheal tubes were quite unknown. Anæsthetic deaths were all too frequent and the impact upon the nervous system of the surgeon, of the everlasting interruptions to operations while artificial respiration was instituted to restore the patient, added seriously to the strain of long days in theatre under primitive conditions.

The first stage in the game was to overcome the prejudice against ether, for it seemed to be certain that the two factors of altitude and temperature could act in only one way, namely by increasing the volatility of the drug, thus making it easier to obtain the necessary concentration under the mask. All that was required was to wrap the mask and the patient's face in a towel and watch carefully to prevent moisture freezing on the exposed area of gauze. This difficulty was soon overcome when the surgeon found that he got all he wanted in spite of the absence of his beloved chloroform and also without the need for frequent resuscitation. There remained the lack of apparatus and on this point Officialdom remained adamant. We did, however, persaude them to let us buy a laryngoscope and some Magill's catheters, so we made an apparatus out of a couple of bits of wood, some glass bottles, rubber and glass tubing. It was a formidable machine but it was practical since every sort of case was tackled with it, even lobectomy with positive pressure. It embodied a mercury manometer and a mercury safety blow-off and was used with compressed air. Two locomotive cylinders were begged from the Railway and joined by a wide-bore steel tube to make a container. Into this were welded a small brass tap for the outlet and a motor car tyre valve for inlet. It was pumped up with a large garage-type car pump and would last for several hours. One shudders to think when one reads of the dire results of CO_2 excess, what went on in the patients' systems and, of course, the resistance to respiration must have been considerable through narrow-bore rubber tubing However, endotracheal anæsthesia was an established possibility and before long a metal machine was designed and made under close supervision by an Indian engineer. We were very proud of this apparatus which, though it still had glass bottles and rubber tubing, was easily portable and it even had a CO_2 sparklet attachment fixed to one end of its hot water container. This had subsequently to be discarded. It was apt to blow out its rubber washer with a shattering bang and since it gave no warning before doing so, the surgeon said it was more than he could stand and the thing was an unnecessary refinement anyhow. After that the patients still got their CO_2 unbeknown to him through a "T" junction in the delivery tube and a sparklet resuscitator.

In 1936 the great day came when at last the authorities yielded to persuasion and consented to the purchase of modern orthodox apparatus and today in Nairobi and in several of the other larger centres up-to-date machines are in constant use. All the old theories have been exploded. Ether is used even on the Coast, nitrous oxide and cyclopropane are also in daily use and though it is admittedly more difficult to give smooth gas and oxygen at high altitudes, it can be done with suitable premedication and close attention at every stage of the administration.

Intravenous anæsthesia was introduced here almost as soon as it was in England and the recent relaxant drugs like d-tubo-curarine chloride, C 10 and flaxedil are all used to bring to patient and surgeon alike, the advantages which are enjoyed in more advanced centres of learning at Home.

One is often asked if the African is more difficult to handle under anæsthetics than is the European. The answer is two-fold. If he has confidence in the surgeon and the anæsthetist, he is far easier to deal with. Having no idea of what lies before him, being something of a fatalist and being possessed of a very limited imagination, he does exactly as he is told and goes to sleep, often without any conscious or unconscious struggling. If, however, he cannot be brought to a state of reliance upon his doctors, the position is very different and he becomes as difficult a problem to tackle as an intoxicated dock labourer from Limehouse. Not only is he resistant during induction but he continues to give cause for anxiety throughout maintenance, having exhausted his strength by violent struggling and, of course, by reason of his excessive fear, filled his blood-stream with large quantities of adrenaline. This may not add up to serious danger in the case of robust adult males but when the patient is a weedy, under-nourished woman, the position is very much more hazardous. African women still lag far behind the men in their contacts with civilization and in their knowledge of the benefits to be obtained from western medicine. They often strenuously resist the efforts of both doctors and nurses to persuade them of the necessity for even life-saving operations and not infrequently they only consent when ordered to do so by their more sophisticated male relatives. These are cases to beware for they are quite devoid of confidence and are literally petrified with fright. It may well be argued that basal narcosis would overcome this difficulty but in a noisy African ward full of screaming children and staffed by natives, most of whom are only partially trained, this refinement is quite out of the question. They just lie there shivering with fright until they are taken to the theatre. All too often in the past the result was a tragedy and it is now forbidden that any African woman shall be over-persuaded to undergo a major operation if she is set against it.

This, which in common with numbers of others, is a lesson learned in the light of bitter experience over many years and tens of thousands of cases, has its bearing upon the art of anæsthesia wherever it may be practised and I may perhaps be forgiven if in closing I make reference to it. Time spent in reassuring patients before they face what to us is commonplace but to them may well be the most terrifying experience to which they will ever be called upon to submit, is time well spent indeed. No amount of pre- or post-operative drugging can replace the calm that comes of confidence and a mind relieved of fear. Your women patients will not die of fright like their African sisters but they will certainly do better if they face their ordeal with calm spirits. An anæsthetist, be he never so skilled and knowledgeable in such matters as partial pressures of gases and the structural formulæ of the ultra-rapid-acting barbiturates, will fail to get the best results if he is not in addition something of a psychologist and one who will take the trouble to exert his personality for the benefit of his patients, before he connects their respiratory tracts up with the most complicated and expensive machine yet devised by the ingenuity of man.

11th DECENNIAL CLUB

The next Dinner of the 11th Decennial Club will be held at Frascati's Restaurant, on Friday, April 28. Will any who do not receive a card and wish to come communicate with F. C. W. Capps, 16, Park Square East, N.W.1.

GIFFARD'S MANOEUVRE ?

By C. P. WENDELL-SMITH

A RECENT article on William Giffard contained references to the Mauriceau-Smellie-Veit method of delivering the aftercoming head in breech presentations. It concluded that credit should be given to Giffard for describing it; this is acceptable, but the reasons given for reaching this conclusion are not.

As is so common in the history of medicine, the manœuvre, as we know it today, was not suddenly discovered but was evolved over a period of years by a process of trial and error, adaptation and modification. Let us consider its genealogy.

In 1668 Francois Mauriceau's book, *Des Maladies des Femmes Grosses*, was published. Hugh Chamberlen translated it into English and it is from his translation (6th edition) that the following passage is taken:

" . . . he must disengage it, by little and little, from the Bones of the Passage, with the Fingers of each Hand, sliding them on each side opposite the one to the other, sometimes above, sometimes under, until the Work be ended, endeavouring to dispatch it as soon as possible, lest the Child be suffocated."

Lib. II. Chap. XIV, p. 187.

It will be noted that there is no mention of jaw-flexion with shoulder-traction.

Between the writing of this book and 1675, Mauriceau must have experimented, for in his second edition, published that year, he advocates the introduction of a finger into the mouth to assist in delivery of the chin. This is only the first stage in the evolution of the method, for Mauriceau did not then advise shoulder-traction with the jaw-flexion. Neither this second edition nor subsequent editions were translated into English, all the editions of Chamberlen's translation being based on Mauriceau's first edition.

Further experimentation is indicated by this quotation from the third edition published in 1681:

" . . . il ne faut pas s'amuser à tirer seulement l'enfant par les épaules : car quelquefois on feroit plutost quitter & separer le col que de l'avoir ainsi, mais durant que quelqu'autre personne tirera mediocrement le corps de l'enfant, le tenant par les deux pieds, ou au dessus des genoux, le Chirurgien dégagera peu à peu la teste d'entre les os du passage: ce qu'il fera en glissant doucement un ou deux doigts de sa main gauche dans la bouche de l'enfant, pour en dégager premierement le menton, & de sa main droite il en embrassera le derriere du col de l'enfant, au dessus de ses épaules, pour le tirer ensuite, avec l'aide d'un des doigts de sa main gauche, mis dans la bouche de l'enfant comme je viens de dire, pour en dégager le menton."

Livre II, Chap. XIII, p. 275.

[He must not content himself solely with pulling the child by the shoulders : because sometimes one would rather abandon the attempt and decapitate than do this, but while *another person* is gently pulling the body of the child, holding it by the two feet or above the knees, the Surgeon will guide the head through the bones of the passage, which he will do by gently sliding one or two fingers of his left hand into the mouth of the child in order first to free the chin, and with his right hand he will grasp the back of the child's neck above the shoulders in order to pull afterwards, with the help of one of the fingers of his left hand, placed in the child's mouth, as I describe, in order to disengage the chin.]

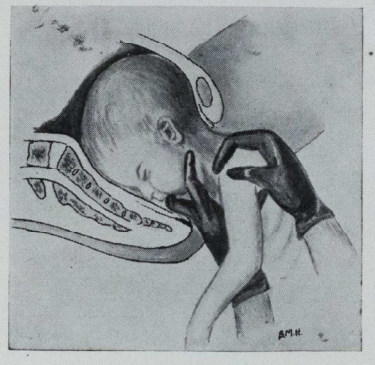
Again it is important to note that Mauriceau, with his many pupils and disciples used an assistant (" quelqu'autre personne ") in his method.

Clearly such a method, needing an assistant, was not suitable for the lone practitioner, and it remained for William Giffard, who *was* such a man, to describe his method of delivery *without* an assistant. One of his cases delivered by this method is described in the article mentioned above. Also in that article, the author states that, in his opinion, Giffard did not know Mauriceau's views, " because he did not, *at first*, realise the importance of delivering the head with the face of the child turned towards the sacrum, an essential point stressed by Mauriceau." It may be that Giffard did *not* know of Mauriceau's views, but he *did* realise the importance of turning the face towards the sacrum, and did so early in his career ; for of the second case in his book, dated January 25, 1725, he writes:

" Upon examination after the Delivery, I found the Head pressed very flat, and the Coronal Suture riding above an inch : this I judged, in great measure, to proceed from the unhappy situation of the Child ; for it came sideways with the Face towards the Hip : the Head was so locked in the Passage by the long continuance in this Posture, that I was not able, with all my strength, to turn the Face towards the Buttocks."

Case II, p. 5.

The child was dead when Giffard arrived, having " come forth, with the Feet foremost, as far as the Buttocks, in which Posture it had stuck for about two hours." He delivered by jaw-flexion with shoulder-traction, but in doing so broke the child's jaw.



Jaw-flexion with Shoulder-traction.

From Giffard we pass to Smellie, who taught Giffard's methods and recommended students to read his book. Such a great teacher as Smellie must certainly have popularised the manœuvre. In his *Treatise* (4th edition, 1762) Smellie says:

" If one finger of his right hand be fixed in the child's mouth, let the body rest on that arm ; let him place the left hand above the shoulders and put a finger on each side of the neck : if the forehead is towards one side at the upper part of the Pelvis, let him pull it lower down, and gradually turn it into the hollow of the Sacrum ; then stand up, and, in pulling, raise the body so as to bring out the head in an half-round turn, as above directed."

Vol. I, Chap. IV, Sect. II, p. 312.

There remains the contribution of Veit. Aloys Constantin Conrad Gustav Veit published a paper called " Ueber die beste Methode zur Extract des nachfolg Kindes kopfer," in the *Greifswalder med. Beiträge* of 1863. This obscure publication of the Greifswalder medical faculty was only issued from 1863 to 1865, and is very rare; the only readily traceable copy being in the library of the Surgeon-General's Office in Washington. In the *Biographisches Lexikon* of Dr. August Hirsch, concerning this paper, we read:

" Heir beschreibt er den nach ihm und *Smellie* genannten Handgriff zur Extraction des Kopfes bei schon geborenem Rumpf."

[Here he describes the grip named after him and Smellie, for the extraction of the head when the breech is already born.]

Fasbender endorses this. It appears that Veit primarily popularised the method in Germany, doubtless with the aid of his son Johann, editor of the famous " *Handbook der Gynäkologie.*

Thus unfolds the story of jaw-flexion with shoulder-traction, a manœuvre which must be credited not to one man, nor to the more usual three, but to all concerned in its development. An attempt at tracing and clarifying this evolution has been made and it is hoped that some misconceptions have been corrected.

Thanks are expressed to Mr. W. J. Bishop of the Wellcome Medical Library and Mr. J. L. Thornton of St. Bartholomew's Hospital College Library for help and for access to the original works quoted in this article, also to Dr. Wilfred Shaw and Messrs. J. and A. Churchill Ltd. for permission to use the illustration from Dr. Shaw's *Textbook of Midwifery*.

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PHYSICIAN TO THE KING'S HOUSEHOLD

Dr. R. Bodley Scott was appointed Physician to the King's Household on December 13, 1949.

We wish him success in his new appointment.

PORTRAITS OF HARVEY

2. WILLIAM HARVEY; c. 1655, aet. 78. Hunterian Collection, University of Glasgow.

1. WILLIAM HARVEY; c. 1622, aet. 45. Formerly at Rolls Park, Essex.

These photographs are reproduced by kind permission of the Cambridge University Press.

WILLIAM HARVEY; MAN AND IMAGE

The Portraiture of William Harvey, by Geoffrey Keynes. London, R.C.S., 1949. 25s.
The Personality of William Harvey, by Geoffrey Keynes. Cambridge, 1949. 5s.

WILLIAM HARVEY was born in 1578, the eldest of seven sons of Thomas Harvey, yeoman, of Folkestone, and was educated at the King's School, Canterbury, and Caius College, Cambridge. Padua gave him his training and his doctorate, and the friendship of Fabricius. Returning to England in 1602, he began to work in London: his marriage in St. Sepulchre's to Elizabeth Browne, whose father was physician to Queen Elizabeth and King James, foreshadowed his lifelong connection with St. Bartholomew's and with the Court. His professional career was rapid, and in 1616 he was appointed Lumleian Lecturer in Anatomy to the College of Physicians. His MS notes for these lectures show that he had by then become convinced of the circulation of the blood. The publication of *De Motu Cordis*, Frankfurt, 1628; *De Circulatione Sanguinis*, Rotterdam and Cambridge, 1649; and the first English tranlation, London, 1653, reflects the gradual acceptance, scarcely complete at his death, of a discovery too great to merit polemics.

Harvey was appointed Physician to this hospital in 1609, and held the post for 34 years; he did not live on the precincts, and received an extra £8 6s. 8d. on that account. He made vigorous and sensible suggestions for reforms, which were adopted by the Governors—who seem to have appreciated his worth. The surgeons, by contrast, became restive at his repeated absence from his duties: he accompanied King Charles on many of his journeys, and was with him, and made Warden of Merton, during the last stand of the Civil War. The next year he retired, and lived quietly till his death in 1657. He was even unwilling to allow his friend Dr. Ent to publish the *De Generatione Animalium* (London, 1651), which has earned him the title of Father of British Midwifery.

What kind of a man was this that turned the mediæval rite of medicine into an experimental science, whose fame is such that he has even been identified with the mysterious W. H. of Shakespeare's Sonnets? Mr. Keynes' two books, in succession to his *Biblography* (1928) and tercentenary edition of *De Motu Cordis* (1928), give the answer. The first was the Vicary Lecture for 1948 to the Royal College of Surgeons, who have published it handsomely. It is an analysis and critical comparison of the extant representations of Harvey, conducted with taste and skill, and with that discerning eye for details of face and dress, of eyebrow and tassel, which reveals derivations and exposes errors: the conclusion that few contemporary portraits exist may be unwelcome, but is shown to be inevitable. The earliest and best (Fig. 1), which shows a dark and fervid young man and is inscribed *Docter William Harvey*, has for long been strangely overlooked, and an account of its recognition and preservation forms an apendix to the Lecture. It was one of a group of portraits of Thomas Harvey and his sons set in the wall of a house that has remained in the possession of the descendants of Eliab Harvey; Sir D'Arcy Power saw the pictures in 1928, and had a photograph of them which is now in the Library, but he thought they were posthumous. Mr. Keynes dates this important likeness 1620-1625. Thirty years later there is dignity and wisdom, besides an alert impatience, in the portrait attributed to Bemmel (Fig. 2). This seems a more honest delineation of character than the "State Portrait" at the Royal College of Physicians, which has been the source of most of the subsequent copies and engravings (although as early as the 18th century one of these, a mezzotint by MacArdell, was remote enough from the original to give rise to the plausible supposition that a portrait by Van Dyck had existed). These three pictures, with the memorial bust by Edward Marshall at Hempstead, and engravings by Faithorne and Gaywood, allow the construction of a very clear image of Harvey. Two of the portraits, and the bust at Hempstead, bear the arms granted to Sir Daniel Harvey in 1660 quartered with those of Sir Walter Hervey, Mayor of London in 1272, and in one case the motto PIV ARDE PIV SPLENDE, and crest, a torch with serpents twined about it; this crest is also seen at Padua as Harvey's *stemma* or memorial. William Harvey was no more proud than prophetic, and it seems likely that these trappings are at least partly a later product of that strong family sense which is as conspicuous among the Harveys as their physical resemblance.

On his study of Harvey's appearance and the few contemporary comments Mr. Keynes based his Linacre Lecture at Cambridge last May. It is a delightful evocation of an attractive personality, enquiring, zestful, modest, devoted to the rational investigation of Nature; similar in some respects to that of John Hunter, but more polished. Aubrey's stories that he held Man to be "but a great mischievous baboon," and that he kept an opiate ready to ease his death both ring true, and his religious outlook was unusually broad and tolerant for the times. He was generous with the fortune that the efforts of his merchant brothers secured to him; and one of his legacies was £30 "to the poore of Christ hospitall in Smithfield." It is possible to doubt a few of Mr. Keynes' assertions, as for instance that Harvey's distended temporal vessel was a vein (especially if he is thought to have been hypertensive), or that his "olivaster" complexion suggests a Gallic rather than a Celtic ancestor. But such disagreement only emphasises that these two graceful studies of a great man are lively and imaginative, as well as erudite.

G. C. R. M.

NEW YEAR HONOURS

C.B.E. (Civil Division)

Clifford Viney Braimbridge, M.V.O., M.B., B.Chir., F.R.C.S.(Ed.), Colonial Medical Service, Senior Surgical Specialist, Kenya.

Frederick Tavinor Rees, M.C., T.D., M.R.C.S., L.R.C.P., Director-General of Medical Services, Ministry of Pensions.

O.B.E. (Civil Division)

Charles Elias Reindorf, M.D. For public services in the Gold Coast.

CORRESPONDENCE

MACKENZIE'S

To the Editor, St. Bartholomew's Hospital Journal

Dear Sir,

More reminiscences of Mackenzie's:

In my case a warning by a potential criminal against the police might have been more appropriate.

On an April evenig in 1904 it was my turn for the next case and I proceeded to No. 10, Rahere Street—off Goswell Road—the side streets of which—particularly Bestwick Street—were known as the abode of criminals.

I had been in and out of the house attending a "primip." By about midnight there was still "nothing doing" so I left the house for a "breather." When I reached Carter Paterson's Depot at the end of Goswell Road, it began to pour in torrents so I took to my heels and ran for shelter of some sort. There was a shop doorway at one of the corners and I had scarcely squeezed in when two stalwart City policemen seized me by wrists and shoulders and dragged me across the road to a street lamp. They were admonishing me in their usual stentorian tones "to come along quietly" and were about to clap handcuffs on me when, regaining my breath, I suggested they should send for a doctor from Bart.'s to take over my case.

Fortunately, one of the policemen had seen me entering the house earlier in the evening, and when I gave him the address and suggested he should check the articles in my black bag they let me go after the most humble apologies. The criminal whom they had been shadowing must have laughed up his sleeve, as I had apparently crossed his track.

Although there were plenty of abnormal presentations, the cases* in the three months from October 1 to September 31, 1907 showed not a single case of puerperal fever, thus agreeing with W.G.W.'s reference. The only catastrophe was a pph when the mother was moribund when the midwifery clerk arrived. In a serious case of this sort the Extern was instructed to send to the Hospital for the Physician-Accoucheur—Dr. Herbert Williamson at that time—and the Emergency Bag. This contained nothing more than two sheets, a pillow case and a couple of towels!

*Total: 299

Yours faithfully,

M. B. R.

Timber Hill,
Ashstead.
October 17, 1950.

THE BORDERLANDS

By DAVID CARRICK

THE little man who collected the pots in the "Green Dragon" was of grotesque appearance. Well below normal height, wizened, and possessed of a Punch-like nose, he resembled something out of a Grimm's Fairy Story or one of the more obscene characters from the Tales of Hoffmann, rather than a human being. But he was efficient, nobody could deny that: the very instant a customer had placed an empty glass on the table, the little creature would snatch it with a gnarled hand and scuttle off into his gloomy den at the back of the inn.

New customers regarded him with curiosity and perhaps revulsion: women avoided the place as they said he made them feel nervous: knowing the publican, I imagine that the latter fact may well have been the reason for his employment. But the regular customers looked upon him with a mixture of pity and amusement, for they knew his story.

Many years before, he had been certified insane and sent to the nearby asylum where he had remained as a patient for a considerable time. At length it was decided to give him his freedom, but he had grown so fond of the place that he refused to leave. The authorities, realising that his chances in the outside world were slight, kindly allowed him a bed in return for little odd jobs around the place. The only time he ever came outside was when he worked at his pot-collecting at the "Green Dragon."

Apart from any failings he may have had from the æsthetic point of view, there was much in his favour to suit such a job as his. He was as polite as possible, in no way aggresive, and, above all, never said a word even when the tipsy wags tried to pull his leg. So profound indeed was his silence, that I believed him to be a mute until one memorable evening.

It was a Saturday night. The pub was crowded. Some of the customers, who were very much the worse for wear, became involved in a heated argument with each other about something of trifling importance. In and out amongst the seething mass weaved Chico, as he was called, serenely indifferent to the turmoil until his progress was suddenly arrested by the application of a thumb and finger to the pinna of his right ear.

His captor, a large and burly navvy, winking at his laughing companions and antagonists, asked the wretched victim for his views on the subject, to which the poor fellow managed to whisper, diplomatically, that he agreed with all that his custodian had said.

"There y'are, boys," chortled the navvy, "if old Chico agrees with me, I must be right!"

Chico was very pleased at the acceptance of his wisdom and at his new-found popularity, and returned to his work. One of the navvy's opponents, however, disgruntled at his discomfiture and wishing to turn the laughter away from himself, shouted at the navvy: "Well, Mate, if that's the place yer get yer learning from, I reckon you're as mad as he is. Look at 'im: blooming idiot; chump; daftie; escaper from a Bughouse!"

There was a crash of breaking glass. The room was in silence as all eyes turned on Chico who was standing bowed down, with murder in his piggy eyes, the tray and six glasses broken at his feet.

For a time he stood like this. Then he became as a thing possessed. He jumped up and down, threw his arms about, and spat and swore like an angry ape.

"Mad am I?" he suddenly squeaked, still leaping about, and feeling in his pockets. "So it's daft I am. Well, we'll see about that, Mister Clever, just you look at this and see if I can't prove that I'm the only one in this room who ain't mad!" and he thrust a grimy piece of cardboard under his enemy's nose.

I never saw the document myself, but I was told that it was a certificate stating that its owner was sane. It was probably some joke on the part of a doctor done to please him, but, at all events, it certainly had the desired effect on those who read it, for, not only did a few have the grace to apologise, but ever afterwards he was treated with more respect and even occasionally to a free beer. He had gained his position in society.

Now this story can be regarded as a quaint little anecdote, or, on the other hand, as a parable, for a closer consideration of the material may reveal that a very important question is raised, namely, whether it is easier to prove oneself sane or insane. A hundred years ago, when people were not quite so clever, the problem hardly existed:

a man was either mad or he was not. To-day, when the world abounds with learned, and not so learned men who profess themselves able to divine the veriest degrees of stability, only the most obvious lunatic can be sure of his position.

Psychological and aptitude tests are becoming a rage. If they make as much ground in the next decade as they have done during the last, there may well come a day when even road-sweepers are subjected to tests as to their temperamental approach to wielding a broom, and meat-porters a carcase: such a state of affairs is by no means inconceivable in this enlightened age. It might be argued that these tests have no bearing upon a person's degree of sanity, only his intelligence, but it is a moot point as to where one begins and the other ends.

For example, consider those tests devised during the war for assaying a subject's aptitude for flying. When I was forced to participate in the game I was fortunate enough to be faintly intoxicated at the time and therefore did rather well. A companion of mine, however, who was not in such a happy frame of mind, failed miserably. He acquitted himself reasonably on the more difficult tests: the easy ones floored him. On being asked to assemble a machine so elementary that even I had no difficulty, he confessed himself beaten after five minutes: he was incapable of even beginning the task.

This failure depressed the man. For weeks afterwards, until he was posted, he never seemed the same. We tried to convince him that the incident was of no importance, but he would not see it that way: he had failed; there was a slur on his character. You see, in civil life that man had been an expert at assembling taxi-meters. Perhaps the test was too easy: it was certainly fallible, and it raised serious doubts in the mind of a normally placid individual.

Another case in which all the experts and all the tests and machines were baffled occurred at a later stage in the war.

There was a certain pilot at a certain aerodrome. He was brave, happy, carefree, and apparently in perfect health, but he developed a peculiar obsession: he became enamoured of a sandwich. It was a commonplace, everyday paste sandwich, just the sort of thing perpetually displayed beneath glass domes in railway buffets, and just as decrepit; yet he professed to be fond of it. He took it wherever he went at the end of a piece of string: he never let it out of his sight, not even at night when it reposed on the pillow beside his head: it is alleged that he even bought beer for it, but its desiccated appearance belied the story: he called it Cuthbert.

Although treated as a joke by his companions, the strange alliance was severely questioned by the authorities: the appearance of an officer on parade trailing a sandwich behind him was considered bad for the discipline of the other ranks.

Naturally enough it was thought that, although he himself evinced no desire for it, he was trying to work his ticket, and strenuous efforts were made to unmask his cunning. However, his affection proved too strong for all the experts and both he and his friend were discharged.

Sceptics may regard this story as an exaggeration; they might even be right; but, at the same time, many a man was discharged from the Services under conditions just as strange and where the patient—or pretender—was the only person who had any idea about the true state of his mind.

To criticise always, and to praise never is the sign of a narrow mind, so I must close by recounting a singular adventure that befell a friend of mine that goes a long way to prove that the marvels of applied psychology can sometimes succeed where all else fails.

Brown, as I shall call him, had injured his elbow getting out of an aeroplane. He said that it gave him a great deal of pain at times, particularly in the evening when he used it most: yet nobody could find anything wrong with it. Relays of doctors examined and X-rayed it with no result. They all said that it was perfectly all right: any pain that he said he had must be a figment of his imagination. He nevertheless persisted in complaining, and at last it was decided to send him to a psychiatrist in the hope that he could do something, but they artfully omitted to tell him the nature of his destination: it would be a nice surprise for him.

Being a wealthy young man he was the proud possessor of a car. It was a huge and roomy vehicle but, unfortunately, not very reliable. In the normal way he took a preponderance of passengers as a precaution against the inevitable breakdown. On this occasion, however, he was alone, so it was with acute dismay that he heard the usual signs of trouble developing when he was within a mile of his goal. By the time he had

driven up to the entrance of the small mansion, the original faint knockings had developed into deafening explosions. Then when he stopped, so did the engine with an air of finality suggestive of death.

As he was sitting quietly thinking about this, a little Flying Officer came running down the steps towards him. He pranced up to the car, wrenched open the bonnet, peered inside, threw it down again, then, with a high-pitched laugh, said: "Something's wrong with that," and danced back into the building again.

My friend thought this was all a bit odd but was too concerned with the state of his car to consider the sinister significance of the incident, so he went inside to report his arrival.

He was asked to wait, which he did for nearly four hours, and it was nearly six before he was shown into the presence of a benevolent looking Squadron Leader.

After shaking hands, Brown proceeded to take off his coat as he had done so many times before. The doctor looked surprised and asked him what he was doing.

"I'm going to show you my elbow, sir," he replied.

"Show me your elbow?" repeated the doctor, with a perturbed look, "I don't think I really want to see that. Just you sit down quietly and we will have a little chat."

There was silence for a time until suddenly the doctor shot out, "Is your father a nervous man?"

Brown thought about it for a bit and then replied that he didn't think so, adding that it was unlikely because, as a young man he had spent a number of years training cannibals to plant coconuts.

Another silence ensued until the second question.

"Did you bite your nails as a child?"

"Yes, sir," was the reply, "did you?"

The doctor, hastily removing a nail from sight, laughed and agreed that he had done so on occasions.

And so the questions went on in a like fashion until both interrogator and examinee were quite fatigued. Finally, the doctor said that he was afraid that Brown had been sent to the wrong place and wrote an angry letter to those responsible.

Over an amicable cup of tea they discussed what my friend should do that night. His car would not go, the nearest town was miles away and there were no buses. The only thing for him to do was to sleep in one of the wards: a perfectly quiet one he was assured.

He found the ward which contained a dozen or so officers intent on a fierce game of solo with match sticks as currency. They evinced no interest in him so he went down to the common room.

The occupants here were more friendly and asked him what he was in for. His explanation about the car caused a good deal of merriment. They said it was the best one they had ever heard, and reminded each other to remember it. However, after a deal of trouble, which included a visit to the car, they said they believed him and he spent a pleasant enough evening which was only marred by the repeated warnings about nurses with injections. Once he allowed them to inject him, they darkly prognosticated, he really would be in for a stretch.

At ten o'clock he went to bed. To his surprise the lights were out: only a small blue bulb shed an eerie glow across the white beds and their occupants. The patient nearest to him was wide awake and staring at the ceiling, all the time muttering quietly to himself. Brown thought that a little light conversation was not out of place and whispered the observation, "Shocking place this, isn't it?"

The man sat bolt upright, glared malevolently and shouted, "Shocking place! Why? Why is it a shocking place?"

"Well," stammered Brown nervously, "there doesn't seem to be very much to do."

"There's plenty to do," came back the angry answer, "we have a film once a week, and during the day we have our handicrafts and sewing. What else do you want?"

Brown hastily agreed, apologised for running the place down, and added that he only wished that his own stay was longer. Then he quickly hopped into bed and pretended to go to sleep. Pretended was the word: what with keeping an eye open for the cruising nurses and listening to the noises of the sleepers and other wakers, the wretched man never slept a wink all night, and was only too glad to totter down to breakfast at 6.30, a worn-out wreck.

Breakfast was a merry meal. All went well until an argument arose as to the possibilities of financial gain in canning rabbits in Scotland. The argument quickly developed into a row for which he, who had never said a word, was blamed. He left his unfinished

breakfast and fled from the room amidst howls of derision, straight to his car which, with superhuman effort, he managed to push for nearly two miles before he judged himself fairly out of danger.

He tells me that his elbow never gave him any trouble again, and, what is more, never again will he complain of any illness unless verified by a thermometer: it was such a lesson to him.

EAST WING

The East Wing has now been opened with the following wards:—

Gynæcological Wards

Butlin	18 beds
Sandhurst	18 beds

Obstetrical Wards

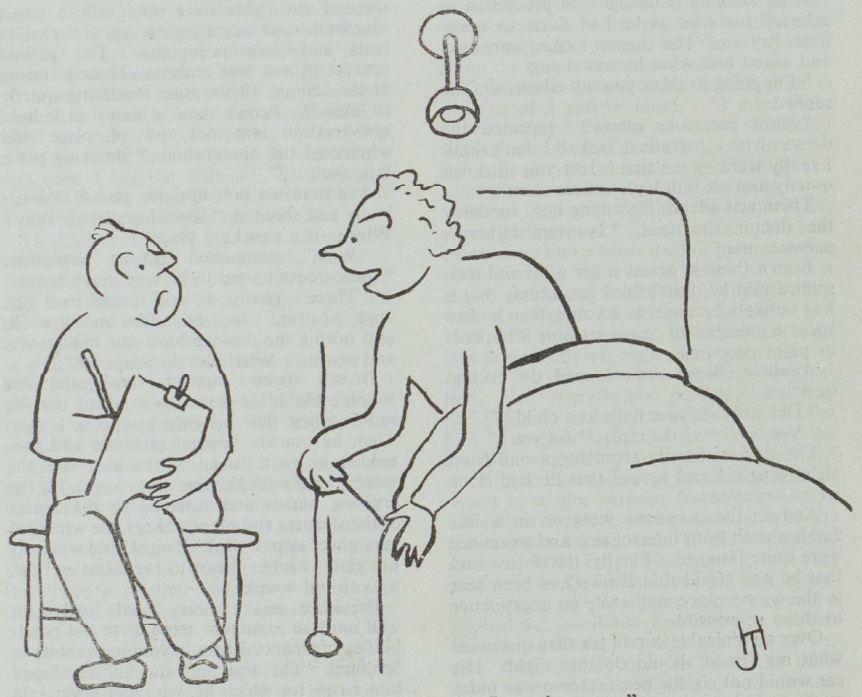
Elizabeth	18 beds
Martha	22 beds

Children's Wards

Kenton	24 beds

Physiotherapy Department

The four wards thus rendered vacant in the Main Block will be filled, after cleaning, by Mr. Naunton Morgan's firm and Dr. Spence's firm.



"I wasn't really well the day I was born . . ."

JIM SLOGGETT WALKS DOWN THE AISLE

By HERBERT PRANCE

ON a winter's morning in a year at the beginning of the century, I drove into a Cornish town to become partner to an old established practitioner. My attention was suddenly drawn to the sight of a boy, aged about seven, sitting on a board on the pavement and propelling himself by means of a stick in each hand. The pedestrians were accustomed to him evidently, as they just stepped to one side to let him pass and hardly looked at him. The excitement of introduction to my new environment put the matter out of my mind. One night after I had been in the practice about six months, I successfully turned and delivered a breach. The old midwife was no end pleased at my performance and said, "I wish you could see my little boy, I believe you would do him some good." When I saw him it was none other than the lad I had seen crawling along the pavement. It was an extreme talipes equinus. The nurse told me that all five doctors in the town had seen the boy, also a specialist surgeon from Plymouth, and all had told her that if they cut the tendon, the gaps left would be so wide that they would not join. My memory went back to Bart.'s orthopædic out-patients, when Willie Walsham called me up to state my treatment of a talipes. I said that I should be afraid to operate lest joining should not take place. The Surgeon said, "Never refrain from operating on that account; the joining will always take place."

What Walsham said was always Bible fact to me and I had no hesitation in telling the mother that I would put her boy's feet as they ought to be.

Accordingly I asked my old partner to give an anæsthetic but to my astonishment he refused and said it was very wrong of me to do an operation that had been universally turned down. Nor could I get any of the other men to lend a hand. Mrs. S., the mother, and all the family belonged to the Baptist Chapel and three of the girls were in the choir. The pastor of the chapel called and upbraided Mrs. S. for allowing this young doctor to "torture" her son when she had been told it was useless. The mother and family left the chapel for the Parish Church. I was on my mettle and decided to do it under a "local," with the mother as my assistant. This I did. Unfortunately the boy felt the prick of the needle in the second leg and set up a heart-rending howl, audible in the street and to neighbours. That put the cap on it. I put the legs up in plaster and departed. Many a time during the six weeks I gave it to heal I broke out in a clammy sweat, as I knew that failure meant a "finisher" as far as practice in that town was concerned. Imagine my ecstatic joy when I found the feet in excellent position and the tendon firm.

For a month after that mother and I secretly taught the boy to walk until he could make quite a good job of it. Then I decided after all I had been through, cold shouldered and cut for the last two months, I would get my own back. I had a talk with the sexton of the Parish Church and made him reserve two seats in a front pew for morning service on Easter Sunday. I then told a cab driver to pick up mother and boy and take them to the church just as the "Parson's bell" was finishing. Then mother and son—unassisted—would walk up to their front seats. It all come off according to plan and the people who for years had seen Jim crawling along the dirty pavement, saw him walk quite reasonably well up the aisle of the Parish Church. And what a change for me. I now became the talk of the town as "the clever young doctor."

Thank you, Mr. Walsham.

DEATH

We regret to announce the death of Dr. C. G. Martin, Deputy Medical Officer, Port of London Authority, aged 74.

SPORT

RUGBY CLUB

January 4, v. Leeds Medicals (home). Won 15-3.

Main credit for Bart.'s victory in this delightful game at Chislehurst was due to the individual attacking prowess of the backs, and to the very fine display of V. G. Caiger at full back.

The forwards, opposed by a good Leeds pack, were energetic enough in the loose, but seemed to lack that cohesion necessary to feed the backs as often and as cleanly as they should.

Bart.'s opened the scoring in the first half when Porteus, after a fine run, scored far out. This was soon followed by a similar effort by Davies.

In the second half Mears pounced on a Leeds mistake and cleverly sent Porteus over the third try. The fourth try was scored by A. H. John. A fine penalty goal by Leeds was followed by the most spectacular incident of the match. Fielding a miskick by a defender, John found himself hemmed in near the touchline. Unperturbed, our hero sold one of his famous "dummies" to create a gap for him to stroll nonchalantly over for Bart.'s final try.

January 7, v. Old Rutlishians (away). Drawn 3-3.

One penalty goal each was the score when St. Bart.'s Hospital drew with the Old Rutlishians in a thrilling match on the Old Boys' ground this afternoon.

The Old Rutlishians were first to take the initiative and pressed hard for the early part of the game, but by half-time Bart.'s were looking really aggressive and continued to improve throughout the second half. Gaskin converted a penalty for the Old Boys half-way through the first half, and Davies did likewise for the Hospital in the early part of the second half.

M. J. A. Davies, the master-mind of a much-improved line of Bart.'s backs, was in devastating form; K. A. Clare at fly-half also looked dangerous and his kicking was good, but he tended to hang on to the ball too long, with the result that wings did not receive the opportunities their talent deserved. At full back V. G. Caiger was outstanding; his fielding and tackling were faultless, and rarely did his kicks fail to find touch.

The Bart.'s pack were in great form. The hooking of P. D. Moyes enhanced even his reputation, whilst A. H. John was a tower of strength in the line-outs. D. G. Dick was active everywhere, spurring his fiery forwards to even greater efforts.

It was indeed a game full of thrills, and also a most encouraging improvement in the Bart.'s side. The forwards are now playing together as a pack, and the backs are becoming constructively aggressive. The game was clean, fast and open.

January 21, v. Bedford. Lost 0-17.

The Hospital were beaten by Bedford on Saturday, January 21, by 1 goal, 1 try and 3 penalties (17 points) to nil. The game as a whole was rather disappointing after the performance against Cheltenham. Bedford scored in the first two minutes with a try by their right wing after a quick heel from the loose and a cut through by the stand-off. Seven minutes later this was followed by a try by the left wing after another break through by the stand-off. This was converted, and the Hospital were eight points down before they realised they were on the field. However, after this disastrous start, our line was not crossed again, though Bedford's score was increased by three good penalty kicks. The outstanding feature as far as the Hospital was concerned, was the brilliant hooking of P. D. Moyes and the grand tight scrummaging of the rest of the pack. In the loose A. J. Third, R. Heylings and G. Mears were outstanding, and C. W. H. Havard did some good work in the line-outs. Of the backs, both centres, K. A. Clare and J. K. Murphy, found gaps in the Bedford defence, and the wings, R. F. M. Jones and G. Picthall, had some good runs and always looked dangerous when given a chance. Too often, however, wild passes ended promising movements, and the centres had to make hurried kicks ahead because they received the ball a little too late to allow them to do otherwise. At full back G. Small played extremely well, his fielding, kicking and tackling being most encouraging.

If only the team can cure themselves of that fatal lethargy of the first ten minutes, which in previous matches has cost them so dear, we should win our remaining matches.

January 14, v. Cheltenham (home). Lost 0-9.

Against a team containing two Internationals, two Cambridge Blues and five County Players, Bart.'s put up one of their best performances of the season. Cheltenham have not been beaten in England yet, and a keen game was anticipated; our supporters were not disappointed.

Bart.'s took longer than the visitors to settle down, and, after a quick heel from a scrum on our line, an opposition wing forward dived over and scored in the first five minutes. The game then speeded up and the battle between the two packs was rough and boisterous. There was very little in it in the line-outs and loose scrums, but we had a definite advantage in the tight. In a game in which all the players were good, it is difficult to pick out individuals; however, P. D. Moyes must be mentioned for his faultless hooking. He was ably supported by a pack who let the ball out quickly into the hands of an eager scrum-half.

The battle between the three's was similar in intensity. Tackling was vigorous in defence, and our attack was wholehearted in determination. We still must develop penetration, however, and then we shall indeed be on top.

Our visitors' second try came just before half-time. The two sides were evenly matched in the second half, with Bart.'s coming near to scoring half a dozen times and not quite making it. The visitors scored their third try in the last minute of the game.

HOCKEY CLUB

January 7, 1st XI v. Vauxhall Motors (home). Lost 1-4.

January 14, 1st XI v. Staines (away). Won 2-0.

Our first fixture against Staines was played on a slippery, uneven surface. The home team, fresh from a 4-0 win against London Hospital the previous week, attacked strongly from the start, but was kept at bay by the backs, of whom Ross was clearing the circle with particular severity. The Hospital forwards, with Dossetor at inside-left, always looked dangerous, and it was no surprise when Godden finished a spirited run with a beautifully angled shot.

In the second half Staines combined well in mid-field, but wasted several good scoring chances. Haigh, in goal, made several notable saves, but his technique of catching the ball between his thighs and hopping towards the goal line seemed open to question, if only for reasons of personal safety. Bart.'s settled the issue with a goal by Dosseter, who tricked the entire defence in a brilliant solo run from his own half.

January 21, v. R.N.C. Greenwich (home). Lost 3-4.

This match proved to be one of the best of the season so far. The Hospital opened the scoring with a goal by Batterham. R.N.C. quickly took advantage of defensive lapses to score twice, but Dosseter equalised just before half-time.

Both sides went all out from the restart, and Bart.'s soon took the lead through Batterham, who ran through and beat the goalkeeper in convincing style, only for R.N.C. to equalise from a long corner.

The College were a little fortunate to score the winning goal off a defender's boot, and spent the last ten minutes desperately defending their goal from the furious onslaught in which the Hospital did everything but score.

January 28, v. N.P.L. (home). Won 1-0.

January 7, 2nd XI v. Vickers, Crayford (away). Lost 0-7.

January 14, 2nd XI v. Inland Revenue II (home). Lost 1-3.

January 21, 2nd XI v. Peak Frean (away). Lost 2-4.

January 28, 2nd XI v. N.P.L. II (away). Lost 1-4.

CROSS COUNTRY CLUB

Bart.'s has not enjoyed a successful cross-country season up to the time of writing. New members have not been forthcoming and with A. Dormer, A. Macdonald and J. Stainton-Ellis all suffering from injury we have often had difficulty in raising a team. John Menon has now qualified and we wish him every success. Menon has been the undisputed United Hospitals' cross-country champion for three years, and he was always a tower of strength in the longer track events. The Athletic Club will be the poorer for his absence.

With the return of Dormer and Stainton-Ellis, however, we expect that the New Year will see a reversal of fortunes: although, at the risk of repetition, it is painfully obvious that new members are still urgently required.

October 29. v. Orion Harriers. Away. 5 miles.

This fixture was held in conjunction with the United Hospitals' match versus the Orion. It proved a most enjoyable run, the Orion emerging victors by a narrow margin.

Leading Bart.'s positions:

2nd A. Macdonald.
5th J. I. Burn
7th J. A. Menon
10th G. Wallace

1. Orion—36 points
2. Bart.'s—42 points

November 26, v. Shaftsbury Harriers. Away. 5 miles

Bart.'s were well beaten—deservedly.

Leading positions:

3rd J. I. Burn
7th G. Wallace

1. Shaftsbury—18 points
2. Bart.'s—37 points

November 30, v. Guy's Hospital v. L.S.E. Home. 3¼ miles.

This was our first home match of the season, although we had previously entertained members of the United Hospitals' in the Club Handicap race. The Bart.'s tail wagged merrily, but J. Barnes lost his way and Guys had beaten us for the first time in ten years.

Leading Bart.'s positions:

1st J. I. Burn
3rd A. Macdonald

1. L.S.E.—31 points
2. Guys—44 points
3. Bart.'s—45 points

December 3, v. London University Championships Roehampton. 4¾ miles

This fixture always lacks the friendly atmosphere that one associates with the inter-club races. With titles and honour at stake tempers are often frayed and not a few are truly glad when the meeting is over.

This proved to be an exception, however, and a most enjoyable afternoon was experienced. We had no illusions as to our chances in the event, and were well pleased to obtain 15th position out of some 30 competing teams. It was gratifying to see the newly formed London Hospital team occupying 5th place.

Leading Bart.'s positions:

23rd. J. A. Menon
27th J. I. Burn
34th A. Macdonald

RIFLE CLUB

"It was not always so"—might well be said of the club as it finds itself today, for the past six months have seen a big change. Firstly, we have the use of the hospital range again which allows us a great many opportunities which we lacked at the Cripplegate Institute. Then we also have new rifles and telescopes and as a result most people's scores have improved appreciably. Lastly, but probably the most important factor has been the hard work put into practising by the team members.

The "A" team has not been beaten by any college team entered for the Engineer's Cup and 9 out of 13 matches have already been shot. A year ago it must be said, not a single match was won. The following have averages over 95:

B. D. Lascelles	98.2	(match av. 97.3)
J. S. Bunting	96.4	(match av. 96.7)
G. C. R. Morris ...	96.3	(match av. 97.3)
J. E. Craddock-Watson	96.2	(match av. 95.8)
M. C. Hall	95.7	(match av. 95.8)

B. D. Lascelles won the scratch competition for the Lady Ludlow Cup with a score of 99. He has obtained five possibles this season (though still none in matches) and shoots for the Univer-

sity "A." The University "B" team contains three from Bart.'s including its captain M. C. Hall.

Once a month we have been holding prize meetings run on a handicap basis and these have been very popular. H. G. Scott won the November Tankard prize with 94 (+6 handicap) and C. M. Vickery won in January with 96 (+4 handicap)—2nd prize C. J. R. Elliott, 3rd prize R. J. Johnson.

The "B" team has now several safe shots in reserve so that it should be able to enter for the Engineer's Cup next season and make a good showing. It has beaten University College "B" and when given 25 handicap beat the "A" team by a good margin. The highest averages in the "B" team are:

M. B. McKerrow—92.6
C. D. Ellis—92.6
F. P. Thoresby—92.0

Bisley

During the months of May and June it will be possible to take up to 15 members to Bisley on Saturdays. This season's full-bore shooting should be even more enjoyable than last for University and club matches will be more keenly contested and it should be possible to do some revolver and clay pigeon shooting in addition. There is a handicap and a scratch cup for competition and, of course, finally, the United Hospitals' Cup in which we were second to Guy's in 1949.

EXAMINATION RESULTS

ROYAL COLLEGE OF SURGEONS

Subject to the approval of the Council of the Royal College of Surgeons at a meeting held on December 8, 1949, the following are entitled to the Diploma of Fellow:—

Black, H. D. W.	Farrar, D. A.	Jack, R. C.	Rogers, N. C.
Block, J.	Flannery, B. P.	Mackenzie, A. B.	Roper, A.
Dingley, A. G.	Gabel, F. E. J.	Ramayya, G. P.	Ross, D. N.
Donaldson, I. A.	Henson, G. F. T. W.	Ramsay, G. S.	Todd, I. P.
Durham, M. P.	Higazi, H. E. S.	Ramsay, R.	Williams, D. O.
			Wilson, M. G.

UNIVERSITY OF LONDON

M.D. Examination — **December, 1949**

Branch I (Medicine)	Branch II (Pathology)	Branch IV (Midwifery)	
Anderson, A. W.	Story, P.	Champ, C. J.	

Examination for the Academic Postgraduate Certificate in Public Health — **December, 1949**

Adams, K. J.	Phillips, H. T.	van de Linde, P. A. M.	

Special First Examination for Medical Degrees — **December, 1949**

Batterham, E. J.	Clare, K. A.	Goss, G. C. L.	Stainton-Ellis, J. A.
Beasley, R. W. R.	Cranston, C. J.	Kirk, A. G.	Topham, P. A.
Carter, I. C.	Cunningham, G. A. B.	Macadam, F. I.	

The following Higher School Candidates have qualified for exemption from First Medical Examination

Allen, A. B.	Bott, M. M. L.	Graham, M. A. H.	Taylor, R. C.
Ashworth, E. J.	Canning, W. C.	Jones, H. D.	Wetherall, J. M.

CONJOINT BOARD

Final Examination — **January, 1950**

Pathology			
Cairns, J. D.	Godden, J. L.	Richards, R. B. O.	Wright, A. N. H.
Coldrey, J. B.	Jenkins, G. C.	Watkins, P. H.	Wright, R. F.
Dossetor, J. B.	Jones, J. N. W.	Willis, P. F.	
Medicine			
Abraham, R. J.-D.	Chorley, G. E.	Liu, S.	Wallis, F. P.
Baker, A. M.	Dossetor, J. B.	Mason-Walshaw, K. R.	Willis, P. F.
Brest, B. I.	Hibbard, B. M.	Rees, J. D.	Wright, R. F.
Burn, J. I.	James, D. C.	Rosen, I.	
Carter, F. G. T.	Lester, J. P.	Tannen, G. P.	
Surgery			
Abraham, R. J. D.	Chandler, G. C. H.	Hacking, S.	Rowson, K. E. K.
Baker, A. M.	Dossetor, J. B.	Hale, B. C.	Tannen, G. P.
Bhandari, N. P.	Gosling, R. E. G.	Rosen, I.	Willis, P. F.
Midwifery			
Cairns, J. D.	Hirst, G.	Moyes, P. D.	Vickers, R.
Dossetor, J. B.	Hodson, J. M.	Sacks, R. H. B.	Willis, P. F.
Godden, J. L.	Horwitz, H.	Smith, I. G.	Wright, R. F.
Hardy, C. G. J.	Lodwick, J.	Vercoe, M. G. S.	

The following students have completed the examination for the Diplomas M.R.C.S., L.R.C.P.

✓Abraham, R. J.-D.	✓Carter, F. G. T.	✓Lester, J. P.	✓Tannen, G. P.
✓Baker, A. M.	✓Dossetor, J. B.	✓Mason-Walshaw, K. R.	✓Wallis, F. P.
✓Bhandari, N. P.	✓Gosling, R. E. G.	✓Rees, J. D.	✓Willis, P. F.
✓Brest, B. I.	✓Hardy, C. G. J.	✓Rosen, I.	

BOOK REVIEWS

HANDBOOK OF BACTERIOLOGY, by J. W. Bigger. 6th Edition. Ballière, Tindall & Cox, 1949, pp. xvi+547. Price 20s.

This excellent book does credit to its publishers. It is well produced on good paper with clear illustrations, and at a reasonable price. The chapters on general bacteriology are exhaustive but not wearisome in their length—the detailed illustrated description of staining methods and serological technique is to be commended. The chapter on the identification of bacteria is particularly valuable to the student. The individual bacteria are treated briefly but adequately—subheadings, however, would improve these chapters considerably.

OUTLINE OF ANÆSTHESIA FROM THE NURSE'S VIEWPOINT, by C. Langton Hewer. Hospital and Social Services Journal. 1950, pp. 24. Price 1s. 6d.

The theatre nurse will find practical information in a readable style and sensible presentation in Dr. Langton Hewer's pamphlet.

AIDS TO ANATOMY AND PHYSIOLOGY, by K. F. Armstrong. Ballière, Tindall & Cox, 1949. 4th Edition, pp. xii+452. Figs. 192. Price 6s.

This is a fourth edition of a well-known book in the "Aids" series. Its diagrams are very good, but the X-rays to show normal function are poorly selected. A reversed picture of a barium enema has been chosen, the most striking point in the normal gall bladder picture is a group of stones. The mouth and oesophagus are not lined with transitional epithelium (p. 60), neither do elastic fibres have nuclei (p. 61).

THE NATURE OF DISEASE INSTITUTE, Second Annual Report, by J. E. R. McDonagh. Heinemann, 1949, pp. 188. Price 15s.

The foundation of this Institute by the author in 1927 was prompted by the desire to establish the view that what are known as "diseases" are no more than manifestations of the damage suffered by the protein in the blood of man. The basis of treatment is to wash out the large intestine, correct the osteopathic lesions to which the intestinal toxæmia has given rise, to restore the damaged protein in the blood to its normal chemico-physical state, and to immunise the patient against the activity of the micro-organisms isolated from the excreta. The First Annual Report (1948) opened with a discussion of the relationship between healthy and unhealthy soil, and health and disease in plants, animals and man; the Second deals with disease in plants. Both contain physico-chemical, microbiological and clinical sections.

The terminology of these Reports is largely private to the author, and any relationship of his theories to orthodox medicine is coincidental. The coming publication of a Third Annual Report promises to complete a trilogy which will be interesting to students of medical heresy.

DISEASES OF WOMEN, by Ten Teachers. Edited by Clifford White, Frank Cook and Sir William Gilliat. 8th Edition. Arnold, 1949, pp. 461. Price 25s.

The systematisation of gynæcology allows ten distinguished exponents of the speciality to write a coherent text-book, without duplication or contradiction. And it is right that a text-book for students should present the consensus of the best current opinion. That variations from this opinion are possible the student will soon discover in the clinical teaching of this hospital, and in particular he will need to acquaint himself with recent advances in theory and technique not yet uniformly acceptable. These reservations do not detract from the value of this concise and well-cogitated basic text-book, which has been thoroughly revised in the seven years since the last edition.

A SHORT HISTORY OF PHYSIOLOGY, by K. J. Franklin. Staples Press, 1949. 2nd Edition, pp. 147. Price 10s. 6d.

The progress of physiology, slow for centuries, has been very rapid recently. The work of the twentieth century can not yet be assessed in a historical context, and Professor Franklin's chapter on the nineteenth century reveals how difficult it is to weave a continuous pattern from the multifarious threads of modern research (and the vital strand of the genetic theory of evolution, as important to physiology as the discovery of the microscope, is omitted). The less familiar early history, from Alcmaeon to Fernel and William Harvey, is admirably set out, and gives a good perspective view of the background to the scientific investigation of animal physiology. The book has been redesigned to good effect, and decorated by sixteen portraits of the great.

THE COMMON INFECTIOUS DISEASES, by H. S. Banks. Arnold, 1949, pp. 354. Price 21s.

All who have had the benefit of Dr. Banks' teaching at the Park Hospital will be delighted to see in print the results of his extensive experience of "fevers." The book is founded, as is only too rare, on personal clinical observation, and embodies a large number of advances in management for which the author is responsible. Each disease is presented freshly and in admirable detail, with a critical appraisal of the literature; so that the post-graduate will find the answers to most of his queries, and yet the student will not be overwhelmed. The relevant technical procedures are carefully described in the appropriate places, and a number of valuable practical hints are incorporated.

Some of the illustrations show too clearly the difficulties in the way of half-tone representation of skin. Idiosyncrasies of phraseology, the use of italics for emphasis as well as cross-headings, and such misprints as "intake of fluids by mouth and parentally" will no doubt be ironed out in subsequent editions of what should become a very popular text-book.

ESSENTIALS OF ORTHOPÆDICS, by Philip Wiles. J. & A. Churchill Ltd., 1949, pp. xvi + 486, 7 colour plates and 365 text figures. Price 42s.

The paucity of orthopædic text-books points to the difficulty of presenting a subject which is undergoing rapid change and in which there is a correspondingly healthy diversity of thought. A text-book like the present, with its freshness of personal experience and personal opinion, must reflect the whims of the author unless he is to fall into the trap of discursiveness. Mr. Wiles expresses his views with a dogmatism which should please the most exacting examinee. The soundness of most of his views is sufficient justification, but there are errors which are perhaps emphasised by such an approach. Sterno-mastoid tenotomy for torticollis should not be performed as early as possible, but as early as the patient is able to co-operate in after-treatment; spondylolysis is not a failure of fusion between the centres for neural arch and vertebral body, but between two parts of the neural arch; anterior fusion for spondylolisthesis, a dangerous operation, has not been condemned without fair trial; arthrodesis of the foot as early as the age of eight years leads to much avoidable crippling; heel wedges as high as a quarter of an inch are intolerable; osteoarthritis is not the perquisite of diarthrodial joints; in acromegaly the ribs grow in length as well as thickness; the ratio of lateral meniscus injuries to medial is not about 1 in 10 but 1 in 3 or 4. It would be a pity to stress such errors in so good a book, and they will doubtless be corrected in the succeeding editions which will assuredly be asked for. The book is intended for general practitioners, undergraduate students and junior post-graduates, for all of whom it will be useful as a text for the cases which they see and as a basis for practice. The text is pleasant and easy, and the illustrations exceptionally good.

H. J. B.

INFANT NUTRITION. Its Physiological Basis, by F. W. Clements. John Wright, 1949, pp. vii + 246. Price 21s.

Infant feeding is, and has been for many centuries, an art; infant nutrition on the other hand is a science, born at the end of the 19th century. This comprehensive book is written by an Australian who has collected most of the relevant facts published in the last twenty years about fœtal and infant nutrition. Part I deals with tissue metabolism, Part II with fœtal nutrition, Part III with the properties of human and cow's milk. Part IV with digestion, and Part V with infant nutritional requirements. In Part VI he deals with the clinical application of the vast amount of data compiled in the preceding sections (there are over 600 references), but it is sketchily written and on the whole disappointing. It is impossible to check the accuracy of the scientific data, but there is a reference to Sir Wilfred Sheldon which suggests that that eminent pædiatrician's reputation is even higher in Australia than it is over here.

As a reference book on infant nutrition, this is unique and research workers should find it of very great value, but to the larger circle of doctors and nurses practicising the art of infant feeding, it will not be of much practical assistance.

I. G. W.

THE REMINISCENCES OF A PHYSICIAN, by Bernard Myers. A. H. and A. W. Reed, 1949, pp. 159. Price 10s. 6d.

Perhaps the most exciting thing about writing an autobiography is the opportunity it gives us to see our exploits over the years, purged of trivialities and resplendent in the gloriously rapid succession in which they appear to have occurred. Dr. Myers deserves this satisfaction, although he has been generous enough to include some of his less momentous experiences, such as organising unruly women at a rummage sale and being in charge of a detachment of St. John's Ambulance.

Authors are often so reticent that they hide behind pseudonyms or disguise themselves as characters in novels. This author, however, is to be congratulated on the intrepidity with which he has recorded his doings, thoughts and impressions. His philosophy appears both simple and warm-hearted, and is neatly summarised in a lunch-party conversation with a former Premier of Canada. When asked for his views on life, he replies that after forty years of practice, he believes that it is true to state that we all seek health and happiness, but by no means always in the same way. He had found that hard work—whatever the occupation—altruism, recreation, good health, good friends and a contented mind, paved the road to happiness. If the current Government acted wisely, that helped. Lord Bennett agreed.

This book is designed to interest the general reader. There are no bemusing technicalities. When the author introduces hypertension, he dismisses it again without embarrassment. ("Take, for instance, blood pressure. It may be normal, high or low . . .") We think that many such readers will be interested in reading this book, which is mainly about the author, his experiences and his distinguished friends. It should be of especial interest to all those who know the author personally.

VARICOSE VEINS, by R. Rowden Foote. Butterworth, 1949, pp. xv + 226. Price 32s. 6d.

This book covers the whole subject of varicose veins and gravitational ulcer of the leg. Although many authorities do not agree with his actual operative technique, that is, retrograde injection from the saphenous opening with scarification of the intima, the author nevertheless has a sound approach and covers the subject including an historical survey.

Particularly good are the chapters on investigation of the patient and on supportive treatment for ulcer. The production is good and the illustrations are well above average.

More recent work is referred to briefly in an appendix.

TEXTBOOK OF BACTERIOLOGY, by C. H. Browning and T. J. Mackie (11th edition of Muir and Ritchie's "Manual"). Oxford University Press, 1949, pp. 907. Price 50s.

The aim of a "a critical survey of knowledge up-to-date, along with an account of the basic information yielded by laboratory and clinical investigations" was consistent with a "manual" of bacteriology in 1897; forty years later the work was becoming unhandy; and now a revision of format and so of title has become inevitable. The scope of the book has been most conspicuously enlarged in the subjects of chemotherapy and viruses, but every chapter has shared in an exhaustive reassessment of past experience and present theory. Nomenclature has wisely been left unchanged, but the still variable alternatives of "Bergey" are quoted. The bibliography is excellent.

The whole is a comprehensive review of the subject, far less formidable in the perusal than would be expected: a reference book and stimulus for the enquiring student, no less than a text-book for the bacteriologist.

A TEXTBOOK OF BACTERIOLOGY FOR DENTAL STUDENTS, by Arthur Bulleid and C. W. Shuttleworth. 3rd Edition. William Heinemann, 1949, pp. xvi + 247. One coloured plate. Price 25s.

There have been considerable additions to our knowledge since the last edition of this textbook in 1937 and these are reflected in this new edition which has been completely rewritten and enlarged. The authors claim that it has been to some large extent modelled on the Textbook of Bacteriology by Fairbrother, and medical students will recognise the similarity. It is divided into three parts: the first dealing with bacteria in general, technical methods and problems of infection, the second with individual organisms and the third with the work more particularly confronting dental bacteriologists.

The book is handsomely printed on excellent paper, but it is a sad commentary on present day prices that it should be necessary to charge 25s. for it.

ST. BARTHOLOMEW'S HOSPITAL JOURNAL

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EDITORIAL OR ESSAY?

We recently received enquiries as to when the JOURNAL editorials ceased being editorials and became essays on subjects often remote from medical and Hospital interest. To answer this, a brief review of the evolution of the Bart.'s editorial is necessary.

The JOURNAL was founded in 1893 in the face of considerable opposition, and under an extract from Horace were stated the objects of the new Editor: to put on permanent record clinical work done in the Hospital: to promote and extend the feeling of *esprit de corps* among students: to record clinical lectures which many students were unable to attend: to give publicity to anything original in the way of articles, verse and drawings, and to keep up the interest of old students in the doings of those at Hospital. They are objects as true now as then, though perhaps the idea of the JOURNAL raising a whirlwind of *esprit de corps* was a little ambitious.

In this first number was an account of an outbreak of cholera in Bart.'s, and also an article by "Our Comical Correspondent"—an office for which we should be grateful to receive applications.

These early editorials were purely a series of notes on Hospital occurrences and problems during the month, Rugger receiving considerable attention. Players were criticised for turning out for clubs other than the Hospital, and there appeared the title "Football as a moral agent." A patient at St. Thomas' Hospital had leapt out of bed and drunk a bottle of nitric acid intended for testing urines: canvassing on behalf of candidates for the post of Junior Ophthalmic Surgeon aroused intense enthusiasm—their election manifestos must have been interesting.

During the whole of 1897 the Editor declined to commit himself to paper—an attitude warmly commended by the present holder of that office. Later, in 1901, not only was there no editorial but there was no Editor, and a plaintive appeal for a new one was published. Since at that time the post was held for two years, not six months as now, it was a task not lightly undertaken.

In 1910 came notes on the death of Florence Nightingale and the election of Dr. —now Viscount—Addison to Parliament—had the B.B.C. then been in existence, he might well have been the prototype of our present Radio Doctor. The JOURNAL was reduced in size during the First World War, editorial efforts feeling the pinch also. From the end of the war until 1937 these brief notes continued, enlivened in 1924 and following years by the era of Bart.'s predominance in the Hospitals' Rugger Cup.

Then in 1937 the editorial as we know it was evolved, with single subjects varying from poor attendance at Abernethian Society meetings to the constantly recurring appeals for more material. The "tone" began to rise—an editorial on "Cynicism, Fatalism and Hedonism," with Plutarch getting more than a passing mention, came with "A Ciceronian Soliloquy on Hirudo the Cataline"!

In recent years two schools of thought have become apparent. On the one hand are mellifluous metaphysical meanderings in the realm of Higher Medicine; on the other, commentaries on the outstanding events of the day. The former school has predominated, and, except that it comes first, the editorial has been indistinguishable from the rest of the matter. The fact which causes the division is that 60 per cent. of the readers of

the JOURNAL—the paying readers incidentally —have left the Hospital and it is they who are the targets for the erudite editorial. The downtrodden proletarian 40 per cent. have been expected to gather their crumbs of information from the remainder of the JOURNAL.

Let is now be stated that the object of the present staff is to keep its feet as close as possible to terra firma, without prejudice to the " tone " of the JOURNAL. It has been supposed impossible to please both the 40 per cent. and the 60 per cent.—a topic of vital importance to the Bart.'s student having little interest for the Harley Street nabob. We shall nevertheless pursue the policy of the extreme centre.

A NEW ROBE FOR RAHERE

By REGINALD M. VICK, O.B.E.

An Address to the Abernethian Society on December 1, 1949

I SHOULD like to preface my address by thanking the President and Officers of this famous Society for the great honour that they have done me by asking me once more to address you. It is an honour which anyone would appreciate but, particularly, a Bart.'s man. On the first occasion that I addressed the Society nearly thirty years ago, I shared the evening with my old chief, Sir D'Arcy Power. At that meeting, he very appropriately dealt with the past and I talked somewhat too optimistically about the present and the future. Sir D'Arcy Power was one of the greatest medical historians of all time. But, probably, very few of you will know that he was one of the most rapid operators—he did his last gastro-jejunostomy at the age of 65, from the first cut to the last stitch in 17 minutes.

In 1919, I gave an address on " Malaria " —a curious subject for a surgeon to choose. But I had just come home from three years in the salubrious climate of Macedonia and what I did not know about the ravages of that dread disease in those days was not worth knowing. Just after the recent upheaval, I gave a talk about the " changing face of Bart.'s " with the idea of acquainting those students of Bart.'s who owing to the war had hardly ever been to their Alma Mater, with some of the history and traditions of the place.

I fear that some people may have formed a wrong impression from the title of my address that I am going to enter the lists in that controversy waged in the pages of the Bart.'s Journal by some very erudite gentlemen as to exactly what robe Rahere did wear. I would not dare to do that. I am speaking symbolically. It is certain that with all the rapid changes that are taking place, Rahere will have to change his robe and I am—with a certain amount of trepidation—taking this opportunity of appealing to you, the students of this generation and of generations to come to see to it that though he may change his robe, he will not lose his soul.

It is one of our gloomy habits in these strange days to keep on saying that everything is changing. And, of course, it is lamentably true. But we must all remember that whatever changes do take place, Bart.'s will go on for ever.

It is not my intention to deal with the far distant history of the Hospital which has been set forth in many a famous volume far better than I could ever hope to put it before you. But I would like, just for a moment, to carry you back to the foundation of the Hospital in 1123—far back in the mists of history. I quote from an oration given by the then Dean of Gloucester at the Inauguration of the Rahere Lodge in 1895.

" Nearly eight centuries ago, Rahere, a Knightly Minstrel of the Court of Henry Beauclerc was lying sick unto death. In a vision of the night, a man of unearthly beauty came and stood by his side and said, ' Rahere, I am Bartholomew, the Apostle of Jesus Christ. Build in my name a holy House of God, in Smithfield by London and lo, I will help thee.' The sickness passed away but the Minstrel of Beauclerc was not disobedient to the Heavenly vision. He devoted his life henceforth to the building of that stately Church we know so well, and close by the Church he placed the Hospital. When these were building, men say how at the hour of Evensong, a strange light from Heaven would play upon the yet unfinished walls and then would flash up into the sky and disappear.

"Ever since those days, the house of prayer and the house for God's suffering poor stood side by side. The Hospital was famous in mediaeval days for gifts of healing—as then, so now. In the stormy days of the Reformation, for a brief season the work of the Church and the Hospital was interrupted. Henry VIIIth restored the Hospital and endowed it. Since then the House of Rahere has grown with the great city in which it stands. A splendid record of noble work belongs to this great House in the relief of sorrow and suffering. It is well known as, perhaps, one of the greatest of our English Hospitals." Except that we might query the word " perhaps " in the last sentence we cannot but admire the stately periods in this, one of many descriptions of our Foundation.

And now, let us for a moment, pass across the centuries to the year of our Lord 1948, at a dinner given by the Treasurer of the Hospital to the medical and nursing staff near the appointed day (July 5th, 1948) the following sentences were printed on the menu

cards: "There are few of us who, at some time or another, have not closed with a sigh the last chapter of a well-worth book. We at Saint Bartholomew's Hospital are about to close the last chapter in the long and glorious history of the most ancient of voluntary Hospitals. That a second book will be written and that it too will be studded with famous names and tell, as in the past, of noble achievements in the service of humanity is poor consolation to those of us, who have cherished the voluntary spirit of mutual helpfulness, for which Bart.'s has been renowned since its Foundation."

I do not know who wrote those words but reading them over and over again helped me to get through an evening, which was a strange mixture of conviviality and depression and has comforted me since. By reciting to you these sentences about the far off days of our Foundation and about the very recent beginning of a new era in the life of our Hospital I hope I have given you some idea of the way my thoughts are running.

I want to tell you something about Bart.'s in the years that have gone—not of the days of long ago but of those years whose history has yet to be written. If I err on the side of personal reminiscence, you must forgive me. After all, to reminisce is one of the few privileges of advancing years. If I am at times rather light-hearted, I feel that after a hard day's work you will be glad to combine entertainment with instruction.

Early Days

When I became a dresser to Sir D'Arcy Power and Mr. Rawling I joined the Light Blue firm, to which, except for two short lapses, I was destined to belong all my time at Bart.'s. I used to ride on a chocolate horse bus from Waterloo to Bart.'s. In 1906, motor buses were unheard of and hansoms still jingled through the streets of London. The surgery—the outpatient department—was in the far corner of what is now known as the Lucas block. The entrance was direct from Smithfield—near the Martyrs' Memorial. I wonder how many of you know where that is and who the Martyrs were. The surgery was far too small. It was always packed with patients and smelt to high Heaven. Those people, once described as the "indignant poor" were very much in evidence.

The firms worked in boxes, which were bounded by nothing more substantial than heavy screens. Different coloured boards indicated which firm was working in which box. At the end of the morning the boxes were cleared for "minor ops." The East, the West and the South wings housed the cosy wards of the Hospital with their two large open fires. Even the system of communication by tubes and whistles was still used sometimes. You should be reminded of the light-hearted nurse, who poured milk down the tube into the listening ear of the subsequently infuriated Houseman below. History does not relate what disciplinary action was taken.

The Operating Theatres were four in number. Theatre A, which was also one of the main lecture theatres of the medical school. When an operation was to be done the floor was just cleared in its lower part and the operating table and other essentials for the operation brought in. Theatre B at the top of the East wing, then thought to be absolutely up-to-date. Theatres C and D, which were lean-tos, where the million-volt X-ray department now stands. They were temporary structures and functioned for 20 years. And Martha Theatre on the top of the then South wing, which belonged to the gynæcological department and where the Senior Surgeon operated.

The pathological department was housed in two very small laboratories near the Museum. The students fed either outside the Hospital at neighbouring cafés, one of whose staple diet was milk, appropriately called the "nipple," or in a strange room near the Smithfield gate, which was also used as the Inquest Room.

The medical school was very inadequately housed on the Hospital site. The Warden's house and the residential college ran along Little Britain. The Warden's house was 200 years old—very comfortable but rather bothered with mice, who nibbled the gas pipes. In those days, all the main transport of Smithfield market was horse-drawn and came down Little Britain, and the smell had to be smelt to be believed. So much for a brief description of some of the buildings of the Hospital in those days.

The Staff

In 1906, Sir Henry Butlin, the greatest living authority on Carcinoma of the tongue—then a very prevalent disease and since almost disappeared as the result of the more efficient treatment of syphilis—was still a Consulting Surgeon to the Hospital. He

used to ride to the Hospital on a black horse wearing dark grey jodhpurs and his horse had to be walked round and round the Square during his visits. Most of the staff drove to the Hospital in their smart horse carriages.

The Senior Physician was Sir Norman Moore, who wrote the famous two-tome history of Bart.'s. The Senior Surgeon was Mr. Harrison Cripps. It was always said that he started and owned the Marylebone Electricity Company, which supplied light to the Harley Street area and that he subsequently sold it for a quarter of a million. Both these members of the staff wore beards and, of course, frock coats. It is interesting to recall that, in those days, the physician-accoucheur did not operate within the abdomen. He only dealt with things lower down. The senior surgeon did all the operations for the gynæcological department And now they have a College of their own which they describe so verbosely.

Nursing Staff

Miss Isla Stuart was the Matron. The Sisters of those days were far more terrifying than the Sisters of today. Woe betide the young dresser who allowed one drop of water to fall on the wooden floor of the ward. The probationers did a great deal of domestic work. They wore rather pathetic dark grey uniforms and we all thought that they had a raw deal.

The students and nurses were not supposed to associate with one another, either inside or outside the Hospital. And yet the curious thing was they used to get engaged to one another. When this happened either the student or the nurse had to leave.

Dressers

There were six surgery dressers and six ward dressers to each firm. Medicine was not the crowded profession that it is today. It was not the custom to change from one firm to another. If you belonged to a firm—be its colour light blue, dark blue, green, yellow or pink—your loyalties were to that firm. You might, possibly, condescend to visit another firm on a teaching round, but it was always something of an adventure and one felt that one was being just a bit disloyal. I am not for a moment suggesting that this was a good idea, but it certainly stimulated the team spirit.

We worked very long hours in the surgery. The duties were from a Tuesday to a Friday and Friday to Tuesday and, during those times, one worked at very high pressure. The patients were so numerous that the dressers often had to take a great deal of responsibility, and many patients were seen only by a dresser. Now and again accidents nearly did happen. As on the famous occasion when a dresser was about to plunge a knife into an aneurysm pulsating through the sternum under the impression that it was some curious form of abscess.

The ward dressers did all the dressings in the wards, and in addition to that, the dresser of a case was responsible for all the instruments and ligatures in an operation. This was called doing "strings." Grand practice for the dresser but sometimes a headache for the surgeon.

The students of those days—apart from the fact that they were of course exclusively male—were much as they are today. A bit tougher, perhaps—I think that they played harder than you do but worked less. Discipline was good—there were a few cases of petty larceny—as then, so now. Chronics—even chronic alcoholics—were much more common than they are today and for obvious reasons.

I do not think that the story of the student who took 30 years to qualify and then was found to have been left £500 a year by an affectionate aunt until he became a doctor, is founded on fact, but it is told at every hospital. I can remember a Nigerian student who took more than 20 years. And, of course, there was the candidate who went up for the Primary F.R.C.S. until well past middle age, when the examining board decided to pass him so that he could go up for the Final before he died. Examiners as a class belonged to a later age group than they do today. One of them was removed from the Court because he would persist in going to sleep during the vivas. The impolite examiner was not unknown and one examiner was knocked down by a candidate. He was a very old man and the candidate was referred for two years.

When I became House Surgeon, I had a most distinguished lot of dressers, though I did not realise it at the time. Ogier Ward, now one of the best known exponents of the genito-urinary art. Major-General Barnsley, now Colonel Commandant of the R.A.M.C. and Bedford Russell, whom you all know. I am delighted to see them here tonight. I know that I enjoyed my time as a H.S. more than any other time in my professional career. For the first time, one felt the thrill of responsibility. Remember, in those days

there were none of those invaluable young men known as Chief Assistants, men ruffling it with their high qualifications and starting to carve their way to fame and fortune. The H.S. had to take the complete responsibility for fetching his chief down to do emergencies. The Senior Surgeon did all the day emergencies and the Assistant Surgeon all the night emergencies. This was a rigid rule, and for the very good reason that there was no one else to do them. I can still recall one's sigh of relief when gas shot out of the peritoneal cavity, when one had summoned the Chief out on a dark and stormy night to operate upon a perforated duodenal ulcer.

Many more acute abdominal cases came to the Hospital in those days than now. It was not uncommon to admit several patients with perforations, of children moribund with peritonitis spreading from an undiagnosed appendicitis. I can remember on more than one occasion operating all night long. This change has, of course, nothing to do with the Hospital itself. It is accounted for by the opening up of other Hospitals in and around London perfectly capable of dealing with surgical emergencies. But, from the point of view of your training, it is a great pity.

And now for a change, may I take you for a short time away from Bart.'s into the world of private practice. I think that going out and about doing surgery in all sorts of places was not only excellent training for a surgeon but very pleasant. The frequent association with Bart.'s men and doctors from other Hospitals was very interesting. In fact, it was then that one began to realise that there were other Hospitals. And it did one good to work in other theatres, where one was not protected by the assistance of skilled people.

And how different it all was from one's ordinary work in Hospital. To take one example. I once remember operating in a private house, a practice which has now almost entirely disappeared, thank Heaven. It was always something of a trial. I remember very vividly operating in a house in Sussex, when it took me and the local doctor and the anæsthetist two hours to get the room ready and then we had to wait another two hours for the husband of the patient, a doctor, and long since dead, to be summoned from the beyond so that he could be present at the operation. This is the one and only time that I have been assisted at an operation by someone who had already "crossed over."

Nursing Homes

One did a great deal of one's work in Nursing Homes in and around London and they were of varying efficiency. Some of them were excellent and some were quite terrible. I knew one Nursing Home where there was only one qualified nurse. Another, where by noon on Christmas Day I and my patient were the only sober people in the Home. One where the Theatre was so small and the Matron so large that she could not come in to the operations. In this Theatre, I recall an amusing incident, when the anæsthetic was being administered by a very cultured George's man, who wriggled about so much that, at last, I had to ask him what was the matter with him. He expressed his apologies but said that he was sitting on the radiator and it was most infernally hot.

I once went to a Nursing Home about 15 miles from London to operate upon a young man with a perforated duodenal ulcer of some hours standing. I found that the Matron who looked after the Theatre had gone out and not left her address, although she knew that there was an operation pending. The Sister left in charge was a hoary old lady, who admitted that she knew nothing whatever about the Theatre. The anæsthetic was appalling and the lighting was a pale blue, which made everybody look as if they were dead before we started. During the operation, the local doctor, who was assisting asked if he could withdraw as he felt ill. I was left entirely alone to sew up the most difficult perforation that I have ever dealt with and do a short circuit before I closed the abdomen. The patient survived and I operated on one of his grandchildren years afterwards. The doctor died some months later and, at the end of the operation, I felt almost dead myself.

It was all excellent practice but it took years off one's life. Fortunately for the surgeons of today this type of Nursing Home has gone, and private wings in Hospitals are taking their place most efficiently. It would be impossible, of course, to do many of the major operations of the present day in the surroundings I have described.

And now something of the surgery of the early days of this century. I think one can say, without fear of contradiction, that anæsthesia was almost in its infancy. In 1906, the Senior Anæsthetist to the Hospital was called the Chloroformist. He administered that dangerous drug with consummate skill. But what a dangerous drug it was. Patients usually went through a violent excitement stage during induction. Delayed chloroform poisoning claimed its victims. Surgeons used to be kept waiting for periods varying from half an hour to an hour between cases. And often when the patients came into the Theatre, they were not properly under. I can well remember a patient popping his finger into an incision for appendicectomy while it was being made. Then ether came into general use. The Theatres reeked of it and the surgeons went back to their stately homes emanating its fumes. Chest complications were very common indeed.

The full aseptic technique was just beginning to be understood. Charles Barrett Lockwood was one of its most skilled exponents. The surgeons of those days had much shorter tempers than they have today and with very good reason. Lockwood used to have his whole Theatre staff in tears by the end of the afternoon—with the possible exception of his House Surgeon. He was known when he was presented with an amputation knife, an instrument of which he strongly disapproved, to throw it across the Theatre so that it stuck in the door.

One or two more things and I have finished with the past. The Residential College, while I was Warden, was closed temporarily in 1923, and is only now about to be reopened.

Consultations

Medical and surgical consultations at Bart.'s were famed throughout the world. At surgical consultations it was the custom for most of the surgeons to turn up, including the consulting staff, and express their opinions on difficult cases. Sir Henry Butlin was still coming to consultations when I was a student. He was a great believer in drastic surgery in malignant disease and would criticise very trenchantly any surgeon who was shy of extensive operative procedures.

It was worth going to consultations, if only to hear the wonderful clinical opinions of men like Sir Anthony Bowlby. The Senior Surgeon used to speak first. I never thought that this was a good idea as it left the diffident junior surgeons so little to say. In medical consultations, the junior physician spoke first. It was interesting and amusing as well as instructive for the students to see and hear all the surgeons and to realise, often to their surprise, that very often they did not agree. And of course there was always the hope of a row. And we were not always disappointed. Consultations have long since ceased to be held at the Hospital. It is interesting to know that an attempt has been made at Guy's to start consultations there, and by a Bart.'s man on the staff.

Very soon after 1906, great changes began to take place. The surgery and outpatient department moved to its present building. The pathological block was opened and many people thought that it was too big. The X-ray department opened where it now is—and it has never been big enough. Bart.'s was one of the earliest Hospitals to realise the importance of X-rays and our department was one of the very first to open under Dr. Hugh Walsham.

Later the present Hospital began to take shape. The new surgical block and then the new medical block became the very up-to-date and magnificent buildings that they are today. In their planning, Sir Holburt Waring and Dr. George Graham played a very important part. The Medical College moved to Charterhouse Square and was incontinently and very largely destroyed by fire and bombs before it had been paid for. In its inception and construction, Sir Girling Ball was very largely instrumental but, most unfortunately, he did not live to see the College paid for in 1946, and gradually being rebuilt.

In 1921, the College received its Royal Charter and became an incorporated part of the very young University of London. In April, 1946, an event of major importance took place as on that day women students first entered the precincts of this once monastic institution. One felt that, on that day, some of the long dead members of the staff of Bart.'s must have turned in their graves or rustled their ashes. But they need not have worried. This revolution took place very quietly and the women were received with all the kindness and courtesy characteristic of our Medical College.

In the First World War, I new nothing of Bart.'s as I was away on active service all the time. But we did run a very efficient General Hospital at Wandsworth, and the East wing of the Hospital was given up to soldiers. The staff went rather uncomfortably into uniform. It is recorded that, on one occasion, Dr. Calvert left home in uniform and wearing his top hat, and got quite a long way to Bart.'s before someone

pointed out to him his unusual appearance.

In the recent Armageddon the Mother Hospital, considerably reduced in size, continued under the most appalling difficulties to carry on its functions. In fact, I believe that the only occasion that Bart.'s could not admit patients was when one of the last rockets fell in Farringdon Market—and that was because the casualties were so heavy that the Hospital was full.

The Bart.'s staff took over Hill End and part of Friern Hospital. The one a widely spread out institution near Hill End, and the other an incredible building in New Southgate. In those two places, Bart.'s men worked and lived and tried with difficulty to carry on the great traditions of our Alma Mater. At Friern Hospital, at one time better known as Colney Hatch, the staff housemen and some of the students lived in. And believe me or not, we were quite reasonably happy. Most certainly some very good surgery was done. Our patients were ordinary civilians, air raid casualties, soldiers of all races, and in the dim and dark wards behind us dwelt more than two thousand of the mentally deranged. We almost forgot that they were there.

I often wondered how the mental patients would behave if a bomb dropped on the Hospital. And when that did happen, we found that they behaved rather better than normal people.

And now to deal with some of the advances that have taken place. Anæsthesia has advanced by leaps and bounds. Now you just lie luxuriously on your stretcher in the anæsthetic room, feel the gentle prick of a needle in your arm and you know no more. Curare produces a relaxation hitherto unknown, but, as happens with all new discoveries and advances, there are martyrs. We have all heard of X-ray martyrs—their misfortunes were ventilated in the Press. But what about the martyrs to radium and deep X-rays with their overdoses and their terrible burns, now, thank Heaven, a thing of the past. What about the patients who were given Avertin in its early days and had to have artificial respiration for hours and sometimes never breathed again. Of course, anæsthesia still has its risks today. One has only to see a real pukka Pentothal spasm to realise that.

With the advance of anæsthesia, surgery advanced step by step. So now we have almost perfect anæsthesia, perfect asepsis and, with the help of penicillin and the sulphonamides to combat infection in operations like abdomino-perincal resection of the rectum and cerebral operations, there is nothing that a modern surgeon dare not tackle. Think of leukotomy, for instance. I know of one gravely deranged patient, who had a leukotomy performed and later escaped from the Hospital which guarded him, stole a car and was found five days later living at a luxury hotel near Guildford. And no one had noticed any difference between him and any of the other guests.

One can say with truth that surgery has advanced more in the last fifty years than in any period in history and there would appear to be no limits to what the skill of surgeons may deal with in the future. How fortunate indeed are the young surgeons of the present day. But we must not forget the grand old men of the past, who showed us how to do major surgery under the most appalling difficulties. They were pioneers indeed.

I have given you some sort of picture of the past, indicated those changes which have brought us to the present and hinted at what may happen in the future. I have told you something of what Bart.'s was like nearly fifty years ago and of the changes, which have made it the magnificent Hospital it is today. I have mentioned a few of the famous Bart.'s men of the past. And it would be natural to ask "Haven't we got any famous men today?" Of course we have, but it would be rather invidious to give you a list of them. (At this point, the speaker gave the names of some six present day Bart.'s men, who could justly be described as famous—each name was received with applause.) Modesty forbids me from elaborating this list. I would rather remind you of all those other members of the Bart.'s staff, who are doing magnificent work in the relief of suffering, or research into the origin and treatment of disease. Or, even carrying out the less dramatic functions of teaching Bart.'s students to be good doctors. There are plenty of them and there is nothing the matter with the spirit of the old place.

We have always been accused of being reactionary—horrid word—but, to my mind, Bart.'s is the most go-ahead Hospital I know. What we do is just to wait a little to see whether a treatment is any good or not. And when it turns out to be a winner, we back it more quickly than anyone else.

I expect that you will all be glad to hear that I have nearly finished. And, in the phrase of which I have been so fond in all

my teaching life, "If you remember nothing else, do please remember what I am going to say to you now."

I would now tell you what I consider the outstanding difference between Bart.'s and any other institution that I know. It is that wonderful spirit of cheerful helpfulness and earnest co-operation which I have never known lacking during all the years that I have worked here. I have never (and I use this dangerous word without the slightest hesitation) known a patient unkindly treated at Bart.'s I have always found that patients who have been to Bart.'s never want to go to any other Hospital. I have even known as I have already told you, the spirit of Bart.'s carried into another Hospital.

Please do not think that I am telling the tale or that I am unduly biased. You will be able to test the truth of what I say in the years to come. Wherever Bart.'s men get together, they help each other—sometimes rather to the annoyance of the alumni of other schools. And that wonderful spirit exists today unchanged as it has throughout the ages. We have now passed into another era—into a future that many people dread and that no one looks forward to without some qualms. Far be it from me to digress into politics, that strange and twisted game, where even the best people lose their heads and talk without thinking. There is, however, unfortunately no doubt that the relation between doctor and patient has subtly changed since the National Health Service started. That change has not yet reached Bart.'s and pray God it never will.

And now I want to leave a final thought in your minds. I want to appeal to the present generation of Bart.'s men and women and to generations yet unborn; in spite of the National Health Service, in spite of the new relationship between doctor and patient, in spite of the soul destroying flood of rules and regulations, forms and certificates, in fact, in spite of everything—to keep at full strength that vital living spirit, which shows patience in all difficulties, gentle consideration even under exasperation, and radiates kindness and comfort to all around you. Thus and thus only will the glorious traditions of this beloved Hospital be preserved. Thus and thus only, will old Rahere don his New Robe with a glad heart and carry on the good work throughout the centuries to come.

PLUS CA CHANGE . . .

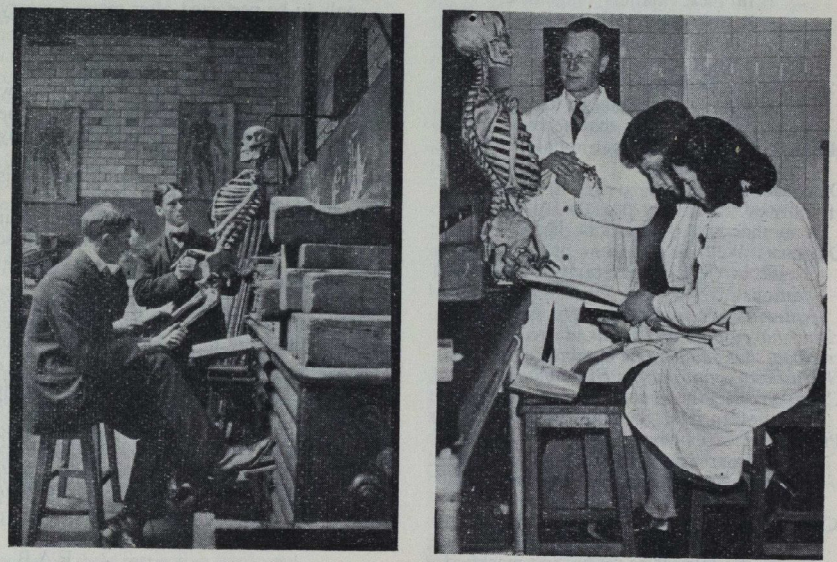


Photo: H. Charles, Bart.'s Photographic Society.

IMPROMPTU IN EXTREMIS

(A dramatic episode in 13 acts)

ACT I

(The scene is the Accidents Box at an indeterminate hour—such windows as exist being impermeable to light. The bareness of the white tiles is relieved only by their occasional absence. Up-stage L. are posters reading, "A Shadow on Health; trap the germs by using your handkerchief," and "Mist. Expect. The great Rejuvenator—refuse imitations. No responsibilty can be accepted in actions brought by the L.P.T.B." Nothing can be heard save the soft murmur of generalised incompetence. A houseman is seated at a desk [centre] and the Minor Chorus is lined up down R.)

A dresser enters R. He wears the ceremonial uniform of the Household Cavalry which is partially concealed by a short white coat.

HOUSEMAN: Next time you send your demob. suit to the cleaners why not take a week in bed?

DRESSER: There is an Eastern Professor of Egyptology without. I think he has (*in a whisper*) a euphemism of the aorta.

CHORUS: If we seem a bit agnostic
In these matters diagnostic,
It isn't due to kindly tact
But to the very awkward fact
That if we told the patient all
He would certainly recall,
What we told him he had got
When he finds that he has not.

HOUSEMAN: Ah! The great imitator! What are his symptoms?

DRESSER: None.

HOUSEMAN: Let me put the question in another way. Why is he here?

DRESSER: Well, he thinks he ought to have some in view of the gravity of his condition.

(Enter the Professor, R. He is a small, clean-shaven man and is naked except for an overcoat, hat, muffler and a pair of corduroys. He rushes to confront the Houseman.)

CHORUS: See, he's unsteady on his fæte.
Can it be the spirochæte?

PROFESSOR: 10^{10} effusive and humble greetings, your exigency. I can conceive no greater ecstasy than to eviscerate myself in your presence.

CHORUS: This man is plainly Oriental,
His language very ornamental.
Its intricacies we haven't mastered.
He's certainly a queer old person.

PROFESSOR: (*Withdrawing an articulated shooting-stick from the interstices of his beard and perching himself on it*). I would in fact grovel were it not for the streptococcal contaminants of your floor-dust.

CHORUS: Haemo-lysis, haemo-lysis,
Stick 'em on blood-agar slysis.

HOUSEMAN: (*Thrusting a bell-piece into the patient's bosom*). Ah! Bronchophony.

DRESSER: Er—quite.

HOUSEMAN: From the Latin of course—
Broncho—"I bellow"—phony, "down a tin tube."

(A very fresh bespectacled probationer enters R. carrying four mattresses and having a variety of clinical impedimenta hanging about her person. She is enamoured of the Houseman, whom she seeks to impress with quotations and original verse acceptable to an Oxford graduate.)

HOUSEMAN: Busy tonight, ducks?

NURSE: But I keep going.
"Will-power is the decision of character, the outcome of mental stability, the very quintessence of all the virtues and only to be perfected after many a weary struggle and many a bitter experience" (*apologetically*) er—as it were (*exit*).

PROFESSOR: Now where's that from?

HOUSEMAN: Cheltenham L.C. (*rising*), now Sir, if you will kindly assume the lithotomy position I think I can put my finger on the trouble.

CHORUS: Look how near his knees his nosis
This will clinch the diagnosis.

HOUSEMAN: Come, Sir, if you persist in your attitude I shall have no other course open to me than to call in a surgical colleague.

(The professor leaps to his feet alarmed and extracts a small silver hunting trumpet hurriedly from his shopping bag. He blows a piercing note. Immediately there is a trampling of many feet off-stage and a rumble of distant cannon: the stained glass French windows [centre] burst open and a chorus of twenty tabetics enters. They form up three deep and are about to chant but the lights are suddenly extinguished and the curtain falls to the sound of stumbling bodies.)

END OF ACT I

E.A.B.

PRINCIPLES IN THE TREATMENT OF ATHLETIC INJURIES

By R. SALISBURY WOODS

IT is a great honour to be invited to contribute to the St. Bartholomew's Hospital Journal. In justification, I can only plead the inadequately extenuating circumstance that, at the beginning of World War I, when St. George's Hospital lacked a complete XV, I enjoyed the privilege of playing in a number of matches for Bart.'s!

This article is based on experience derived in the main from the undergraduate section of a practice in the University town of Cambridge, extending over 25 years, and comprising many thousands of cases. In such an able-bodied and highly competitive (sporting) community, the features essential to the treatment of any injury are rapid restoration of function, and fitness to withstand fresh stresses.

Moreover, sport is so exacting in its demand for swift return to the arena that it is of interest first to see how the injured fared about 80 years ago. Consulting Erichsen (1), a standard authority in 1869, we are advised to treat a badly sprained ankle with "rest and perfect immobility . . . leeches . . . , and when subsided . . . supported with . . . starched bandage or leather splints. Later kneaded until . . . strength and mobility are restored. This very commonly does not occur in sprains of the knee and ankle for *many weeks*"!

Of Colles' Fracture (treated in flexion, and bandaged to a piece of padded wood), Erichsen wrote: "It will be *at least three months* before stiffness of the hand and wrist are so far diminished, even by the use of friction and douches, for the patient to use his hand"!

Fortunately modern progress is such that, about from 1930 onwards, Lorenz Böhler, of Vienna, after reduction under local anæsthesia, treated these cases by fixation in a *non-padded* plaster splint, and between flexion and extension, followed by immediate full *active* function of the digits, and the elbow and shoulder joints. He stated in 1933 that "a seamstress, aged 56, resumed her work *three days* after reduction of a Colles' fracture with extensive displacement . . . Writing is also possible after a few days."

It is proposed to discuss types of injury in evolutionary order of the improvement effected in their respective treatment.

Shortening Sick Wastage

Initially inspired by the early work of Frank Romer, and after many years of constant experience at home, and on tours abroad amongst every type of university sportsman and woman student engaged in athletics, rugger, soccer, hockey, rowing, cricket, tennis, boxing, ice-hockey, hunting, steeplechasing, etc., *one principle in treatment* has been found to apply to almost every injury, except those of the head, viz. (in so far as it may be possible) *to support the injured part and to encourage immediate natural use.* To this may be added a warning against premature rubbing, massage, or manipulation of sprains and severe bruises, which can only defeat the processes of healing, result in further extravasation, tension and pain, and lead to lengthened incapacity.

Function v. Rest and Physiotherapy

Practising in Cambridge, and faced with the necessity of restoring the injured athlete (often a probable or actual "Blue" or "International") as soon as possible to an important series of contests, it was found necessary as long ago as 1923 to break away from traditional doctrine, a 30-year-old legacy of Hilton's teaching, which created a bias in favour of rest for all painful injuries. (This promotes the formation of articular and peri-articular adhesions, and of inelastic fibrous tissue in damaged muscles. Incidentally, it has made the fortune of the bonesetter.)

Hospitals, in their overburdened teaching curriculum, have had little time to spend on ordinary sprains, strains and bruises, and old methods have been perpetuated in text-books. Treatment of fractures, though ranking far higher in importance, also lagged in progress until Böhler's work establshed the advantages of early function.

Instead, therefore, of following the orthodox "masterly inactivity" (made palatable by massage as evidence of something attempted), a sprained ankle or a "pooped" thigh was immediately supported with adhesive strapping, and the patient made to bear weight and to walk at once. This was facilitated by a wealth of athletic material, urgently anxious to co-operate. Rugger players were thereby enabled to train in a few days and to play in a week—a revolu-

tionary advance on the teaching and results current at that time (1923). (The writer himself, after severely spraining his ankle while still a competing athlete, was able very successfully to make trial of this method for expediting his own return to the arena.) Romer extended the idea to treatment of fractures of the clavicle and other injuries.

Others have investigated the pathology and have urged the use of physiotherapy and active exercises in athletic injuries, whereby adhesions may be prevented and the empirical bonesetter deprived of his prey.

Injuries of Joints

I. Sprain (*mainly extra-articular*).—Taking the sprained ankle as the commonest example, the benefits of immediate firm support and natural function are seen to be various and complementary:

(*a*) *Local.*—(i) Damaged ligaments are relieved of stress.

(ii) Extra-articular hæmorrhage is limited by immediate firm pressure. There is therefore less to be absorbed.

(iii) Increasingly active movements, by alternately pressing and relaxing under the strapping, furnish natural (and, incidentally, *free*) massage, which enormously hastens reduction of swelling.

(iv) Where tendon sheaths are involved in the damage, early movement prevents adhesions.

(v) Disuse-atrophy of muscles acting upon the injured joint is prevented, the blood supply and tone being maintained.

(vi) Even where there is a synovial effusion these severe cases benefit most by this treatment.

(vii) Massage is largely eliminated, natural function taking its place from the time of receipt of the injury; it is, however, of advantage in hastening the late stages of recovery (loosening-up, etc.).

(*b*) *General.*—(i) The whole body is enabled to keep fit and more or less in training, instead of having to start from zero after a period of couch and crutches.

(ii) Morale is maintained by a consciousness of activity and of rapid progress, an important factor in the highly strung athlete or player.

II. Sprain (*with Synovial Effusion*).—Although strapping injured ankles has gradually become recognised treatment, it is probably true to say that a peculiar reverence is still usually accorded to injuries of the knee-joint with synovial effusion. Even today the simple sprain (or "water-on-the-knee") of so many games players is liable to be rested, swathed in Scotts' ointment, bandaged and, of course, "massaged," with or without "electricity." But, as far back as 1932, necessity emboldened a trial of adequate support and immediate gentle ambulatory treatment in a 'Varsity wing three-quarter. This man would otherwise have been too late for a Trial which led to his "Blue" 14 days later, and no recurrence. After that he played several seasons for Scotland with no relapse. The technique then devised for strapping the knee-joint has been uniformly successful with all subsequent cases in shortening sick-wastage from this very common cause of being "crocked."

The detail has been published, but is rather outside the scope of this paper. It is sufficient to show that the injured knee-joint, for many years regarded as sacrosanct, may be brought into line with the ambulatory ankle. In this case, however, early massage and Faradism are indicated for the reflex atony of the quadriceps femoris m., always associated with severe injuries of the knee-joint, and generally leading to muscular atrophy, particularly of the vastus medialis muscle.

III. Hæmarthrosis.—Even when there has been a copious hæmorrhage into the knee-joint, as may follow a kick from a horse or from a violent twist, the same principles apply. Under rigidly sterile precautions, the effusion is drained off after 24 hours by a stab puncture, followed by suture. Firm strapping pressure is applied over a dressing, followed by walking in two to four days. Recurrent oozing is then unlikely, the case is treated as for synovial effusion, and recovery is similarly speeded up.

IV. Traumatic Dislocations.—A dislocation inevitably injures all the component soft structures of a joint severely, and considerable effusion of blood is always present, infiltrating the whole area involved.

Reduction is, of course, the first consideration, after which, current teaching enjoins rest and passive movements after about a week. Thus we read in Romanis and Mitchener: "Once effusion is subsiding, passive, leading to active, movements may be commenced, being controlled by the production of any pain or spasm. This will be an average from five to ten days . . . Lastly, adhesions may form which will require breaking down . . ."

It is the purpose of this paper to show that active movements may be instituted at once, and that adhesions should never be *allowed* to form.

In dislocations of the elbow-joint particular care was exercised, and it was recommended (Rose and Carless) that "the joint should be kept flexed at a right-angle for at least two to three weeks lest traumatic myositis should supervene"; and, again (Romanis and Mitchener) "Passive movements may be started after five days, and active movements after fourteen. The sling is discarded in three weeks, but no heavy work for six." This customary sentence would in effect debar a player from Rugger for the rest of a given season!

Now this problem of expediency versus orthodoxy, in the elbow-joint, presented itself in the case of a patient who, playing for Cambridge as a scrum-half, had every hope of gaining his "Blue" in his very last year, and who was willing to take any risk for his last chance:—

"O.B.," November 12, 1934. Complete backward dislocation of right elbow. Tackled with a Ju-jitsu lock. Morphine, gr. $\frac{1}{4}$, statim. Reduction under "G. and O." half an hour later. One and three-quarter inch swelling appeared in both the arm and forearm.

After-treatment: In bed suffering from shock and great pain 48 hours. Then left nursing home and began walking exercise and active movements of right wrist and shoulder joints. Massage instituted twice daily for swelling, and *active* movements encouraged as far as possible, but *no passive* movements allowed. Radiant heat and Faradism also given to the muscles.

Fourth day: Patient was tried with handling a rugger ball, and made to use it, swinging both arms in unison, thereby regaining the tactile skill of his fingers, and using the whole limb, including the elbow-joint. This was gradually increased.

Seventh day: Running and passing with the other players on the University ground. All swelling rapidly disappeared under this régime; he was put on exercises such as "press-ups," handing-off against a solid wall, and he played squash twice daily.

Eighteenth day: He engaged in Rugger practice, tackling without ill-effects.

Nineteenth day: Played for the University, and sufficiently well to be awarded his Blue, as completely reliable.

Bearing in mind the precision demanded of a keystone scrum-half in handling and passing out the ball, I do not know of any player whose courage and persistence have been rewarded in so short a time by successful trial in a rough-and-tumble game. He suffered *no* permanent disability.

It is seen, therefore, that the general principles already advocated in this paper are also applicable to dislocations, except that in this instance recurrence in an elbow-joint being impossible during treatment, the factor of very firm support does not arise where stability is already ensured.

Injuries of Muscles

A typical example is the "pooped" thigh, commonly caused by a violent blow, usually from the momentum of a boot, knee or elbow, at "Rugger" or "Soccer," and equally well-known to American footballers as "Charley Horse." It results from localised crushing and transverse snapping of quadriceps muscle fibres struck in a state of contraction. Profuse capillary oozing may follow, with much swelling, tension, pain and disability.

If these cases are made to lie up, hæmorrhage will proceed until checked by the increasing pressure it causes, and the above sequelæ will all be intensified. I once saw a steeplechase rider who had been kept lying-up for *six weeks*, by which time the quadriceps muscle presented much scar tissue and brawniness, while the knee-joint was limited to 30° flexion by (extra-articular) adhesions!

The best treatment is firm support of the whole of the thigh at once by strips of interlocking strapping, starting from below. The patient is then encouraged to walk gently, and increasingly to use the injured muscle. As in sprained ankle, the principle of this method is to prevent further hæmorrhage, to hasten absorption by natural massage, to prevent disuse-atrophy and to enable the whole body to remain fit.

Fracture of Bones

While the above advantages thus became available for athletes with injuries of joints and muscles, a fracture was still a fracture, i.e. a cause of prolonged disability, until sound bony union was complete, muscular wasting cured, and skilled co-ordination re-established.

In major fractures of the lower limb weight-bearing was not attempted until after eight to twelve weeks; the atrophied muscles required at least a further three months to regain their full power, and neighbouring joints were often impaired for life. Working

for various insurance companies, I still frequently see such end-results which are entirely avoidable.

The erroneous principles responsible for this lamentable state of affairs were mainly: (1) Incomplete reduction of the fragments; (2) failure to retain them in accurate alignment until union was sound, i.e. inadequate support; (3) abolition of active natural function for a period of weeks or months; (4) *passive* movements, causing mobility of fractured surfaces.

Böhler's Methods — mainly Non-operative

In the last 15 years, the genius of Lorenz Böhler, of Vienna, has revolutionised the whole treatment of fractures. For instance, those with a broken leg may now walk without crutches on the very day of the injury, and a seamstress with a severe Colles' fracture of the wrist may resume her work in three days. (v.s.)

The cardinal features are very important:

(1) Local or regional anæsthesia for nearly all cases (simpler, lasts longer, better relaxation, single-handed reduction).

(2) Immediate and accurate reduction of the displaced bone ends under X-ray control.

(3) Absolute fixation of the replaced fragments until union has occurred, usually by a non-padded plaster-of-paris splint ("Cellona" P.O.P. bandages, in England).

(4) Minimal immobilisation of limb while controlling fracture, allowing maximal freedom and use.

(5) Immediate functional restoration of movements, including (in the lower limb) weight-bearing where possible, while the necessary fixation is maintained.

(6) No open operation, even in closed fractures, except where there is separation of the fragments, e.g. of the olecranon or patella, or in some fractures involving joints in which the joint surface is twisted, e.g. upper and lower ends of humerus, in upper end of radius, in sub-capital intra-articular fractures of neck of the femur (and, it may be added, in cleft fractures of the upper end of the tibia).

Naturally, technical skill and experience are necessary in fitting plaster casts, especially where there is much swelling, and two stages may be necessary.

Ordinary Splints now Obsolete

These really basic requirements, as preached by Böhler, of accurate reduction, fixation and function, were not satisfied by most of the splints whose employment was a standard routine in hospitals until recent years.

Nowadays fractures of the tibia and fibula, fairly common in those who play rugger, soccer, or hockey, should be accurately reduced under local anæsthesia (*by screw traction if necessary*), and the position accurately maintained by a simple, non-padded plaster-of-paris splint of "Cellona" bandages, which sets immediately, fitted with a "Duralumin" walking stirrup. In simple, and particularly transverse, fractures, walking may be commenced at once, and the patient should be able to walk up to a mile within the first week. Even in oblique and multiple fractures, where telescoping would formerly have been inevitable, ambulatory treatment is, nevertheless, rendered possible by transfixion-fixation of the fractured tibia above and below the fractures, by means of stout transverse steel pins, whose projecting ends are embedded in the irregular cylinder of plaster.

The saving in stiff joints, hospitalisation and expense is nothing short of dramatic, and the massage of natural function replaces the dreary and expensive daily ritual of months of "physiotherapy," when patients languished on beds, couches and crutches. If reduction has been satisfactory, there will be full range of movement two weeks after removal of the plaster. *The only massage the patients need is the massage of function.*

An actual case may help to illustrate the foregoing abstract principles:—

G.H.B., a Caius undergraduate, on *October* 23, 1936, was playing hockey when, tripped by a stick, he fell, with severely injured left leg. Half an hour later, distortion, tremendous swelling over lower half of tibia, ankle inverted, obvious crepitation, X-ray showed marked displacement. Under local anæsthesia fractures reduced and limb securely "put up" in "Cellona" cast from sole to mid-thigh. Patient spent a comfortable night.

October 24: Radiography showed multiple fractures, and though position obviously greatly improved, some angulation of tibia laterally. Even fibula, though intact, was bent outwards. Therefore decided to effect further improvement and minimise sick wastage by operation remote from the fractures.

October 25: Plaster cast removed under anæsthesia, leg cleaned up and sterilised. Kirschner wire drilled through os calcis and screwed taut in Max Page stirrup. Connected to screw-traction apparatus with spring balance, knee being flexed over padded bar in Böhler extension frame. Forty-five pound pull exerted, and fragments manipulated into accurate alignment. Tension then maintained while two stout transfixion pins were bored through tibia, one just above ankle-joint, the other through tuberosity of tibia, and left with their ends projecting. The limb then encased in mid-thigh "Cellona" cast by usual technique, leaving toes free, embedding ends of pins, and surrounding the Kirschner wire in a rigid, irregular cylinder. Wire then withdrawn, releasing traction, and punctures sealed. Projecting spikes blunted with plaster knobs and walking stirrup applied. Radiography showed position perfect.

October 26: Patient very well, toes warm, no œdema. Twenty hours after operation encouraged to walk with sticks about 10 yards and back again. No discomfort (and no crutches).

October 27 *to* 30: Walked whenever he felt like it, and has walked up and down stairs without help.

October 31: Six days after operation, discharged and returned to rooms in College.

November 12: Has dined nightly in Hall, attended lectures, and walked about the town. Has had no pain. *Never used a crutch.* Skiagrams show perfect alignment of tibia.

This man reported from W. Africa in 1946, and it was impossible to distinguish the fractured leg from its fellow.

Another graphic early instance may be mentioned of a young woman, Mrs. M., *æt.* 28, weighing 12 stone, who broke her leg while skating in 1936.

Six spiral oblique fragments middle third of tibia, one piercing skin; fibula also fractured in upper third. Similar principles in treatment applied; walked without crutches in two days; left nursing home in six.

Cast and pins are usually removed in about eight weeks, and an ordinary non-padded cast applied for a further fortnight, during which patients can easily walk two or three miles a day. If an "Elastoplast" puttee is then applied from the toes to the lower thigh there is practically none of the prolonged œdema which was formerly so troublesome in fractured limbs, necessitating further weeks of massage.

Throughout treatment the patient is made to do all manner of general "physical jerks," rowing exercises, etc., to contract the quadriceps femoris m. and to move the toes.

It may fairly be claimed that Böhler's principles save such cases about eight to ten weeks off their legs, "an incalculable degree of disuse-atrophy of the muscles, prolonged sick wastage and tedious training back to proper strength, and a staggering bill for months of massage which . . . function obviates almost entirely."

Indeed, it would be impossible to achieve a perfect result in badly comminuted cases, with so little interference with the patient's routine, except by using Böhler's technique of screw-traction and absolute retention of the accurately reduced fragments. An athlete can return to his games with no disability, after the shortest possible absence.

Ununited Fractures

Formerly ascribed to constitutional and other causes, these are generally found to be due to *faulty position* of the fragments with interposition of soft parts. Ununited fracture, or pseudarthrosis, should not occur if sound general principles are applied.

Concussion of the Brain

This injury, as sustained by those taking part in sport, is mainly encountered in Rugby football, hunting, steeplechasing, boxing and motor-cycling.

Concussion is *probably the most neglected of all sports injuries*, for while, as has been demonstrated, joints, muscles and bones are unduly rested, the damaged brain is not rested nearly long enough.

As soon as a man regains consciousness at rugger or boxing, for instance, he is encouraged by his supporters to play on or to box on, and often functions fairly successfully as a pure automaton for the rest of the game or bout.

In my experience, however, it is of the greatest importance not only that such men should not be allowed to return to the field or ring, but that they should be kept quietly in bed until the pulse, blood pressure (charted) and nervous reflexes become stabilised at the normal again. This always outlasts the symptoms of headache, etc., generally taking at least a week, and possibly three weeks. Concentration upon work for examinations is best avoided for about four to five weeks, and in severe cases for three months.

If this caution is not observed (as anyone with experience of head injuries knows), these cases may suffer later on from intract-

able headaches, impaired memory, and other after-effects; and at a late stage it is very difficult to do much for them.

Conclusion

Admittedly, major fracture work demands skill and special experience but, in the main, the theme of this necessarily condensed article is *widely applicable* (to bones, joints and muscles) and *easy of adoption*.

If then, these general principles of adequate support and immediate natural function (however modified) are accepted in treatment, whether of sprained joints, of torn muscles, or of fractured bones, it is quite certain that a great deal of unnecessary pain, sick wastage and lasting disability will be eliminated from our practice; and many an athlete's jeopardised ambitions will be still realised by rapid recovery, in spite of untimely injuries.

No athlete of today should be submitted to delayed or obsolete treatment, nor to the pain and the waste of health, time, enjoyment and money which it entails.

THE STUDENTS' UNION ANNUAL BALL

FOR the second year in succession the Dorchester Hotel was the scene of the Students' Union Annual Ball, and although the night of January 20 was very cold it did not deter Bart.'s men and their partners from making the occasion a gay and festive one.

Dancing commenced at 8.30 p.m., to the music of Bill Savill and his band and the ballroom soon filled as the 500 guests gradually assembled.

Many of the ladies had chosen the currently fashionable strapless evening gowns—a choice entirely justified by the charming results obtained.

Professor O. J. E. Cave, who had swapped his usual white coat with the turned-up collar, for white tie and tails, came with his wife and daughter, Veronica, and Dr. Jamieson, with other members of the Pre-Clinical Staff, formed another merry party.

Most of the Hospital Departments were well represented. Professor Garrod was present with his wife and two sons, and several other members of the Pathology staff were there. Dr. Strauss, President of the Students' Union, presided genially over a large and hilarious party. Mr. Badenoch had joined forces for the evening with Dr. J. G. Williams, Dr. Kemp-Harper and Dr. Levitt.

Members of the Dental Dept. were also present—Mr. Hankey and Mr. Schofield acquitting themselves creditably on the dance floor.

Dr. Cates, in great form, was one of a large party composed mainly of Chief Assistants.

Students from both sides turned up in quite large numbers, Mr. B. Hick being "father" to a large party of "Clinicals."

Excellent refreshments were provided and the occasional high note of a champagne cork popping became more frequent as the evening wore on—an indication of the rise in alcohol consumption and consequently the spirits of the guests.

At midnight Mr. Bryan Bailey introduced the cabaret, which was produced by Mr. Jack Rodney. It was unfortunate that some of the items were not really in keeping with the merry mood of the audience, but Mr. Patrick Corgill, who had travelled from Windsor, where he is appearing at the Theatre Royal, certainly seemed to capture the spirit of the party and greatly amused Mr. Tubbs whose table was near the dance floor. Others taking part in the cabaret were Miss Angela Oswald, Miss Pamela Marmont (appearing in "Oklahoma"), Miss Mary Loraine, Miss Mary Kimber and Mr. Jack Rodney (who are appearing in "On Monday Next.")

The cabaret over, dancing was resumed with a succession of quick-steps and waltzes, not forgetting the South American influence of rumbas and sambas. Mr. Capp's "execution" of the samba was a joy to behold.

The "Harry Lime Theme" was one which recurred more than once during the evening (coloured lights playing on the dancers during some of the numbers lent an air of enchantment and unreality to the scene).

At 2 a.m. the Last Waltz was played, and after "The King" the ballroom slowly emptied.

It was a most enjoyable evening and our thanks are due to Mr. John Pittman (Chairman of the Ball), Mr. Peter Mathews, who worked hard as Senior Secretary of the Ball Committee, and the other members of the Committee who helped to make the occasion such a great success.

H. B. (Miss)

PITFALLS IN GASTRO-ENTEROLOGICAL DIAGNOSIS

By INDIRA

I AM a general practitioner. Mrs. Brown called in the other morning. She is one of those women about whom you notice nothing except the feathers that sometimes sprout out of her hats. She has the sort of face that makes you write "psychosomatic case" on the blotting paper in front of you—a face psychologists like to ask a lot of questions of, and draw out the sub-conscious under light anæsthesia. I recall the last time she came to me complaining of a stomach-ache. I diagnosed gastritis and gave her a bottle of Methylene Blue, which she brought back two days later telling me that it put her "off colour" and that it did her stomach no good. How ignorant patients can be! It was not unexpected that the drug gave her a bluish tint.

I reassured her only to find that the pain had now spread to her back. A part of my silent cortical area is reserved for problems in differential diagnosis. I tried hard to work out the causes of backache. It is difficult to remember. My theory is that repeated abuse of the cortex leads to the formation of adhesions and one could not very well try and manipulate the head to try and free the brain within, without offending psychosurgeons whose job it really is. A bit of fibrositis perhaps . . . indigestion . . . or just reading in bed? Intrathoracic new growths and Carcinoma of the Pancreas suggested themselves to me but I hastily dismissed these surgical thoughts as being unworthy of a good physician. I prescribed her an orthopædic corset, which doesn't look too bad but must be a bit stiff to wear, and asked her to come back in a couple of months.

She returned the other morning and said she thought she had a spanner in her works. I sent her immediately to a psychiatrist. Although he tried different techniques to draw out her subconscious the only intelligible comment she made was "I think I have a spanner in my works." He tried electrical convulsions therapy and put her through a course of insulin therapy and took five consecutive electro-encephalograms. This told him nothing further and so he referred her to the psychosurgeons. They warned her that prefrontal leucotomy was still in the experimental stage and told her not to expect too much, and then went on to sever all her cortical tracts. I saw her again five weeks later. She came up to my desk and held an open ink bottle upside down. The patterns which the ink made on the carpet captured my interest and we both watched them for a while. Suddenly I was horrified to find my pin-stripe trousers stained but I smiled encouragingly and asked her (she is my panel patient you see) how she felt after her operation. She replied that she thought she had a spanner in her works.

I knew a house sugeon at my old hospital . . . a very self-complacent sort of chap who thought he could diagnose anything (he got a house job and I didn't). I thought I would put an end to his pride by sending Mrs. Brown to him. After rescuing some paper which had not been completely submerged in ink, I wrote as follows:

Dear Jim,

Re Mrs. Brown.

This lady complains of a "spanner in her works." She has no cortical lesions because she has had everything psychiatrists and psychosurgeons could offer. I fear that their efforts have not been eminently successful, and I would, therefore, be grateful to you if you could admit her for complete investigation.

I hope you are well on the way to becoming a senior surgeon on the firm. The number of forms that I have to fill in in general practice is giving me writer's cramp.

Yours, etc.,

Indira

Mrs. Brown gave my letter to the house surgeon, who happened to be on duty at the casualty department. He put it in his pocket, beckoned a dresser, instructed him to take a history and then went over to have some coffee. The dresser was only just getting used to holding a surgical appointment. What's more important is the fact that he had been spending all his savings on making long journeys to a far-away hospital pursuing a course of lecture-demonstrations on psychological medicine. He didn't go there merely to get signed up, but was genuinely interested. Not having seen my letter he asked her a few questions and put down "cortical lesion." The H.S. came

back, pulled out the letter and read it and said to himself "Ah, a case from my old friend in general practice! Thinks she will fix me by sending a difficult case. I will have her admitted right away for investigations." Mrs. Brown was admitted into a large ward and they did her ESR, MCD, MCH, MCV, CSU, CI, Bleeding time, Marrow biopsy, Differential count, Icterus Index, Diastase index, Prothrombin time, Lumbar puncture, and a Uric acid estimation, and the nursing staff faithfully entered the temperature, fluid intake and output on her chart and did all the other things they do in large wards of well-known hospitals. The H.S. went through all this in the evening and got into a panic saying to himself, "Heavens! Whatever will my chief tell me if I don't get an ECG taken and a total cholesterol done, and the sputum examined." So he drew out a pile of pathological investigation cards and filled them hurriedly. There was a phone call put through to the ward that evening but the things the pathologist said are better left unmentioned. To make sure he would become a chief surgeon one day and ride to the hospital in a big shining car the H.S. did a hurried examination of the fundi and a proctoscopy. "No abdominal examination," he said to himself, smiling confidently, "is complete without a P.R.!"

The chief was very busy the next morning. He spoke to some new dressers of the importance of taking a detailed case history and making a thorough physical examination, and left because he had an important lecture to give. However, he did manage to snatch a hurried look at the vast pile of reports which had gathered towards the distal end of Mrs. Brown's bed and expressed regret that no X-rays nor Barium meals had been done. So the next few days were spent in getting Mrs. Brown to swallow Barium but all the radiologist could find was a diffuse shadow in the subcostal region and could make nothing of it. So he told the technician to try and keep her head out of the way of the X-ray plates. This didn't help the surgeons one way or the other and so they decided to perform an exploratory laparotomy.

The lights shone in the theatre, the house surgeon used his elbows to turn off the taps and said a few things to impress the dressers. The chief said he would have his sandwiches later and the theatre sister blushed. Soon after this he was making a paramedian incision. The dresser beamed with delight because he had been allowed to hold some retractors, and the H.S. felt that they were going to hit on something important and was trying to work out a strategem to persuade his chief to let him write up the case in the literature. He drew his head out of the way of his chief's headmirror, hit the back of his head against the theatre light, had slight concussion and leaned heavily on the "pro." She blushed. The chief did an appendicectomy, followed it up with a brilliant cholecystectomy and then removed several bits of viscera which he felt might be precancerous. While manipulating the stomach with a gloved hand he felt something. He looked at the anæsthetist. The anæsthetist looked at his "Times" crossword. The chief made some scathing remarks about anæsthetists in general. This annoyed the anæsthetist who pumped the sphygmomanometer vigorously and took a peep under the cloth to find, much to his embarrassment, Mrs. Brown giggling stupidly. He turned on a few more taps and increased the depth of anæsthesia. The chief asked for dabs and the theatre sister passed him a nasal speculum. "No, not that," he said and put some clamps on the stomach and laid the gastric mucosa wide open. Lo and behold, there lay a spanner! The dresser blamed himself for not enquiring more fully into her social history. He knew discreet enquiries into her husband's profession (he was a mechanic) would have cast light on the diagnosis. The H.S. rebuked himself for not suggesting an œsophagoscopy and knew his chances of becoming a big surgeon with a large car were not so good. The chief said that it was an unusual case and he would communicate it to the Royal College right away.

Everything turned out happily. Mrs. Brown had a long chat with the Lady Almoner who asked her "How many flights up do you live and how many steps do you have to climb?" Mrs. Brown said "Five flights and eighty-five steps." The Almoner smiled and said, "If you live for eighty-five years that would make a step for each year," but hastily withdrew her remark because she wasn't too sure of her arithmetic. Only radiotherapists have a good head for figures because they have to work out complicated X-ray dosages, while she had nothing to do except to provide occupational therapy for

patients and make sure they had enough money to get back home.

Mrs. Brown does not complain any more of having a spanner in her works. When I told him, the psychiatrist was so embarrassed that he changed the subject immediately. He doesn't take on any more cases which I refer to him.

I hope you will publish these facts of the case before the chief gets a chance to put them into the Journal of the Royal College of Surgeons. I can't very well send you the spanner but you will find it in the pathological museum. There is a Sarcophagus there too, but that has nothing to do with it.

CAMBRIDGE BART'S GRADUATES DINNER

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

Dear Sir,

The recently held Cambridge Bart.'s Graduates' dinner was an outstanding success.

But many of us fear, however, that it might be the last dinner of this character that will ever be held, for inevitably the whole atmosphere of the dinner and speeches will change if we have women, in particular non-medical women, guests. The speeches, as is usual, were excellent, topical, reminiscent of the great figures of the past, and full of essentially medical humour which would be boring and even somewhat distasteful to a feminine audience; and in respect to their feelings, the speakers in future will have to modify their wit to suit a mixed company.

This club has held its dinners for many years and is comparable with old school, college or regimental dinners, where friends who have enjoyed the advantage of a similar background can meet again. Surely women would not enjoy themselves and would be out of place at any of these dinners?

It was obvious that opinion at the dinner was very much against this innovation, and I think the very small majority at the ballot should not be enough to influence the Secretaries and Elder Brethren to take this drastic decision.

Yours faithfully,
WARREN A. BARNES.

PREPARATION OF MATERIAL FOR THE PRESS

The preparation of papers for the Press can be very complicated, but much time and trouble is saved if one studies the instructions to contributors printed in most scientific periodicals. These instructions differ considerably, and articles are liable to summary rejection if not prepared in accordance with the rules of the journal to which contributions are submitted. Spacing, the arrangement of references, and the abbreviation of titles of periodicals commonly cause trouble, and to assist students and staff in preparing material for the Press, the following are provided in both the Main and Charterhouse libraries:

A folder containing (a) "Instructions to Contributors," removed from periodicals taken in the Library (b) *A List of Abbreviations of the Titles of Biological Journals*, from the "World List of Scientific Periodicals," and (c) a sheet bearing the conventional signs commonly used when correcting proofs, to prevent misunderstandings with the printer.

This material should prove useful to authors, and the Librarian will be glad to assist further if required.

J. L. T.

WESSEX RAHERE CLUB

The Wessex Rahere Club will be holding a Spring Dinner at the County Hall, Taunton, at 7.30 p.m. for 8 p.m. on Saturday, April 29. Mr. J. B. Hume is attending as guest of honour. The Hon. Secretary of the Club is Mr. A. Daunt Bateman, 3, The Circus, Bath.

WARD ROUND AND OUTPATIENT TIMES

We trust that the lists of ward rounds and of times for attendance in the Out-Patients' Departments will be accurate at time of publication. When the present state of flux between Hill End and Bart.'s has resolved itself we hope to publish an amended list of ward rounds. Meanwhile we should be grateful for notification of any changes.

SPORT

RUGBY CLUB

HOSPITALS' CUP : FIRST ROUND

February 14 v. King's College Hospital. Richmond.

Result : Won 11 (1 goal 1 penalty 1 try)—9 (2 penalties 1 try).

King's attacked strongly and kept the Hospital well within their own half for most of the first ten minutes—during this time a number of penalties were awarded against the Hospital, and from one of these King's opened the scoring. Soon after this one of the King's centres slipped his opposite number and scored far out—the goal points were not added. Bart.'s now really started to get going and from a line out on the King's line Mears went over—the try was not converted. The Hospital kept up the pressure, and from a scrum on the King's line John scored, the goal points being added by Moyes with a really fine kick. Play was fairly even from now on, but just before half-time a penalty was awarded against the Hospital—the kick was successful. Half-time: Bart.'s 8 pts., King's 9 pts.

In the second half Bart.'s had the advantage territorially for a large proportion of the time, but there was little cohesion and they just did not seem to be able to finish off any movement. Fortunately for the Hospital, about ten minutes from the end, one of the King's forwards was off-side from a set scrum just outside his own "25," and Moyes kicked a perfect goal to give Bart.'s a narrow, but deserved, victory.

HOSPITALS' CUP : SECOND ROUND

February 28 v. London Hospital. Richmond.

Result : Lost 21—nil.

London Hospital beat St. Bart.'s in the second round of the cup by 3 goals and 2 tries (21 points) to nil. Bart.'s had more of the ball than the score would suggest, thanks to the grand work of the forwards, who were without Mears for the greater part of the match and Havard for the last ten minutes. The London backs showed superior speed and thrust in attack and defied the gallant efforts of the Bart.'s backs to hold them.

The game opened with vigorous open play from both sides, and London looked dangerous when one of their backs kicked ahead, but Stephens was the first to touch down. Gradually the London backs gained the upper hand and had scored three tries (all converted) by half-time.

After the interval the Bart.'s forwards took command, and, with frequent forward rushes, kept the ball in the London half, despite accurate touch-finding by the London stand-off half, Phillips. Dick, Havard and Stephens were well to the fore, and came close to scoring. The backs were also holding their own at this stage, but spoiled one very promising movement with a forward pass.

Gradually London returned to the attack, and were pressing strongly when Havard and Moyes collided. The former was bleeding too profusely to be allowed to continue and the latter carried on with a broken tooth.

London pressed home their advantage and scored two tries in the last five minutes, despite the efforts of the indefatigable Third.

The Bart.'s team was well beaten, but is to be congratulated on its grand spirit and "honest endeavour."

February 18, v. Old Leysians (home).

Result : Won 23—3.

February 25, v. O. Cranleighans.

Result : Lost 6—8.

HOCKEY CLUB

2nd Round Inter-Hospital Cup v. St. George's Hospital.

February 18. Won 3—0.

This match, played at Chislehurst, proved to be far more enjoyable for all concerned than is usual in a Cup match. St. George's opened well, and during the opening ten minutes harassed the Bart.'s defence considerably, gaining three short corners in quick succession. The home side, however, soon recovered, and their forwards began to show thrust and initiative, and it was no surprise when Dossetor opened the scoring from a short corner. The lead was increased shortly afterwards by Batterham, who, following up his own shot, forced the ball over the line, and, just before half-time, Godden received a long pass down the right wing, and went through on his own to give Bart.'s a three-goal lead.

After the interval Bart.'s forwards, well supplied with cross passes from their halves, continued to keep up their pressure, but fine goalkeeping by Jory of St. George's prevented them from increasing the lead. The St. George's forwards, though fast and clever, tended to hold the ball too long, thus playing into the hands of a safe defence.

Our thanks are due to J. W. Mellows for his help in umpiring, and to those spectators who gave us their support.

Other Results, 1st XI.

February 11, away, v. U.S. Portsmouth. Lost 2—3.
February 18, home, v. Middlesex Hospital.
Won 3—1.
February 19, away, v. Lansbury. Lost 2—4.
February 25, away, v. South Saxons. Lost 0—7.

CRICKET CLUB

Officers for the 1950 season :—President, Mr. J. E. A. O'Connell; Vice-Presidents, Dr. Geoffrey Bourne, Dr. N. C. Oswald, Prof. Sir James Paterson Ross, Prof. A. Wormall : Captain. J. A. Clappen ; Vice-Captain, M. Braimbridge ; Secretary, H. B. Ross ; Treasurer, J. P. Waterhouse.

Watch the notice-boards during April for announcements about net practice, trial matches, etc.

GOLF CLUB

"Evening News" Tournament

The qualifying round for the "Evening News" Week-end Golfers' Tournament was held at Sundridge Park on February 22. There were 11 entries. The two players returning the best nett scores were D. Rushton 80—7=73, and M. Braimbridge 89—14=75, who thereby qualify for the match play stages.

CHESS CLUB

A Chess Club was formed last November with Dr. N. C. Oswald as its President. The club has entered the University of London Chess Club Leagues, Division II, and has won its first two matches (v. Goldsmith's College 5—1 and v. King's College II 4—2).

We expect to meet with much stronger opposition in our next two matches.

The club meets every Thursday at 5 o'clock in the small Abernethian Room at Charterhouse Square, except when there is an Abernethian Society meeting. All interested will be very welcome.

TIMES FOR ATTENDANCE IN THE OUT PATIENTS' AND SPECIAL DEPARTMENTS

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
*MEDICAL OUT-PATIENTS New Cases : 9 a.m.	Dr K. O. Black 9 a.m. Dr. R. Bodley Scott 10 a.m.	Dr. E. F. Scowen 9 a.m. Dr. G. Hayward 10 a.m.	Dr. Neville Oswald 9 a.m. Dr. W. E. Gibb 10 a.m.	Dr. R. Bodley Scott 9 a.m. Dr. K. O. Black 10 a.m.	Dr. G. Hayward 9 a.m. Dr. E. F. Scowen 10 a.m.	Dr. W. E. Gibb 9 a.m. Dr. Neville Oswald 10 a.m.
*SURGICAL OUT-PATIENTS New Cases : 9 a.m.	Mr. Tuckwell 9 a.m.	Surg. Prof. Unit 9 a.m.	Mr. A. H. Hunt 9 a.m.	Mr. D. F. Ellison Nash 9 a.m	Mr. Badenoch 9 a.m.	Prof. Sir J. Paterson Ross (Surg. Prof. Unit) 9 a.m.
*DISEASES OF WOMEN ANTE-NATAL	Mr. John Beattie 9 a.m. (Gynae & Ante-Natal)	Mr. J. Howkins 9 a.m (Ante-Natal) Infertility Clinic 1.30 p.m.	Post-Natal Clinic 9 a.m. Dr. Wilfred Shaw Gynaecology Mr. J. Howkins 12.30 p. m.	Mr. Donald Fraser 12.30 p.m. (Ante-Natal)	Discharge Clinic 9 a.m.	Mr. Donald Fraser 9 a.m. (Gynae)
¶*ORTHOPAEDIC DEPARTMENT	Mr. H. J. Burrows 9.30 a.m. (Fracture Clinic) Mr. H. J. Burrows 1 p.m.			Mr. S. L. Higgs Mr. W. D. Coltart 1 p.m	Mr. W. D. Coltart 9 a.m.(Fracture Clinic)	
*EAR NOSE & THROAT DEPARTMENT	Mr. J. W. Cope 9 a.m.	Mr. F. C. W. Capps Mr. J. C. Hogg 9.30 a.m. Mr. N. A. Jory 1 p.m.		Mr. J. C. Hogg 9 a.m.	Mr. N. Jory Mr. J. W. Cope 9.30 a.m. Mr. F. C. W. Capps 1 p.m	
*OPHTHALMIC DEPT.	Mr. Seymour Philps 9 a.m. Refraction Clinic 1.30 p.m.	Mr. H. B. Stallard 1.15 p.m.		Mr. Seymour Philps 9 a.m.	Refraction Clinic 10 a.m. Mr. H. B. Stallard 1.15 p.m.	
*SKIN DEPARTMENT		Dr. Brian Russel 9 a.m.	Dr. R. M. B. MacKenna 9 a.m.		Dr. R. M. B. MacKenna 9 a.m.	
*DISEASES OF CHILDREN	Dr. Charles Harris Dr. A. W. Franklin 1 p.m. (Babies under 1)	Dr. Charles Harris 1 p.m. (Children to 12)			Dr. A. W. Franklin 1.30 p.m. (Children 1 to 12)	
DENTAL DEPARTMENT	Mr. G. A. Cowan 9.30 a.m.	Mr. G. T. Hankey 9.30 a.m.	Mr. J. D. Cranbrook 9.30 a.m.	Mr. G. A. Cowan 9.30 a.m.	Mr. G. T. Hankey 9.30 a.m.	Mr. J. D. Cambrook 9.30 a.m.
TUBERCULOSIS DISPENSARY		12.30 - 3.30 p.m. A.P. Clinic 6 - 7.0 p.m.			3 p.m. (By appointment only)	
MATERNITY & CHILD WELFARE (City Residents only)	2 - 4 p.m.		2 - 4 p.m.			
VENEREAL DEPARTMENT	Men 9 a.m. - 6 p.m. Clinic 11 a.m.-1.45 p.m	Men 9 a.m. - 6 p.m. Women 9.30 a.m. - 12.30 p.m.	Men 9 a.m. - 6 p.m.		Men 9 a.m. - 6 p.m. Clinic (Women) 11 a.m. - 1.45 p.m.	Men and Women 9 a.m. - 12 noon
*PLASTIC SURGERY			Sir A. H. McIndoe 2 p.m. (1st & 3rd Wednesdays)			
*PSYCHOLOGICAL DEPT.					Dr. E. B. Strauss 2 p.m.	
*NEUROLOGICAL DEPT.		Dr. J. Aldren Turner 1.30 p.m.			Dr. J. Aldren Turner 1.30 p.m.	
*NEUROLOGICAL SURGICAL DEPT.		Mr. J. O'Connell 1.30 p.m.				
*SPECIAL & FOLLOW-UP CLINICS		Speech Therapist 1 p.m. Mr. Basil Hume 3.30 p.m.	Dr. E. R. Cullinan 1 p.m (Gastroenterological) Mr. John P. Hosford 1 p.m.	Dr. Geoffrey Bourne 10 a.m. (Cardiological) Dr. A. W. Spence 5.15 p.m. (Endocrine) Dr. R. Bodley Scott 2 p.m. (Anaemia)	Prof. R. V. Christie 10.30 a.m. Dr. E. F. Scowen 10.30 a.m. Mr. Rupert Corbett 10.30 a.m. Dr. K. O. Black 1.30 p.m. Surg. Prof. Unit 1.30 p.m.	Mr. O. S. Tubbs 10.30 a.m.
RADIOTHERAPY DEPT.	1.30 p.m.	1.45 p.m.		1.45 p.m.		

* By appointment only with appointments department.
† These hours are intended only for patients who cannot attend at mid-day.
¶ There is a daily Fracture Clinic at 9.30 a.m. attended by the Chief Assistant to the Orthopaedic Department.

WARD ROUNDS

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Prof. R. V. CHRISTIE		2.0 p.m. Bart.'s			2.0 p.m. Bart.'s	
Dr. G. BOURNE		2.0 p.m. Bart.'s			2.0 p.m. Bart.'s	
Dr. E. R. CULLINAN	2.0 p.m. Bart.'s			2.0 p.m. Bart.'s		
Dr. A. W. SPENCE		10.30 a.m. Hill End			10.30 a.m. Hill End	
Dr. E. F. SCOWEN		2.0 p.m. Bart.'s		2.0 p.m. Bart.'s		
Prof. Sir J. PATERSON ROSS	1.30 p.m. Bart.'s				1.30 p.m. Bart.'s	
Mr. J. B. HUME		1.45 p.m. Bart.'s		1.45 p.m. Bart.'s		
Mr. E. S. CORBETT		10.30 a.m. Bart.'s			1.30 p.m. Bart.'s	
Mr. J. F. HOSFORD	10.0 a.m. Bart.'s					
Mr. C. NAUNTON MORGAN				1.30 p.m. Hill End		
Dr. C. F. HARRIS	10.30 a.m. Bart.'s			10.30 a.m. Bart.'s		
Dr. A. W. FRANKLIN		10.30 a.m. Bart.'s				
Dr. J. W. ALDREN TURNER				10 a.m. Hill End		
Dr. W. SHAW	2.0 p.m. Bart.'s			10.0 a.m. Bart.'s		
Mr. J. BEATTIE			10.0 a.m. Bart.'s			
Mr. D. B. FRASER				10.0 a.m. Bart.'s	2.0 p.m. Bart.'s	
Mr. J. HOWKINS						
Mr. S. L. HIGGS	10.0 a.m. Hill End (Alt. Mondays)				10.0 a.m. Hill End	
Mr. O. S. TUBBS	3.0 p.m. Hill End (Alt. Mondays)					
Mr. J. O'CONNELL						
Dr. R. BODLEY SCOTT ..	2.0 p.m. Bart.'s				1.30 p.m. Bart.'s	
Dr. K. O. BLACK				2.0 p.m. Hill End		
Dr. N. C. OSWALD					2.0 p.m. Bart.'s	
Dr. W. E. GIBB				2.0 p.m. Bart.'s		
Dr. G. W. HAYWARD					10.15 a.m. Bart.'s	
Mr. A. H. HUNT	10.30 a.m. Bart.'s					
Mr. A. W. BADENOCH				1.30 p.m. Bart.'s		
Mr. E. G. TUCKWELL					2.0 p.m. Hill End	
Mr. D. F. ELLISON NASH ..				1.30 p.m. Bart.'s		
Assistant Director of Surgical Professorial Unit						

BOOK REVIEWS

BUCHANAN'S MANUAL OF ANATOMY. Edited by F. Wood Jones. 8th Edition. Baillière, Tindall & Cox, pp. viii + 1516, plates 48, figs. 847. Price 45s.

This new edition of **Buchanan** is essentially a re-issue of the previous (1946) edition: some necessary minor emendations have been effected in the text and in certain of the figures, but the pagination, format and illustrations remain unchanged. The policy of omitting colour from all illustrations has been maintained and proves, on the whole, to be distinctly advantageous. The superb radiographic plates merit a special word of praise.

This work remains the only satisfactory British textbook of anatomy arranged on a regional basis and its disadvantages are those inseparable from such an arrangement, principally the inevitable absence of a sufficiently informative introductory account of the several body-tissues and systems. Thus bone, as a tissue, receives such a traditional treatment, but not so muscle and nerve: nor is any general scheme of, for example, the important lymphatic system, capable of presentation. On the other hand, these inherent defects are offset by the copious and well-planned index, permitting rapid reference to any given structure or region, whilst the full and delightfully "easy" text provides an authoritative account of topographical anatomy unrivalled for lucidity and accuracy. So far as any anatomical treatise may inculcate a knowledge and an appreciation of human structure, this work does: the student who accepts its guidance to supplement his own work in dissecting room and laboratory will do so with profit and pleasure. Particularly valuable is the retained chapter—an innovation in the previous edition—on human growth and development. Not easily will the student glean elsewhere the information here assembled regarding the anatomical characteristics of infancy, childhood, puberty and adolescence.

Perhaps in a subsequent edition it will be deemed advisable to give details of the facial and vertebral musculature in smaller print and compass, likewise the traditional cabalistic divisions of the cerebellum, admitted by the text to be devoid of either physiological or morphological value. A useful addendum to the section on the central nervous system would be a diagram of the brain-stem nuclei and their principal connexions as seen in three-dimensional lateral view. The figure (Fig. 526) of the rectum and anal canal stands in need of correction, both pictorially and as regards labelling, whilst in Fig. 676 a more accurate demarcation seems desirable between the respective cutaneous territories of the ophthalmic and maxillary nerves. These however are very minor matters, in no way detracting from the general excellence of the work, which for accuracy and quality of descriptive style is its own recommendation.

A.J.E.C.

A TEXT-BOOK OF HISTOLOGY FOR MEDICAL STUDENTS, by Evelyn E. Hewer. Heinemann. 1949. 5th Edition, pp. viii + 432, 418 illus. Price 25s.

It is perhaps too much to expect a preclinical student to carry a book such as Gray's Anatomy to each Histology class. Yet minute structure is adequately described and illustrated therein. If 25s. can be spared, however, Dr. Hewer's book will provide the solution to this problem which is one of transport. Apart from this, it is undoubtedly the most satisfactory text-book for those who are later to study also the abnormal. The illustrations are lavish: the photomicrographs of acknowledged excellence and the drawings object lessons in how detail can be rapidly, simply and yet effectively represented. Does all this tend to "spoil" the student? The answer will depend on how one believes that histology should be taught and learnt, and what its place is in the present-day whirlwind before the 2nd M.B.

This new edition has been thoroughly (not "roughly" as misprinted in the preface) revised and yet more illustrations added; human material replacing some that was previously from brutes. This is ideal, but it is not always easy to obtain fresh, normal human material, and even that from the more edible brutes is nowadays guarded by restrictions that are somewhat irritating, considering the very small quantities required*.

Finally, may it be suggested that a picture of blood x385 means little to a student who is taught that the red cells average 7.2 in diameter? Nearly all books continue to give only magnifications against the illustrations. All can presumably read scale maps, and if Dr. Hewer, in her next edition, were to break with tradition and insert a simple scale with each picture, she would give the student a clearer and much more exact understanding of the size of microscopic struc-

tures. Furthermore, it would not then matter what size the original pictures were reproduced.
* **Lancet** (1949, ii. 1149.)

J. M. P.

OPHTHALMIC NURSING, by P. Garland. Faber & Faber. 1950. pp. 158, illus. 119, plates 24. Price 12s. 6d.

Miss Garland has a clear and simple style, and the information that she gives is just what the nurse wants to know. The photographs and diagrams are good.

We cannot agree that the front of the nurse's wrist is better than a thermometer for testing the temperature of a lotion (p.44). It should not be true in these days that the patient feels a "sudden sharp pain" at iridectomy (p.136).

GRAY'S ANATOMY, edited Johnstone and Willis. 13th Edition. Longmans Green & Co., 1949, pp. xix+1,533. Price 84s.

It would be presumptuous to attempt to review the new edition of "Gray's Anatomy" and thus a note on the changes from previous editions is all that is required.

The whole work has been carefully revised and new matter added, but in spite of this the length has been reduced by sixty pages. This has been made possible by avoiding repetition, and has entailed the transference of matter on Surface Anatomy from its own section to that dealing with the part in question. This seems a praiseworthy innovation which should assist in the correlation between cadaveric and living anatomy.

The new illustrations are up to the high standard of those in past editions.

STEDMAN'S MEDICAL DICTIONARY, edited by N. B. Taylor. 17th Edition. Ballière, Tindall & Cox, 1950, pp. xliv+1,361. Price 64s.

This American dictionary is, in spite of its spelling, of value to the British doctor. In the introduction is a list, for the benefit of those who lack the blessings of a classical education, of common Latin and Greek root words and their meanings. A useful table. In the text the derivation of words is stressed in detail. The dictionary itself is in very small, though clear, type, with the described words standing out in bold lettering—a striking method of presentation but worrying to the eye. Short biographical notes of famous men are useful inclusions.

BENNETT'S MATERIA MEDICA AND PHARMACY FOR MEDICAL STUDENTS, revised by H. G. Rolfe. 5th Edition. H. K. Lewis, 1950, pp. xxviii+276. Price 16s.

The points of value and the faults of this book are better understood when it is realised that both the author and reviser are chemists. Consequently the rider "For Medical Students" is somewhat of a euphemism. Three-quarters of the text attached to each drug refers to formula, source and physical characteristics, and merely a quarter to the matters of real moment to the student, uses and dosage. The size of the book, however, is convenient, there is a useful table of substances in order of increasing dosages, and a good chapter on incompatibility. This is a book of more value to the pharmaceutical than the medical student.

ST. BARTHOLOMEW'S HOSPITAL JOURNAL

Vol. LIV MAY, 1950 No. 5

WE ARE NOT FORGOTTEN

THERE is little doubt that at the moment we have the worst lecture accommodation in London. The present Clinical lecture theatre is inadequate in size, convenience and comfort, and is a stock source of jibes for visiting speakers. The newly designed Practical Surgery lecture room, in which the gentle Glaswegian touch may be felt, is too small to make any difference to the seating accommodation as a whole.

It is therefore a welcome sight on reaching the Hospital in the morning to see that something at last is being done about our bombed site. The old Medical lecture theatre, wrecked during the war, has been demolished, and there has been considerable conjecture, as to what will fill its place. To understand what part this demolition plays in the scheme of reconstruction for the Hospital, it is necessary to know the main lines on which the Hospital Planning Committee is working. It is emphasised that the following plans are merely plans and are in no sense certain to be carried out, as the approval of the Ministry has not been obtained for all the proposed changes.

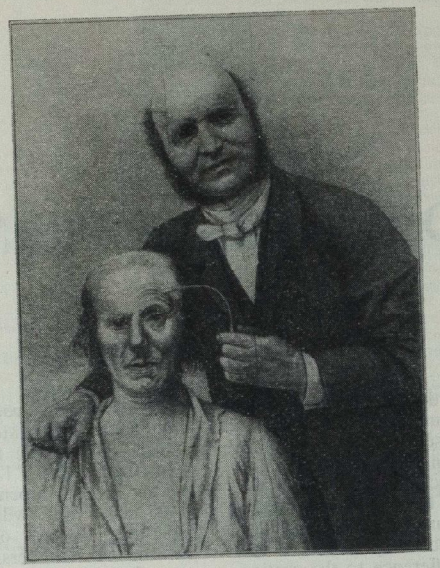
The present Clinical lecture theatre is to be "rehabilitated." Exactly what this means has been difficult to determine—plush tip-up seats and Hughes selling ice-creams are perhaps a little Utopian. At the least let us hope that the incredibly uncomfortable ledge on which we are expected to take notes will be removed and replaced by a more efficient substitute.

On the bombed area now being cleared will be built a temporary building to house the almoners. This housing is necessary, as the most urgent need is the reconversion of the West Wing into wards, an operation which will deprive the almoners of a roof over their heads. The Wing will be similar to the recently opened East Wing with its 100 beds, but will probably have two operating theatres on the top floor. The swarms of scrubbers, secretaries and so on now housed there, will require alternative accommodation, and this will be found by building huts along the Little Britain wall. The present scrubbers' room in M.O.P.s'—that hot-bed of gossip—will be again used as Medical and psychiatric consulting rooms.

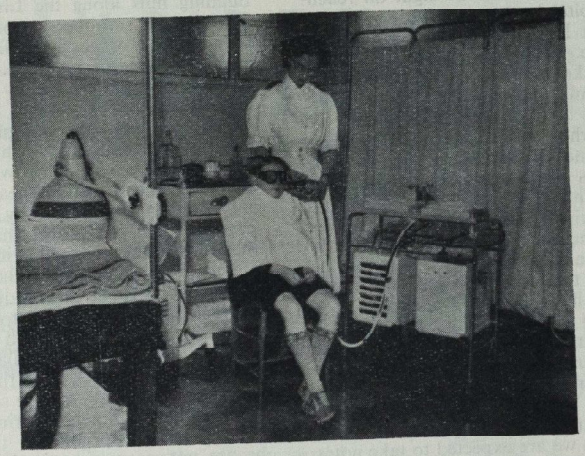
These changes are mainly palliative. The long-term project, which, however, it is hoped will soon pass the planning stage, is the Little Britain site. This site. East of Little Britain, will have wards containing 200 beds and a lecture theatre seating 300, connected to the Hospital by an underground passage. Let us hope that this lecture theatre will be planned with an eye to a modicum of comfort for the student: that there will be room to brandish a note-book without having it shot on to the floor by a neighbour leaning back: and that the central scotoma due to the epidiascope will be reduced in size. At least there will be no running commentary on the seamier sides of Hospital life from neighbouring rooms.

So we are not forgotten. The powers that be are not, as we imagined, suffering from hyper-pensive encephalopathy, but have produced excellent plans to meet the present problems—plans which we hope will meet with the approval of the Ministry and will be acted upon in the shortest possible time.

PLUS CA CHANGE . . .



Duchenne stimulating the Frontalis Muscle.



RESIGNATION OF JOURNAL MANAGER

We regret to announce the resignation of the Manager of the Journal, Mr. C. P. Wendell-Smith, who has ably filled this post for the last two years. Mr. E. A. Boyse has been elected to fill this vacancy.

THE PLACE OF OPTIMISM IN THE TREATMENT OF HEART DISEASE

By GEOFFREY BOURNE

An Address to the Abernethian Society

THE subject of my talk this evening is, I feel, not inappropriate, because I have tried to deal in it with a general aspect of the treatment of patients suffering from heart disease. John Abernethy, in spite of being a good surgeon, was a very good general physician, and he was a pioneer in that he paid especial attention to general treatment in so far as it might affect the local surgical trouble from which the patient was suffering. Moreover, if you read his life you will see that he was the first man to take a scientific interest in such a medical subject as vital capacity, and the uses to which this measurement could be of use, both in diagnosis and in other aspects of medicine. So I feel that he was more than a fine surgeon, he was more than the founder of our school, he was a great scientist, who took a broad survey of his problems.

The Patient's Attitude

The view which should be taken about patients suffering from heart disease is a two-fold one. There is, first of all, the attitude of the patient towards his troubles, and this aspect one is rather apt to overlook. The second is, of course, obvious, and that is the view we as medical men take of the case. How does a patient react when he thinks he has heart disease? He suspects it, of course, either because he has symptoms which he thinks suggest heart trouble, such as palpitation, fainting, or precordial pain, or because he has been told, rightly or wrongly, that he has heart disease. As a result of this, his first reaction is fear. He knows sufficient to appreciate that the heart beats and then stops, beats and then stops, and at the back of his mind is the question, "When is this organ going to stop finally? When is it going to forget to beat?" This may sound silly to us, but it is a very real fear to the person concerned. He knows the heart is an engine, and he thinks that 40 or 50, 60 or 70 years without a rest is a tough programme.

He goes to a doctor because he requires information: he wants to know exactly what is the matter with his heart; he wants to know what the outlook is likely to be; and he wants treatment. He requires this information for two reasons, first of all for his own selfish satisfaction—using the word in its most pleasant sense—and he also probably has financial responsibilities and personal dependants.

His fear either is groundless, having no substance or basis, or it is based upon the presence of definite organic heart trouble. In either event it is bound to be exaggerated by him, mainly because he is ignorant of the full implications. As you will know from reading Tacitus. "Omne ignotum pro magnifico." Which, being interpreted, means that unknown things are exaggerated. The patient's fear therefore can be best allayed by knowing the truth, even if it is slightly unpleasant. Those of you who went through the London blitz will not forget, at a time when we stood alone, Churchill's speech in the middle of a severe air raid, threatening Mussolini that we were on his track, and explaining to us that there were good grounds for restrained optimism. Even to be told unpleasant things, such as that we had to go through blood, sweat and tears, seemed on the whole to buck us up. If you can replace the feeling of helpless ignorance in the patient by a feeling of knowledge, at any rate so far as he is capable of knowing things about his heart, you will find that the truth, even if it is only as much of the truth as you may think he can stand, will help enormously.

There is another aspect to be considered, and that is the relief obtained by shifting the burden. This is the same old principle as that upon which the Roman Church bases the practice of confession; and it is a profound psychological fact, which has been brought up to date, as it were, by modern psychiatrists. Similarly this shifting of the responsibility about his heart from the patient to the doctor is of great practical benefit.

The Doctor's Attitude

We must now consider the problem from the position of the doctor. First of all, it is his duty to make as full an examination of his patient as he can, again for two reasons, one of them selfish, to avoid mistakes, and the other unselfish, to help those who consult him. He must try to get every available fact and detail, because he wants to do his

patient as much good as possible. He must therefore attempt to prove, either that the patient's heart is normal and his fears groundless, or he must try to assess accurately the extent of the abnormality as regards the structure of the heart in terms of valve muscle and rhythm, and also in terms of function and cardiac efficiency.

Clinical Material

My next point, and the real crux of this address, is that ambulatory heart patients, a term which is used to include everybody who is sent for a cardiological opinion, are nearly always much less ill than they think they are. Either there is nothing organically wrong at all, or else what is present is feared too much. In order to try to prove this point to you, I have taken a series of 403 consecutive cases. All these patients were private patients, and the following are the reasons why I have chosen them as evidence. I can spend, if necessary, a whole hour examining each case. I do my own X-ray examination and take my own electrocardiogram. I also feel that the average level of intelligence is higher, or certainly the powers of expression are greater, than in any other group. Out of these 402 cases sent to me as having some cardiac disability only 169, i.e. 42%, had in fact anything organically wrong with their hearts; 234, i.e. 58%, had no organic heart lesion at all.

TABLE I

	Invalid	*Care +*	*Normal Life Reduced*	*Normal Life*	*Total*
Infarcts	5	9	30		44
Angina of Effort		10	32	2	44
Hypertensive Heart Disease	5	10	5	3	23
Cor Pulmonale	1	1	1		3
Enlargement	1	4	8	1	14
Bundle Branch		1	1		2
Systolic Murmur				1	1
Premature Beats and Enlargement				1	1
Auricular Flutter			3		3
Auricular Fibrillation			6		6
Nodal Rhythm				1	1
Mitral Disease	1	6	4	2	13
Aortic Disease		1	5	1	7
Congenital Defect			2	5	7
	13	42	97	17	169

I have also dealt separately with the patients suffering from organic heart disease as a group, and have attempted to classify them under four heads, according to what I thought that they were capable of doing; or in other words, according to the advice that I gave to the patients themselves and wrote to their doctors. The first group includes those who were told that they should live an unrestricted normal life, a total of 17; the second group were advised that they might live a normal life with slight restrictions, a total of 97. These restrictions amounted to such cautions as not running up stairs after a meal, not moving heavy furniture, or undertaking unnecessarily strenuous activities. The patients in the third group were told that they must take care of themselves, should to some degree limit their activities, should rest after lunch, and should pay regard to their symptoms of shortness of breath, and possibly cardiac pain. This third group comprised 42 patients. The fourth and final group were informed indirectly, and their doctors directly, that they should be regarded as invalids. They were 13 in number.

What it amounts to is this: that of all ambulatory patients with organic heart disease 10% were allowed normal activities, 57% were allowed normal life on a rather reduced basis, and 33% only of the total of patients had to take great care or had to be regarded as invalids. I regard this investigation as being important, and I think that it gives you something of an idea of my personal view of the practical outlook for patients with organic heart disease as a whole. Why do I take this slightly optimistic view? For two reasons. Firstly, the statistical evidence as to the prognosis of severe illness is frequently fallacious. I would like to amplify for a moment this question of statistics. In many text-books before the introduction of penicillin, you will find the statement in black and white that the expectation of life of patients suffering from syphilis of the aorta or the aortic valve is five years or less. And yet I know from

TABLE II

CARDIAC MANIFESTATIONS—NORMAL HEARTS

1.	Left Chest Ache Effort Syndrome	39	
2.	Hypertension (Normal Hearts)	35	
3.	Fatigue, Worry, Overwork	28	
4.	Nervous Hypertension	17	
5.	Vasomotor Weakness after Illnesses, etc.	15	
6.	Fibrositis (Chest)	15	
7.	Anæmia	5	
8.	Thyrotoxicosis	5	
9.	Dyspepsia (Palpitation, etc.)	5	
10.	Vasovagal Attacks	6	
11.	Menière's Syndrome	5	
12.	Pulmonary Embolism	3	
13.	Emphysema	5	
14.	Functional Murmur, No Symptoms	6	
15.	Premature Beats	14	
16.	Paroxysmal Tachycardia	9	
17.	Adiposity and Dyspnœa	4	
18.	Oedema of Legs, Varicose Veins, Orthostatic	2	
19.	Brachial Neuritis	1	
	Cholecystitis	1	
	Cerebral Thrombosis	1	
	Asthma	1	
	Oesophageal Pain	1	
20.	Brachial Pain	4	
21.	Examination (Routine)	7	
	TOTAL	234	

personal experience, going back to those days, that careful treatment, if repeated a sufficient number of times with a co-operative patient, would enable one either to cure the condition, or at least to arrest it so that it did not progress. I have seen such patients surviving eight or ten years, to be lost sight of when the war broke out. Statistics vary greatly with the thoroughness of personal therapy. But, as quoted in books, they are frequently taken from post-mortem records, or from the Registrar General's figures, where the valuable factor of personal keenness in treatment is not taken into account. This is one reason why I believe in being more optimistic than some of the text-books are, even in patients suffering from serious conditions like coronary thrombosis and angina of effort. There is another reason for stressing as optimistic an outlook as is justifiable; that is that worry and fear have a definitely deleterious effect on physical health. There is no doubt about this at all. The extent to which it can be accurately measured is problematical, but it is none the less real, and if you can prevent your heart cases from worrying too much, you will benefit their physical state. I don't want you to run away with the idea that I regard many forms of heart disease as being of no particular account. They matter very seriously, and they cause premature decease in human beings; but I believe that the function of the doctor is to treat his patients as well as possible, and I think that the cardiologist or the physician who takes up the attitude of careful constructive optimism will get more out of life for his patients.

Advice in Simple Language

To get a patient to co-operate in treatment, one must try to clarify the situation for him. For example, perhaps a young man of 26, who wants to get married, has been refused life insurance because he has disease of his aortic valve. You examine him, and you find that there is a slight aortic leak, rheumatic in origin. There is no appreciable enlargement of the heart, the blood pressure is normal, and you can safely conclude that although there is a murmur, the leak is of no importance. It is worth while explaining in simple terms to such a patient that he has a murmur which is due to a slight scar of a valve, but that this scar is of no more importance than would be a rather definite scar on a finger, the health and the use of such a finger remaining normal. You can go on further and explain that there is no real leak in spite of this murmur, because the blood pressure figure is good, and you can state also that the effect on the heart is insignificant, because there is no enlargement. He may carry on with his programme.

Rational Explanation

Like Hitler, any individual who wishes to impress his fellows will always give reasons for what he thinks or says, whether these reasons have any basis in truth or not, for to rationalise any situation is almost a human necessity. If you can find evidence, and sound evidence, so that your patient may rationalise his heart condition in an optimistic manner, he will believe you and he will pay no attention to some gloomy physician later who pulls a long face when examining his chest. Suppose again that you have to

treat somebody who has a coronary thrombosis? You can explain the situation by saying that this is due to a small clot which has silted up a small branch of the artery, but that it has healed, that it will turn into scar tissue, and that the surrounding muscle will get stronger in the course of time and take up the burden. By this explanation you give the patient something that he can understand, and it has a sufficient basis in truth. One should avoid such terms as "angina" or "heart failure." Don't use threatening language to the patient. After a coronary infarct, the patient's relatives will say "What is the chance that it will happen again?" and you will say, "There is a one in four chance that it will happen again." But when the patient puts the same question, the answer should be "There is a 75% chance that this will not occur again." It is the same statement, but it exemplifies a profound difference in outlook: for you give the patient something to hope for, and not something to fear. You should also stress, as the patient's medical adviser, that the situation is in hand, and you should be as constructive as you possibly can in the explanation of the treatment.

Another question which often arises is whether the patient should make a will. He will look at you with an expression of apprehension and put the query. The best answer is that anybody with any dependants over the age of fifty, ought to make a will, and since there has been this recent attack, for what it is worth, there is now an additional reason for his not being careless about such matters. There are ways of saying these things to the patient, and it is not so much the fact, as the attitude of mind of the doctor to the problem, that counts. The converse gloomy outlook ought to be avoided. There was once a London cardiologist, who has now gone to his fathers, who was serious and pessimistic. He would regard the smallest change in an electrocardiogram as a portent of doom, and he thrived on gloom. He won a position of chilly reverence tempered with fear in the hearts of many people; and his patients came to see him repeatedly. He gained, therefore, both from the points of view of self-importance and of finance, but his patients did not gain in either respect.

Illustrative Cases

To provide some concrete examples of what I mean, I will tell you about a few patients who have passed through my hands. The first of them is a lawyer, the second an East End practitioner, the third an adventurer—in the best sense of the word—the fourth an actor, the fifth another general practitioner, and the last was a South African statesman.

The lawyer was a man of 53 in 1934, and he had a bad coronary thrombosis with auricular fibrillation. He remained in bed for seven weeks at that time. Two years later he developed Graves' disease, and had a partial thyroidectomy with success. One year later he bought a place in Suffolk and became very fond of splitting and sawing trees and wood. A year later he became President of the Law Society, and from 1939—1945 he remained, I think, the only partner except for a very elderly gentleman, in a busy solicitors' firm, the other three partners having gone to the war. He is still alive now at the age of 71, his coronary thrombosis having occurred in 1934.

My second patient was a busy East End practitioner in Hackney. In 1942 he had a severe coronary thrombosis which produced a bundle branch defect, and it was clearly a sizeable lesion. He had three months convalescence, then worked part-time for six months, and since 1943, including work during the later blitzes in the East End, has been carrying his medical bag up Council flat stairs, five or six flights at a time, and he is still going strong. He came to see me again two years ago because he had developed a bundle branch defect once again. I thought that as he was now 68 he should retire. He did not do so at that time, but is now thinking about it.

The "adventurer" was 64 years of age when I examined him first. He was in the Australian forces in the South African war, and was at the relief of Mafeking, and joined up again during the 1914-18 war. He was full of bounce, and was particularly proud of his prowess with an Australian stock-whip. Some of you may remember having seen him at Hill End. When I first met him he showed me a photograph of himself mounted on a horse with this famous implement, but with my usual scepticism I thought nothing particular of this and was mildly amused. He had had two coronary infarcts before I saw him. He disappeared after the outbreak of the Second World War, until in about 1942 a friend of mine, who is

now in practice down at Torquay and who had been in the Forces as a Medical Officer throughout the war, turned up at Bart.'s one day for lunch. During the course of conversation he said to me, "I have seen the most extraordinary patient of yours, a stock-whip expert, who asked to be remembered to you if I should see you." "If you happen to be talking about Col. X, I do indeed remember him," I replied. My friend went on, "It is really the most extraordinary thing I have ever seen in my life, and happened while I was in West Africa." Apparently the Colonel turned up there with his whip to give a demonstration of his skill to members of the Forces. Two of the soldiers held up a half-sheet of *The Times* and Col. X produced a twenty-foot long whip, and after sundry gyrations, slit the paper down the middle with the thong. The sergeants took up the half-sheet of paper and the slitting down was repeated. When the paper finally reached the size of a half-sheet of notepaper, the assistant's hands shook so that he called a halt. The Colonel, nothing daunted, then called up two African soldiers, blindfolded them, and they held up the paper without a tremor. Col. X, at a distance of twenty feet, slit it too down the middle. When the paper was the size of a postage stamp, he placed it, having licked it, upon the forehead of one of these gentlemen, and then, after sundry more gyrations, he curled the whip so that it went round the neck of the African, and the thong descended over the forehead, neatly removing the tiny scrap of paper. Col. X returned from his African tour eventually, and came to see me again, telling me at the time how, before doing his stock-whip turn, he always took two tablets of glyceryl trinitrate. I asked him if he would give us a performance of his skill at Hill End, and he agreed immediately. He came out to the Hospital and I assure you that his prowess had not been exaggerated. However, he had sufficient angina of effort to need to stop half-way down the long corridor at Hill End until the pain disappeared; and later after tea with us, fortified himself with his dose of glyceryl trinitrate before doing his turn. He travelled to Iceland and the Middle East and to other places during the war, keeping up in his individual way the morale of the troops during his visits. After the war in 1945, at the age of 71, he went over to the United States on a lecture tour and there he died, having lived a very useful life in spite of his cardiac handicap. He had expressed the wish to "die in harness."

My next patient was aged 34 when I saw him in 1936, and he then had a very severe attack of rheumatic fever affecting the joints. He also developed inflammation of his pericardium, and had heart block of high degree, 2:1 or 3:1. Finally, he was one of the rather rare cases of rheumatic meningitis. He recovered from these various conditions and returned the next year to his work as a film actor. He did three films in 1936, and in 1943 some of you may have seen him in "Flare Path." In 1949 his heart function was perfectly good in spite of the severity of his attack of rheumatic fever, which had so injured his heart at the time that he had heart block. Unfortunately his real trouble was alcohol, and he has now slowly progressive alcoholic cirrhosis of the liver with pancreatitis and diabetes.

The second of the general practitioners I mentioned is a very old friend of mine, and we were in fact on the House Staff here together in 1917. He wished to join the Forces, but had an aortic systolic murmur with a thrill, and a narrowing of his aortic valve which was congenital. For these reasons he was sent before a Medical Board. In those days medical boards were peopled by what were described as "dug-outs," old gentlemen who had long retired. The officer who first examined my friend shook his head and called his colleague. He too shook his head, and so they called for the President of the Board, who had a long white beard and an honest expression. The old President said to my friend, "Young man, you have been qualified much more recently than we have. What is the matter with your heart?" "Well, sir," he replied, "I was told by Sir Thomas Lewis that I had subaortic stenosis." This information knocked the members of the Board back on their heels, and the President said frankly, "I have never heard of it." One of the others, after some thought, asked "In that condition, which side of the heart beats first?" At the time of this examination the patient was 24 and he is now in practice thirty-three years later at the age of 57 not very far from the Thames Estuary.

I don't want to worry you with too many examples, so I will conclude with my old South African friend, aged 72 when I first saw him in 1931. He was a very active man

in business, and he had made three fortunes, the first two of which he proceeded to lose. In 1931 he had rather a slow heart, but no real symptoms of any sort. The next year he developed auricular flutter, which I tried to stop, first with digitalis, then with quinidine, but I failed. I found, however, that I could control his heart rate at about 60 if I gave him a maintenance dose of digitalis. He took this until he died at the age of 81, having had auricular flutter for over eight years. During all these years he remained as active as an old gentleman of that age can be. He was a very great character, and he always had a fresh story to tell me when he saw me. I think one of his most amusing ones was an incident in Johannesburg, when as a young man he was at his club playing poker with some of his colleagues. He played until he had nothing left to wager, and finally one of his friends suggested that he should wager his fine bushy beard. He agreed, and asked what they considered it was worth. They settled on £20, and the beard was put—figuratively—into the kitty. He lost the game, and had to shave off the beard. This was about four o'clock in the morning, and after the final reckoning, he went home to bed. When his wife woke beside him in the morning, she had a most frightful shock, for without his beard she didn't know who he was. On another occasion, walking down Piccadilly one day, he stopped at Hatchard's and saw a very fine edition of Keats in the window. He enquired the price and was told that it was something like fifteen guineas. He protested that it was too much, and went on his way, and that evening he lost £40 playing cards. As he walked back from his club through the London summer dawn, with the sun just rising, he again passed Hatchard's and said to himself, "What a damn fool you were not to buy that Keats." I think the thing I was most grateful to him for was that, as a personal friend of Smuts, he once invited me to lunch in order to meet this great statesman. He was a man of many parts, and had a very fine appreciation of literature, and was an active individual of great charm to the end of his varied life.

Conclusions

My conclusions are that heart symptoms as such are more frequently harmless than otherwise. Secondly, organic heart disease is by no means immediately dangerous, and thirdly, it is very often not progressive. Even if it is progressive it is often compatible with many years of useful and reasonably active life, and the role of the doctor is to see that the patient makes the best use of his cardiac powers. As Dickens wrote in *Sketches by Boz*, "Grief never mended no broken bones; and, as good people is werry scarce, what I ses is make the most on 'em."

ABERNETHIAN SOCIETY

Meetings of the Society to be held this month are:—

May 11—Sir Heneage Ogilvie, K.B.E., Surgeon to Guy's Hospital. Subject to be announced later.

May 25—Rt. Hon. Lord Webb-Johnson, on "Circumspice."

Meetings will be held at 5.30 p.m. in the Clinical Lecture Theatre.

THE SURGICAL LIFE OF WALTER MITTY

"The surgeon who operated three hours previously located no foreign body. Then I, by placing the patient in his position at the moment of impact, removed the nosepiece of a 105mm shell!"

"A German prisoner was almost dead of a fulminating gas gangrene of the lower leg. I amputated through the knee and, within five minutes of coming round, he was playing draughts with the man in the next bed!"

Excerpts from a Surgical Lecture.

N. S. P. C. C.

By R. V. PEARSON

ALLOW me to warn you against bought enthusiasm. One evening after an exhausting day in M.O.P.s, I was murmuring diastolically over a haustus of beer in the local, when in swept my enthusiasm's purchaser. He was dressed in a wavy navy tie and suède shoes (amongst other things) and after a searching glance around the place (which took in the shapely lady behind the bar) he perched himself, rather surprisingly, on the stool next to mine. Observing that the level of my glass had sunk rather lower than is good for me, he invited me to join him, and without giving me time to refuse (an unlikely occurrence), he ordered for me. The result was a pint of a black viscid fluid, reminiscent of haustus niger with (I discovered later) much the same effect. Whilst he occupied himself so admirably, I started to feel carefully in my pocket for the packet containing one cigarette (kept specially for emergencies such as this) but he maintained the good impression he had formed by producing a tin of fifty "Players" as soon as the beer arrived. Then, having toasted each other properly and lit up, he started to talk. I am not at all clear about his subsidiary arguments, but I clearly remember his main theme was the N.S.P.C.C., and how I was the first suitable person he had met. Even now, I am not at all certain for what he thought me suitable, but my worst fears were not realised. By his advocacy he raised my enthusiasm to fever pitch, and carefully kept it there until closing time (a matter of two and a half hours) by constantly replenishing my glass and preserving my emergency cigarette. It was an unusual evening for me. All I contributed to the conversation was a pen picture of Austin Flint and the life cycle of the Schistosomata. (Oh—and a rather good limerick about a young lady called Ermyntrude.) So it came about that I was to help him to gain support for the N.S.P.C.C. the next Sunday morning. Off I went to bed in a state of riotous enthusiasm for the whole thing. Some of the things he had said came back to me as I prepared myself for my couch. "The poor creatures aren't allowed to broadcast their point of view, so we must do it for them." (This as I cleaned my teeth with shaving cream.) And "We'll make this a land of Paradise," just as the ceiling came down and hit me.

When I awoke and had observed the pharmacological action of the said draught, I admit that my enthusiasm had waned just the tiniest bit. Nevertheless, When Sunday came, I kept our rendezvous. Unfortunately he was there, too. All I had to do was to knock at the doors of all the houses in a street which he would show me and ask them to support the N.S.P.C.C. It was simple (he said). Easy as falling off a log (he said). He gave me a pad and pencil and instructed me to note the names and addresses of our supporters.

I wonder if you have ever knocked on the doors of Suburbia on a Sunday morning at 11 o'clock? Or if you have any idea of what can be heard as you stand on the doorstep waiting for an answer? No? Well, it is very entertaining, and I should have enjoyed it had I not been petrified with fear that somebody would answer. The first door I knocked at belonged to a house built in the reign of George III. In those days it would, undoubtedly, have been answered by someone resplendent in livery. Now it was opened by an urchin with adenoids. This in response to a gentle request made by somebody within, possessing a rasping alcoholic voice, who diagnosed sclerosis of the child's auricular appendage unless an immediate laparotomy was performed upon the door, which was apparently suffering from an acute and sudden hæmorrhage. The child's name I discovered was Ernest, and I realised that the initial shout that I had heard from the hoarse voiced one was not, as I had imagined, a rapid diagnosis of one suddenly afflicted but the imperative—"Ern! Ere!" I asked if it would be possible to speak to Ern's father, rather hoping that it would not. But it was. So I said, "I represent the N.S.P.C.C. May we count on your support?" At this point I thought that if what I thought I had heard had been true, it would have been he and not I that needed support. This struck me as laughable and I nearly laughed in his face. Fortunately I did not.

"The N.S.P.C.C." he replied, spitting accurately over my left shoulder, "No! I 'ate the sight of all perishing animals—see!" And he slammed the door in my face.

I walked along to the next house, mentally working out a new approach. The door was opened quickly by a harassed H/W who said "Not today, thank you. My mother's in bed with the doctor. Oh dear!" And she, too, shut the door in my face before I could recover from the shock of this professional indiscretion. I began to think that this was not so easy as it was supposed to be. Then I remembered the enthusiasm of a few nights ago and determined to do better. Squaring my shoulders I knocked on the next door like a postman with a registered letter. As I waited for the door to be opened I gathered that lady of this household imagined me to be the opposite sex and to have flown over on a broomstick from No. 89 to borrow some salt. (Or perhaps I got the species wrong altogether.) However, I think not, because she bore a marked resemblance to Macbeth's wife. At the sight of me, her expression became even more murderous than I imagine it was as she came to answer the door.

"Oh! Now, listen young man," she said, "If you've brought me to the door in the middle of cooking dinner to sell me something, you'll be sorry. I promise you!"

I said I was sorry already (and believe you me, I was) but that I had called to elicit her support for the N.S.P.C.C. This was obviously a sore point with her, for with a snort she was on the attack again.

"N.S.P.C.C. eh? I've got a dog and a cat. The dog's got fleas and the cat! Wait till I lay my hands on that cat. A new carpet. Why, it'll take a pint of Lysol to get rid of the —"

I said that I was afraid that she didn't understand but—"Don't understand eh? Well, I don't want to."

Again the door slammed. And so it went on. I managed to be misunderstood by no less than seventeen different households. I got some amazing answers. For example, one dear old lady said, "Oh, no. I'm so sorry. We've always been chapel, and we couldn't change now." And another, "I've always used Toni. And I am satisfied. I don't want to change." One very severe landlady, "Im sorry. I don't allow male callers!" (Incidentally it was at this house that I had my greatest success. No sooner had the landlady gone than a female apparition appeared at a window on the top floor and shouted "OoooоHoooo" and down came a Yale key. But that's another story.) One lady didn't trust me at all and her final thrust was "Why must you wear them green trousers?"

And it wasn't only what they said, it was their appearance as well. There was a bald pale man with a worried, anxious look. This gentleman I considered to be tolerating third degree hæmorrhoids. One lady who had not heard of the N.H.S., had inherited a complete set of dentures which fitted her not at all. Thus she was able to talk (incoherently I admit) while her teeth remained clenched and immobile and protruding just beyond her lower lip. These were ordinary people of all shapes, sizes and complexions. Physiological variations of the average, with (I hoped) a few pathological variants. By now my enthusiasm had practically vanished. The next port of call was a public house, called appropriately enough "The World Turned Upside Down." So was the sign and I had to go to some lengths to read it! Having bought my breakfast, and watched it poured out properly, I drank deeply and tried the landlord with my formula. "I represent the N.S.P.C.C. Can we count on you for support?" "Good Lord, yes," he said. So I bought him a drink, and when I recovered from the shock, I proceeded further. I said that this was excellent. "Oh, yes," he said, "I've got a box for them on the counter. Always been fond of kids. So's the missus."

This really was getting beyond a joke. Early on a Sunday morning. And from a publican too. It was almost sacrilege.

"Look here," I said, "What do you mean? I'm not talking about children or goats. What the devil do you mean?"

"Why, the National Society for the Prevention of Cruelty to Children. What do you think I mean?"

I looked at him as coldly as I could. Did he really think I was out on a childish thing like that? And on a Sunday morning? Surely—and then I began to realise why I had got such odd answers. I decided to enlighten him.

"I," I said, "have the honour to represent the National Socialist Party's Conservative Candidate." And I walked out in disgust.

CORRECTION

The recently appointed successor to Professor Hopwood is Professor Rotblat, and not as erroneously spelt in our February number.

PERSONALITIES AND PROGRESS IN THE STORY OF DIABETES MELLITUS

By S. F. MARWOOD

So vast a subject is the history of medicine, forming as it does an inseparable part of the story of human progress at least since the days of the Babylonian empire some four thousand years ago, that the story of a single disease may be long in the telling. Diabetes mellitus is a notable example. In the short time at our disposal, it is not possible to do justice to all who have played a part in the growth of knowledge of this ailment, and the omission of many names is unavoidable. Those who disagree with my choice will need no reminder that none views history through the same eyes as another, and that posterity is seldom unanimous in its appraisal of bygone genius.

Diabetes mellitus is a disease which we know to have occupied the minds of men since the days of the Roman Empire when the first recorded contributions to the clinical picture were made. Actually the first known reference probably occurs in the Ebers papyrus. Discovered between the legs of a mummy in one of the graves of the Necropolis at Thebes in 1858, this famous papyrus was acquired fifteen years later by George Moritz Ebers, Professor of Egyptology at Leipzig, and it proved to be the most perfect specimen ever to come out of Egypt. Virtually a treatise on therapeutics, it was believed to be one of the forty Hermetic books, so called because, according to legend, it was through these books that the god, Hermes, dictated all knowledge to the priesthood of ancient Egypt. Estimated to be 3,500 years old and written in the reign of Amenhotep I, it was already old when the Israelites crossed the Red Sea and when Homer wrote his epics. The language was Hieratic, and the characters were inscribed with remarkable beauty and clarity. This truly ancient document contains prescriptions for a variety of disorders, and, among them, one for the driving away of the too much emptying of the urine. The treatment by cakes, wheat, corn, and grit is, of course, fantastic, but not more so than the balsam of Peru, candied nutmeg, ginger, and gum-arabic prescribed by physicians 3,000 years later. The claim made for this as the earliest known reference to diabetes mellitus has been criticised, not altogether without justification, on the ground that this disorder is not the only cause of polyuria. It is, however, reasonably certain that the disease existed among the ancient Egyptians and it is not likely that they were unmindful of it, and most authorities accept this reference as the first on record.

Fifteen hundred years pass before we hear of diabetes mellitus as a definite clinical entity. Unfortunately no record of it appears in the Hippocratic collection although the Master must surely have encountered and noted the disease, and, for the first description, we are indebted to the famous Aulus Cornelius Celsus, a Roman physician who lived during the reigns of Augustus and Tiberius, probably from B.C. 30 to A.D. 50. Although, according to Barach, not a practising physician himself, he wrote widely on medicine and indeed on all knowledge. The section on medicine in his *Encyclopædia* was used as a text-book in schools of medicine for many centuries, and is the only portion of that famous work extant. Celsus described a polyuria without pain, but with hunger, thirst, and emaciation, and he claimed that the amount of fluid drunk was less than the discharge of urine—a curious assertion which was to receive the authority of Galen, and remain unchallenged for 1,500 years.

But it is to Aretaeus the Cappadocian that we owe not only the name of diabetes, an Ionic Greek word meaning "I go through" but the first full and accurate clinical description of the disease, a description which McCradie asserts bears the hall mark of genius, for he sketched the morbid entity of diabetes mellitus without a true knowledge of pathology, and without experimental aids. The early history of this great physician of the Roman era is not known for certain, but he probably lived in the first century between the times of Celsus and Galen. Born in Cappadocia, a far eastern Roman province, he studied at Alexandria, and later became famous for his extensive writings on a wide variety of clinical conditions. As a clinician he was little inferior to Hippocrates himself. As a physician in the widest sense he was in one respect greater, for, unlike the Master, he rejected the Pythagorian philosophy that it was useless to treat incurables. He always did what he could to ease the sufferings of

these unfortunates and to bring them the comfort of hope, and in this, was possibly influenced by early Christian teachings. According to Leopold, Aretaeus described and contrasted the crossed paralysis of cerebral lesions with the uncrossed of spinal, the various stages of epilepsy including the aura, tetanus, and what was long after to be known as Bell's palsy. He differentiated arterial hæmorrhage from venous, demonstrated the fulness of the veins in heart failure, and noted the rusty sputum in pneumonia. He palpated enlarged livers and spleens, noted the drum-like sound on tapping abdomens, and is said to have heard rales in asthma and bruits in heart failure, thereby anticipating Lænnec by 1,800 years. These examples are apparently only a few of the contributions he made to medical knowledge, but that which provides the excuse for this brief review of his career is his description of diabetes mellitus as a wonderful disease consisting of a melting down of the flesh and bones into urine, and in which the kidneys and bladder do not cease emitting urine as though the acqueducts were opened wide. Thirst is extreme, mouth parched, body dry, and wasting progressive. He passes more urine than fluid drunk! The development of the disease is chronic, but short will be the life of the man in whom the disease is fully developed. The cause may be a previous acute illness, or some poisonous agent such as the bite of an adder. And now we find Aretaeus entering the realms of fantasy in an attempt to rationalise his treatment. He gives many remedies aimed at controlling the thirst the site of which he believed to be the stomach. If thirst be cured there will be less need to drink, the urination will diminish, and flesh will no longer be carried away in the voided urine. Fantastic and primitive we may say, but surely we need not be surprised at a treatment which is not of the same high order as his clinical observations, or be intolerant if he bridges with his imagination gaps which could be filled only by the development of pathology, experimental medicine, and the allied sciences nearly 2,000 years later. We may instead pay tribute to a great master and one of the architects of our calling.

It would be almost heresy to pass from the Roman era without a reference to the great Galen (A.D. 130—200), the founder of experimental medicine. It must be confessed, however, that Galen added little to the knowledge of diabetes, describe and theorise on it though he did. He believed the cause of the condition to lie in the kidneys and postulated that, owing to a resorption of the noxious fluids into the renal tissues, the kidneys had lost their power to hold liquids. He likened the condition to lienteric diarrhœa, and regarded the urine as unchanged drink. The treatment, therefore, should consist of blood-letting and the flushing out of the poisons by diuretics in order to lower the acrimony of the humours, to slow down the blood circulation, and to cool the renal heat. So great was Galen's authority that these, like many of his dicta, were accepted for many centuries. Nor need we be surprised, for Claudius Galen, sometime physician to Marcus Aurelius, was a medical giant of the ancient world and the author of 500 treatises on medical and philosophical subjects; of these, eighty-three are extant besides some commentaries on Hippocrates. His fame rests most securely on his work as a great practical anatomist, but he also co-ordinated the medical knowledge of his predecessors and contemporaries, and did much to render possible the development of medicine as we know it today. Nevertheless, it may be said that his influence on diabetes mellitus was, if anything, inhibitory rather than contributory.

The fall of Rome was a tragedy which almost brought to a standstill for a thousand years the onward march of scientific progress. Earlier civilisations had come and gone, but each had been supplanted by another and greater one without any dark interlude. Either contemporaneously, or in successive waves, there were the great Mediterranean civilisations of Egypt, Babylon, Assyria, Phœnicia, Persia and Greece. These culminated in the Roman world in which was concentrated all the best of what had gone before. Had this process of civilised development followed the same continuous pattern, who can doubt that scientific progress, upon which medical advances were to depend, would have anticipated by many centuries the achievements of modern times? It was not to be. Weakened by moral and political corruption and by disease, especially malaria, Rome fell to the invading Germanic barbarians who, young, virile and ruthless, and having no liking for nor understanding of cultural monuments, contrived a destruction so rapid and complete that the lights went out in the

western world. They were to burn only fitfully until the revival of classical learning implicit in the Italian Renaissance provided mankind once again with a stimulus to that creative effort which has continued with ever increasing tempo to the present day.

After the fall of Rome, medicine became canalised into two separate streams which, diverging into the Middle Ages, came together again at the beginning of the modern era. One, the more important, flowed through the great Islamic societies of the Eastern and Western Caliphates of Baghdad and Cordova respectively, the other through the somewhat subterranean channels of the monasteries.

It is a popular belief in Christian countries that the Moslem conquerors were little better than marauders living and perishing by the sword. This is far from the truth. Militant and ruthless they were at times, but, under the rule of a number of liberal-minded caliphs, notably Al-Mansur and the famous Haroun-al-Raschid, there were much learning and advancement of knowledge. The demand of a conquering caliph, when dictating terms to a Byzantine emperor, that his Arabian scholars should have the right to translate the Greek manuscripts in the emperor's keeping, was not the action of a barbarian. The truth is that a nomadic people, fired by religious fanaticism, had become masters of an empire extending from the Indus to the Atlantic, and they had come to realise the need of studying the arts and sciences. Mathematics and architecture were the realms in which they excelled, but medicine also came in for a share of their attention. Had not the Prophet himself said "God does not inflict diseases upon us without, at the same time, giving us the remedies," and does not the Koran remind all true believers that "He who has restored life to a man shall be acknowledged as if he had restored life to humanity." From a number of able physicians, the names of Rhazes and Avicenna stand out most prominently.

Rhazes (860—932) was the physician who, on being asked to choose the site of a hospital, hung pieces of meat at various points and noted where putrefaction occurred latest. There he built his hospital and became its chief physician. He quarrelled with the ruler of Bokhara who ordered his head to be beaten with one of his books until one or other should break. The head broke first and the eyesight is said to have been affected in consequence. Later in life, Rhazes declined an operation as he had seen more than enough of this world's sorrow and misery. He wrote one hundred and fifty books best known of which is his encyclopædia of medicine—*Liber Continens*. His description and differentiation of infectious diseases, particularly scarlet fever and measles, are classical, but his clinical interests were wide and he described diabetes and gave an account of its treatment. It must be admitted, however, that he added nothing new to our knowledge of the disease.

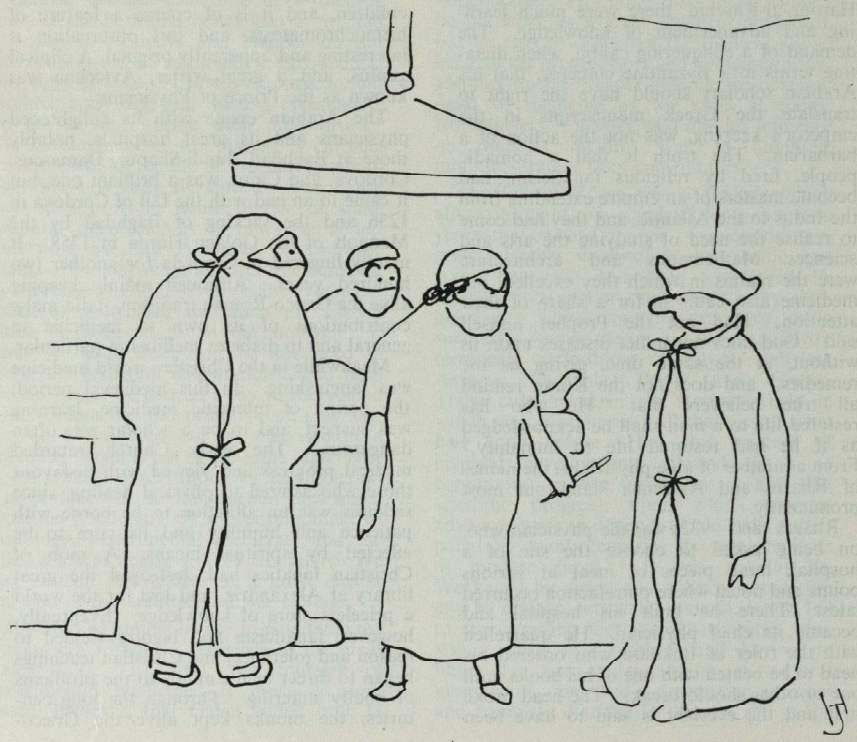
Avicenna (980-1036) was the author of the gigantic and famous *Canon* in which he attempted to codify the medical knowledge of his day, and bring it into line with the systems of Galen and Aristotle. He gave an excellent account of diabetes and is said to have noted the sweetish taste of the urine. He described diabetic gangrene and observed enlargement of the liver in some cases. Hepatomegaly occurs sometimes in diabetic children, and it is of course a feature of hæmochromatosis, and this observation is interesting and apparently original. A clinical genius, and a great writer, Avicenna was known as the Prince of Physicians.

The Arabian epoch with its enlightened physicians and its great hospitals, notably those at Baghdad, Jundi-Shapur, Damascus, Cordova, and Cairo, was a brilliant one, but it came to an end with the fall of Cordova in 1236 and the sacking of Baghdad by the Mongols of the Golden Horde in 1258. It merely lingered in Granada for another two hundred years. Although mainly keeping alive the Græco-Roman tradition, it did make contributions of its own to medicine in general and to diabetes mellitus in particular.

Meanwhile in the Christian world medicine was languishing. In this mediæval period, the period of monastic medicine, learning was suspect, and to be a scholar was often dangerous. The early Church retarded medical progress and viewed with disfavour those who aspired to physical healing, since sickness was an affliction to be borne with patience and humility and its cure to be effected by spiritual means. A mob of Christian fanatics had destroyed the great library at Alexandria, and lost for the world a priceless store of knowledge. Eventually, however, fanaticism and bigotry yielded to reason and tolerance, and Christian teachings began to direct men's minds to the problems of bodily suffering. Through the long centuries, the monks kept alive the Græco-

Roman heritage by translating and illuminating classic manuscripts which had survived, but the work was slow and laborious, and intercourse between the monks and the outside world limited. It is therefore not surprising that nothing new in medicine emerged from this environment, and that no more is heard of diabetes mellitus until the coming of Paracelsus, despite the one beacon light provided by the school of medicine at Salerno, a light which, according to Singer, had been fanned into a feeble flame by Arabian learning. This school was at its zenith in the eleventh century and had a proper six years' curriculum for medical students who, before admission, had to be legitimate, twenty-one years old, and to have studied logic for three years. It is perhaps well that these conditions, or at least two of them, are not insisted on in these less leisurely days, even though many of us regret the absence of a sounder preliminary education in the humanities. The School of Salerno produced no great figures and made no original contributions to medical knowledge, but it may be said to have provided a pattern for the famous seats of learning at Padua and Bologna, Paris and Montpelier, to whose medical schools came students from all parts of the civilised world. At the beginning of the fifteenth century it had disappeared. The Renaissance had begun in Italy, and the two streams of Medicine, Arabian and Monastic, had merged. The mediæval age was at an end, and the modern era was born.

To be concluded



CAMBRIDGE GRADUATES CLUB OF ST. BARTHOLOMEW'S HOSPITAL

THE Sixtieth Dinner of the Club was held at Frascati's Restaurant on February 24, with Mr. Rupert Corbett in the Chair. The attendance of one hundred and thirty-five members and guests was the highest recorded in any but the Club's Jubilee year, and a very enjoyable evening was spent.

In proposing the toast of the Club in an engaging manner, the Chairman welcomed the new members and referred to the happy chance by which the Dinner had fallen on the night after the General Election. The admission of women to full membership of Cambridge University, and their acceptance at the Hospital, had raised the question of their admission to the Club. All members, numbering 922, had been given the opportunity of voting on the subject; and 460 had done so. The result, now announced, had been a very small majority of 23 in favour of making women eligible. The general dissent—nay, expression of dismay—at this announcement showed that the minority were very strongly represented at the Dinner. Professor Garrod welcomed the guests in a most entertaining speech. Despite an air of detached gravity he left the conviction that even bacteriologists have souls. He welcomed especially the Regius Professor of Physic, Sir Lionel Whitby, two Scots whom the Hospital had recently taken to its heart—namely Professor Blacklock and Mr. Badenoch—and finally the new members. In replying for the Guests the Regius Professor spoke of the reconstruction of the Cambridge Medical School, which was progressing in spite of the difficulties of the day. A sister club, the Cambridge Graduates Medical Club, had preserved its character as a men's dining club by definition before women had become graduates; he believed that there was a place for distinct clubs for men and women, and for the social meeting of such clubs together on equal terms. Mr. Vick, in proposing the health of the Chairman, spoke of his great qualities of personality and achievement. The Chairman, in acknowledgement, was able to announce that Mr. Vick had become the grandfather of twins that very day. After announcing the General Election result, which gave the Labour Party a very small majority, the Chairman referred to the good work which Dr. Kenneth Black had done as Junior Secretary at a very difficult time before handing over to Dr. R. A. Shooter, whose name, though spelt differently from that of the Founder, Dr. James Shuter, was appropriate to the office.

Many members were able to repair afterwards to 7, Mansfield Street at the invitation of Dr. Geoffrey Evans, where, in accordance with the ancient traditions of the Club, Hairy Rouchy was recited by Sir Alan Moore and the usual songs were sung.

Thus might appear to end the meetings of a band of brothers so happily held for 72 years; seemingly the time had come to join the ladies—but not so: in the moment of crisis the British genius for compromise prevailed. An informal meeting of all the Bart.'s Cambridge Women Graduates was arranged by Mr. R. S. Corbett, the Chairman for the year, and the Secretaries, Mr. H. J. Burrows and Dr. R. A. Shooter. The Chairman conveyed to the ladies the decision of the Club that they should have the privilege of membership if they so desired. It was decided: (1) that the Cambridge Graduates Club of St. Bartholomew's Hospital should include all Bart.'s Cambridge graduates—both women and men; (2) that an Annual Gathering be arranged, such as a cocktail party—preferably in the summer—to welcome the new members; (3) that the dining club should continue as in the past; (4) that Mrs. Lodwick be appointed an additional Secretary, to help in the organisation of the Annual Gathering; (5) that the present arrangements be reviewed after a period of three years.

DEATHS

We regret to announce the deaths of Lewis R. Shore, M.C., former Lecturer in Anatomy in the Medical College, on February 9, 1950, in New Zealand, and of Edward Alfred Griffiths Dowling on February 17, 1950, at Weston-super-Mare.

Also Dr. Kenneth Wolferstan of 22 Thames St., Sunbury-on-Thames and Dr. Victor John Duigan of Gorleston on March 2.

VIEW DAY

For centuries the afternoon of the second Wednesday in May has been set aside for View Day. The origin of the custom is obscure, but may date from the foundation of the Hospital. Before 1599, the Governors met at 7 o'clock in the morning, attended a religious service, and then inspected the Wards and Departments of the Hospital. In 1599 the time of assembly was fixed at 6 a.m., but in modern times it has usually been 2 or 3 o'clock in the afternoon. In earlier times the proceedings terminated with a View Day Dinner, held in the Great Hall, but is now confined to a tea for Consultants, Emeritus and Visiting Staff, senior members of the Nursing Staff and Heads of Departments.

The Treasurer, Governors, Clerk to the Governors, the Matron and the Steward form a procession, headed by the head porter bearing his staff of office. The Surgery, Dispensary, Wards and Departments are visited, their respective staffs being present. In the Wards, the names of patients are read out, the physician or surgeon, and the matron, are invited to submit complaints, as are the patients, and the procession then continues its round, which occupies about one-and-a-half hours.

* * * *

"Yes, perhaps you're right."

Visitors can then view the Departments of the Hospital, and tea is served in the Wards. An exhibition of the Hospital archives is on view in the Great Hall, and books and prints are displayed in the Library. View Day is an ancient custom that has been allowed to continue, and is welcomed by students as an occasion upon which parents and other visitors can be introduced into the Hospital This year it will fall on May 10.

J. L. T.

FOR GOLFERS ONLY

RUFFERWOCKY

(or an unexpected result in the Staff match)
(With the usual apologies)

'Twas goffig and the divotees
Had chased the spheroid round the links,
All "bung ho" were the four and threes
And the "off days" stood drinks.

"Beware the rufferwock, my son,
The grass that's long, the whins that scratch.
Beware the socket shank,
And shun the spurious handicatch*."

He took his ligneous spoon in hand,
Full oft the blameless ball he smote;
Obliged was he at the nineteenth tee†
To slake the other's throat.

"And hast thou lost so easy match,
Oh crafty clerk, of goodwill thief,
A House job you are out to woo
By losing to your chief."

'Twas goffig and the divotees
Had chased the spheroid round the links.
All "bung ho" were the four and threes
And the "off days" stood drinks.

*This is a player who catches you out by playing off a handicap much higher than he merits.

†This is the end of the bar nearest to the clubhouse door.

R. V. F.

SPORT

RUGBY CLUB

February 8, v. Oxford University Greyhounds (home). Won 13-9.

March 4, v. Nuneaton (away). Lost 0-15.

A team somewhat depleted, and very fatigued, by the Hospitals Cup match a few days earlier, made its weary way to Nuneaton only to find itself locked out of the ground. While waiting to be let in, however, we were treated to an amusing dissertation by a local inhabitant, on the brickwork of the wall round the ground.

It was a moderate game. The shuffling around of the Bart.'s team, due to several people playing out of position, was a little bewildering. The forwards, urged on by Dick, played hard, but the robust play and "native skill" of their opponents was too much for them, so the backs were given few chances.

The vociferous encouragement from the touchline of Havard, unable to play because of a cannibalistic attack on his scalp some days earlier, was a great help.

March 11, Inter-Firm Sevens. At Chislehurst.

For some weeks the rival seven-a-side teams had been studying each other carefully and last-minute conferences were held to decide final plans of campaign.

It was a fine day and a record crowd gathered on the Athletic Ground at 2 p.m. to witness the struggle for supremacy and the survival of the fittest. The matches started promptly, both pitches being used, and it was soon evident that the Preclinical challenge was a strong one. An amusing commentary was given by Lance Dowie on the loudspeaker system, interspersed with the radio commentary on the Ireland v. Wales match in Belfast.

Each team had its supporters, who were not slow to air their views on the play of their own team, the opposition and the referees. This friendly banter was an integral part of the proceedings and was enjoyed by all.

Owing to examinations the Preclinical First and Third years had combined, and had inveigled Robin Jones into playing for them. They had a formidable side and, after a hard fight with Dr. Scowen's firm, were the first to reach the final. They were soon followed by the Second year "A" team, which defeated Dr. Harris's firm. There was wild excitement amongst the Charterhouse supporters.

At this stage the Chief Assistants and Housemen took the field. Mr. F. C. Capps kindly refereed the game and, this year, his watch kept good time. Miss J. Wheelright kicked off, having been presented with a bouquet by Dr. Morgan. Dr. Cates took over the duties of commentator and kept everybody in shrieks of laughter with his merry quips. He was particularly hard on Jimmy Knott, and every time that worthy Chief Assistant received the ball our eardrums were shattered with, "Jimmy Knott's got it!" This was followed by a loud, long chuckle when the unfortunate gentleman hit the earth with a resounding bang. Nevertheless, the players appeared to enjoy themselves—the onlookers certainly did—and all left the field unassisted.

The final of the Sevens concluded the outdoor sport. In this the First and Third years' team achieved a lead of 13 points, but only just held out against a strong challenge by the Second year to win 13-10. Charterhouse Square is to be congratulated on its success; the Clinicals must be suffering from "Anno Domini."

The dance after tea was a great success and, during the course of it, Dr. Morgan presented the cup to the winners. The experts found actual dancing rather difficult because of the crowd, but everybody seemed to enjoy it none the less.

The Rugby Club is indebted to Mr. and Mrs. White, whose untiring efforts were largely responsible for making the occasion such a tremendous success.

March 18, v. Old Merchant Taylors (home). Lost 9-11.

This was a disappointing match insofar as it should surely have been won. The Bart.'s forwards had the measure of their heavier opponents, especially in the second half, but the backs spoiled many promising movements by bad handling.

Picthall, apart from one rather wild pass, was positively scintillating on the left wing. Obviously seeing the ball well, he delighted everyone by taking every kind of pass in his stride and by running with the utmost speed, skill and determination. Easily the best back on the field, he scored two excellent tries. Dick completed the Bart.'s score with a good penalty goal.

March 25, v. Moseley (home). Lost 0-19.

Bart.'s started off disastrously and had conceded 8 points almost before they realised they were on the field. Dick, however, rallied his men well, and for a long time the game was carried from one end of the field to the other at a great pace, both sides executing delightful movements. This exhilarating play was temporarily interrupted when, as the result of a slight *contretemps* between the referee and the Bart.'s hooker, Layton kicked a very good penalty goal for Moseley. Towards the end of the game Moseley scored two more tries, one of which was converted by Layton from the touchline.

Cuthbert made a promising debut at wing forward, and Clare acquitted himself admirably, playing at scrum half for the first time, opposite the Irish International De Lacy.

April 1, v. Nottingham (away). Lost 3-14.

This match was a strange mixture of good and bad Rugby, with a great deal of unpleasant bickering going on.

Bart.'s, with the wind behind them, had much more of the play in the first half, but somehow failed to score. In fact, just before half-time, a Nottingham forward broke away from a line-out and a try resulted.

In the second half Nottingham had more of the game and scored three times, of which one was converted.

Towards the end Bart.'s made a spirited rally, and Third, backing up superbly, scored in the corner.

HOCKEY CLUB

FIRST XI

March 1, Hospitals Cup Semi-final v. London Hospital (away). Lost 2-3.
March 4, v. Ealing Dean (home). Lost 1-2.
March 11, v. Blueharts (away). Lost 0-3.

It was with some misgiving that Bart.'s took the field with only three of the cup team playing against a powerful Blueharts side, but the substitutes played with spirit and determination seen all too rarely this season.

Blueharts attacked from the start and Stanford soon saved on the line. Pressure was relieved by a forward movement in which Aubin figured prominently. Blueharts returned to the attack and scored through their centre-forward.

After Preece had nearly scored fom a corner, Haigh achieved a remarkable save when he just failed to avoid a fast, rising shot at point-blank range.

In the second half promising moves by Arthur and Milligan failed in the final stages, and Haigh made two brilliant saves in quick succession. Nevertheless Blueharts scored two further goals to settle the issue. Apart from Haigh, Ross was particularly solid in defence, and Preece was the best of the forwards.

OTHER RESULTS, FIRST XI

March 18, v. Present (home). Lost 0-4.
March 19, v. Bandits (home). Lost 2-6.

SECOND XI

March 4, v. Ealing Dean (away). Lost 3-7.

March 11, v. Vickers Crayford (home). Won 3-0.

March 18, v. Selfridges (away). Drawn 0-0.

March 25, v. Cuaco (away). Won 3-1.

March 22, Hockey Club v. Rugger Club at Association Football. Hockey Club won 2-1.

Mr. Duffy kindly officiated and was chiefly noted for his ill-concealed mirth, which, at times, seriously inconvenienced him in blowing the whistle.

Both sides frequently changed their positions, which, coupled with the blissful ignorance of the participants, resulted in no score before half-time.

When battle was rejoined Hicks made one of his lightning dashes down the wing—this time accompanied by the ball—and drove the said spheroid into the centre. The becapped and hard-pressed goalkeeper, on bending down to pick it up, kicked the ball to Aubin. That worthy made no mistake, and netted the ball with a powerful kick from fully 3 yards. He was returned in triumph to the centre of the field.

The Rugger Club counter-attacked. After a bout of intricate interpassing (forwards and backwards) a text-book centre by Davies struck Pithall's foot and ricocheted into the net, leaving Haigh confounded.

At full time the score was 1-1, so extra time had to be played. Almost immediately a Rugger Club full-back was floored and a penalty awarded. Amidst a deathly hush H. Jones took the kick. At the crucial moment Haigh leapt into the air, arms and legs flying. The ball struck one of these extremities and the goal was saved. Taking courage from this fascinating episode, the Hockey Club scored their second goal to put the issue beyond doubt.

The fast, clever play was doubtless due, in no small part, to the expert guidance of the rival captains, Ross and Dick. Anyway, everybody enjoyed the game tremendously and it is to be hoped that this will become an annual fixture.

BOAT CLUB

The following Officers of the Club have been elected for the year 1949-50.

President: Dr. B. W. Town.

Vice-Presidents: Prof. L. P. Garrod; Prof. K. J. Franklin; O. S. Tubbs, Esq., F.R.C.S.; Dr. N. C. Oswald; M. Donaldson, Esq., F.R.C.S.; J. C. M. Currie, Esq.; D. C. H. Garrod, Esq.

Captain: G. S. Banwell.

Secretary: R. G. D. Newill.

The following members have been awarded Honours for the year 1949.

J. C. M. Currie; D. C. H. Garrod; G. S. Banwell; R. V. Smith; M. Cohen.

We congratulate M. Cohen on being awarded a Trial Cap by University of London Boat Club.

The Club thanks all those who contributed towards our new boat, which is now in regular use.

GOLF CLUB

On March 13, at the Annual General Meeting of St. Bartholomew's Hospital Golf Club, the following Officers were elected for the year 1950.

Captain: D. Rushton.

Hon. Sec.: C. J. R. Elliot.

The only match played so far this year resulted in a win for St. Mary's at Moor Park on March 8 by 6 matches to 2.

Results

L. Gracey 7/6 beat A. G. Wells.
D. Rushton lost to E. Lewis 1 hole.
M. Braimbridge lost to P. O. P. Newell 4/3.
Dr. McIlroy 5/4 beat R. Lewis.
M. Cassels lost to I. Gillison 1 hole.
C. J. R. Elliot lost to I. H. Page 1 hole.
G. Greenhalgh lost to K. Hudson 8/6.
R. Draper lost to D. Harone 1 hole.

RIFLE CLUB

The winter small-bore season has closed very successfully with the Club either first or equal first in the inter-college "Engineers Cup." Of the matches for this cup, eleven were won, one drawn and one lost.

The "B" team, formed late in the season, won four matches and lost one by 2 points.

The "C" team won two and lost one—again by 2 points.

Honours have been awarded to B. D. Lascelles, M. C. Hall and J. S. Bunting.

Team colours were awarded to C. M. Vickery, G. C. R. Morris, H. G. Scott and J. E. Watson.

The University of London team, of which B. D. Lascelles was a member, won the inter-university competition, and the United Hospitals Club has been reformed with M. C. Hall as its Secretary.

The pewter for the highest average was awarded to B. D. Lascelles with 98 per cent.; the H. J. Waring Handicap cup and pewter to M. C. Hall. A prize for the member with the best average, but who has never scored 95 per cent. was awarded to D. T. Morgan, and a pewter on the basis of "choose your own start" to J. D. Bruce.

The full-bore season begins early in May, but the .22 range will be open during the summer for any student or member of the staff who wishes to shoot down there.

HOUSE APPOINTMENTS

APRIL 1 to JUNE 30, 1950.

At St. Bartholomew's Hospital.

Dr. Bourne	P. H. Bass	M. W. Partington
Dr. Cullinan	J. D. W. Tomlinson	P. J. Roffey
Dr. Scowen	A. D. Munro-Faure	A. M. Baker
Prof. Christie	Miss J. Wheelwright	J. B. Dossetor
Mr. Hume	D. C. H. Garrod	K. R. Mason-Walshaw
Mr. Corbett	J. S. Cox	E. A. Cooper (B.2)
Mr. Hosford	J. E. von Bergen	G. Kazantzis
Prof. Sir James Paterson Ross	H. V. James	J. D. Griffiths
Casualty H.P.	N. P. Bhandari	
Children's Dept.	B. B. Reiss (B.2)	J. C. Turner
E.N.T. Dept.	B. J. Batt (B.2)	
Skin & Gynæ Dept.	J. R. Harris (B.2)	
Eye Dept.	J. Monckton (B.2)	
Intern	J. W. S. Harris (B.2)	R. A. Struthers (B.2)
Anæsthetists	J. Q. Matthias (B.1)	W. G. Dawson (B.2)
Dental Dept.	C. Todd (B.1)	
Orthopædic Dept. (Accident Service)	D. Weinstock	

At Hill End Hospital.

Dr. Spence	J. C. S. Ainley-Walker	
Mr. Naunton Morgan	M. B. S. Cooper	
E.N.T. Dept.	R. E. G. Gosling (A man holding B.2 appointment)	
Orthopædic Dept.	H. S. Brown	B. I. Brest
Thoracic Dept.	I. R. McWhinney (B.2)	
Neuro-Surg. Dept.	G. A. Court (B.2)	
Anæsthetists	I. Jackson (B.1)	W. J. Wright (B.2)
		J. W. Latham (B.2)

Alexandra Hospital

R.M.O.	M. Reckless

SCHOLARSHIPS AND PRIZE AWARDS 1950

Brackenbury Scholarship in Medicine
Bouton, J.

Brackenbury Scholarship in Surgery
Rothnie, N. G.

Walsham Prize (Surgical Pathology)
Smith, I. G.

Willett Medal (Operative Surgery)
Holmes, R. P.

Matthews Duncan Prize (Obstetric Medicine)
Cairns, J. D.

Kirkes Scholarship (Clinical Medicine)
Briggs, J. H.

Skynner Prize (Children's Diseases)
Bouton, J.

Roxburgh Prize (Dermatology)
Horton, I. A.

FOSTER PRIZE—Geldart, R. E. M.

Certificates—Hopkins, J. S.
Langdon, L.
Pearce, J. F.

TREASURER'S PRIZE—Witt, M. J.

Certificates—Smith, M. G.
Wooding, D. F. P.

Senior Scholarship in Anatomy, Physiology and Biochemistry
Lindop, P. J. aeq.
Pearce, J. F.

Herbert Paterson Medal in Biochemistry
Pearce, J. F.

THE TWELFTH DECENNIAL CLUB

The meeting of the Twelfth Decennial Club will be held on Friday, May 5, at 6 p.m. at the Hall of the Society of Apothecaries, Water Lane, E.C.1.

RECENT PAPERS BY BART'S MEN

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*ANDREWES, C. H. Bearing of recent work on the virus theory of cancer. *Brit. Med. J.*, Jan. 14, 1950, pp. 81-5.

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*BOURNE, G. Antipyretic action of cryogenine. *Lancet*, Dec. 17, 1949, pp. 1,126-8.

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*DALE, *Sir* Henry. Medical research as an aim in life. *Edin. Med. J.*, 56, 1949, pp. 273-84.

*DESMARAIS, M. H. L. The neutral 17-ketosteroids in rheumatoid arthritis and spondylitis. *Ann. Rheumatic Dis.*, 8, Dec., 1949, pp. 296-8

*FISHER, A. G. Timbrell. Osteoarthritis of the hip joint with special reference to its pathogenesis and clinical types. *Rheumatism*, 6, Jan., 1950, pp. 1-8.

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*GARROD, L. P., and MCILROY, M. B. Hospital outbreak of enteritis due to duck eggs. *Brit. Med. J.*, Dec. 3, 1949, pp. 1,259-61.

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*HEWER, C. Langton. Analgesia in childbirth. *Brit. Med. J.*, Dec. 31, 1949, pp. 1,521-3.

*HOWELL, Trevor H. Old age. *Geriatrics*, 4, Oct., 1949, pp. 281-92.

*—— Relief of pain in rheumatoid arthritis with tetraethylammonium bromide. *Lancet*, Feb. 4, 1950, pp. 204-5.

*—— Teaching and research in problems of old age. *Med. Press*, 223, Jan. 11, 1950, pp. 39-41.

*—— IVES, L. A. Perforation and hæmatemesis. *Lancet*, Feb. 11, 1950, pp. 246-7.

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*—— (DOLL, Richard, and others.) Gastric secretion and subsequent dyspepsia: a follow-up study. *Lancet*, Nov. 26, 1949, p. 984.

KENNAWAY, *Sir* E. L. William Turner Warwick —some personal recollections. *Middlx. Hosp. J.*, 49, Dec., 1949, p. 143.

—— *See also.* HEADY, J. A. and —

*KEYNES, Geoffrey L. Thymectomy for myasthenia gravis. *Bristol Med.-Chir. J.*, 66, Oct., 1949, pp. 100-102.

*LANDOR, J. V. The effect of nutritional disorders on the skin and mucous membranes as observed in the civilian internment camp, Singapore, during the Japanese occupation of Malaya. *Brit. J. Derm. & Syph.*, 60, Jan., 1948, pp. 1-9.

LOXTON, G. E. (LE VAY, D. and—). Clinical observations with deoxycortone and ascorbic acid. *Lancet*, Feb. 4, 1950, pp. 209-11.

MCILROY, M. B. *See* GARROD, L. P. and—

MAXWELL, J. Preston, and WHITEHEAD, J. P. S. Fibroadenoma of the cervix with adenomyosis of the uterine body. *J. Obstet. & Gynæc. Brit. Emp.*, 56, April, 1949, p. 246.

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*NASH, D. F. E. The development of micturition control with special reference to enuresis. Hunterian Lecture, Feb. 21st, 1949. *Ann. Roy. Coll. Surg. Eng.*, 5, Nov., 1949, pp. 318-44.

*PHILPS, A. S. Choroidal sarcoma with metastasis in the opposite orbit. *Brit. J. Ophth*, 33, Dec., 1949, pp. 732-9.

*—— Eye-tuberculosis. *Brit. Surg. Practice*, 3, 1948.

*RAVEN, Ronald W. The properties and surgical problems of malignant melanoma. *Ann. Roy. Coll. Surg. Eng.*, 6, Jan. ,1950, pp. 28-55.

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*SCOTT, R. Bodley. The place of radiotherapy in the tratment of chronic lymphoid leukæmia. *J. Fac. Radiologists*, 1, July, 1949, pp. 3-8.

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*SMITH, A. J. D. The doctor-patient relationship in the treatment of cancer. *J. Fac. Radiologists*, 1, July, 1949, pp. 73-4.

*—— The treatment of advanced breast cancer. *J. Fac. Radiologists*, 1, Oct., 1949, pp. 103-6.

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*TOWN, B. W., and others. Action of suramin and "antrycide" on enzymes. *Nature*, 164, Aug. 6, 1949, p. 233.

*TUBBS, O S. Ductus arteriosus. *Brit. Surg. Pract.*, 4, 1948, pp. 275-81.

*—— Heart and pericardium. *Brit. Surg. Pract.*, 4, 1948, pp. 412-27.

*TURNER, G. Grey. 13th Congress of the International Society of Surgery. *Ann. Roy. Coll. Surg.*, 5, Dec., 1949, pp. 411-15.

*—— Lord Moynihan and the training for surgery. *Univ. Leeds Med. Mag.*, 19, No. 3, 1949.

*—— Surgery in 1900. *Brit. Med. J.*, Jan. 7, 1950, pp. 73-5.

*VARTAN, C. K. Primary brow presentation. *J. Obstet. & Gynæc. Brit. Emp.*, 56, *April*, 1949, pp. 650-1.

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*WATTS. Carbon tetrachloride poisoning. *Lancet*, Jan. 14, 1950, pp. 66-7.

WEBER, F. Parkes. Retrograde peristalsis and vomiting of fæces, enemata and suppositories in functional nervous conditions; remarks on the tonic leiomyospasms. *Med. Press*, 223, Feb. 8, 1950, pp. 120-6.

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WILSON, E. J. and WORMALL, A. Studies on suramin (Antrypol: Bayer 205). *Biochem. J.*, 45, 1949, pp. 224-31.

WORMALL, A. *See* TOWN, B. W. and others.

—— *See* WILSON, E. J. and—

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

EXAMINATION RESULTS

ROYAL COLLEGE OF SURGEONS

At the Primary Fellowship Examination held in February, 1950, the following were successful:

Bourne, G. L.
Brown, R. W.
Hans, S. F.
Hunt, M. F.
Moffat, D. B.
Nicoll, E. D. V.
Thompson, M. R.
Whittle, R. J. M.

UNIVERSITY OF OXFORD

2nd B.M. Examination. Hilary Term, 1950.

Forensic Medicine and Public Health.

Denny, I. B.
Milligan, H. E.
Tomlinson, E. S.
Wallace, J. G.

Special and Clinical Pathology.

Denny, I. B.
Gilks, J. M. L.
Godden, J. L.
Milligan, H. E.
Tomlinson, E. S.
Wallace, J. G.

UNIVERSITY OF CAMBRIDGE

Examination in Pharmacology for Medical and Surgical Degrees. Lent Term, 1950.

Chapman, W. H.
Cozens, F. S.
Goldsmith, R.

UNIVERSITY OF LONDON

Examination for the Academic Postgraduate Diploma in Medical Radiology (Diagnosis) Part I. February, 1950.

Green, B.

CONJOINT BOARD

First Examination.

March, 1950

Physiology

Reynolds, A. B.

Pharmacology

Almond, F. A.
Bartley, R. H.
Blake, A. S.
Blau, J. N.
Boyse, E. A.
Chitty, W. A.
Coldrey, P. A.
Dickman, H. R.
Dodge, J. S.
Drown, G. K. M.
Evans, E. W.
Fildes, P. G.
Gobert Jones, J. A.
Goode, J. H.
Goodspeed, A. H.
Hall, M. C.
Hart, C. J. R.
Hazelton, S. F.
Hodgson, D. C.
Jones, H. D.
Ladell, R. C. H.
Mehta, P. C.
O'Reilly, P. B.
Parker, R. B.
Parrish, J. A.
Sims, A. J.
Stevenson, K. M.
Wallace, J. R. C.
Watkins, D.
Whelan, N.
Wilkinson, W. H.
Wyatt, H. J.

Pre-Medical Examination. March, 1950.

Chemistry

Greenwood, R. A.

Biology

Greenwood, R. A.

BOOK REVIEWS

A DOCTOR REGRETS, by D. McI. Johnson. Christopher Johnson, pp. 242. Price 12s. 6d.

The interest of the general public in the medical professions and its lore seems to be at a high peak at the present time; higher perhaps than ever before. Similarly with the General Election so lately over, an interest in other people's politics persists.

This book combines these two features. It is the autobiography of a Bart.'s man up to his retirement from practice in 1936, though mention is made of later happenings.

Let it not be thought that it is of appeal to the layman only, for there is much that is provoking and stimulating for all who would delve into its pages.

There is a chapter on the author's experiences in London, including his days at Bart.'s and it is interesting to compare present-day conditions.

The author traces his life in an individual style, which conforms with that of the illustrations. These latter are mostly of a personal nature and interest, and give some insight into his character.

It is impossible in these few lines to summarise further the contents of its pages. Suffice it to say that a true picture of inter-war practice with its difficulties, and the reasons for the author's retirement may be found therein.

RELAXATION AND EXERCISE FOR NATURAL CHILDBIRTH, by Helen Heardman. Livingstone, 1950, pp. 32. Price 9d.

A useful little booklet which many practitioners will like to know about. It explains in simple terms how natural childbirth can be achieved. Exercise and relaxation technique are described and illustrated, and the mother's part in labour explained.

The booklet is intended to be read by the husband as well as the wife, and the final paragraph is dedicated to the newly made father. Whilst not as useful as the author's "Way to Natural Childbirth" (Livingstone 7s. 6d.), which includes post-natal exercises as well as a fuller account of the ante-natal preparation, this pamphlet has a real place in the preparation of the mother-to-be.

BROMPTON HOSPITAL REPORTS, VOL. XVII (1948). Brompton Hospital Research Dept., pp xii+183. Price 10s.

This book contains reprints of papers published by the staff of the Brompton during 1948. It has been said that the function of a university is to teach about what is unknown rather than what is known. It is for this reason that this is such a refreshing work for the medical student whose reading is of necessity limited to the standard texts and has little opportunity (or encouragement) to study original literature. There are many case reports and whilst it would be invidious to select any individual article for mention, of particular interest at the present time are accounts of developments in thoracic surgery, notably pulmonary valvulectomy in the treatments of congenital pulmonary stenosis. Also included is an excellent centenary review. The book is well produced and illustrated.

STILLBIRTHS, by I. Sutherland. Oxford University Press, 1949, pp. xii+93. Price 7s. 6d.

This is a statistical social survey of the problem of stillbirths conducted by the author from the Institue of Social Medicine at Oxford. This may seem the wrong way to tackle what is paradoxically a "live" problem, but the end appears to justify the means, for practical conclusions are drawn from abstract figures. "The best practical policy for further reduction in Stillbirth rate appears to be to maintain the equitable distribution of essential foods, to ensure that sound education in nutrition reaches the poorest sections of the community—through ante-natal clinics and otherwise—and to improve the medical and obstetrical facilities available to expectant mothers." There is nothing new in this, but the survey draws attention to the differences between the Stillbirth rates of London, Urban Wales and Denmark (32, 52 and 23 respectively), and correlates the differences with the above factors.

A most interesting paper.

REMINISCENCES OF A PHYSICIAN, by Bernard Myers. This book is obtainable from H. K. Lewis & Co., Gower Street.

ST. BARTHOLOMEW'S

HOSPITAL JOURNAL

Vol. LIV JUNE, 1950 No. 6

THANKS, PAL

THE more cause there is for gratitude, the less one is grateful. How many mothers know this—having given their offspring life itself they get no thanks for their devoted labours. So, too, with America. She has given us so much—economic life indeed—that we take it all for granted, and are concerned only with how much more we shall get.

It is particularly hard, however, to give thanks on bended knee to America, as they have usurped our position as premier nation of the world, distributors of largesse in time of trouble. But we must be prepared to relinquish this position, reluctant though we may be, with as good a grace as possible. The older civilisation must give way under the impact of the dollar—though at the present moment the world must think that "civilisation" should read "senile dementia."

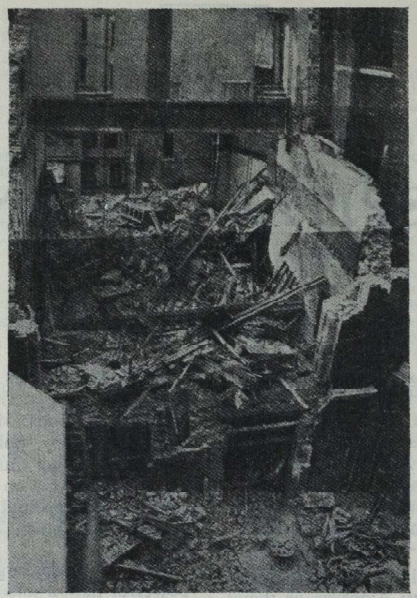
How can we be grateful anyway, when we are trounced at Wimbledon, in the Ryder Cup, at Henley? The fact that our only winning team is Women's Hockey is more an insult than a consolation. Once again, too, the attitude of "We won the war" has rankled, there being enough truth in it to make it the more bitter.

The United States hold the lead in the sphere of medicine also. The centre of gravity of medical research has shifted across the Atlantic, because they bring a different approach to the subject. Perhaps it is that the Americans take more trouble—certain it is that they tackle tasks of interminable detail that British workers seem shy of touching. They use a battering-ram technique that delivers the goods. More important still they have the money, polio research workers in particular having much more than they can use. Aureomycin on sale in New York drug-stores is a perpetual source of irritation to visiting Englishmen.

But we must forget the envy of a less powerful nation and thank America for her truly unselfish help in economic, political and scientific fields. What we should now be were it not for Marshall Aid does not bear considering. We are, as medical men, indebted to the States for their great discoveries, of which cortisone is the latest. In any case, where would our leading specialists go for their holidays were it not for this recognised American research pre-eminence? As Bart.'s men, too, we owe a debt, because we were helped during the war—before Pearl Harbour — by two Americans on our staff, who did a magnificent job in those short-staffed days.

We have now an opportunity not merely of congratulating ourselves that we feel grateful, but of showing our gratitude in a concrete manner. The Lord Mayor's National Thanksgiving Fund has been founded with the object of assisting overseas', including American, students in Britain, and by our contributions to this worthy cause we can show our appreciation of the sacrifices the United States have made, and are making, on our behalf.

DEMOLITION



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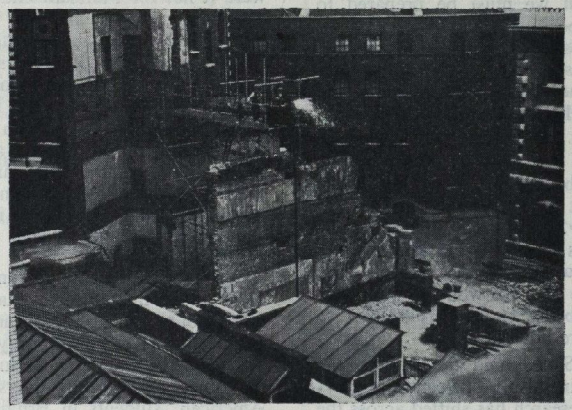


1950 *Photo:* H. Charles, Bart's Photographic Society.

The old Medical and Surgical Theatre, bombed in 1940, is now being demolished to make room for accommodation for the Almoners.

RHEUMATIC PAINS

By TREVOR H. HOWELL

ONE of the commonest problems of clinical medicine in elderly patients is the diagnosis and treatment of rheumatic pain. The twin difficulties of stiffness and pain on movement afflict many old people and limit their mobility. This in turn lessens their range of movement, their physical and mental horizon, their interests or pursuits and, in some measure, diminishes their very independence and happiness. If we can reverse or arrest this process, we shall not only diminish the sum of human misery, but shall also add life to the dwindling years. For these reasons, the application of one or two recent advances in the diagnosis and treatment of rheumatic pains would seem well worth while.

Synovial Pain

In the past, one of the most difficult situations to counter was that of an acute exacerbation of rheumatoid arthritis. Analgesics gave only limited relief, physiotherapy and splinting often left the patient still suffering more than discomfort. The pain is usually described as diffuse, throbbing, acutely aching with sudden increases in severity on movement. This is characteristic of synovial pain. During the past year, I have found that intramuscular injection of 5 c.c. of a 10 per cent. solution of tetra-ethyl-ammonium-bromide (T.E.A.B.) will usually stop this type of pain for a period of several days at least and often for weeks or months. It is gratifying to know that my results have been confirmed in Sweden. This pain can also be diminished by the intra-articular injection of local anaesthetic such as procaine, but the effect of T.E.A.B. lasts much longer. There are, however, a few cases in which T.E.A.B. is not effective and these require further study. Since the known action of T.E.A.B. is to block autonomic impulses of a sympathetic nature, it would suggest that this type of pain travels via the sympathetic nerves supplying the interior of the joint.

Capsular Pain

Another kind of joint pain which is encountered both in chronic rheumatoid arthritis and also in osteo-arthritis is a sharp, stabbing, localised pain. This has its seat in the capsule. This is commonest on the anterior surface of the knee, just below the edge of the patella and above the top of the tibia. Sometimes this type of pain may be encountered where tendons are inserted into the capsule of a joint, such as the postero-lateral aspects of the knee joint. This pain is not relieved by T.E.A.B., but can be removed, at least for a time, by the injection of local anæsthetic such as procaine. Many of the dramatic results gained by injection of procaine lactic acid into arthritic joints seem to occur when the pain has been capsular. The duration of relief varies a great deal in these cases. Occasionally a certain spot will never give pain any more. Often pain returns after a period of hours or days, but can be treated in the same way a second time with equal success. An important factor is the precise localisation of the most painful spot and the injection at the right depth from the surface.

Muscle and Tendon Pain

In a great number of patients who have either rheumatoid or osteo-arthritis, the site of the pain is not the joint structures themselves, but the muscles or tendons of the limbs. Mrs. H., who is a patient of mine at St. John's Hospital, Battersea, was diagnosed as chronic rheumatoid arthritis. Most of her pain is located on the inner aspect of her left knee. At first she was treated by injection of procaine to the spot where she felt the pain, but this used to give only temporary relief. On re-examination it was found that her vastus internus muscle had a patch of thickening and tenderness some six inches above the joint. When this was treated, the pain in the knee vanished.

Another site which gives rise to such referred pain is the upper border of the trapezius muscle, which may cause pain going down the inner aspect of the arm and hand, easily misdiagnosed as arthritis or neuritis. The origin of the flexor tendons of the forearm, will refer pain into the wrist or the hand. The origin of the extensor muscles in the forearm can refer pain to the back of the wrist. The gluteal muscles can give rise to pain with a sciatic distribution. This can be either a dull ache or a sharp, shooting sensation, either continuous or intermittent. The customary method of dealing with such myalgic spots is to inject them with local anæsthetic. Procaine not only deadens the pain, but also has the pharmacological property of diminishing spasm of striped muscle. Hence, whether we regard these areas as nodules of fibrositis or as

patches of muscle spasm secondary to some other condition, procaine seems the rational weapon to employ.

Medicated Creams

Pain due to fibrositis or spasm is much more common than we realise. In many patients, the disability from which they suffer and which is considered due to arthritis is entirely soft tissue in origin. One series of ninety cases which I analysed included thirty-three with rheumatoid arthritis and thirty-four cases with osteo-arthritis, where the pain and disability was due to soft-tissue lesions, not the actual joint lesion. This series was assembled in order to test the effects of a cream containing adrenalin on rheumatic lesions. Moss had claimed very good results, but I must confess that I was sceptical. As the trial progressed, however, it appeared that this adrenalin cream often relieved muscle pain for quite a considerable number of hours in many of the patients. At first, the firm pressure needed to massage it into the body was painful. Within about half a minute, this pain and tenderness began to diminish and the texture of the muscle could be felt to get much softer under the finger. If the lesion was superficial, the pain would usually disappear at about ninety seconds. The deeper the site of pain, the longer it took to go and the shorter was the duration of relief. In our search for improvements, we tried a number of other drugs in the cream base. Of these ephedrine was the best for general use and belladonna also relieved pain. Either of these could remain effective for more than twenty-four hours in certain cases, while adrenalin rarely lasted more than twelve. In order to confirm our views about the efficacy of this method, a control cream was used on twenty patients who had previously had one of the other preparations. Twenty per cent. of these experienced no relief; sixty per cent. had relief lasting less than four hours. The group treated with ephedrine cream had 14 per cent. with relief less than four hours, 56 per cent. relief from four to twenty-four hours and 30 per cent. with relief more than twenty-four hours.

Not every case responds to this method of treatment (for example, I have collected about a dozen very stout women who get little or no relief from it). There are others whose pain recurs after several hours, but these say that they can be sure of a good night's sleep if they use one of the creams permanently.

Fibrositis

In 1938 Sir Thomas Lewis suggested that the pain of fibrositis was similar to that of on going to bed. Generally speaking, the acute, sharp, stabbing type of rheumatic pain responds best to this treatment: the dull ache gets less relief. A great deal seems to depend upon the technique of massage, which must be very firm and almost vigorous. Much also depends upon the proper selection of areas to be treated, since so much rheumatic pain seems to be referred from elsewhere, and it is no good rubbing the wrong place.

As an attempt to follow up the train of thought which these results have started, we have tried injection of various drugs into the muscles. Here the results are more confusing. Adrenalin tends to produce faintness and tachycardia. Acetyl choline produces a burning sensation at the site of injection, with some local flushing. Yet several patients have claimed considerable relief after this drug has been used. Two cases had procaine in one site of pain and acetyl choline in another. Both stated that the latter produced the greater effect. The pain of acetyl choline seems to be different from that of fibrositis. This investigation is only just beginning, however, and I mention it more for the sake of interest than as even a preliminary report of progress. All we can say is that inunction and injection do not have similar results.

One form of treatment which is in the news at present is the use of desoxycorticosterone and ascorbic acid. Reports as to their results are conflicting, and I do not wish to make confusion worse confounded. In our experience the best results were obtained after the first few injections in patients whose disease retained some trace of smouldering activity. Those with a burnt-out arthritis did not respond. Stiffness was relieved more than pain and there was often a marked euphoria and desire for activity. There seems to be a need for more investigation into the indications and contra-indications for the use of this and similar combinations of drugs.

Another recent development which may be worth trial is the use of hyalase in cases of rheumatoid arthritis with puffy painful swelling around a joint. This preparation will sometimes promote absorption of the fluid and relief of the pain, either for a time or

intermittent claudication and had a physico-chemical basis. This suggestion is very interesting, because I have been treating a small number of cases of intermittent claudication with T.E.A.B. Several of them have showed slight improvement and appear to be able to walk a little further following treatment. Yet, in some of the patients who have had the drug for an exacerbation of rheumatoid arthritis, there has been an apparent increase in the pain due to the fibrositic soft-tissue lesions. It has been my experience that there is a group of very fat people with rheumatic pains in the hip and shoulder girdles whose pain is made worse by any kind of heat. Their basic lesion seems to be a panniculitis, rather than a pure muscular nodularity, so that the examining finger feels something like a mass of miniature cobblestones in the tender spots. These pains have little relief from the medicated creams which I have mentioned, and the syndrome seems to resemble a mild Dercum's disease.

As you will realise, these recent investigations and their unexpected results have somewhat altered our conceptions of the nature and origins of rheumatic pains. They suggest that more research will be needed in endocrinology, anatomy, the physiology of the autonomic nervous system and in pharmacology. I hope that our Geriatric Units will be able to lead the way in the advances which must surely follow from the pointers which I have mentioned today.

Reference.

Hollander, J. L., in "Arthritis," by Comroe, B. I. 1949, Kimpton, London.

STRANGULATION OF THE APPENDIX IN A FEMORAL HERNIA

By R. A. STRUTHERS

THE commonest site of strangulation of a hernia is at the neck of the femoral canal. For about a third of strangulated hernias occur at this point. With regard to the contents of the sacs containing bowel nearly 90% contain small intestine. Of these, about 5% have been found to contain the appendix.

Although appendicular strangulation in a femoral hernia is not rare, it is felt to be sufficiently unusual to describe a case, more especially as it occured in a male, and because the symptoms did not facilitate an accurate diagnosis.

The patient, a rubicund man of 55 years, walked into the Casualty Department one Saturday evening with the outward appearance of being in good health. He complained of a tender swelling in the right groin. Three days previously there had been a sudden onset of continuous pain low in the right iliac fossa. This pain could not be localised more precisely, was moderately severe, but not incapacitating. It radiated to the right testicle, was made worse by coughing (his only source of strain being a mild chronic cough), and relieved somewhat by lying down. In eight hours it eased in severity to a slight ache, and, as it eased, so a mass appeared and became increasingly prominent in the right groin. At no time did this make him feel sick.

On examination, this pleasant, jovial man was but little perturbed by the discovery of a lump. His temperature, pulse and respiration rates were normal and his tongue clean and moist. There was a swelling visible below the right inguinal ligament lying between the pubic tubercle and the mid-inguinal point. The long axis of its oval outline lay in the direction of the inguinal ligament, measuring 2in. x ¾in., of irregular outline, tender and soft at the apex and firm at the base. It was irreducible, the attempt causing pain. There was no impulse on coughing.

Operation was on the third day after the onset of the pain. An incision was made below and parallel to the inguinal ligament and the mass exposed, presenting through the cribriform opening. It consisted of extra-peritoneal fat and the sac. On opening the sac some free fluid escaped and the contents were found to be omental fat and the congested appendix. A low right paramedian incision was then made and the peritoneum opened. The femoral ring was defined and the hernia reduced by gentle traction on the sac. On further dissection of the sac, it was clearly shown that two-thirds of the appendix had been strangulated by the sharply defined junction at that point between normal and congested organ. Appendicectomy and closure of the internal opening of the canal were then performed. Pyrexia up to 101° F. occurred on the first two days post-operatively, after which recovery was uneventful.

I wish to thank Mr. John Hosford for permission to publish this case of his.

FISHING IN THE METROPOLIS

By LLEWELLYN PRIDHAM

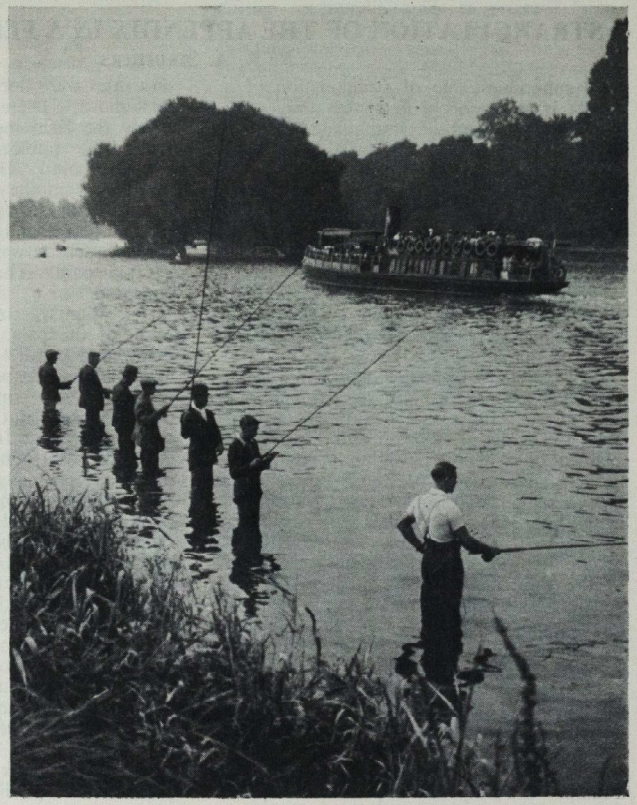
THOUGH I did not realise it at the time, I was, while a boy at St. Paul's School, within easy reach of good fishing. Yes! I have since caught a two-pound roach within three minutes' bus ride from Hammersmith Broadway!

The way of it was this: When I was a Bart.'s medical-student I found time heavy on my hands during the long vacation and cast about me to discover some form of relaxation. Wandering along the towpath at Barnes, I observed a solitary man on the other side of the railings protecting one of the great reservoirs bordering the road, just over Hammersmith Bridge. He was obviously happy, sitting on a small box, pipe in mouth, his eyes intent on a motionless float.

I managed to penetrate his trance and got into conversation with him about the fishing thereabouts. The good fellow gave me all the information I wanted, telling me to write for a permit either to the Metropolitan Water Board or the Thames Conservancy, I forget which. The next post brought me the necessary little card of admission, without a penny to pay.

There I spent many hours in solitude, sometimes but a couple of casts from the roaring street and the thronged towpath. Perhaps the only human being speaking to me during the long, quiet afternoons and evenings would be one of the officials who, while on his rounds, inspected the passes. It was more than pleasant squatting down at one's ease under the tall poplars and willows, facing the great sheet of clear water.

Never shall I forget the first time my float bobbed under and the peculiar thrill as I felt the pull of a fighting fish, which was in due course played to the concrete slope and then gathered up in my grasping hands, for I had no net. But that happened to be the only roach I ever caught by this method, and after many futile days I was more than a little interested in a couple of anglers who were busy hauling in fish, of which there was a glistening heap alongside their tackle. They were using the paternoster, with a quarter-pound lead embedded in ground-bait. The



whole contraption was suspended from the notch of a hurling-stick and then, with a terrific heave, the lead, line, bait and hooks were cast out over the reservoir; the line uncoiling from where it had been flaked down with the greatest nicety on the stone surround, and the sinker hitting the water many yards out from the concrete margin.

The whole success of this mighty fling depended on the smooth action of the thrower: the least little jerk or the slightest catch in the unwinding and the line would have to be hauled in and the whole business gone through all over again. But this was the way to catch roach!

I tried to emulate this system, but I never managed to cast quite so far—a good fifty yards: and as the fish seemed to feed only out in the centre of this artificial lake, my quota never approached in numbers that of my mentors.

Another resort of mine was Richmond Park, where I fished the Pen Ponds. Permission to fish these waters could only be obtained from the Head Keeper's cottage. In the front enclosure, I remember, there was a whole pack of black retrievers, from whose combined attack I was rescued by the man himself—a picturesque figure in green jacket and corduroy breeches, his bright blue eyes twinkling with amusement as he saw my amused self.

Here, however, using the same technique, I met with less success; but the environment was lovely, especially when compared with the artificial conditions of the reservoirs. There were almost alarming legends about immense carp, pike and other monsters inhabiting the lower of the two ponds; and, indeed, with my own eyes I have witnessed mighty flounderings, but that was all, and I have never heard of one of these Loch Ness varieties being caught.

The nearest I came to it was one afternoon when I left my rod with the tell-tale lump of ground-bait hanging from the loop in the line, precariously balanced on the edge of the water. On my return I saw to my amazement the light rod which I used jerking about in the water, and then it remained ominously still. Waist-deep, I got hold of my reel and began to wind up the line, which came in easily enough to its frayed out, broken end . . . *sic transit gloria aquae*!

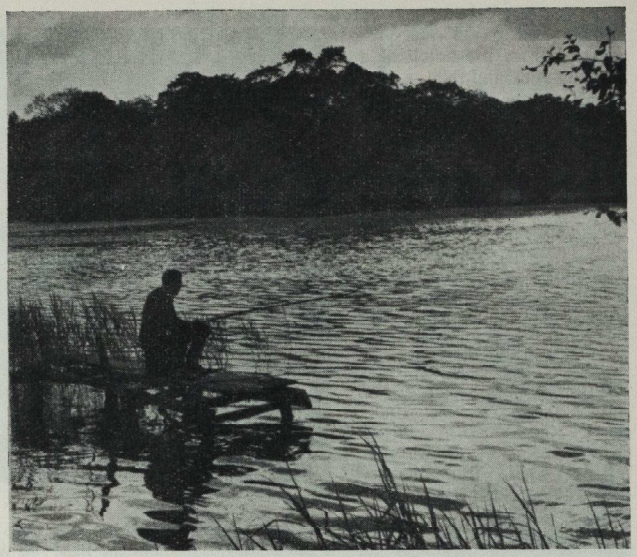
Not very far away was Richmond Bridge, with the towpath meandering up to Eel-Pie Island and downstream to the railway bridge. Along this stretch of the river bank I have seen a long line of anglers sitting on their little stools, one every three yards, catching the sunlight and the beauty of "Old Father Thames," but, alas! few fish. The amount of ground-bait thrown into the water was surprising; enough, one would think, to gorge every fish for miles downstream. There they were, perhaps a hundred of them, smoking, baiting-up, unhooking and throwing back the small-fry, yarning away with their next-door neighbours, their minds free and unshackled from the troubles and mundane worries of their respective little worlds.

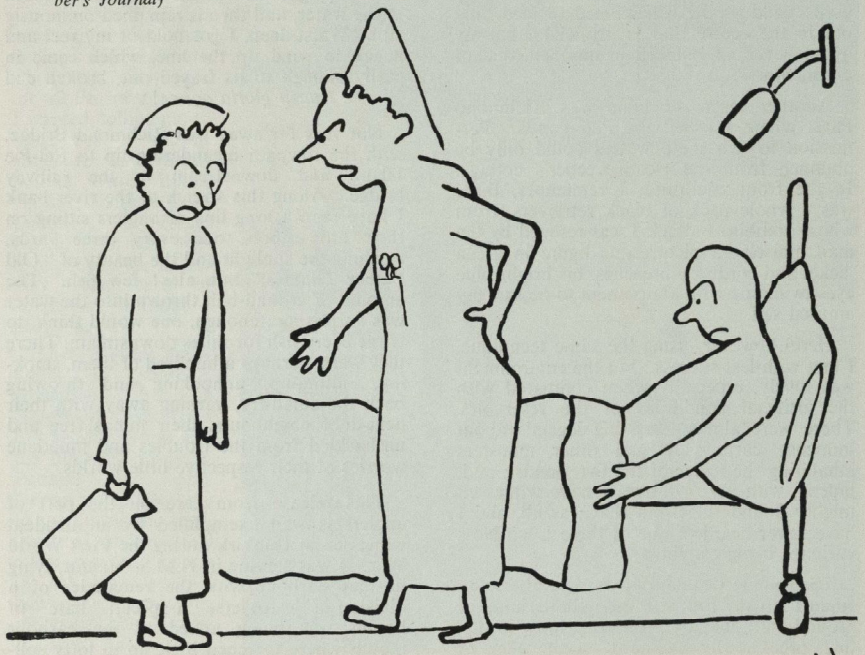
This release from care on the part of anglers is well exemplified by an incident witnessed at Dunkirk during the First World War. I was serving in H.M.S. *Mentor*, lying in that harbour with the remainder of a division of destroyers. A special "hate" of bombs was being aimed at the harbour mouth where, perched high up in lofty soli-

tude on the tall wooden piers set each side of the entrance, there sat a few dear old gentlemen, completely unmoved — fishing!

It was on an afternoon of noisy detonations; blast, fire, smoke — and some blood; and I remember a 12-inch monitor loosing off one of her heavy pieces as soon as the gunlayer could get it to bear on the 'planes flying up the coast. Yet these old philosophers continued with their sedentary sport, cynical and apart . . . one with Plato or Diogenes!

(With acknowledgements to *Angling* and *Chamber's Journal*)





I am well aware the patient asked for a bottle

PERSONALITIES AND PROGRESS IN THE STORY OF DIABETES MELLITUS

By S. F. MARWOOD

(*Continued*)

In 1492 there was born in the Swiss town of Einsiedeln, Philippus Aureolus Theophrastus Bombastus von Hohenheim, better known by his own pseudonym of Paracelsus. The son of a physician, his early education was somewhat neglected, but his precocity enabled him to accumulate considerable knowledge of medicine and natural philosophy during extensive travels through Europe, and occasional studies at the famous universities of the time. A practical man, he despised bookmen and was, consequently, a rebel against orthodoxy. Appointed Town Physician and University Lecturer at Basle at the early age of thirty-three, he insisted on lecturing in German instead of the traditional Latin, and he publicly burned the books of Galen and Avicenna. Denounced as a necromancer by the all-powerful Church, he had to flee from Basle and, after an adventurous and irregular life, he died at Salzburg at the age of forty-nine. By his often successful if empirical application of mineral medicines, Paracelsus gave a great impetus to therapeutics. He wrote widely on his own practical experiences, and is believed to have been the first to describe miners' disease and to establish, not surprisingly, the relationship between cretinism and endemic goitre. He secures an essential place in our story because he separated from the urine of diabetics, by evaporation, a substance which he termed salt, but which we now know was glucose. This discovery marks the end of what Duncan terms the ancient period in the history of diabetes mellitus, and the beginning of the truly diagnostic period which was to last for a further 250 years. Reviled by some as an adventurous charlatan of loose morals, regarded by others as an eccentric genius, Paracelsus certainly stimulated medical progress and, immortalised in a poem by Robert Browning, occupies a secure niche in medical history.

The march of progress was still leisurely. A century passed and, in 1621, Thomas Willis was born. The son of a farmer, he went to school in Oxford where he was a retainer of a Canon of Christchurch, Thomas Iles, through whose good offices he was enabled to matriculate at the age of fifteen, graduate at eighteen, and take the B.M. degree at the age of twenty-five. Practising for a time in Oxford, his early professional years were passed in the troublous times of the parliamentary wars. Not afraid to proclaim his sympathies, he remained a staunch king's man and, at the Restoration in 1660, was rewarded with the Sedleian professorship of natural philosophy at Oxford. There he wrote his *Cerebri Anatome* which was illustrated by Wren and, in it, described the spinal accessory nerve or nerve of Willis, and also that wonderful system of vascular anastomoses at the base of the brain known to us all as the circle of Willis. In 1666 he removed to London where he soon built up a large and fashionable practice and eventually became physician to Charles II. He continued his observations and writings, gave the first description of paracusis Willisii in a deaf woman who could hear her husband's voice only if a drum were beaten at the same time, and described and named puerperal fever. His greatest work, however, was his treatise on diabetes which, in the robust language of his time, he entitled *The Pissing Evil*. He considered the disease to be one primarily of the blood, and made the best urinalysis possible in his day. Tasting the urine, he found it wonderfully sweet as if imbued with honey or sugar, and he introduced an undernutrition cure. Small wonder is it that Willis occupies an honoured place in the literature of diabetes mellitus. He died in 1675 when only fifty-four years old, having refused a knighthood because Charles, in one of his merry moments, had said that Willis had killed more of the king's subjects than could an invading army. Be that as it may, Garrison classes him with Sydenham, William Heberden, Richard Bright, and others as a remarkable example of the capacity of the English physician for close, careful clinical observation.

Yet another century had to pass before the next milepost was established. In 1756, there graduated from Edinburgh university Mathew Dobson who, after settling in practice in Liverpool, became physician to the Liverpool infirmary. Failing health restricted his tenure of this office to the ten years from 1770 to 1780. He then removed to Bath where he died four years later. A pioneer in

medicine, he was elected F.R.S., and he is best known for the paper he communicated to the Medical Society of London on *Experiments and Observations on the Urine in Diabetes*. In this paper Dobson gives a careful clinical description of the disease in a soldier admitted to the Liverpool infirmary in 1772. The patient was suffering from acute diabetes and, from the description, we may conclude that there was marked ketosis and impending coma. Thus far, excellent though his picture is, it cannot be said to advance our knowledge of diabetes. It is on account of the several experiments he carried out with the help of Mr. Poole, apothecary to the hospital, not only on the urine, but also on the blood, that his claim to a place in diabetic history rests. He notes that (1) the serum is opaque and sweetish though not so sweet as the urine, (2) the urine contains a substance which readily passes through the vinous, acetous, and putrefactive fermentations, (3) a considerable quantity of saccharine matter is apparently carried off by the kidneys in this, and probably every other case of diabetes, (4) the saccharine matter is not formed in the kidney but exists in the blood serum, and (5) the loss through the kidneys of so large a proportion of the alimentary matter, before it can be assimilated and applied to the purposes of nutrition, explains the emaciating effects of the disease. These remarkable observations and conclusions foreshadow the great era at hand, and give Dobson an honoured place in our story.

In 1778, Cawley noted abnormal changes in the pancreas in a fatal case of diabetes mellitus. Ten years later, Marshall observed the smell of decaying apples in the breath of sufferers from diabetic coma. About the same time, Rollo, a distinguished military surgeon, ridiculed at long last the claim that the urinary output was greater than the fluid intake. He noted the significance of cataract, and prescribed the first scientifically restricted diet together with drugs to lessen the appetite. And with the identification of sugar as glucose by Chevreul in 1815, we find ourselves on the threshold of the experimental era in the history of the disease.

Taking stock of the situation at this stage, it may be said that, laboriously and painfully through the centuries which have passed since the classic descriptions of Aretaeus and Avicenna, we have become dimly aware of a profound disorder of the metabolic processes, expressing itself by certain prominent signs and symptoms and the discharge of glucose in the urine, and having its seat possibly in the pancreas. Advances in pure science, particularly in chemistry, and the development of pathology as a special subject were now to provide powerful stimuli to research.

In 1774, Priestly discovered oxygen, probably the most important single contribution ever made in the realm of chemistry and one which made possible the metabolic researches which were soon to follow. In France, Priestly's counterpart, Lavoisier, made the first investigations into basal metabolism. Famous for his experiments which enabled him to prove the indestructibility of matter, he was made fermier-général under the ancient regime. As a result he was later guillotined, his plea for a further fourteen days of life to enable him to complete an important experiment being ignored. Under the "Terror," France had no more use for scientists, and Lavoisier became one of the most notable examples of senseless sacrifice to mob fury.

No account of diabetic history could omit the name of Claude Bernard, the great French physiologist. The son of a modest vine-grower, he was born in 1813 at St. Julien near Villefranche. Like many great men, he showed little promise as a boy. Apprenticed to an apothecary, he soon found the work distasteful. That he had a sense of humour is evident, for, when writing of this early experience, he said: "The first thing my patron taught me to make was shoe-polish. I had arrived. I knew how to make something. I was a man." Ambitious to become a playwright, he secured his escape from the apothecary, but his attempts to write plays were equally unsuccessful and he decided to study medicine. As a medical student and a house man he was undistinguished, and no-one would have forecast his brilliant future. By a fortunate circumstance he became an assistant to the great Magendie, and from that moment rose to fame. In 1845, at the age of thirty-two, he married, and a well known cynic of a later day wrote that Bernard's misfortunes were thus placed on a permanent basis. It was only after twenty-five years that incompatibility, occasioned in the first place by his wife's aversion to his work, that they separated. Elected to a special chair of physiology at the Sorbonne, he soon became full professor at the Collège de France and he was elected to the Académie Française at the age of fifty-five. He it was who said that hypothesis is excellent but should only determine the object of experimental research, and should be put away like an overcoat on entering the laboratory lest it vitiate observation. His work in physiology covered a wide field, but it is that on animal glycogenesis which gives him an honoured place in our story. Briefly, Claude Bernard discovered that glucose, conveyed from the alimentary tract by the portal vein, was stored in the liver as glycogen and, when needed by the tissues, reconverted into glucose and despatched via the hepatic vein. He noted that the livers of starved animals were empty of glycogen, and that the glucose in the blood of normal animals was maintained at an almost constant level. His production of glycosuria by puncture of the floor of the fourth ventricle, and consequent stimulation of the suprarenals via the splanchnic nerves is a famous experiment known to all students of medicine. He noted that puncture did not result in glycosuria if these nerves were previously divided, nor if, with the nerves intact, the liver had been so depleted by starvation that no glycogen was left for conversion into glucose by the outpoured adrenalin. In diabetes, he demonstrated that glucose in the blood preceded glycosuria, and if time proved his hepatic theory of diabetic causation to be wrong, his researches nevertheless were an immense contribution to our knowledge of the disease.

Claude Bernard died in 1878, and a measure of the fame that was his, not only in France but in the whole scientific world, was the state funeral given to him. This was a tribute formerly paid only to princes, statesmen and soldiers (Rolleston).

Contemporary with Bernard was Bouchardat (1806-1886), a great pioneer in diabetes and one of the originators of the modern viewpoint of the disease (Barach). He used the fermentation test and the polariscope in diagnosis, and, impressed by the diminution of glycosuria in diabetics during the siege of Paris, emphasised the importance of undernutrition and instituted fast days. He was also the first to formulate the theory that there exists a diabetes due to a disturbance in the function of the pancreas (McCradie). His conclusions were arrived at empirically, but they marked a great advance on preceding work, and were to be elaborated on sound principles by Naunyn a generation later.

In 1841, Trommer reported his well-known test for sugar in the urine. Fehling, in 1850, slightly improved on this test which is more commonly named after him, and introduced a quantitative test. Langerhans, in 1869, discovered the pancreatic islets which for ever bear his name. He was only a medical student at the time, and thus joins a select band among whom we have had, in our time, Castle of intrinsic factor fame, and Best the collaborator with Banting. It is natural to regret that Langerhans never lived to know the vital role his islets played in diabetes.

In this country there was Frederick William Pavy, physician to Guy's Hospital during that institution's golden age, an age which knew such famous figures as Richard Bright, Thomas Addison, and William Gull. Pavy had been a pupil of Claude Bernard, and he devoted his life to the study of diabetes mellitus. His treatise on *Food and Dietetics* was well known in his day, and he enjoyed the largest diabetic practice in London. To his credit is the establishment of a definite relationship between degrees of hyperglycæmia and glycosuria, an observation later confirmed by van Noorden. A contemporary, the famous Sir William Gull, said of Pavy "what has this man done, or his father before him, that he should be condemned to spending his life searching for the cure of an incurable disease." It is remarkable that a man of Gull's brilliance, oracular in pronouncement though he was, should not have realised that it is because men like Pavy have willingly spent their lives in such manner that many diseases have become curable or controllable. It is true that the cure of diabetes is not yet, but we may be sure that Gull would have paused to think could he have seen only sixty years ahead.

In 1889 there was performed an experiment which constituted yet another of medicine's brilliant researches. Minkowski, sometime Professor of Medicine at Breslau, was the performer, and he was assisted by von Mering. The two names are usually associated but, so far as this and similar experiments are concerned, Minkowski is entitled to most of the credit. The pancreas of a dog was extirpated and, twenty-four hours later, the urine contained 5 per cent. of glucose. The importance of this discovery needs no emphasis. In further experiments of a like nature, Minkowski noted, among other conditions, the need of strict antisepsis, for, whereas normal dogs enjoy a remarkable capacity for healing by primary intention, diabetic dogs are much less resistent to pus producers. Having regard to our own clinical experience, this was a most interesting observation. He observed that the depan-

creatised dog became abnormally hungry, thirsty and greedy, and suffered from marked polyuria and that, no matter what the dietary, there was a continuous heavy excretion of glucose. Sooner or later, diacetic acid appeared in the urine and death took place in four weeks at the most. Partial removal of the pancreas did not result in diabetes. All results were carefully checked by autopsy. His reference to diacetic acid in the urine before death will be noted, for he had already confirmed and elaborated the observations of Kussmaul and others, and had shown that diabetic coma is due to increased formation and accumulation of βhydroxybutyric acid and its derivatives. The importance of the pancreas in the pathology of diabetes was thus experimentally established, and Minkowski is a name that can never be forgotten.

To be concluded.

THE FELLOWSHIP FOR FREEDOM IN MEDICINE

In May, 1948, the medical profession decided to accept the National Health Service Act as it now stands. After receiving numerous letters of dismay at the capitulation of the profession Lord Horder called a meeting in November of the same year which was attended by 700 doctors from all parts of the country. At this meeting the Fellowship for Freedom in Medicine was inaugurated. Today the Fellowship has over 3,000 members with branches and local secretaries throughout the country.

The present objective is to secure those intensive amendments of the National Health Service Act which are necessary for the furthering of the high standards of medicine and for the return of freedom for patients and doctors alike. In particular the Fellowship aims to abolish the dictatorial powers over the medical profession given to laymen and also to restore facilities for those patients who wish to receive medical treatment outside the Act.

Associate membership of the Fellowship is open to all registered medical students. Associate members are entitled to attend all general meetings and to join in the discussions; they are not, however, entitled to vote. For the nominal fee of 2/6d. per annum they will receive copies of the Bulletin and other literature published by the Fellowship.

RAHERE SOCIETY (WALES)

The Annual Dinner of the above Society was held at the Park Hotel, Cardiff, on Saturday, March 25th, when the guests of honour were Mr. J. P. Hosford, F.R.C.S., etc., and Dr. Hayward, M.D., F.R.C.P. There were sixty present at the Dinner. The toast of "Bart.'s" and the two principal guests was proposed by the President. Dr. F. W. Campbell and was responded to by Mr. Hosford and Dr. Hayward, who were received with musical honours.

The toasts of the other guests, mainly members of the Professorial Staff of the Welsh National School of Medicine, was proposed by Dr. Cyril Joyce, and Professors Kennedy and G. Watkins replied.

It was proposed in the course of the evening that a donation of ten guineas be given annually by the Society towards a Prize to be known as the "Rahere Society of Wales Prize," the terms and conditions for which to be determined by the Dean, Dr. C. F. Harris.

In accordance with the traditions of the Society Mr. Hosford and Dr. Hayward were made Honorary Members. The other Honorary Members of the Society are Sir Milsom Rees, Dr. Charles Harris and Sir James Paterson Ross.

The President and Vice-President of the Society for the next year are Mr. Melbourne Thomas and Dr. P. O. Davies, respectively.

It is hoped that all Bart.'s men who are eligible for membership of the Society, who have not yet been contacted, will communicate with the Honorary Secretary, G. Emrys Harries, The Residence, City Isolation Hospital, Canton, Cardiff.

HONORARY LL.D., ST. ANDREWS

The Honorary Degree of Doctor of Laws was conferred on Mr. H. B. Stallard at St. Andrew's University on April 20.

ASSISTANT DIRECTOR OF THE SURGICAL UNIT

Mr. J. B. Kinmonth has been appointed Assistant Surgeon and Assistant Director of the Surgical Unit with effect from June, 1950.

YOUNG HIPPOCRATES HAS A GO

How old are you, young Hippocrates?

I am twenty-five, Wilfred.

What are your hobbies?

I like spending my time reading, and if I am not actually reading I like to try and work out the differential diagnosis of dyspnœa, diarrhœa and palpitations, the causes of ascites, hæmatemesis, pyuria and jaundice. I like to invite medical friends to my home and throw them out if they talk about subjects other than those strictly relevant to the answering of examination questions. My wife doesn't like this because she thinks I should take a break off from work. She ought to have known better than to marry a medical student.

The only word I understand is diarrhœa, so I think it should go through very well. What games do you play?—this has nothing to do with marriage.

Only rather curious games, which a friend and I have invented. We use a set of cards, each containing a single symptom on it. As soon as we collect a complete set of symptoms to make up a disease entity we put the cards down and claim points. Of course, a syndrome carries a higher valuation. We also try and get into different embryological positions and the idea is to guess which organ is being depicted in its development. If we aren't sure we look it up in a book.

I shall have to look that lot up in a book, too. If you were not you, who would you like to be?

A house surgeon, because then I can examine and write up cases before the dressers get at them. I can also send dyspnœic dressers across to the pathological department with forms demanding useless laboratory investigations. It would be great fun.

Do you dream of anything you would like to have done?

Yes. I would like to appear before a lot of distinguished surgeons at the F.R.C.S. examination and show them how clever I am by directing the conversation to the treatment of a pelvic volvulus. All the other candidates looking apprehensively through the window will be cheering me and I am sure it must be a great thing to have this happen.

For an encore you can show them how to take an appendix out. Now what do you dislike?

I dislike people who try to detract my attention from one of three volumes of Cunningham's anatomy which I read in tubes and buses. I detest people who ask me questions to which they don't know the correct answers. It means writing them on a scrap of paper and looking up the answers when I get back home.

Be careful you are not arrested for passing betting slips. Have you ever had an embarrassing moment?

Oh yes. Apart from my past exploits with 2nd M.B. examiners, my most embarrassing moment was when I studied a number of electrocardiograms of a patient by his bedside and told my chief that the patient was dead, to find the patient waking up and saying to me: "Don't be so silly." I really felt completely at a loss. I have no doubt that my chief felt the awkwardness of the situation.

Could you put your finger on any action and say, "I could not do that to save my life"?

In a patient with tuberculous peritonitis I cannot percuss the transverse rolled up omentum to save my life. Nor can I hear moist rales in a patient with a localised pleural effusion.

Have you ever longed to say anything to anyone and not dared?

I have longed to ask my professor of anatomy the nerve supply to the inferior gemellus and have just not dared, because I am almost certain he would throw me out of the window for not having looked it up before.

What is your ambition for the future?

To be professor of surgery at a big hospital and perform dramatic life-saving operations—and to be surrounded by admiring assistants and the most divine nurses—just like Walter Mitty.

What is the one thing you have done in life that gives you the most pride?

To offer the diagnosis of Albright-McCune-Sternberg's syndrome during a ward round and find that the professor of medicine had never heard of it. It still fills me with pride to think of it.

Are you still courting?

No. I gave it up when I took up medicine

because I found it interfered with my medical studies. I am married of course, but my wife finds some other way to keep herself amused.

If you could have three people in a desert island whom would you take and why?

I would take Dr. Scolex, who will be able to keep my pharmacological armamentarium up to date, and help me in finding out the rare disease entities met with in the island. He can also help me with urinanalysis, particularly to determine urea-nitrogen, so that I can be certain that my protein intake is adequate. I would take Miss Ergophobia the glamorous physiotherapist. She would, apart from carrying out electrodiagnostic techniques, join Dr. Scolex in performing the "pas de deux" from "Les syphilides." Lastly, I should find Mr. Truculent the surgeon indispensable. He would be able to perform anastomotic operations on me should I develop portal hypertension, and make a boat from the trees in the desert island so that we can all get back home.

And then you can carry out electrodiagnostics with Miss Ergophobia. I am under cyclopropane, Barney, so give him his pelvic volvulus!

(By Vishnu with the assistance of Wilfred Pickles.)

AN OPERATION FOR RECTAL PROLAPSE IN WOMEN

By M. WHITELEY

FROM time to time cases of rectal prolapse in women are seen which have not responded to previous surgical treatment. A study of a small series of these cases suggested that the problem might be dealt with by suspending the rectum from the tendinous tissues in front of the body of the first sacral vertebra.

The utero-sacral folds and ligaments are thickened near the points where they pass lateral to the rectum. It was thought possible that suspension of these thickened areas to the promontory of the sacrum would prevent prolapse of the rectum. The utero-sacral ligaments consist of muscle and fibrous tissue and on each side a recto-uterine fold marks approximately the course of the ligaments from the uterus to the sacrum. The technique involves opening the abdominal cavity by means of a midline suprapubic incision. On the right side of the patient, the thickened part of the utero-sacral fold and ligament adjacent to the rectum is picked up with a needle threaded with thread and sutured directly to the tendinous tissues in front of the first piece of the sacrum. On the left side the suspension to the first piece of the sacrum is impossible unless both ends of the suture are passed through the mesosigmoid. In such cases the sigmoid colon can easily be displaced to the left side after the rectum has been drawn up.

The following three cases have been submitted to this procedure:—

Case 1. Mrs. M. A., aged 31.

Two years history of prolapse on straining at stool. More recently the prolapse appeared at each bowl action and on micturition. The patient was a nullipara and no abnormality apart from the rectal prolapse was found. The prolapse protruded about 3in.

Operation was performed on 16.9.48.

Case 2. Mrs. D. T., aged 48.

This patient gave a long history of hæmarrhoids for which an operation had been performed eight years previously. The operation had been repeated 18 month ago. Shortly after the second operation the patient noticed prolapse of the rectum. She was readmitted to hospital and a Lockhart-Mummery operation was performed. Three weeks later the prolapse recurred. The patient stated that the prolapse had been aggravated by the operation. The patient had had three miscarriages previously and had one child. Apart from some degree of hypertension, the general condition of the patient was good but there was prolapse of the rectal mucous membrane.

Operation was performed on 1.10.48.

Case 3. Miss F. E. L., aged 72 years.

This patient had noticed prolapse of the rectum 18 months previously and the prolapse had not been controlled except by lying down. The redundant rectal mucous membrane was excised but prolapse recurred within a week of her discharge from hospital.

Operation was performed on 20.4.49.

The cases have been followed up and the end results up to the present have been satisfactory. It is possible that the operation may be of value. I wish to thank Mr. Wilfred Shaw for permission to publish the records of these cases.

IN OUR LIBRARY—XV.

WILLIAM BULLEIN'S BULWARKE OF DEFENCE AGAINST ALL SICKNES, 1579

By JOHN L. THORNTON, *Librarian*

WHEN qualified medical men were jealously guarding the secrets of their art by publishing their observations in Latin, a few rebels catered for the general public by writing in the common tongue. Quacks were always popular, and made fortunes by means of patent medicines (as today) and their writings, which went into numerous editions, were eagerly perused by the public. Certain of these quacks, practising without holding medical qualifications, attained great skill and wide influence, and were not inferior in medical knowledge to the nominally qualified practitioners. Occasionally it is impossible to differentiate between those who acquired recognised qualifications, and those who gained their knowldge solely by practical experience, and the possession of "qualifications" by many "doctors" of the period cannot be confirmed by investigation.

In the first half of the sixteenth century Andrew Boorde (*c.* 1490-1549) wrote on domestic medicine, his *Breviary of healthe*, 1547, and his *Compendyous regyment, or a dyetary of helth*, [1542] going into several editions. In the first half of the seventeenth century Nicholas Culpeper's numerous writings achieved great popularity, and between these two characters we have William Bullein (1500?-1576). We know little of the life of Bullein, other than the information contained in his own writings, but he was probably born in the Isle of Ely during the reign of Henry VII. It is claimed that Bullein studied at both Oxford and Cambridge, and he may indeed have done so. From 1550 to 1554 he was rector of Blaxhall, in Suffolk, following which he travelled extensively on the Continent. During this period he studied medicine, and is believed to have taken a medical degree while abroad.

The year 1558 saw the publication of Bullein's *A newe booke entituled the Governement of healthe*, [*etc.*], which was dedicated to Sir Thomas Hilton, and of which a further edition appeared in 1595. In 1562 William Bullein published *A comfortable regiment against pleurisi*, [*etc.*], and also his *Bulwarke of defence against all sicknes*, [*etc.*], dedicated to Lord Henry Carey, Baron of Hunsdon, a second edition of this appearing in 1579. Our Library contains a copy of this second edition, the title-page of which reads: *Bulleins Bulwarke of Defence against all Sicknesse, Soarenesse, and Woundes that doe dayly assaulte mankinde: Which Bulwarke is kept with Hilarius the Gardener, & Health the Phisician, with the Chirurgian, to helpe the wounded Souldiours. Gathered and practised from the most worthy learned, both olde and new: to the great comforte of Mankinde: by William Bullein, Doctor of Phisicke, 1562. Imprinted at London by Thomas Marshe, dwellinge in Fleetestreate neare unto Saincte Dunstanes Church, 1579.* In his foreword Bullein tells of some of his troubles, which were caused by William Hilton, brother to Sir Thomas Hilton, whom Bullein had treated, and to whom he had dedicated his *Government of healthe*. William Hilton accused Bullein of murdering Sir Thomas, who had died of fever, but Bullein was acquitted. William Hilton then caused Bullein to be arrested for debt, and it was while in prison that he wrote this book. In his *Government of healthe* Bullein had promised to write a book entitled *Healthfull medicines*, but this was lost at sea on a voyage between Tynemouth and London, as explained in the following foreword to his *Bulwarke*, which Bullein headed: "To the friendly reader, William Bulleyn sendeth salutation": "For as mutch good Reader, as foure yeares last past, I promysed (in a Booke of myne, called the *Government of healthe*, whych I dedicated to a knyghte of great worshyp in the North, called Syr Thomas, the Baron of Hilton) to set forth an other Booke of Healthfull Medicines: Evenso, by the space of one yeare next after the same, I travayled to performe my Promyse made, & so finished my Copy: whych Copy dyd perishe in Shipwracke, & so my Labour was lost. And not only my Labour, but also my Lyfe, by sundry malicious and devilishe Inventions, by, and through one William Hilton: in nature, Brother to the foresayd Baron of Hilton, but in Condicions, nothing lyke at all: for hee wanted hys gentlenesse, & good nature. Now, after that God had delivered me from the great perill of thys Man, that is to say: conspiring of my

giltless death, & hurtlesse lyfe, towards him and hys: Eftsoones this man attempted an other new displeasure agaynst me for debt: colouring his Malice by a pretence of lawe. By which Action, finally I was imprysoned, me thought a long tyme (for there are but fewe Chestes, that have pleasure in sutch Innes). And doeing thus in Pryson, me thought I had not only convenient tyme, but also a quiet Conscience, to travel, in renuing my late Booke, or lost Copy, whych in deede, I am not able to finyshe, being prevented wyth so many Troubles, and Lets of my sayd Enemy, whose doings at large, I commit to sylence, least I should seeme to wryte, a Story or Tragedy, or els a description of hys folly, in the place of Phisicke: no lesse also can I, but declare some cause of my let, and why my Booke came not forth ere thys tyme, accordingly as I promysed. But blame mee not, good Reader, although I put hym in my Booke, whych would have put me from thys Lyfe. And this Book, which I have done, Gentle Reader, take it in good part, I pray you, for that is my desyre."

The *Bulwarke* is divided into four parts: (i) *Book of simples,* which is one of the earliest English herbals; (ii) *Dialogue betwene Sorenes and Chirurgi;* (iii) *Booke of compounds;* and (iv) *Booke of the use of sicke men and medicens,* which is lacking in our copy. Bullein was a keen naturalist, and his *Booke of simples* is most interesting reading. Under "Lupines" he writes:

"They be lyke Beanes, having seaven leaves, somwhat like Beares foote, and are commonly knowen: whose Meale mingled with Hony or licked up, or drunke, doth cast wormes out of the bellye. And made in a plaster, and applied to the belly, it doth ye lyke to children: sodden in Vinegar, it helpeth the Kinges evil, beyng made in plaster. And also doth breake a pestilence sore, layed on warme. And seeth *Lupines* in rayn water until they be wasted, strayne this water, and when it is cold wash thy face and it wil clense it from foulenes and spottes. Myrthe, Hony and *Lupines* incorporate togeather, and rolled in Wolle, make therof a Pessary, and convey it into the place, and it will bryng forth the dead childe, & force the menstrual termes. This herbe and seede thereof, wil kil Cancers, and skales in the hedde: tempered with hogges grease, Vinegar and Brymstone. Seeth it in Persely water, or whaye, and it wil clense the bladder, and provoke urine: and drunke with Vinegar, it clenseth the stomacke, helpeth digestion, & expulseth all noysomnesse, or abhorrhyng of meate. *Lupines,* sayth Galen, be of an earthly substance, and engender evil humours: to be eaten as meate, they be hurtful, but in medicine good. And they be bitter hoat and dry."

Under "Mandragora" Bullein mentions the folklore of the mandrake, and incidently deals with its use as an anæsthetic: "Many superstitious, and foolishe thynges have bin devised of this herbe: a very invencion of Wytches, and Hypocrites, through the suggestion & motion of the devill, to delude the weake hart of mankynde wythall. For they doe affyrme, that this herbe cometh of the seede of some convicted dead men: and also, without the death of some lyving thinge, it cannot be drawen out of the earth to mans use. Therefore, they did tye some Dogge, or other lyving beast unto the roote thereof wyth a corde, and digged the earth in compasse rounde about, and in the meane tyme stopped their own eares, for feare of the terreble shriek, and cry of this Mandrack. In whych cry, it doth not only dye it selfe, but the feare thereof kylleth the Dogge or Beast, whych pulled it out of the earth. And this hearbe is called also *Anthropomorphos* because it beareth the Image of a man, and that is false. For no herbe hath the shape of a man or Woman, no truely, it is not naturall of his owne growing: but by the crafty invention of some false man, it is done by arte. As many rootes may be made, in the formes of men, foules, and beastes, and secretly covered in the earth: whych when they are found by the crafty hyder thereof, the beholders be dryven into no small admiration and wounder, supposing there by, that some straunge fearefull thing, shall quickly followe the same. . . . The juyce of this herbe pressed forth, and kept in a close earthen vessel, according to arte, bringeth sleepe, and casteth men into a trans on a deepe terrible dreame, untill he be cut of the stone, &c. . . . The juyce thereof with oyle & Hony, healeth woundes: and thus I end of Mandrack, which in old tyme, it was called *Circaeum,* of Wytches, whych had vertue (sayd they) or craft to transforme, both man and beast, and herbe out of kynde. Among all other they wrought Wonders by this herbe, to provoke, bewitch, or cast men into mad blynd fantasies, or frenses, called Love, whych rather may be termed noysome beastly Lust, and when it is wrought by herbes, foolishnesse."

The *Bulwarke* is printed in black-letter type (Gothic), with engraved initial letters. It contains a few illustrations, including several botanical specimens at the end of the *Booke of simples,* and a human skeleton, with the bones lettered and named, at the end of the second part. The book abounds in personal anecdotes, remarks on cases Bullein had treated, and on places he had visited during his extensive travels. He also wrote *A dialogue bothe pleasaunte and pietifull wherein is a goodly regimente against the fever pestilence,* [*etc.*], 1564, of which edition only one copy is known, this being in the Bodleian Library. Later editions were issued in 1573 and 1578, and in 1888 a fourth edition, edited by Mark W. Bullen and A. H. Bullen, was published by the Early English Text Society. Only Part 1, The Text, appeared, and a copy of this is available in the Library.

William Bullein died on January 7, 1575/6, and was buried in St. Giles, Cripplegate, in the same grave as his brother Richard, with John Foxe, the martyrologist. His writings remain, reminding us of the state of medicine four hundred years ago, expressing the opinions of a remarkable character, and entertaining those who appreciate that the ancient is not always obsolete, but may contain truths unrecognised in modern times.

THE PSYCHOPATH

The Psychopath is born, not made,
And lives in pyrex houses.
A family of nine or ten
Where Mother wears the trousers.

His life is regimented, stern
And given to discredit.
He shuns authority and law
And always thinks he's had it.

His superego never grows
Above a selfish pleasure;
An immature recluse, his life
Despoiled by spivoid leisure.

At fourteen, hairs begin to sprout,
His voice becomes disarming;
And Mother finds his way with girls
Is growing quite alarming.

At fifteen, school thrown off, he plumps
For some exciting calling,
But disappointment rears its head,
For life is merely crawling.

At seventeen, twice crossed in love,
Our lad, in desperation,
Seeks proud redress for damage wrought,
Through Ego ventilation.

He seeks the voluble, the smart,
The Deltoid set, the barrow;
Acquiring elements of speech
That germinate at Harrow.

He mixes well with citizens
Of no mean City standing,
And boasts of exploits in the R.A.F.;
A crash? A "pancake" landing?

In female circles, conquests loom;
Twice-crossed, the rakish fellow
Out-Casanovas Don Juan
And learns to play the 'cello.

But neither wine nor women fill
His longing for excitement.
Philandering gives way to crime
And crime compels indictment.

"Bound over," limelight, Press and Police
All stoke the fire of passion.
The Psychopath reverts to sin
And overdraws his ration.

A second charge—appeal withdrawn—
He serves a prison sentence.
The bitter pill he swallows whole
And suffers faint repentance.

But aberrant mentalities
Deserve especial measures;
Psychiatrists advise us to
Reform perverted pleasures.

Unfettered urges harnessed once
To some constructive mission,
Dispatch a lad's uncouth designs
To realms of inhibition.

Our Psychopath no longer plagues
Society with terror.
Narcosis sessions taught him how
To conquest urge and error.

Re-cast and thoroughly mature,
He walks the straight and narrow,
Imploring fruitless citizens
To patronise his barrow.

J. C. W.

CORRESPONDENCE

ATHLETIC INJURIES

The Editor,
St. Bartholomew's Hospital Journal,
Dear Sir,

It was a great pleasure to read an article on athletic injuries by such a distinguished athlete as Mr. Salisbury Woods. The principles he advocates are widely accepted nowadays by those who practise and teach the treatment of injuries, but they are the principles of treatment of all injuries to the limbs whether they have occurred during athletics or in the ordinary way of life. I cannot help feeling that it may be better to think about the treatment of injured athletes, rather than to try to differentiate a set of "athletic injuries."

The particular trends amongst athletes that one has noticed have been a tendency to defer seeking advice until six days after the injury has been sustained, i.e., the day before the next match. A tendency to rely more on the advice and treatment of masseurs and trainers than on that of experienced surgeons, or anyhow to try their advice out in the wrong order. A tendency to forget that no one is indispensable, or irreplaceable, and therefore to insist upon playing on, or with a limb which may be unreliable. Later in the game this proves to be so, with disastrous results for the team and, perhaps, to the limb also, although this, of course, is not of such importance! Finally, a tendency to be the best possible patients once they have been persuaded to accept the reasonable advice of a surgeon!

Although agreeing with Mr. Salisbury Woods when he says "Hospitals, in their overburdened teaching curriculum, have had little time to spend on ordinary sprains, strains and bruises," I cannot agree with him when he suggests, in the same paragraph, that the treatment of fractures is of far higher importance. In athletes it is the sprain, strain or bruise which so often leads to an unnecessary length of disablement: sometimes because the diagnosis is wrong and sprain, strain, or bruise should read—dislocation, ruptured ligament, or fracture: often because Hilton's undying principle is forgotten altogether, rather than overdone as Salisbury Woods suggests.

In conclusion, many would not agree with the use of a local anæsthetic for fractures of the tibia or with the method of two-pin fixation and too early walking in the treatment of fractures of the same bone. It is not accepted by all that handling a rugger ball and handing-off against a wall is advisable within a week of a dislocation of the elbow. But Mr. Salisbury Woods quotes successful cases and does not ask us to accept the particular for the general.

Yours, etc.,
W. D. COLTART.

5, Wimpole Street, W.1.
3rd May, 1950.

HERALDRY

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

It is to be hoped that the recent pronouncement from the editorial chair[1] upon the hospital coat-of-arms is not to be regarded as the last word on the subject.

There was indeed at least one omission in the annotation. The Processional Banners of this hospital are depicted in a 15th century heraldic visitation[2]. The tinctures of one of them are given; the field is *party per pale argent and sable.* Its connection with the well-known coat of *party per pale argent and sable, a chevron counterchanged,* which appears in the hospital muniments from 1423 onwards, is as certain as it is obscure. Moreover, it is possible and even probable that these banners were already of some antiquity at the time of their enrolment.

The position will remain unsatisfactory until a thorough and systematic search is made among the early manuscripts at the College of Heralds and in the Harleian Collection at the British Museum. Meanwhile, it would seem both prudent and justifiable to continue using the arms which have been associated with this hospital for over five centuries. The claim that their exhibition is "vulgar and unauthorised" is surely not meant to be taken seriously.

I am, Sir,
Your obedient servant,
CYRIL HART.

THE ABERNETHIAN ROOM.
March 15, 1950.

[1] *St. Bartholomew's Hospital Journal,* January, 1950.

[2] M. S. Harl. 2169 f. 32. Plate III in Sir D'Arcy Power's *A Short History of St. Bartholomew's Hospital* is a facsimile reproduction.

CURIOSITIES OF NATURAL HISTORY

The Editor,
St. Bartholomew's Hospital Journal,
Dear Sir,

Mr. Vick's description in your last number of a black horse in grey jodhpurs being led round the square will remind readers that sartorial eccentricities were not unknown at Bart.'s even before the lady students came. Turning slightly in my grave, I hand the palm to Mr. Vick.

Yours, etc.,
FRANK BUCKLAND.

OBITUARY

SIR CHARLES GORDON-WATSON

SIR CHARLES GORDON-WATSON died last December at York, aged 75. He was educated at St. Mark's, Windsor, and St. Bartholomew's Hospital, and served in No. 1 Field Hospital in the South African War with Sir Anthony Bowlby and Dr. Howard Tooth. He became an assistant surgeon to Bart.'s in 1910, and in 1914 served in the R.A.M.C. at home and in France, ending it as consultant surgeon to the British Army in Italy.

Between the wars he became interested in proctology, and wrote on this subject. He served on many committees and was an honorary Fellow of the American College of Surgeons.

In the last war, he was consulting surgeon to the British Army at home, and was promoted major-general.

It is related that he was once watching a rugger match between Bart.'s and Mary's, the Mary's team having been much improved by the activities of their Dean. A good movement began in the Mary's three-quarters but the ball was dropped by the wing. Amid the hush, Sir Charles' voice boomed out, "Take away his scholarship!"

We are indebted for the following appreciation to Mr. Reginald M. Vick:—

With the passing of Sir Charles Gordon Watson, still one more of the great figures of a past generation has left us.

His was, indeed, a striking personality. I had the good fortune to meet him, when he was still a surgical registrar at Bart.'s, and to know him intimately right up to the beginning of the last war. I was his Chief Assistant, his assistant in private for many years and, later, his assistant surgeon.

His surgery was characterised by courage. He would never refuse to undertake an operation, however serious, if the thought that there was any chance of cure or, even, of alleviation of suffering. His main work was in the operative treatment of cancer of the rectum and large bowel. In such a field, there were many unavoidable disappointments. Naturally he was sometimes discouraged, but always came up smiling. When the radium treatment of cancer was first introduced into this country, he was one of the pioneers.

As a teacher, he was original and had no use for routine methods. He taught with dogmatic enthusiasm about things that he knew. He was very keen on fractures and introduced the first Balkan Beam into Bart.'s after the 1914-1918 War. He followed up his cases long before there was such a thing as a "Follow Up" department.

He served in the South African War, the 1914-1918 War becoming a Consulting Surgeon to the Forces. He resumed this appointment in 1939, and only retired from it in 1942. He played games with abounding enthusiasm. He was an incredibly energetic tennis player—a somewhat surprising golfer. He was one of the very earliest motorists—riding from London to Edinburgh and back in one of the very first motor cycle trials in this country. He was a familiar figure at many race meetings.

He was a very loyal friend and never spared himself in helping all those who had worked with him. Many a houseman and many a chief assistant—some of the latter now high up on the surgical staff of Bart.'s—had cause to be grateful to him. He was a most amusing person to live with and had a most charming smile. He was happily married. He and Lady Gordon were tremendous friends, and the later years of his life were clouded by her death.

His memory to those who knew him well, will be that of a man of character, a loyal friend, an exciting surgeon, and a stimulating teacher.

CONTRIBUTIONS TO THE JOURNAL

Contributions must reach the Editor by the first of the month for inclusion in the following number.

SPORT

CRICKET CLUB

April 30th, v. Nomads C.C.

Result: Won by 106 runs.

St. Bart.'s Hospital 198—9 (J. D. W. Tomlinson 62, P. G. Haigh 35).

Nomads C.C. 92 (Haigh 4—31, B. N. Foy 3—10).

The previous day's heavy rain prevented a start being made before lunch and resulted in an easy-paced wicket for most of the game.

The Hospital batted first and were able to declare at tea-time with a score of 198-9. The chief contributors to this total were Tomlinson and Haigh, each providing an innings in his own particular style.

After the tea interval the Nomads never settled down against the bowling of Clappen and Haigh. Wickets fell steadily throughout their innings, the main resistance being offered by G. Alston, who was completely beaten by a ball from Foy's unpredictable attack.

The last wicket fell with a quarter of an hour to spare. H. B. R.

SQUASH RACKETS CLUB

1949–50.

1st Team: Won 8, lost 11.

2nd Team: Won 4, lost 5.

The squash club had very little fresh talent last season, and with this in mind the results are very satisfactory. Great encouragement can be drawn from the marked improvement shown by J. P. Waterhouse and B. St. J. Brown, both of whom should be with us next season.

The benefit derived from frequently playing teams of a higher standard than ourselves was demonstrated by a considerable increase in the proportion of matches won as the season progressed.

The second team had an enjoyable season under the captaincy of J. S. Murrell, ably supported by D. C. Hodgson and D. H. Rushton.

The Donaldson Cup was won by M. H. Hambling, and presented to him by the President, Mr. Donald Fraser. H. B. R.

GOLF CLUB

We congratulate L. R. H. Gracey, who won the Royal Mid-Surrey "Antlers" with Ian Caldwell of Guy's, with scores of 74 and 77.

D. H. Rushton and M. Braimbridge, Bart.'s 2nd pair, beat Guy's II in the first round of the Beveridge Cup.

WOMEN'S HOCKEY CLUB

The club has just finished its first full season with success. Matches were played against most of the London Hospitals, particularly good games being had against U.C.H. (2—2) and the Royal Free Hospital. We met the latter in the first round of the tournament arranged by the London Hospitals' Women's Hockey Club which was only formed this year. We drew 3—3 against them and lost the replay, but at least we lost to the eventual winners of the trophy.

The club also entered for the London University Intercollegiate Tournament. A full fixture list has been arranged for next season, including a week-end at Oxford and a number of 2nd XI matches.

Matches played 18. W. 12, D. 2, L. 4.

Goals for—74; goals against—36.

BOOK REVIEWS

BIOLOGY. An Introduction to Medical and other Studies, by P. D. F. Murray. Macmillan, 1950, pp. viii + 600, 381 illus. Price 25s.

Across the Atlantic there are almost as many college text-books as there are colleges. Frequently, if not customarily, when a scientist reaches a certain degree of eminence he writes his own text-book which his students are expected to buy: and oh how the money rolls in, rolls in to quote from an old classic beloved of soldiers and medical students. In British countries we are, perhaps, not so prolific in the production of texts. For example, the *Zoology* by Parker of Otago and Haswell of Sydney was first published in 1897 and, brought up to date by successive authors, it is still the most widely read and still the most comprehensive book of its kind today. When new books appear then, they had better be good.

Murray's book *is* good. It is quite easily the best and most painless synthesis of zoology and botany that has appeared, and one which is especially designed to cover the needs of medical students who wish to read both subjects as a dovetailed whole. Murray has adopted—or perhaps invented—a particularly ingenious technique of presentation that enables the reader to see clearly the evolutionary emergence of the animal and plant type whose anatomy and physiology he so lucidly discusses. The histology sections are particularly fine as, perhaps, might be expected from a world authority on the histogenesis of bone. There is also a most excellent chapter on the evolution of man and his fossil history, a subject not generally covered in a book of this nature. The illustrations, too, should especially mentioned. Particularly the one on p. 537 illustrating the nitrogen cycle which reaches almost sublime heights of reality: such a dear little horse, too!

Professor Murray left Bart.'s last year to take over Haswell's Department—the school in which he himself spent his early student days. He has left his old Department here an invaluable legacy in the present volume.

A. J. M.

MODERN PRACTICE IN ANÆSTHESIA. Edited by Frankis Evans. Butterworth, 1949, pp. xv + 566 [+ 40]. Price 50s.

This book is a very important addition to the anæsthetic literature, in that the whole field is covered and brought up to date by recognised authorities.

Dr. Frankis Evans need make no apology for his personal verbosity, as his own chapters set a high standard, frequently, but not universally achieved by the other contributors.

The book shows the inevitable characteristics of multi-authorship—the standard of writing varies, there is repetition, and quite often contraditcion, but this in no way detracts from the value of the book, as it never becomes dogmatic. The book is extremely well produced, easy to read, and the diagrams are clear, and to the point.

Modern Practice in Anæsthesia has had the initial success it so well deserves, both as a book of reference, and as a foundation for the reading of post-graduate students. It will in the future find a place in every anæsthetist's library.

FŒTAL AND NEONATAL DEATH. Revised edition. E. L. Potter and Fred L. Adair. University of Chicago Press (Agents: Cambridge University Press), 1949, pp. xiv + 173, illus. Price 30s.

This is a workaday little monograph of great interest to the obstetrician. Between two covers are collected many fundamental facts about the new-born baby. The book is divided into five sections—the normal fœtus and infant, post mortem examination, survey of the principal causes of fœtal and neonatal death, special pathology, and statistical data. Except for the last section, it is in the main the record of the authors' experience at The Chicago Lying-in Hospital, and a remarkably wide experience that is. In the statistical section the Chicago figures are taken into the context of the United States. The presentation of personal opinions has its dangers when the book, having crossed the ocean, comes into the hands of British students. For example, on p. 19 the authors seem unwilling to accept Barcroft's experiments on the prime cause of the first breath, and their statement that excessive concentrations of oxygen depress the respiratory centre and produce apnœa is dangerous if taken to be a warning against oxygen for the new-born. Their experience of hæmolytic disease of the new-born has been unlucky and their outlook for the offspring of Rh. negative mothers does not apply in London. Meconium ileus is omitted from the causes of intestinal obstruction and there is no mention of fibrosis of the pancreas.

The book received—and justly—much praise on its first appearance in 1939; although its high reputation makes it necessary to notice any blemishes, this remains a first class monograph on its subject.

MEDICAL BOOKS, LIBRARIES AND COLLECTORS, by J. L. Thornton, introduction by G. L. Keynes. Grafton & Co., 1949, pp. xviii + 293. Price 35s.

Mr. Thornton has put us all in his debt by his great industry in bringing together this mass of detailed fact into so small a compass. Beginning with the Kahun Medical Papyrus of about 1900 B.C., and marching valiantly forward into our own 1940's the author mentions, and mentions informatively, every considerable and many inconsiderable figures known by books in the vast panorama of medical history between. It is a breath-taking achievement. If, as the result, Mr. Keynes has to invent a new category of book to contain it—the semi-readable—this is because Mr. Keynes refuses to be at a loss for the just word. It does not mean that Mr. Thornton is semi-unreadable. The mental enzymes of an ordinary man simply cannot digest all the information presented. Turn up any author and there is something to whet the appetite and a pleasant little menu of further reading. The chapters on medical societies and their books, and on those cannibals of authors, the bibliographers, are of especial value. Let us hope that in a future less expensive era a lower price may bring this book within the purchasing range of the medical undergraduate.

LECTURES ON MEDICINE TO NURSES, by A. E. Clark-Kennedy. Livingstone, 1950, pp. viii + 288, illus. 28. Price 15s. 6d.

Nurses' theoretical needs are simple, but that does not mean they can be adequately supplied by summaries of facts to be learnt by rote for examination purposes. Dr. Clark-Kennedy addresses nurses as reasoning people, and this is the most interesting medical book for the nurse that your reviewer has read for some time. Every teacher should find it stimulating. It would have to be used in conjunction with another text-book, since it does not aim to supply details of nursing and treatment. Dr. Clark-Kennedy says in several places, "That is all you need know on this subject," and it is not usually quite true. Writing the book as if it were being spoken to a class is also an unnecessary handicap.

A PRACTICAL HANDBOOK OF PSYCHIATRY FOR STUDENTS AND NURSES, by Louis Minski. 2nd Edition, Heinemann, 1950, pp. 136. Price 6s.

An inexpensive text-book on a subject about which nurses in a general hospital ought to know more.

OPERATIVE SURGERY, by A. Miles and J. Learmouth. 3rd Edition, Oxford Medical Publications, 1950, pp. x + 559, illus. 235. Price 30s.

This book describes the major operative procedures in current use. It is intended for the house-surgeon and senior student, and is admirably fitted for that task. It describes in detail, with many good diagrams, all operations at which the house-surgeon might be called upon to assist. Each chapter is preceded by a short review of the anatomy of the part under discussion—a useful provision. The only criticism is that perhaps the orthopædic section receives too much space.

PYE'S SURGICAL HANDBOOK, edited by Hamilton Bailey. 16th Edition, John Wright, 1950, pp. xii + 724, illus. 830. Price 25s.

This is a house-surgeon's bible. It includes all the manipulations short of major operative procedure necessary to a house-man. It begins with chapters on first aid and bandaging, subjects neglected in clinical courses but very necessary in practice. It includes minutely descriptive detail of everything from the giving of injections to assisting at operations: from hints on prescribing to the management of surgical patients and their complications. The chapter on hand injuries is good. The illustrations throughout are profuse and clear, and this book is thoroughly recommended.

ELEMENTARY BACTERIOLOGY AND IMMUNITY FOR NURSES, by Stanley Marshall. 2nd Edition, H. K. Lewis, 1950, pp. viii + 88. Price 6s. 6d.

This is a reasonably priced book with attractive coloured plates, written in a style that is clear without being oversimplified. The questions at the chapter ends will be useful to the nurse working from it. A valuable addition would have been an account of the antibiotics.

THE MIDDLESEX HOSPITAL, by Hilary St. George Saunders. Max Parrish, 1949, pp. 100. Price 8s. 6d.

The author of this book appears to have fallen between two stools, for he has produced a book which is in parts too technical for the layman and in others too elementary for the student. For the layman there are too many names; for the student too many popular platitudes.

If either group is prepared to overlook these faults then here is a very pleasantly produced history of the Middlesex Hospital, and the work as a whole must not be condemned because of them.

It is an admirable account of the inception and subsequent progress of our younger sister, and one cannot help feeling that a similar easily readable work ought to be written on the history of this hospital.

The pictures throughout are excellent reproduced and tastefully chosen.

A book which is well worth reading and which will be popular in spite of its major fault.

EXAMINATION RESULTS

UNIVERSITY OF LONDON

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Arthur, B. K.	Davies, M. B.	Lacey, S. M.	Ryan, H. S. S.
Bailey, R. D.	Dunger, G. T.	Lamplugh, A. N.	Shah, M. C.
Bartley, R. H.	Evans, M.	Langdon, L.	Shaw, D. M.
Biddell, P. B.	Fieldus, P. L.	Lindop, P. J.	Shere, S.
Bird, G. C.	Geldart, R. E. M.	McAdam, B. N.	Smith, E. P.
Boomla, D. F.	Glassett, M. C.	McKenzie, A.	Southgate, B. A.
Britain, E.	Gray, J. M.	Marker, H. R.	Stather-Dunn, M. T.
Brooks, E. F.	Hall, J. M.	Marshall, L. J.	Stephenson, J. W.
Brown, I. P.	Hall, M. C.	Need, R. E.	Storey, V. C.
Brown, J.	Hill, D. A.	Newberry, R. G.	Theobald, G. I.
Bunting, J. S.	Hill, J. McL.	O'Reilly, P. B.	Third, A. J.
Caldwell, A. M.	Hodgson, M. J.	Page, A. R. W.	Thomas, P. I.
Castell, E. O.	Hopkins, J. S.	Paterson, I. S.	Ullmann, H. A.
Chapman, L.	Ivens, H. P. H.	Pearce, J. F.	Vickery, C. M.
Chitham, R. G.	Jackson, D. A. T.	Porteous, C. J.	Warburton, T. H. M.
Clarke, D. J. A.	Jones, B. S.	Pugh, M. A.	Woodruff, W. A. A.
Cretney, P. N.	Jones, H. D.	Randall, J.	
Crosfill, M. L.	King, P. A. H.	Rimmer, B. K.	

Examination for the Academic Postgradute Diploma in Medical Radiology (Therapy) — **March, 1950**

Part I

Pablot, P. J. Ritchie, J. K.

CONJOINT BOARD

Final Examination — **March, 1950**

Pathology	Medicine	Surgery	Midwifery
Aubin, D. F. A.	Aubin, D. F. A.	Cardwell, J. S.	Albright, S. W.
Hambling, M. H.	Baddoo, M. A.	Chorley, G. E.	Brown, P. B.
Hewson, J. P.	Cairns, J. D.	Drown, G. K. M.	Chesover, I.
Hodson, J. M.	Chandler, G. C. H.	Godden, J. L.	Clarke-Williams, M. J.
Horwitz, H.	Coldrey, J. B.	Green, N. A.	Coldrey, J. B.
Husainee, M. M.	Davies, W. H. G.	Hibbard, B. M.	Drown, G. K. M.
Kinsman, F. M.	Green, N. A.	Hodson, J. M.	Fuller, A. P.
Milligan, J. L.	Griffiths, A. W.	James, D. C.	House, M. L.
Montgomery, B. K.	Hale, B. C.	Kaye, M.	Juckes, H. F.
Phillips, G. D.	Hovenden, B. J.	Lewis, H. E.	Rosser, E. M.
Sacks, R. H. B.	Jenkins, G. C.	Liu, S.	Smyly, D. P.
	Marsh, G. W.	Marsh, G. W.	Watkins, P. H.
	Milligan, J. L.	Milligan, J. L.	Whelan, N.
	Montgomery, B. K.	Phillips, G. D.	
	Moore, G. J. M.	Reading, J. H.	
	Raines, R. J. H.	Vercoe, M. G. S	
	Reading, J. H.	Wright, R. F.	
	Rees, J. H.		
	Stebbings, N. E.		
	Wainwright, A. J.		
	Warlow, P. F. M.		

The following students have completed the examination for the Diplomas M.R.C.S., L.R.C.P.:

Baddoo, M. A.	✓Davies, W. H. G.	✓James, D. C.	✓Raines, R. J. H.
✓Cardwell, J. S.	✓Green, N. A.	Kaye, M.	✓Rees, J. H.
✓Chandler, G. C. H.	✓Griffiths, A. W.	Liu, S.	✓Vercoe, M. G. S.
✓Chesover, I.	✓Hale, B. C.	✓Marsh, G. W.	Wainwright, A. J.
✓Chorley, G. C.	✓Hibbard, B. M.	✓Milligan, J. L.	Wright, R. F.

SOCIETY OF APOTHECARIES

Midwifery — **Final Examination** — **March, 1950**

Bexon, W. H.

RECENT PAPERS BY BART'S MEN

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WALKER, A. J. *See* GRIFFITHS, E., and others.

ST. BARTHOLOMEW'S

HOSPITAL JOURNAL

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LECTURES

Taking the overall view, the standard of lectures at Bart.'s is poor. We have, of course, notable exceptions, and it is not the high standard of these few but the general level that leaves so much room for improvement.

It is interesting to know by what means the hospital magnate becomes eligible for his Rolls-Royce and chauffeur, and acquires the power of tyranny for three quarters of an hour over the minds of a somewhat variable number of students. To begin with, he practically must be a Bart.'s man. Excepting the Dental Department, there are only twelve of a clinical staff of sixty from outside hospitals. One-third are from Oxford and Cambridge, the majority of these from the latter. He must have served his time in subordinate posts, the length of time varying with his ability and with luck—the applicant's geographical position at the moment of a post becoming vacant having considerable importance. The official procedure is that notice of a vacancy on the Staff must be published in two medical journals, and applications submitted to an Advisory Appointments Committee consisting of seven members, five appointed by the Hospital and two by the University of London. The percentage of Bart.'s men on the Staff is thus explained.

Thus are our lecturers chosen, as in all scientific institutions, for their technical rather than their rhetorical ability. The requirements of a good speaker are few and readily attained, yet it is disturbing to see how often these elementary criteria are neglected. He must speak slowly, clearly and loud enough for the backbenchers to hear. He should avoid mannerisms—we have our quota at Hospital. The pointer at the empty blackboard, the chalk adjuster, the bashful, facing directly away from his audience, the recumbent, the peripatetic, the moustache stroker, the juggler, all pursue their foibles enthusiastically.

The good speaker must present his subject in an intelligible framework, capable of interpretation by those most voracious of note takers, the ladies. Lecture notes help towards this end, but defeat their purpose if merely read. If he can produce jokes that are funny, so much the better, but it is as well to remember that nothing falls so flat as a poor joke at half past five of a summer evening. The reading of previously issued précis makes for the dullest of all lectures. A few slides, however irrelevant, always enliven a talk, not to mention the value of a few minutes of darkness for readjustment in the numbers of the back bench population. Above all, let him not exceed the recognised time limit. Finally there is that something that will always distinguish the orator from the mere lecturer—that gift of the gab, that drop of Irish blood that can convert a talk on sanitary science into an hour's sheer fascination.

Appreciation of a lecturer varies directly with the convenience of the accommodation —it is not surprising that attention wanders in our present apology for a lecture theatre.