

St. Bartholomew's
Hospital



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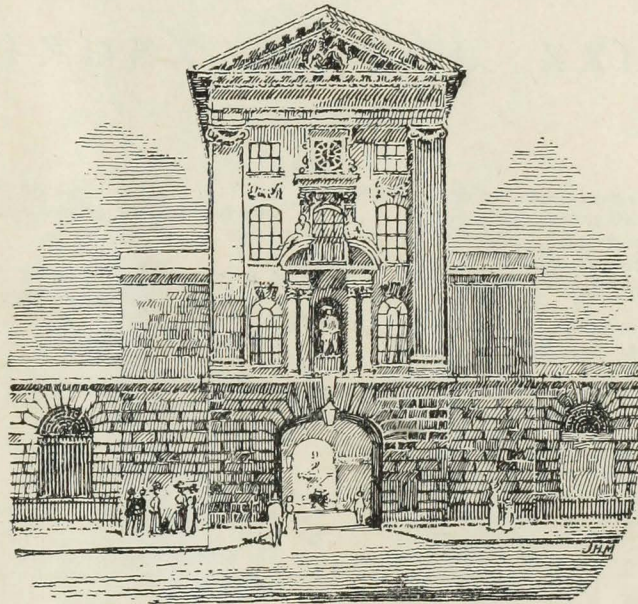
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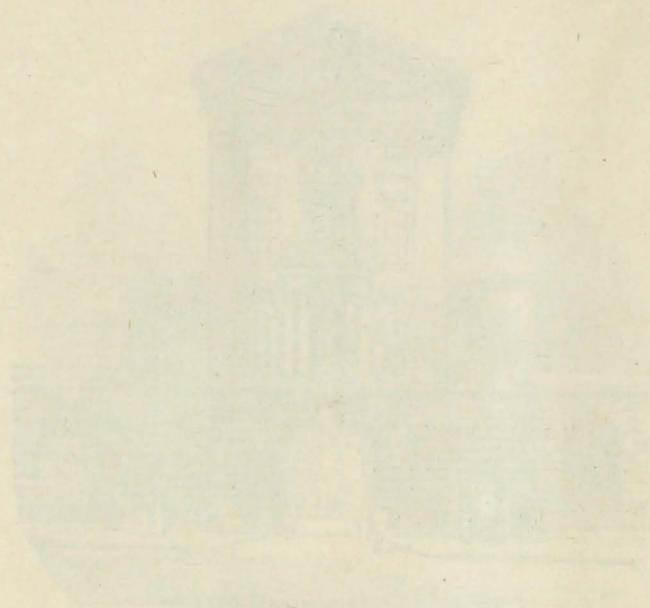
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St. Bartholomew's Hospital



JOURNAL.

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

VOL. XXIV.—No. 1.]


OCTOBER 1ST, 1916.

[PRICE SIXPENCE.]

CALENDAR.

Mon., Oct.	2.—	Winter Session begins. Cambridge Michaelmas Term begins. Exam. for Part II of Second M.B.(Camb.) begins. Exam. for D.P.H.(Camb.) begins. First Exam. Society of Apothecaries begins.
Tues., "	3.—	Dr. Calvert on duty. Final Exam. Conjoint Board (Medicine) begins.
Wed., "	4.—	Second Exam. Society of Apothecaries begins.
Thurs., "	5.—	Final Exam. Conjoint Board (Midwifery) begins.
Fri., "	6.—	Dr. Morley Fletcher and Mr. Wilson on duty. Final Exam. Conjoint Board (Surgery) begins. Clinical Lecture (Medicine). Dr. Drysdale.
Tues., "	10.—	Dr. Drysdale on duty. Oxford Michaelmas Term begins.
Wed., "	11.—	Exam. for D.P.H.(Camb.), Part II, begins. Clinical Lecture (Surgery). Mr. Waring.
Fri., "	13.—	Dr. Hartley and Mr. Waring on duty. Clinical Lecture (Medicine). Dr. Drysdale.
Tues., "	17.—	Dr. Horder on duty.
Wed., "	18.—	Clinical Lecture (Surgery). Mr. Waring.
Fri., "	20.—	Dr. Calvert and Mr. McAdam Eccles on duty. Clinical Lecture (Medicine). Dr. Hartley.
Mon., "	23.—	Exam. for M.B., B.S.(Lond.) begins.
Tues., "	24.—	Dr. Morley Fletcher on duty.
Wed., "	25.—	Clinical Lecture (Surgery). Mr. Waring.
Fri., "	27.—	Dr. Drysdale and Mr. Bailey on duty. Clinical Lecture (Medicine). Dr. Horder.
Tues., "	31.—	Dr. Hartley on duty.
Wed., Nov.	1.—	Primary F.R.C.S. Examination begins. Clinical Lecture (Surgery). Mr. McAdam Eccles.
Fri., "	3.—	Dr. Horder and Mr. Wilson on duty. Clinical Lecture (Medicine). Dr. Morley Fletcher.
Tues., "	7.—	Dr. Calvert on duty.

EDITORIAL NOTES.

 R. R. GILL, who recently resigned the post of Chief Chloroformist at this Hospital, has been elected a Governor. We tender our heartiest congratulations to him as the recipient of this mark of the esteem in which he was always held.

* * *
We congratulate Dr. Arthur J. Hall, Professor of Medicine at the University of Sheffield, on his appointment as Examiner in Medicine at the University of London.

* * *
The appointment is gazetted of Surgeon-General Sir C. P.

Lukis to be Director-General, Indian Medical Service (ranking as Lieut.-General).

* * *

The name of Alexander Granville appears in the Foreign Office List of the King's Birthday Honours as a recipient of the C.M.G. Our heartiest congratulations are extended to him.

* * *

We congratulate Mr. W. Foster Cross on his appointment to the post of Senior Administrator of Anæsthetics to this Hospital, the post till recently held by Mr. R. Gill.

* * *

We very much regret to announce the death of Sir Thomas Lauder Brunton, M.D., F.R.S. Born in 1844, he was educated at Edinburgh, where he graduated M.B. in 1866, B.Sc. in 1867, M.D. in 1868, and D.Sc. in 1870, having in the meanwhile studied in Paris, Vienna, Berlin, and Leipzig. He became a Member of the Royal College of Physicians in 1870 and a Fellow in 1876, in which year he was appointed Assistant Physician to this Hospital, with which he has been connected ever since. At the time of his death he was, of course, one of our Consulting Physicians. In 1890 he was knighted, and received a baronetcy in 1908.

Sir Lauder's elder son, James Stopford Lauder Brunton, succeeds to the baronetcy, and to him and to his two sisters our deepest sympathy is extended. A more detailed obituary notice appears on another page of this JOURNAL.

* * *

It is with great regret that we learn of the death of Lieut.-Col. William Selby, I.M.S., which took place as the result of a cycle accident at Lucknow, India, on September 8th. He was Principal of King George's Medical College, Lucknow, and Honorary Surgeon to the Viceroy of India. The younger son of the late Mr. Prideaux Selby, of Croydon, he was born in 1869, and was educated at the Whitgift Grammar School, receiving his professional training at St. Bartholomew's Hospital. He qualified as a licentiate of the Royal College of Physicians, London, and a member of the Royal College of Surgeons, England, in 1892, taking his F.R.C.S. in 1905. He took part with the relief force in the operations in Chitral in 1895, for which he had the medal

with clasp. In 1897-8 he was in the operations on the north-west frontier of India, and in the Tirah Campaign, when he was mentioned in despatches. He was also awarded the Companionship of the Distinguished Service Order. Our deepest sympathy is extended to his relatives and many friends.

* * *

At the moment of going to press we learn with sorrow of the death of a nephew of the late Lieut.-Col. William Selby. Captain Gerard Prideaux Selby, R.A.M.C., was killed in action on September 26th while attending to the wounded on the field. He was 25 years of age and had been a popular student of this Hospital. Our heartfelt sympathy is extended to his father, Dr. Prideaux George Selby, in his sad loss.

* * *

With very much regret we learn of the death of Lieut. Donald Roy Drysdale from wounds received in action. He was a student at this Hospital for a short time, and on leaving the Hospital went to Cambridge. He took a commission in the Dorsetshire Regiment early in the war. Lieut. Drysdale was the nephew of Dr. J. H. Drysdale, of this Hospital, and the son of Joseph N. Drysdale, of Buenos Aires, to whom our sincere sympathy is offered.

* * *

Again we learn with extreme sorrow of the loss sustained by a member of our surgical staff. Captain John Dennison Eccles, the eldest son of Major McAdam Eccles, has died from wounds received on September 9th, at the age of twenty years. On the outbreak of war he obtained his commission, and in July, 1915, he went to the front, and was wounded in December. For conspicuous bravery on this occasion he was awarded the Military Cross. He returned to the front in April this year, when he received his company, which he was leading in an attack when he was mortally wounded. We offer our truest sympathy to Major and Mrs. McAdam Eccles in their sad loss.

* * *

It is with very much sorrow that we learn of the death in hospital of Archibald William Robertson Don, which took place on September 11th. Soon after the outbreak of war he worked on a motor ambulance in France until he obtained his commission as Second Lieutenant in the Royal Highlanders (the Black Watch). He was the fourth son of Mr. and Mrs. Robert B. Don, to whom our sympathy is extended in their sad bereavement.

* * *

With very great regret we hear of the death of John Schofield Heape, who was killed in action on July 1st. Lance-Corporal Heape, who had previously been reported missing, was in the signal section, and previously to the war was a student at this Hospital, where he had many friends. Our deepest sympathy is extended to his parents in their sad bereavement.

* * *

The Index for Vol. XXIII (1915-1916) of the JOURNAL will be published and distributed with the next issue.

FROM THE FRONT.

EXTRACT FROM A LETTER FROM MAJOR GASK, EARLY IN JULY.

NOW that all the facts have been published in the papers, I can tell you about my visit to the lines without giving anything away. A. B— took R— and myself up in his car, a distance of about seven miles, and seeing that it took over an hour you can imagine the congestion. At first the roads were comparatively free, that is to say, one side, for there was an almost continuous stream of lorries with ammunition, food and supplies, motor ambulances, guns, mobile kitchens, and troops. About four miles up we got into the region of big guns which went off with a tremendous "whump" close beside us, making it feel as if one's back hair was blown off. Then we came to villages with innumerable troops quartered, cooking and looking after horses and mules. A little further on we met a brigade of infantry marching out to rest, and were much interested looking at them to see whether they appeared broken at all. These didn't—dirty, plastered with mud, but with clear bright eyes. The tin helmets, which they love, give them a very Chinese appearance. These helmets must have saved hundreds of lives. A little further on we came to the area shelled by the enemy as shown by ruined houses and churches, often a F.A. tucked away among the ruins. The roads now became very bad, hard on the crown with a ditch of mud and often great holes two feet deep and three or four across. There were many blocks, and one long one for a lorry badly ditched. Now we were in the area of the guns—ours—and all around they were bursting off. A little further on we came to our old trenches held by our men through the long winter. In one place the trench had crossed the road, which was temporarily repaired with balks of timber, over which we bumped. The noise now was becoming intense, and we had reached as far as the car could go, and got out. We picked up the A.D.M.S. of one of the corps—he happened to be an Old Bart.'s man—and he led us into X—, recently taken by us. You may not believe it, but honestly I did not know when I was in it. The whole place had been levelled and destroyed by our artillery. There was one small piece of wall, perhaps eight feet high, standing. The earth was so churned up by shells that all grass had disappeared and the only sign of trees were a few bare shattered stumps. The noise was now terrific; guns were going off all round without intermission, one had to shout in a man's ear to make him hear. The whole place was pitted with craters and everything covered with mud. A little ahead was a wood, very like one of our Bucks woods, on the top of a hill. Our front line was in this and was being shelled—some were falling by us. Our objective was an advanced medical post quartered in a dug-out. The entrance to this was rather like the old-fashioned

ship companion: a long flight of steps, wooden and very greasy with mud, about fifteen feet deep, led down to a passage with rooms opening off it. The first one on the left, about fourteen feet square, was being used as a dressing room for wounded; further on was the kitchen and then another exit, then another flight of stairs down to a second story, so that the whole thing was perhaps thirty feet deep. The passage was about three feet wide and six feet high, with walls shored up with timber as in a mine. There were many telephone wires and it had been lighted by electricity. In each room was a little stove, making the place look like a Swiss hut, but the atmosphere was different, very mouldy and grave-like. In one place the roof had been bulged by one of our shells and had been shored up. After the din above, the quiet was extraordinary, the noise of the guns resembling damp squibs only. We stopped there about twenty minutes and then made our way back to the car, which had stopped in a sheltered hollow, and personally I was very glad to get away. It was very interesting but very unpleasant, and my first inclination was to take to my heels and run, and I can quite understand how the thing gets on one's nerves—growing cabbages for me every time.

WITH THE YEOMANRY ON THE WESTERN FRONTIER OF EGYPT.

By LIEUT. H. E. BLOXSOME, R.A.M.C.

LIFE from the point of view of a M.O. in Egypt on the western frontier cannot be considered either arduous or exciting. There has been no trouble with the Senussi since last Christmas, and they do not seem inclined to venture from their oasis a hundred miles across the desert to try conclusions with the Yeomanry.

Our brigade is stationed in a large oasis. The headquarters are in a big country town, and the Yeomanry are placed at different outposts. At the headquarters camp is the field ambulance, while the casualty clearing station is a well-equipped modern building used in peace-time only for natives, but now appropriated to the troops.

There are six M.O.s in the ambulance, and each of the three regiments has its own doctor. Isolated squadrons are supplied with medical officers from the field ambulance, and it has been my lot to remain for several months in this outpost to take medical charge of each squadron as it is relieved by another. It is the simple life in its most perfect form. One is on the edge of a small patch of cultivation, surrounded on three sides by desert which stretches away into infinity with no habitation for many miles except the mud huts of the natives.

The desert air is bracing and healthy, so there is very little sickness amongst the troops except just after the sandstorms, which are truly terrible affairs, lasting several days

and choking everything, including one's inside, with sand and dust. The heat during May and June was very bad, 120° in the mess tent at the hottest time of the day, and making sleep impossible at night. It is better now, in August, and seldom gets hotter than 105°. Practically no work is done between ten and four, so the men and horses have been able to stand it. Flies and mosquitoes are a far greater pest than the heat, however, and a very objectionable thing called the sandfly keeps one awake and scratching at night.

The medical duties are elementary—a sick parade at seven, when one deals with a septic mosquito bite or a case of diarrhoea, and a tramp round the camp through the heavy sand to inspect the labours of the three native sanitary men, complete the day's work.

There are plenty of relaxations when the sun will allow them. One generally rides in the early morning and can often get a good gallop after a fox or jackal, finishing him off, if lucky, with a revolver shot. A neighbouring squadron has a couple of native hounds which are very fast and clever with foxes and jackals. In the winter there is plenty of wild duck to be shot on the lake which one can see from the camp. Sometimes one treks twenty miles or so to a neighbouring squadron and puts up for the night. The natives are a subdued and simple lot. At first the small boys were inclined to harass one's dignity by throwing mud at the "Ingleezi," but they have learnt better manners now. The animals are often treated very badly, and we delight in finding some poor ass or camel with a heavy load and many sores. The load is dumped down in the desert and the poor beast spends a few weeks in our sick lines while the driver receives an appropriate number of welts from the willing hand of the transport sergeant. He is allowed to come and fetch his animal when it is well. We have five donkeys recuperating at present and having the time of their lives.

There seems very little chance of our being moved from here, but every week someone has a new theory that we are soon to be sent elsewhere, but they have been saying that for nearly a year now.

THE "SALT PACK" METHOD OF TREATING INFECTED WOUNDS.

By W. GIRLING BALL, Capt. R.A.M.C. (T.).

DURING the present war the treatment of infected wounds has come prominently before the notice of surgeons: so that there has been a much larger opportunity of dealing with these conditions than has hitherto arisen. The dispute as to the use of antiseptics against other methods has become acute, and has led to a great deal of discussion. It is not my intention, however,

to enter into this discussion, but to relate my own experience as regards the use of the salt pack method, as advocated by Col. H. M. W. Gray, C.B.

For many years past it has been my practice to use salt in solution for the irrigation of suppurating wounds, and with success. I have no hesitation in saying that the results obtained in the use of the pack method are excellent, and the method has many advantages over those previously used; at the same time it would be unwise to say that it is the only method that should be used.

It has been used in all stages of infection, from a few hours after injury, immediately after opening an abscess, after opening up wounds caused by gunshot injuries in order to obtain better drainage, in cases of gangrene due to similar injuries, in cases of deep as well as superficial abscess formation, in suppurative arthritis, and in lesions close to the neighbourhood of large blood-vessels in which it might have been reasonably expected that secondary hæmorrhage was likely to occur, etc.; also in chronic infective conditions even those due to tubercle.

My method of carrying out the treatment has been as follows:

The salt is used in the form of small tabloids (1-5 grs.), or as a powder which can be rubbed into the meshes of sterile gauze; it is best used in tabloid form, as it takes some little time for these to dissolve, thus rendering the action more prolonged. The salt is sterilised by dry heat in an oven at a temperature of 130° C. in bottles or small gauze bags. Some surgeons add potassium citrate to the salt, but this has not been used in my cases.

The infected areas are freely opened so as to completely expose the depths of the wound, thus converting them into surface wounds as far as possible. In the neighbourhood of important structures such as blood-vessels, or in deep abscesses under such, this is not possible; the surface incision in such cases, however, has been enlarged so as to ensure that it will not heal over too rapidly, but will remain conical in shape; the same remark applies to joints in cases of suppurative arthritis; often a deep lesion in the neighbourhood of a bone or large vessel is exposed from two different aspects by large incisions, each being packed separately so as to avoid injuring important structures.

Having made sure that the area involved has been freely opened up, and that no pockets remain—probably the most important part of the treatment—the wound is washed out with several pints of hot (105° F.) sterile saturated (30 per cent.) salt solution; any loose sloughing tissues, pieces of clothing, shrapnel, or other *débris* are removed; in the case of compound comminuted fractures loose pieces of bone are left in position or even replaced in the neighbourhood of the fracture if displaced to a distance. Having cleaned up the wound in this manner, a layer of plain sterile gauze is laid over the whole of the raw surface, care being taken to pack it into the corners of the wound.

It is important to do this so as to avoid contact taking place between the tabloid and the exposed tissues; if this happens, on removal of the packing minute areas of gangrene are found at the site of contact; if powdered salt is sprinkled over the area, a thin layer of gangrenous tissue is found on removal of the pack. On to the layer of gauze a large number of the salt tabloids are placed, not too thickly, themselves wrapped up in bags of gauze so as to prevent their straying during the packing of the wound; a further layer of gauze is placed over this, and then more salt, and so on until the wound is filled up with successive layers, tightly packed in. The most superficial layer is tucked under the skin edge. The area of skin around the wound is washed with a lotion of biniodide of mercury (1-2000) or any other antiseptic that may be preferred, to remove blood, pus, etc. A thick pad of plain sterile gauze and wool is placed over the whole and a bandage tightly applied. In order to keep the parts at rest, in the case of all limb wounds, however trivial, a splint is applied. Padded splints are covered with jaconet, as there is considerable oozing from the wound. When the wound is deeply placed, especially in cases of compound fracture, a large-bore rubber tube is inserted into the depths; lateral holes are made in the tubing, and the distal end is sewn up; salt tabloids are then placed in the bore of the tube. It is necessary to give a small dose of morphia after the application, as in some cases, though not all, the wound is painful for about four to twelve hours; after that there is no pain as a rule.

During the first twenty-four hours there is a profuse discharge of blood-stained serum, so large at times as to lead to the suspicion that some bleeding point has been left untied. If the soaking is very profuse the surface layer of gauze and wool is replaced by another; but in no instance is the packing touched. This is left as a rule for four days. A foul odour is often emitted, but is not an indication for the removal of the plugging. The most noticeable feature is the great improvement in the general condition and comfort of the patient, no doubt due to the evacuation of the purulent material and the absence of œdema, all the fluid exudate being discharged into the wound, instead of collecting in the tissues, thus limiting the degree of pain.

The temperature often rises to a considerable height, but usually falls on the second or third day; a rise of temperature alone, other symptoms being favourable, is not an indication for the removal of the plugging. If the general condition does not improve, and the local condition is not relieved, the œdema persisting, it means that the original lesion has not been efficiently dealt with. This is the chief indication for the removal of the plugging; a further examination usually defines the source of the trouble. Bone injuries are the commonest lesions necessitating further investigation, pockets of pus collecting around the ends of the bone or in the bone cavities themselves. On the fourth day the packing is removed, usually without any

anæsthetic; it sticks to the skin margins, but is easily loosened by moisture. The rest of the packing comes out in one mass, quite painlessly, soaked with purulent material; in passing it may be noted that as much as 2 per cent. of salt is to be found in the juices squeezed out of the soaked gauze. There is seldom any large collection of pus beneath the gauze. Any collection of pus that may be present is washed out with a 30 per cent. solution of saline. This may cause pain, but does not do so in all cases. The underlying tissues are found covered with a thin layer of fibrinous material, and some sloughs; most of these have come away with the original dressing, in gangrenous conditions. The fibrinous layer is not removed, but the wound is well irrigated, and all loose *débris* removed in the case of deep wounds, no fresh packing, except in the very gangrenous cases, is used on to the surface of the granulations, but the edges of the wound are kept apart by gauze or wire frames, with a tube passed into its depth. In surface wounds the dressing is soaked in saline and laid on the surface. This process is repeated three times daily, care being taken on each occasion to wash the skin surrounding the wound with some antiseptic solution. Within two or three days the surface of the wound becomes marvellously transformed into one of brilliant scarlet granulations of a healthy character, with practically nothing but a small amount of clear serous discharge. The strength of the saline irrigation is gradually diminished until at the end of the week normal saline solution only is used and continued until the wound has healed. If the use of the stronger solutions is persisted in fresh sloughing takes place, and the recovery is retarded. At the end of ten days to three weeks, depending on the extent of the wound, with the superficial, and even in the deeper lesions where the bone is not involved, the wound has become so cleaned up that, where the area is a wide one, the skin edges can be freed and sewn together or drawn together by strapping, which expedites the convalescent period.

The chief advantage of the method is the rapidity with which the wounds, even the most foul, heal by healthy granulation tissue formation. Of great importance also is the avoidance of multiple dressings, which are so painful in the early stages of healing of a recent wound, and at a time when it is important to avoid giving pain which will interfere with the general condition of the patient. The prolonged packing also tends to keep the outer edges of the wound from falling together, as is seen in cases where only a drainage tube is used. It is my belief also, that it tends to prevent secondary hæmorrhage in cases where the septic condition is in the neighbourhood of large blood-vessels, no doubt by rapidly causing the cleansing of the tissues. It has been noted that in cases which have previously been discharging large quantities of pus, that after the salt pack has been instituted this immediately diminishes, the wounds take on the characteristic changes

above noted. The salt causes an exudation of fluid, which washes out the bacteria not only from the surface of the wound, but also from the deeper tissues, thus affecting them in a manner which no antiseptic applied to the surface will do. Whether this is due to osmosis or irritation it is difficult to say; the clinical fact remains.

This method has been carried out in almost all the cases that have come under my care in the Hospital during the last fourteen months, and has established itself in my mind as a great advance in the treatment of infected wounds.

NOTES ON MINOR SURGERY

NO I. THE CIRCUMCISION OF CHILDREN.

By PAUL BOUSFIELD, M.R.C.S., L.R.C.P.

THE newly qualified surgeon or the advanced student who is called upon to perform some minor operation has in very many instances never seen that operation performed by any member of the senior hospital staff; often his only experience of it may have been a textbook. This applies to several of the operations of minor surgery, not merely to the one under present consideration. Not long ago I inquired of various acquaintances with the result that I discovered no less than four fully qualified men, and quite a number of senior students, who had never seen the operation of circumcision performed, others who had both seen and themselves performed the operation stated that they had done so under the auspices of previous house surgeons who were not in all cases experts.

One is inclined to approach circumcision in a somewhat light-hearted manner; it is simple, with but little danger, and appears to be very easy. It is only when one has had to tackle the job for the third or fourth time that some realisation is brought about that this simple little operation is in reality a delicate and by no means to be despised work of art, if one is to obtain a workmanlike result, and under workmanlike conditions.

Two things are primarily to be borne in mind—firstly, that it is very easy to produce a very ugly result; and secondly, that the more speed with which the work can be done the better, because the operation must often be performed upon very small infants with whom every minute under an anæsthetic is a minute to be avoided when possible.

I had myself seen the operation done in an indifferent manner by various house surgeons at two or three hospitals. Each employed a separate technique, with very varying results. As casualty house surgeon at a children's hospital I found that I had to perform a very large number of these operations myself, whereupon I set about inquiring as to various methods in use, out of which the following technique was finally evolved, and this I found to be very satisfactory.

The patient is placed upon the table with a loose sterile

towel in position, and the parts are prepared by the usual application of iodine, which should be done before the patient is anaesthetised.

The instruments should be placed in the order in which they are to be used and arranged with their handles right and left according to which hand must grasp them. This saves a great deal of time and trouble.

The instruments in the order in which they are used are as follows:

Dissecting forceps	(Left hand)
Straight bone forceps	(Right hand)
Scalpel	(Left hand)
Probe	(Right hand)
3 Spencer Wells forceps	(Right hand)
Small scissors	(Right hand)
1 straight needle threaded with 12 in. of soft gut.	

Three spare artery forceps and some gut ligature are also necessary in case of hæmorrhage.

The operator stands at the patient's right side.

With the dissecting forceps the prepuce is grasped and stretched to its full extent. The straight bone forceps are then made to grasp the prepuce above the glans, which fits into the concave surface of the forceps, taking care to incline the blades so that slightly more of the upper than the lower surface of prepuce is included. The bone forceps are then gripped tightly and the prepuce crushed between the blades. The dissecting forceps are replaced in the dish and, with a scalpel in the left hand the prepuce is sliced off, along the flat surface of the blades of the bone forceps. Scalpel, bone forceps and prepuce are then discarded, as they are no longer required.

The cut surface will bleed very little on account of the slight crushing to which has been subjected, and a beautiful straight edge will be found to have been made, quite unlike the somewhat notched edge sometimes made when using scissors for this work.

The outer skin is then pressed back manually and the three pairs of artery forceps are clipped on to the inner layer. One is fixed in the mid line ventrally, *i. e.* immediately distal to the frænum. The other two are fixed on the upper surface immediately on either side of the mid line.

Holding these two latter pairs of forceps in the left hand, a probe is passed between the skin and the glans penis as far as it will go, immediately beneath the forceps on the upper side of the glans. This creates a space into which one blade of a pair of scissors may be safely passed. The probe is not discarded, as it may be required later. In using the probe to separate the skin from the glans, I only separate it on the dorsal aspect sufficiently to insert the blade of a pair scissors, and do not try to separate the whole surface of the glans, which is often very adherent, as this is done manually much more effectively and with a great saving of time after the dorsal incision has been made along

the inner skin, so that the latter can simultaneously be turned back.

Still holding the two dorsal forceps in the left hand, the skin between them is cut vertically right down to the junction of the skin and mucous membrane at the base of the glans with the scissors.

The scissors are for a moment laid down, and the skin, which is often adherent to the glans, is gently separated therefrom with downward pressure by means of the fingers or a swab of wool. It is most important that this separation be completely carried out and all the smegma cleared away, otherwise the results may be far from those desired.

An assistant now holds two of the pairs of forceps well out so as to stretch the attached skin; the operator holds the third pair similarly. With a couple of quick cuts the whole is removed, leaving about an eighth of an inch as a collar round the glans. The part in the neighbourhood of the frænum should be cut very close in order to avoid an ugly lump afterwards. One stitch is now inserted through the skin and frænum, care being taken to include not more than one eighth of an inch of skin between the entrance and exit holes of the needle. The stitch must be not more than about one-sixteenth of an inch from the edge of the skin. A substantial quantity of frænum should be caught up so as to include the artery which runs in it, and which is sometimes a source of bleeding. By this means we shall obtain a neat result, avoiding the somewhat unsightly lump which follows a careless suture in this position.

No further stitches are as a rule necessary, but they may be inserted if there be hæmorrhage. There is in most cases of children under about eight years of age very little hæmorrhage, and the one stitch indicated above is all that is required. Occasionally there is some hæmorrhage from the two arteries which run on the dorsum of the penis. This can generally be stopped by application of forceps for a minute, but they may need ligaturing. Ligatures should be avoided if possible, as they may tend to cause painful erections; for this reason I use soft gut instead of silk if a ligature is necessary. The most difficult form of hæmorrhage in infants appears to take place from the plexus of veins on the body of the penis, as these are very delicate and sometimes torn. I have only had two cases of this, and in each instance I treated it by allowing a nurse to compress the whole surface with her finger and thumb for ten minutes while I went on with the next case.

A strip of gauze, 2 ft. long by $\frac{1}{8}$ in. wide, is now wrapped round the penis from the root to the glans, and then tied firmly.

As a dressing Friar's balsam, poured on to the gauze after it has been tied in position, seems to be better than Lotio Plumli and other dressings I have tried, since not only is it antiseptic and hæmostatic, but being of the nature of gum, it helps to keep the dressing in position very effectively. When using it great care must be taken not to upset

a drop over the meatus, as this may effectively prevent mic-turition. It is for this reason that the probe has not been cast aside, for should a drop reach this position, the probe must be gently forced into the meatus to free the passage.

The time taken for this operation, in straightforward cases, varies from $2\frac{1}{2}$ minutes in the case of a child of four years or over to $3\frac{1}{2}$ minutes for a child of a few weeks old, for the smaller children are sometimes much more difficult; indeed, on one occasion, in a boy of six weeks old, who was very small, I have seen the penis disappear into the scrotum, a matter of no importance except that it wastes time and renders the dressing somewhat more difficult. Often there is a good deal of adherent smegma, and the separation of the skin from the glans and the clearing away of the smegma will extend the operation for a further couple of minutes.

The anæsthetic which I prefer in these cases is ethyl chloride or nitrous oxide for children of three years or above, and æther for younger children, who only require sufficient to keep them still for about one minute, as there-after not much pain is felt.

SURGICAL NOTES.

By Col. G. F. ROWCROFT, Temp. Major, I.M.S.

(1) SKIN-GRAFTING.

IT may be only my crass ignorance, but I do not remember ever seeing or hearing of a method of skin-grafting I employed very successfully about a year ago. I had a patient on a hospital ship, a poor fellow who had been badly wounded in the Gallipoli Peninsula. A shell had passed across his back, ploughing an immense furrow right across, breaking one scapula and the spine of the other, and making a wound as if a gigantic cheese scoop had been used on him. The ends of various muscles were exposed, and a huge area left which would have taken months to granulate and heal by itself. Moreover, when healed, I fancied that the resulting cicatricial contraction would probably draw his head right down, so that he would be looking straight up to the sky. This I hoped to avoid, to at any rate some extent, by skin-grafting, but the difficulty was that, owing to the wound, the patient could not lie down in any position, so that the administration of a prolonged general anæsthetic was practically impossible. (He had to be propped up in bed always by an arrangement of pillows, in which the nurse was very skilful.)

I therefore employed a local anæsthetic on the left arm, and took numerous small grafts of skin from the anæsthetised area by pinching up a little bit of skin with forceps and pulling it upwards, and then cutting it off with scissors. Each little bit so removed was a round piece about a

quarter of an inch in diameter. Each one, as it was clipped off, was placed in position on the wound on the back, and I took about twenty of them. The arm was then bandaged, and the usual dressing applied to the wound on the back, and when removed a few days later, all the scattered skin-grafts were found to have taken root most satisfactorily. With so many centres of epithelial growth the wound should have healed rapidly, and I hope did so, but I had to hand the case over, of course, on reaching England, when the man was transferred to, I believe, Netley. I might mention—though it had nothing to do with the skin-grafting—that a violent secondary hæmorrhage suddenly started from a spot near the left scapula after the separation one day of a sequestrum, when we were having some particularly rough weather in the Bay of Biscay. In spite of all I could do I could not catch the bleeding vessel, so, against all teaching, used a graduated compress, which effectually stopped the hæmorrhage. It is not the easiest way to work, holding on “for dear life” to a stanchion with one hand and stopping the flow of blood with the other! However, it succeeded. A very firm bandage was of course applied, and a careful watch kept over him.

(2) NOTES ON NURSING.

May I emphasise one or two little points about nursing which may seem self-evident, but each one of which was borne in on me about eighteen months ago, when so seriously ill that I could not lift a hand off the bed.

(1) The *taste* of medicines. I had often been ill, and pretty badly so before, but never worried much about the taste of my physic, and am not addicted to being fanciful, but, on the occasion referred to, it was a real physical torture to drink the stuff prescribed, t.i.d. When a patient is really ill the physician should pay attention to this point, which is often quite ignored, as it was in my case. It is very easy as a rule to add something to improve or disguise the flavour.

(2) See that hot-water bottles are really warm (*not too hot*), and placed where they can warm the patient. A cold and clammy bottle is disgusting, while a hot one out of reach is useless. I have often been left for hours in one predicament or the other. This in cold weather when one is really ill and helpless is very trying. *Efficient* nurses and sisters would guard against such things, but there are inefficient in every line of life.

(3) Use of feeding cup. *Before* using one with a patient for the first time show him, or her, how he can use the tip of his tongue as a cork to stop the flow, in order to take breath, etc. And then, when you use it, *put the spout well into the mouth*. It may sound extraordinary, but I have repeatedly had the tip of the spout placed only just between my lips, with the result that the least movement on the part of the holder dislodged it, and sent a rivulet down my neck, wetting me uncomfortably.

Having got the spout well into the patient's mouth, *tip the cup up well*. (I assume that you have already explained how to "cork" it up, if necessary, with the tip of the tongue.) It is irritating and annoying to only be able to get a drop or two at a time.

(4) As regards making the bed: What is the prejudice some sisters and nurses seem to have against allowing the bed-clothes to come well up to the chin and ears? I have often seen a bed made, and have had my own made, in such a way that they only came up a little more than half way above the top of my chest. This, in cold weather, is absolutely miserable, and makes one chilly all over.

Whatever is worth doing at all is worth doing well, so if a patient is to be made comfortable in bed see that he really is so, and not merely that the tops of the bed-clothes are all in one line.

(5) In winter one may suffer much from cold hands in bed. Take my advice, and if you suffer thus wear warm gloves. If reading, or handling things, it makes an immense difference in comfort, although it may not be usual; but that is not the point.

The above may all appear very trivial matters, but they are not so to a sick person, and it is attention to all such little details which make all the difference between efficient nursing, such as one has a right to expect from trained people, and the rough and uncomfortable experiences which one may expect only from the untaught.

SIMPLE RHYMES FOR FRIGHTFUL TIMES.

6. MINNENWERFER.*

When big and little Minnie fly
Like blundering bird across the sky,
And shattered sandbags round you lie,
Mid sounds of muttered curses vocal,
You may always, if you try,
On these soothing words rely,
Which to these the great apply—
"Their effect is very local."

J. R. R. T.

* "The enemy made use of Minnenwerfer. Their effect, however, was very local."—*Official communiqué*.

EXTRACTS FROM THE PRIVATE JOURNAL OF DR. REVLYN-BLOOD,

SOME TIME ASSISTANT PHYSICIAN
ACCOUCHEUR TO ST. BARTHOLOMEW'S
HOSPITAL. 1609-1616.

Found in an Old Chest during alterations to "Mackenzie's."

Now Concerning y^e matters related in thys JOURNAL, let itt be plaine to alle from y^e frst that they are but a plaine tale of such thinges as passed in oure tyme at Bartelmey's and no fancifull discoure on things OBSTETRICK; for thatte is foreign to oure purpose and very hatefull to alle goode District Clerkes.

Aug. 1. Did meete at Mackenzies in greate force. Alle mightie busy purging awaye y^e heape of olde mucke. Did heare how one, seeking in a darke Cupboarde did drawe forth an olde Ham wrapt in news sheetes, w^{ch} some doe say was layd by for provision in y^e warre but now gone foule and stank abominably.

Made ready our Black Bagges, mightie exercised to keepe our kerchiefs and geare cleane, but were told how 'twas impossible, so did give vppe y^e attempte, eache being contente to packe his geare as beste he mighte—and alle very Septick.

To y^e Abernethian Roome and saw y^e Newes, how oure Army in Flanders hath gained a Victory—but what refult 'twill have in St. Luke's none dare thinke.

Did waite very expectant for most of y^e day and later met one returned from hys frst cafe, who told how he did give a gallon by waye of glyster and then retyred for a space—but being called of a fudden from a Pot Hofse neare by, didde mayke al speede to y^e hovse and perceiv'd y^e babe. But y^e corde being cutte of a fudden, ye babe dropt and so was trampled under foote by y^e greate prefs of lookers on and Children. Then came y^e midwyfe, having scraped uppe y^e babe, w^{ch} beeing of ye Bovncing forte, did presently recover and joynd in y^e dinne what tyme y^e mother fitting vppe did calle for ayle, but was mayde quiet with a douche mightie hotte and so was lefte and all very merrie.

Aug. 2nd. To y^e square and there fell a talking wth one of our clerkes who going to Goswell Roade, a meane streete—did see a woman mightie fatte about y^e legs and they y^e colour of snow. And how hee, tayking itt for a leprosy didde put one two paires of gloves and presently did test her reflexes with a pinne—but perceiving a babe of a fudden att y^e foote of y^e bedde—did thinke otherwyse as toe her difease.

August 6. To Bartlemeys Church and there heard a good discoure by M^r Visday tho' overlong for so small a man.

Heard how M^r Snagdout hath suffered his latest babe to be borne before he came—this being his 7th—hee crying

aloude to Heaven how hee doth hate these careles folk and wishd them dead.

Aug. 10. To y^e Chirurgery and there hearde how one Octavius, being called, didde finde a wenche took wth a great losf of bloode and y^e babe nott yet come; and how hee did plugge her, and being come to y^e ende of his kerchiefs did presf in alle those things proper to his hande and coming to y^e curtaines ended not his greate worke but did tampe her wth y^e bedde cloathes—and putting atop y^e bolfter did commend her to Her Maker: thus showing how truly spake thatte learned Docktor who, later seeing her, said 'twas *Multum in parvo*.

Aug. 14. To y^e Queenes Ward and there heard a good discourse on y^e Dropsy in pregnant WOMEN by Dr. Chearful w^{ch} pleased me much, and hee very learned and sympathetick being mindfull always of his owne clerkshippe in former years.

Aug. 15. To y^e Office where busy writing a greate list of those TEACHERS of PHYSICK most meet toe bee internd for y^e common weal and did adde others.

Did heare how one of oure clerkes—being ever a poore starter—hath at last seen a delivery—w^{ch} pleased him mightilie tho' D^r Sharp—being privy toe itt—saith "twas due rather to chance than toe y^e clerkes endeavour that hee arrivednot, as is his wont, too late."

Did receive complaintes, amongst them a woman crying oute against y^e long delays of our Office to sett forth her "ETERNITY PAPERS"—but what thys may be no man knoweth, for it is sure no paper will avail at such a HEATE.

This nighte at cardes and won much money but troubled by one breakinge in vpon us crying for red Wyne and hee very druncke. Did refuse him liquor and did adde his name to oure liste. So to bedde—being first for DUTY.

Aug. 16. Lords Day, vp betimes to finde M^r Octavius gone to y^e Fyre Station where hee is in great esteem, but they that be privy toe it do thinke him a fly dogge.

Today to y^e swimming bath and divid for coines w^{ch} we did throw inne—but got none till later when seeing one of a greate bigness toe lye vpon y^e bottom did presently take it uppe, and found it to bee my owne watch thrown in in errour and y^e workes all broke by too great zeal.

At Crickett in y^e Fives Courte but brake open y^e balle (itt being parte of a Hygginson) and cannot prevaile vpon y^e Curator for another—he saying he hath been there before.

Did perceive a fayre maide to wave her kerchief at us wee being vpon y^e roofe) from a neighbours house: and all did wave backe but none knowing whether she meaneth him or no and all disputing.

Shall to Arnolds foon for y^e fitting of my bagge and will enquire more clofely.

Mem. Must have a care that Dorothy heare none of this.

So to bedd after waving a long while and no reply.

18th. Did hear M^r Paterfon going oute to a cafe by M^r Grousewell did finde a woman with a great flux and pretty nigh gone but M^r Grousewell fulle of Hope plugging her as if 'twas in Dublin. And howe he went oute and cried for a coache but none came, so perforce returned afoot to y^e Hofpittall and made ready y^e Jewes chaire and did presently wheele itt to y^e house, they being at greate paines to mount her vpon itt and very nigh came to overturn itt in y^e mire but albeit returnd safely by Smithfield and sad to thinke so few should bee aboute to see such an exercise (itt being about midnichte and y^e chaire a brave sighte wth its high wheelles making a greate rattle).

(To be continued.)

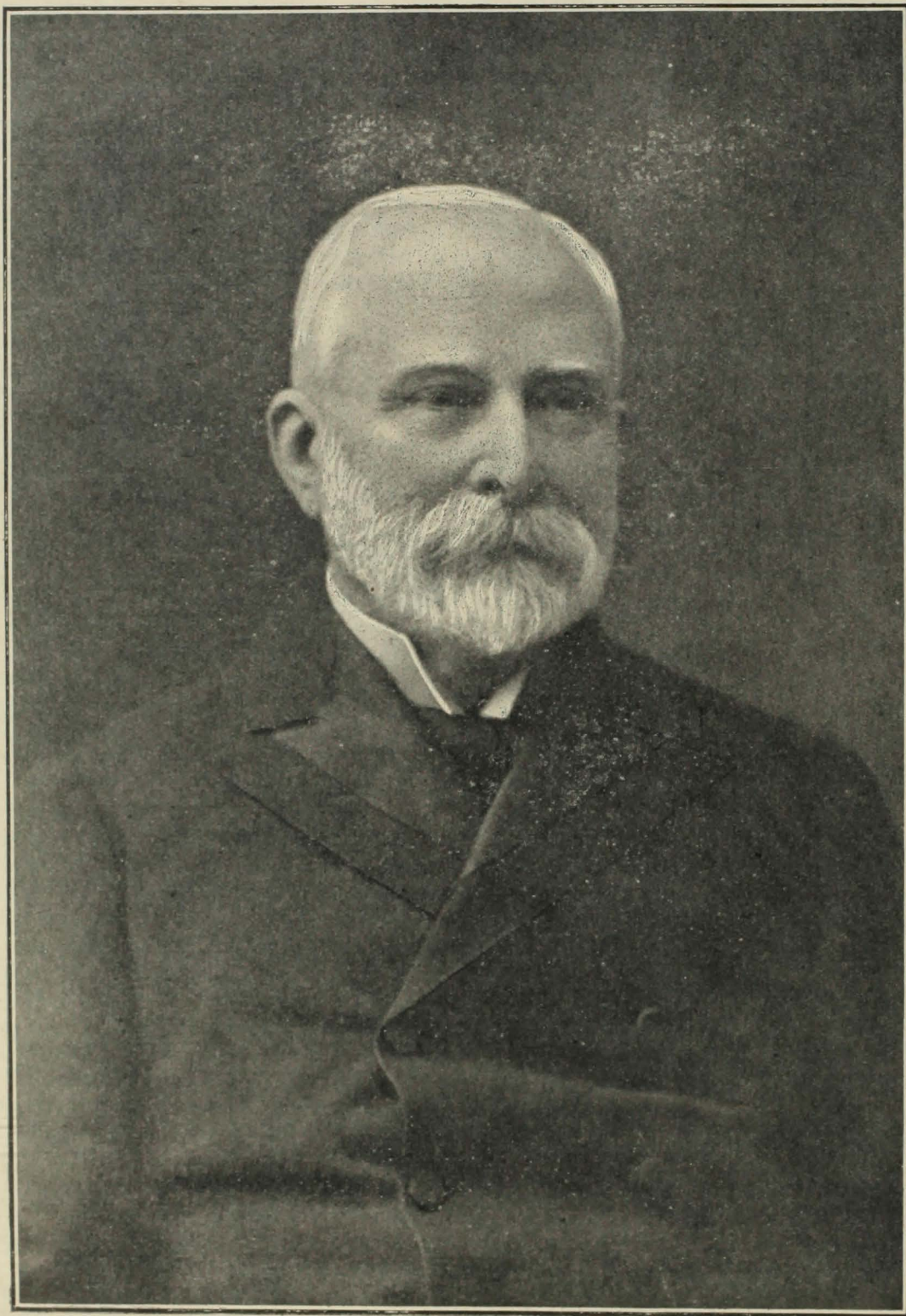
OBITUARY.

SIR T. LAUDER BRUNTON, BART., M.D., LL.D.
D.Sc., F.R.S.



THE death of Sir Lauder Brunton will awaken many recollections in the minds of his old friends and pupils at St. Bartholomew's. He came to us with a remarkable reputation from Edinburgh, where he carried off every University distinction in Science and Medicine that it was possible for him to secure. He had already conducted clinical and laboratory researches of value respecting the actions of digitalis, and introduced the employment of nitrate of amyl as a standard remedy for the agony of angina pectoris.

Dr. Frederick Farre's retirement created a vacancy in our *Materia medica* lectureship, and Brunton was appointed his successor. He modified the character of the teaching, and rendered it both pharmacological and therapeutical, bringing his practical physiological knowledge to bear especially on the subject. He was well equipped for this, having studied successively in Vienna, Berlin, Leipzig, and Amsterdam under the best masters of the time. He was appointed Assistant-Physician in 1876, and associated with Sir William Church as his senior. The out-patient work at that time was very heavy, yet he was able to continue laboratory research, and to write several large treatises which led to his Fellowship of the Royal Society at an early age, and his election later to the Council and Vice-Presidency of that body. In his vacations he travelled much on the Continent, revisiting his former masters, with whom he maintained a close connection. He went to India in 1889 for some months to take part in the Hyderabad Chloroform Commission, and was on the Commission appointed to examine Pasteur's treatment of rabies. With Sir Joseph Fayrer he conducted a research on the treatment of snake poisoning, which was profitable. He also travelled far and widely in America, visiting the Medical Schools and



SIR T. LAUDER BRUNTON, BART., M.D., LL.D., D.Sc., F.R.S.

gathering fresh ideas and knowledge everywhere. His private practice now began to be active, yet he never relaxed his efforts when he became full Physician, and was ever diligent and inspiring in his clinical teaching. He resigned his office rather sooner than he need have done, no doubt finding his private work seriously engrossing his energies. He was elected a member of several foreign medical societies. He received the honour of knighthood in 1900, and was created a baronet in 1908.

Looking back on his career, we find him to have been a man of extraordinary parts, earnest, far-seeing, ingenious, and full of resource. Personally a man of charming disposition, simple, sympathetic, most generous and hospitable, he had no enemies. His private life [was very happy, and supported by a devoted and able wife, whose loss was a severe blow to him in 1909. He was always a prominent figure in the International Medical Congresses, and accepted as one of the lights of British Medicine. His health gave way two or three years ago, and he began to suffer from cardiac failure, yet he carried on his work prudently and bravely. The loss of his second son, a Cambridge man, and one of our pupils, killed by a shell at the front in France while serving with the Grenadier Guards, was a severe shock to him. He passed away on September 16th, in his seventy-third year, and a funeral service was held for him at St. Peter's Church, in Vere Street, on the 20th inst., his remains being interred in Highgate Cemetery.

He leaves behind him none but bright memories of a guileless, strenuous, and useful life, largely spent in the service of our Hospital. Yet he found time to take an active part in several patriotic movements such as the Second International Congress for School Hygiene, of which he was President, the City of London Cadet Brigade, the National League for Physical Education and Improvement, and the National Association for the Prevention of Infant Mortality. He was a prolific writer, and sought persistently to apply in practice such remedial measures as gave promise, on physiological grounds, of affording relief to various maladies and symptoms. His position in the medical world was probably unique. Intense earnestness was the keynote of it. His title passes to his elder son, formerly in the Royal Engineers, and now an Instructor at Montreal to the Canadian Engineers.

D. D.

CORRESPONDENCE.

THE VEXED QUESTION OF ANATOMICAL NOMENCLATURE.

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

DEAR SIR,—As *Gray's Anatomy* is one of the text-books which I am constantly recommending to our students, I hope you will allow me to state briefly why I differ from your Reviewer of the Nineteenth Edition when he states, in the August number of the JOURNAL, that he considers "it would scarcely be our duty to recommend it to students."

True, the "B.N.A." names are used throughout this work; but when they differ from the older names (on what grounds these can be called an "official terminology" I fail to understand) the latter are always given in brackets, clearly prefixed by the letters "O.T."

I am convinced that it is really no hardship for the student to learn both names, at any rate in the case of the larger structures with which he will generally have to deal in practice later on. He will find it best to know the new because many of them, manifest improvements on the old, have no doubt "come to stay"; he must know the old because many of them will certainly remain in use, for a long time to come, in our medical schools and clinics.

Now, while the task of learning both names may appear an indescribable nuisance to the mere book-crammer, it may, nevertheless, I think, be regarded as a blessing in disguise in the case of the industrious practical student. This type of worker—the only one we should seek to encourage—has ample opportunities nowadays of handling and examining the structures themselves. If he finds that a structure he is studying may be described by two or more different names he is stimulated to inquire the reason therefor; in observing it again more carefully, in order that he may understand *why* it should bear these alternative names, he is made to devote more *thought* to his work, and that, surely, is always more of a help than a hindrance to successful study.

The picture drawn by your Reviewer of the student (B.N.A.) and demonstrator (O.T.) at loggerheads over the radial nerve may suggest, at first sight, a state of hopeless confusion. But surely, unless the student be simply one of those cramming sheep deplored by Epictetus, the discussion of the musculo-spiral nerve which would follow, with a specimen at hand, would not only reconcile apparently contradictory descriptions but would also impress the student more strongly with the actual facts. I do not believe that any of us who demonstrate in the dissecting room find it any harder to get in touch with the difficulties of our students because we were brought up exclusively on the old terms, while they largely use text-books which for the most part employ the new.

In my considerable experience as an examiner in many parts of the country I have never come across a single case of a student who failed in his examination owing to what R. L. Stevenson has called the "Tyranny of Nomenclature." To parody another well-known saying, "The *Structure's* the thing"—not the *name*—and for that reason I wish to say that I think your Reviewer suffers from a false perspective when he feels that he cannot recommend the text-book in question, though he admits that, apart from terminology, the new edition is all that may be desired.

Though it is a matter outside the main purpose of this letter, I would point out that one of the dangers of using epynymic names—a danger which the "B.N.A." with all its faults, has made an effort to lessen—is well illustrated in two printer's errors which have escaped the proof-reader in the same number of the JOURNAL. What in the name of the high surgical traditions of this Hospital, is the *Warham* (p. 122) Prize in Surgery? To have his well-known corpora called "*aurantii*" (p. 129) is surely enow to make the shade of Arantius, disciple of the great Vesalius, turn *orange* with grief!

I am, yours faithfully,
ALEX. MACPHAIL.

REVIEWS.

PRINCIPLES OF DIAGNOSIS AND TREATMENT OF HEART AFFECTIONS. By SIR JAMES MACKENZIE. (Henry Frowde and Hodder & Stoughton.) Pp. 264. Price 7s. 6d. net.

Originally prepared as a series of lectures for post-graduate students, which owing to the outbreak of war were never delivered, this work is of a somewhat colloquial nature. From this it certainly gains much interest in the reading. The author's aim has been for the most part to teach the practitioner to recognise, by employing the ordinary bedside methods of investigation, those heart conditions of which we have recently obtained so much information by means of the polygraph and electro-cardiograph, instruments which are not as a rule available to the general practitioner. The teaching in this respect is excellent, but its value will be to some extent limited by the fact that the practitioner does not as a rule see a sufficient number of similar cases, especially of the rarer types, to attain or retain the high standard of efficiency necessary.

The author states that "the main question in every examination of the heart is concerned with heart failure—whether it is present or foreshadowed." And a considerable portion of the book deals with the essential matters connected with heart failure in a very able manner, which should be of much service to the practitioner. We can confidently recommend the work to students and practitioners alike as a very valuable exposition of the subject.

ACUTE POLIOMYELITIS. By F. E. BATTEN. (John Bale, Sons & Danielsson, Ltd.) Pp. 104.

This work consists of a series of Lumleian Lectures delivered at the Royal College of Physicians, and reprinted from *Brain*, vol. xxxix, 1916.

They form a concise yet thorough investigation into the subject, dealing with it in the first place historically and geographically, and afterwards going very fully into its pathology, clinical manifestations, and treatment. The work is of great interest at the present moment in view of the recent outbreak of poliomyelitis in London. It is well illustrated, and those concerned in the subject from a scientific standpoint, as well as from the mere matter of diagnosis and treatment, will find much of interest throughout, and perhaps especially in the chapter devoted to experimental work.

THE STORY OF A RED CROSS UNIT IN SERBIA. By JAMES BERRY, B.S., F.R.C.S., F. MAY DICKINSON BERRY, M.D., B.S., W. LYON BLEANE, L.C.M., and other members of the Unit. (J. & A. Churchill.) Price 6s. net.

This story of the "Royal Free Hospital Unit" should take high rank among the many books descriptive of the different phases of the Great War. Mr. and Mrs. Berry had spent a summer holiday cycling in Serbia in 1904 and had acquired some knowledge of the language, which stood them in good stead. The short but interesting historical introduction is worth reading, and the whole book is full of incidents graphically described, which will commend it to the general reader and to the student of the course of the war in Serbia. Their appreciation of the Serbian character is also good.

For the medical profession the chief interest of the book will be found in the account of the struggles of the unit with the dirt and disease of a primitive country into which they managed to introduce the refinements of a London hospital in the face of every kind of difficulty. Typhus was rampant, and the methods by which it was fought are of great interest. Mr. Berry comes to the conclusion that the ubiquitous flea was not a carrier of typhus in Serbia. Lice were the culprits, and their complete elimination from the hospital resulted in the elimination of typhus. The drastic remedy of shaving every hair from all parts of the body was finally adopted. "Not only were hairs removed from the head, face, axilla, and pubes, but those also on the thighs, legs, chest, and abdomen." Mr. Berry arrives at the emphatic conclusion, "Remove lice and you remove all danger of transmitting typhus," and that there is no danger of the transmission of typhus through the air, even in the wards. Next to the typhus wards was the common sitting-room used by all members of the Unit, yet no one ever contracted the disease.

The general interest of the book, from the inception of the Mission to their capture by the Austrians and final release, is well maintained, and the authors are to be congratulated on a notable contribution to the war literature.

APPOINTMENT.

W. FOSTER CROSS, M.R.C.S., L.R.C.P., appointed Senior Administrator of Anæsthetics to St. Bartholomew's Hospital.

NEW ADDRESSES.

D. L. E. BOLTON, 15, Russell Square Mansions, 122, Southampton Row, W.C.

R. B. KHAMBATA, Winters' Buildings, Calcutta, India.

J. W. TREVAN, Sundridge, Grange Road, Norwood, S.E.

BIRTHS.

LEWARNE.—On Thursday, September 21st, at Stonecroft, Cricklade, Wilts, the wife of Frank Lewarne, M.R.C.S., L.R.C.P., of a son.

O'BRIEN.—On August 28th, 1916, at Surgeon's House, Royal Military College, Camberley, to Dorothy, wife of Major C. W. O'Brien, R.A.M.C., a son.

PAGE.—On September 21st, at 7, The Marina, Worthing, Violet (née Shillitoe), the wife of C. H. W. Page, M.A., M.D. Cantab., Temp. Lieut., R.A.M.C., of Holly House, North Walsham, of a son.

RAMSAY.—On September 13th, at Eldon Place, Blackburn, the wife of Jeffrey Ramsay, M.D., Capt., R.A.M.C.T., of a daughter.

RIDOUT.—On September 6th, at St. Elmo, Clarendon Road, Southsea, the wife of Major C. A. Ridout, R.A.M.C., of a son.

WELLS-COLE.—On September 21st, at 37, Grosvenor Place, S.W., the wife of Lieut. Gervas Wells-Cole, R.A.M.C., of a son.

MARRIAGE.

KITCHING-BOUCHER.—On August 30th, at Frolesworth Church, by the father of the bride, Robert Lacy Kitching, Capt., R.A.M.C., of 9, Lansdown Road, Blackheath, to Alyson May Estcourt, elder daughter of the Rev. Canon and Mrs. C. E. Boucher, of Frolesworth Rectory, Lutterworth.

DEATHS.

BRUNTON.—On Saturday, September 16th, 1916, at 1, De Walden Court, 6, New Cavendish Street, Sir Thomas Lauder Brunton, Bart., M.D., LL.D., F.R.S., in his 73rd year.

DON.—On September 11th, in hospital, Archibald William Robertson Don, 2nd Lieut., Royal Highlanders (the Black Watch), beloved fourth son of Mr. and Mrs. Robert B. Don, Tealing House, Forfarshire, and Lodge, Broughty Ferry, aged 25.

DRYSDALE.—On September 25th, of wounds, Donald Roy, Lieut., Dorsetshire Regt., son of Joseph N. Drysdale, of Buenos Aires and St. Rode, Bournemouth, aged 21.

ECCLES.—On September 27th, of wounds received on September 9th, at the 1st London General Hospital, Capt. John Dennison Eccles, M.C., Queen Victoria's Rifles, eldest son of Major and Mrs. W. McAdam Eccles, 124, Harley Street, W., aged 20.

HEAPE.—Previously reported missing, now reported killed in action, on July 1st, 1916, John Schofield Heape, Lance-Corporal, Signal Section, Middlesex Regt., second son of Sam and Bertha Heape, 4, St. Albans Road, Bedford, aged 20.

MURPHY.—On September 13th, 1916, at Plymouth, James Keogh Murphy, M.D., M.C. Cantab., F.R.C.S., Staff-Surgeon, R.N.V.R., eldest son of the late Right Hon. James Murphy, aged 47.

SELBY.—Killed on September 26th, while attending the wounded, Gerard Prideaux Selby, B.A., M.B., B.Ch. (Oxon), M.R.C.S., L.R.C.P., Captain, R.A.M.C., eldest son of Dr. Prideaux George Selby, of Teynham, Kent, aged 25.

SELBY.—On September 8th, at Lucknow, India, William Selby, D.S.O., Lieut.-Col., I.M.S., F.R.C.S., Principal, King George's Medical College, Lucknow, Hon. Surgeon to the Viceroy of India, son of the late Prideaux Selby, of Koroit, Croydon, aged 47.

WOOLLCOMBE.—On August 30th, 1916, at 16, The Crescent, Plymouth, Walter Ley Woolcombe, F.R.C.S., aged 51.

ACKNOWLEDGMENTS.

London Hospital Gazette, British Journal of Nursing, L'Attualita Medica, Guy's Hospital Gazette, The Nursing Times, The Medical Review, New York State Journal of Medicine, Long Island Medical Journal, Otago University Review, Westminster Hospital Gazette, The Hospital.

NOTICE.

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

The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER, W. E. SARGANT, M.R.C.S., at the Hospital.

All communications, financial, or otherwise, relative to Advertisements ONLY, should be addressed to ADVERTISEMENT MANAGER, the Journal Office, St. Bartholomew's Hospital, E.C. Telephone: City 510.

A Cover for binding (black cloth boards with lettering and King Henry VIII Gateway in gilt) can be obtained (price 1s. post free) from MESSRS. ADLARD & SON AND WEST NEWMAN, Bartholomew Close. MESSRS. ADLARD & SON AND WEST NEWMAN have arranged to do the binding, with cut and sprinkled edges, at a cost of 1s. 9d. or carriage paid 2s.—cover included.

St. Bartholomew's Hospital



"Æquam memento rebus in arduis
Servare mentem."

—Horace, Book ii, Ode iii.

JOURNAL.

VOL. XXIV.—No. 2.]


NOVEMBER 1ST, 1916

[PRICE SIXPENCE.]

CALENDAR.

- Wed., Nov. 1.—Primary F.R.C.S. Examination begins.
Clinical Lecture (Surgery). Mr. McAdam Eccles.
- Fri., " 3.—Dr. Horder and Mr. Wilson on duty.
Clinical Lecture (Medicine). Dr. Morley Fletcher.
- Tues., " 7.—Dr. Calvert on duty.
- Wed., " 8.—Clinical Lecture (Surgery). Mr. McAdam Eccles.
- Fri., " 10.—Dr. Morley Fletcher and Mr. Waring on duty.
Clinical Lecture (Medicine). Dr. Horder.
- Tues., " 14.—Dr. Drysdale on duty.
- Wed., " 15.—Clinical Lecture (Surgery). Mr. McAdam Eccles.
- Thurs., " 16.—Final F.R.C.S. Exam. begins.
Exam. for D.P.H.(Oxford) begins.
- Fri., " 17.—Dr. Hartley and Mr. McAdam Eccles on duty.
Clinical Lecture (Medicine). Dr. Fletcher.
- Tues., " 21.—Dr. Horder on duty.
- Wed., " 22.—Clinical Lecture (Surgery). Mr. Wilson.
- Fri., " 24.—Dr. Calvert and Mr. Bailey on duty.
Clinical Lecture (Medicine). Dr. Calvert.
- Tues., " 28.—Dr. Morley Fletcher on duty.
- Wed., " 29.—Clinical Lecture (Surgery). Mr. Wilson.
- Fri., Dec. 1.—Dr. Drysdale and Mr. Wilson on duty.
First and Second Exams. for M.B.(Oxford) begin.
Clinical Lecture (Medicine). Dr. Hartley.
- Mon., " 4.—Exams. for M.D., M.S.(Lond.) begin.
- Tues., " 5.—Dr. Hartley on duty.
- Wed., " 6.—Clinical Lecture (Surgery). Mr. Bailey.
- Fri., " 8.—Dr. Horder and Mr. Waring on duty.
Clinical Lecture (Medicine). Dr. Calvert.

EDITORIAL NOTES.

 notice with the greatest of pleasure that two more Bart's men have received the Military Cross. Capt. R. A. Peters, R.A.M.C., has received this honour for tending the wounded the whole day and night under heavy shell fire, and at night was instrumental in getting in many wounded who were lying out in front in the open. Capt. F. G. Lescher, R.A.M.C.,

has been awarded the distinction for initiative in searching for wounded under heavy shell fire. He repeatedly led his bearers through heavy barrage. He continued his work until he had got all the wounded to safety.

* * *

It is also our pleasant lot to note that Capt. R. C. Clifford, I.M.S., who has already received the Military Cross, has now been awarded the Distinguished Service Order.

* * *

In a recent issue we referred to the posthumous award of the V.C. to the late Captain John Leslie Green, R.A.M.C. We are now pleased to relate that the King received Mrs. Green on October 7th and handed to her the Victoria Cross won by her late husband.

* * *

Our congratulations are extended to Mr. R. N. Geach, F.R.C.S., who has been appointed Assistant Surgeon to the Italian Hospital.

* * *

It is with very much regret that we hear of the death of Mrs. Edkins, the wife of Dr. J. S. Edkins, the late Lecturer on Physiology at this Hospital. Our most sincere sympathy is extended to Dr. Edkins in his bereavement.

* * *

Whilst we are fortunate this month in that no Bart's men have been lost at the front during this period, yet we unfortunately notice no less than six sons of Bart's men, or members of the School staff. Amongst these we must particularly mention Second Lieut. P. S. Chattaway, the only son of Dr. Chattaway, our late Lecturer on Chemistry, who was killed in action on the 14th inst.; our deepest sympathy is extended to Dr. Chattaway in his sad loss.

* * *

Just as we go to press we learn that the King has been pleased to award the D.S.O. to Captain Augustus Scott-Williams, R.A.M.C., in recognition of his distinguished

service and devotion to duty during the typhus epidemic at the Gardelegen prisoners of war camp in Germany. The epidemic lasted four months, during which time there were over 2000 cases. The Germans displayed great callousness and cowardice and the British and Allied doctors a heroic devotion to duty. Of the sixteen Allied doctors in the camp twelve took the fever, and two died. It is an honour right well deserved, and we hope to publish some of Captain Williams' experience in a later issue.

* * *

The following is the list of the new Junior Staff appointed from November 1st:

<i>House Physicians.—</i>	
Sir Wilmot Herringham	G. Burton
Dr. Tooth	P. O. Ellison
Dr. Garrod	W. H. Blackburn
Dr. Calvert	T. B. Bailey
Dr. Fletcher	N. Sherrard
<i>House Surgeons.—</i>	
Mr. D'Arcy Power	A. Morford
Mr. Waring	H. E. Griffiths
Mr. Eccles	C. V. Braimbridge
Mr. Bailey	C. H. Terry
<i>Medical Receiving Room Officers</i>	{ E. O. Goldsmith
	{ L. Cunningham
<i>Surgical Receiving Room Officers</i>	{ P. Bousfield
	{ A. H. Beyers
<i>Ophthalmic House Surgeon</i>	W. B. Heywood-Waddington
<i>House Surgeon to Throat, Nose and Ear Department</i>	R. Moser
<i>Extern Midwifery Assistant</i>	G. Day
<i>Intern Midwifery Assistant</i>	D. A. Blount

FROM THE FRONT.

LETTER FROM MAJOR L. B. RAWLING.

*No. 34 (The Welsh) General Hospital,
Deolali,
Bombay Presidency,
India.
September 9th.*

IT will be of some interest to the readers of the JOURNAL to know where I am. Deolali is a hill station situated rather more than 100 miles north-east of Bombay. I am in charge of the Surgical Division. We are able to take in 2000 cases, and we are the largest hospital in India. We act as a base hospital for sick and wounded from Mesopotamia.

Wallis (Mackenzie) is with us, also Burn. Stanley has left us to take up the post of Surgical Specialist at Secunderabad.

All of us are well.

Yours truly,
L. BATHE RAWLING
(Major R.A.M.C., T.F.)

TO "SOMEWHERE" IN FRANCE AND BACK TO "BLIGHTY."

"DANGEROUSLY ill from multiple wounds," so ran the wire. Then the hurry and worry to obtain necessary permits and passes. Waterloo at 10.30 p.m., a good non-stop run to ———, where the courteous R.T.O. made easy the embarkation on the packet. Some hours of interrupted sleep and a start in the early hours of the morning. The slowness of the steaming, when haste was desired to reach the other side, was trying, and the rolling of the boat in the rough sea even more so. Landing, a little difficulty with some of the necessary papers for entering the "area occupied by the British Army," and the express inland was nearly lost thereby. About an hour's run through beautifully cultivated French land brought us to our destination. Having had our papers examined by the R.T.O., we found a Red Cross car, generously given by the farmers of Dorsetshire, waiting to take us to the hospital. At the wheel sat an English girl, whose helpfulness was great to those tired with a trying journey, associated with much anxiety concerning their wounded relative. A short drive up a very steep hill and we were at No. — Red Cross Hospital, kept for officers only. It is housed in a seminary which, in the days of the Franco-German War, had been used by the Germans for their wounded—thus have the tables been turned. Nothing can be too high in the way of praise for the whole of the staff of the hospital, from the commandant down to the newest orderly.

It so happened that the week-end, September 15-18th, was one of great activity on the western front, and the number of casualties which came through were naturally considerable, and it enabled a great deal of work to be observed at the various hospitals of this large base. Situated on both sides of the river, some miles from the city itself, are the two areas now covered with hospital tents and huts. When one goes round these places, here if nowhere else, one is filled with admiration for the wonderful organisation of the British, and especially of the R.A.M.C. Stretcher, aid post, field ambulance, ambulance train, hospital motor ambulance, stretcher, all and each take a share in the transport, treatment and comfort of the wounded man from the trench to the base. Nothing seems to have been unthought of. Certain it is that stretcher-bearers may be damaged, or even killed, in their courageous work near the firing line; true it is that the aid post may be annihilated by shell fire, the field ambulance overturned in the mud, and an ambulance train run off the line, but such accidents occur in the best regulated families. The wounded man, unless he dies on the way, eventually finds himself comfortably in bed, with all the skill and care of the medical and nursing staff at his disposal.

It was my privilege to see a large amount of the admirable equipment, staffing, running, and medical and surgical work of the General and Stationary Hospitals.

When one remembers that everything had to be prepared—the ground, the tents, the huts, the operation theatre, the X-ray rooms, the pathological department, the destructors, the sanitary arrangements, etc., and all with modern perfection—one is amazed and gratified. Truly we are a wonderful nation—never quite ready, but always there!

These improvised hospitals are to a large extent upon more or less the same general plan, but each has its individual peculiarities. Here I saw an absolutely spick and span quarter-master's department; there one found most elaborate hospital gardens still radiant with colour; at another a most ingenious Russian steam-bath, in which a large number of newly-arriving "walking" cases could be cleansed in a very short space of time; and at still another a kitchen, which looked as if nothing was ever in it which could tend to soil its cleanliness.

One met many a Bart.'s man, many a Bart.'s nurse, but out there, unlike our 1st London General Hospital, they were rubbing shoulders, working, resting, eating, and quarrelling in a good-natured way with others drawn from all parts of the United Kingdom, even of the Empire. Truly it is wonderful, and if it were not that the wastage of war had brought them together one could have been delighted over all.

The surgical treatment carried out is excellent. Of course in the different hospitals it varied, chiefly owing to the personal equation of the staff.

For instance, in one the "salt pack" was practically the only method of treatment of the wounded when first dealt with, in another eusol held its sway, while in a third hardly any wound was treated other than with peroxide of hydrogen.

One great lack was apparent, and it was the want of facilities for treating the wounds by immersing the patient in a bath. The joy with which a wounded man lies submerged in a hot bath in our large home hospitals is so apparent that one wishes baths could be more generally used "somewhere" in France.

Specialism, even in the base hospitals, even though of necessity patients are cleared as quickly as possible, is becoming more and more the vogue. One surgeon will take a particular interest in joint cases, and he is able to point to a ward nearly filled with brilliant successes, particularly in gunshot wounds of the knee. There, as here, infection of the hip or shoulder is always very serious.

Another surgeon has paid special attention to the treatment of open, septic, fractures of the femur, and the ingenuity seen in splinting and dressing of these cases redounds to the credit of both surgical and nursing staff.

One great incentive permeates the whole work, and it is

to get the man fit to return to England or to go back to the firing line. Probably the uppermost thoughts in the mind of the wounded man are two: "Is my wound one that will make them send me to 'Blighty'?" and "How soon shall I get there?"

If one is filled with admiration of the transport to and the treatment at the General and Stationary Hospitals in France, one is amazed at the splendid organisation of evacuation. Think of it, literally thousands a day, even in times which are not excessively busy, are conveyed from hospital to train, from train to ship, from ship to train, and from train to hospital in the homeland with the least possible discomfort or delay. In some places where there is a river or seaport near at hand the necessity of a train journey intervening between the hospital and the ship is negated.

It was my good fortune to be allowed, owing to special circumstances, to return in one of the hospital ships. Some hundreds of wounded and sick were conveyed, by motor ambulances chiefly, from a dozen or more hospitals to the quay-side. Here they were carried or walked on to the ship. The arranging and making comfortable of the "cot" cases takes some time, so that the period from 8 to 11.30 a.m.—the hour at which the ship was to leave her moorings—was none too long.

For the medical officers on board no praise can be too high. Efficient, cheerful, scornful of the waves, capable of work without sleep, alert for emergencies, and enduring the strain week in and month out—such is the record of these men doing their large bit. And what of the nursing sisters? They are "just splendid." If the relatives and friends of the wounded could see the skill and devotion of these sisters in the most trying circumstances, careful, resourceful, clean, and sympathetic, I think they would realise a little more what the nation owes to its nurses in this war. In passing, I may say that, although none of the medical officers were of us, one of the sisters was altogether Bart.'s, and it was grand to see her work.

It is an anxious time for those tending the wounded on a hospital ship. Bad cases come on board—there was one death during the voyage I made—secondary hæmorrhage not infrequent—the troubles and perils of the sea are around—sea-sickness is not pleasant at any time, it is horrible when added to a fractured humerus. Submarines have been known in the Channel, and the masts of sunken vessels are a disagreeable evidence that the enemy did not always respect neutral vessels or even the Red Cross.

Still, the men are buoyed up with the knowledge that a few hours of it may be misery, will bring them to "Blighty," and this forgives much. All are patient; "up" cases revel in the sight of the English shore from the deck, "cot" cases grow excited when the engines stop and the ship is alongside the quay. Then comes the journey in the ambulance train, a journey sometimes short, sometimes long.

It is at this stage that a shade of disappointment may arise. A man whose home and friends are in London learns that the train he is placed in is destined to land him in a hospital in Glasgow, while an Aberdonian is carried to Bristol. Still, with the thousands that have to be dealt with it is impossible to prevent such happenings.

Our ambulance trains are almost perfect, and the manner in which they are run over our railway systems leaves little for improvement. I have in a previous issue of the JOURNAL written an appreciation of the arrival of an ambulance train, and the work of the transportation of the wounded to hospital (see *St. Bartholomew's Hospital Journal*, May, 1915). On this occasion the same splendid care was taken of the one conveyed to the 1st London General Hospital, where unfortunately all the skill and care bestowed upon him was destined to go unrewarded by his recovery from wounds. This fragmentary sketch of a visit paid to "somewhere" in France under somewhat tragic circumstances will suffice, I hope, to kindle or deepen admiration for all the labours of the R.A.M.C. and Nursing Services so freely and generously placed at the disposal of our brave men.

W. MCA. E.

RECENT ADVANCES IN THE STUDY OF SPEECH.

By E. W. SCRIPTURE, M.D.



ALL of us remember that in our clinical years when we referred to our books we never could make out exactly what the authors meant by their "scanning speech, staccato speech, slurred speech," and so on. We read that in disseminated sclerosis the speech is often "scanning," and that a very similar form of speech may be met with in Friedreich's ataxia. We often had observed a laboured speech where each syllable came out with a separate effort; but although the case might be one of disseminated sclerosis, yet it was just as often one of cerebral diplegia, and most often of all an old hemiplegic. We read that in myxœdema the speech is often slow, but for one case of myxœdema that we saw with slow speech we would find a dozen of various other diseases with speech even slower. In short, our minds were in hopeless confusion in regard to the speech signs, and when we attempted to use them for a diagnosis we generally found that we had made a mistake.

The trouble does not lie with the physicians or with the men who write the text-books; it arises from the fact that an accurate scientific study of speech in disease has never been carried out.

The problem is not an impossible one, as has just been shown by recent work. The trial of many methods has resulted in the development of one that is not too com-

plicated, and is direct and accurate. An outline of its principles may be of interest.

The patient speaks into the mouth-piece of a rubber tube which conducts the waves of air to a flexible membrane at

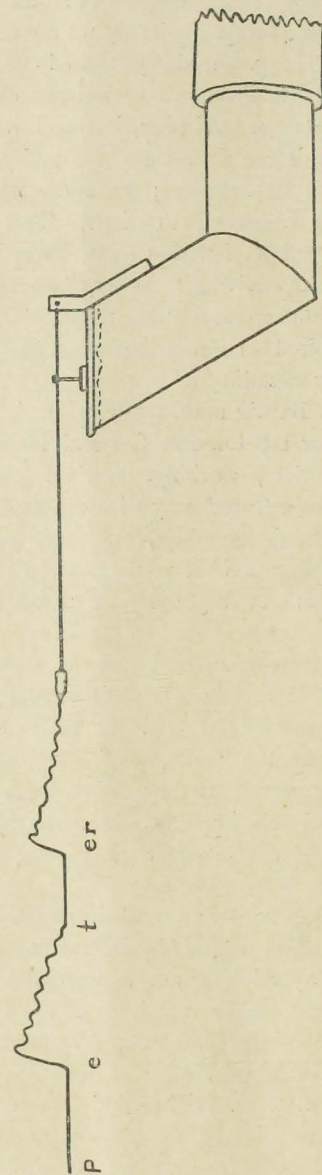


FIG. 1.—DIAGRAM OF THE RECORDING APPARATUS. The air waves passing through the rubber tube set a thin membrane in motion whose vibrations are recorded by a light lever writing on the revolving surface of a blackened drum.

the end of a metal tube. The vibrations are recorded by a lever on the moving surface of a blackened cylinder. The speech thus appears recorded as a white line on a blackened surface (Fig. 1).

A phonautograph record of "Peter Piper's peppers" from a case of general paralysis is given in Fig. 2. One of the marked characteristics of this record is the variability

of the lengths of the occlusions and heights of the explosions. Every one of these sounds would be a correctly formed sound in some language. In any language such as English the lengths of the occlusions and the heights of the explosions are practically constant. Here there is a variation round the type. This variation from the type is known as "asaphia." It corresponds to what has been rather improperly called "cortical ataxia." A particular interest lies in the fact that asaphia can be found in the records long before it can be detected by the ear. The method thus offers a means of recognising general paralysis at a very early stage, when it is often confused with neurasthenia or other troubles.

The study of records of many cases of general paralysis has shown that asaphia is the one sign that is never lacking whether the case is early or late. As the degeneration continues, other disturbances of speech arise. These proceed until in the advanced cases every factor of mental and nervous degeneration is shown in the records.

The speech in disseminated sclerosis shows so many protean forms and varies so utterly from one case to the next that all attempts have failed hitherto to introduce any system of classification. One prominent neurologist has declared that there is no one type of speech characteristic of this disease. Many records have been made of cases, and it has been found possible to reduce all the many varying and confusing speech symptoms to one fundamental principle, namely, "motor ataxia" and the efforts to correct it (anataxia). It is interesting to note that this ataxia shows itself in the records before any speech disturbance can be detected by the ear. This is of great value for an early diagnosis.

Studies of spastic speech in infantile cerebral diplegia have shown very characteristic peculiarities, and have indicated that the present methods of treating these cases by education in precise and accurate movements is directly contra-indicated. It has been found that the only really successful way of improving the speech and also the movements of the legs and arms is by systematic training in lessening the amount of voluntary effort needed for the action; as this effort becomes lessened the speech and the movements become correct of their own accord.

These methods are being extended to the various nervous and mental diseases. A characteristic epileptic speech has been found. The records of speech in hysteria can never be confused with those of epilepsy; a differential diagnosis is always possible. Certain peculiarities have been observed in the speech of dementia præcox.

In the course of time we may hope to establish the speech signs for all the nervous and mental diseases so definitely that the disease can be diagnosed by an analysis of the speech record alone. The method will then do for such troubles what an elaborate urinary analysis does for metabolism.

It is interesting to note that some of the troubles hitherto regarded as being the most characteristic speech defects are shown to be in no sense cases of diseased speech. Probably if one were asked to give the most striking speech

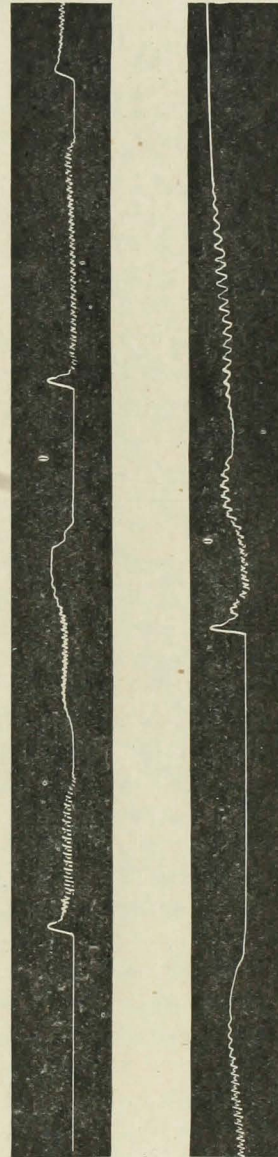


FIG. 2.—PHONAUTOGRAPH RECORD OF "PETER PIPER'S PEPPERS" BY A CASE OF GENERAL PARALYSIS. The straight lines show the durations of the "occlusions" during which the lip- or tongue-passage was closed. Each occlusion ends with a slight puff of air, or "explosion," which shows in the record as an upward jerk. In normal speech all the occlusions are of about the same length and all the explosions of about the same height. In this record the occlusions vary. For example, that for the second "p" in "Piper's" is only half that of the first "p." The "pp" of "peppers" should have been recorded by a straight line for the occlusion with an upward jerk for the explosion; really there is neither; the line does not sink completely, indicating that the lips were not completely closed; there was no explosion, and the small waves indicate that the larynx kept on vibrating instead of stopping. The variations in the details of the letters while they conform to the general type are illustrations of asaphia (cortical ataxia). The presence of laryngeal vibrations in the "pp" is due to transmission apraxia. The insertion of "s" in "Piper's" is due to transmission apraxia.

disease he would name stuttering. It is quite true that the records of stuttering show most grotesque abnormalities, yet these never in any way resemble the records found for any troubles that involve the speech mechanism, either bodily or mentally. Since the whole ground has now been covered in outline we can declare that stuttering is not a speech disease at all. The reasons for concluding that

stuttering is a psychoneurosis closely related to hysteria are derived from other sources that we do not need to consider here.

A large amount of work has already been done at various London hospitals in the speech line; but publication of the results is only now being begun, because it was thought wise to wait until the chief diseases had been studied.

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NOTES ON MINOR SURGERY.

No 2. A NEW METHOD OF SUTURING WOUNDS.

By PAUL BOUSFIELD, M.R.C.S., L.R.C.P.



HE following technique was primarily designed as a painless method of closing incised wounds in children.

It is within the experience of all that a child with a cut forehead is terrified at the thought of a stitch being inserted. Moreover the process is rendered more difficult by the fact that the child will often perform contortions during the operation, at the same time using its voice and lungs in no measured manner. Under these circumstances one is sometimes unable to get the stitches symmetrically placed, and an unsightly scar may result; further, there is a strong temptation to make two stitches answer the purpose of three, with a similar inartistic result.

With the idea of avoiding all pain in closing these wounds, and at the same time of getting a good scar, I use the following method, which does not necessitate the skin being punctured with the needle.

Two strips of plaster, each about one foot in length by a quarter of an inch broad, are stretched on a table and pinned down at each end, the two pieces of plaster being parallel to one another and about half an inch apart. The adhesive side is downwards. Across these strips and at right angles to them are placed pieces of horse-hair or silk at intervals of half an inch. Two more strips of plaster are now placed on the top of the horse-hair, fastening this securely down to the first strips. The ends of the horse-hair are now carried round to the under-side of the first strips—*i. e.* to the adhesive side, to which they adhere, and the superfluous ends are cut off.

We now have formed a kind of ladder the sides of which are formed by plaster strips, the rungs by the horse-hair or silk.

This is kept in stock ready for use. In treating a cut on the forehead or arm, say of one inch in length, I should merely cut off about one and a half inches of this ladder. Pressing one of the plaster sides on to the skin a quarter of an inch from the wound, I then close the edges of the

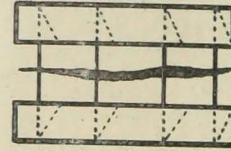


FIG. 1.—AS APPLIED TO A SMALL INCISED WOUND.

wound with suitable pressure, and, while it is compressed, fasten down the plaster on the opposite side. The horse-hair is then stretched across the wound and takes the place of an ordinary suture (Fig. 1).

As a variant of this method I sometimes place a piece of plaster on each side of a wound and then, inserting the needle between the plaster and the skin, stitch the two pieces

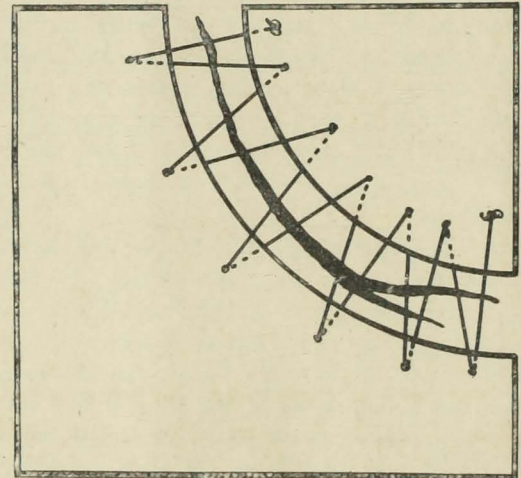


FIG. 2.—AS APPLIED TO AN IRREGULAR CURVED WOUND.

of plaster together. This method is especially suitable where a wound is curved or irregular, as the plaster can be cut to the shape required (Fig. 2).

In extending this method to abdominal wounds, or large wounds elsewhere, I find that considerably wider pieces of plaster must be used, and these may be reinforced by other pieces at right angles extending to a distance of several inches on either side. The reason for this is two-fold. In the first place the force tending to open a large wound on the abdomen is much greater, and a greater adhesive surface is necessary in order to avoid risk of slipping; and in the

second place a consideration of the mechanical forces at work will show that if the pull be applied only near to the edges of a deep wound, the edges will be approximated, but the flesh immediately beneath will not meet and the edges will thus be turned in (see Fig. 3). In order to pull the lower portion of the wound together, the pull must be applied at a distance (see Fig. 4). It must be remembered that, even so, closure can only take place to a depth of about half an inch, with any degree of certainty.

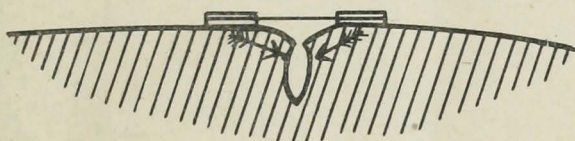


Fig 3.—INVERTED EDGES OF DEEP WOUND DUE TO LACK OF TENSION AT A DISTANCE—ONLY NARROW STRIPS OF PLASTER HAVING BEEN USED.

[The arrows indicate the direction of movement or compression of the underlying tissues.]

There are certain situations in which this method of suturing cannot be applied, viz., at angular points such as the chin, or upon hairy surfaces, such as the scalp, unless this be very thoroughly shaved, which is often impracticable.

On the other hand, there are certain very definite advantages to be claimed for its use.

(1) The avoidance of pain either in suturing or in removing sutures.

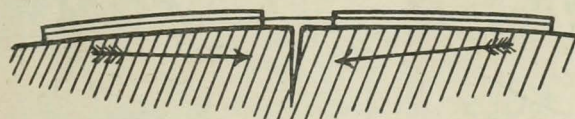


FIG. 4.—CORRECT CLOSURE OF DEEP WOUND. TENSION IS EXERTED FROM A DISTANCE—BROAD STRIPS OF PLASTER HAVING BEEN USED.

[The arrows indicate the direction of movement or compression of the underlying tissues.]

(2) The improved scar, for there are no stitch holes, and no puckering of the skin.

(3) In cases of suppuration there is more ready egress for discharge, and "stitches" can be removed in definite positions with the least possible difficulty.

(4) In cases where there are wounds with friable edges, or irregularities which will not hold ordinary sutures, this method will often overcome the difficulty.

(5) The speed with which the suture can be applied when it has merely to be cut off from a ladder-like strip of sutures first described.

It is very necessary to use a good plaster, there are many adhesive plasters which are liable to slip or "dry off" and

such as these are, of course, worse than useless. A plaster which I have found excellent in practice is "Curity" adhesive plaster, which has zinc oxide in its constitution and is made by the Lewis Manufacturing Company, U.S.A.

A CASE OF SPONTANEOUS HÆMORRHAGE FROM THE SPLEEN.

BY W. E. WILSON, M.R.C.S., L.R.C.P.



MILY L—, æt. 18, was admitted to the Hospital on September 6th at 1 p.m., complaining of abdominal pain.

History Preceding Admission.—September 5th, 7 a.m. There was severe pain in right iliac fossa which woke the patient up; she felt sick and vomited.

The pain remained all day, but was not very severe. The patient had no sleep that night.

September 6th.—There was pain now in left hypochondrium. There was no vomiting. The bowels were open. The patient was seen by a doctor, and sent here as case of appendicitis.

Case on Admission.—The patient walked to the hospital; she was rather pale, but was apparently not in any great pain. On questioning, she said she had some pain in the right iliac fossa, about the umbilicus, and in the left hypochondrium. There was some rigidity and tenderness in right iliac fossa, but it was most marked in the left hypochondrium. No swelling was palpable. The abdomen was not distended. There was a suggestion of free fluid in the peritoneum on the right side. The skin was rather clammy. T. 96.8° F.; P. 120; R. 28.

Operation.—A definite diagnosis was not made, but the patient was first explored in the appendicular region, an incision being made at the outer margin of the right rectus below the level of the umbilicus. On opening the peritoneum free blood was found in the peritoneal cavity. The contents of right iliac fossa were explored; the appendix was found to be normal, and no cause for hæmorrhage discovered here.

The abdomen was then opened in the middle line above the umbilicus and explored for the cause of the bleeding. The left hypochondriac region was explored and the spleen found to be the cause of the trouble. The incision was enlarged and the spleen removed. Nothing else abnormal was found in the abdomen, there were no enlarged glands, the liver was not enlarged. The abdomen washed out with saline, and clots of blood were removed. The patient had lost a great deal of blood, her pulse becoming very rapid and feeble until the splenic vessels were ligatured, after which she improved considerably by the time the abdomen

was sewn up. Next day her condition was very good indeed. She had an uninterrupted recovery, being kept quiet in bed for three weeks, and discharged in a month.

On examining the spleen it was found that there had been a large hæmatoma under the capsule, which had ruptured into the peritoneal cavity. Beyond this the spleen seemed quite normal in size, etc.

Reports on examinations of blood were as follows :

7-9-16 (morning after operation).—R.B.C., 3,200,000.

W.B.C., 35,000. Normoblasts (2 in 500 W.B.C.).

Platelets unusually conspicuous. Slight relative lymphocytosis.

11-9-16.—R.B.C., 3,050,000. W.B.C., 20,000. Nor-

moblasts (1 in 500). Anisocytosis and polychromatophilia. Slight relative lymphocytosis.

26-9-16.—R.B.C., 4,870,000. W.B.C., 3,500. Relative lymphocytosis, Wassermann reaction positive.

The case is interesting from two points of view, firstly, the differential diagnosis ; secondly, the cause of the hæmorrhage from the spleen without any obvious history of trauma or violence, which is a very unusual condition. The diagnosis of splenic hæmorrhage (it cannot be called ruptured spleen) was very difficult in this case. It would well have done for an acute appendix, except for the subnormal temperature.

Perforated gastric ulcer had been suggested, although there were many points against it, such as the temperature and absence of history of indigestion, the onset of the attack, and combined with this the age, etc.

No family history of syphilis was obtained from the relations, and no possible cause for the condition could be extracted from them or from the patient herself. When discharged the patient looked a particularly healthy girl.

It is interesting that the pain from the beginning of the attack was in the right iliac fossa, and only appeared later in the splenic region. This could perhaps be accounted for by the blood, as a result of the splenic hæmorrhage tracking down along the upper surface of the root of the mesentery, which conveyed it to the appendicular region, where it accumulated. The line of the root of the mesentery corresponded to the regions of pain, namely, the right iliac fossa, the umbilical region, and the left hypochondrium. The blood must have oozed very slowly into the peritoneal cavity from the spleen, seeing that she was operated on thirty hours after the onset of her pain in the right iliac fossa. Also, her condition and appearance when admitted did not give any great cause for alarm as a large hæmorrhage would have done.

The pathology and cause of the condition would be interesting.

I am very much indebted to Major Bailey and Captain Girling Ball for allowing me to publish the above case.

TWO CASES OF FRACTURE OF THE OS CALCIS.

R. C. DAVENPORT, M.R.C.S., L.R.C.P.

TWO cases of fracture of the os calcis, occurring very shortly the one after the other and showing different types of fracture, seem of sufficient interest to be recorded. I am indebted to Major McAdam Eccles for permission to publish the notes of the cases.

(1) W. T—, æt. 38, was admitted on August 29th, 1916, giving a history of a fall down a lift shaft through mistaking the entrance for the door of a room. The depth of the shaft was said to be about thirty feet and its width about six feet. The flooring was probably concrete and smooth.

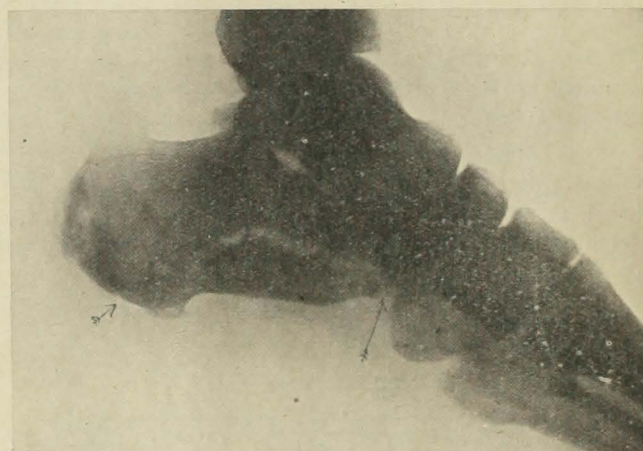


FIG. 1.—HORIZONTAL FRACTURE OF OS CALCIS.

Patient showed considerable shock and was in great pain, particularly in the left arm and left heel and around the pelvis. The left heel was swollen and hot but not reddened. Palpation showed much tenderness but revealed nothing definite. The movements of the ankle joint were limited and caused great pain. A provisional diagnosis of fracture of the left os calcis was made, and this was confirmed by skiagram (Fig. 1) which shows a longitudinal fracture which turns downwards before reaching the tuberosity. Also a small vertical fracture far forward on the upper surface. Patient also had three fractures of his pelvis, a left Colles' fracture, and a fracture of the internal condyle of his left humerus.

(2) W. S—, æt. 17, was admitted on September 27th, 1916, stating that on September 25th he fell some thirty feet on to stone ballast. A skiagram was taken on that day as no definite diagnosis could be made, and this revealed a comminuted fracture of each os calcis (Figs. 2 and 3) though the reproduction of Skiagram 3 shows only one vertical

fracture. In this case swelling and tenderness were the only signs to be elicited, for the movements of the ankle-joints seemed perfect. In neither case could crepitus be felt.

As is usual the bone in all the three cases is comminuted,

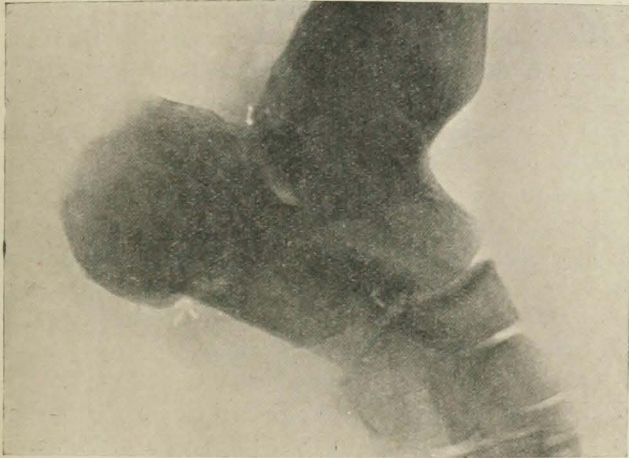


FIG. 2.—VERTICAL FRACTURE OF THE RIGHT OS CALCIS.

but owing to the binding of the soft parts displacement is but slight. The long horizontal fracture in the first case is unusual, and the fact that in both cases joints are involved seems to have made no difference, for the right foot of the second patient recovered its full functions as

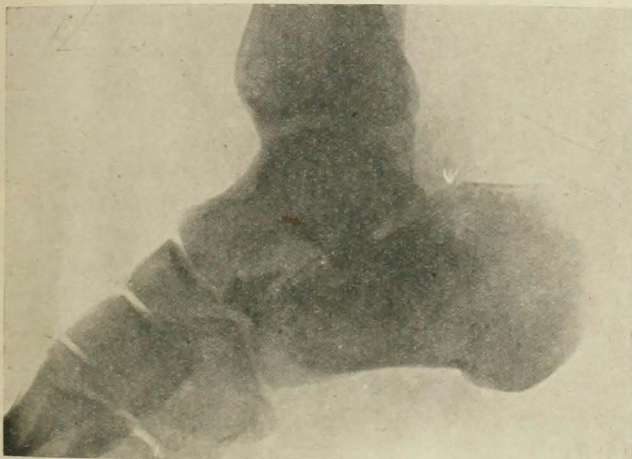


FIG. 3.—VERTICAL FRACTURE OF THE LEFT OS CALCIS.

quickly as the left, though the fracture was complicated by extension into a joint.

Both men gave a history of falling on their feet—the latter of a definite fall on to his heels—and this is almost always the history, for a fall on to the ball of the foot is more usually attended by forward dislocation of the astragalus.

Both cases were treated by rest without splinting of any form, the only precautions taken being to prevent talipes equinus and stiffness of any joints through disuse. Accordingly early massage and passive and active movements of all the joints were enforced.

There has been no persisting pain or tendency to "flat foot," but whether the latter will follow on further use remains to be seen.

EXTRACTS FROM THE PRIVATE JOURNAL OF DR. REVLYN-BLOOD,

SOME TIME ASSISTANT PHYSICIAN
ACCOUCHEUR TO ST. BARTHOLOMEW'S
HOSPITAL. 1609-1616.

Found in an Old Chest during alterations to "Mackenzie's."

(Continued from Page 9.)

19th. Mr Extern very infant with me toe take conduct of a labour—hee faying it was high tyme and I dallying fo long and holding his hande. So to Flag Alley—but flowly and with great misgivings—tho' I put itt forthe twas but y^e thoughte of y^e fleas thatt wroughte ill vpon my spirits—and there founde y^e wyfe of a dealer in small cole in greate hope of a XIIth babe. Did make triall of itt and fware I could feele its Eares and Eyes and presd vpon them toe make sure—they being mighty soft and one burfing as I did thinke. Anon came y^e Amnion Water of a fudden, I being without apron.

Did thinke how twas mightie Diagnostick of a Face—that being all I could calle toe mynde from my boke of wordes. Sat awchyle in greate hopes of a speedy deliverance and writ oute a long paper toe Mr. Extern showing how twas plainly a face or twin babes lying transverse and did adde toe itt aboute a greate flux of bloode coming after—tho' this laft were only as it were a f safeguard left it should bee so—y^e babe coming not yett.

Markd how one oppofite did play "Another litel drincke" at y^e harpichord—but a poore thing and ill playd with half y^e notes dumb, and how shee, presently taking to hearte her song did ceafe and filling a greate can wth ayle did toast our speedy success—wee being in plaine view and y^e blinde broken. Talked awchyle wth y^e nurfe, a comely enough wench,—but y^e babe—turning to y^e lefte and in fronte was born of a fudden very eafy and no more ado.

Packd vppe my geare, being at greate paines to show y^e nurfe how twas ever thuf with my cafes be they never fo desperate (w^{ch} laft was a greate LYE, this being my first cafe). And so parted very merry.

Mem. Founde y^e letter to Mr. Extern in my pockett—muft burne itt.

Aug. 20th. With M^r Extern to a cafe by M^r Grousewell who doth tell of y^e babe being vpright and y^e harte heard high vppe—but when wee were come to mayke triall of itt did perceive itt to be more nearly oblique and presently—looking narrowly, I did see itt to turne, as Euclid hath it, Base over Apex like S^t Catherines Wheele—but M^r Extern will nott stomach thifs and saith twas no spontaneous Recktification—but holdeth with learned D^r Eden that twas naught but y^e babe at exercife.

And so to bedd, M^r Extern saying 'twas plainly no cafe for drinkes alle rounde.

Aug. 24. To y^e Houfe Chirurgeons roome and there made a greate musick.

D^r Norman, but lately come from Oxford making greate sport at y^e Harpfichorde and hee very clever at playing sometimes wth one finger, and anon very quicke with two handes so thatt one may nott perceive y^e motion of them save only a dimness in y^e aire, w^{ch} pleased us much.

Did note how hee, by y^e exceeding fury of his musick, did quite vanquish and overcome y^e musick manglers of y^e White Harte and y^e players of streete musick—they being poore toilers at eache note and onlie able to compafs Pot house aires and poore ballads of squire Chumley—and how he, turning of a sudden to litel gentle aires of former dayes did play with such exceeding sweetnes that all were compell'd to filence and all listening at y^e windowes. So to bedd—but presently calld and needs must drefs againe—there being an alarme of y^e Enemy attacking from y^e sky w^{ch} shows how these lewd Germans, being brought by oure armes to a deadlocke on Earthe, scruple nott to put Heaven to their base vses.

To ye roofe with alle our Company and did note y^e Generall there mayking a brave show in his laced Coate. Waited awhile in darknes and naught to bee seen, but presently came a found like to a man humming a greate way off, and y^e greate lanthorns all lit vppe searhing y^e sky. Then we did heare y^e sound of cannons far off, at w^{ch} y^e Generall was very instant with us to retyre—but stayd with another and climbed vpon a post whence we did see a great light over vpon Greenwich—all red—and a mightie found and shelles to burft in y^e sky (or did thinke we didde) there being a greate pres of lights and cannons fying.

Anon, all being quiet, did climb downe but being catchd suddenly in a greate flare of lighte did thinke our last houre was come and prayd very vrgent—tho' I did heare my companion to use wordes but ill fitted to y^e Church service—and so dropt to y^e roofe, but no explosion followd and we did see 'twas naught but a greate lanthorne shying bright vpon us and all oure panick in vaine.

So to y^e Chirurgery and marked how greate a presse was there all drinking and mayking merrie against y^e ende and a greate deal of cocoe and small cakes used.

Did see also y^e Bihop to take counsel wth others in y^e middle Roome and he very brave at y^e cocoe.

To y^e square and saw many walking toe and fro and others fat fmoaking and one I did see fmoaking that should not—but enough said.

So to bedd againe, sadd toe have seen so litel.

Mem. Did heare how y^e Warden lookd weary next day and very short in speech.

25. To y^e Queenes Warde and heard a noble discourse on Hydramnnoticks by D^r Chearful—he discovering to us y^e plaine reasons for such a mischance, telling them by y^e alphabetickal letters in order. Did note how hee cryed downe y^e practife of Paracentesis Abdominis in such an event, he holding strongly that y^e lessening of y^e naturall elements in such a manner doth discourage y^e babes from y^e first and thus preventeth them from early learning to swimme. Heard also of y^e Sapræmick Condition and how twas now held separated from y^e Septicaemick State—y^e former arising from foule humours retayn'd within y^e body and y^e latter from y^e pestilential poyson w^{ch} some poore folk doe breed in their owne veins and are thus confumed.

Did note there were none of these in oure warde—but was told twas y^e practife to send them to a darke warde undergrounde and make casualties of them.

26. To Bottle Alley with M^r Paterfon and there prevail'd vpon one of oure poore patients to come to y^e Hospital—or as they say “to tayke her inn.” Shee being very sick of a greate imposthume on her breaft and we waiting with a coache at y^e ende of y^e alley.

Did note how many did throng vs thinking 'twas an arrest or at y^e least a funerall: and how she, being drest and come down we did urge her to y^e coache with greate cries—there being about three hundred present all very filthy and shee supported at each hande by her spouse and y^e Gampe—both mightie drunke and nigh falling at eache step. Did stow her in y^e coache what tyme her neighbours cryed out to her very hearty to take courage—saying “We shall meete againe in Heaven” and y^e like and reasoning among themselves whether they were downhearted or no and others answering with a great shouting.

So to y^e Hospital, she mighty sad and wee prying her with cordials.

27. Came M^r Extern and let open y^e imposthume wth his greater knife mightie pretty, and I mightie near pickt off wth y^e humours that came from within itt. Did note how he stuck therein a hollow rod with holes to give encouragement he faith.

28. To drefs her wounde and heard how shee, coming round from y^e anestheticke did descrybe y^e nurfing staff at greate length giving all detailes and many Home Truths tolde and how y^e other patients did make merry of it.

To-day M^r Snagdout to Richmond with Grousewell and others all making merry with one another, and mightilie diverted by M^r Snagdout's pretence that twas his first coming to Towe and he asking all kind of antick questions of y^e strangers on y^e Coache. Heard how one—an olde

beldame sitting neare—did spend clofe vpon an houre making plaine to him how twas y^e Mufick Halle and not Westminster Abbey, as hee did seem to thinke, that they passed at Chiswick.

Heard how Mr. Groufewell was catchd in a greate storm of raine—he taking no cloke—and sitting perforce outside. Did note how he cried downe y^e towne of Richmond on his return and will not beare it so much as spoke of.

29. Calld this morning very Early by one Creapy a porter who told of a letter waiting me—but slept again, it being revealed to me in a dreame that y^e woman was not yet in travail.

Presently he comes againe and so I rose. To Blinde Alley and there founde one delivered of her babe some hours and not sending till th n. Did mine office quickly and so to to bedd againe.

Called again at 6 o'clock by y^e under porter one Marnight to St. Lukes againe and found another babe in like case with y^e firft.

Did kneade y^e mother though shee making greate ado did kick me shrewdly but I turning round sharpe did put in a stitch or two tho' she was not torne as a lesson to her.

Mem. Shall see to itt that all mothers have their bootes drawn off or their leggs tyed in future.

30th. A quiet day and nothing.

31. Visited oure poore folk for y^e laft time and sadd to leave them. Called at one o'clock by Marnight y^e porter to a woman with a greate fluxe of bloode and had a greate ado to stanch itt.

STUDENTS' UNION.



MEETING of the Council was held on October 19th.

It was decided that :

- (1) A freshmen's meeting should be held as soon as possible.
- (2) An estimate should be obtained for a suitable glass-covered case in which to keep the Hospital Cups in the library.
- (3) The paper *Land and Water* should be discontinued, and that for it should be substituted *Country Life* and one other illustrated weekly journal.

NOTICE.

The Secretary regrets to inform the members of the Union that many and continual complaints have been made with regard to the condition of the illustrated papers in the Abernethian Room, which are unnecessarily defaced, torn, and rendered useless. Arrangements will shortly be made for the sale of these papers to members of the Union by contract, and it is earnestly hoped that everyone will try to preserve their original condition as far as possible.

PRESENTATION TO MR. E. W. HALLETT.



ON October 20th an interesting meeting took place in the Anatomical Theatre on the occasion of the completion by Mr. E. W. Hallett of twenty-five years' service in the Anatomical Department. A presentation was made to Mr. Hallett on the part of the Dean and the past and present members of the staff of the department; unfortunately, owing to war conditions, many of the subscribers had to express their regret at not being able to be present, but the gathering, though small, was representative of all periods of Mr. Hallett's connection with the department, and including, we were pleased to note, a distinguished late lecturer, the Rt. Hon. Dr. Christopher Addison, P.C.

Mr. Jessop, who was Senior Demonstrator at the time of Mr. Hallett's appointment, made the presentation, and in recalling the early days of the department he told several interesting and amusing stories, after which he handed to Mr. Hallett, on behalf of the twenty-seven subscribers, an inscribed photograph of the Smithfield Gate and a War Savings Certificate for the balance of the subscriptions, with a list of the subscribers' names.

Mr. Hallett replied, recalling his long service in the "rooms," and assuring those present of his feelings of loyalty to the Hospital and School. Thus concluded an interesting occasion, recalling a quarter of a century of excellent service.

CORRESPONDENCE.

BERMONDSEY MILITARY HOSPITAL,
LADYWELL, S.E.

DEAR SIR,—While invigilating at one of the examinations at the Apothecaries' Hall, I have just seen a copy of the ST. BARTHOLOMEW'S HOSPITAL JOURNAL. I thought it might interest you to know that I have this morning received a cable from my son-in-law, Capt. A. S. Cane, R.A.M.C., an old Bart.'s man.

He left India in November, 1914, with the 6th Division for Mesopotamia, where he has been ever since. After seeing a good deal of fighting he was shut up with Townshend's force in Kut-el-Amara, and at its fall was taken prisoner by the Turks. He reached Baghdad, but fever and jaundice developing, he was kept there in hospital. When sufficiently recovered, he was put on duty to attend the British, Indian, and Russian prisoners. Last month he was exchanged, and, reaching Busra, was sent on a hospital ship to Bombay, which he reached on the 18th ult. and was admitted into the Calaba Hospital. Cable just received states that he is sailing from Bombay to-day for three months' leave in England. I thought these few notes might be of interest, as he is a Bart.'s man.

Yours truly,

H. W. MARCH TIMS, Major, R.A.M.C.
O/c Bermondsey Military Hospital,
Ladywell, S.E.

October 4th, 1916.

REVIEW.

PULMONARY TUBERCULOSIS IN GENERAL PRACTICE. By H. G. SUTHERLAND. (Cassell & Co., Ltd.). Pp. 290, 6 plates, 42 figures, and 9 charts. Price 10s. 6d. net.

The aim of the work, as stated in the preface, is to present, with an especial view to the requirements of the general practitioner, "the modern conception of pulmonary tuberculosis as a systemic disease, with an account of clinical and biological methods of diagnosis, and the national treatment of the malady." In our opinion the author has been entirely successful in his endeavour. The pathology, course, symptoms, and physical signs are dealt with in a most clear manner; the chapters on treatment, however, are perhaps the most useful, and these are very thoroughly entered into, especially from the practitioner's point of view, and from the point of view of the patient who must be treated at home. The work gains interest from the fact that it was written in the neighbourhood of the equator on board H.M.S. armed merchant cruiser "Empress of Britain," and that many of the diagrams have been drawn by surgeons of the Royal Navy. A work that we can confidently recommend to the general practitioner.

EXAMINATIONS.

CONJOINT BOARD.

First Examination.—September, 1916.

Part I. Chemistry.—D. H. Cockell, T. B. Thomas.

First Examination.—October, 1916.

Part IV. Practical Pharmacy.—J. B. Brash, H. Davies, S. R. E. Davies, W. A. Drake, M. N. Eldin, E. F. S. Gordon, K. A. I. Mackenzie, H. Nosrat.

Second Examination.—October, 1916.

Anatomy and Physiology.—D. P. Guilfoyle, H. L. Sackett, A. W. Taylor, N. S. B. Vinter.

APPOINTMENTS.

R. N. GEACH, F.R.C.S., appointed Assistant Surgeon to the Italian Hospital.
 Lieut.-Col. A. G. HENDLEY, I.M.S., M.R.C.S., L.R.C.P., appointed Officer in Charge, Military Hospital, Parkhurst, Isle of Wight.
 E. G. STANLEY, M.S.Lond., F.R.C.S., appointed Surgical Specialist, Secunderabad, India.

NEW ADDRESSES.

R. ARMSTRONG-JONES, 9, Bramham Gardens, S.W.
 M. D. EDER, 37, Welbeck Street, W. (Tel., Mayfair 1094.)
 A. F. FLOWER, Temp. Capt., R.A.M.C., Inns of Court O.T.C., Berkhamsted.
 A. J. S. FULLER, 17, Park Road, Southborough, Tunbridge Wells. (Tel., 29 Southborough.)
 R. W. B. GIBSON, 145, Eighth Avenue, Mayfair, Johannesburg.
 F. GRÖNE has changed his name to F. PIERCE GROVE, and his address to Stoke House, Stoke St. Mary, Taunton.
 Lieut.-Col. A. G. HENDLEY, I.M.S., Clatterford Farm House, Carisbrooke, Isle of Wight.
 C. D. KERR, Meekatharra, West Australia.
 F. G. LLOYD, 10, Upper Phillimore Place, Kensington, W.
 C. A. S. RIDOUT, Major, R.A.M.C.(T.), No. 29 Stationary Hospital, Salonica Army.
 R. M. SOAMES, Temp. Capt., R.A.M.C., Ridgeway, Reigate Hill, Reigate.
 E. G. STANLEY, Temp. Capt., R.A.M.C., Station Hospital, Tremulgherry, Deccan.

BIRTHS.

ADAMS.—On October 4th, at 13, Prince's Gate, W., the wife of Surgeon J. Wroth Adams, R.N. (née Gwinnell Wonwell, Bedford Park), of a daughter (Dorothy Margaret).
 CATES.—On October 11th, at Laurel Mount, St. Helens, the wife of Joseph Cates, M.D., D.P.H., of a son.
 DAVIS.—On October 23rd, at 24, Upper Berkeley Street, W., the wife of K. J. Acton Davis, F.R.C.S., M.C., a daughter.
 HEALD.—On September 27th, at The Cottage, Weybridge, the wife of Capt. C. B. Heald, R.A.M.C., of a daughter.
 MAUNSELL.—On October 21st, at Farnleigh, Kettering, Northamptonshire, the wife of Bertram S. O. Maunsell, of a son.
 MELLER.—On October 14th, at Harcourt, Leighton Buzzard, to the wife of Surgeon R. W. Meller, R.N., a daughter.
 PULLING.—On October 23rd, the wife of John B. Pulling, M.B., B.C.Camb., The Grove, Faringdon, of a son.
 WHITING.—On September 22nd, to the wife of E. W. Whiting, M.B., B.S.Lond., 51, Woodlands Road, Ilford, a daughter.

MARRIAGES.

GIBSON—MCNAIRN.—On July 12th, at the Church of St. John the Baptist, Harrismith, O.F.S., South Africa, Robert William Beor Gibson, B.A.Cantab., M.R.C.S., L.R.C.P., to Elizabeth Winthrope McNairn.
 HANDS—COX.—On October 25th, at the Servite Church, Fulham Road, by the Very Rev. Austin Moore, Dr. Charles Hubert Hands, Totland Bay, I.W., to Nancy Cox, Fulham.
 SANGER—CREWDSON.—On September 27th, at St. Mary's Church, Syde, by the Venerable Archdeacon of Cirencester, assisted by the Rev. John Sanger, Frederick Sanger, M.D., of Rendcomb, Cirencester, to Cicely, youngest daughter of Theodore Crewdson, of Styal, Cheshire, and Syde, Gloucestershire.
 SHERMAN—BROOKE.—On October 23rd, at St. Alfege, Greenwich, by the Rev. F. J. Tackley, Vicar of Greenwich, assisted by the Rev. John Kirby, M.A., Capt. Reginald Sherman, R.A.M.C., elder son of the late Arthur Sherman and Mrs. Sherman, 2, Gloucester Place, Greenwich, to Dorothy Raffles, elder daughter of J. Raffles Brooke and Mrs. Brooke, Osborne House, Formby, Lancs.
 STIDSTON—CUMBERLAND.—On September 27th, at the Parish Church, Luton, by the Rev. J. St. Clare Hill, assisted by the Rev. A. E. Chapman (Vicar), Lieut.-Col. C. A. Stidston, M.D., R.A.M.C., T.F., of Wolverhampton, and Olive, youngest daughter of Mr. Hugh Cumberland, J.P., of The Lynchet, Luton, and the late Mrs. Jeanie Cumberland.

ACKNOWLEDGMENTS.

The Medical Review, The Hospital, Long Island Medical Journal, New York State Journal of Medicine, The Shield, The Middlesex Hospital Journal, St. Thomas's Hospital Gazette, The Nursing Times, Guy's Hospital Gazette, The British Journal of Nursing, St. Mary's Hospital Gazette.

NOTICE.

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

The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER, W. E. SARGANT, M.R.C.S., at the Hospital.

All communications, financial, or otherwise, relative to Advertisements ONLY, should be addressed to ADVERTISEMENT MANAGER, the Journal Office, St. Bartholomew's Hospital, E.C. Telephone: City 510.

A Cover for binding (black cloth boards with lettering and King Henry VIII Gateway in gilt) can be obtained (price 1s. post free) from MESSRS. ADLARD & SON AND WEST NEWMAN, Bartholomew Close. MESSRS. ADLARD & SON AND WEST NEWMAN have arranged to do the binding, with cut and sprinkled edges, at a cost of 1s. 9d. or carriage paid 2s.—cover included.

St. Bartholomew's Hospital



"Æquam memento rebus in arduis
Servare mentem."

—Horace, Book ii, Ode iii.

JOURNAL.

VOL. XXIV.—No. 3.]

DECEMBER 1ST, 1916.

[PRICE SIXPENCE.]

CALENDAR.

- Fri., Dec. 1.—Dr. Drysdale and Mr. Wilson on duty.
Minor Operations. Mr. Waring's dressers.
First and Second Exams. for M.B.(Oxford) begin.
- Mon., „ 4.—Exams. for M.D., M.S.(Lond.) begin.
- Tues., „ 5.—Dr. Hartley on duty.
- Fri., „ 8.—Dr. Horder and Mr. Waring on duty.
Minor Operations. Mr. Eccles' dressers.
- Mon., „ 11.—First Exam. for Med. Degrees (Lond.) begins.
First, Second, and Part I of Third Exams. for M.B.
(Camb.) begin.
- Tues., „ 12.—Dr. Calvert on duty.
- Thurs., „ 14.—Part II of Third M.B.(Camb.) begins.
- Fri., „ 15.—Dr. Morley Fletcher and Mr. McAdam Eccles on
duty.
Minor Operations. Mr. Bailey's dressers.
- Sun., „ 17.—Oxford Michaelmas Term ends.
- Tues., „ 19.—Cambridge Michaelmas Term ends.
Dr. Drysdale on duty.
- Fri., „ 22.—**Winter Session divides.**
Dr. Hartley and Mr. Bailey on duty.
Minor Operations. Mr. Wilson's dressers.
- Tues., „ 26.—Dr. Horder on duty.
- Fri., „ 29.—Dr. Calvert and Mr. Wilson on duty.
Minor Operations. Mr. Waring's dressers.
- 1917.
- Mon., Jan. 1.—D.P.H. (Conjoint) Exam. begins. Second Exam.
of Soc. of Apothecaries begins.
- Tues., „ 2.—Dr. Morley Fletcher on duty.
First Exam. Conjoint Board begins.
- Wed., „ 3.—First Exam. of the Soc. of Apothecaries begins.
- Thurs., „ 4.—Second Exam. Conjoint Board begins.
- Fri., „ 5.—Dr. Drysdale and Mr. Waring on duty.
Minor Operations. Mr. Eccles' dressers.
- Sat., „ 6.—**Winter Session resumes.**

EDITORIAL NOTES.

CUR heartiest congratulations are extended to Col. C. Gordon Watson, who has been appointed Consulting Surgeon to the Expeditionary Forces in France. Col. Watson's career in the Army has been an exceptionally happy one. In August, 1914, he was a Captain, R.A.M.C. (T.). In September, 1914, he became Commandant of the Duchess of Westminster's Hospital at Le Touquet, with the rank of Temp. Major, R.A.M.C. In August, 1915, he was promoted to Temp. Lieut.-Col., and in January, 1916, he was appointed C.M.G. Now, in November, 1916, he has been promoted Temp. Col., A.M.S., and Consulting Surgeon to the Forces in France. It would be difficult to find a better record, we believe.

* * *

We also give our heartiest congratulations to four more Bart.'s men who have been awarded the Military Cross :

Capt. J. R. R. Trist, R.A.M.C., "tended and dressed wounded under heavy fire, with great courage and determination. He has on many previous occasions done fine work."

Capt. R. E. Barnsley, R.A.M.C., "when in charge of an advanced dressing station he tended the wounded under heavy hostile shell fire when impossible to bring them to the dressing station."

Temp. Capt. T. R. H. Blake, R.A.M.C., "dressed the wounded for seven hours in an open trench under heavy fire. Later he tended the wounded in the open, displaying great courage and determination."

Temp. Capt. J. C. Sale, R.A.M.C., "rescued many wounded men under intense fire by carrying them on his back, displaying great courage and coolness. He set a splendid example throughout the operations."

* * *

Col. Gilbert Barling, A.M.S., is proceeding to join the British Expeditionary Forces in France in the course of reliefs to the consultants attached to those forces.

Surgeon Major-Gen. Sir A. F. Bradshaw, K.C.B., K.H.P., has been appointed Hon. Consulting Physician to the Military Hospitals in Oxford and the neighbourhood.

* * *

We hear that the following Bart.'s men were among the prisoners taken by the Turks in Mesopotamia: Capts. T. E. Osmond, R.A.M.C., H. H. King, I.M.S., A. S. Cane, R.A.M.C., W. Spackman, I.M.S., R. C. Clifford, I.M.S., E. G. S. Cane, R.A.M.C. Of these we congratulate Capts. A. S. Cane and H. H. King, who have recently been exchanged, and are once more free.

* * *

The following extract from a post-card which we have seen should be of great interest to readers of the JOURNAL: "Major Rawling I met at Deolali, near Bombay. He was in charge of a medical ward (chiefly dysentery, I think) and doing wonders with a stethoscope! *O Tempora. . . !*"

* * *

THE ROLL OF HONOUR.

It is with the greatest regret that we hear of the death, on active service, of the following Bart.'s men, and to their sorrowing relatives and friends we extend our deepest sympathy in their bereavement:

Lieut. Frederick Whitaker, R.A.M.C. The second son of Joseph Whitaker, J.P., of Halifax, he was born in 1874, and was educated at Rugby, Trinity College, Cambridge, and St. Bartholomew's Hospital. In 1897 he represented Cambridge successfully against Oxford in the Feather-weights, and acted as cox for his hospital. He was House-Surgeon at the Halifax Royal Infirmary from 1903 to 1906, after which he was elected to the Honorary Staff. He went out to Salonika last year as one of the Surgeons of the 29th General Hospital, and died on his way home at Alexandria on October 28th, of dysentery.

* * *

Surgeon Charles Humphrey Gow, R.N., was killed on November 13th. The only son of the Rev. Henry and Mrs. Gow, of Hampstead, he was educated at Westminster School and Emmanuel College, Cambridge, and later at this Hospital. When war broke out he volunteered as a surgeon probationer, and served for eight months in the destroyer "Laforey." He then returned to the Hospital, and qualified in the summer of 1915. Joining the R.N.D. as a surgeon, he served in both Gallipoli and Salonika, and has been serving for the last eight months on another front, where unfortunately he has been killed in action.


* * *

Capt. Leonard Osborne Habershon, though not a member of the Hospital, was the son of a well-known Bart.'s man. He was in the East Yorkshire Regiment, and was the youngest son of the late Dr. S. H. Habershon and Mrs. Habershon, of Westbourne Crescent. Shortly after the outbreak of war he joined the fighting forces of the Army, which he has served with considerable distinction. He was killed in action on November 13th.

THE ADMINISTRATION OF CHLOROFORM.

By J. W. BEAN, M.D. (Cantab.).

ANALYSIS.

HLOROFORM when inhaled by man enters the air passages and is taken up into the blood.

Herein is the key to its correct administration.

We must concentrate first upon

CHLOROFORM—its properties;

Next upon

MAN (the personal equation).

In particular upon

<table border="0"> <tr> <td style="padding-right: 5px;">AIRWAY</td> <td style="font-size: 2em; padding: 0 5px;">}</td> <td rowspan="3">The two bodily parts with which Chloroform first comes in contact—the two bodily parts upon which it directly acts.</td> </tr> <tr> <td style="padding-right: 5px;">and</td> <td></td> </tr> <tr> <td style="padding-right: 5px;">BLOOD</td> <td></td> </tr> </table>	AIRWAY	}	The two bodily parts with which Chloroform first comes in contact—the two bodily parts upon which it directly acts.	and		BLOOD	
AIRWAY	}	The two bodily parts with which Chloroform first comes in contact—the two bodily parts upon which it directly acts.					
and							
BLOOD							

Chloroform has a heavy pungent vapour, nearly four and a half times the weight of air.

It decomposes fairly readily in the presence of air and sunlight.

The *weight* and *pungency* of chloroform vapour must never be forgotten. They are two things which greatly make for danger when it is administered by inhalation to man.

DANGERS OF A HEAVY VAPOUR.

Heavy vapours, such as chloroform, can interfere with respiration in two ways:

(1) They are extremely inert compared to air and tend to collect in the middle airway (trachea and upper bronchi) in a dense plug. It is as though the middle airway were lightly packed with cotton wool. It is plain that given such a plug in the middle airway the inrush of further air to the lungs is hindered. What happens? The pulmonary arterioles contract, damming back the blood in the pulmonary circulation. The pulmonary capillaries and the systemic circulation are starved of blood and as a consequence the respiratory muscles, being underfed and overworked in the effort to counteract this interference with respiration, become exhausted.

(2) Heavy vapours interfere with respiration in a second more direct way. Being so inert they need powerful respiratory movements to keep them circulating freely to and fro, into and out of the airway.

Respiratory movements quite efficient where air is the atmosphere breathed may be inefficient in an inert "chloroform air" atmosphere where chloroform is present in excess.

In the above two ways, then, chloroform vapour by its mere weight may bring breathing to a standstill. It does this chiefly

(1) Where respiratory movements are initially weak, as in very feeble people, or in severe cases of emphysema.

(2) Where respiratory movements are temporarily weakened (*e. g.* inhibited breathing of light anæsthesia prior to vomiting). This hindering of respiration by a heavy chloroform vapour in the airway is called the *physical action of chloroform*. Any mechanical obstruction in the airway will help chloroform to interfere in this way with the respiration. The pungency of chloroform vapour frequently creates such a mechanical obstruction.

DANGERS OF A PUNGENT ANÆSTHETIC VAPOUR.

Chloroform vapour is usually, but wrongly, thought to be much blander than ether vapour.

This is chiefly due to its being used in such low concentration as compared to ether. Ether will not redden or blister the skin, but chloroform will. In an equal concentration chloroform vapour is far more of an irritant than ether vapour.

It has three atoms of chlorine united to its anæsthetic or hydro-carbon radical, and this chlorine causes it to be an irritant.

It is very apt to irritate the respiratory mucous surfaces, which respond by secreting an extremely thick glutinous mucus far more slimy and tenacious than the secretion which you get with ether. No doubt this is a protective effort on the part of the mucous membrane.

This secretion takes place very insidiously; it is not forced upon one's notice as is the ether secretion. There are two reasons for this:

(1) The extremely slimy glutinous nature of the chloroform-secretion.

(2) The gentler character of chloroform-respiration as compared to ether-respiration.

Ether, fairly light, volatile, quickly absorbed, acts as a respiratory whip. The heavy breathing of ether churning up the more fluid ether secretion makes it bubble and rattle very noticeably in the airway.

Chloroform: Relatively inert. May, as we have already seen, greatly hamper respiration and can never be compared to ether as a respiratory whip.

Thus the quieter breathing associated with chloroform fails to displace or churn up the more sticky chloroform-secretion.

What happens? No bubblings nor rattlings in the airway warn the anæsthetist of approaching danger. He fails to notice the very gradual and insidious weakening of respiratory movements—the very gradual and insidious onset of cyanosis.

When he does notice it the crisis is probably in its later stages. Even now that he sees something is seriously wrong he does not realise *exactly what is wrong*.

Breathing has been brought to a standstill by the combined action of two or more causes:

(1) Mechanical obstruction to respiration by a sticky plug of mucinous chloroform-secretion in the airway.

(2) The physical action of chloroform which, as we have already seen, is liable to become dangerous whenever it is helped by a co-existing mechanical obstruction.

(3) Probably, in cases ending fatally, combined with the above causes, there is usually a third cause, *viz.*:

Reflex depression of circulation and respiration due to surgical stimulation of a sensory afferent nerve or due to the imminence of vomiting.

Now this state of crisis has been slowly produced, and only slowly can it be removed. It may happen, and sometimes does happen, that the heart will fail before this removal can be effected. The patient dies, and it is thought that chloroform has paralysed the heart muscle or respiratory centre.

In the examination now under consideration, at all events, such is not the case; the patient has really died of a most insidious and deceptive type of asphyxia.

The pungency of chloroform vapour tends to danger it in two other ways:

(1) A sudden unexpected intake of a too concentrated vapour may over-stimulate the sensory terminals of the vagi in the larynx, and reflexly stop the heart. Such a catastrophe would be especially likely to occur in panic-stricken patients with nervous systems ablaze, with reflexes strung far above concert pitch and ready to act explosively on any provocation. Embley maintains, however, that the action of chloroform is on the vagal *centres*, in which it is borne by the blood-stream, rather than peripheral.

(2) A too powerful vapour may cause spasm of the glottis—sometimes dangerously persistent.

Chloroform is liable to be impure through decomposition. Does this fact make for danger? Yes, it does. Impure chloroform is weaker anæsthetically than pure chloroform; you have, let us say, to use "A + B" of impure chloroform to get the effect produced by "A" of pure chloroform. Now the more (within limits) anæsthetic you drop on to your mask, the more do you substitute anæsthetic vapour for air in the atmosphere breathed.

When using weak chloroform you may have to give so much of it to attain anæsthesia that the patient is starved of air. Straightway the pulmonary arterioles begin to close. This denial of air to the lungs which an excess of anæsthetic vapour causes is called the *negative action of that vapour*. Weak chloroform, then, tends to unduly exaggerate the negative action of chloroform—tends to cause narrowing of the pulmonary arterioles. Narrowed pulmonary arterioles are a great danger in chloroform. Why so?

They are an obstacle to recovery from the various crises which may occur during the chloroform administration. Safety in such crises lies in being able to secure an efficient circulation of blood through the lungs. If, previous to the onset of crises, the pulmonary circulation is already

hampered, it is obvious that the crisis becomes thereby more serious, and recovery will be delayed. To take one example: A sensory nerve is strongly stimulated—say in the region of the gall-bladder. Splanchnic vaso-dilatation occurs. The heart having no blood to contract on becomes automatically reduced in action. The blood, which has been displaced into the splanchnic area, to get back to the system must pass through the pulmonary circulation. It gets very little help on from the heart, since the heart is automatically reduced in action. The patient is placed head down on an incline, and the airway is kept normally patent so that air can get freely to the alveoli. Gravity drives the displaced blood on through portal system, etc., to the pulmonary artery. Finding the pulmonary arterioles open the blood passes on freely through the lungs to the left heart, and the heart thereupon quickly resumes the normal action.

Suppose, now, a pre-existing spasm of pulmonary arterioles. The blood on its way back to the left heart is stopped by this. You have a reduced heart trying to overcome an obstructed pulmonary circulation. It obviously cannot do it. Immediate artificial respiration and a patent airway become urgently necessary. Till the pulmonary alveoli become flooded with air the obstacle will not begin to yield, and even then it yields gradually. It is none too early to flood the lungs with air in such a case, because the airway is already filled with a dense inert chloroform vapour, and it takes time to get rid of this. It is obvious now how dangerous is spasm of the pulmonary arterioles during chloroform anæsthesia.

It may cause such delay that recovery becomes impossible. Now the anæsthetist is not clairvoyant; he cannot see the contractions of arterioles nor can he see the pulmonary artery, right ventricle, and auricle all distended by back pressure. When the back pressure has reached the right auricle it extends backward further into superior vena cava (chiefly) and inferior vena cava (to a less degree). Their tributaries begin to swell. *And this swelling he can plainly see* in the frontal and auricular veins; such visible warning is valuable, but comes somewhat late in the vicious cycle of events just described. Nature is kind, and gives the anæsthetic a far timelier warning than venous distention, namely, *discoloration of the arterial blood*. The moment aeration becomes insufficient (however slight the degree of insufficiency) that very moment the arterial blood darkens, though the degree of colour change may be very slight where defective aeration is also slight. Nature has given the anæsthetic all he needs; the danger—closing of pulmonary arterioles—and the warning—discoloration of arterial blood—are practically synchronous.

It is clear, then, how *all-important* it is to watch closely the colour of the arterial blood, to train oneself to detect the *very slightest* changes in it. The ear is the best place, usually, in which to observe such colour changes.

Let us now turn to

MAN—*The Personal Equation—more especially Airway and Blood.*

PRELIMINARY EXAMINATION.

Individuals differ very much in temperament and in bodily structure, and such differences have far-reaching effects upon the course of anæsthesia. To successfully give chloroform you must make first a swift but searching examination of each patient. You must be able to analyse correctly your findings, to estimate the probable danger or difficulty likely to be caused by any given variation from the normal. Having made a correct estimation you are in a position to devise modifications of the routine method—modifications designed to obviate the difficulties present in any individual case, designed to attain and maintain a safe smooth anæsthesia.

Let us consider Airway and Blood, the two first and most intimate points of contact between chloroform and the human body.

Airway: We have already set forth the physical action of chloroform in the airway, hindering respiration, and we have asserted that any mechanical obstruction in the airway tends to exaggerate such physical action. We have spoken of the dangers of the glutinous chloroform secretion; it is obvious then that we must look carefully for any mechanical obstruction in the airway, *e.g.* nasal obstruction, large tongue, large tonsils, etc. We must look, indeed, for any signs of weakness or stiffness of respiratory movement, for any poverty of air entry. We must examine the respiratory machine as a whole, not only airway but motor power (muscles) and lungs.

(To be continued.)

THE AFTER-MATH OF BODY-SNATCHING : A PLEA FOR ANATOMY.*

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HERE is no doubt that the highly organised though clandestine supply of "subjects" by the body-snatchers resulted in a notable quickening in the pulse of scientific teaching in the medical schools of this country in the later years of the eighteenth and the beginning of the nineteenth centuries. This quickening led to a great increase in the number of medical students, and this

* Being the Mid-session Address to the Abernethian Society, delivered November 9th, 1916.

in turn to an ever-growing anxiety on the part of the anatomists as to ways and means. Their precarious supply at this period depended on three sources. First, the civil authorities were empowered, by an Act of Parliament passed in the reign of King George II, to hand over the bodies of criminals after execution to the Schools. This was not only a meagre source of supply, but it also served to bring the practice of dissection into disrepute through its association with the ugly crimes and angry mobs that formed its necessary prelude.

Another source, still more meagre, but of more than passing interest, was the voluntary deposition of their own bodies by enlightened people who left instructions in their wills, with more or less eloquence, directing their mortal remains to be devoted to the advancement of the healing art in this way. They form a small but noble company, and we are bound to salute their zeal with reverence. Even the laconic directions recorded of one of these testators, a certain Mr. Boys, is worthy of respect in spite of its rather odd ending. He addresses his executor thus: "It may be irksome to you to superintend the business, but perhaps you have knowledge of some rising genius or geniuses who may be glad of a subject without paying for it. *Let them slash and cut and divide as best may please 'em.*"* Very different were the stately terms of the Will of the famous philosopher and politician, Jeremy Bentham, who, when a young undergraduate at Oxford, felt so impressed with the opposition offered to a science which he regarded as indispensable for the advancement of knowledge, that he there made a will devoting his body to the public good; though Bentham lived to be 85, he once again, only two months before his death, full of years and honour, bequeathed his body for that purpose, thinking it unjust that the humbler classes should alone be called on to sacrifice those feelings which are cherished alike by rich and poor. It is very significant that the framing of this codicil by the mature philosopher in 1832 coincided with the very climax of the troubles experienced in getting the teaching of anatomy placed on a satisfactory footing in this country.† Bentham's skeleton is preserved to this day in the Museum of University College, and one wonders if it may have been the force of his example that formed the inspiration of the bequest recently published ‡ as having been made by another who added so much to the fame of that college and who died so nobly for his country—the late Sir Victor Horsley. Another heroic soul touched by this feeling of duty was Florence Nightingale, who similarly directed by her Will that her body should be devoted to the purposes of medical science. All that was mortal of Sir Victor Horsley had been laid to rest in the sands of Mesopotamia ere the terms of his Will could be made known, and by the time of Florence Nightingale's

death the difficulties she sought to alleviate had passed away; yet these examples and many others that might be quoted go to show that choice spirits have felt, in past times as well as in our own, that a feeling of reverence for the dead need imply no repugnance to the dissection of the human body.

It is on record that at the time when the evils of body-snatching were at their height, ninety-nine gentlemen of Dublin signed a document in which the wish was expressed that their bodies instead of being interred "should be devoted to the more rational, benevolent, and honourable purpose of explaining the structure, functions, and diseases of the human being."* And later, when the opposition to the introduction of the Anatomy Act was at its height, "many of the highest in the land, amongst them the Duke of Sussex, youngest son of King George III and uncle of Queen Victoria, gave directions that after death their bodies, if required, should be anatomised."†

It may be the imperfect understanding of examples such as these that has led to poor misguided folk at various times writing to anatomists offering to barter their frail and mortal coil for a consideration of sordid gold! These pathetic missives, which still turn up every now and then, appear always to share two points in common; first, the manifest conviction that the art of anatomy is a wildly lucrative profession, and second, that the bargain is to be a hard one—cash down and the body when you can get it!

The third source of supply, to which we now return for a moment, were the body-snatchers. The "profession" of body-snatching became so highly organised, as has already been pointed out, that ample supplies of bodies were always to be had through its ghoulish aid. But the process of getting them conveyed to the Schools was disgraceful often, precarious always, and calculated to bring the teachers not only into disrepute but even into real personal danger. Professors of anatomy themselves, and their surely entirely innocent windows as well, commonly experienced violence at the hands of enraged mobs; there are authentic accounts of some such who were like to have lost their lives indeed, but for the timely protection of the police.

By the end of the third decade of the nineteenth century things had got so bad that both for the honour of medicine and for their own personal safety the teachers were compelled to bring their grievous difficulties to the notice of the Government, and to press for the security of an adequate supply of bodies under the ægis and protection of an Act of Parliament. So strong were the representations then made, that in 1828 the Government appointed a Committee to investigate the whole matter. This Committee took evidence from many sources, teachers of anatomy, police officials, and a chosen few of the resurrection men

* *Diary of a Resurrectionist*, p. 38.

† *Brit. Med. Journ.* Oct. 21st, 1916, p. 564.

‡ *The Times*, Oct. 1916.

* *Diary of a Resurrectionist*, p. 37.

† *The History of Burke and Hare*, McGregor p. 271.

themselves, who had been induced to give evidence under the promise of ample police protection.

But in this very year the profitable but ghoulish trade in bodies snatched from the grave had progressed, by an all too easy evolution, to some dreadful crimes of murder done on poor victims whose bodies were never to be allowed to enjoy even temporarily the protection of Mother Earth. These were the revolting murders committed by the notorious Burke and Hare in Edinburgh. Though in his dying confession Burke made a point of the fact that they had never been guilty of body-snatching, yet it was a close acquaintance with the customs of "the trade" that actually launched these men on their brief but busy career of crime. The dire game started when an old pensioner who lodged with Hare died while still owing some of his rent. Rather than risk waiting to be recouped by a share of the pension, then nearly due, Hare conceived the idea of conducting a sham funeral with an empty coffin and surreptitiously selling the body for dissection. He found in his neighbour Burke a willing accomplice. Sharing a house in the midst of the warren of broken-down and utterly disreputable slums of Edinburgh not far from Surgeons' Hall, they were well placed from the start. Conveying the body of the old pensioner by night to Surgeons' Hall they realised, as they afterwards confessed, £7 10s. for the bargain. The immediate sequel to this successful transaction was that the ghastly idea occurred to them that if money was to be made thus easily they could surely gather riches more quickly by letting their own hands act the part of the "Fell Sergeant" who had given their crime the first impetus by laying low the old pensioner under their wretched roof.

So they set out to decoy any poor wandering tramp who might be induced to lend an ear to the promise of lodging and warmth and drink. Once, indeed, they actually succeeded in winning out of the hands of the police, by promising to take care of her, an old drunken woman whom they were on the way to lock up.

In his dying confession Burke gave an account of at least sixteen victims whom Hare and he and the women who lived with them had first decoyed, then murdered in cold blood and conveyed to Surgeons' Hall. Sometimes the intemperance of the victims made them an easy prey, but in some the end was not reached, he confessed, without a fierce struggle. With diabolical cunning, however, Burke had invented a method which made a quiet and sure end, and at the same time left on the body no traces that might arouse suspicion when it came to be laid on the table for dissection. Burke was a man of heavy build and immense muscle, and his method was first to throw his victim down, then to leap on the breast with the whole weight of his knees, and at the same moment grip the mouth and nose with both hands like a vice, thus producing suffocation in a moment or two.

It is a curious speculation to wonder how many of the mild people who to-day speak blandly of having "burked" some question are aware of the sinister etymology of the word they use. It is fast becoming a forgotten fact that this innocent-looking transitive verb owes its origin to the deep impression made on the English-speaking world by the publicity given to Burke's confession of his brutal *modus operandi*. Surely the penalty of anyone bearing this name must have been a severe one in those days; but it is a consolation to reflect that, with Nature's happy way of covering over evil with a cloak of good, the surname now recalls to us all more readily the other Burke, Edmund, the eloquent orator and author of the immortal essay *On the Sublime and Beautiful*.

If inclined to marvel that the suspicions of the thoroughly trustworthy officials, who received these murdered bodies into their School, were never aroused, we must remember that in those days the teachers had to take what bodies they could get from the body-snatchers, and had to be content to receive them without any clue as to their source. We must realise, too, that in the rough processes of resurrection and conveyance to the schools these bodies often suffered far more mutilation than any of those offered to the unsuspecting officials by Burke and Hare. Indeed, it is recorded that the body of one their victims, that of a depraved but handsome young woman, was so fairly proportioned and so well preserved, that it was allowed to lie undisturbed for a considerable time, that artists might come to study a model that was said to be "worthy of Phidias and the best Greek art" (Lonsdale's *Life of Knox*, p. 101). Surely there can have been no trace there of the foul murder that had been done upon it. Yet suspicion *had* been aroused in two instances where the murderers sailed dangerously close to the wind by making victims of persons who were well-known in the neighbourhood of Surgeons' Hall and were recognised at once both by the dissecting-room porter and the students: in these cases awkward questions were asked of the murderers when they arrived with the bodies, but it was surely easy for such cunning criminals to invent circumstantial and believable lies in ascribing their death to natural causes.

How true the saying has often proved to be that "Murder will out!" But there is no saying how long these crimes might have gone undiscovered had this murderous gang of men and women not "given the show away" by growing overbold. One night they actually invited some neighbours to a carouse in the very room where the dead body of their latest and last victim lay awaiting disposal, concealed too carelessly beneath a heap of straw. The story of the remorseless strides with which judgement now fell quickly on them—at the hands, in the first instance, of these carousing guests half frenzied with drink and fear—is a tale too long to be told here. Burke and Hare and their two female accomplices were now soon in the hands of the

police and on their trial for murder. Hare turned informer, the women were acquitted, and Burke alone, who had actually carried out the murders they had all planned together, was condemned to death. He was executed in public in January, 1829. His dead body was exposed to the view of a curious crowd, of more than 25,000 people, who filed slowly past it as it lay in the University of Edinburgh, to which it had been consigned for dissection. A notable lecture, full of moral periods, no doubt, as well as anatomical, was delivered on the anatomy of the brain of this man who had planned for so many helpless victims the fate he himself was to suffer in the end. This lecture was given by Prof. Monro, the son of the more famous father, Monro Secundus, after whom the well known foramen connecting the ventricles of the brain is named.

Needless to say, the public disclosure of these awful crimes thrilled the whole land with horror; but it is curiously significant of the effect of geography on politics that when, within two months of the execution of Burke in Edinburgh, a Mr. Warburton introduced a Bill into the House of Commons for "preventing the unlawful disinterment of human bodies and for regulating Schools of Anatomy," no mention was made in that Bill of the dreadful series of murders that had so recently stained the fair fame of the capital of the North.

It seems strange, too, at a time when the legislature might have been expected to welcome, and amend if need be, *any* Bill framed to prevent the recurrence of such horrors, that Mr. Warburton's Bill was so strongly opposed that, though it survived the House of Commons, it was abandoned in 1830 in its passage through the House of Lords. Truly the Bill had many defects, as first introduced, but it seems extraordinary to us now that it was actively opposed by the Royal College of Surgeons and other public Corporations, and by so powerful a medical periodical as *The Lancet*. In spite of all these opponents, however, it is very probable that it would have been passed by the House of Lords had it not arrived there at a time when the country was seething with the Reform agitation, and the dissolution of Parliament was imminent.

The abandonment of this Bill seemed to have ended for a time all public agitation, and to have nullified the anxious efforts of the authorities of the Schools to secure an adequate legal basis for the practice of anatomy. But the difficulties and alarms which the teachers were still left to face at this time are well shown in the following account of a coroner's inquest held within the walls of St. Bartholomew's Hospital. It is given verbatim from the copy of a contemporary account in the possession of the Librarian. It is dated December 11th, 1831:

ANATOMICAL SUBJECTS.

Coroner's Inquest; December 11th, 1831.

On Thursday afternoon, at 4 o'clock, an inquisition was taken in the Board Room of St. Bartholomew's Hospital, before Mr. Payne,

the City Coroner, and a highly respectable jury, on view of the body of a middle-aged man, transmitted from the country to that institution for anatomical purposes, and who, from a dreadful wound in the throat and other marks of violence, was supposed to have fallen a victim to the diabolical system of "Burking," so prevalent of late. Alderman Wilson, at whose instance the inquiry took place, was present, and took a prominent part in the proceedings, and the room was crowded to excess by medical practitioners and other persons interested in the investigation.

Mr. Edward Stanley, the demonstrator of anatomy at the institution, was the first witness examined, who deposed that the body of the deceased man had been sent up from a village, 100 miles in the country. It was packed in a deal box, was received through the same channel which supplies the dissecting rooms of the metropolis with subjects, and arrived at the institution about noon the preceding day. He saw it soon afterwards, and was struck at beholding a wound in the throat, which extended from thence all the way down the body as far as the knee. These suspicious appearances induced him to make a most careful and minute examination of the body in order to ascertain whether the man had died a natural death or not. The result of his observations were, that the deceased had died from consumption, the lungs being much diseased, and he was of opinion that the wounds he had described were inflicted after death, and in all probability by the instruments used by resurrectionists in extracting bodies from the earth. The deceased appeared to have been dead about a week, and had evidently been interred.

Mr. Stanley added that although he felt satisfied, in his own mind, that the deceased had not come to a violent death, yet, in the present feverish state of the public mind, produced by the fiendish system of "Burking," he did not think himself justified in placing the body in its mutilated state before his pupils, but judged it advisable that a public investigation should take place.

Dr. George Burrows, who had also examined the body, gave similar testimony as to the cause of death.

William Smith, a porter in the institution, stated that he received the body, on its arrival, from the waggon-office. It was placed in the box in a recumbent position, and was quite naked.

In his opinion the corpse had been buried in the ordinary way and had been exhumed by the resurrectionists.

Alderman Wilson: What leads you to suppose that the body had been interred?

Witness: Because it appears to me to have been drawn through the earth by body-snatchers.

Alderman Wilson: Did you ever then see a body raised by the body-snatchers, as they were termed? (A laugh.)

Witness: No; but I have heard them relate how they do it.

Alderman Wilson: Describe how it is done.

Witness: They first dig down to the head of the coffin, disturbing the earth as little as possible. This enables them to raise the coffin on the feet end. They then force open the lid with a strong instrument, and divesting the body of the shroud, place it in a sack and decamp.

Alderman Wilson: Would the instrument you mentioned inflict the wounds on the deceased in forcing open the coffin?

Witness: I think it very likely.

A Juryman here observed that he did not conceive it probable that the wound would in such a case have extended so far as the knee; besides, the shroud would, in his opinion, have formed a protection to the body.

The Witness said that it might have been buried without a shroud.

A Juror observed that he hoped the recent atrocious cases of Burking persons for the dissecting-knife would put medical men on their guard, and that they would be more cautious than heretofore in examining bodies furnished them by the wretches carrying on the disgusting trade of resurrectionists.

The Coroner eulogised the conduct of Mr. Stanley, who had, in the case before them, acted most properly in instituting an inquiry, and the public would now be satisfied that the deceased had died a natural death. If the circumstances of the case had got wind without an inquiry taking place, there was no doubt, from the excited state of the public mind upon the subject, that a very unfavourable opinion would have been formed of the medical gentlemen belonging to the establishment.

The Jury returned a verdict of "Natural Death." The body is to be re-interred at the expense of Cripplegate Ward.

Very soon again, however, another revolting murder—this time nearer the centre of things—startled the Govern-

ment into renewed and speedy action. On November 5th, 1831, in the ordinary routine of the prevailing method of supply, two well-known body-snatchers brought the dead body of a boy to King's College, Strand. The dissecting-room porter was suspicious from the first of the appearance of the body and summoned the Demonstrator, who, from a further examination of the body, confirmed his suspicions. Convinced that the boy had been the victim of foul play, the Demonstrator—Mr. Partridge—hit on a clever ruse for detaining the men; these "transactions," it must be explained, were always conducted on strict "cash" principles. Producing a £50 note, he asked them to wait in the dissecting-room while he went to have it changed. It was not to a bank he hurried, however, but to the nearest police-station, and very soon the men were safe in gaol. A more complete examination, made later at the instance of the Crown, showed that the boy had died of a broken neck; the men, Bishop and Williams by name, who had been concerned in the attempted "deal" with King's College, were tried for murder at the Old Bailey in the following December and condemned to death. Before their execution they made a full confession of how they had decoyed the lad to their house in Nova Scotia Gardens, Saffron Hill, drugged him with opium, and then thrown him into a well, where he died of suffocation. They confessed, too, to having previously murdered a woman and another boy, and disposed of them successfully to the Schools without arousing any suspicion. Bishop made the further confession that he had been engaged in body-snatching for the past twelve years, and in that time had obtained over 500 bodies and sold them to the Schools.

Something must be said here to maintain the honour of the teachers, who had perforce to deal in those matters with the low ruffians who carried on this ghastly trade. Upright men themselves, of high honour and education, they had no alternative but to deal with those ghouls in order that the science and art of medicine might progress and its students be efficiently trained as proper craftsmen in their life-work. Dr. Knox, the noted anatomist of Surgeons' Hall, Edinburgh, to whose dissecting-room Burke and Hare successfully disposed of all their victims but their last, was publicly attacked after their trial, on account of his supposed connivance with the murderers. He had to be protected by the police from a riotous mob bent on his destruction; but at his own request an influential Committee at once investigated his whole connection with these crimes and completely freed him from any suspicion that he had even any inkling of them before they were revealed to him by the police, and this exoneration was subsequently endorsed by the dying confession of Burke. The account of the inquest in St. Bartholomew's Hospital given above amply illustrates the honour and watchfulness of the teachers at a time when they were in constant danger of being implicated in such horrible crimes. Finally, the astuteness

and prompt action of the Demonstrator and porter at King's College in detecting the murder perpetrated by Bishop and Williams stand to their lasting credit, and were actually the chief instrument in bringing to an end this dreadful era of body-snatching and murder.

Bishop and Williams were publicly hanged in Newgate on December 5th, 1831, in presence of an enormous and excited crowd. In their frenzy to get near the scaffold the angry people broke through the barriers erected by the police, and the casualty out-patient room of St. Bartholomew's Hospital must have been a busy scene at 7.30 that morning, as the *Weekly Dispatch* declares that "by that time between 20 and 30 persons were carried thither, all seriously maimed." "Fortunately," the *Dispatch* goes on to state, a "Mr. Birkett, the Dresser to Mr. Vincent," had been forewarned, and "was in attendance to receive any accident that might be brought in."

The bodies of Bishop and Williams, as had been the fate of Burke before them, were handed over to the College of Surgeons, and subsequently given for dissection to the very Schools they had staked their lives to trade with.

This single sordid crime of Bishop and Williams, no doubt because it took place in the heart of London, accomplished at once what the holocaust of murders by Burke and Hare in the north had failed to do. It stirred the Government to immediate action, and the legislation which the teachers, through long years, had earnestly been asking for was hurried forward with express speed. In December, 1831, the same month in which Bishop and Williams were hung, Mr. Warburton again introduced his Bill into the House of Commons, and in a very few months—August, 1832—the Anatomy Act under which we still work took its place among the laws of the realm.

The dark deeds of the previous year find a sinister echo in the "preamble" to this Act:

"Whereas a Knowledge of the Causes and Nature of sundry Diseases which affect the Body, and of the best Methods of treating and curing such Diseases, and of healing and repairing divers Wounds and Injuries to which the Human Frame is liable, cannot be acquired without the Aid of Anatomical Examination: And whereas the legal Supply of Human Bodies for such Anatomical Examinations is insufficient fully to provide the Means of such Knowledge: And whereas, in order further to supply Human Bodies for such Purposes, divers great and grievous Crimes have been committed, and lately Murder, for the single Object of selling for such Purposes the Bodies of the Persons so murdered: And whereas therefore it is highly expedient to give Protection, under certain Regulations, to the Study and Practice of Anatomy, and to prevent, as far as may be, such great and grievous Crimes and Murder as aforesaid; be it therefore enacted" etc., etc.

The chief clauses of the Act, under which all the dissecting and operative surgery work of our medical schools is still carried on, may be briefly summarised: The Secretary of State to grant to duly qualified teachers a licence to practice Anatomy: government inspectors to supervise the whole matter of the supply and burial of subjects; any person having lawful possession of the body of any deceased person legalised to permit the body of such deceased person to

undergo anatomical examination, with certain restrictions as to previously expressed wishes on the part of the deceased; no body to be received by a school without a certificate of the time, place and cause of death duly signed by some physician, surgeon or apothecary; carefully expressed enactments regarding the respectful treatment and decent interment of the body and due certification thereof; repeals the previous Act of George II directing the dissection of the bodies of executed criminals and substitutes burial of these malefactors within the precincts of the prison.

The passing of the Act was hailed with approval and confidence on all sides, as a measure, to quote a contemporary, "which infallibly respects the wishes of the humblest as to the burial of their bodies after death. The pauper and the peer are alike safe."*

Truly it does merit profound praise in that it sounded once and for all the knell of the body snatchers, made the crime of murder for anatomical purposes no longer possible, and established for the first time on a legal and decent basis the necessary place of anatomy in the medical curriculum.

But, alas! it has not stood unscathed the trial of the eighty-four years it has been in operation. The bitter experience of anatomists and operative surgeons in all parts of the country in recent years has proved that it is now quite inadequate to accomplish the beneficent purpose it was framed to serve. Nor are the explanations of this far to seek.

Investigations which immediately preceded the passing of the Act had shown that if *all* the unclaimed bodies of persons dying in the various Poor-law Institutions were made available there would be ample supply of subjects for all the medical schools, and undoubtedly the Act was originally framed principally to legalise this particular source of supply. If the body of a pauper dying in one of these institutions is not claimed by any known relative, then the Guardians become the "Executor or other Party, having lawful possession of the body," as described in the vital clause of the Act; but the crucial defect in this clause is that it merely enacts that "it shall be lawful (for these custodians) to *permit* the body of such deceased person to undergo Anatomical Examination."

Now, it must be admitted that the idea of a human body being dissected may be naturally repugnant to many, and that the revolting crimes which we have passed under review might have added, at that time, to simple repugnance an active prejudice. But it is a matter for wonder and regret that among the men of education forming these Boards of Guardians there are many who, turning a deaf ear to the eloquent preamble of the Anatomy Act, actively oppose the provision of these unclaimed bodies for the beneficent purposes described therein. Unfortunately, too, the desire to escape their responsibility in this matter has actually

been adopted sometimes as a plank on electioneering platforms. It is probably no exaggeration to say that some candidates who have enjoyed no *other* qualifications have scored success at the poll simply because they declared with dramatic fervour in speech and pamphlet that they positively would *not* permit the bodies of the poor to be desecrated by dissection.

It is impossible to regard with any patience or respect such retrogressive prejudice, which, if it were universal, would simply throw the science of medicine back on the deplorable days when human bodies were only to be obtained by inhuman crimes of theft and murder.

With this spirit of obstruction only too common at the fountain-head, it is not surprising that so called philanthropic societies have been formed for the express purpose of contravening the spirit of the Act by furnishing funds to induce the Guardians actually to divert all unclaimed bodies from the Schools.

Several other factors, naturally unforeseen by the framers of the Act and all quite laudable in conception, have combined in late years to reduce the much-needed supply. Thus, the increase in thrift among the working classes has led to a gradual falling off in the number of persons who seek the shelter of these Poor-law Institutions; the up-growth of burial clubs and insurance societies among the poor, and the introduction of old-age pensions, now make it much easier than it used to be for the penurious to be themselves responsible for the care, right to the end, of their aged relations. Nevertheless, the number of unclaimed bodies that are still available would be ample to supply the needs of all the medical schools in the country if only their legal custodians, the Boards of Guardians, were at all times intent on carrying out the *spirit*, as well as the *letter*, of the Anatomy Act.

So desperate had the difficulties of the schools become in the first decade of the present century, that in 1910 a committee was elected by representatives from all the medical schools in the kingdom to press upon Government once more the urgent necessity for some drastic improvement in the sources of anatomical supply.

This Committee, after making a very complete inquiry into the nature and causes of these difficulties, issued a Report, which was sent to the Prime Minister, with the request that he would receive a deputation. This request was graciously granted. An imposing deputation was forthwith organised and received at the House of Commons, in December, 1912, by the particular Ministers of State in whose province the matter actually lies.

Forming this deputation were representatives from the Faculty of Medicine in every University in the United Kingdom, in almost all cases the Chancellor or Vice-Chancellor; from the Councils of all Royal Colleges of Physicians and Surgeons, in all cases the President; from all the Examining Boards, from the Medical Service of

* Lonsdale, *Life of Knox*, p. 106.

the Royal Navy, the Indian Medical Service, and the Army Medical Service. Little wonder that this galaxy of distinguished men was described by the Home Secretary as forming a deputation "literally and truly unparalleled and unprecedented."

The proceedings of this deputation to the House of Commons were, at the time, kept strictly confidential, and the eloquent and impressive speeches delivered there have not yet been freed for publication. They remain on record, however, in twenty-six closely-typed official pages; and this much may be said, that the opinion unanimously expressed by the speakers, on behalf of the high authorities whom they represented, was that the only likely remedy lay in some such amendment of the Anatomy Act as would render *obligatory* its merely *permissive* enactments in the case of *all unclaimed bodies*, that these bodies should be placed at the disposal of the State, and the State become responsible for their distribution to the medical schools, to serve there the humane purpose indicated so eloquently by the preamble of the Act.

Passages in support of the argument may be recalled from some of the speeches which were then made; first, from that of one of the Vice-Chancellors:

"But after all," he said, "the strongest ground for this appeal to you, sir, is that it is in the interests of the nation, and especially of the poor of the nation. For their safety under all forms of medical treatment, it is absolutely necessary that their physicians and surgeons should come to them not as still experimenters on the human body, but as experts with such knowledge and confidence as can only be provided through a more adequate supply of material in the cases of anatomy and operative surgery than is at present possible."

These words, it is curious to note, read almost like an echo of the speech made by Sir Robert Peel in support of Mr. Warburton's first Bill in 1829*; and the argument, used by another of the speakers in this deputation, on behalf of medical students who had had perforce to go abroad in recent years to enjoy facilities of this kind which were denied to them at home, had likewise been used eighty-three years before.

Another peroration which may be recalled closed the speech of the distinguished soldier who represented His Majesty's Forces. It is of special interest in that it was delivered nearly two years before our country was plunged in war. "I wish to say that it is a matter of national importance that the Medical Officers of our Navy and Army should be highly trained in operative procedures in order that sailors and soldiers may receive that treatment in peace to which they are entitled. Above all should they be able to receive that treatment in war when they have been stricken down in carrying out a patriotic call. I venture to repre-

sent, therefore, that the provision of means to that end is a national duty, conducing to efficiency in public servants and thereby to economy and conservation of life and limb."

Now what of the Government's reply? Here again rang out an echo from 1828. The first admission of the spokesman of the Government was almost identical with that made to a similar deputation in that year; he appreciated the difficulties of the situation, he recognised the necessity for some radical alteration in the Act, but he was very dubious of the possibility of getting these measures, asked for by the deputation, through the House of Commons in face of existing prejudices. But he promised that it would be tried if certain practical suggestions he was prepared to make did not have an immediate effect in removing the difficulties and disabilities abundantly shown by this influential deputation to be so pressing in all parts of the country. These suggestions were considered, shortly after, at a conference held early in the year 1913, and from then till now practically nothing more has been done!

The unforeseen calamity of war has plunged all who took part in this last assault, into many urgent concerns and anxieties of other kinds; the magnificent response made by our students to the call to arms has largely emptied the medical schools; thus the matter has naturally become less urgent now than it was then. But when once more we reach the time of peace, when once again "the (medical) boys come home," when many more will range beside them to swell the ranks of our noble calling, we know we must expect a greater demand than ever for these facilities we have been fighting for.

It is the duty of those of us who are more directly concerned to see to it that the settling of this matter is not delayed until then, and that the Government's pledge is not left to die a natural death in some official pigeon-hole, overlooked and unfulfilled.


But there may also be a part for you who listen to play, students and nurses both, for you both have knowledge and experience of these things, and you may be able, as opportunities occur, to help to remove some of the unthinking prejudice against the science on which rests the only sure foundation of medical teaching. I therefore ask you to lend us your aid in bringing in the happy day when its needs will be more truly and frankly and openly met, when all trace of the dangers and difficulties which have lurked in these dark pages will be spent, and will have left no "aftermath."

* *Diary of a Resurrectionist*, p. 106.

AN APPEAL

RECEIVED BY A MEDICAL OFFICER IN
THE EAST.*To the Chief Cocktail-shaker, General Hospital.*

ARCHÆOLOGICAL NOTE ON COCKTAILS.

HE earliest cuneiform inscriptions on which reliance can be placed in dealing with the subject of cocktails date from the time of Semiramis; on the architecture of the temple of Astarte at Memphis there are frequently found in combination the following symbols:

- (i) A slave-girl holding a goblet.
- (ii) A cow.
- (iii) A fowl.
- (iv) * * *

It is to be noted that in no case is symbol (iv) absent when the other symbols are present. Helmholtz has proved that the astronomical significance attributed to symbol (iv) is entirely imaginary, and in his exhaustive treatise on the subject (Tauchnitz, Dresden, 1875) has, with the aid of the researches of the learned Hennessy, proved beyond all doubt that this symbol represented the vine.

Phœnician inscriptions, while less conclusive in the mutilated state in which they have come down to us, point in the same direction. But perhaps the most valuable record of all is the swizzle-stick branded with the emblem (iv) found in the tomb of Dido at Carthage.

To come to more recent times, have we not the record of that prince of raconteurs, Nicostratus, to the effect that it was the neglect of Xantippe to infuse into his cocktails sufficient of the coarse wine of Thessaly that drove the philosopher Socrates to the fatal dose of hemlock?

In Roman times we have the invaluable testimony of Horace (*vide* Epist. *passim*) and Vergil (*Georgics passim*) as to the use of the old wine of Falernus in the morning cocktail.

Philologically perhaps we are the losers by the introduction from across the Atlantic of the word "cocktail" in succession to our old English "posset." While we have gained a graphic word we have not added to the potency of the drink, for did not the ripe Falstaff complain of the "intolerable deal of sack" that was his lot? while at yet another time he almost gave up cocktails through the infliction upon him of an equally intolerable deal of eggs.

It is indisputable that while eggs and milk have often been omitted from the best cocktails, from burnt-sack to the modern bar-tender's product, wine in some form has never been omitted from the true cocktail.

In the opinion of many of the profoundest drinkers, the 11 a.m. cocktail holds first rank among life-saving cocktails,

and is therefore the last which should be deprived of its most important ingredient, even by a race addicted to appendectomy. The argument is still stronger that the last place in which so effeminate a custom should be introduced is in those institutions which combine with the advancement of medical research the frequent saving of lives—the hospitals. In this respect general hospitals should be particularly careful of their patients, and not hurriedly discard the life-saving cocktail which has had the approval of generations of savants—and others less wise.

Hence, chief cocktail-shaker, hitch your swizzle to *three* stars.

ABERNETHIAN SOCIETY.

The officers elected for the forthcoming year are as follows:

Presidents.—Mr. J. Basil Hume, Mr. Cecil H. Terry.
Vice-Presidents.—Mr. H. G. Griffiths, Mr. D. A. Blount.
Extra Committeemen.—Mr. T. B. Vaile, Mr. D. J. Batterham.
Secretaries.—Mr. T. B. Bailey, Mr. J. P. Ross.

STUDENTS' UNION.



COUNCIL Meeting on November 27th, Capt. Ball in the chair.

It was decided that all old periodicals are to be sold on the first working day of each three months; payment to be made in advance, and one of the Secretaries to be auctioneer. Mr. E. I. Lloyd's resignation was accepted with great regret. Mr. G. A. Fisher was elected to the Council in place of Mr. Lloyd. Mr. Joyce's resignation from the post of Senior Secretary was accepted, and, after a vote of thanks had been passed to him for his services, he was elected Vice-President. Mr. Watson was elected Senior Secretary, and Mr. G. A. Fisher Junior Secretary.

REVIEWS.

CLINICAL METHODS. By R. HUTCHISON and H. RAINY. (Cassell & Co., Ltd.) Pp. 664. Sixth edition. Price 10s. 6d. net.

This work is intended as a guide to students in the investigation of their cases. The manner, method, and order in which such investigations should be pursued are carefully and clearly dealt with. A special chapter has been devoted to the clinical methods of examining children, as these, naturally, differ in many respects from those employed in the case of adults. Chapters have been added to this edition on the examination of pathological fluids and clinical bacteriology, and new matter has been added regarding various micro-organisms, many of which have assumed a special importance in connection with the war. We are glad to see that the Basle anatomical nomenclature has not been adopted except in so far as the new names are given in brackets after the older ones when anatomical structures are referred to.

The book is excellent in every way, and should be studied by every student of medicine during the period of his medical clerkship

FIRST AID FOR THE TRENCHES. By S. HASTINGS. (John Murray.) Pp. 49. Price 1s. net.

A practical little book devoted to "simple instructions for saving life that every soldier should know." The work deals with shock, bleeding and poisoning of wounds in the first place, and gives both preventive and general treatment in a concise form. The reasons for carrying out the various methods of first aid are given, and this is no doubt wise, for it will impress the treatment much more firmly in the mind of the learner. The whole is clearly written, and should be easily grasped by the average lay mind. Methods of carrying, treatment of burns and scalds, artificial respiration, and, in fact, most of the first aid possibilities, are dealt with. It is a handy little volume and should prove very useful.

I.K. THERAPY IN PULMONARY TUBERCULOSIS. By WILLIAM BARR. (John Wright & Sons, Ltd.) Pp. 81. Price 3s. 6d. net.

In the medical profession as a whole there is considerable antagonism to the use of Spengler's immune substances, commonly known as "I.K." All discussion centres round tuberculin, and many are inclined to sneer at "I.K.," and relegate it to the therapeutic rubbish-heap without trial. Dr. Barr has made considerable trial of it, and has come to the conclusion that in many cases it yields very valuable results, though by no means placing absolute reliance upon it, nor discouraging the use of tuberculin, which he uses almost as extensively as I.K. In this book he has approached the study of I.K. on purely clinical grounds, and gives the clinical history of forty-seven cases, together with forty-two temperature charts. The contra-indications and classification of special conditions are treated in a very lucid manner, and the book should prove of value to anyone interested in the subject of the therapy of the treatment of tuberculosis.

EXAMINATIONS.

UNIVERSITY OF CAMBRIDGE.

The following Degrees were conferred on November 18th, 1916:
M.D., B.C.—A. S. Cane.

UNIVERSITY OF LONDON.

Third (M.B., B.S.) Examination for Medical Degrees.
October, 1916.

Pass.—P. C. Cole; A. Morford, B.Sc.; E. C. Spaar.

Supplementary Pass List.

The following have passed in one of the two groups of subjects:

Group I. Medicine.—C. V. Boland.

Group II. Surgery and Midwifery.—H. M. C. Macaulay, B.Sc.

CONJOINT BOARD.

Final Examination.—November, 1916.

The following candidates have completed the examinations for the Diplomas of M.R.C.S. and L.R.C.P.:

L. Cunningham, G. Day, E. O. Goldsmith, B. Haskins, J. F. Haynes, W. B. Heywood-Waddington, E. I. Lloyd, A. Morford, R. Moser, B. H. Pidcock, C. H. Terry.

NEW ADDRESSES.

- H. E. BLOXSOME, Temp. Lieut., R.A.M.C., 1st North Midland Mounted Brigade Field Ambulance, Force in Egypt.
A. R. J. DOUGLAS, 1st London General Hospital, Cormont Road, Camberwell, S.E.
G. E. ELLIS, Surg., R.N., 2, Naval Terrace, Sheerness.
J. GIRVIN, Col., R.A.M.C., 27th General Hospital, Cairo, E.E.F.
C. GORDON WATSON, Col., A.M.S., Army Medical Service, Head Quarters, Second Army.
A. B. TUCKER, Temp. Lieut., R.A.M.C., Eastcote, Branscombe, Axminster.

BIRTHS.

- LETCHEWORTH.—On October 28th, at Vinchelez, Hornsey, the wife of Capt. G. H. S. Letchworth, R.A.M.C., of a son.
TAYLOR.—On November 15th, at St. Leonards-on-Sea, the wife (née Peto) of Capt. C. R. Taylor, M.B., R.A.M.C., of a daughter.

MARRIAGES.

BURNE—TURNER.—On November 23rd, at St. Andrew's Cathedral, Singapore, Thomas W. H. Burne, second son of the late Col. S. T. H. Burne, V.D., Loynton Hall, Staffs, to C. Violet Turner, M.D., second daughter of the Rev. W. H. Turner, Hazelwood Vicarage, Derby.

POCOCK—DASHWOOD.—On November 30th, at St. Mary's, Newick, by the Rev. C. S. Gillett, Chaplain of Liddon House, South Audley Street, assisted by the Rev. Clement Powell, Rector of the Parish, Surgeon W. A. Pocock, R.N., eldest son of Mr. W. H. F. Pocock, of St. James, Cape Town, to Margaret A. E. (Greta), younger daughter of the late Mr. Edmund S. Dashwood, of Foulsham, Norfolk, and Mrs. Charsley Mackwood, of Greenfields, Newick.

ROXBURGH—LAMBERT.—On November 29th, at St. Mary's, Bryanston Square, W., by the Rev. L. J. Percival, Archibald Cathcart Roxburgh, M.B., Surgeon, R.N., son of the late Archibald Roxburgh, to Mary, daughter of the late Col. J. A. Lambert, Queen's Bays.

WALLIS—GROVE.—On November 29th, at the Parish Church, West Wickham, Kent, by the Rev. Bertie Roberts, Vicar, Surgeon Percy Boyd Wallis, R.N., fourth son of the late Mr. Henry Wallis, of "Graylands," Horsham, Sussex, and of Mrs. Wallis, of 48, Holland Park, W., to Mary Glenie, younger daughter of Mr. and Mrs. Frederick Grove, of "Antrim," West Wickham, Kent.

WALSHAM—BANNISTER.—On November 17th, at the Central Mission Church, Barking Road, West Ham, by the Rev. R. Rowntree Clifford (brother-in-law of the bride), assisted by the Rev. Walter S. Lord, Hugh Walsham, M.A., M.D., F.R.C.P., to Amy Bannister.

DEATHS.

BLAKENEY.—On October 29th, at Denehurst, Dorking, Hugh Theophilus Weare Blakeney, M.R.C.S., youngest son of the late Edward Hugh Blakeney, M.D., Deputy Inspector-General of Hospitals, A.M.D.

GOW.—Killed in action, on November 13th, Charles Humphry Gow, M.R.C.S., Surgeon, R.N., Royal Naval Division, aged 25, only son of the Rev. and Mrs. Henry Gow, of Hampstead.

MOSS.—On November 17th, at Sutton Court, Chiswick, William Boyd Moss, F.R.C.S., in his 88th year.

WHITAKER.—On October 28th, in hospital abroad, Frederick Whitaker, Lieut., R.A.M.C., M.A., M.B., B.Ch. (Cantab.), beloved husband of Jessie Whitaker, Montana, Halifax, and second son of Joseph Whitaker, J.P., Halifax, in his 42nd year.

ACKNOWLEDGMENTS.

New York State Journal of Medicine, The Medical Review, The Nursing Times, British Journal of Nursing, L'Attualita Medica, Long Island Medical Journal, Guy's Hospital Gazette, Sydney University Medical Journal, St. Mary's Hospital Gazette.

NOTICE.

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

The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER, W. E. SARGANT, M.R.C.S., at the Hospital.

All communications, financial, or otherwise, relative to Advertisements ONLY, should be addressed to ADVERTISEMENT MANAGER, the Journal Office, St. Bartholomew's Hospital, E.C. Telephone: City 510.

A Cover for binding (black cloth boards with lettering and King Henry VIII Gateway in gilt) can be obtained (price 1s. post free) from MESSRS. ADLARD & SON and WEST NEWMAN, Bartholomew Close. MESSRS. ADLARD & SON and WEST NEWMAN have arranged to do the binding, with cut and sprinkled edges, at a cost of 1s. 9d. or carriage paid 2s.—cover included.

St. Bartholomew's Hospital



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

JOURNAL.

VOL. XXIV.—No. 4.]


JANUARY 1ST, 1917.

[PRICE SIXPENCE.]

CALENDAR.

Mon., Jan.	1.—D.P.H. (Conjoint) Exam. begins. Second Exam. of Soc. of Apothecaries begins.
Tues., "	2.—Dr. Morley Fletcher on duty. First Exam. Conjoint Board begins.
Wed., "	3.—First Exam. of the Soc. of Apothecaries begins.
Thurs., "	4.—Second Exam. Conjoint Board begins.
Fri., "	5.—Dr. Drysdale and Mr. Waring on duty. Minor Operations. Mr. Eccles' dressers.
Sat., "	6.— Winter Session resumes.
Mon., "	8.—Cambridge Lent Term begins. Exam. for Matriculation (London) begins.
Tues., "	9.—Dr. Hartley on duty. Final Exam. Conjoint Board (Medicine) begins.
Thurs., "	11.—Final Exam. Conjoint Board (Midwifery) begins.
Fri., "	12.—Dr. Horder and Mr. McAdam Eccles on duty. Minor Operations. Mr. Bailey's dressers.
Sun., "	14.—Oxford Lent Term begins.
Tues., "	16.—Dr. Calvert on duty.
Fri., "	19.—Dr. Morley Fletcher and Mr. Bailey on duty. Minor Operations. Mr. Wilson's dressers.
Tues., "	23.—Dr. Drysdale on duty.
Fri., "	26.—Dr. Hartley and Mr. Wilson on duty. Minor Operations. Mr. Waring's dressers.
Tues., "	30.—Dr. Horder on duty.
Fri., Feb.	2.—Dr. Calvert and Mr. Waring on duty. Minor Operations. Mr. Eccles' dressers.
Tues., "	6.—Dr. Morley Fletcher on duty.

EDITORIAL NOTES.

 WITH the entrance of 1917 we once again wish our readers the best of luck. Our wishes are the more sincere since so many of our JOURNALS are read in the trenches, both east and west, and we know that quite apart from ordinary war risks a good deal of luck is often essential for those in the west, if they are to keep warm, and for those in the east if they are to keep cool.

* * *

The Christmas festivities at this Hospital have this year passed off as last year, wonderfully successful in spite of the war. Father Christmas made his rounds in the morning in the approved manner to the delight of patients both old and young. Turkey and plum-pudding appeared at the appointed time. The programme of the day was carried through without a hitch, and with a swing and gaiety which would have made us forget that a war was in progress, were

it not that the soldiers' wards were there to remind us. The decorations have, as usual, been above reproach, but the gradually increasing cost of labour and material have hampered us somewhat in other directions. However, the spirit was there, and though the old "firm" troupes were lacking, there was yet no lack of entertainment.

It was generally conceded that the most effective decorations were those in which the Chinese lantern played a part. This, of course, may be due to the fact that with so much enforced darkness upon us we welcome these little extra one-candle-power rays with more than common appreciation.

The Christmas trees also were quite up to their pre-war standard as far as appearances were concerned, though we understand that in many instances the presents were not so costly as they have been in the past.

It must also be mentioned that two babies were born within the precincts of the Hospital on Christmas day, though we hardly know whether to classify them under the heading of "decorations" or of "entertainments."

We are greatly indebted to many kind friends who brought troupes or otherwise assisted in the entertainment of the patients in this time of need. Our own "Dry Dressings" were again present, and this unfortunately was the only troupe provided from within the Hospital itself. The others who so kindly assisted were Mrs. Le Breton, Miss Warren Fisher, Miss Florence Castelle, Miss Robertson Hayward, Miss Gladys Dickinsen, Mr. Seymour Dicker, and "The Roland Ramblers." To these and their assistants we have to express our great appreciation of their services, and our hope that those services will be available again next year.

* * *

It is with much satisfaction that we congratulate the Right Hon. Dr. Christopher Addison on having become a member of the Cabinet and Minister of Munitions. It does not often happen that one who is educated to the profession of a medical man rises to great eminence in another walk of life. Such a change as this serves to encourage the rising generation of medical students. Some of them may also become cabinet ministers or poet laureates.

The University of Malta, which was founded under the rule of the Order of St. John of Jerusalem, has, under a recent statute, reacquired the power of conferring honorary degrees. Under this power, which has been in abeyance for a century, the University, on December 15th, 1916, conferred upon the four consultants to the forces stationed upon the island the degree of M.D. *honoris causâ*. Among the recipients were Cols. Tooth and Garrod, A.M.C. This honour is a graceful recognition of the work done by the R.A.M.C. in that large hospital base, and seeing that the two physicians are members of our staff, may be regarded as a compliment to our Hospital and Medical School.

* * *

It is with great pleasure that we congratulate yet another Bart's man on having been awarded the Military Cross, Temp. Capt. R. A. Fuller, R.A.M.C., has received this distinction, and the following extract is coupled with this award: "He led stretcher parties and tended the wounded under intense fire. He displayed great courage and determination throughout the operations."

* * *

As we go to press we learn also that two other decorations have been awarded to Bart's men in Mesopotamia. We heartily congratulate Capt. W. Hayward Hamilton, I.M.S., who has received the D.S.O., and Temp. Capt. D. R. Thomas, of the Cheshire Regiment, who has received the Military Cross.

* * *

It is with very much regret that we learn of the death of Sir Frederick Eve, which took place as the result of an attack of influenza. His medical education took place at St. Bartholomew's Hospital, and later at Leipzig, and he subsequently became known as a careful and skilful operator. His connection with this Hospital was short, but at the London Hospital it was long and full of work. He finally became senior surgeon to that Hospital, and soon afterwards was knighted by the King. He was a member of the Council and lately a Vice-President of the Royal College of Surgeons, and formerly Lecturer on Surgery at the London School of Medicine for Women. After the outbreak of war he was appointed a Temporary Lieutenant-Colonel in the R.A.M.C., and became Consulting Surgeon to the Eastern Command. He leaves a son and a daughter, to whom our deepest sympathy is extended, in their bereavement.

* * *

THE ROLL OF HONOUR.

It is with the greatest regret that we have to report the death of Captain J. Cropper, R.A.M.C., on active service. He was on board H.M.S. "Britannic" when she was sunk, and, though reported at first as "missing," we are informed that there is no foundation for any other belief than that he was drowned. A memorial service was held on December 22nd at Caerwent Church. We give our heartfelt sympathy to his sorrowing relatives and many friends.

THE ADMINISTRATION OF CHLOROFORM.

(Continued from p. 34.)

By J. W. BEAN, M.D. (Cantab.).



E must likewise find out the degree of salivation in each case. If it appear excessive or if the oral cavity appear congested and inflamed we shall be especially on the alert for signs of danger from chloroform-secretion, and we shall take steps to obviate such secretion.

Blood is the body tissue upon which I believe chloroform exerts its direct chemical action. It attacks the red blood corpuscles and probably impairs their function as oxygen carriers. Anæsthesia is thus an indirect result of chloroform due to oxygen starvation. It follows that a correct estimate of the quantity and quality of the blood, in each case, is a matter of fundamental importance. From it, more than from anything else, is calculated the correct dosage for each case.

Anyone who attends to give an anæmic girl the same dosage as a full-blooded man, say, is courting disaster.

Good red blood, in plenty, takes up large quantities of oxygen. Such blood has high resisting powers, and needs much chloroform to cripple it in its function of carrying oxygen to the tissues.

Scanty anæmic blood can only take up small quantities of oxygen and the red cells of anæmic blood offer little resistance to chloroform's attack. If then you present too much chloroform to it such blood quickly becomes profoundly deoxidised, the pulmonary arterioles close, and an unsafe strain is put upon weak flabby respiratory muscles and upon a weak flabby heart. I am inclined to think, though it is mere conjecture, that there may be a further danger in the case of anæmic people.

Ordinarily, if excess of chloroform be given, the blood automatically protects the body from being poisoned by such excess. It effects this by causing strong spasm of the pulmonary arterioles and thus preventing the chloroformed blood from getting into the systemic circulation in excess.

It is well known that anæmia is associated with extreme poverty of muscular tone. Take for example the feeble heart sounds in anæmia. It is a fact that the muscle phenomena of asphyxia in anæmia are very, very feeble—sometimes barely noticeable. It may be then that the spasm of pulmonary arterioles in anæmic people may be weak and incomplete or in extreme cases pretty well absent. If such be the case then their automatic protective action against a toxic blood would be weak and incomplete.

Naked chloroform—that is chloroform not linked to the red cells—would then pass through to the systemic circulation and would exert its usual action as a protoplasmic poison. This, as I say, is mere conjecture, but it is conceivable and therefore possible.

Chloroform present in the arterial blood to an anæsthetic degree is associated with the normal red colour, or even with an increase in colour, a hyper-red colour of arterial blood.

Chloroform present in excess always darkens the blood. It follows that, above all, the patient's color must be watched and must be kept hyper-red.

Another important point in connection with the blood must be remembered. *The dosage of chloroform depends on the quantity of the blood in the systemic circulation at any one particular time*, not on the total quantity of blood in the body. Now it may happen that a full-blooded man getting a large dosage suddenly becomes pale through surgical stimulation of a sensory nerve. Much of his blood is depleted into the splanchnic area and his heart action becomes automatically reduced. It becomes necessary to greatly lessen the dosage of chloroform given to him and to keep it reduced till the circulation returns to the normal, when the original dosage may be resumed. Neglect of such precaution may lead to dangerous crisis.

Yet one more point in connection with the blood must be noted. Blood offers a resistance to chloroform's attack. This resistance is great at first, but gradually and steadily lessens as the administration proceeds. It follows that the chloroform dosage must in like manner be progressively and systematically lessened from time to time.

One last point of importance before we leave the blood. Chloroform is known to be especially dangerous in toxæmias, such as diabetes, septicæmias, and renal inefficiency.

Why is this? Probably it is because in these conditions the blood is already flooded with toxins, and the red cells are already fully engaged oxidising and destroying the toxins of the blood (oxygen is known to be a great destroyer of toxins—hence the cleansing properties of Condy's fluid, to take one example.)

In toxæmias you usually get a darkening of the blood together with incomplete or complete unconsciousness (delirium or drowsiness and profound coma), which states find a ready parallel in incomplete or complete chloroform unconsciousness.

If now you add chloroform to an already poison-laden blood, one or two things must surely happen: either chloroform has a greater affinity for the red cells than have the bacterial renal or diabetic toxins, in which case the latter will pass on unoxidised and poison the system. A second possibility is that the original toxins have a greater affinity for the blood than has chloroform, in which case "naked" unlinked chloroform, that is to say ChCl_3 not combined chemically with the red cells, will pass on into the systemic circulation (a protoplasmic poison) and poison the system.

In either case it is clear that chloroform and circulating toxins act as adjuvants, each of them lowering the resistance of the red cells and impairing their productive action.

Several other points in the personal equation should be carefully considered, for example:

- (1) The circulatory system as a whole.
- (2) The nervous system as a whole, the temperament of the patient, the dangers of excessive fear, the likelihood of excessive or unduly persisting reflex action. The possibility of excessive weakness or sluggishness of the vital nervous centres, associated sometimes with exceptionally slow pulse and respiration.
- (3) The muscular system as a whole—both striped and unstriped musculature. The power and endurance of the respiratory muscles—blood pressure, which is fitly considered under unstriped muscle-tone and cardiac tone.
- (4) Metabolism and the nutrition of the body as a whole.

Indications of defective nutrition or defective metabolism should be carefully noted, such as eczema, gout, any rough skin, hives, bilious attacks and sick headaches, muscular rheumatism, etc., etc. Enquiry should be made as to previous anæsthetics and the amount and persistence of vomiting after them.

Time forbids me to do more than merely mention these items in the preliminary examination; they have been dealt with in detail in previous papers.

SYNTHESIS.

Having completed our analysis we are in a position to construct, step by step, a safe and sound method of administering chloroform. Such a method must above all things be elastic and adjustable, so that the complications caused by individual peculiarities of structure or temperament may be avoided or overcome.

Let us construct in the same order as we have analysed, and start with chloroform.

IMPURE OR SUB-STANDARD CHLOROFORM.

Get your chloroform in bottles, 2-4 ounces, and see that it is in coloured bottles. Keep it in a *cool dark spot*, firmly stoppered, and never expose it to heat or sunlight nor leave it unstoppered for more than a few seconds at a time. The advantage of a small bottle is that it is finished at one sitting probably, and so is not kept for many weeks or months half-filled, tending to decomposition.

Get the very best chloroform.

In dealing with a drug so dangerously powerful as chloroform "the best or nothing" should be one's motto. It is possible, after considerable practice and experience, to "spot" impure chloroform by the smell alone, pouring a few drops on one's hand and smelling it.

PHYSICAL ACTION OF CHLOROFORM.

This can be avoided by very gradually and very evenly increasing the chloroform dosage. By so doing you very gradually and very evenly increase the air shortage. The respiratory machine corresponds to a stimulus of less air, provided that stimulus be a gradually and evenly increasing one. Should the increase be made too abruptly, then, as we have seen, pulmonary "arteriole spasm" and an inert mass of chloroform vapour together bring respiration to a standstill.

Responding to a gently progressive stimulus breathing becomes progressively faster, deeper, more vigorous—able to keep an ever-increasing chloroform dosage in free circulation into and out of the airway.

Should mechanical obstruction or emphysema be present, or any other condition causing weak air entry, then the chloroform will have to be pushed still more gradually (the degree of graduation being proportional to the degree of abnormality present). As additional precautions free oral breathing should be secured by insertion of a mouth-prop; the tongue should be kept in its normal position and the base of the jaw not allowed to sag back.

Hewitt's oral airway and Longhurst's tongue depressor are both very useful in this connection. A little ether may be given also to whip up respiration. Great care must be taken as to the correct "lie" of the patient on the table—nothing in it being allowed to hamper free respiration, e.g. the patient's chest not being "splinted" by means of her arms pressed close to her side, bent at the elbows, hands and forearms crossed on the breast; or, again, the lithotomy position, extreme flexion of thighs on abdomen in a fat patient must not be allowed since it may make respiration impossible.

NEGATIVE ACTION OF CHLOROFORM.

Like the physical action this is counter-acted by increased vigour and frequency of respiration. A point, however, may be reached where this counteraction becomes insufficient, and deficient aeration makes its appearance. This is especially liable to occur in very full-blooded people and in alcoholics and drug-takers, all of whom need a very large dosage. Of course in these conditions it is often wiser not to induce with chloroform at all. It occurs too, sometimes, when weak chloroform is being used. The measures mentioned in connection with physical action help here too. A preliminary injection of morphia or omnopon may be useful, so that the patient is already on the way to anaesthesia when he mounts the table. Test your chloroform, and make certain that is of standard strength. Preliminary depletion (to be spoken of later) is good treatment for this complication. In extreme cases it may be necessary to allow a certain amount of cyanosis during the induction.

Less chloroform is needed for maintenance, and the surgeon should not be allowed to start till the normal colour of the arterial blood has been resumed, as the combination of chloroform, pulmonary arteriole-spasm, and surgical stimulation is such an extremely dangerous one. If some degree of cyanosis is a necessity let it be with ether, and never with chloroform, whilst surgical stimulation is going on.

THE GLUTINOUS CHLOROFORM-SECRETION.

This can be avoided in two ways:

(1) Give the patient (adult) $\frac{1}{120}$ – $\frac{1}{100}$ gr. of atropine at least one hour before induction—as a routine—only avoiding it in cases where secretion is initially unusually scanty. Examine the patient's oral cavity just before induction, and if secretion still be free, give a gargle of alum or Condy's fluid fairly strong. Where exceptionally free secretion is met with the anaesthetist will be on the alert throughout the administration for the first warnings of dangers from it. He will watch for swallowing during the induction—for weakening respiratory movements, and for the slightest indication of commencing cyanosis. He may periodically pass a sponge through the fauces and mop round the glottis, and notice the amount and character of any resulting secretion on the swab, and whether any change in breathing or colour follows.

It must be remembered that atropine will probably have the effect of paralysing, or at any rate weakening, the contraction of the pulmonary arterioles' muscular coat, so that:

- (1) Their protective action against a blood overdose of chloroform reaching the systemic circulation is lessened.
- (2) On the other hand, any vagal action is obviated.
- (3) Sudden dangerous complete spasm blocking the pulmonary circulation (such as I believe you occasionally get with an abrupt overdose of ethyl chloride) is likewise obviated.

(2) Increase the chloroform dosage during induction *extremely gradually especially for the first two or three minutes*. After a time the airway becomes less sensitive to irritation, and the rate of increase of chloroform may be quickened. Probably the local action of the chloroform-vapour deadens the mucous lining to some extent after a time, or else a thin coating of glutinous secretion protects.

The respiration must be watched very closely, for the dosage of chloroform depends upon it once the induction is complete.

Weak breathing during induction means a slow induction, and must not be allowed to continue, since it hinders access of chloroform to the blood. Once the blood is thoroughly under the influence of chloroform it is a matter of circumstance whether or no weak breathing should be allowed. To anyone who is not thoroughly expert, thoroughly master of the situation, I should say, "Never under any circumstances permit weak breathing to continue, as it is un-

doubtedly a potential danger. So long as you maintain efficient respiration with the normal complexion you need have little fear. If, under such circumstances, crisis should occur, it is almost certain that chloroform has nothing to do with it, and with appropriate treatment the patient is bound to recover."

An expert on the other hand may find it very convenient to allow feeble breathing—or even to provoke it. The blood being once fully chloroformed, feeble breathing simply means a condition *approaching* chloroform-equilibrium. *Complete* chloroform-equilibrium may now be secured by periodically adding a drop or two of chloroform, thus making good to the blood periodically the very slight chloroform-loss occasioned by feeble breathing.

The simile of a vessel of water with a hole in it illustrates my meaning aptly. With a large hole the vessel quickly fills and quickly empties. With a small hole it slowly fills and slowly empties, and a little leakage is easily made good.

When this trance-like anæsthesia is typically present the patient keeps a perfect colour, breathing movements are so slight as to be only just perceptible, and the condition is obviously one of perfect restfulness (the "dewy sleep of infancy" you might almost call it). You are most unlikely to be able to attain such an ideal in, say, a severe abdominal operation with extreme visceral and peritoneal stimulation, but it is admirably suited for plastic operations where a couple of hours, say, is to be spent in repairing a scarred cervix and badly torn perineum. I have several times attained it, too, in Alexander's operation—though here the traction on the round ligament momentarily upsets it. It is obviously a valuable state, to the expert anæsthetist, because a tedious two hours' operation becomes, under this trance-anæsthesia, less tiring than a ten minutes' operation under ordinary anæsthesia. How is this state produced? I do not know exactly, but it is probably a complex state whose components are:

- (1) A moderate degree of physical action of chloroform;
- (2) A moderate degree of glutinous chloroform secretion;
- (3) Slight displacement backwards of the base of the tongue;
- (4) A non-excessive degree of surgical stimulation.

"Trance-anæsthesia," if I may so christen it, has another manifest advantage for all "habitués" of operation theatres—Far less chloroform diffuses into the theatre-atmosphere; those who are constantly giving chloroform realise how it upsets them.

TO REVERT TO THE BLOOD.

Consider carefully its quantity and quality and adjust your dosage accordingly.

In extremely full-blooded people it may be desirable either to deplete by purges and moderation in diet some

days before administration, or to deplete locally immediately before operation. The latter object may be attained in several ways:

- (1) Position: Raising the head and shoulders and lowering the legs, or
Keeping the whole body, head raised, upon an inclined plane.
- (2) Drawing the blood to the feet by means of a foot-bath of mustard and hot water. The blood once drawn to the feet may be kept from returning to the main circulation by bandaging sufficiently tightly to prevent return.

This is practised, I believe, on the Continent by certain surgeons. Theoretically it has another advantage, which is this:

The blood so shut off does not come into contact with chloroform till it is returned to the main circulation at the end of an operation by loosening the bandages. Thus, during the period of recovery the body is flooded with a quantity of un-chloroformed blood. This blood, though stagnating during the operation, quickly returns to the normal on passing through the pulmonary circulation. Once having regained the normal this blood is able to quickly and efficiently re-oxidise the body, and thus brings about a rapid and efficient recovery. I have no personal experience of this method, but its advocates praise it.

To me it is of doubtful advantage, except in exceptional cases. It cannot be a very good thing to keep a considerable portion of the body's blood stagnating for an hour or two. I should have thought that stagnated blood might become more injured than lightly chloroformed blood.

Certainly, however, it would be advantageous from the point of view of promoting a smooth induction in certain full-blooded patients.

Dr. Hornabrook of Melbourne first pointed out to me the advantages of raising the head during induction. There is less blood in the cerebral circulation and consequently less excitement, and less anæsthetic is needed to induce, consequently there is less risk of a blood-overdose. Needless to say, in anæmic patients you would not raise the head. Anæmia is a more dangerous condition, anæsthetically, than is full-bloodedness. Its chief dangers we have mentioned already, but apart from them, anæmia means malnutrition and malnutrition means body tissues less able to meet and allow for any adverse circumstance. Apart from the blood-danger an ill-nourished brain and weak ill-fed musculature (heart, blood vessels, and respiratory muscles) may readily fail their owner in a moment of crisis.

Another thing which makes anæmia dangerous is that changes in the colour of the arterial blood are so hard to discern. Choose some organ like the tongue where arterial colour-change is plainest to the eye and watch it most carefully. Venous distention is not masked in anæmia, and consequently becomes exceptionally valuable as a sign of

danger. Watch the temporal veins, and also the small veins on the pinna of the ear. These small veins are of the utmost value to the anæsthetist for "spotting" venous distention in its earliest stages and venous distention with chloroform spells danger. As we have already said, muscle-phenomena in anæmic patients are very feeble and do not give you much warning, but if you notice slight "epileptiform" twitchings of the fingers in an unconscious anæmic patient—stop giving the anæsthetic—do not push it, thinking you are dealing with anæsthesia. These twitchings signify imminent crisis. Sallow people and coloured races provide the same difficulty as anæmics. You must choose an accessible mucous membrane in which to watch for colour changes in the arterial blood. To any but an expert I should certainly say open ether is far safer than chloroform for the anæmic.

Another thing the anæsthetist has to consider is hæmorrhage. Remember that bleeding very greatly hampers the surgeon in his work, and is probably the chief cause of shock. The anæsthetist is quite as responsible for bleeding as is the surgeon.

Wherever there is the least cyanosis and venous distension, there you will get excessive bleeding, and often you can greatly check bleeding and help your surgeon by changing from ether to chloroform, though be careful how you do it, as such changes are apt to be rather "tricky." I fancy the change from chloroform to ether is a more dangerous change than from ether to chloroform.

Another reason why you should carefully watch the amount of bleeding is that you must be guided by it to judiciously lower your dosage of chloroform. The pulse does not show the effect of moderate bleeding immediately, but after a short interval, and in such bleeding you must adjust your dosage to the near future of the pulse rather than to its actual present.

In fever cases and toxæmias give ether as lightly as possible, or if giving chloroform give oxygen both before it and with it to get the blood into as healthy a condition as possible.

The end word with regard to the blood is this:

"Watch like a hawk the colour of the arterial blood, and watch equally carefully for the earliest sign of venous distension. This intense concentration of the anæsthetist upon the veins and upon the colour of the arterial blood, enabling him to detect the very earliest signs of distension and darkening (which mean pulmonary arteriole-spasm and are **SYNONYMOUS WITH DANGER** and with unnecessary exhaustion of the patient's reserve fund of vitality), is far and away the most important thing in the whole range of anæsthetic practice—**FAR MORE IMPORTANT EVEN THAN WATCHING THE RESPIRATION.**"

The blood is the direct seat of chloroform's chemical action, and is therefore the prime action for prophylactic observation.

Space forbids me to dwell on the many other interesting points raised in our analysis.

One thing must be mentioned—Fear. Avoid it by every means in your power. Tact can do wonders, but some cases need to be stupefied before induction.

Fear lowers blood-pressure dangerously, tunes vagus and sympathetic centres far above concert pitch, exaggerates reflexes and makes them unduly persistent, tends to vomiting, and so excites the cerebral centres that much more anæsthetic than usual is needed to overcome them. Fear is always most upsetting; it is sometimes highly dangerous.

We have constructed now the broad principles of a safe and sound method for administering chloroform.

Space forbids that I should consider such a method in detail here.

In conclusion, I should like to say that nearly all the ideas in this paper have been either taken from or suggested by Mr. Richard Gill's great classic, *The CHCl₃ Problem*, a close study of which is most desirable for anyone who seeks thoroughly to master the theory and practice of anæsthesia.

LITERATURE.

For evidence in favour of the facts regarding spasm of pulmonary arterioles and consequent stoppage of the pulmonary circulation, refer to:

(1) *Circulation and Respiration*, 1st series, Sir Lauder Brunton, pp. 331—333.

(2) *Brit. Med. Journ.* 1894, April 21st, p. 841 *et. seq.*: 'The influence of the Arterioles etc.' by Sir George Johnson, M.D., F.R.C.S.

(3) *The Asclepiad*, vol. ii, Sir Benjamin Ward Richardson.

N.B.—It is interesting to note in Sir Lauder's experiments that he found a *cold moist* atmosphere presented to the pulmonary alveoli caused a narrowing of the arterioles to two-thirds their original lumen. Irritant CHCl₃ vapour had a similar affect but more marked. A *warm moist* atmosphere is the natural environment of airway—terminal alveoli, and arterioles, and should always be maintained.

A CASE OF PARTIAL PNEUMOTHORAX.

By P. O. ELLISON, M.R.C.S., L.R.C.P.

THE patient, a man, æt. 43, of Hebrew nationality and by trade an outdoor general outfitter, was admitted to Matthew Ward on October 3rd, 1916, complaining of shortness of breath.

In 1905 a troublesome and intractable cough first began, and in June, 1906, the patient had a hæmoptysis. In August of that year he was admitted to Daneswood Sanatorium with signs of pulmonary tuberculosis involving three lobes. The bacilli were not found in the sputum, and at his discharge he had gained in weight 19 lb., and his evening temperature was normal.

In 1907 he was again admitted to Daneswood with implication of four lobes. He had had another hæmoptysis in June, 1907, up to which time he had been at work.

Tubercle bacilli were found in the sputum on several occasions. He improved considerably, and gained 14 lb. during his stay. He was subsequently readmitted in April, 1915, and made good progress.

The patient remained well and was able to do his work without discomfort until the end of August, 1916. Gradually he became aware of some difficulty in breathing accompanied by pain in the abdomen, which increased on the slightest exertion. His idea of the actual onset was somewhat vague, and he was unable to say whether it was sudden, or in any way connected with undue exertion. The difficulty was quite sufficient to prevent him from attending to his stall, though he got some relief after rest, and his trouble did not become increasingly worse.

He complained of cough with very little sputum. He has had no night sweats, nor recent hæmoptysis. The appetite was poor and the bowels sluggish. He has not indulged in alcohol nor tobacco.

On admission, the temperature was 99.2, the pulse was 100, and the respirations were 22. He was thin, of sallow complexion, but did not appear to be in any great distress.

The chest was poorly covered, with retraction of both apices. Expansion of the chest was not good, but apparently equal. Vocal vibrations were absent at the lower part of left chest and axilla. The percussion note was markedly impaired at both apices in front and behind, but hyper-resonant at the left axilla and lower part of the chest in front and behind. In these latter regions breath sounds and voice sounds were inaudible; whilst at the right apex in front and behind could be heard bronchial breathing, bronchophony, and whispering pectoriloquy. Marked inspiratory crepitations were heard on both sides to the level of the third rib in front, and the spine of the scapula behind. Neither bell sound nor splashing were obtained.

An impaired percussion note corresponding to the heart could be detected 1 in. to the right of the sternum from the fourth to the sixth ribs.

X rays showed a pneumothorax of the lower part of the left chest, the lung lying partially collapsed with the edge parallel to the vertebral column. The heart was seen, elongated vertically, lying behind the body of the sternum.

The patient did not require any relief for pain. He was given a generous diet, with cod liver oil, and strapping was applied to the left chest.

On Nov. 9th the X rays suggested that the lung had somewhat expanded; and the patient's breathing was clearly much improved, and much less short. Very feeble breath sounds could be detected over the affected part. Shortly afterwards the signs in the chest improved somewhat rapidly, and on November 23rd the breath sounds were equal all over, and loud friction could be heard over the lower part of the left chest and axilla.

On December 1st the heart had returned to its normal position, and the hitherto affected part of the chest gave no

abnormal physical signs. All evidence of pneumothorax had completely disappeared, and even the friction sound had gone. On the last two occasions the X rays gave no evidence of pneumothorax. The patient could attend to his work without discomfort, and was only troubled with a slight cough without any sputum.

The case is of interest in several ways. First the long duration of the primary disease, at least eleven years since the first onset having elapsed, during which time the patient was able to work except when an inmate of the sanatorium. Second, the occurrence of a partial pneumothorax, owing to pleural adhesions in the upper part. And third, that a diagnosis of partial pneumothorax was made on tympanitic resonance with complete absence of voice and breath sounds, without the help of a bell sound, and before X rays were used.

I am greatly indebted to Dr. Horton-Smith Hartley for permission to publish the notes of this case.

DICKENS AND THE DOCTORS.

IT is remarkable that amongst the hundreds of characters in Dickens novels there are so few doctors. Almost all the types which make up Society, from Lord Dedlock to Trotty Veck, are there in prodigal profusion; the doctor rarely. And this is stranger because the plot is often of very secondary importance. The mastery and characterisation of type, the marvellous passing show of life have made Dickens famous. No one cares very much for the plot of *David Copperfield*, but we are all firmly attached to Betsy Trotwood, and to Micawber. Now the doctor has always had a definite and peculiar place in society. Never a home in which some doctor's name is not an household word. How is it then, that Dickens makes so little of him?

In the first place it is probable that he never really understood doctors. Certainly he never understood them as Stevenson did when in the perfect dedication to "Underwoods" (which it is a shame to curtail) he wrote:

"There are men and classes of men that stand above the common herd: the soldier, the sailor, the shepherd not unfrequently: the artist rarely: rarer still, the clergyman: the physician almost as a rule. He is the flower, such as it is, of our civilisation; . . .

"Generosity he has, such as is possible to those who practice an art, never to those who drive a trade; discretion, tested by an hundred secrets; tact, tried in a thousand embarrassments, and, what are more important, Heraclean cheerfulness and courage."

This feeling can come through gratitude alone. Stevenson was an invalid most of his life; Dickens, robust.

Again, Dickens was a reformer. Sometimes, indeed, he

was a reformer before he was a novelist. *Bleak House* was written in protest against the Chancery Laws; *Little Dorrit* against the Marshalsea. Throughout the novels he continually turns aside to fulminate against some passing abuse—*Tom All-Alones* was a particularly hideous slum:

“There is not a drop of Tom’s corrupted blood but propagates infection and contagion somewhere. It has polluted this very night the choice stream (in which chemists on analysis would find the genuine nobility) of a Norman house and His Grace shall not be able to say Nay to the infamous alliance. There is not an atom of Tom’s slime, not a cubic inch of any pestilential gas in which he lives, not one obscenity or degradation about him, not an ignorance, not a wickedness, not a brutality of his committing, but shall work its retribution through every organ of society up to the proudest of the proud and to the highest of the high. Verily what with tainting, plundering, and spoiling Tom has his revenge.”

But even then doctors were mitigating these horrors. Even then the Hospital was often the only glimpse the very poor got of a cleaner, sweeter way of living. Only once does Dickens recognise this, when Maggie in *Little Dorrit* exclaims:

“What a nice hospital! So comfortable, wasn’t it? Oh, so nice it was. Such a ’Ev’nly place!

“Such beds there is there! Such lemonades! Such oranges! Such d’licious broth and wine! Such chicking! Oh, AIN’T it a delightful place to go and stop at!”

Truly Dickens once, appealing for funds for the Great Ormond Street Hospital in which he was interested, referred politely to “the most humane profession”; but his own idea was much more clearly expressed in a letter to Forster in which he remarked: “The longer I live the more I doubt the doctors.” Nevertheless sometimes he brings them into novels. He, who drew the life of the times, had to; but Balzac, who is perhaps nearest to Dickens in portraying the common life of the common people, does so more frequently and much more sympathetically.

In modern fiction the Medico figures in three ways. Occasionally he is the hero; and in this case the novel is often written to commemorate some striking character.

Again (and this is quite a modern development) there is the Scientific Freak—super-detective or super-villain, it matters not—so that scientific knowledge of a kind unknown to scientists may play its part in the story.

Thirdly, there is the common-or-garden Doctor. A child is born and somebody has to officiate. In all well-regulated novels a doctor descends the stairs in order to enlighten the distracted male parent below. Or the villain thoughtfully blows out his brains (leaving a full confession) and a doctor confirms the happy news.

With the exception of typical Dickensian caricatures, most of Dickens’ doctors belong to the last class.

Bob Sawyer was a Guy’s man. His friend, Jack Hopkins, was from Bart.’s. Dickens, by the way, seems to mention only these two hospitals and he distributes his favours pretty equally between them. Of the two friends we do not envy Guy’s her alumnus.

“Mr. Bob Sawyer, who was habited in a coarse blue coat which, without being either a great coat or a surtout, partook of the nature and qualities of both, had about him that sort of slovenly smartness and swaggering gait which is peculiar to young gentlemen who smoke in the street by day, shout and scream in the same by night, call waiters by their Christian names, and do various acts and deeds of an equally facetious description. He wore a pair of plaid trousers and a large rough double-breasted waistcoat; and out of doors carried a thick stick with a big top. He eschewed gloves and looked, upon the whole, something like a dissipated Robinson Crusoe.”

Although Mr. Sawyer refused to dissect a head solely upon the ground of expense, Jack Hopkins was probably the keener worker. He regales Mr. Pickwick with some reminiscences of the operating theatre, and mentions with genuine pride one of our old surgeons, Mr. Slasher, whereof all may read in Chapter XXXII of *Pickwick*. Bob Sawyer was perhaps indiscreet with his drinks and (like many of his successors) found landladies an unappreciative class, but finally he and Mr. Benjamin Allen received surgical appointments in the East India Company. “They each had the yellow fever fourteen times and then resolved to try a little abstinence, since which period they have been doing well.”

Alas, in these warlike days our own Bob Sawyers are with us no more.

It would be impossible in discussing Dickens and the profession to leave out Mrs. Gamp. This lady also was trained at Guy’s, but her friend, Mrs. B. Prig, was from:

“Bartlemys; or, as some said, Barklemys; or, as some said, Bardlemys; for by all these endearing and familiar appellations had the hospital of St. Bartholomew become a household word among the sisterhood which Betsy Prig adorned.”

And here again it is obvious that Dickens was doing his best to pay us a compliment. Read his description of Mrs. Gamp:

“She was a fat old woman, this Mrs. Gamp, with a husky voice and a moist eye which she had a remarkable power of turning up and only showing the white of it. Having very little neck it cost her some trouble to look over herself, if one may say so, at those to whom she talked. She wore a very rusty black gown, rather the worse for snuff, and a shawl and bonnet to correspond. . . . The face of Mrs. Gamp—the

nose in particular—was somewhat red and swollen, and it was difficult to enjoy her society without being conscious of a smell of spirits . . . setting aside her natural predilections as a woman she went to a lying-in or a laying-out with equal zest and relish.”

Later he talks of the “Prig School” of Nursing. Indeed, in some respects he displays remarkable insight. He knew that this Hospital had devoted attention to surgery—Mr. Slasher makes his bow. He knew the honourable reputation of our nurses. Mrs. Prig heads a school.

Truly, treatment was not as perfect then as it is now, as the following extracts show :

“Betsy Prig has nussed a many lunacies and well she knows their ways, which putting 'em right close afore the fire, when fractious, is the certainest and most compoging.”

“If you should turn at all faint we can soon revive you, sir, I promige you. Bite a person's thumbs or turn their fingers the wrong way,” said Mrs. Gamp, smiling with the consciousness of at once imparting pleasure and instruction to her auditors, “and they come to wonderful, God bless you !”

“She administered the patient's medicine by the simple process of clutching his windpipe to make him gasp, and immediately pouring it down his throat.”

Those were dark days, but it is pleasant to think that even then our nurses were at the head of their profession.

Now for the doctors who appear incidentally in the novels.

Mr. Chillip, “the meekest of his sex, the mildest of little men,” who assisted at the birth of David Copperfield ; Dr. Slammer of the 99th, that stricken amorist (“Lots of money—old girl—pompous Doctor—not a bad idea—good fun—cut out the doctor,” thus Mr. Jingle at the Ball) :

Professor Dingo (of European reputation), and Mr. Bayham Badger, second and third husbands respectively of Mrs. B. B. in *Bleak House* :

Dr. Haggage, who, with Mrs. Bangham, flycatcher and general attendant, ushered Little Dorrit into a very foul world indeed, the world of the Debtor's Prison.

“The doctor's friend was in the positive degree of hoarseness, puffiness, red-facedness, all-fours, tobacco, dirt, and brandy ; the doctor in the comparative—hoarser, puffer, more red-faced, more all-fourey, tobaccoer, dirtier, and brandier. The doctor was amazingly shabby in a torn and darned rough weather jacket, out at elbow and eminently short of buttons (he had been in his time the experienced surgeon carried by a passenger ship), the dirtiest white trousers conceivable by mortal man, carpet slippers, and no visible linen. ‘Child-bed?’ said the doctor ; ‘I'm the boy.’”

This interesting midder case is described in *Little Dorrit*, Chapter VI.

It must not be forgotten that Mr. Skimpole, in *Bleak*

House, surely one of the most detestable characters in all fiction, had been a medical man.

All these have been caricatures or libels of our profession. Only once does Dickens attempt to draw what with pride we may regard as the typical General Practitioner. Allan Woodcourt is the hero of *Bleak House* in that he marries the heroine, Esther Summerson. The character is lightly drawn and is of no importance as a doctor—any other pleasant young man would have done as well, but Dickens treats it with far more sympathy than any other of his doctors. The scene of Little Jo's death is one of the excellent things of the book, and at the very end Esther Summerson sums up most that is best in a doctor's life :

“We are not rich in the bank, but we have always prospered, and we have quite enough. I never walk out with my husband but I hear the people bless him. I never go into a house of any degree but I hear his praises and see them in grateful eyes. I never lie down at night but I know that in the course of that day he has alleviated pain, and soothed some fellow-creature in the time of need. I know that from the beds of those who were past recovery thanks have often, often, gone up in the last hour for his patient ministrations. Is not this to be rich?”

Thus Dickens amends.

H. L. S.

ST. BART'S 1870-76.

A FEW RECOLLECTIONS FROM MY DRESSER-SHIP UNDER “TOM” SMITH, MY UNCLE.

By GERARD SMITH, M.R.C.S.

DR. SAMUEL GEE was pathologist. One day he was to have performed a *p.-m.* for my uncle ; failed to be at the *p.-m.* room up to time. Tom Smith wrote on the slate outside the room : “Gone to Gurneys, S. Gee.” Those who know the extremely retiring, almost shy, disposition and devotion to duty of that great physician, Samuel Gee, and the character of that resort of the billiard-playing and less industrious Bart.'s students—the “pub.” known as Gurneys in Little Britain—will appreciate this little episode.

It was a great sight in skating winters to see (then) Dr. Church and “Tom” Smith skating intricate figures on the “Welsh Harp” at Hendon. A finer skater than Dr. Church I never saw, and “Tom” Smith ran him very close.

I had the privilege with my cousin, the late S. Moberley Smith, of assisting my uncle at private operations (many of those cleft-palates operations which Tom Smith likened to “spitting through a keyhole in the dark,” amongst other operations). If a local G.P. was about to assist also, Tom

Smith sometimes asked for his forbearance in case, as he said, "I should, for instance call you an ass, or even a damned ass, during the operation." He was eminently an easy man to assist, and always assisted his assistants, but with one who assisted him frequently and therefore had learned his ways he expected a strict rapidity and precision; he kept his cleft-palate needles of various sizes in old tin match-boxes, which had portraits on them, and a sharp demand for "Bismarck" or "Gladstone" meant a needle from the box bearing the portrait.

I assisted by holding the patient's legs in position at an operation for piles, but as the patient was a man of immense muscular power, and the anæsthetist a little cautious, I was raised helplessly off my feet and well over the patient by his powerful thighs; such an interruption would have certainly enraged many surgeons. "Tom" Smith patiently asked me, "When, young man, you have finished your observations up there, perhaps you will kindly descend."

After an operation on the child of a man of wealth, who did not assent readily to fees asked, Tom Smith whispered to me and my cousin: "I will get you chaps a good extra fee out of this; just watch his face when I ask him for it." As we were departing and were waiting for the fees extracted, it was quite a delightful pantomime.

When chatting in his quiet-voiced way with a woman at Bart.'s, on whom he had operated the day before, he said: "I did not ask you what is your occupation; I know you are not married." She said she was a cook. He replied, with a distressed air: "Why did I not know this before operating? I have been looking for an opportunity to kill a cook for weeks!"

He had no reverence for drugs. I remember him calling to (then) Dr. Lauder Brunton in the Hospital Square: "I say, Brunton, I want you to give me a drug to inhibit a patient's vaso-motor what's-his-name!" On another occasion he asked me to write him a prescription for a gargle for his private patients. I did so. Some days later he met me in the Square and said: "I say, my covey, that gargle dissolves all my patients' teeth; write me another!"

These were the times of transition from pure empiricism in therapeutics to prescribing on lines of scientific pharmacology, and Lauder Brunton's work had scarcely yet taken hold of us. The time when Moxon said "drugs are but aids to faith in a weary time" (as some of us still say).

In the wards Tom Smith's teaching was unsurpassed—he knew the temperament of each student, and how best to bring out his faculty of observation.

It was a lesson in surgery to see him handle a painful injured part. I remember a distinguished French surgeon visiting the wards and examining a painful limb. Tom Smith's French was not strong, and he said, looking over the Frenchman's shoulder, "I say, it hurts *infernally*, you know"! then, appealing to the surrounding students, "tell him, someone, in his own lingo, that it hurts *infernally*!"

Nothing in all his magnificent operating impressed me more than his catheterising; his hand "invited" the urethra to accept the catheter; it looked as if *vis a tergo* was *nil*, but the catheter was being drawn in by its point; and this was the impression in even the worst cases of stricture.

In the out-patient room at Bart.'s his unfailing optimistic view of each case, and equally his perception of the saving grace of humour in even otherwise serious matters, helped both his teaching of his students and the recovery of his patients; the time was lightened by his inimitable *sotto voce* asides. I remember his nudging me, and telling me to look at that woman just coming in; that will be a specific case "she has, to begin with, 'a syphilitic bonnet.'" Throughout his teaching it was the pressing need of getting away from the theoretic side of diagnosis as quickly as might be consistent with fair certainty as to the actual conditions, and passing to the practical aspect of treatment: "What is the matter with him?" "Why do you think so?" "What would you *do* for him?" were his three points; but he seldom lingered over contesting theories, and kept etiology for other occasions than the actual presence of the patient. "What would you *do* for him?" always took precedence of prognosis and etiology. Prognosis was often: "Let's get this done first, and then we shall see"; every opportunity of giving the student just starting his work some small surgical manipulation or proceeding to carry out, he seized, a practical teacher.

I attended regularly his work at the Ormond Street Hospital for Sick Children at 9 a.m. during my second and subsequent years; in the out-patient department and wards of that hospital Tom Smith was at his best: he had a rare capacity for attracting even the most fractious or frightened child, and his handling of them—I mean his actual manipulation of their bodies—was an education. His conversation with them was always amusing; in talking to a child, whilst keeping their attention on his talk, he always seemed to bring in the students around by his humorous way of speaking, often even in apparently aimless or absent-minded chatter to a child.

I remember his auscultating a child's chest, and listening (without a stethoscope) to the voice sounds; he asked the child: "Are you married?" and being answered "No," wishing for a further test, he asked: "Not at all?"

His introduction of bright-coloured ribbons upon straps, wherewith a child might be rewarded as a great treat by being tied down on his back for hours, in cases where such a posture was needed, is one instance of his methods at Ormond Street. The children were delighted with the treat.

There was a formula he used for the many cases of eczema in the out-patients at Ormond Street: "Give him plain and simple food, no tarts, nor sucks, nor sausages, nor pork, nor herrings; nothing that he *LIKES*; use no soap to the sore parts; use oatmeal or bran and water; use a

little, and only a little, of this ointment on lint; give the medicine three times a day—go away, my good woman—bring the child this day week—next child!”

His anatomy lectures at Bart.'s I was fortunate enough to attend. I remember a lecture on the facial muscles, commencing: “Gentlemen! you all know with what an infernal scrunch your teeth close upon a stone in your cake”; this precluded the masseter muscle, of course.

He had a habit of playing with the pointer which he used on diagrams, and aiming little dabs with its point on any spot which seemed in reach was a constant occurrence; but of all objects, the nose or person of a drawing or sleeping student on the end of the bottom row of seats, was his favoured aim; sometimes there would be silence, the lecture arrested, and the theatre full of interest, when he experimented thus on a sleeping student. The lectures were at 9 a.m. Many came some distance by train, and at the bottom of the well-like theatre the air was carbonised and soporific.

“The tonsils, gentlemen, by the will of a beneficent providence, have the function of earning fees for surgeons,” was a dictum of Tom Smith's.

The extreme facial seriousness and absence of laughter on his part was the essential of his humorous remarks.

The description of the “kicking diaphragm which produced that peculiar ‘haw-haw’ performance which is supposed to express hilarity” was a very solemn utterance, as also “the cat-like cough and the rising to return thanks,” which defined the function of vomiting.

I remember an occasion when one of our surgeons who possessed a remarkably small hand (being, indeed, built physically on a very small scale), was undertaking an abdominal examination *per rectum*, and the hand was announced as touching some hitherto unreached part, Tom Smith remarked to a colleague: “I say, we are responsible, you know, if he should get lost.”

An elderly nurse at Bart.'s was fond of long words (there were some nurses then who had no facility with anatomical terms) she once took a remark of Tom Smith's about the mucous membrane, to refer to the macintosh sheet in use; and he always asked her for the mucous membrane afterwards when he wanted the sheet.

ODE OF THE DEPARTING DRESSERS.

Should you ask me whence this story,
Whence this legend and tradition,
I will answer, I will tell you,
This the story of the Pink Firm.

We must bid farewell to Dressing,
And to all its pleasures rare,
Ranging from a suprapubic,
To a photo in the Square.

What a time we had at Christmas,
Zepps and lampshades, waiters three,
Chinese wigwams, fortune-tellers,
Dressings dry with C.V.B.

Crackers, holly, violincellos,
Turkeys, pudding, cakes and tea,
Teddy Bears, and scraps of paper,
Oh, my word, it was a spree.

Graver times, too, came upon us,
As upon the matter *re*—
Fibula for Mr. D—s,
From the staff of Theatre—!

How they said we shirked the dressings,
Always in the ward were late,
Our excuses always scoffed at,
That, of course, was only fate.

They recked little of the patients,
Left forlorn in halls below,
Wanting plasters, gargles, tablets,
Anything for aught we know.

Then the lights were fairly thrilling,
Having just crawled into bed,
You would hear the porter tapping,
Filling nervous hearts with dread.

“Colston wants you very urgent!
Hurry, sir, it's half-past three.”
Then you fall out, wond'ring dully,
If they'll give you any tea.

In the ward the H.S. greets you,
“Sorry, lad, that there's no gore,
Merely perforating gastric,
We'll emerge at half-past four.”

When at last the op. is over,
And you've slept for minutes four,
Once again you're rudely awakened,
(Now it is a morning raw.)

“If you please, another case, sir,”
So you wander round again,
Find a beery Smithfield porter,
Suff'ring from a minor sprain.

On the morrow, tired and sleepy,
You would stagger round the ward,
Listening to the worthy Major,
Feeling somehow rather bored.

Now, alas! those days are over,
Happy days, and full of fun,
This, we think, will leave on record,
How the Pink Firm took the bun.

REVIEWS.

RADIUM, X RAYS AND THE LIVING CELL. By H. A. COLWELL and S. RUSS. (G. Bell & Sons, Ltd.) Pp. 324. Price 12s. 6d. net.

The author's object is to describe some of the main experimental facts which have been established as to the effects that the X rays and the rays from radium have upon the living cell. Part I. of the book deals largely with a description of the properties of the radiations, and is adapted to meet the needs of those who approach the subject with a view to experimental investigation. A considerable portion of the work is devoted to the effects of the rays upon malignant cells, and the results so far described seem to give a good augury for the foundations of a rational basis of radio-therapy. The subject is not approached from the clinical aspect, but in places data have been selected from clinical observation when these have borne upon the subject matter. The book is an extremely able and interesting piece of work, and should prove to many an introduction to one of the most important branches of therapeutics.

MEDICAL DISEASES OF THE WAR. By A. F. HURST. (Edward Arnold.) Pp. 151. Price 6s. net.

The author has had constant opportunities of studying every phase of the diseases occurring on active service, not only in the military hospitals in London, but also in the Mediterranean and at Salonika, and this book is a record of his own observations, amplified by a study of the literature not only as published in England and France, but also to a certain extent as published in Germany. The work is extremely interesting and often very original. It should prove of considerable service to the younger medical officers who are not well up as yet in their "Diseases of the War."

DISEASES OF THE THROAT, NOSE, AND EAR. By W. G. PORTER. (John Wright & Sons, Ltd.) Pp. 280. 77 illustrations. (2nd edition.) Price 7s. 6d. net.

This work is not intended to be an exhaustive text-book. The purpose which it is intended to fulfil, which it admirably succeeds in doing, is that of a text-book giving sufficient information to be of use to the senior student or to the general practitioner.

Special attention has accordingly been paid to diagnosis, and to treatment in so far as the latter can be carried out by the non-specialist. The major operations have not been described, the indications for their performance and their general features alone being given.

The forty-four coloured illustrations are very clear, and should prove of much service in assisting diagnosis when the general practitioner has not had much experience in some of the diseases.

SURGICAL ANATOMY. By T. A. C. MACEWEN. (Baillière, Tindall & Cox.) Pp. 353. 77 illustrations. (2nd edition.) Price 10s. 6d. net.

The author presents a concise yet connected account of the anatomical facts of importance to the surgeon, and indicates the relative importance of these facts by a brief reference to their surgical bearing. The physiology of parts under discussion has also been touched on where of surgical import.

In presenting the second edition the work has not been materially altered, except that a special section on surgical anatomy is now prefixed to each division.

The book is lucidly written, and some of the new illustrations are extremely ingenious in their conception, where relations of a difficult nature have to be elucidated. We can cordially recommend this book to all students, the more so since the author has retained the old and official nomenclature throughout.

EXAMINATIONS, ETC.

UNIVERSITY OF OXFORD.

A Congregation was held on December 15th, 1916, at which the following degree was conferred:

B.M. K. A. I. Mackenzie.

UNIVERSITY OF CAMBRIDGE.

D.P.H. Examination, October, 1916. R. W. Jameson.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

E. D. Adrian, M.B. (Cantab.), was admitted a Member.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The following candidates were admitted *Fellows*, December 14th, 1916:

T. J. Cobbe, M.B., Dublin; A. E. Woodall.

NEW ADDRESSES.

MAPLES, E. E., The Gables, High Road, North Finchley N.
VINER, G., No. 3 General Hospital, B.E.F., France.
WALKER, K. M., 28th Field Ambulance, B.E.F.

BIRTHS.

BARKER.—On December 13th, at Down Hall, Rippingale, Lincs, the wife of G. Laycock Barker, Physician and Surgeon, of a son.
DAVIES.—On December 21st, at 9, East Park Parade, Northampton, Marjorie, the wife of Captain J. P. H. Davies, Welsh Field Ambulance, of a daughter.
HOWELL.—On December 22nd, at 45, Harley Street, W., the wife of C. M. Hinds Howell, M.D., F.R.C.P., of a son.
MCLEAN.—On December 2nd, the wife of Dr. W. McLean, Medical Inspector, Board of Trade, Liverpool, of a daughter (Elizabeth).
PRINGLE.—On October 2nd, at Thakurbari, Darrang, Assam, the wife of Kenneth D. Pringle, M.B., of a daughter.

MARRIAGES.

GLENNY—ELLIOTT.—On December 9th, at St. John's Church Clifton, by the Rt. Rev. Bishop Stileman, D.D., Vicar of Emmanuel, and the Rev. C. H. E. Cropper, Vicar of Holy Trinity, Clifton (cousin of the bride), Elliott Thornton Glenny, M.B., B.S. (Lond.), F.R.G.S., Captain, R.A.M.C., to Rachel Winifred, eldest daughter of Christopher Elliott, M.D., of Clifton, Bristol.
JAMESON—BAINES.—On December 1st, at St. John's Church, Putney, by the Rev. H. Westall, Vicar of St. Cuthbert's, Earl's Court, assisted by the Rev. Canon Thurston Rivington, Vicar of Putney, George Dearden Jameson, Captain, R.A.M.C., son of Mr. and Mrs. Jameson, of Miller's Place, Warwick, to Phyllis, only daughter of Mr. and Mrs. Baines, of 37, Carlton Road, Putney Hill.

DEATHS.

ARNOULD.—On December 18th, at Bombay, Loris Arthur, Captain, R.A.M.C., M.R.C.S. (Surgeon to the G.I.P. Railway), youngest son of A. H. Arnould, D.C.L., and Mrs. Arnould, of 9, Nevern Square, S.W., aged 36.
EVE.—On December 15th, at 61, Harley Street, after a few days' illness, Lt.-Col. Sir Frederic Eve, F.R.C.S., son of the late William Eve, of the Manor, North Ockenden, Essex, aged 63.
MITCHELL.—On Friday, December 15th, at "Swadlands," Lenham, near Maidstone, Henry Mitchell, late Surgeon-Major, 2nd Life Guards, dearly-loved husband of Mary Mitchell, and second son of the late Sir Henry Mitchell, Kt., of Parkfield House, Bradford, Yorkshire, aged 59.
WYER.—On December 11th, 1916, at Epperstone House, Leamington Spa, Otho Francis Wyer, M.D., J.P., aged 79 years.

ACKNOWLEDGMENTS.

The Nursing Times, The Hospital, Long Island Medical Journal, St. Thomas's Hospital Gazette, Westminster Hospital Gazette, New York State Journal of Medicine, L'Attualità Medica, Guy's Hospital Gazette, The Medical Review.

NOTICE.

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

The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER, W. E. SARGANT, M.R.C.S., at the Hospital.

All communications, financial, or otherwise, relative to Advertisements ONLY, should be addressed to ADVERTISEMENT MANAGER, the Journal Office, St. Bartholomew's Hospital, E.C. Telephone: City 510.

A Cover for binding (black cloth boards with lettering and King Henry VIII Gateway in gilt) can be obtained (price 1s. post free) from MESSRS. ADLARD & SON and WEST NEWMAN, Bartholomew Close. MESSRS. ADLARD & SON and WEST NEWMAN have arranged to do the binding, with cut and sprinkled edges, at a cost of 1s. 9d. or carriage paid 2s.—cover included.

St. Bartholomew's Hospital



"Æquam memento rebus in arduis
Servare mentem."

—Horace, Book ii, Ode iii.

JOURNAL.

VOL. XXIV.—No. 5.]

FEBRUARY 1ST, 1917.

[PRICE SIXPENCE.

CALENDAR.

- Fri., Feb. 2.—Dr. Calvert and Mr. Waring on duty.
Minor Operations. Mr. Eccles' dressers.
Clinical Lecture (Medicine) Dr. Fletcher.
- Tues., „ 6.—Dr. Morley Fletcher on duty.
- Wed., „ 7.—Clinical Lecture (Surgery) Mr. Wilson.
- Fri., „ 9.—Dr. Drysdale and Mr. McAdam Eccles on duty.
Minor Operations. Mr. Bailey's dressers.
Clinical Lecture (Medicine) Dr. Calvert.
- Tues., „ 13.—Dr. Hartley on duty.
- Wed., „ 14.—Clinical Lecture (Surgery) Mr. Wilson.
- Fri., „ 16.—Dr. Horder and Mr. Bailey on duty.
Minor Operations. Mr. Wilson's dressers.
Clinical Lecture (Medicine) Dr. Hartley.
- Tues., „ 20.—Dr. Calvert on duty.
- Wed., „ 21.—Clinical Lecture (Surgery) Mr. Wilson.
- Fri., „ 23.—Dr. Morley Fletcher and Mr. Wilson on duty.
Minor Operations. Mr. Waring's dressers.
Clinical Lecture (Medicine) Dr. Horder.
- Tues., „ 27.—Dr. Drysdale on duty.
- Wed., „ 28.—Clinical Lecture (Surgery) Mr. Bailey.
- Thurs., Mar. 1.—Hichens' Prize.
Applications for Luther Holden Scholarship to be sent in.
- Fri., „ 2.—Dr. Hartley and Mr. Waring on duty.
Minor Operations. Mr. Eccles' dressers.
Clinical Lecture (Medicine) Dr. Fletcher.
- Tues., „ 6.—Dr. Horder on duty.
Clinical Lecture (Surgery) Mr. Bailey.

EDITORIAL NOTES.

THE following resolution was adopted at a General Court of the Governors of the Hospital on January 25th:

“That the Governors of St. Bartholomew's Hospital, in General Court assembled, hereby tender their cordial and sincere congratulations to the Right Hon. Viscount Sandhurst, P.C., G.C.S.I., G.C.I.E., G.C.V.O., Treasurer of the Hospital, upon his elevation to the dignity of a Viscount of the United Kingdom.

“The Governors desire to express to Lord Sandhurst their appreciation of his whole-hearted devotion to the interests of the Hospital; they recognise that the complete unanimity which, during his Treasurership, has characterised their deliberations has been due to his business ability and to his courteous and genial character.”

* * *

We learn that Colonel Gordon Watson, C.M.G., A.M.S., was married to Miss Teevan, the eldest daughter of the late Charles James Teevan, on February 1st, 1917. We extend our heartiest congratulations and best wishes to Colonel Gordon Watson.

* * *

We have to give our congratulations to Dr. Stansfeld, who has been appointed Physician to the Metropolitan Hospital. This notice should have appeared in an earlier issue, and we must apologise for its previous omission.

* * *

We extend our sincere congratulations to the following, who have received the Military Cross:

Capt. H. E. P. Yorke, R.A.M.C., who “displayed great courage and determination in tending the wounded under very heavy fire. Later, himself wounded, he continued to carry out this work.”

Temp. Capt. Rupert Farrant, R.A.M.C. “During the whole day he tended wounded in an open trench which was subjected to a violent bombardment. On one occasion he led a party into ‘No Man's Land’ and brought in several wounded men.”

Lt. Daniel Davies Evans, R.A.M.C., who “displayed great courage and determination in collecting and attending to the wounded under very heavy fire.”

Temp. Surgeon Geoffrey Sparrow, R.N. (attd. R.N.D). “He displayed great courage and determination collecting and attending to the wounded under very heavy fire.”

* * *

We have to congratulate Surgeon Hother McCormack Hanschell, R.N., who has received the Distinguished

Service Cross, in recognition of his services in connection with the Tanganyika Flotilla. The comparative immunity from sickness enjoyed by the members of the expedition was due to the unremitting care bestowed by him on the health of the personnel and on the sanitary state of the camps and vessels.

* * *

Dr. Robert Armstrong-Jones has been appointed to be Consulting Physician in Mental Diseases to the London Command, with the honorary rank of Major in the R.A.M.C. We congratulate him upon this well-deserved honour, with which his skill and eminence have been recognised.

* * *

The following gentlemen have been nominated as Resident Medical Officers, commencing February 1st, 1917:

House Physicians.—

Dr. Calvert	L. P. L. Firman-Edwards
Dr. Fletcher	K. N. G. Bailey
Dr. Drysdale	G. H. Rossdale
Dr. Hartley	P. O. Ellison
Dr. Horder	G. Verniquet

House Surgeons.—

Mr. Waring	H. E. Griffiths
Mr. Eccles	C. W. B. Littlejohn
Mr. Bailey	J. P. Ross
Mr. Wilson	E. M. Atkinson

Extern Midwifery Assistant

G. F. Cooke

Medical Receiving Room Officers

}	H. A. C. Langton
	E. R. Longstaff

Surgical Receiving Room Officers

}	P. Bousfield
	A. R. Dingley

Ophthalmic House Surgeon

C. J. L. Blair

*House Surgeon to Throat, Nose and**Ear Department* A. Morford

* * *

The Dean desires us to acknowledge the receipt of a small oil painting, "The Anatomy Lesson" after Rembrandt, which has been presented by "An Old Bart.'s Man." The picture has been handed to the Secretary of the Students' Union and will be placed in the Abernethian Room in due course, so that it may be seen by all students.

FROM THE FRONT.

EXTRACTS FROM A LETTER FROM CAPT. ANTHONY FEILING, R.A.M.C.

No. 2 BRITISH GENERAL HOSPITAL, MESOPOTAMIA,
November 25th, 1916.

IVE heard no news from Bart.'s for ages. . . . Well, here I am, still in —, and likely to remain, as far as one can see, for any period of time! For I have signed on again here for a second year's service; if lucky, I may get an exchange to India before next hot season, but it's all quite uncertain; I am not particularly keen on a second summer here, though, of

course, it won't be so bad as last one was, for I can't feel the least bit optimistic about an early end to the war. You will be amused to hear that I have become a "Specialist in Bacteriology"! Rs. 60 a month extra pay, and a funny little laboratory of my own, like an overgrown rabbit-hutch, placed in the courtyard of an Arab house. So I am finding my experience in the pathological laboratory at Bart.'s very useful; the work is, of course, dull and routine, but no worse than the wards! And I always contrive to get called in to see all the interesting cases; besides one gets off all the tiresome duties of being orderly officer, etc., and is very much more one's own master, so that on the whole I am quite pleased. No neurology, unfortunately, lately. Since being appointed I have, amongst other work, done 350 Widals for T.A.B. and nearly 700 blood-films for malaria! So I think I've earned my pay! We've started a medical society here, and have had some good meetings; one Batt and myself treated to a paper on paratyphoid, which we think of publishing, perhaps. Batt is very well, and a great companion to me. Nicoll left for home two days ago, rather seedy, too. Our late C.O. was one Col. Gill, an old Bart.'s man, went down in the "Arabia," but was rescued; the "Arabia" was also responsible for the loss of one of our mails homeward bound. Life here isn't really bad now; the climate for the time being is delightful, and will continue so, I expect, till the rains come. Do you know we haven't had rain since April? I have moved into a room in an Arab house, in the same building as my laboratory, and find it a good deal more comfortable than a tent. I have also acquired an Indian servant, and live really quite luxuriously. But it's all very *boring!* Nothing doing in the way of military activity. Batt and I bought a bellum—one of the native canoes—and have taken exercise therein on the Tigris, which has been quite good fun; but the ship is now leaking badly, and we have to plaster her sides carefully with mud before embarking. I hear that a whole lot of Bart.'s men came out with Bruce Porter and the 40th General. Hamill is rumoured to be sick and to have left for India; Charles is, I believe, running an X-ray show somewhere, and I have heard nothing of old Willett. We have just been visited by a sort of travelling troupe of scientists: Ledingham of the Lister Institute, Wenyon of *fæces* fame, Balfour from Khartoum, and Buchanan of the L.G.B.—a most weird assortment, but all good and very agreeable men! I have been trying to learn from Wenyon something about the protozoa of the human intestine, but it's a most appalling subject, and I was never enamoured of stool examinations! . . . I think I shall start again when I get home as an expert in tropical medicine! But I shall be old and *quite* bald by that time.


Well, remember me to all my friends at Bart.'s.

Yours truly,

ANTHONY FEILING.

SOME EXPERIENCES IN GERMANY IN 1914-15.

By Captain A. SCOTT-WILLIAMS, D.S.O., R.A.M.C.

N August 27th, 1914, the Germans took possession of a village, in the church of which I was present with wounded. The next day we were moved to another village, where the church was used as an aid post of the Germans. The ground surrounding the church was used as a latrine with no sort of sanitary supervision whatever. This primitive state of sanitary requirements is typical of German notions. In the prisoners' lagers an open cement pit was used—flies and stench flourished. While here milch cows were slaughtered and we partook of them. Here I obtained drugs and dressings for the British of whom I was left in medical charge, probably because the German medicoes had their time fully occupied by their own wounded.

A week later we were moved to Cambrai, the men were crammed in a waiting-room for the night; the next day we started a journey of about fifty-four hours, the men in goods waggons, from which they were generally refused permission to alight for any purpose. The German Red Cross had free refreshment bars at all the halts, but the British generally got nothing, chiefly on account of the hostility of the German woman. Eventually we landed at a beer-garden-restaurant which was taken over to be a hospital. I was allowed to do nothing. A nursing sister gave anæsthetics here. It was here that I sent a post-card home which caused my people to drop mourning for me, as I had been officially reported dead. Ten days later two officers and I and nineteen men left for Munster internment camp, but we three officers went on to Magdeburg, whence we journeyed on to Halle a/s, after two days' travelling. This was an officers' camp. A factory had been cleared of its machinery, and we occupied the boards, on which loose straw had been put. The washing arrangements consisted of hand-bowls; to get a bath I used two basins on the ground with a foot in each, and so carried on. A month later I was transferred to Torgau. The French had undertaken the cooking here, and did well with what was provided. We could buy ham, sausages, and cheese at the canteen. This was the best officers' camp I was in. There was a large field in which we had football, Swedish drill, etc. France v. England was a favourite match.

Two months later another move took place. It seemed as if we moved about to impress the populace with the number of British prisoners that were supposed to be taken. They were evidently disappointed when they learnt we were not newly arrived in their country. This time found me in Magdeburg. Here it was that the Hun tried to get possession of all valuables above 15 marks

value. I succeeded in keeping my watch and ring and money, as the doctors claimed they were not prisoners of war, so the ten of us were put on one side. An unteroffizier was ordered to search us, but he did not like the job, and made the merest pretence of a search, with the request that we would not give him away. Chocolate and tobacco sent us from home were forfeited; we were supposed to be consoled by being told it was given to the German Red Cross. However, a change of command took place and the robbery was stopped; rumour had it that the new commandant's son was a prisoner in England. During the period that we were forbidden to smoke, we could, nevertheless, buy cigars and cigarettes from the Germans. Provided one smoked only in the barrack-room and put one's pipe, etc., out of sight on the entry of a German, nothing was said. French, Belgian, Russian, or English were mixed together in the different rooms. The Germans hoped that the Allies would not get on together. Here I filled up the time by re-learning German by reading the *Berliner Tageblatt*, by giving English lessons and receiving French lessons, and walking round and round the small yard. There was no space for games.

This ended my seven months odd in officers' lagers, during which I did no medical work at all. The last five months were spent at Gardelegen at a men's camp, where typhus had scared German doctors, officers, and guard out of the camp. The cultured Hun was so scared that we were even not allowed to write letters, for fear the louse would get past the barbed-wire enclosure.

Whatever came into the camp had to remain; the men scored as regards parcels that were wrongly delivered, as they used the contents. Parcels and letters were delivered satisfactorily here; the parcels were censored in view of the owner, and nothing but contraband was taken away. The men's food was awful; it looked like pigs'-wash. Soup often contained meat that was bad. The Russians used to forage for decayed potatoes and herring-heads that the French and English had thrown away. It was at this camp I saw a Highlander wearing trousers and kilt. It appears the Germans tried to make them give up the kilt, and, on refusal, they were made to wear both.

During the time that typhus went on in the camp everyone carried on as they chose, so that the absence of the German from the camp was not a matter of grievance. Football was played between the huts, and many window-panes disappeared; a boxing match was arranged between an Englishman and a Frenchman, the former was knocked-out early in the second round; we intended to put up another Englishman to take on the victor, but the German Commandant had the English doctors on the mat, and forbade boxing as being inhumane. Every evening the main road through the camp was crammed by the Allies. This road went by the name of Petticoat Lane. Roulette tables, etc., hawkers, bands, etc., abounded. The Russians made

bags out of the towels, shoes out of paillasse covers and blankets; others sold cigarettes, tea, and coffee. At the same time French music swelled forth. The French made their own violins and 'celloes. Every sort of trade and profession was represented in camp, and the output was interesting. A well-known French clown got up excellent performances. Money from concerts, etc., went towards buying milk and eggs for typhus patients.

Some empty barrack-rooms were fitted up with a stage and scenery, but all this disappeared immediately the Germans returned inside the camp. For this reason there were regrets that the typhus came to an end, as all freedom also ceased. Headmasters' conferences talk a lot about Latin and Greek. A knowledge of German and French is of practical use in easing misunderstandings on the Continent. Some of the Russians were ready to converse in Latin, but there was no response. A lot of irritation could be avoided were Frenchmen, Germans, and English able to understand one another without interpreters; besides, one cannot get prohibited goods, such as alcohol, so easily unless one can "sling the *bât*" without the intervention of a third party.

A NOTE ON CHARLES DICKENS AND THE DOCTORS.

By W. H. MAIDLOW, M.D., F.R.C.S.

EXPECT "H.L.S." is more concerned to give examples of his types of fiction doctors in the works of Charles Dickens than to exhaust the list of them. The list of Dickensian doctors may be considerably increased, and I venture to add some in case it may be of interest.

In *Pickwick* there is Dr. Payne; in *Little Dorrit*, Chap. XXI, one who was among the "evening magnates" at Harley Street. He describes Mr. Merdle's constitution as that of a rhinoceros, "with the digestion of an ostrich, and the concentration of an oyster." In *Martin Chuzzlewit* there is the menial Dr. Jobling; and no description, I think, of Dickensian doctors is complete without the snob, Dr. Parker Peps, in *Dombey and Son*.

Besides Allan Woodcourt, to make amends, Dickens gives us Dr. Losberne in *Oliver Twist*, who was fat "more from good humour than from good feeding"; Manette, in the *Tale of Two Cities*, in which work, by the way, written in 1859, is the early use of an anæsthetic in fiction; and Dr. Jeddler, the father of Grace and Marion, in the *Battle of Life*—a great philosopher, the heart and mystery of whose philosophy was to look upon the world as a gigantic practical joke. Dr. Marigold is a cheapjack, who is hailed as a fellow M.D. by a nice country doctor. Lastly, in *Nicholas Nickleby*, we have Drs. Lumbey and Snuffim.

There are, in various less-known works, apothecaries and incidental doctors. In *American Notes* there is quite an amusing group, consisting of Drs. Torrell, Crocus, Howe, Bell Knight, and Kutankumagen. How reminiscent of a local branch of the B.M.A.!

But it seems to me that Dickens knew very little of medical men compared with his knowledge of lawyers such as he presents in Tulkinghorn, Kenge, or Vholes. The best of them, such as Woodcourt, Losberne, Manette, or Jeddler, might not have been doctors at all as regards their influence on the stories, apart perhaps from their right of entry into various homes. Losberne, perhaps, did some sort of medical good to Oliver, but the others did very little, if any, medical treatment. The portrayal of the medical students is, however, another matter; these he might have been at their not infrequent appearances in the police-courts. Dickens, however, with his proclivity to caricature, must have intentionally exaggerated some tendency or trait in the doctors he came across. It does not follow he regarded the class with such hostility as did Molière. He had a great friend in his medical attendant, Dr. Beard, of Welbeck Street, who attended him at his final apoplexy. I often think the tangle of *Edwin Drood* had something to do with this attack. I know when I try to solve it I get dangerously excited!

The study of great writers' doctors is an interesting and delightful medical hobby, and, as we rise from the investigation, we are apt to have a fuller knowledge of the author and our profession as existing at the time of the book. But, alas! the work has nearly always been done before us, and I believe *Dickens' Doctors* has been tackled pretty thoroughly by Dr. John Chalmers Da Costa in 1905. A commentator on this book, which I have not in my library, adds: "We may comfort ourselves with the reflection that the satirist lets the doctors off lightly in comparison with the lawyers."

Another doctor in *Battle of Life* is Alfred Heathfield, Jeddler's son-in-law. He was happy in a country practice among the poor.

A NOTE ON THE MEDICAL CLASSIFICATION OF RECRUITS.

By TEMP. CAPT. EDGAR WILLETT, R.A.M.C.

AT about the middle of last May the War Office authorities rather suddenly added to the ordinary duties of the work connected with the Division II War Hospital, Croydon, that of the inspection and examination of recruits and men called up under the Derby Scheme. No special instructions were issued, but candidates had to be examined, and classified according to

the different categories, in numbers of about 300 a week, and I am informed by the clerk-orderly that up to the end of 1916 something like 8000 men were examined. The work was more difficult than the usual examination of recruits for general service, as instructions were given that all men who could be classified into any of the seven possible categories were to be accepted, and in a great many cases it was exceedingly difficult to decide to which class a man should properly be assigned. Classes B₃ and C₃ quickly became so full that intimation was received that no additional cases should be accepted for these classes, such assignment being equivalent to rejection; these instructions were modified later on. Out of the 8000 cases referred to above, I am informed that about 7000 came under my personal examination for reference to their respective classes, and it is perhaps a satisfaction to state that very few (certainly not more than '01 per cent.) came back for further re-examination. A great deal of the "spade work" in filling up the medical history sheet was done first by the clerk-orderlies, viz., as far as 1-6, while 7-11 was undertaken by a junior medical officer; the actual examination of teeth, heart, lungs, abdomen for hernia or previous operations, and legs for varicose veins, etc., then devolved on me to make the final decision into which category the individual should be placed.

Without a doubt the large majority of men examined wished to escape service if possible, pleading business or some slight defect, which they usually magnified; a very large number had already previously been examined on attestation or had appealed to the local tribunal.

The work was not entirely without its humorous side, as the following two letters which I received will show:

I.

"Dear Sir,—As regards K. M. H—, an employee of — bakery, a roundsman, regular food and discipline would improve his general health, which has been neglected by self-indulgence. Having been a great source of worry to his relations, it is their wish that you should pass him."

Unfortunately for the relations, this man was 40 years of age and was found to be suffering from bad varicose veins of the legs; he was quite unfit for service and was rejected.

II.

"From Mrs. B—,

"X— Road, Croydon.

"Dear Sir,—I have now taken the trouble to write to you to ask you if you will help me; my husband is coming to you at 1.30 on Thursday to be examined pending going into the Army; as my life is almost unbearable with him at home, I hope you will do your best to get him in for me, as I am sure he is only saying he is not fit because he is afraid to join up: I have six children, and if he is not

passed I shall have to break up my home as I cannot bear it much longer. He does not knock me about, but his vile tongue (*sic*) is worse than the cat-and-nine-tails, so I pray God you will do your best for me, as he thinks by his coming down to you he will get out of it, but he has got brothers in the Army, so I think if they are fit, so is he. Do not let him know I have sent this to you, as he would not be fit to be at large if he knew, as he has got a murderous temper. Once more asking your kind help, I remain an hearted (?) woman, willing to do any thing for my country.

"I remain, your obedient servant,

"Mrs. B—"

This letter reached me when I happened to be particularly busy, and when the particular Thursday came I quite forgot to be on the lookout for Mr. B—, and am therefore unable to say whether he was passed for general service, into any other class, or whether he was rejected.

On one occasion I received an unsolicited testimonial. Towards the close of a busy afternoon one of the recruits (I think a bank clerk) came back to me and said: "I should like to say, Sir, how much I have been struck with the way in which this examination has been conducted: everybody has been so polite, quite different from what I expected."

THE DAWN OF MEMORY.

REMINISCENCES OF MY THIRD YEAR.

By LEONARD PORTAL MARK, M.D.(Durham).

"These are begot in the ventricle of memory, nourished in the womb of *pia-mater*, and delivered upon the mellowing of occasion."
—*Love's Labour's Lost*.



It is interesting to see how far memory will carry us back into the past, to note if we can remember our earliest sensations, the order in which they seem to have appeared, how some of them, fixed in our memory at its dawn, have remained there for years, to form part of our nature—a link with the past.

The various senses play a conspicuous part in connection with the earliest facts which we remember and these can be roughly grouped under vision, hearing and language, taste and smell, the sense of motion and locality, the appreciation of passing events.

Dr. Robert Armstrong-Jones in his interesting address before the Abernethian Society "On Dreams and their Interpretation" points out that 60 per cent. of dreams relate to sight, whilst only 5 per cent. relate to the sense of hearing, 3 per cent. to taste, and 1.5 per cent. to smell. I

believe that very similar percentages, if they could be obtained, would hold good as regards the memory of early events. The earliest and the most vivid are those connected with vision. Then come others, fewer in number and later in date connected with hearing and language. Sensations of taste and smell become fixed in the memory much later and some of the last seem to be those of motion and locality. Such an order certainly applies to the various impressions produced in my early childhood and retained since in my memory.

I had an exceptional opportunity of fixing the dates of some of these very early impressions, as at the age of three years I was taken on a voyage to America, and the ten months spent there were an eventful time in the family's history. My father went to South America soon after my birth and only came back to England and rejoined my mother after two years, just when I was about old enough to "know my own father." But I have never been able to remember anything of such a great event as his return nor any first impressions of him. Nor can I remember anything of my life in England before that or of the journey to Baltimore. But after my arrival there my memory seems to have blossomed out almost suddenly as is proved by the series of facts connected with that period. It is of interest that this first group of "trivial fond records" which I have not wiped away from the table of my memory, are all connected with

THE SENSE OF VISION.

I will enumerate some facts remembered about the hotel at Baltimore where we lived for ten months.

I have visions of a big staircase and long corridors, and of an immense room that I peeped into one day. It was the dining-room where all the guests were assembled and stood up while grace was being said. They all seemed such tall people.

My two brothers and I were given a small white kitten to play with, which always put its front paws into the saucer when given any milk.

At the end of the garden behind the hotel, where we used to play, there was a well being sunk. I remember the ladders, and the earth brought up by the workmen.

My sister was born at the hotel. I was taken into a room and saw her lying across the foot of a bed, wrapped in a grey shawl. I remember nothing more of my introduction to my sister, when I was three years and two months old. I have sometimes wondered if that vision was fixed in my memory by the help of the grey shawl, which cropped up many times during the family peregrinations, also by the periodical recurrence of the anniversary (1st of April), which was religiously kept in the nursery days, and helped to preserve it as one of the "evergreens of one's memory."

I was taken with my brothers to my sister's christening. I remember nothing of the ceremony, and of the church the only vision retained is that of a square box with lofty sides too high to see over, in which we were placed and made to kneel down before a seat with cushions. We amused ourselves all the while pulling at the buttons of the cushions, a game at which I was at a disadvantage, being the smallest, and the cushions being on a level with my chin.

My father, who went to Baltimore as Her Majesty's Consul, never settled down there or took a house, as he was very shortly promoted to the consulate of Marseilles. Some notes in his diary, kept on the journey home, mention two occasions which seem to have left traces on my memory. We stopped two days at Niagara, where it rained most of the time, but we were able to "see the Falls in a momentary glimpse of sunshine" just before leaving. I have a very vague recollection of huge masses of vapour reaching up to the clouds, something confused and terrifying, something of another world "enshrined in preternatural mist." I have a distinct recollection of the wooden parapet on the bridge or pier where we stood to see the view. This left an impression because in a fit of naughtiness I threw over it one of the arrows belonging to the bow my eldest brother had been given.

After that I have visions of some immense walls, something titanic, on the top of a hill. There were red-coated soldiers about and a flagstaff. I was lifted up and made to look over a parapet at the view, and this produced a feeling of vastness and awe which I retained. This must have been the citadel of Quebec.

We embarked at Quebec for Liverpool in the propeller "Anglo-Saxon," the earliest screw steamer which my father travelled in after crossing the Atlantic ten times in paddle boats.

On the journey to England I used to share a bunk with one of my brothers, one of us being put at each end, so that our feet met in the middle of the bed. A cot was rigged up by the carpenter against the side of the cabin to hold the baby. Of course, I never realised at the time what a narrow escape we all had from shipwreck one evening when the ship bumped against an iceberg. My father, who was on deck at the time, often spoke of it afterwards.

We stopped a few weeks in London. Our new nurse, Elizabeth, joined the family and became the darling of us children for the next ten years. I have no first impressions of her coming, and the only fact that I can remember about that time in London was when she took me out for a walk and we stopped in front of a very large building in a huge open space. There were many soldiers walking about; it may have been the Wellington Barracks. Two soldiers stopped to speak to my nurse and one of them, a drummer, bent down and spoke to me. The braid on his tunic made

a vivid impression. The date of this vision of soldiers is easy to fix, as we started in a few days for France and I had no opportunity of seeing any English soldiers for the next three years.

(To be continued.)

REVIEWS.

THE BRITISH JOURNAL OF OPHTHALMOLOGY. (Geo. Pulman & Sons). Issued monthly. Single copies, 4s. net. Annual subscription, 31s. 6d. post free.

This new periodical comes into existence through the union of three other well-known periodicals: *The Reports of the Royal London Ophthalmic Hospital*, *The Ophthalmic Review*, and *The Ophthalmoscope*.

This Journal is the property of a limited liability company, the declared object of which is to further the study of ophthalmology rather than to earn large dividends. The literary conduct of the journal is in the experienced hands of Mr. Sydney Stephenson as editor, and Mr. Erskine Henderson as sub-editor. The prime mover of this new development has been Mr. W. H. H. Jessop, who considered that the time was opportune for this unification, and who with the assistance of the owners of the separate periodicals has succeeded admirably in seizing the opportunity.

The contents are for the most part divided into two classes: Communications and abstracts, while book notes and sundry notes find a place at the end. Without a doubt every ophthalmologist will read this periodical as a matter of course, and we wish it and its promoters the success which is deserved in taking a leading place in the world's literature of ophthalmology.

LIGATIONS AND AMPUTATIONS. By A. BROCA, translated by E. WARD. (John Wright & Sons, Ltd.) Pp. 285, with 510 illustrations. Price, 8s. 6d. net.

This little work has been translated in the hope that it may prove useful to English-speaking students of medicine as well as to French, and of interest to others who have been compelled by the War to turn their attention very largely to these types of operation.

Professor Broca believes that far from advancing, some of the guiding principles in performing amputations have been lost sight of in recent years, and he emphasises their importance and adds information he has gathered from his War experiences.

The descriptions are given in careful detail which is of great advantage to the inexperienced, as it is often the little points which take the longest to discover. Naturally there are differences in the teaching of the two countries, but the translator has simply translated the book as it is written.

The illustrations are excellent, and the work should prove not only interesting but of great value to those who by force of circumstances are now more especially interested in War surgery.

GERMAN SYNTHETICS NOW BRITISH.

Since the war began the general practitioner has had a useful opportunity of seeing to what extent he can do without the multitude of German synthetics which were formerly thrust upon his notice. It is true that, for the more popular ones, substitutes have been provided by British manufacturers, who are at any rate to be congratulated on their patriotic enterprise, and some of them have achieved a quite surprising degree of success, considering the difficulties they have had to face. At the worst, these may be regarded as hopeful auguries for the future of synthetic chemistry in this country.

On the other hand, it has been found that many of the much-

vaunted German proprietaries—though ingenious enough from a pharmaceutical standpoint—are by no means essential; some indeed are quite superfluous luxuries which might well be dispensed with in the future, since their main recommendation is that they save the trouble of prescription-writing.

There are, however, a few honourable exceptions, and most clinicians will give a prominent place amongst them to the Sanatogen group of chemical compounds, including Formamint, Albulactin, and Cystopurin, which have lately been acquired by a British syndicate of high standing.

Concerning Sanatogen and Formamint little need be said here; their therapeutic properties are thoroughly well established, and their clinical record, covering more than a decade, may be left to speak for itself. But the more recent products, Albulactin and Cystopurin, are of fresher interest, and make special demands on our attention as representing new advances in their respective spheres.

Albulactin, in particular, merits investigation at the hands of those concerned with the problem of artificial infant-feeding.

According to an interesting article in the *Lancet* before the war, "milk modification by means of Albulactin is preferable to and more reliable than all other plans. It gives a sense of security which is otherwise only felt when breast-feeding is employed." In the analytical columns of the same journal, it is pointed out that Albulactin "represents the proteid which predominates in human milk." It is in fact simply pure soluble lacalbumin, which is now held to be largely responsible for the unique nutritive power and easy digestibility of human milk. Albulactin must not therefore be classed amongst the ordinary "artificial" infant foods; even those who condemn such foods, root and branch, have found it of marked value.

In Cystopurin we have a product more limited in its scope, and perhaps less original in its conception, than the other preparations mentioned, but one of equally superior efficacy when judged by the standard of clinical results.

Cystopurin is described as "a double salt of Hexamethylene-tetramine and Sodium Acetate with water of crystallisation," and there is abundant evidence of its value in bacterial affections of the urinary tract, especially in cystitis and gonorrhœa. Its action is both diuretic and sedative, giving adequate relief without any unpleasant symptoms such as gastric trouble, renal irritation, or offensive odour in the breath. Last year, we are informed, it was employed with great benefit amongst British troops who had returned from German South-West Africa suffering from obscure urinary trouble due to excessive perspiration and the lack of good drinking water.

EXAMINATIONS, ETC.

UNIVERSITY OF OXFORD.

Second M.B. Examination.—December, 1916.

Materia Medica and Pharmacology.—K. A. I. Mackenzie, G. H. Rosedale.

Pathology.—J. J. Savage, G. K. Stone.

Forensic Medicine and Public Health.—K. A. I. Mackenzie.

Medicine, Surgery and Midwifery.—K. A. I. Mackenzie, G. H. Rosedale.

UNIVERSITY OF CAMBRIDGE.

Second M.B. Examination.—October, 1916.

Part II. *Pharmacology and General Pathology*.—B. W. Thompson.

Second M.B. Examination.—December, 1916.

Part I. *Human Anatomy and Physiology*.—J. V. Sparks, F. C. Cozens, S. G. Galstaun.

Third M.B. Examination.—December, 1916.

Part I. *Surgery and Midwifery*.—D. J. Batterham.

Part II. *Medicine, Pathology, and Pharmacology*.—A. Orr-Ewing.

At a Congregation held at Cambridge on January 19th, the following degree was conferred:

M.B., B.C.—A. Orr-Ewing.

UNIVERSITY OF LONDON.

*Second Examination for Medical Degrees.—December, 1916.**Part I.—E. Gallop.*

CONJOINT BOARD.

*First Examination.—January, 1917.**Part I. Chemistry.—B. Goldfoot.**Part II. Physics.—B. Goldfoot.**Part IV. Practical Pharmacy.—S. E. D. A. El Daab, S. L. Higgs, S. W. Page, R. I. Rhys, W. S. Tunbridge.**Second Examination.—January, 1917.**Anatomy and Physiology.—R. W. P. Hosford, H. J. Levy, J. L. C. O'Flynn, C. Shaw, L. A. Simiaka.*

APPOINTMENTS.

- BHAT, K. S., M.R.C.S., L.R.C.P., appointed R.M.O., East London Hospital for Children, Shadwell.
 PENNEFATHER, C. M., M.B., B.S.(Durh.), appointed District Medical Officer of the Hendon Union.
 ROBERTS, C. H., M.D.(Lond.), F.R.C.S., F.R.C.P., appointed to the Staff of Lady Howard de Walden's Maternity Home for Officers' Wives, 35, Albert Road, N.W.
 STANSFELD, A. E., M.D.(Cantab.), M.R.C.P., appointed Physician to the Metropolitan Hospital.

NEW ADDRESSES.

- BHAT, K. S., East London Hospital for Children, Shadwell.
 CAMPBELL, F. W., Capt., R.A.M.C., Lucknow Cavalry Field Ambulance, B.E.F.
 CAZALY, W. H., Major, R.A.M.C., Lucknow Cavalry Field Ambulance, B.E.F.
 DANNATT, R. M., Surgeon, R.N., H.M.S. "Venus," c/o G.P.O., E.C.
 DOWSING, H. L., 275, Beverley Road, Hull.
 IRELAND.—A. E., 9, Brunswick Mansions, Brunswick Square, W.C.
 JAMESON, R. W., 422, Buxton Road, Stockport.
 JOYNT, I. W., Officers' Mess, 3rd London General Hospital, Wandsworth, S.W.
 TURNER, P. E., 49, Disraeli Road, Putney, S.W.

BIRTHS.

- ARCHER.—On January 23rd, to Ada Caroline, wife of Charles W. Archer, Temporary Surgeon, R.N., of 2, Monckton Road, Alverstoke, Hants—twin daughters.
 BARROW.—On January 4th, at Bishopton, Lochgilphead, Argyll, the wife of Surgeon Murray Barrow, R.N., of a son.
 LOUGHBOROUGH.—On December 15th, at "Clan Conal," Lee-on-the-Solent, the wife of W. G. Loughborough, of a son.
 TATCHELL.—On December 29th, at 29, Barkston Gardens, S.W., the wife of Percy Tatchell, of a daughter.
 YOUNG.—On January 10th, at 2, Inverness Gardens, Kensington, the wife of Captain (Temporary) F. P. Young, R.A.M.C., of a daughter.

MARRIAGES.

- BURD—WALKER.—On January 8th, at All Saints', Bournemouth E., by the Rev. A. P. Annand, Lycett Burd, M.D.(Cantab.), to Elizabeth, daughter of the late E. V. Walker, Dewsbury.

GORDON—POWER.—On December 27th, in London, Hon. Lieut.-Col. Mervyn Henry Gordon, M.D., R.A.M.C., son of the late Canon H. D. Gordon, of Harting, Sussex, to Mildred Olive, daughter of the late Sir William Power, K.C.B., F.R.S.

OKELL—ROBERTS.—On January 2nd, at Holy Trinity Church, Stratford-on-Avon, Captain Charles Cyril Okell, M.C., R.A.M.C., elder son of Charles Percy Okell, Esq., Titchfield Terrace, Regent's Park, to Dorothy Gladys, youngest daughter of the late W. Owen Roberts, Esq., Pulrose House, Isle of Man.

RADLEY—CLAYTON-SMITH.—On November 30th, at St. Thomas's Cathedral, Bombay, Captain S. B. Radley, F.R.C.S., R.A.M.C., to Gladys, daughter of W. E. Clayton-Smith, of Pontefract.

SMYTHE—WOOD.—On January 16th, at the Parish Church, Clifton, by the Rev. D. Lee Pitcairn, M.A., Gerald Arthur Smythe, Captain, R.A.M.C., son of the late Mr. and Mrs. A. W. Smythe, of Southsea, Hants, and grandson of the late Arthur Smythe, M.D., of Pau, France, to Sarella Mary Mackenzie, third daughter of Mr. and Mrs. Robert Ley Wood, of Clifton.

SPENCE—STEVENS.—On December 29th, at St. Marylebone Church, by the Rector, the Rev. Dr. Morrison, Douglas Leigh Spence, Lieut., R.A.M.C., elder son of the late Dr. W. J. Spence, Bedford, and Mrs. Spence, New Cavendish Street, W., to Florence Mabel, third daughter of Mr. and Mrs. T. W. Stevens, Grove Road, Leighton Buzzard.

WATSON—TEEVAN.—On February 1st, at St. James's, Spanish Place, Colonel C. Gordon Watson, C.M.G., to Geraldine Teevan, daughter of the late Charles James Teevan.

DEATHS.

ALLEN.—On December 27th, at his residence, 13, Fairfax Road, South Hampstead, John William Allen, M.R.C.S., aged 83.

BEARD.—On December 23rd, Charles Izard Beard, M.B.(Cantab.), aged 89.

HENDLEY.—On February 2nd, at his residence, 4, Loudoun Road, N.W., Col. Thomas Holbein Hendley, I.M.S., Rt., C.I.E., aged 69.

HUGHES.—On December 18th, 1916, in Northern Assam, from cerebral malaria, David E. J. S. Hughes, M.R.C.S., L.R.C.P., only son of the late Rev. David Meates Hughes, Rector of Clyst Hydon, Devon, and of Mrs. Hughes, Wotton Lodge Nursing Home, Gloucester, aged 30.

SALTER.—On December 21st, at 2, Higher Summerlands, Exeter, John Reynolds Salter, M.R.C.S., L.S.A., aged 90.

TAYLOR.—On January 18th, 1917, at 13, Higher Broadway, Exmouth, Herbert Paget Tayler, M.B., (Cantab.), aged 59.

ACKNOWLEDGMENTS.

British Journal of Nursing, The Nursing Times, Guy's Hospital Gazette, Magazine of the London (Royal Free Hospital) School of Medicine for Women, St. Mary's Hospital Gazette, Annual Report of the Prince Alfred Hospital, Sydney, New York State Journal of Medicine, The Liverpool Medico-Chirurgical Journal, Long Island Medical Journal.

NOTICE.

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

The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER, W. E. SARGANT, M.R.C.S., at the Hospital.

All communications, financial, or otherwise, relative to Advertisements ONLY, should be addressed to ADVERTISEMENT MANAGER, the Journal Office, St. Bartholomew's Hospital, E.C. Telephone: City 510.

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St. Bartholomew's Hospital



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

JOURNAL.

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MARCH 1ST, 1917.

[PRICE SIXPENCE.]

CALENDAR.

- Thurs., Mar. 1.—Hichens Prize.
Applications for Luther Holden Scholarship to be sent in.
- Fri., " 2.—Dr. Hartley and Mr. Waring on duty.
Minor Operations. Mr. Eccles' dressers.
Clinical Lecture (Medicine) Dr. Fletcher.
- Tues., " 6.—Dr. Horder on duty.
- Wed., " 7.—Clinical Lecture (Surgery) Mr. Bailey.
- Fri., " 9.—Dr. Calvert and Mr. McAdam Eccles on duty.
Minor Operations. Mr. Bailey's dressers.
Clinical Lecture (Medicine) Dr. Calvert.
- Mon., " 12.—Kirke's Scholarship and Gold Medal.
- Tues., " 13.—Harvey Prize.
Junior Practical Anatomy.
Dr. Morley Fletcher on duty.
- Wed., " 14.—Senior Practical Anatomy.
Clinical Lecture (Surgery) Mr. Baily.
- Thurs., " 15.—Senior Scholarships.
Junior Scholarships.
- Fri., " 16.—Dr. Drysdale and Mr. Bailey on duty.
Minor Operations. Mr. Wilson's dressers.
Clinical Lecture (Medicine) Dr. Hartley.
- Mon., " 19.—Second Examination for Medical Degrees (London), Part II, begins.
- Tues., " 20.—Dr. Hartley on duty.
- Thurs., " 22.—Second Examination for Medical Degrees (London), Part I, begins.
- Fri., " 23.—Dr. Horder and Mr. Wilson on duty.
Minor Operations. Mr. Waring's dressers.
- Tues., " 27.—First Examination Conjoint Board begins.
Cambridge Lent Term ends.
Dr. Calvert on duty.
- Thurs., " 29.—Second Examination. Conjoint Board begins.
- Fri., " 30.—Dr. Morley Fletcher and Mr. Waring on duty.
Minor Operations. Mr. Eccles' dressers.
- Sat., " 31.—**Winter Session ends.**
Essays for the Wix and Bentley Prizes to be sent in.
- Tues., April 3.—Second Examination of Society of Apothecaries begins.
Dr. Drysdale on duty.
- Fri., " 6.—Dr. Hartley and Mr. McAdam Eccles on duty.
Minor Operations. Mr. Bailey's dressers.
- Sat., " 7.—Oxford Lent Term ends.

EDITORIAL NOTES.

IN this number of the JOURNAL we again publish a supplementary list of those who are serving with His Majesty's Forces either at home or abroad, together with the portraits of those gallant sons of our Hospital who have fallen in the service of their country. Once more we must apologise for any omissions or errors. for this list is a difficult one to compile and mistakes are inevitable. We shall, however, be pleased to rectify any errors in a future supplement if our readers will kindly inform us of such.

* * *

With this number of the JOURNAL we enclose forms of application for the use of those who may not already be subscribers and who wish to become so. There is a two-fold reason for calling special attention to this matter. In the first place, there are from time to time articles and items of news from Bart.'s men of all ages serving with the country's forces, and this cannot fail to be of interest to the majority of their old friends. In the second place, the cost of producing the JOURNAL has increased enormously, both paper and labour being expensive items now, and as it is the organ of the Students' Union and a very considerable source of that Union's funds, it has been our endeavour to keep the JOURNAL going as a sound business concern. We have had to curtail the JOURNAL somewhat and to make savings in other and various ways, and up to the present we are glad to say that we have succeeded in our aim, and have been able to hand various sums to the Students' Union. In order to continue to do this we require all the support which we can get, and we hope therefore that a large number of old Bart.'s men will respond to our invitation to use the enclosed application forms.

* * *

We have to congratulate Dr. Robert Armstrong-Jones on being the recipient of the honour of knighthood. Sir Robert is well known to all readers of the JOURNAL, and it is unnecessary for us to enumerate further his great merits and hard work in the realm of mental diseases,

the *menu* card was headed "In the Field," yet one would hardly have known it from the list of dishes set forth, and we actually had an orchestra and a skilled entertainer.

The toast of "Bart.'s" was proposed by the junior man present, Capt. Gibbons. He pointed out that the object of the dinner was not the food, but the "dashed idea," with which we all agreed.

Lieut.-Col. Peake, in reply, read letters from several Bart.'s men who had hoped to be present as guests. Sir Anthony Bowlby and Sir Wilmot Herringham were prevented by the weather conditions from travelling at night. Col. Gordon Watson was, unfortunately, confined to his bed, but was on a fair way to recovery. Lieut.-Col. Peake said that though many generations of Bart.'s men had come and gone since he was first a student there, yet he was able to see the persistence of the Bart.'s spirit throughout all the changes. He said he had known Sir Anthony since the threshold of his most successful career, which had never failed to do credit to the venerable institution which had launched him. Col. Gordon Watson, like other members of the Senior Staff, had given an excellent example of the Bart.'s spirit when he had given up a rapidly growing and lucrative practice to take the step of accepting a temporary commission. He was informed, further, that Col. Gordon Watson shortly proposed taking another important step—this time for duration. (This reference to G. W.'s approaching marriage was loudly cheered.)

After expressing a hope for frequent repetition of such dinners as this, Col. Peake concluded a very happy speech by calling for talent in the way of entertaining. This was rather slow in appearing, till Col. Peake had opened the road himself with a song. Several others produced what they could (the audience realising that it was not the quality of the effort so much as "the dashed idea" that counted), and at 11 o'clock the meeting dispersed "in an orderly manner."

The following were present at the dinner: Lieut.-Col. W. P. Peake, Lieut.-Col. V. V. Wilmot, Lieut.-Col. Coleman, Capt. F. G. Lescher, Capt. E. S. Marshall, Capt. J. V. Fiddian, Capt. H. B. G. Russell, Capt. N. C. Patrick, Capt. P. Gosse, Capt. G. Gibbons, Capt. C. N. Binney, Capt. A. Chillingworth, Capt. J. M. Plews, Capt. W. R. Sadler, Lieut. J. Davies, Capt. C. R. Woodruff, Capt. J. E. Hepper, Capt. F. A. Roper, and Lieut. D. P. Thomas.

We reproduce a copy of the *menu*, which should make the mouths of those in England water, for in England it is not allowed that one should partake of so many dishes.

ST. BARTHOLOMEW'S HOSPITAL DINNER
(2ND ARMY)

In the Field, January 26th, 1917.

MENU.

Huitres.

Potage.

Crème de Tomates.

Poissons.

Soles au beurre.

Entrée.

Vol au vent.

Roti.

Poulets de Gravelines.

Pommes rissolées.

Salade chicorée.

Entremet

Moka.

Dessert.

Café.

A CASE OF COMBINED NERVE INJURY AND ANEURYSM DUE TO A SHELL WOUND.

By E. GERALD STANLEY, M.S.(Lond.), F.R.C.S.(Eng.),
Capt. R.A.M.C.(T.C.).

Specialist in Advanced Operative Surgery, 9th Division, India;
Surgeon to Dreadnought Hospital, Greenwich; and Senior
Demonstrator of Anatomy, St. Bartholomew's Hospital.



PATIENT, a private of a regiment of infantry, was admitted under my care while working with the French Army. Three hours before he had been wounded by the explosion of a high-explosive shell, and when I saw him he had no appreciable shock.

There was a small, irregular wound of entrance the size of a sixpenny piece in the mid-line of the left thigh posteriorly and at the junction of the mid and lower thirds. There was no bleeding, and the first field dressing had been applied in the trenches.

As wounded were continually arriving, he was not X-rayed on admission. The wound was enlarged, the edge tissues excised, saline irrigated, and closed with a few catgut sutures for the muscles and fishing-gut for the skin. Eventually it healed *per primam*.

The next morning I noticed that he had "foot-drop," and on examination found the anterior tibial group of muscles paralysed as well as the peronei, complete anæsthesia over the areas supplied by the anterior tibial and musculocutaneous nerves, and a patch of anæsthesia on the plantar surface of the heel.

From the direction of the wound I believed that the great sciatic nerve had been hemisected on its external aspect, cutting the fibres which later would come off as the external popliteal nerve. This proved to be the case.

The fragment of shell could not be found by X-ray examination. Accordingly, that day, and thirty-four hours

after being wounded, I exposed the great sciatic nerve at the site of injury, confirmed my diagnosis, and easily sutured half the thickness of the nerve. It appeared as if half the diameter of the nerve on the external aspect had been bitten out. No trace of a fragment of shell was found, but the wound was seen to be nearly postero-anterior, with a very slight inclination inwards.

The wound healed by first intention.

Massage was commenced at once and, much to my surprise, some sensation had returned after the lapse of a month.

And now the sequel. Six weeks after the operation the private said he felt a sensation like electricity running up and down his thigh, and when I carefully examined him the first thing I felt was a distinct thrill in the thigh, and with a stethoscope I heard a loud "bruit" at its maximum immediately opposite the old wound and conducted up and down the thigh. Ten days later there were *all* the signs and symptoms of an aneurysm of the femoral artery in its middle course. The picture was text-book.

As I believed a collateral circulation must have been well established, and as the expansile impulse was becoming daily more palpable, I decided to look and see what could be done for the best.

Accordingly, about two months after his being wounded and under spinal anæsthesia, I exposed the femoral artery in the femoral canal, and there was the most beautifully sacculoform aneurysm one could wish to see springing from the anterior-internal aspect of the artery; it had a fairly narrow neck, and I considered it ideal for a reconstruction operation on the lumen of the artery.

Giles' clamps were applied just above and below the sac and the sac opened. *Fluid* blood escaped; there had been no clotting, and *loose in the sac* was a piece of irregular shell, some $\frac{1}{8}$ in., roughly square. The intima of the sac was smooth and uninjured. With some little difficulty I sutured the oval mouth of the sac leading into the artery with a single row of fine silk and a round, very fine sewing needle. A small collateral from the sac also needed suturing. On removing the clamps no bleeding at all occurred.

The sac was pleated up with three more rows of silk sutures according to Giles' technique, but deep sutures were not put through the skin into it, as I could not see their utility. The wound was closed in the ordinary way.

Healing by first intention took place. Both the popliteal and internal tibial arteries pulsated normally, and there was no disturbance of circulation whatever.

The limb remained at rest, slightly raised and enveloped in cotton wool, for some days.

I was lucky enough to see this patient in a military hospital in Paris some seven months after his second operation. He had complete return, of sensation and

the tibialis anticus was making feeble attempts to contract. There was no "bruit" or abnormal pulsation in the course of the artery, and all seemed well.

The points that struck me in this case were:

- (1) The early return of sensation after nerve suture.
- (2) The presence of the projectile *free* inside the sac.
- (3) That the intima should be *uninjured* and the blood *unclotted*, as everything was favourable for clotting. (How could one hope to cure an aneurysm by clotting better than to put an irregular piece of shell inside it?)
- (4) How the projectile ever *entered* the artery and there remained to form a complete *true* aneurysm.
- (5) The ideal nature of the aneurysm for Matas's operation with restoration of the lumen of the vessel.

The patient, I may say, thought all his trouble was due to the piece of shell which I had not removed from his leg, and before the second operation I told him I would find it for him (rather rashly).

There was no jugglery, however, in producing the piece or where it was found, as two eminent French surgeons were present at the operation and were as unable to explain how the apple got inside the crust of the dumpling as I.

An excellent article in the *Royal Army Medical Corps Journal*, by Major McAdam Eccles, on aneurysm stimulated me to publish this case.

"THE ART OF ANÆSTHESIA."*

By H. EDMUND G. BOYLE, M.R.C.S., L.R.C.P., Capt.
R.A.M.C.T.

Anæsthetist and Demonstrator on Anæsthetics to St. Bartholomew's Hospital.



WHEN I told you last week that I should try to tell you to-day something about the "Art of Anæsthesia," I did not quite realise how difficult my task would be.

The real art of anæsthesia is not easily summed up, for it consists of a large and varied number of points that may individually appear to be trivial, but when welded together into the whole or perfect article, becomes of really great importance.

The art of anæsthesia is acquired after you have become familiar with the various methods of administration and are able to properly apply that knowledge. Experience will

* Delivered during a course of Demonstrations on Anæsthetics at St. Bartholomew's Hospital.

give you dexterity and skill, and those of you who are blessed with that inestimable of all things, tact, will find that the true art of anæsthesia is not, perhaps, so difficult after all.

Remember, too, as I have told you before, the anæsthetist must, above all things, be calm and unruffled. Let no emergency or possible impending danger, or even fatality, impair your nerve or make you falter. To yourself be what you like—but to those who are working with you let your nerve be as the finest steel, and let it be said of you, "in an emergency he is the calmest man in the theatre."

To begin with, let us take the attitude of the anæsthetist to the surgeon.

The anæsthetist ought to be in the position of adviser to the surgeon on all matters appertaining to anæsthesia. He ought to be consulted by the surgeon as to what anæsthetic he considers best for the particular case in hand—whether he thinks it necessary to use any pre-operative medication—*e. g.* the administration of morphia or atropine, etc., or the giving of glucose as a possible preventative of after-sickness, or even delayed chloroform poisoning. To do all these things the anæsthetist certainly ought to see his patient prior to the operation, say the day before. This has the added advantage that the patient knows whom he will meet on the "dreadful" day of operation; for, to most people, the operation is a terrible ordeal, and it ought to be our especial province to make that dread, and that almost necessary discomfort, as little as possible. Unfortunately, in the present hurly-burly of life, this precaution is but seldom exercised, but it would, I feel sure, be of great assistance to the patient if it were more generally observed.

If, now, we turn to the selection of the anæsthetic best suited to the case, think for a moment what a wide field there may be. Let me begin by telling you what I consider are the main points that should influence your selection.

First and foremost, you must consider the *safety* of the patient; next, perhaps, we may put the convenience and comfort of the surgeon. Thirdly, the comfort before, during, and after the operation, of the patient; and lastly, skill, convenience, and comfort—call it what you will—of the anæsthetist.

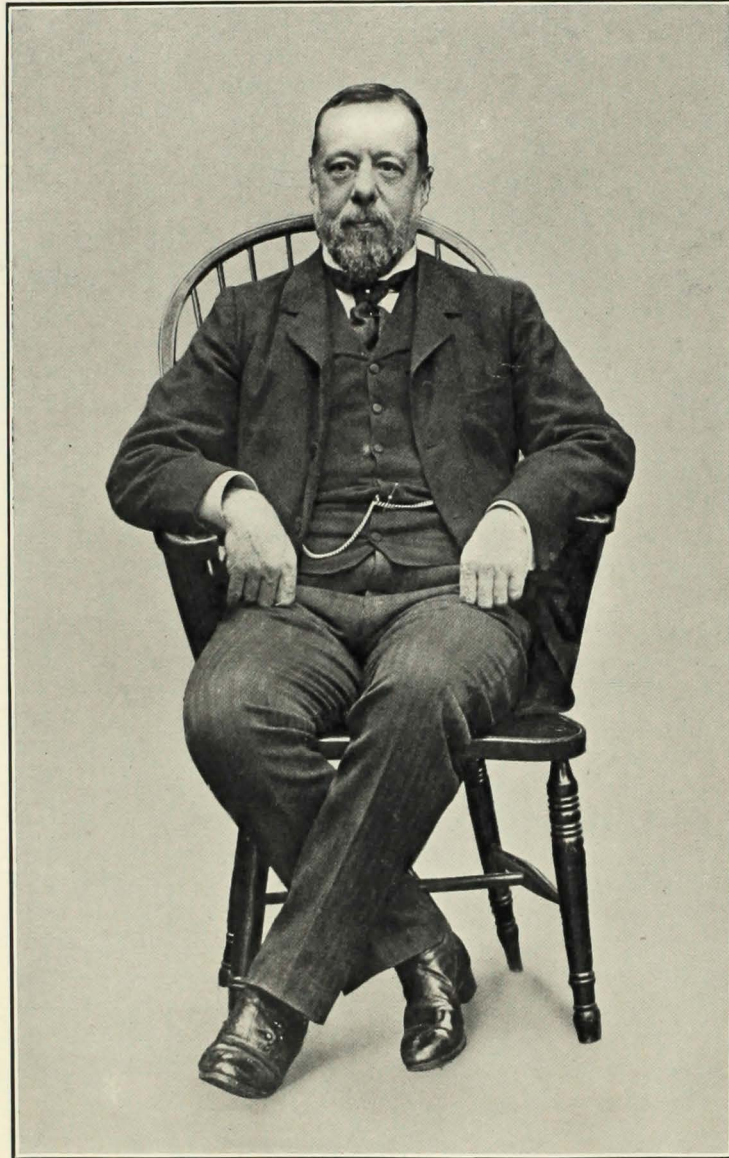
Now, if we take the safety of the patient, we have to consider what anæsthetic we think will be the best for the particular operation in hand. For the vast majority of operations, I think that, perhaps, the safest and most comfortable anæsthetic is gas and ether. It is most comfortable for the patient because you have shortened your period of induction. Anyone who has ever had an anæsthetic realises that the period of induction is most uncomfortable, and I feel very strongly that a man who habitually subjects his patients to a long period of induction is lacking in consideration for his patients, or else has never given a thought to the matter. If, then, you are going to consider the convenience

of the surgeon it is advisable, in most cases, especially abdominal cases, to change to chloroform, thus giving the gas, ether, chloroform sequence. But if you are going to think of the after-comfort of your patient, I think that you will get a better result if you give gas and oxygen, and, if necessary, a little ether with a Gwathmey, or some similar apparatus, than any other anæsthetic that I know.

The comfortable after-condition of patients who have been given gas and oxygen is to me one of the most remarkable points about the method. I am judging not only from my own observation but also that of the Sisters who have charge of these patients, and they tell me that on the whole these patients are infinitely better after their operation than those who have any other form of anæsthesia. The almost complete absence of after-sickness and the rapid recovery to consciousness and the general well-being make it almost ideal from the patient's point of view. It is only fair to add that up to the present I have not succeeded in obtaining relaxation of the abdominal muscles such as one can get with chloroform, but still, abdominal operations can be done with gas and oxygen provided always that the surgeon is prepared to be very gentle with the tissues, and to wait and be patient if there is straining and hardening of the abdominal wall. If you cannot give gas and oxygen or gas and ether, then give open ether; but in any case if you are thinking of your patient's comfort you will give morphia and atropine half an hour before, and before the open ether you will put a few drops of essence of orange on your mask. This serves to abolish the horrible smell of the ether.

In selecting your anæsthetic agent you ought to know the relative dangers of the various drugs. I think that we may consider that nitrous oxide or nitrous oxide and oxygen are about the safest of all anæsthetics, whilst chloroform is generally considered to be the most dangerous drug. Between these two we have ether, the various mixtures A. C.E., C.E., and then ethyl chloride quite close up to chloroform on the danger list. It is said that fatalities are five times more frequent with chloroform than with ether, but I think myself that this figure would probably be less if you deducted those cases which died during the induction by chloroform; that is in my opinion the most dangerous period of chloroform anæsthesia. I do not think that there is very much danger in giving chloroform if only some ether is given to induce the anæsthesia.

(To be continued.)



WALTER HAMILTON HYLTON JESSOP, M.A., M.B.CANTAB., F.R.C.S. ENGL.,

SENIOR OPHTHALMIC SURGEON TO ST. BARTHOLOMEW'S HOSPITAL; PRESIDENT OF THE
OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

Adlard & Son & West Newman, Ltd.

BART'S

1888.

BARTHOLOMEW'S! What memories, awaking
Dim thought of days, long passed, when life
was gay,
Those were the times of cases few and trifling;
Responsibilities as clouds in May.

Those were the days when Berry, Clarke, and Bowlby
With sleeves upturned, showed us the way to know
The ultimate division of a venule,
And where each muscle fibre ought to go.

When Jessop, primed with knowledge, filled with judgment,
Showed us how filaments of nerves were traced,
Supplying quaintly, subcutaneous spaces,
Just over where the parent trunks were placed.

Then Savory transcendent, full of satire,
Twisted each dresser's brain with agile skill;
And little Gee, with quietest gentlest humour,
Requested the constituents of a pill.

And in the theatre, gloves and masks, unheard of,
Drowned in the perfume of carbolic spray,
Willett and Baker showed us graphic details
Of surgery in all its gory way.

Those were the days when flourished great John Langton.
Those were the days when Lockwood, Walsham taught;
When Brunton gave us many brilliant details
Of lines of physiology and thought.

Cripps was a force endowed with rectal ardour;
Filled with a hæmorrhoidal instinct sure and keen,
As day by day he passed the ancient portal,
Carriage and horses of the best were seen.

Those were the days when Marsh and Butlin, cultured,
Lectured on joints and throats; and these we knew
Were very special subjects, deep and hidden,
And really understood by very few.

1917.

These times have passed. The world has altered strangely,
Sorrow and trouble travel hand in hand:
Traditions live! Men who have heard these teachers,
Give willingly their all to save their land.

—*F. P. Wightman.*

OBITUARY.

WALTER HAMILTON HYLTON JESSOP, M.A.,
M.B.CANTAB., F.R.C.S.ENGL.,

Senior Ophthalmic Surgeon to St. Bartholomew's Hospital; President
of the Ophthalmological Society of the United Kingdom.



WITH sincere regret we record the death of Mr.
Jessop. He was quite well on February 10th,
and went to the Hospital; he came back feeling
cold and ill, pneumonia developed and he died within the
week on February 16th.

He had seemed to be in his usual health, full of spirits
and energy, but it was known that the extra work entailed
on him by the War both at St. Bartholomew's and at No. 1
Base Hospital, Camberwell, as well as the voluntary and
enthusiastic work involved in the setting up of the new
British Journal of Ophthalmology had tired him, and left
him ill-prepared to resist an attack of acute pneumonia.

He was born in 1853, the son of Walter Jessop, F.R.C.S.,
of Cheltenham; his education was obtained at Cheltenham
College, the Bedford Modern School, and later at Gonville
and Caius College, Cambridge, which he entered with
a Tancred Studentship. After obtaining the B.A. degree
at Cambridge in 1876 he came to St. Bartholomew's,
obtained the M.R.C.S. in 1880, the F.R.C.S. in 1884, the
M.B.Camb. in 1886. Henceforth the Hospital was for him
one of the dominant interests of his life. He was House
Surgeon to Mr. Willett at a time when there was no junior
house surgeon—all the work fell to one man.

It seems impossible at this time that one man could carry
on the work of both offices until it is remembered that the
number of operations were comparatively few; there was only
one operating theatre for four surgeons and four assistant-
surgeons, and only two operating days—Wednesday and
Saturday. He was afterwards Ophthalmic House Surgeon
under Mr. Henry Power and Mr. J. Bowwater Vernon.
After serving on the junior staff he became Demonstrator
of Anatomy in 1882, and remained in the rooms until his
election to the staff. It was during this time that he made
life-long friendships with colleagues like Bruce Clarke and
Lockwood, both of whom are now gone, and also with
successive generations of Bart.'s men who passed through
his hands, many of whom lived with him in Harley Street.

Life at this time was a struggle; he had taken up
ophthalmic surgery as the work of his life, had been elected
Surgeon to the Central London Ophthalmic Hospital, and
Ophthalmic Surgeon to the Children's Hospital at Paddington
Green, but his position at St. Bartholomew's was by no means
secure; it needed courage and tenacity to hold on.

On the retirement of Mr. Power in 1894 he was elected
Junior Ophthalmic Surgeon to St. Bartholomew's Hospital,
after a stoutly contested election, carried on, after the old
method, with a personal canvass of the whole body of the

Governors. His position then became secure, professional success followed, and with it the sunnier side of Jessop's nature developed.

In his work he stood by the tradition of the eye wards, which had acquired a certain character and individuality; thus it had been the custom to do the simple operation for the extraction of cataract without iridectomy; there were ways of treatment, methods of doing things, tricks of bandaging and the like, justified by experience, which gave the work of the eye wards at St. Bartholomew's a character of its own; in all these matters Jessop not only followed the tradition but jealously maintained its superiority.

As a teacher he was not fluent, but his methods were appreciated; he had a bent towards sarcasm, but he could be tolerant of fools. As a surgeon he rather followed the French school: he had received an austere training at Moorfields under Nettleship and others which made his practice sound. He had made contact with the great founders of modern ophthalmology and had sat under the giants like Bowman and Donders. He was not prolific as a writer, but some good work stands to his credit, notably his research into the action of cocaine on its first introduction, and the Hunterian Lecture in 1887-8 at the Royal College of Surgeons, the subject being "The Intra-ocular Muscles; their Anatomy and Physiology." He was the author of a popular text-book which ran through two editions. He reached his chief ambition when he was elected President of the Ophthalmological Society in 1915. He used this position to set on foot the establishment of a British *Journal of Ophthalmology*, securing for that purpose the amalgamation of the *Royal London Ophthalmic Hospital Reports*, the *Ophthalmic Review*, and the *Ophthalmoscope*, the object being to form a thoroughly representative British journal which should appeal to the whole English-speaking world and also be welcomed on the Continent, which had been crushed by the volume and ponderousness of German ophthalmic literature.

He lived to see the successful launching of the new journal.

Jessop had become almost the representative figure of English ophthalmic science on the Continent; he was a member of the most important of the foreign ophthalmological societies; he assiduously attended all International Congresses and was generally present at the annual meetings of the Paris and Heidelberg societies. He was frequently voted into the chair and had sufficient command of languages to fill the duties of the office successfully. He had many close friends amongst his continental colleagues; and was always glad to welcome them either in Harley Street or in his country home, where Mrs. Jessop entertained with gracious cordiality.

Jessop was a good friend, and a warm-hearted honest man. He was, perhaps, seen at his best at the head of his table entertaining his colleagues; he had the faculty of

drawing out what was best in the way of anecdote or recollection from his guests; sometimes the fun was fast and furious when he succeeded in setting one to cap the stories of another on their experiences or on the methods of practitioners they had known.

As a story-teller his own method was peculiar; the barest framework of the story was outlined, an impressionist picture; it was filled in with a word, a half-sentence, a smile, or a flash of silence.

His love of art was genuine and enthusiastic; his knowledge, judgment, and taste were good. His Whistler lithographs are famous, and he loved to show and talk about his collections and the ways of collectors: he would tell of a rival who, after offering very large sums for a unique specimen, finally handed him a blank cheque to fill in as he liked in exchange for the picture; that cheque was not filled in.

At his country home he was always glad to see old friends; under his roof the guest was free to follow his own way, to join him in a morning swim in the river, or a hard spell of gardening. He lived the free life of the country whenever he could get away from his work, and took his full share as a magistrate, and in other ways in the social life of the neighbourhood.

BIRTHS.

FAWKES.—On February 9th, at Walney Island, Lancashire, the wife of Surgeon Marmaduke Fawkes, M.B., Royal Navy, attached Naval Airship Section of R.N. Air Service, of a daughter (Marguerite).

HUDSON.—On January 29th, at the Florence Nightingale Home, to Major and Mrs. Bernard Hudson, R.A.M.C., of Davos-Platz, Switzerland—twin sons.

DEATHS.

DOBELL.—On February 22nd, at his residence, Parkstone Heights, Dorset, Horace Bengé Dobell, M.D., in his 90th year.

JESSOP.—On Friday, February 16th, at 73, Harley Street, of pneumonia, Walter Hamilton Hylton Jessop, M.A., M.B. (Cantab.), F.R.C.S., J.P., of Mill House, Sutton Courtenay, and Harley Street, Senior Ophthalmic Surgeon to St. Bartholomew's Hospital, and President of the Ophthalmological Society of the United Kingdom, in his 64th year.

PROWSE.—On February 5th, 1917, at 9, Saville Place, Clifton, Bristol, William Prowse, M.R.C.S., aged 91.

NOTICE.

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

The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER, W. E. SARGANT, M.R.C.S., at the Hospital.

All communications, financial, or otherwise, relative to Advertisements ONLY, should be addressed to ADVERTISEMENT MANAGER, the Journal Office, St. Bartholomew's Hospital, E.C. Telephone: City 510.

A Cover for binding (black cloth boards with lettering and King Henry VIII Gateway in gilt) can be obtained (price 1s. post free) from MESSRS. ADLARD & SON & WEST NEWMAN, LTD., Bartholomew Close. MESSRS. ADLARD & SON AND WEST NEWMAN have arranged to do the binding, with cut and sprinkled edges, at a cost of 1s. 9d. or carriage paid 2s.—cover included.

St. Bartholomew's and the War.

SUPPLEMENTARY LIST, No. 3.

The following supplementary list, made up to February 27th, 1917, of those connected with the Hospital and Medical School who are serving in the Navy, Army, and Territorial Force in the present crisis will, it is felt, be welcomed both by all old St. Bartholomew's men and by present students. Great care has been taken to make it as accurate and complete as possible, but the Editor will be glad to hear of any errors or omissions.

Many of the photographs are produced from blocks kindly lent by the Proprietors of the *Lancet*.

This List brings the total number of those serving to about 1950.

Roll of Honour.

Killed.

Surg. (temp.) C. H. GOW, R.N.
 Maj. P. A. LLOYD JONES, R.A.M.C., D.S.O.
 Capt. (temp.) J. L. GREEN, V.C., R.A.M.C.,
 attd. Sherwood Foresters.
 Capt. (temp.) G. O. MAW, R.A.M.C.
 Capt. (") G. P. SELBY, R.A.M.C., attd.
 Lancashire Fusiliers.
 Capt. (temp.) A. J. WAUGH, R.A.M.C., attd.
 N. Staffs Regt.
 Capt. (temp.) D. H. D. WOODERSON,
 R.A.M.C., attd. Liverpool Regt.
 Lance-Cpl. J. S. HEAPE, Signal Section,
 Middlesex Regt.

Accidentally Killed.

Capt. (temp.) R. K. MACGREGOR, R.A.M.C.

Died of Wounds.

Capt. (temp.) R. M. DENNYS, Loyal N. Lancs.
 Regt.
 Capt. (temp.) R. W. MICHELL, R.A.M.C.
 Capt. (") C. T. TRESIDDER, Glos. Regt.
 Lt. D. R. DRYSDALE, Dorsetshire Regt.
 Lt. (temp.) W. R. WILSON, R.A.M.C.
 2nd Lt. A. W. R. DON, Royal Highlanders
 (The Black Watch).

Died.

Staff-Surg. J. K. MURPHY, R.N.V.R.
 Col. J. HARPER, R.A.M.C.T.
 Lt.-Col. W. SELBY, D.S.O., V.H.S., I.M.S.
 Maj. F. R. MILLER, R.A.M.C.T.
 Capt. (temp.) L. A. ARNOULD, R.A.M.C.
 Lt. (temp.) S. W. BURRELL, R.A.M.C.
 Lt. (") H. J. S. KIMBELL, R.A.M.C.
 Lt. (") F. WHITAKER, R.A.M.C.

Drowned.

Capt. (temp.) J. CROPPER, R.A.M.C.

Wounded.

Flight Sub-Lt. I. de B. DALY, R.N.
 Capt. (temp.) E. A. ALDRIDGE, R.A.M.C.,
 attd. A.S.C.
 Capt. (temp.) H. S. BAKER, R.A.M.C.
 Capt. (") H. J. BOWER, R.A.M.C.
 Capt. (") T. W. DAVID, R.A.M.C.
 Capt. (") D. H. DERRY, R.A.M.C., attd.
 K.R.R.C.
 Capt. (temp.) R. FARRANT, R.A.M.C.
 Capt. (") J. FERGUSON, R.A.M.C.
 Capt. (") H. A. HARRIS, R.A.M.C. attd.
 R.F.C.

Capt. (temp.) R. M. MILLER, R.A.M.C., attd.
 R. Welsh Fusiliers.

Capt. (temp.) A. T. NANKIVELL, R.A.M.C.,
 attd. Argyll & Sutherland Highlanders.

Capt. (temp.) J. A. PRIDHAM, R.A.M.C.
 Capt. (") A. E. QUINE, R.A.M.C., attd.
 Middlesex Regt.

Capt. (temp.) P. W. RANSOM, R.A.M.C.,
 attd. Northumberland Fusiliers.

Capt. (temp.) P. T. SPENCER-PHILLIPS, R.F.A.
 Capt. (temp.) O. TEICHMANN, R.A.M.C.,
 attd. Yeomanry.

Capt. D. R. THOMAS, Cheshire Regt.

Capt. (temp.) J. H. TOMLINSON, R.A.M.C.

Capt. (") A. C. WILSON, R.A.M.C.

Capt. (") C. R. WOODRUFF, R.A.M.C.

Capt. (") H. E. P. YORKE, R.A.M.C.,
 attd. E. Yorks. Regt.

Lt. W. CHAMPNEYS, Grenadier Guards.

Lt. (temp.) G. C. LINDER, R.A.M.C., attd.
 R.F.A.

Lt. (temp.) J. M. HAMMOND, R.A.M.C., attd.
 Devon Regt.

Lt. (temp.) J. A. NOBLE, R.A.M.C.

Lt. (") R. PUTTOCK, R.A.M.C., attd.
 R. W. Kent Regt.

Lt. (temp.) J. C. SALE, R.A.M.C., attd. 11th
 Essex Regt.

Lt. (temp.) C. P. C. SARGENT, R.A.M.C.

Sec. Lt. K. C. J. JONES, Bedfordshire Regt.
 Sec. Lt. G. KINNEIR, Manchester Regt., attd.
 Gloucester Regt.

Sec. Lt. W. E. M. MITCHELL, R. Irish Rifles.

Slightly Wounded.

Surg.-Prob. C. E. E. Herington, R.N.V.R.

Injured in Flying Accident.

Capt. (temp.) C. B. Heald, R.A.M.C.

Accidentally Injured.

Capt. W. S. Edmond, R.A.M.C.

Taken Prisoners at the Capitulation of Kut-el-Amara.

*Capt. A. S. CANE, R.A.M.C.
 Capt. E. G. S. CANE, R.A.M.C.
 Capt. R. C. CLIFFORD, I.M.S.
 *Capt. H. H. KING, I.M.S.
 Capt. T. E. OSMOND, R.A.M.C., attd. Nor-
 folk Regt.
 Capt. W. C. SPACKMAN, I.M.S.
 Capt. R. T. VIVIAN, R.A.M.C., attd. 6th
 (T.F.) Devon Regt.

* Now exchanged prisoners.

Mentioned in Despatches.

By Gen. J. Nixon from Mesopotamia; Eu-
 phrates Operation, June 25th to July
 25th, 1915.

Capt. R. C. CLIFFORD, I.M.S.

By Sir Ian Ham lton, December 11th, 1915,
 (published May 6th, 1916).

Col. (temp.) A. E. GARROD, A.M.S.

By Sir John Nixon; Mesopotamia Opera-
 tions, October to December, 1915 (pub-
 lished May 11th, 1916).

Surg.-Gen. H. G. HATHAWAY, A.M.S.
 Maj. W. HAYWOOD HAMILTON, I.M.S.

By Sir C. Dobell; Cameroon Operations.

J. C. M. BAILEY, W. A. Med. Staff.

By Gen. Barnardiston; Operations of the
 Tsingtau E. F., November 13th, 1914
 (published May 31st, 1916).

Capt. G. H. DIVE, R.A.M.C.

By Sir Douglas Haig (published June 16th,
 1916).

STAFF.

Bt.-Col. M. H. G. FELL, R.A.M.C. (4th
 time).

A.M.S.

Col. O. R. A. JULIAN, C.M.G. (2nd time).
 Col. S. WESTCOTT, C.B., C.M.G. (2nd time).

Lt.-Col. (temp. Col.) F. W. HARDY, R.A.M.C.
 (2nd time).

Lt.-Col. (temp. Col.) H. S. THURSTON,
 C.M.G. (3rd time).

Maj. Lt.-Col. R. L. V. FOSTER,
 R.A.M.C. (2nd time).

R.A.M.C.

Lt.-Col. (temp.) G. N. STEPHEN.

Maj. (temp.) T. C. L. JONES.

Capt. (temp.) H. J. COUCHMAN.

Capt. (") G. H. DIVE (2nd time).

Capt. (") S. GURNEY-DIXON (2nd time).

Capt. (") C. KINGSTON.

Capt. (") E. S. MARSHALL.

Capt. (") E. WHITE.

Capt. (") D. H. D. WOODERSON (the late).

Lt. (temp.) A. J. W. CUNNINGHAM.

Roll of Honour—continued.

R.A.M.C.T.

Bt.-Col. and Brig.-Surg. C. E. HARRISON, C.V.O.
Lt.-Col. W. P. PEAKE, T.D.
Maj. (temp. Lt.-Col.) R. M. WEST.
Capt. J. MILLER.
Lt. (temp. Capt.) J. E. SANDILANDS.

By Sir A. Wilson; Military Operations in Egypt, November, 1914, to March, 1916.

FIRST LIST.

Maj. R. W. KNOX, D.S.O., I.M.S.

SECOND LIST.

Maj. R. W. KNOX, D.S.O., I.M.S.
Maj. W. R. BATTYE, D.S.O., I.M.S. (2nd time).
Capt. C. H. FIELDING, I.M.S.

Sir John Maxwell.

FIRST LIST. PART I. OPERATIONS ON WESTERN FRONT.

STAFF.

Lt.-Col. E. P. SEWELL, R.A.M.C.

PART II. ADMINISTRATION IN EGYPT.

R.A.M.C.

Capt. E. J. BRADLEY, R.A.M.C., Sp. R.
Capt. E. W. H. GROVES, R.A.M.C.

GENERAL LIST.

Local Maj. Dr. E. V. OULTON.
Local Maj. Dr. L. P. PHILLIPS.

SECOND LIST.

R.A.M.C.

Lt.-Col. A. R. TWEEDIE (T.F.).

By General Smuts, Commander-in-Chief E. African Forces, dated May 8th, 1916.

Capt. G. T. BURKE, I.M.S.
Capt. R. S. TOWNSEND, I.M.S.

By Gen. Sir Beauchamp Duff, Commander-in-Chief in India, Aden Operations, dated March 9th, 1916.

Major G. E. CATHCART, I.M.S.
Major J. K. S. FLEMING, I.M.S.

By Sir C. Munro, Commanding Mediterranean Exp. Force, dated April 10th, 1916.

GEN. HEADQUARTERS STAFF.

Surg.-Gen. W. G. A. BEDFORD, C.B.

R.A.M.C.

Lt.-Col. L. HUMPHREY (T.F.).
Capt. (temp. Maj.) H. S. BEADLES (T.F.).
Capt. (temp.) T. E. HAMMOND.
Capt. L. R. SHORE.
Capt. O. TEICHMANN (T.F.).
Surg.-Capt. W. T. ROWE (T.F.).
Lt. (temp.) E. C. MACKAY.
Lt. (temp.) G. WALKER.

MEDICAL UNIT R.N. DIVISION.

Surg. (temp.) M. ONSLOW-FORD, R.N.
Surg. (temp.) C. H. S. TAYLOR, R.N.

I.M.S.

Maj. W. R. BATTYE, D.S.O. (3rd time).
Capt. T. J. C. EVANS (2nd time).
Capt. C. J. STOCKER.

By Sir John Jellicoe for services with the Battle of Jutland, published September 16th.

Fleet Surg. J. H. PEAD, R.N.
Fleet Surg. A. R. H. SKEY, R.N.

By Commander-in-Chief, Egyptian Expeditionary Force, July 1st, 1916 (published September 26th, 1916).

Capt. (temp.) L. L. SATOW, R.A.M.C.

By Lt.-Gen. Sir Percy Lake, Commanding Indian Expeditionary Force, "D," August 24th, 1916.

STAFF AND HEADQUARTERS.

Bt.-Lt.-Col. H. BOULTON, I.M.S. (2nd time).

CHESHIRE REGT.

Capt. (temp.) D. R. THOMAS.

R.A.M.C.

Lt.-Col. S. F. ST. D. GREEN.
Capt. R. T. VIVIAN.
Capt. P. A. WITH.

I.M.S.

Maj. F. P. CONNOR.
Maj. R. A. LLOYD.
Capt. W. H. HAMILTON (2nd time).

By Gen. Townshend, "Kut Garrison Recommendations."

INFANTRY.

Capt. T. E. OSMOND, R.A.M.C., Norfolk Regt.

INDIAN ARMY.

Capt. R. C. CLIFFORD, I.M.S. (2nd time).
Lt. W. C. SPACKMAN, I.M.S.

MEDICAL SERVICES.

Capt. A. S. CANE, R.A.M.C.
Capt. E. G. S. CANE, R.A.M.C.

By Lt.-Col. Sir Percy Lake, Commanding Indian Expeditionary Force, Mesopotamia Despatch, April 30th-August, 1916.

Surg.-Gen. F. H. TREHERNE, C.M.G. (4th time).
Bt.-Col. M. H. G. FELL (5th time).

By Gen. Sir A. Murray, Commander-in-Chief, Egyptian Expeditionary Force, Operating from June 1st-September 20th, 1916.

Local Lt.-Col. L. P. PHILLIPS, A.M.S. (2nd time).

By Lt.-Gen. G. F. Milne, Commanding Officer, British Salonika Army.

R.A.M.C.

Capt. (temp.) R. A. MANSELL.
Capt. (") R. M. VICK (2nd time).

By Sir Douglas Haig (published January 3rd, 1917).

STAFF.

Capt. E. P. W. WEDD, Essex Yeomanry.

A.M.S.

Col. H. S. THURSTON, R.A.M.C. (4th time).
Maj. L. V. THURSTON, R.A.M.C.

CONSULTANTS.

Lt.-Col. (temp. Surg.-Gen.) Sir A. A. BOWLBY, K.C.M.G. (3rd time).
Lt.-Col. (temp. Col.) Sir WILMOT HERRINGHAM (2nd time).

R.A.M.C.

Lt.-Col. C. W. MAINPRISE (2nd time).
Maj. (temp.) G. E. GASK.
Capt. (temp. Maj.) G. H. DIVE (3rd time).
Maj. R. C. WILMOT.
Maj. (temp. Lt.-Col.) M. G. WINDER.
Capt. (temp.) E. C. CUNNINGTON.
Capt. (") L. E. HUGHES.
Capt. (") A. J. KENDREW, M.C.
Capt. (") R. W. MICHELL (the late).
Capt. (") R. M. MILLER.
Capt. (") T. M. MILLER, M.C. (Sp. Res.).
Capt. (") R. S. SCOTT.
Capt. (") G. C. E. SIMPSON.
Capt. (") L. H. TERRY.

CANADIAN A.M.C.

Lt.-Col. C. A. PETERS.
Capt. W. H. SCOTT.

By Secretary of State for War, January 23rd, 1917.

Lt.-Col. (temp.) H. GILBERT BARLING, R.A.M.C.
Lt.-Col. (temp.) W. A. TURNER, R.A.M.C.

By Gen. the Hon. J. C. Smuts, Commander-in-Chief East African Force.

Maj. (temp.) H. B. OWEN, Uganda Medical Service.

By the Secretary of State for War, February 24th, 1917.

Surg.-Gen. W. G. A. BEDFORD, C.B., A.M.S. (2nd time).
Surg.-Gen. H. G. HATHAWAY, C.B., A.M.S. (2nd time).

Col. J. M. BEAMISH, A.M.S.
Col. S. S. HOYLAND, A.M.S.
Col. (temp.) H. H. TOOTH, A.M.S.
Lt.-Col. J. B. ANDERSON, R.A.M.C.
Lt.-Col. C. AVERILL, R.A.M.C.
Lt.-Col. L. K. HARRISON, R.A.M.C.
Lt.-Col. (temp.) R. J. MORRIS, R.A.M.C.
Lt.-Col. B. MYERS, N.Z.M.C.
Lt.-Col. F. P. NICHOLS, R.A.M.C.
Lt.-Col. J. E. NICHOLSON (late R.A.M.C.).
Lt.-Col. J. OLDFIELD, R.A.M.C.
Lt.-Col. G. S. A. RANKING, R.A.M.C. (late I.M.S.).

Lt.-Col. (temp.) A. S. WOODWARK, R.A.M.C.
Lt.-Col. (") A. WRANGHAM, R.A.M.C.
Maj. (temp.) A. G. P. GIPPS, R.A.M.C.
Maj. (temp. Lt.-Col.) W. B. GRANDAGE, R.F.A.

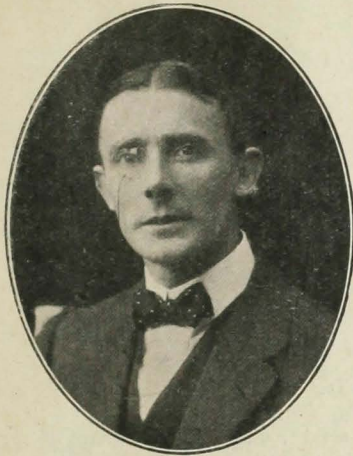
Maj. E. H. MYDDELTON-GAVEY, R.A.M.C.
Maj. M. G. PEARSON, S.A.M.C.
Capt. (temp.) A. ABRAHAMS, R.A.M.C.
Capt. (temp.) H. D. GILLIES, R.A.M.C.
Capt. (temp.) F. HERNAMAN-JOHNSON, R.A.M.C.

Capt. (temp.) H. J. PEHELL, R.A.M.C.
Capt. (") A. TROWER, R.A.M.C.
Capt. (") T. G. WAKELING, R.A.M.C.
Surg.-Capt. R. A. BOSTOCK, ret. Res. of Officers, Scots Guards.

NURSING SERVICE.

By Sir Ian Hamilton.

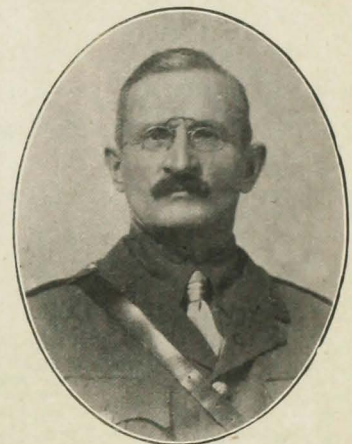
Miss M. ACTON, Matron, T.F.N.S.



LORIS ARTHUR ARNOULD, M.R.C.S., L.R.C.P., Capt. R.A.M.C. [October 1st, 1898.] *Died from plague* December 18th, 1916.



STANLEY WALTER BURRELL, M.R.C.S., L.R.C.P., Lt. R.A.M.C. [October 4th, 1910.] *Died of cerebro-spinal meningitis* July 22nd, 1916.



JOHN CROPPER, M.D. Cantab., Capt. R.A.M.C. [October 1st, 1888.] *Drowned on Hospital Ship "Britannia"* November 21st, 1916.



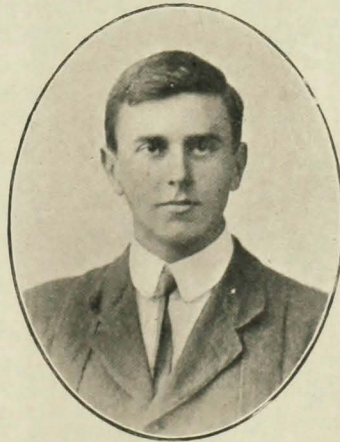
RICHARD MOLESWORTH DENNYS, M.R.C.S., L.R.C.P., Capt. Loyal N. Lancs. Regt. [September 18th, 1901.] *Died from wounds* July 24th, 1916.



ARCHIBALD WILLIAM ROBERTSON DON, 2nd Lt. Royal Highlanders (The Black Watch). [June 18th, 1914.] *Died from wounds* September 11th, 1916.



DONALD ROY DRYSDALE, Lt. Dorsetshire Regt. [April 21st, 1913.] *Died from wounds* September 25th, 1916.



CHARLES HUMPHRY GOW, M.R.C.S., L.R.C.P., Surgeon R.N. [August 1st, 1912.] *Killed in action* November 13th, 1916.



JOHN LESLIE GREEN, V.C., M.R.C.S., L.R.C.P., Capt. R.A.M.C., attached Sherwood Foresters. [September 17th, 1910.] *Killed in action* July 1st, 1916.

Date of entry to Hospital is bracketed.

Roll of Honour—continued.

By Sir Douglas Haig.

Miss E. M. DUNCAN } Sisters, Civil Hospital
Miss M. PATERSON } Reserve.
Mrs. PHILLIPS.
Miss COCKSHOT.
Miss H. WHITE.
Miss A. WILSON.
Miss E. JOHNSON.
Miss D. FOSTER.
Miss E. GORDON.

By Gen. G. F. Milne.

Sister (Acting Matron) M. E. THOMSON.

By Gen. Maxwell.

Miss A. STUTTLE.
Miss K. LOWE.

By Lt.-Gen. Sir Percy Lake.

Miss P. F. WATT, Lady Supt., R.R.C.,
Q.A.M.N.S.I. (2nd time).

East African Despatches.

Mrs. COOPER (Miss MAULTON).

Promotions and Decorations for Field Service following Despatches.

C.B. (MILITARY DIV.).

Surg.-Gen. W. G. A. BEDFORD, C.M.G.,
A.M.S.
Col. O. R. A. JULIAN, C.M.G., R.A.M.C.
Lt.-Col. (temp.) H. GILBERT BARLING,
R.A.M.C.
Lt.-Col. (temp.) W. A. TURNER, R.A.M.C.

C.M.G.

Col. (temp.) A. E. GARROD, A.M.S.
Col. C. E. HARRISON, C.V.O., A.M.S.
Lt.-Col. L. HUMPHRY, R.A.M.C.

D.S.O.

Lt.-Col. C. W. MAINPRISE, R.A.M.C.
Lt.-Col. E. P. SEWELL, R.A.M.C.
Capt. (temp. Maj.) G. H. DIVE, R.A.M.C.
Maj. L. V. THURSTON, R.A.M.C.
Maj. (temp. Lt.-Col.) M. G. WINDER,
R.A.M.C.
Capt. R. C. CLIFFORD, I.M.S.
Capt. W. HEYWOOD HAMILTON, I.M.S.
Capt. (temp.) R. M. MILLER, R.A.M.C.
Capt. A. SCOTT WILLIAMS, R.A.M.C.

V.C.

Capt. J. L. Green, R.A.M.C. (the late).

TEMPORARY SURGEONS.

BARROW, R. M., M.B., B.S. Durh.
BLAIR, C. J. L., M.R.C.S., L.R.C.P.
BLACKBURN, W. H., M.R.C.S., L.R.C.P.
BROOKS, J., M.R.C.S.
BURTON, G. E., M.R.C.S., L.R.C.P.
DANNATT, R. M., M.R.C.S., L.R.C.P.
DUNN, S. G., M.R.C.S., L.R.C.P.
DU PRÉ, W. H., M.R.C.S., L.R.C.P.
EBERLI, W. F., M.R.C.S., L.R.C.P.
FAIRBANK, J. G. A., M.B. Lond., L.D.S.
FIDDIAN, E. A., M.R.C.S., L.R.C.P.
FIRMAN-EDWARDS, L. P. L., M.R.C.S.,
L.R.C.P.
GASPERINE, J. J., M.R.C.S., L.R.C.P.
HAYNES, J. F., M.R.C.S., L.R.C.P.

MILITARY CROSS.

Surg. (temp.) G. SPARROW, R.N.
Capt. (temp.) R. E. BARNESLEY, R.A.M.C.
Capt. (") T. R. H. BLAKE, R.A.M.C.
Capt. (") A. J. CLARK, R.A.M.C., Sp. R.
Capt. R. C. CLIFFORD, I.M.S.
Capt. G. E. DYAS, R.A.M.C.
Capt. (temp.) EVAN EVANS, R.A.M.C.
Capt. T. J. C. EVANS, I.M.S.
Capt. (temp.) R. FARRANT, R.A.M.C.
Capt. (") R. A. FULLER, R.A.M.C.
Capt. (") J. R. KEMP, R.A.M.C.
Capt. (") A. J. KENDREW, R.A.M.C.
Capt. (") F. G. LESCHER, R.A.M.C.
Capt. (") R. A. PETERS, R.A.M.C.
Capt. (") D'ARCY POWER, Junr.,
R.A.M.C., Sp. R.
Capt. (temp.) A. RICHMOND, R.A.M.C.
Capt. (") J. C. SALE, R.A.M.C.
Capt. L. R. SHORE, R.A.M.C.
Capt. (temp.) W. N. SODEN, R.A.M.C.
Capt. (") D. R. THOMAS, Cheshire Regt.
Capt. (") J. H. TOMLINSON, R.A.M.C.
Capt. R. S. TOWNSEND, I.M.S.
Capt. (temp.) J. R. TRIST, R.A.M.C., Sp. R.
Capt. (") J. H. WOOD, R.A.M.C.
Capt. (") H. E. P. YORKE, R.A.M.C.
Surg.-Capt. W. T. ROWE.
Lt. (temp.) D. D. EVANS, R.A.M.C., Sp. R.
Lt. (") C. C. OKELL, R.A.M.C.
Lt. C. J. STOCKER, I.M.S.

DISTINGUISHED SERVICE CROSS.

Surg. H. M. HANSHELL, R.N.

TERRITORIAL DECORATION.

Maj. W. E. MILES, R.A.M.C.T.

KNIGHT OF GRACE OF ST. JOHN OF JERUSALEM.

Col. S. WESTCOTT, C.B., A.M.S.

LEGION OF HONOUR, CONFERRED BY THE PRESIDENT OF THE FRENCH REPUBLIC.

Fleet-Surg. J. H. PEAD, R.N.

ORDER OF ST. SAVA (5TH CLASS), CON- FERRED BY H.M. THE KING OF SERBIA.

Capt. (temp.) L. A. WALKER, R.A.M.C.
Capt. (") G. WHITTINGTON, R.A.M.C.
Capt. (") J. S. WILLIAMSON, R.A.M.C.

ORDER OF THE WHITE EAGLE, CONFERRED BY H.M. THE KING OF SERBIA.

2nd Class (with Swords).

Surg.-Gen. F. H. TREHERNE, C.M.G.,
R.A.M.C.

4th Class (with Swords).

Maj. R. W. KNOX, D.S.O., I.M.S.

5th Class (with Swords).

Capt. (temp.) J. A. ARKWRIGHT, R.A.M.C.
Capt. (") H. FALK, I.M.S.
Capt. (") J. G. F. HOSKEN, R.A.M.C.
Capt. (") R. A. MANSELL, R.A.M.C.

ORDER OF THE NILE (3RD CLASS).

Temp. Hon. Lt.-Col. L. P. PHILLIPS,
R.A.M.C.
J. B. CHRISTOPHERSON.

ROYAL RED CROSS (1ST CLASS).

Miss M. ACTON (Matron), T.F.N.S.
Miss A. M. BIRD (Matron, Gt. Northern
Hospital).
Miss J. M. CLAY, Q.A.I.M.N.S.
Miss D. FINCH (Matron, University College
Hospital).
Miss HALE (Matron, Endell St. Military
Hospital).
Miss A. E. HOLMES.
Miss LARNER.
Miss E. MACFARLANE, Sister (Acting Matron),
T.F.N.S., Malta.
Miss A. McINTOSH (Matron, St. Bartholo-
mew's Hospital).
Miss M. RUNDLE.
Miss E. ST. QUINTIN, Q.A.I.M.N.S. (Acting
Matron, Military Hospital, Abergele).

ROYAL RED CROSS (2ND CLASS).

Miss APPLETON.
Miss BOSWELL.
Mrs. CARTER.
Miss P. DALE.
Miss A. E. HARRIS.
Miss M. HORDER.
Miss D. MINCHIN.
Miss MOUCK-MASON.
Miss D. MUDIE.
Miss H. SIMPSON.
Miss WHITLEY COOZE.
Miss L. A. BOURNER (Sister) } 1st London
Mrs. PETERS (Staff Nurse) } General
Miss E. L. PRESTON (Sister) } Hospital.
Miss M. PEMBERTON (Res. Sister, Royal
Herbert Hospital, Woolwich).
Miss A. TAYLOR (Sister, Adelaide Hospital,
Dublin).
Mrs. WAKELING (Matron, General Hospital,
Southend-on-Sea).

ROYAL NAVAL MEDICAL SERVICE.

HEATH, G. E., M.R.C.S., L.R.C.P.
HEYWOOD-WADDINGTON, W. B., M.R.C.S.,
L.R.C.P.
LANDER, H. D., M.R.C.S., L.R.C.P.
MACKENZIE, K. A. I., M.B. Oxon.
MASSON, K., M.R.C.S., L.R.C.P.
ORR-EWING, A., M.B., B.C. Cant. b.
PIDCOCK, B. H., M.R.C.S., L.R.C.P.
ROSS, J. P., M.R.C.S., L.R.C.P.
STATHERS, G. S., M.R.C.S., L.R.C.P. (July,
1915.)
TERRY, C. H., M.R.C.S., L.R.C.P.

SURGEON PROBATIONERS.

CARLYLE, T.
EVANS, T. G.

GOUMENT, L. C.
LEMARCHAND, F. W.
LLEWELLYN, E. E.
MILLAR, GORDON.
MURRAY, E. F.
SARGENT, E. J. G.

HON. STAFF-SURGEON, R.N.V.R.

HARDING, C. O'B., M.R.C.S., L.R.C.P.
(Sussex Div.).

LIEUT.-COMMANDER, R.N.V.R.

HOWDEN, I. D. C., M.D., C.M., F.R.C.S. Edin.

LIEUTENANT, R.N.V.R.

MARTIN, E. G.

ROYAL NAVAL MEDICAL SERVICE—*continued.*

TEMPORARY SURGEON, R.N.V.R.
 ASHLEY, T. E., M.R.C.S., L.R.C.P.
SURGEON PROBATIONERS, R.N.V.R.
 HORDEK, C. A.
 THOMPSON, B. W.
 CHAPPLE, K. R.
 WALL, A. D.

HOSPITAL SHIPS.
H.M. Hospital Ship "Formosa."
 Maj. R. D. IRVINE, M.S.Durh., R.A.M.C.

H.M. Hospital Ship "Jan Breydel."
 Capt. W. AMSDEN, M.R.C.S., L.R.C.P.

ROYAL NAVAL AUXILIARY SICK BERTH RESERVE.
 HARRISON, S. G.

ROYAL NAVAL AIR SERVICE.
 Prob. Flight-Lt. J. T. C. GRAY.

ARMY MEDICAL SERVICE.

DEPUTY DIRECTOR OF MEDICAL SERVICES.
 Col. J. GIRVIN, M.R.C.S., L.R.C.P. (9th Army Corps M.E.F.).
ASSISTANT DIRECTORS OF MEDICAL SERVICES.
 Col. H. C. C. DENT, M.B.Durh., F.R.C.S. (N. Midl. Div.)

Lt.-Col. C. A. PETERS, M.R.C.S., L.R.C.P., C.A.M.C.

Capt. W. T. ROWE, M.D.Lond., M.R.C.P. (Mounted Division).

DEPUTY ASSISTANT DIRECTORS OF MEDICAL SERVICES.
 Maj. W. E. MILES, F.R.C.S. (1st Lond. Div.).
 Maj. R. STORRS, L.R.C.S., L.R.C.P.Edin. (6th Division).

SANITARY OFFICER.
 Maj. A. H. HOGARTH, M.D., D.P.H. Oxf. (Southern Army).

ROYAL ARMY MEDICAL CORPS.

TO BE LIEUTENANTS AND GRANTED RANK OF TEMPORARY CAPTAIN.
 (FROM R.A.M.C.T.)
 Capt. R. E. BARNESLEY, M.R.C.S., L.R.C.P.

(FROM R.A.M.C. Sp. R.)
 Capt. E. CATFORD, M.R.C.S., L.R.C.P.
 Capt. R. ELLIS, M.B., B.S.Lond.
 Capt. F. G. A. SMYTH, M.R.C.S., L.R.C.P.

(FROM TEMPORARY R.A.M.C.)
 Capt. H. J. BOWER, M.R.C.S., L.R.C.P.
 Capt. H. J. COUCHMAN, M.B., B.C.Cantab.
 Capt. E. S. CUTHBERT, M.R.C.S., L.R.C.P.
 Capt. G. D. JAMESON, M.R.C.S., L.R.C.P.
 Capt. O. B. PRATT, M.R.C.S., L.R.C.P.

ARMY MEDICAL SERVICE.

Hon. Maj. (temp.) Sir R. ARMSTRONG-JONES, M.D.Lond., F.R.C.S., F.R.C.P., Consulting Physician in Mental Diseases to the London Command.

(TEMPORARY COMMISSIONS.)
 Col. (temp.) H. GILBERT BARLING, C.B., M.B., B.S.Lond., F.R.C.S., Consulting Surgeon to the British Expeditionary Force in France.

Col. (temp.) C. GORDON WATSON, F.R.C.S., C.M.G., Consulting Surgeon to the Second Army in France.

ROYAL ARMY MEDICAL CORPS.

TEMPORARY LIEUTENANT-COLONELS.
 SIR RONALD ROSS, K.C.B., F.R.S., M.D.
 STEPHENS, J. W. W., M.D.Cantab., D.P.H.
TEMPORARY HONORARY LIEUTENANT-COLONEL.
 PHILLIPS, Ll. P., M.D.Cantab., F.R.C.P., F.R.C.S.

(TEMPORARY COMMISSIONS.)

TEMPORARY MAJORS.
 CROSSE, R. E., M.R.C.S., L.R.C.P.
 HAMILL, P., M.D., D.Sc.Lond., M.R.C.P.
 HOTCHKIS, R. D., M.D.Durh.

RUSSELL, JAMES, M.D.Aberd.
 SLADE, J. G., M.D., B.C.Cantab.
 STORER, E. J., M.R.C.S., L.R.C.P.
 THOMPSON, G. H., M.R.C.S., L.R.C.P.
 TROWER, A., M.R.C.S.
 WELLER, C. A., M.R.C.S., L.R.C.P.
 WILLIAMS, R., M.R.C.S., L.R.C.P.I.

CRELLIN, D., M.R.C.S., L.R.C.P.
 CRONK, H. L., M.R.C.S., L.R.C.P.
 CROSS, E. W., M.R.C.S., L.R.C.P.
 DARBY, W. S., M.B., B.C.Cantab.
 DAVIS, K. J. A., M.C.Cantab., F.R.C.S.
 DAY, C. D., L.M.S.S.A.
 DICKINSON, W. R., M.R.C.S., L.R.C.P.
 DOBSON, W. T., M.R.C.S., L.R.C.P.
 DODSON, G. E., D.T.M. & H.Cantab.
 DONALDSON-SIM, E. A., M.R.C.S., L.R.C.P.
 DOUGLAS, A. R. J., M.D.Lond., F.R.C.S.
 DOVE, P. W., M.B.Lond.
 DRAKE, D. J., M.R.C.S., L.R.C.P.
 EMLYN, C. W., M.R.C.S., L.R.C.P.
 EVANS, L. W., M.R.C.S., L.R.C.P.
 FENTON, T. G., F.R.C.S.
 FORBES, J. G., M.D., D.P.H.Cantab., M.R.C.P.
 GARDNER-MEDWIN, F. M., M.R.C.S., L.R.C.P.

TEMPORARY CAPTAINS.
 ADRIAN, E. W., M.B., B.C.Cantab., M.R.C.P.
 ALLEN, W. G. E., M.R.C.S., L.R.C.P.
 ATTLEE, W. H. W., M.D.Cantab.
 BARRIS, J. D., M.B., B.C.Cantab., M.R.C.P., F.R.C.S.
 CANE, M. H., M.R.C.S., L.R.C.P.
 COATES, G., M.D.Oxon.
 COOPER, W., M.R.C.S., L.R.C.P.
 DAVIES, F. M., L.R.C.P.
 EVANS, D. C., M.R.C.S., L.R.C.P.
 GIBB, H. P., M.B., B.C.Cantab., F.R.C.S.
 GOODMAN, H., M.R.C.S., L.R.C.P.
 GRIFFITHS, H. E., M.R.C.S., L.R.C.P.
 HARRISON, H. C., M.R.C.S., L.R.C.P.
 HEASMAN, W. G., M.R.C.S., L.R.C.P.
 HILTON-RUICHINSON, R., M.R.C.S., L.R.C.P. (Jan., 1915).
 LINDSAY, A. W. C., M.R.C.S., L.R.C.P.
 MARTIN, J. N., D.P.H., R.C.P.S.
 PARSONS, C. T., M.D.Lond.
 PARSONS, J. H., M.B., B.S.Lond., F.R.C.S.
 POLLOCK, A. K. H., M.R.C.S., L.R.C.P.

TEMPORARY LIEUTENANTS.
 ADAM, G. H., M.R.C.S., L.R.C.P.
 ATTERIDGE, K. D., M.R.C.S., L.R.C.P.
 APPLIGATE, J. W., M.R.C.S., L.R.C.P.
 BAILEY, J. C. M., M.D.Lond.
 BALGARNIE, W., M.B.Lond., F.R.C.S.
 BAYLIS, H. E. M., M.B., B.S.Durh.
 BECKTON, W., M.R.C.S., L.R.C.P.
 VON BERGEN, C. W., M.B., B.S.Durh.
 BLACK, P., M.R.C.S., L.R.C.P.
 BLOXSOME, A. H., L.R.C.S., L.R.C.P.Edin.
 BODVEL-ROBERTS, H. F., M.R.C.S., L.R.C.P.
 BOOTH, W. H., M.R.C.S., L.R.C.P.
 BOSTOCK, A. H., M.R.C.S., L.R.C.P.
 BRODRIBB, A. W., M.B., B.Ch.Oxon.
 BURN, S. A., M.R.C.S., L.R.C.P.
 BURSTAL, E., M.B., B.Ch.Oxon.
 BUTCHER, H. H., M.R.C.S., L.R.C.P.
 BUTT, H. T. H., M.R.C.S., L.R.C.P.
 CAMPBELL, E. K., M.B.Edin., F.R.C.S.Eng.
 CHARLES, C. P., M.R.C.S., L.R.C.P.
 CHEESE, F. W., M.D., B.S.Durh.
 CHILLINGWORTH, A. J., M.R.C.S., L.R.C.P.
 CHIPP, E. E., M.R.C.S., L.R.C.P.
 CLARKE, P. S., M.R.C.S., L.R.C.P.
 COALBANK, R. M., M.R.C.S., L.R.C.P.
 COOK, J. B., M.D., Ch.B.Vict., D.P.H. Cantab.

GILL, J. F., M.B., Ch.B.Aberd.
 GRÜN, E. F., M.R.C.S., L.R.C.P.
 HAGGARD, T. B. A., M.R.C.S., L.R.C.P.
 HAIGH, B., B.C.Cantab., D.T.M.Lond.
 HAMMOND, J. M., M.B., B.S.Lond.
 HAYSOM, N. N., M.R.C.S., L.R.C.P.
 HOWELL, B. W., M.B., B.S.Lond., F.R.C.S.
 HUGHES, E. E., M.B., M.Ch.Manch., F.R.C.S.
 IREDALE, S. C. W., M.R.C.S., L.R.C.P.
 JONES, G. P., M.R.C.S., L.R.C.P.
 KEBBELL, C. F. V., M.R.C.S., L.R.C.P.
 KEMP, C. G., M.D.Durh.
 KENNINGTON, E., M.R.C.S., L.R.C.P.
 KNOBEL, W. B., M.D.Cantab.
 LAWRENCE, M. R., M.B., B.Ch.Oxon.
 LEATHART, P. W., M.B., B.C.Cantab.

ROYAL ARMY MEDICAL CORPS—*continued.*

LEEMBRUGGEN, R. A., M.R.C.S., L.R.C.P.
 MAINGOT, R. H., M.R.C.S., L.R.C.P.
 MANLOVE, J. E., M.R.C.S., L.R.C.P.
 MAYO, H. R., M.B., B.C.Cantab.
 MOORE, R. F., B.C.Cantab., F.R.C.S.
 MORGAN, C. C., L.R.C.P.Edin., L.S.A.
 MOSES, D. A. H., M.R.C.S., L.R.C.P.
 MURRAY, E. G. D., L.S.A.
 MURRAY, W. A., M.B., C.M.Aberd.
 NAYLOR, J., M.R.C.S., L.R.C.P.
 NOBLE, J. A., M.B., B.Ch.Oxon.
 OGLE-SKAN, H. W., M.R.C.S., L.R.C.P.
 ORAM, E. H. B., M.B., B.S.Lond., F.R.C.S.
 PAGE, G. F., M.R.C.S., L.R.C.P.
 PINNOCK, D. D., M.B., B.S.Melb., F.R.C.S.
 PRACY, D. S., M.R.C.S., L.R.C.P.
 RANKING, G. L., M.R.C.S., L.R.C.P.
 RENDEL, A. B., M.B., B.C.Cantab.
 RICE, F. M. P., M.R.C.S., L.R.C.P.
 ROBERTSON, M. K., M.R.C.S., L.R.C.P.
 ROSTON, L. M., M.B., B.S.Durh.
 RYAN, M. J., L.S.A.
 SAUNDERS, A. L., M.R.C.S., L.R.C.P.
 SCOONES, H. E., M.R.C.S., L.R.C.P.
 SHERRARD, N., M.R.C.S., L.R.C.P.
 SHORE, T. H. G., M.B., B.C.Cantab.,
 M.R.C.P.
 SIMPSON, W., M.B., B.S.Lond.
 SMITH, H. G., M.B., B.S.Lond., D.P.H.
 Cantab.
 SMITH, J. M., M.B.Cantab.
 SMITH, W. A., M.R.C.S., L.S.A.
 SPILSBURY, F. J., L.R.C.S.Edin., L.R.C.P.I.
 STERRY, J., M.R.C.S., L.R.C.P.
 STIVALA-ASPINAL, G., M.R.C.S., L.R.C.P.
 THOMAS, D. P., M.R.C.S., L.R.C.P.
 TUCKER, A. B., M.B.Lond., F.R.C.S.
 VERDON-ROE, S., M.B., B.C.Cantab.
 WADE, A. H., L.M.S.S.A.
 WAKEFORD, V. D. C., M.B., B.S.Lond.
 WARD, V. G., M.D.Lond.
 WATERS, A. C. S., M.R.C.S., L.R.C.P.
 WATKINS, G. D., M.R.C.S., L.R.C.P.
 WEIR, H. H., M.B.Cantab.
 WEST, J. A., M.R.C.S., L.R.C.P.
 WHITE, E. H., M.B., B.Ch.Oxon.
 WILDMAN, W. S., F.R.C.S.
 WILKS, J. H., M.B., B.C.Cantab.
 WILLIAMS, C. L., M.R.C.S., L.R.C.P.
 WILLIAMS, E., M.R.C.S., L.S.A.
 WILLIAMS, E. K., M.R.C.S., L.R.C.P.
 WILLIAMS, H. G. E., M.R.C.S., L.R.C.P.
 WIMBLE, H. C., M.R.C.S., L.R.C.P.
 WOOD, J. F., F.R.C.S.
 WOODALL, A. E., M.D.Vict.Manch., F.R.C.S.
 YOUNG, F. H., L.M.S.S.A.

R.A.M.C. SPECIAL RESERVE OF OFFICERS.

CAPTAINS.

CAUTLEY, J. B., L.M.S.S.A.
 EVANS, D. D., M.R.C.S., L.R.C.P.

LIEUTENANTS.

BAILEY, K. N. G., M.R.C.S., L.R.C.P.
 BAILEY, T. B., M.R.C.S., L.R.C.P.
 BATTERHAM, D. J., M.R.C.S., L.R.C.P.
 BRAIMBRIDGE, C. V., M.R.C.S., L.R.C.P.
 BULL, L. J. F., M.R.C.S., L.R.C.P.
 COOK, P. N., M.R.C.S., L.R.C.P.
 CUNNINGHAM, L., M.R.C.S., L.R.C.P.
 DAVENPORT, R. C., M.R.C.S., L.R.C.P.
 DAY, G., M.R.C.S., L.R.C.P.
 DINGLEY, A. R., M.R.C.S., L.R.C.P.

GOLDSMITH, E. O., M.R.C.S., L.R.C.P.
 HUME, J. B., M.R.C.S., L.R.C.P.
 LONGSTAFF, E. R., M.R.C.S., L.R.C.P.
 MACAULAY, H. M. C., M.R.C.S., L.R.C.P.
 MOSER, R., M.R.C.S., L.R.C.P.
 WHARRY, H. M., M.R.C.S., L.R.C.P.
 WILSON, W. E., M.R.C.S., L.R.C.P.

J. V. ABRINES, L.R.C.S., L.R.C.P.Edin.,
 Civil Surgeon, attd. R.A.M.C.
 R. J. P. THOMAS, M.R.C.S., L.R.C.P., Civil
 Surgeon in Charge of Troops, Bull
 Point.

EXPEDITIONARY FORCES.

No. 14 Field Ambulance, B.E.F.
 Capt. R. H. SIMPSON, M.B., B.S.Lond.

28th Field Ambulance, B.E.F.
 Capt. K. M. WALKER, M.B., B.C.Cantab.,
 F.R.C.S.

140th Field Ambulance, B.E.F.
 Capt. J. LI. DAVIES, M.R.C.S., L.R.C.P.

*1st N. Midland Mtd. Brigade Field
 Ambulance, Egypt.*

Lt. H. E. BLOXSOME, M.R.C.S., L.R.C.P.

*8th Mounted Brigade Field Ambulance,
 Egyptian Exp. Force.*

Maj. H. S. BEADLES, M.R.C.S., L.R.C.P.

Lucknow Cavalry Field Ambulance, B.E.F.
 Maj. W. H. CAZALY, M.B., B.C., D.P.H.
 Lond., I.M.S.
 Capt. F. W. CAMPBELL, M.R.C.S., L.R.C.P.,
 R.A.M.C.

*1/1 South Midland Casualty Clearing
 Station, B.E.F.*
 Capt. G. L. KEYNES, M.B., B.C.Cantab.

No. 4 Casualty Clearing Station, B.E.F.
 Capt. T. M. MILLER, M.R.C.S., L.R.C.P.,
 Sp. Res.

*No. 16 Casualty Clearing Station, Persian
 Exp. Force.*
 Capt. W. B. WOOD, M.D.Cantab.

39th Casualty Clearing Station.
 Capt. G. S. HUGHES, M.B.Lond., F.R.C.S.,
 Surgical Specialist.

29th Stationary Hospital, M.E.F.
 Maj. C. A. S. RIDOUT, M.S.Lond., F.R.C.S.

Station Hospital, Tremulgherry, Deccan.
 Capt. E. G. STANLEY, M.S., Lond, F.R.C.S.

Station Hospital, Dilkusha, Lucknow.
 Capt. L. B. CANE, M.D.Cantab.

No. 3 General Hospital, B.E.F., France.
 Lt. G. VINER, M.D.Lond., F.R.C.S.

No. 24 General Hospital, B.E.F.
 Lt. J. F. ALEXANDER, M.D., B.C.Cantab.

No. 26 Indian General Hospital, Aden.
 Lt.-Col. T. H. FOULKES, M.R.C.P., F.R.C.S.,
 I.M.S.

No. 27 General Hospital, Abbassieh, Cairo.
 Col. J. GÍRVIN, M.R.C.S., L.R.C.P., A.M.S.,
 O/C.
 Capt. J. B. BINNS, M.R.C.S., L.R.C.P.
 Lt. E. E. CHIPP, M.R.C.S., L.R.C.P.

No. 31 General Hospital, Port Said.
 Lt. W. H. LAMPLOUGH, M.D.Durh.

*No. 34 General Hospital (Welsh Hospital),
 B.E.F.*
 Maj. L. B. RAWLING, M.B., B.C.Cantab.,
 F.R.C.S.
 Lt. J. S. BURN, M.B., B.C.Cantab.
 Lt. R. L. M. WALLIS, L.M.S.S.A.

43rd General Hospital, B. Salonika Force.
 Capt. T. H. HARKER, M.D.Lond.

Military Hospital, Imtarfa, Malta.
 Lt.-Col. G. BASIL PRICE, M.D.Lond.,
 F.R.C.P., O/C.

16th Divisional Train, A.S.C.
 Capt. A. S. BLACKWELL, M.D.Lond., F.R.C.S.

24th Divisional Train, B.E.F.
 Capt. C. H. T. ILOTT, M.B., B.C.Cantab.

62nd Heavy Artillery Group, B.E.F., France.
 Capt. R. M. SOAMES, M.B., B.C.Cantab.

MILITARY HOSPITALS.

CAMBRIDGE HOSPITAL, ALDERSHOT.
 Capt. H. D. GILLIES, F.R.C.S., Specialist in
 Plastic Surgery.
 Capt. A. RYLAND, F.R.C.S.Edin., Specialist
 in Oto-Laryngology.

QUEEN ALEXANDRA HOSPITAL, MILLBANK.
 Maj. (temp.) (Col. ret. Ind. Army) G. F.
 ROWCROFT, D.S.O., M.R.C.S., L.R.C.P.,
 I.M.S.

HERBERT HOSPITAL, WOOLWICH.
 CORFIELD, E. C., M.R.C.S., L.R.C.P., Civil
 Surgeon.

MILITARY HOSPITAL, BAGTHORPE.
 ANDERSON, A. R., F.R.C.S., Cons. Surg.

2ND BIRMINGHAM WAR HOSPITAL.
 Temp. Maj. R. C. TWEEDY, M.D.Durh.,
 Chief Res. Surg.

NO. 1 BRITISH RED CROSS (DUCHESS OF
 WESTMINSTER'S) HOSPITAL.
 Hon. Capt. J. W. NUNN, M.R.C.S., L.R.C.P.

NO. 2 BRITISH RED CROSS HOSPITAL.
 Temp. Hon. Maj. B. HUDSON, R.A.M.C.,
 M.D.Cantab.

NO. 6 BRITISH RED CROSS (LIVERPOOL
 MERCHANTS' MOBILE) HOSPITAL.
 Temp. Hon. Maj. F. A. G. JEANS, M.B., B.C.
 Cantab., F.R.C.S.

NO. 10 RED CROSS (LADY MURRAY'S)
 HOSPITAL.
 Temp. Hon. Capt. H. W. CARSON, F.R.C.S.

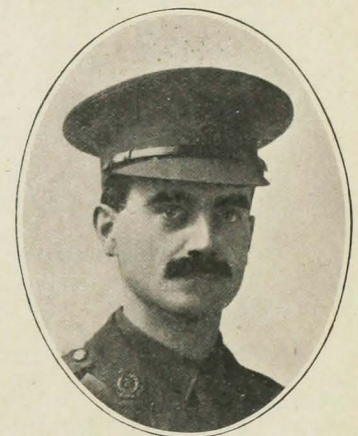
BRITISH RED CROSS IN RUSSIA.
 BERRY, J., M.B., B.S.Lond., F.R.C.S.



JAMES HARPER, M.D. Lond., M.R.C.S., Col. R.A.M.C. (F.), A.D.M.S. 58th Div. [October 1st, 1875.] *Died* March 24th, 1916.



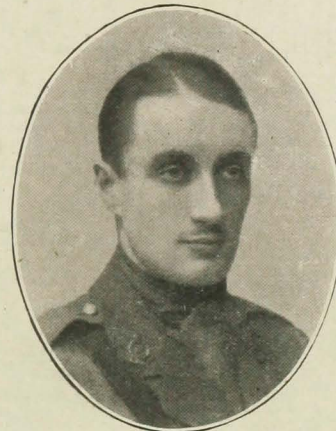
JOHN SCHOFIELD HEAPE, Lce.-Cpl. Signallers, 16th Middlesex Regt., Public Schools Battalion. [April 8th, 1914.] *Killed in action* July 1st, 1916.



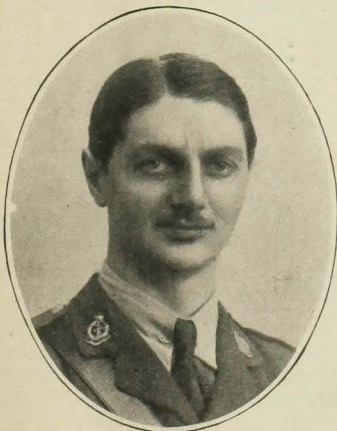
HARRY JOHN SULLINGS KIMBELL, M.R.C.S., L.R.C.P., Lt. R.A.M.C. [October 9th, 1899.] *Died* May 28th, 1916.



PERCY ARNOLD LLOYD-JONES, D.S.O., M.B. B.C. Cantab., M.R.C.S., L.R.C.P., Maj. R.A.M.C., D.A.D.M.S. [October 31st, 1899.] *Killed in action* December 22nd, 1916.



REGINALD KINLOCH MACGREGOR, M.R.C.S., L.R.C.P., Capt. R.A.M.C. [July 28th, 1905.] *Accidentally killed* about May 2nd, 1916.



GEORGE OLIVER MAW, M.R.C.S., L.R.C.P., Capt. R.A.M.C. [March 19th, 1908.] *Died from wounds* July 10th, 1916.



ROBERT WILLIAMS MICHELL, M.D. Cantab., F.R.C.S., Capt. R.A.M.C. [January 8th, 1887.] *Died from wounds* July 20th, 1916.



FREDERICK RICHARD MILLER, M.D. Brux., M.R.C.S., L.R.C.P., Maj. R.A.M.C. (T.), D.A.D.M.S. 60th Div. [October 1st, 1882.] *Died as the result of an accident* February 4th, 1916.

Date of entry to Hospital is bracketed.

MILITARY HOSPITALS—*continued.*

THE LORD DERBY WAR HOSPITAL,
WARRINGTON.
Capt. L. T. GILES, M.B., B.C.Cantab.,
F.R.C.S.

GUILDFORD WAR HOSPITAL.
Temp. Hon. Lt.-Col. H. A. POWELL, M.D.,
M.Ch.Oxon., F.R.C.S.

LEWISHAM MILITARY HOSPITAL.
Surg.-Maj. C. T. T. COMBER, M.D.Durh.,
Surgeon.
RHODES, J. H., M.B.Lond., M.R.C.P., Radi-
ologist.

COUNTY OF MIDDLESEX WAR HOSPITAL.
Lt.-Col. L. W. ROLLESTON, M.B., B.S.Durh.
Maj. A. O'NEILL, M.R.C.S., L.R.C.P.
Capt. H. C. HALSTED, M.D.Durh.

NORFOLK WAR HOSPITAL.
BURFIELD, J., M.B., B.S.Lond., F.R.C.S.,
Surg.
Lt. H. WHITWELL, M.R.C.S., L.R.C.P., Asst.
Surg.

NORTHUMBERLAND WAR HOSPITAL.
RANKEN, D., M.S.Lond., F.R.C.S., Civil
Surgeon.

WHARNECLIFFE WAR HOSPITAL, SHEFFIELD.
Maj. HEPWORTH, F. A., M.B., B.C.Cantab.,
F.R.C.S.
Lt. W. H. DUPRÉ, M.R.C.S., L.R.C.P.

MILITARY HOSPITAL, ASCOT.
MAWHOOD, R. H., M.B., B.C.Cantab.,
F.R.C.S., Hon. Surg.

AUBREY LODGE HOSPITAL.
Temp. Hon. Maj. S. BOUSFIELD, M.D.
Cantab.

MILITARY HOSPITAL, AYLESBURY.
Capt. J. RAMSAY, M.D.Lond.

BLINDED SOLDIERS' AND SAILORS' HOSTEL,
ST. DUNSTAN'S, REGENT'S PARK.

BRIDGES, E. C., M.D.Durh., Vis. M.O.

CHEVELEY PARK MILITARY HOSPITAL.
Lt. N. GRAY, M.B., B.C.Cantab., Surgeon.

COTTESBROOKE AUXILIARY MILITARY
HOSPITAL.
TOWNSEND-WHITLING, H., M.B., B.S.Durh.,
R.M.O.

COUNTY OF LONDON WAR HOSPITAL,
EPSOM.

MCDONAGH, J. E. R., F.R.C.S., Dermatolo-
gist.

CLIFF MILITARY HOSPITAL, FELIXSTOWE.
GIUSEPPI, P. L., M.D.Lond., F.R.C.S. Sur-
geon.

LORD KNUTSFORD'S HOSPITAL FOR
OFFICERS.
GRANT, J. D., M.D., F.R.C.S., Aurist and
Laryngologist.

CITY OF LONDON MILITARY HOSPITAL.
DICK, J. L., M.D., C M Ed., F.R.C.S., Civil
Surgeon.
HADFIELD, C. F., M.D.Cantab., Civil Sur-
geon.

LAKENHAM MILITARY HOSPITAL, NORWICH.
Lt. H. WHITWELL, M.R.C.S., L.R.C.P.,
Hon. Surg.

MILITARY HOSPITALS IN OXFORD AND
NEIGHBOURHOOD.
Surg.-Gen. Sir A. F. BRADSHAW, K.C.B.,
K.H.P., M.R.C.P., Hon. Cons. Physician.

MILITARY HOSPITAL, PARKHURST, ISLE OF
WIGHT.

Lt.-Col. A. G. HENDLEY, M.R.C.S., L.R.C.P.,
I.M.S. (retired), C.O.

RUSSIAN HOSPITAL FOR BRITISH OFFICERS
SOUTH AUDLEY STREET, W.

WARE, A. M., M.D.Cantab., M.O.

BEVAN MILITARY HOSPITAL, SANDGATE.
CALVERLEY, J. E. G., C.M.G., M.D.Lond.,
Surg.-in-Chief.

CONVALESCENT SOLDIERS' CAMP, SEAFORD.
BROWN, T. L., M.R.C.S., L.S.A., Civil Med.
Practitioner.

MILITARY HOSPITAL, SOUTHALL.
BOX, S. L., M.D.Lond., Physician.

RED CROSS HOSPITAL, SUTTON.
CORBEN, C., M.D.Durh., F.R.C.S.Ed.
Surgeon.

SWEDISH WAR HOSPITAL FOR WOUNDED
BRITISH SOLDIERS, PADDINGTON ST., W.
JENNINGS, F. J., M.B., B.S.Lond., F.R.C.S.,
Hon. Cons. Physician.
EDWARDS, F. SWINFORD, F.R.C.S., Hon.
Cons. Surgeon.

THORNLEY AUXILIARY MILITARY HOSPITAL
FOR BRITISH RED CROSS.
TOWNSEND-WHITLING, H., M.B., B.S.Durh.,
M.O.

TORBAY AUXILIARY HOSPITAL, TORQUAY.
PAYNE, J. E., M.B., B.S.Cantab., F.R.C.S.,
Surgeon.

FRIENDS' AMBULANCE UNIT (BRITISH
RED CROSS SOCIETY), B.E.F.
SMITH, E. B., M.B., B.S.Lond., D.P.H.
Cantab.

ANGLO-RUSSIAN HOSPITAL, PETROGRAD.
PAGET, STEPHEN, F.R.C.S.

BRITISH WAR HOSPITAL, POONA.
Lt.-Col. H. E. WINTER, M.R.C.S., L.R.C.P.,
O.C.

R.A.M.C. TERRITORIAL FORCE.**MEDICAL OFFICERS ATTACHED
TO UNITS OTHER THAN MEDI-
CAL UNITS.****SURGEON-MAJOR.**

UPHAM, C. H., M.R.C.S., L.R.C.P. (Staff
Surg. R.N. retired), New Zealand
Military Corps.

CAPTAINS.

CARLYON, T. B., M.R.C.S., L.R.C.P., attached
86th Provl. Battn., Herne Bay.
CURRIE, J. D. L., M.R.C.S., L.R.C.P.,
attached 17th (Co. of Lond.) Battn.,
The London Regt.

HARVEY, F., M.R.C.S., L.R.C.P., attached
2nd West Riding Brigade, Royal Field
Artillery.

HUGHES, L. E., M.R.C.S., L.R.C.P., attached
1st Bucks Battn.

RUSSELL, H. B. G., B.C.Cantab., attached
9th Royal Irish Rifles.

SAUNT, T. E., M.R.C.S., L.S.A., attached
Buckinghamshire Yeomanry.

SOAMES, R. M., M.B., B.C.Cantab., attached
1/5 York and Lancaster Regt., B.E.F.

THOMPSON, M., M.R.C.S.Eng., L.R.C.P.
Edin., Buckinghamshire Battn. (T.)
The Oxfordshire and Buckinghamshire
L.I.

LIEUTENANT.

SPENCE, D. L., M.R.C.S., L.R.C.P., attached
King's Liverpool Rifles.

MARSHALL, H., M.B., B.C.Cantab., Civil
Surgeon, attached 4th Battn. Gloucester
Regt.

TERRITORIAL FORCE RESERVE.

Capt. J. H. BALDWIN, M.B., B.C., D.P.H.
Cantab.

R.A.M.C. TERRITORIAL FORCE—continued.

FIELD AMBULANCES.

(a) MOUNTED BRIGADE FIELD AMBULANCES.
South Midland.

Capt. C. P. C. SARGENT, L.M.S.S.A.

(b) FIELD AMBULANCES.

2nd Home Counties.

Capt. C. C. ROBINSON, M.B.Lond.

1st West Lancashire.

Maj. J. E. W. McFALL, M.D., D.P.H.Liverp.

2nd London (City of London).

Capt. H. K. GRIFFITH, M.B., B.C.Cantab., F.R.C.S.

4th London (County of London).

Capt. M. W. K. BIRD, M.R.C.S., L.R.C.P.

5th London (County of London).

Capt. G. H. L. WHALE, M.D.Cantab., F.R.C.S.

6th London (County of London).

Capt. D. D. BROWN, M.D.Durh.

Capt. M. T. G. CLEGG, M.R.C.S., L.R.C.P.

Capt. A. B. P. SMITH, M.B., B.C.Cantab.

1st South Midland.

Capt. (Acting Lt.-Col.) H. N. BURROUGHS, M.B., B.C.Cantab., C/O.

3rd Northumbrian.

Capt. E. L. MARTIN, M.D., B.S.Lond.

2nd Welsh.

Capt. R. R. POWELL, M.R.C.S., L.R.C.P.

Singapore F.A.

Lt. J. WILMOT ADAMS, M.B., B.C.Cantab.

GENERAL HOSPITALS.

1ST SOUTHERN.

Capt. A. R. BEARN, M.D.Edin., F.R.C.S.

4TH SOUTHERN.

Maj. J. W. GILL, M.R.C.S., L.R.C.P.

No. 36 (BIRMINGHAM HOSPITAL UNIT).

Lt. A. E. A. CARVER, M.B., B.C.Cantab., Radiologist.

No. 43.

Maj. G. H. COLT, M.B., B.C.Cantab., F.R.C.S.

SANITARY SERVICE.

(a) SANITARY COMPANIES.

1st London (City of London).

Capt. R. DUDFIELD, M.B., D.P.H.Cantab.

(b) SANITARY OFFICERS.

Services available on mobilisation.

Maj. R. A. FARRAR, M.D.Oxon.

CASUALTY CLEARING STATIONS.

2ND LONDON.

Capt. J. C. NEWMAN, M.B.Cantab., F.R.C.S.

NORTH MIDLAND.

Capt. A. HEATH, M.D.Lond., F.R.C.S.

WELSH.

Capt. A. W. CLARKE, M.R.C.S., L.R.C.P. Ed.

OVERSEAS CONTINGENTS.

AUSTRALIAN ARMY MEDICAL CORPS.

Lt.-Col. J. S. PURDY, M.D., C.M.Aberd.

Maj. H. FLECKER, M.B., C.M.Sydney, F.R.C.S.Ed.

Capt. H. L. DECK, D.T.M. & H.Cantab.

Capt. L. M. SNOW, M.R.C.S., L.R.C.P.

AUSTRALIAN A.M.C. RESERVE.

Maj. R. E. NEWTON, M.B., C.M.Glasg., F.R.C.S.

CANADIAN ARMY MEDICAL CORPS.

Lt. (temp.) R. C. J. STEVENS, M.B., B.S. Durh.

2nd CANADIAN CONTINGENT.

5th Field Ambulance.

Capt. R. Y. KENNY, M.R.C.S., L.R.C.P., M.B.Toronto.

NEW ZEALAND ARMY MEDICAL SERVICE.

*Capt. G. BASIL D. ADAMS, M.D., D.P.H. Oxon.

Capt. H. C. P. BENNETT, M.B.Lond.

Capt. G. FENWICK, F.R.C.S.

Surg.-Capt. C. D. HENRY, M.D.Cantab.

Capt. A. W. IZARD, M.D.Cantab.

Capt. F. W. KEMP, M.D.Durh.

* Invalided out of Army.

NEW ZEALAND MILITARY HOSPITAL, WALTON-ON-THAMES.

GRANT, J. DUNDAS, M.D.Edin., F.R.C.S., Surgeon in Charge of Ear, Throat, and Nose Department.

NEW ZEALAND WAR HOSPITAL.

Capt. J. EVERIDGE, F.R.C.S., Surgeon.

No. 3 NEW ZEALAND HOSPITAL, CODFORD.

Lt. B. HASKINS, N.Z.M.C.

SOUTH AFRICAN MEDICAL CORPS.

Lt.-Col. A. B. WARD, M.B., B.C.Cantab.

Maj. M. G. PEARSON, M.B.Lond., F.R.C.S.

Maj. J. C. A. RIGBY, M.B., B.C.Cantab.

Capt. K. BREMER, M.B., B.S.Lond.

Capt. G. H. COKE, M.B., C.M.Edin., D.P.H. Cantab.

Capt. F. H. ELLIS, M.R.C.S., L.R.C.P.

Capt. H. MUNDY, F.R.C.S.

Capt. G. G. OAKLEY, M.R.C.S., L.R.C.P.

Capt. R. D. PARKER, M.D.Cantab.

Capt. W. A. RAIL, M.R.C.S., L.R.C.P.

Capt. J. TREMBLE, M.B., B.S.Lond.

BLIEDEN, M., M.D.Univ. Pa., Civil Surgeon, attached R.A.M.C., S. Africa.

COLLYNS, J. M., M.B., D.P.H.Lond., Civil Surgeon, attached R.A.M.C., S. Africa.

INDIAN MEDICAL SERVICE.

DEPUTY DIRECTOR-GENERAL.

Lt.-Col. F. E. SWINTON, M.R.C.S., L.R.C.P.

TEMPORARY MAJOR.

ROWCROFT, G. F., D.S.O., M.R.C.S., L.R.C.P., Bt. Col. ret. Ind. Army.

TEMPORARY CAPTAIN.

AMBLER, F. B., M.B., B.S.Lond.

COMMISSIONS IN ARMY.

Lt. R. G. HILL, M.B., B.S.Lond., "B" Battery, 2nd E. Anglian Brigade, R.F.A.
2nd Lt. C. H. BULCOCK, R.F.A. "D" Battery, 25th Brigade, 1st Division B.E.F.

2nd Lt. H. E. K. ECCLES, R. Flying Corps.
2nd Lt. J. T. LONG, 17th Middlesex Regt., B.E.F.

2nd Lt. C. R. P. WALLACE, 1st Garrison Battn., East Yorks Regt.

BOARD OF INVESTIGATION, ADMIRALTY EXPERIMENTAL STATION.

HOPWOOD, F. LLOYD, B.Sc. Asst. Physicist.

OFFICERS' TRAINING CORPS.

UNIVERSITY OF LONDON CONTINGENT.

Capt. A. MACPHAIL, M.B., C.M.Glasg., R.A.M.C.T.

RELINQUISHED COMMISSIONS IN THE SERVICES.

(If another commission has been received the name is preceded by an asterisk and appears elsewhere also.)

TEMPORARY MAJOR, R.A.M.C.

*FARRER, R. A.
WOOLLCOMBE, W. L. (ill-health).

TEMPORARY HON. MAJOR, R.A.M.C.

JONES, T. C. LITLER.

TEMPORARY CAPTAINS, R.A.M.C.

BAINBRIDGE, F. A.
BERRY, H. S.
BURFIELD, J.
DUNCAN, E. H. G. (ill-health).
DIXON, F. J.
EDER, M. D.
FINIGAN, D. O'C.
GIBSON, S. H.
GRAY, G. C. (ill-health).
HUTCHENS, H. J.
INCHLEY, O. (T.F.) (ill-health).
JAGO, T. D.
JAMES, A. M. A.
LEBROcq, C. N.
LITTLEJOHN, C. W. B.
LYSTER, A. E.
MILLIGAN, E. T. C.
MILLS, H.
NOLAN, B. J. (ill-health).
PINKER, H. G.
SANDILANDS, J. E.
SCOTT, H. H.
TAYLOR, R. B.
*WILLIAMS, R.
WILSON, J. G. (ill-health).

TEMPORARY SURGEON-CAPTAIN, R.A.M.C.

CLARKE, A. J.

TEMPORARY CAPTAIN, I.M.S.

MODI, S. H.

TEMPORARY LIEUTENANTS, R.A.M.C.

ALEXANDER, J. F.
ALMOND, G. H.-H.
BARNETT, B.
BATES, T.
BENNION, J. M.
VON BERGEN, C. W.
BISHOP, F. M.
BODY, T. M.
BRICKWELL, F.
BRIDGMAN, R. O.
BRODRIBB, A. W.
BROWN, A. B.
BURNETT, L. B.
*CANE, M. H.
DAWSON, J. B.
DOWNER, R. L. E.
DRINKWATER, E. H.
FOX, E. H. B.
GANDY, T. H.
HALL, P. (ill-health)
*HARKER, T. H.
HUTT, H. A.
KAYE, E. G.
KNIGHT, C. V.
LAMPLOUGH, W. H.

LEONARD, N.

*LINDSAY, A. W. C.
MAYO, T. A.
MEAD, J. C.
MERCER, W. B.
MILLEN, S. A.
MONCKTON, R. V. G.
PALMER, C. S.
PRINGLE, E. G.
PUGH, A. B.
RENDALL, P.
RICHARDS, R. W.
ROBINSON, G. S.
ROWSTRON, N. F.
SADLER, F. J.
*SAUNDERS, A. L.
TAUNTON, T. J.
TUCKER, A. B.
VAUGHAN, A. L.
VERRALL, P. J.
*WEST, J. A.
WILLIAMS, R. H.
WIMBLE, H. C. (ill-health).
WIPPELL, W. P.
WOOD-HILL, H. G.
WOODD, C. S.
WORTHINGTON, G. V.
*WRIGHT, C. R.

TEMPORARY LIEUTENANTS, I.M.S.

KAKA, S. M.
VAZIFDAR, F. M.

VOLUNTARY AID DETACHMENTS.

ST. JOHN'S AMBULANCE BRIGADE.
*No. 8 District, Canterbury.*WHITEHEAD REID, E. D., M.B., B.C.Cantab.,
Div. Surg.

ST. JOHN V.A.D. HOSPITAL, CHESTER.

BLAGDEN, J. J., M.R.C.S., L.R.C.P., Hon.
Surg.

FOLKESTONE V.A.D. HOSPITAL.

Dodd, P. V., M.D.Dub., S.M.O. (resigned).

GRAVESEND V.A.D. HOSPITAL.

LAWRENCE, S. M., M.D.Lond., Hon. Surg.

"HEATHERBANK" MILITARY HOSPITAL.

*Surrey, 12.*WOOLDRIDGE, A. T., M.R.C.S., L.R.C.P.,
M.O. in Charge.

RED CROSS V.A.D. HOSPITAL, HELSLEY.

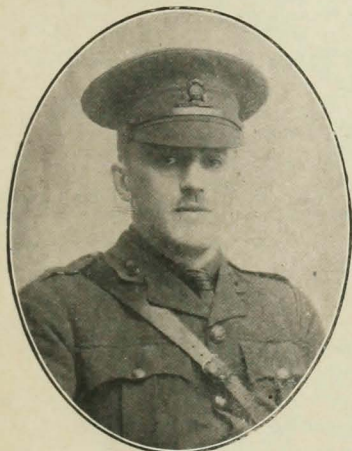
BLAGDEN, J. J., M.R.C.S., L.R.C.P., Hon.
Cas. Surg.MARLPIT COURT V.A.D. HOSPITAL.
*Kent, 88.*NEWINGTON, C. W. H., M.R.C.S., L.R.C.P.,
Hon. M.O.NO. 5, HORSHAM DIVISION, SUSSEX RED
CROSS DETACHMENT.DICKINS, S. J. O., M.D.Brux., Surg. and
Commandant.*Kent, 70.*WHITEHEAD REID, E. D., M.B., B.C.Cantab.,
M.O. in Charge.



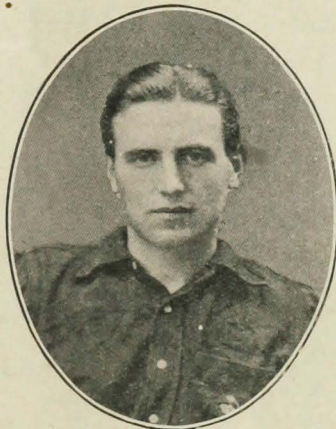
GERARD PRIDEAUX SELBY, M.B., B.Ch. Oxon., M.R.C.S., L.R.C.P., Capt. R.A.M.C. [September 26th, 1911.] Killed in action September 26th, 1916.



WILLIAM SELBY, D.S.O., V.H.S., F.R.C.S., Lt.-Col. I.M.S. [October 1st, 1887.] Died as the result of an accident September 8th, 1916.



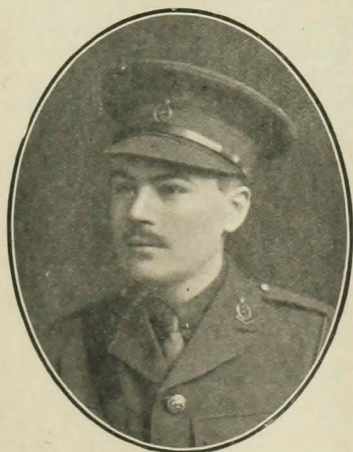
CHARLES TOLMIE TRESIDDER, Capt. Gloucester Regt. [October 1st, 1907.] Died from wounds April 22nd, 1916.



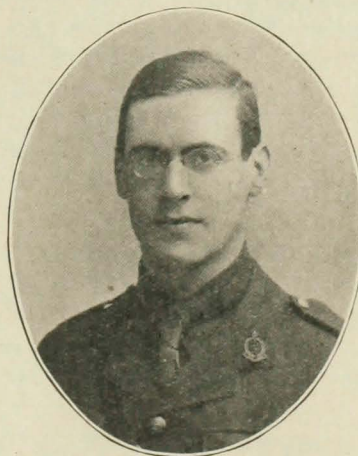
ARTHUR JOHN WAUGH, M.B., B.C. Cantab., M.R.C.S., L.R.C.P., Capt. R.A.M.C., attached N. Staffs Regt. [April 19th, 1909.] Killed in action August 18th, 1916.



FREDERIC WHITAKER, M.B., B.C. Cantab., M.R.C.S., L.R.C.P., Lt. R.A.M.C. [October 2nd, 1897.] Died from dysentery October 28th, 1916.



WALTON RONALD WILSON, M.R.C.S., L.R.C.P., Lt. R.A.M.C., attached Seaforth Highlanders. [September 18th, 1912.] Died from wounds July 12th, 1916.



DOUGLAS HENRY DAVID WOODERSON, M.B., B.S. Lond., M.R.C.S., L.R.C.P., Capt. R.A.M.C., attached King's Liverpool Regt. [September 21st, 1908.] Killed in action August 6th, 1916.

We regret that no photograph is available for reproduction of the following:

JAMES KEOGH MURPHY, M.D., M.C. Cantab., F.R.C.S., Staff Surg. R.N.V.R. [January 11th, 1892.] Died September, 13th, 1916.

Date of entry to Hospital is bracketed.

PRESENT AND FORMER NURSES OF ST. BARTHOLOMEW'S HOSPITAL SERVING IN CONNECTION WITH THE WAR.

TERRITORIAL RESERVE.

1ST LONDON GENERAL HOSPITAL.

The following St. Bartholomew's Nurses have joined this unit since January, 1916 :

Miss D. DRINAN.
Miss V. FLETCHER.
Miss W. HAVILAND.
Miss N. HILLS.
Miss D. LACEY.
Miss M. McCaul.
Miss M. MOODY.
Miss E. NOAR.
Mrs. NOY *née* FISHER.
Mrs. SARGENT *née* DEAR.
Miss E. J. B. WRIGHT.

The following Nurses have left the 1st London General Hospital for foreign service since January, 1916 :

Miss A. ADAMS.
Miss L. APPLEYARD.
Miss W. BICKHAM.
Miss M. BURDETT.
Miss P. COMYN.
Miss G. HIND.
Miss E. HINDLE.
Miss M. HITCH.
Miss E. LITTLEJOHN.
Miss M. MOODY.
Miss F. OLDFIELD.
Miss M. PEARCE.
Miss D. PRIESTLEY.
Miss D. ROBINSON.
Miss G. WHITAKER.

QUEEN ALEXANDRA'S ROYAL NAVAL NURSING SERVICE.

HASLAR.

Miss E. M. RAYNER.
Miss BEAUCHAMP.
Miss FYRNE.

QUEEN ALEXANDRA'S IMPERIAL MILITARY NURSING SERVICE RESERVE.

Serving at various Home Stations.

Miss E. HALL
Miss ALCOCK
Miss HENMAN
Miss F. ST. QUINTIN
Miss SAMSON
Miss TATHAM

} War Hospital,
Welwyn.

Miss F. E. COLE
Miss M. MORRIS
Miss NEWBOLD
Miss PORTNALL
Miss SPACKMAN
Miss CORNISH, Oxford War Hospital.
Miss MOIR, Epsom War Hospital.

} Norfolk and Norwich
War Hospital.

Serving Abroad.

Miss CARVER.
Miss CHEETHAM.
Miss DU FAYE.
Miss MACPHEE.
Miss PROVIS.

In France.

Miss R. DAYE.
Miss FARRANT.
Miss M. L. GILL.
Miss A. E. HARRIS.
Miss HAWKINS.
Miss Z. E. KEELER (Anglo-French Hospitals Committee, Lyons).
Miss P. KEEN (No 1 British Red Cross (Duchess of Westminster's) Hospital).
Miss LIVOCK.
Miss O'KANE.
Miss ROWNTREE.
Miss VINCENT.

In Salonika.

Miss A. N. LEE.
Miss J. THOMPSON.
Miss A. WARD.

In Malta.

Miss MACA. BROWN.
Miss E. JOHNSON.
Miss E. RICE.
Miss SOUTH.

Miss SAUNDERS, Superintendent of Red Cross Hospitals in England.

SPECIAL JAW HOSPITAL, AUXILIARY TO NO. 1 GENERAL HOSPITAL AT BROOK STREET, W.

Miss W. V. BAKER, Sister.

No. 10 GENERAL HOSPITAL.

Mrs. WILSON.

GRAYLINGWELL WAR HOSPITAL,
CHICHESTER.

Miss M. MAY.

CONVALESCENT HOSPITAL, BYCULLAH,
HIGHGATE.

Miss HILLS, Matron.

WAR HOSPITAL, PAISLEY.

Miss H. K. BUTLER, Superintendent Sister.

STAR AND GARTER HOSPITAL, RICHMOND.

Miss BURKE.

GENERAL HOSPITAL, SOUTHEND-ON-SEA.

Mrs. WAKELING, Matron.

QUEEN MARY'S ROYAL NAVAL HOSPITAL,
SOUTHEND.

Miss CORKE.

RED CROSS HOSPITAL, STREATHAM.

Miss WILLINK, Matron.

KETTLEWELL CONVALESCENT HOME,
SWANLEY.

Miss MUNRC, Superintendent of Nursing.
Miss MAYBERRY, Sister.
Miss DE ROZARIO, Sister.

THE GENERAL HOSPITAL, TIDWORTH.

Miss W. E. BAKER, Sister.

HOSPITAL COMPLIMENTAIRE, BORDEAUX.

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QUEEN ALEXANDRA'S HOSPITAL, DMITRI
PALACE, PETROGRAD.

Miss IRVINE-ROBERTSON, Matron.
Miss FARROW (since returned).

CONVALESCENT HOSPITAL, QUETTA.

Miss FRODSHAM.

No. 17 STATIONARY HOSPITAL, E.E.F.

Miss J. M. JACKSON, Matron.

Miss LISTER
Miss E. MCPHERSON
Miss POWELL
Miss RICE

} Q.A.I.M.N.S.R.

St. Bartholomew's Hospital



JOURNAL.

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

VOL. XXIV.—No. 7.]

April 1ST, 1917.

[PRICE SIXPENCE.]

CALENDAR.

- Tues., April 3.—Second Exam. of Society of Apothecaries begins.
Dr. Drysdale on duty.
- Fri., „ 6.—Dr. Hartley and Mr. McAdam Eccles on duty.
Minor Operations. Mr. Bailey's dressers.
- Sat., „ 7.—Oxford Lent Term ends.
- Tues., „ 10.—Final Exam. Conjoint Board (Medicine) begins.
Dr. Horder on duty.
- Wed., „ 11.—Oxford Easter Term begins.
- Thurs., „ 12.—Exam. for D.P.H.(Camb.) begins.
First Exam. of Society of Apothecaries begins.
Final Exam. Conjoint Board (Midwifery) begins.
- Fri., „ 13.—Final Exam. Conjoint Board (Surgery) begins.
Dr. Calvert and Mr. Bailey on duty.
Minor Operations. Mr. Wilson's dressers.
- Tues., „ 7.—D.P.H. (Conjoint) Exam. begins.
Dr. Morley Fletcher on duty.
- Wed., „ 18.—Cambridge Easter Term begins.
- Fri., „ 20.—Dr. Drysdale and Mr. Wilson on duty.
Minor Operations. Mr. Waring's dressers.
- Mon., „ 23.—**Summer Session begins.**
- Tues., „ 24.—Dr. Hartley on duty.
- Fri., „ 27.—Dr. Horder and Mr. Waring on duty.
Minor Operations. Mr. Eccles' dressers.
- Tues., May 1.—Dr. Calvert on duty.
- Thurs., „ 3.—Primary F.R.C.S. Exam. begins.
- Fri., „ 4.—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
Minor Operations. Mr. Bailey's dressers.
- Mon., „ 7.—Exam. for M.B., B.S.(Lond.) begins.

EDITORIAL NOTES.

IN February 8th last the death occurred, in his 92nd year, of Mr. Peter Reid, who had been a Governor since 1864.

At all times a generous subscriber to the funds of the Hospital, Mr. Reid, in the year 1882, gave anonymously a sum of £5000 for the purchase of the site on which the Kettlewell Convalescent Home was erected.

But the benefaction which will always be specially connected with Mr. Reid's name was the founding and endowing by him in January, 1890, of "The Hospital Convalescent Home" at Parkwood, Swanley, for the reception of convalescent patients on their discharge from London hospitals and still requiring active professional treatment. For this object he placed a sum of £100,000 in the hands of trustees, associating with himself the late Sir William Savory and Mr. William Henry Cross, who was at that time the Clerk of this Hospital.

Not content with his original donation of £100,000, Mr. Reid increased his contributions to a total of approximately double that sum by various gifts from time to time in furtherance of his benevolent object.

The Home was opened in June, 1893, with accommodation for 120 patients, and up to the end of last year more than 37,000 poor persons had received its benefits without charge of any kind.

Apart from gifts to personal friends and others, the bulk of Mr. Reid's estate has been bequeathed to charity.

* * *

It is with much pleasure that we congratulate Temp. Capt. John Ferguson, R.A.M.C., on obtaining the Military Cross. "He displayed great courage and determination in tending the wounded under the most intense hostile fire. Later, although himself wounded, he remained at his post until all the wounded men had been dressed."

* * *

Sir Francis Champneys has been re-elected as Representative of the Royal College of Physicians of London on the Central Midwives Board, and Sir Dyce Duckworth has been re-elected as Representative of the same body on the Council of the Queen Victoria Jubilee Institute for Nurses.

* * *

Mr. H. J. Waring has been elected to represent the Royal College of Surgeons of England on the General Medical Council in the vacancy occasioned by the retirement of Sir Henry Morris.

* * *

ROLL OF HONOUR.

We very much regret to learn of the death, on active service, of Major Sidney Rowland, R.A.M.C., from cerebro-spinal meningitis. Born in 1872, he was educated at Berkhamsted Grammar School and Downing College, Cambridge, where he directed his attention to natural science. He completed his medical studies at St. Bartholomew's Hospital, and shortly afterwards joined the staff of the Lister Institute. From the outset of his career he was engaged in research, and worked at a number of important problems, notably upon the scientific basis of typhoid vaccination, and, later, at a similar aspect of vaccination against plague. In 1906 he was seconded by the governing body of the Lister Institute to the Commission for Investigation of Plague in India, where he remained for two years. During this period his work, in conjunction with that of Major Glen Liston and the late Major G. Lamb, of the Indian Medical Service, and Dr. C. J. Martin, F.R.S., of the Lister Institute, helped to establish the transmission of plague by rat-fleas. He returned to the Lister Institute in 1908, and a year later was again seconded to the Plague Commission, and worked in this country upon the problem of plague prophylaxis, making important contributions both to the immediate knowledge of vaccination against plague and also to certain of the wider questions of immunity. In September, 1914, he obtained a commission in the R.A.M.C., and proceeded at once to France in charge of No. 1 Mobile Laboratory. He was among the first of the bacteriologists to be called upon to use their knowledge for the prevention of disease among troops in the field. Shortly before his illness he was engaged in the discovery of carriers of the cerebro-spinal meningococcus among the troops, and it is supposed that he must have contracted the disease in the execution of these duties.

Our sincerest sympathy is extended to his relatives and many friends.

* * *

It is with great sorrow that we learn that Lieut. H. A. Hammond, R.A.M.C., D.S.O., has died of wounds received in action with the Salonika Forces on February 12th. Lieut. Hammond was qualified in 1909, and shortly after that period took up a practice in Bournemouth. He joined the R.A.M.C. in July, 1916, and left shortly afterwards for Salonika, where his D.S.O. testifies to the usefulness of his work. We extend our deepest sympathy to Mrs. Hammond in her sad bereavement.


FROM THE FRONT.

LETTER FROM CAPT. L. B. CANE, R.A.M.C.

H.M.T. —,

AT SEA ;

February 15th, 1917.

 We have at least six Barts.'s men on board— R. C. Davenport, R. D. Maingot, M. B. Lindsey, Cook, Bull, and myself—and are having a very pleasant voyage, one of the longest taken by troops during the war.

“We have already been on board since before Christmas, and shall not reach our final destination till some time in March.

“We have just reached our third port of call, and except at these places have seen no land and scarcely any ships since leaving England.

“The chief objects of interest at sea have been porpoises, albatross, sharks, and whales.

“Battalion sports have been in progress for some weeks, also cricket and other deck games, and we have frequent concerts and pierrot shows in the evenings.

“Recently we had a musical revue, and a comic opera is in rehearsal.

“Even in war time King Neptune holds his court, and seldom have more new-comers to his realms been initiated with the ancient rites than when he visited His Majesty's troopship — on her first crossing of the line.

“Appearing on board in the early afternoon, Father Neptune, with his queen, counsellors, and court, proceeded with discordant band of sea-pirates around the ship.

“Arrived at the saloon, he read aloud his proclamation, and later ascended the throne on a raft by the forward rail.

“As the name of each ‘general’ was then read out by the Chancellor, a rush was made by sea-police adorned with blood-red skulls and crossbones. The ‘visitor’ was, by force, held in the ‘chair,’ whilst a black boy freely lathered him with a paint brush, and the State Barber, smoking an immense cheroot, wielded his great razor, and shaved and marked him with cabalistic signs.

“Next he was borne aloft and hurled over the ropes that bounded Neptune's bath, to be thoroughly cleansed from all his landsman's sins, and so fitted to dwell with shark and crab and mermaid slim in coral caves below.

“For one brief moment then was he held up for examination by the Court Physician, who, taking his temperature with a bath thermometer, invariably declared that it was far too high, and he must again be ‘cooled,’ and a magic potion forced between his lips.

“When at last, as a fully-fledged merman, he emerged dripping from his bath, he was greeted by the beating of

'drums' and other 'instruments of music,' whilst the next in order was prepared for the ordeal.

"And so the fun went on, till several hundred members had been admitted. Some were hailed by police from hidden recesses of the ship, others dragged even from their berths and dug-outs.

"Eventually King Neptune and his retinue prepared to return once more to the vasty deep, but so great was the multitude of their victims that he and his queen, his barber, physician, and all his court had themselves to pass through the festive tank, and to suffer anew the fate for others they had ordained."

NOTES ON WAR SURGERY IN FRANCE.

By COLONEL C. GORDON WATSON, C.M.G.,
Consulting Surgeon, Army.

WOUND SUTURE.

DURING the present war, surgeons have been profoundly impressed with the length of time which large septic wounds take to heal by granulation, even when sepsis is well under control.

These gigantic wounds are the combined product of the initial injury and the free hand of the surgeon. The presence of anaerobes in extensively lacerated and devitalised tissues make it imperative that the wound shall be freely laid open. Every nook and cranny must be explored, and all damaged tissues removed, so far as is surgically possible, if the risk of gas infection is to be avoided. Thus a gigantic wound results, which often takes months to heal under the most favourable conditions.

Needless to say, the military situation demands that every effort should be made to shorten the recovery period and to return wounded men to duty in the *shortest* possible time.

Early in 1915, at the hospital, we began to experiment in wound suture, with a view to accelerating the healing process.

SECONDARY SUTURE

Granulating wounds of all sizes and depths were sutured or partially sutured when conditions were considered favourable, *i.e.*, when suppuration had been reduced to a minimum, the temperature had settled to a steady low level (not necessarily normal) and the granulations appeared healthy.

The following technique was adopted: Usually under gas and oxygen the skin around the wound was cleaned with ether, painted with iodine, and the granulations lightly sponged with ether. *The skin edges and the granulations were left undisturbed by knife or spoon.*

The margins were brought together by silkworm gut

sutures without the use of buried sutures. It was found that sterility was not essential to success in shallow or moderately deep wounds. The degree of tension required to secure apposition proved to be a more important factor. The greater the tension the less the chance of success. Whenever tension was unavoidable, mattress sutures were used. The exposed portions of the suture on either side were threaded through short pieces of small rubber tubing, to avoid undue pressure on the intervening skin and interference with its blood supply. In some cases, when approximation was difficult these sutures were not tied with a permanent knot, but with a triple fold single knot, which was gradually tightened day by day as the skin stretched.

Care must be taken not to remove sutures too soon. Wounds that appear united will often gape when the patient moves about, if the stitches have been removed.

Every attempt was made to secure accurate apposition, and whenever deep pockets existed rubber glove drains were inserted. After suture fomentations were applied for several days and the limb kept in absolute rest, if necessary by splints. In some cases where there was much loss of skin, limited under-cutting was tried. This practice should be avoided: it nearly always results in a "flare up."

It is far preferable to suture the wound by stages than to under-cut, even when the wound has been proved to be sterile on culture.

As a preliminary to wound suture, *i.e.* before a wound is ready for suture, contraction of the wound may be hastened by the following method of stay-lacing (in lieu of strapping). Loops of gauze bandage, varying in width according to the shape and size of the wound, are fixed to the skin on either side of the wound by Sinclair's glue, with the loop towards the wound.

Strips of aluminium from the fracture-box, perforated with holes an inch apart, are inserted into the loops on either side and fixed there by the glue. The loops are then gradually drawn together by a lace of stout silk passed through the holes on either side. In this way wound closure is accelerated, and the wound can be dressed and irrigated until ready for suture.

In August, 1915, we commenced to employ Carrel's method of flush irrigation with sodium hypochlorite, and soon found that wounds became healthy more rapidly, and that the risk of gas infection was greatly diminished. In the most favourable cases wounds became sterile in a week or ten days. The adoption of Carrel's method, which soon became a routine with us, produced a remarkable improvement in results all round, and we were able to suture wounds earlier and with greater confidence. Wounds were frequently sutured in the shallower parts quite early, while the Carrel irrigation was continued in the deeper parts.

Whether or no we were actively employed in wound suture (apart from primary suture) depended on the amount of work in hand. In quiet times, whenever it was considered

possible to accelerate convalescence by suture this was done before transferring the patients to England; in busy times secondary suture has to take a back seat.

Within the last six months a far wider field for wound suture has been opened up by a method which in future may considerably modify our views on the treatment of wounds.

I refer to Rutherford Morrison's bismuth and iodoform paste (BIPP), consisting of bismuth subnitrate, one part by weight; iodoform, two parts; and liquid paraffin sufficient to make a paste. By applying this method and carefully following the technique advised by Morrison, the Carrel method of wound flushing can be dispensed with in many cases.

The wound is thoroughly opened up, and all damaged tissues are removed with the knife; the entire wound surface is dried with spirit and thoroughly smeared with BIPP; the wound is then filled with the paste, and closed by suture without drainage. The results that I have seen by this method are so remarkable that I hesitate at the present time to describe illustrative cases, for fear of straining the credulity of my readers.

Prof. Morrison's initial work was carried out on wounds that had reached him from seven to fourteen days after infliction, but he has also employed the same method for an acute abscess (*e. g.* acute mammary abscess).

In the Army during the past two months I have watched the results of this method on recent wounds, and in a few cases of acute abscess. This method, so far as my experience goes at present, seems to be well suited to recent wounds, with perhaps the proviso that in recent wounds the amount of paste used must be limited owing to the risk of iodoform poisoning.

More experience is required before speaking with any authority on this point. The very severely wounded should not, at any rate in the early stages, be submitted to the extensive operative treatment required by this method. Hitherto *primary suture* of wounds has been limited to cases of scalp wounds and other small non-penetrating wounds. It now seems probable that the field for primary suture can be considerably extended with safety by using BIPP, and in this way an immense saving will result, not only in time occupied by surgeons and nurses in dressings, but also in the length of time required to cure the wounded man.

It is not my purpose, in the present article, to write at length on the use of BIPP for wounds, but simply to refer to its use as an aid to early suture of wounds. In the majority of cases there is a moderate initial though transitory rise of temperature, and for the first few days there may be some redness of the skin edges. *Pain disappears* as if by magic, almost at once.

There is no need to dress the wounds so long as the patient is comfortable; the wounds, though discharging serum freely through the sutures, may be left untouched

from the first, except as regards the outer dressings, for weeks at a time, without impeding the progress. An immense amount of labour is thus saved. When the wounds are dressed for the first time the dressings slip off without pain, and the uninitiated surgeon will often be amazed to find the wound practically healed or well on the road to recovery.

"THE ART OF ANÆSTHESIA."*

By H. EDMUND G. BOYLE, M.R.C.S., L.R.C.P., Capt.
R.A.M.C.T.

Anæsthetist and Demonstrator on Anæsthetics to St. Bartholomew's Hospital.

(Continued from p. 62.)



ET us now take a few special operations and consider what is best in each case.

(1) *Dental extraction.*—Here I think that N_2O and O is undoubtedly the best anæsthetic—with a single administration with a Hewitt's apparatus. That is to say, as soon as anæsthesia occurs, the face piece is removed and the dentist permitted to do his work. The time available is a little longer than with nitrous oxide alone and the patient's comfort, both for induction and afterwards, is greater than with nitrous oxide alone. Should the dentist need more time it is quite simple to adjust a nose-piece and give a prolonged nasal administration. There are one or two points about administration for dental work which you must remember. Let the dentist put the mouth-prop in himself, because he knows where he wants it, and it will be cut of his way, and if it is not in the right place he cannot blame you. Be careful in using your gag. Do not break your patients' teeth. It is not necessary, and they do not like it. Do not smother your patients. Put the face-piece on gradually and quietly. And then there is one thing that you must never forget. Never give nitrous oxide to women unless you have someone else present throughout the operation. Occasionally some of these people have curious erotic dreams, and if you have not got a third person as a witness you may find that you are accused of having committed an assault. Such cases have occurred before, and it is as well to be guarded against such unpleasantness.

Phthisis.—It is a moot point whether a short gas and ether does much harm to a patient with phthisis. By that I mean the induction by gas and ether and the change at once to chloroform. However, in the present state of our knowledge it would be better perhaps to give nitrous oxide and oxygen with a Gwathmey or other similar apparatus rather than have recourse to either ether or chloroform.

* Delivered during a course of Demonstrations on Anæsthetics at St. Bartholomew's Hospital.

Tonsils and adenoids.—When I first began anæsthetics these were nearly always done rapidly, but nowadays, with the careful dissection of the tonsils that some surgeons practise, the administration of the anæsthetic becomes one of the most difficult and dangerous tasks that we are called upon to perform. The *position* of the patient is, in my opinion, extremely important. As soon as anæsthesia is complete the patient should be turned half over so that the dependent cheek lies on the pillow. The reason for this is that the blood goes into the cheek and can be easily swabbed out, and there is less likelihood of blood getting into the larynx. You will find many other positions used, but this position, which we all learned from the late Sir Henry Butlin, is probably the safest. When you have your patient anæsthetised, you continue your anæsthetic with a Junker's inhaler and chloroform. You will find some surgeons seem to like to push the tongue back and completely block the air-way, but you must insist that they stop and let the patient breathe or you may get a relative overdose of your anæsthetic. The best sequence for adults is gas, ether, chloroform, and for children A.C.E., C.E, or open ether.

Goitre.—Now, if we come to goitre we get a very large field of choice for your anæsthetic. As you all know, the operations for goitre—either for the simple condition or for exophthalmic goitre—are exceedingly dangerous things, especially the exophthalmic condition. Indeed, so dangerous is it that some surgeons refuse to operate unless a local anæsthetic is used. In America they have gone to the extent of keeping their patients in bed for several days before the operation, and each day the patient is given a hypodermic injection of water. Sometimes a little morphia is put into it, and each day the rectum is washed out and he is given an injection of pure olive-oil—the patient not knowing quite when the operation is going to be done. And on the morning of the operation the same procedure is gone over as is gone through on the previous day, with this exception. Instead of water he is given morphia and atropine and instead of plain olive-oil, olive-oil and ether, and as the patient sinks into sleep he is taken to the theatre and then if it is necessary to deepen the anæsthesia, open ether is employed and the goitre is removed. All this is done to remove the factor of fear from these easily-startled people. For my own part, in dealing with goitre, both simple and exophthalmic, I think that if you give them a little morphia and atropine beforehand and then anæsthetise them with gas and ether, and then continue with endotracheal ether, you are probably using about as good and safe a method as is possible.

I want you to remember that during the operation for goitre the surgeon very often is pulling on the trachea. As likely as not the trachea is compressed and rather scabbard-like, and I know from my own experience that if you have not got a tube down the trachea you can have some very

troublesome respiratory conditions. Therefore I would strongly advise you, for goitre, to use the endotracheal method. You have your tube down the trachea and you are able to give ether or air, or oxygen at will. There is a curious feeling of safety when giving an endotracheal ether for goitre cases, which I have never had with any other form of anæsthetic. Remember that the death-rate after exophthalmic goitre is extremely high, and any method which will reduce that is welcome. And, finally, on the question of goitre, remember that chloroform for exophthalmic goitre is practically absolute poison.

Head cases.—There again you can use your endotracheal ether, and as in the case of goitre, it has the advantage that the administrator and all his apparatus are safely out of the way of the operator, thus leaving a clean aseptic field—a point which the operator will value.

Actual administration.—In the first place, during the induction period you should keep the room absolutely quiet. Remember that hearing is the last of the senses to go, and all the preparation, walking about the room, talking, etc., and the careless dropping of bowls and instruments, is very distressing to the patient. With an absolutely quiet room you will not only find that the patients appreciate it, but the anæsthetic will probably go much better than if the whole thing had been done amidst a babel and clatter.

If you are giving a nitrous oxide and ether I want you to remember that you are not to slam the mouth-piece on the patient. Put it on quietly—be gentle. And thirdly, if you would make it a practice to put a small mouth-prop between the patient's teeth you will find that you will save yourself a good deal of trouble. As I have told you before, no man can hold his breath if his mouth is a little open. If you have a small mouth-prop he cannot clench his teeth and get black in the face. Subsequently, during your anæsthetic you can place a small rubber tube about 6 in. long in the mouth so that one end is outside and the other end is somewhere about the upper part of the larynx. You can manœuvre it so that they breathe freely and quietly through the tube. You will find that your patients will keep a beautiful colour—a beautiful pink—and you will not have to keep the jaw forward. It saves you an infinite amount of trouble and keeps the air-way clear. If you are not skilled in the use of chloroform or if you are using a mask, be careful not to blister your patient's face. Grease the face well with vaseline beforehand.

Never send your patient back to bed until the reflexes are present. You really ought to see your patient back to bed, and you should never send him away from the table so that he takes hours to recover. When you put your patient to bed, put him on his side and draw the legs up. The reason for this is that patients vomit less if placed on the side, and are less likely to inhale the vomit. The reason I suggest the legs should be drawn up is because if you go through any of the wards you will find the majority of the people

are curled up on their side as being the most comfortable position to lie in.

And, finally, see that there are no hot-water bottles in the bed. Have the bed warm, but no bottles in it.

THE PATIENT'S POINT OF VIEW.

To nearly every patient who undergoes an operation, the day of operation and the operation itself are more or less dreaded. It may be the fear of losing consciousness—and this is most marked in those who have never had an anæsthetic—or it may be the dread of what the surgeon will find; for example, if it is a case of suspected malignant disease; or it may be the general fear of an operation and its results. All these possibilities arise before the patient expecting to be operated on, and some of these factors at times produce a condition that some people would call "funk." But, believe me, these people cannot help their condition. They are really to be pitied. You must remember that they are lay-people, and unaccustomed to the—to them—horrible preparations, and details of the operation. As lay-people they cannot possibly take the same view of operations, etc., that we, as medical men, do.

Unfortunately there are a great many medical men who, full of zeal and enthusiasm in pursuit of knowledge of disease, yet fail to remember, or understand, that their patients are, after all, human beings, and as such are possessed of some form of sensitiveness and feelings. Some medical men—and we all know them—are so wrapped up in their little circle that they must be for ever talking of it, around it, in it; they totally fail to grasp the very elementary fact that there are other people outside their very limited range of vision, to whom medical details are positively repugnant. To men such as these I would say—when you are about to anæsthetise your patients, put off your borrowed cloak of thoughtlessness and callousness, array yourself and behave yourself, as what you ought to be, a gentleman and an ornament to your profession.

JOHN HUNTER AND ST. BARTHOLOMEW'S HOSPITAL.*

By W. LANGDON BROWN, M.D., F.R.C.P.



R. PRESIDENT AND GENTLEMEN,—One hundred and eighty-nine years ago to-day John Hunter was born, and for the eighty-ninth time the Society meets to commemorate that event. Men distinguished in the profession have lavished their learning and their oratory in praise of Hunter, and deeply appreciative as I am of being asked to follow in their wake, I may

* Being part of the Eighty-ninth Annual Oration delivered before the Hunterian Society on February 14th, 1917.

well ask what aspect of the subject is there left for me to dwell on? Looking through the list of orators I discovered the interesting fact that I am the first member of the staff of St. Bartholomew's Hospital to be invited by the Society. As Hunter spent part of his student days at St. Bartholomew's, it seems appropriate that I should say something of the Hospital as it was in his day, and of the men he met there. For much information I must express my indebtedness to Dr. Norman Moore, who has once again shown me that kindness that has never failed since I first entered the Hospital, of which he is the distinguished historian.

We are the resultant of our heredity and our environment. The factor of heredity was strongly marked in the face of John Hunter, as is shown by the number of the family who achieved distinction, such as his brother William, and two of his sister's children—Dr. Matthew Baillie, the leading London physician of his day, and Joanna Baillie, the well-known writer. But even such an original genius as John Hunter must have owed something to his environment. As Stephen Paget truly says, "It is not we who make our profession, it is our profession that makes us." For that reason our calling reveals itself in most of us to a shrewd observer almost at the first glance. So it may be of interest to recall part of Hunter's environment, even though we may conclude that he was less beholden to it than more ordinary mortals.

John Hunter entered St. Bartholomew's Hospital in 1751, when already twenty-three years of age. Even then the Hospital was an ancient institution, for it was founded by Rahere in 1123. The picturesque legend that Rahere was court jester to Henry I has no foundation, for he was a Canon of St. Paul's. A judge may be a jester, but a Canon never. When on a pilgrimage to Rome, he visited Tre Fontane on the Campagna, the scene of St. Paul's martyrdom. Falling a victim to the malaria then so rife there he was nursed by the monks in the Monastery of S. Bartolommeo on Tiber Island. This was the site of the temple of Æsculapius—the original pillars of which still support the Church of S. Bartolommeo. This temple of Æsculapius was built after the great plague in Rome in B.C. 292, when, "in accordance with the advice of the Sibylline books, ambassadors were sent to Epidaurus to bring the statue of Æsculapius to Rome. They returned with it, but, as the vessel sailed up the Tiber, a serpent, which had lain concealed during the voyage, glided from it, and landed among the reeds on this spot—an omen hailed by the people under the belief that Æsculapius himself had thus selected it. In consequence of this story, the form of a ship was given to this end of the island, and its poop may still be seen below the end of the convent garden, with the head of Æsculapius sculptured on it in high relief. . . . For over two thousand years the island has been dedicated to the spirit of healing." (Hare.) While fever-stricken on this island, the story goes, Rahere had a vision of

St. Bartholomew, who ordered him to build a church and a hospital in London in his honour. Certain it is that on his recovery he returned to London, obtained a grant of land from the Bishop of London, and founded not only the Hospital just outside the Roman wall of the city, but also the magnificent priory of St. Bartholomew's the Great, which, even in its present mutilated form, is one of the architectural glories of London.

Rahere's Hospital, though then on the outskirts of London, became in course of time surrounded by buildings which acquired an historic interest. The smooth field or Smithfield in front of the Hospital was the scene of the famous Bartholomew Fair, which, also established by Rahere, later became a regular saturnalia. The field had more tragic memories as the place of repeated martyrdoms, until, in the words of Fuller, "the hydropsical humour which quenched the life of Mary extinguished also the fires of Smithfield." Earlier, when King Richard II met his rebellious Commons on this spot, it was just within the gate of the Hospital that Wat Tyler met his death. This was in 1381, ten years after the Charterhouse had been founded on the other side of the field. To the west of the Hospital, Cock Lane, famous for its ghost, ends in Pye Corner, where the Fire of London burnt itself out. To the east lies Cloth Fair of Elizabethan fame. When I entered St. Bartholomew's it was almost entirely composed of Tudor houses, few of which remain to-day. Little Britain, so charmingly described by Washington Irving, forms the eastern boundary of the Hospital. From Little Britain the first number of the *Spectator* was issued seventeen years before Hunter's birth. Between Cloth Fair and Little Britain lies St. Bartholomew's the Great, but to say anything of its history or beauties would require a whole evening, so I refrain. On the south side lay Christ's Hospital and Newgate Prison, both recently destroyed.

The present building is the one which John Hunter entered. It was then of recent date, and, indeed, incomplete. It was begun from the designs of James Gibbs only twenty-one years before; one side of the quadrangle was built during John Hunter's stay, and the last side was not built till five years later. To James Gibbs London owes several admirable buildings—St. Martin's in the Fields (where Hunter was buried), St. Mary's-le-Strand, and St. Peter's, Vere Street—each a gem in its way. The more massive St. Bartholomew's was designed for utility rather than ornament; but it is a stately pile, and at that time must have been a great advance in hospital architecture. More picturesque than the main building is the Henry's VIII's gateway, recalling Temple Bar in its structure.

The staircase of the Great Hall is enriched by two wall paintings executed in 1736 as a gift by Hogarth, who was then residing in Bartholomew Close. Hogarth says in his manuscript notes: "Without having had a stroke of this

grand business before . . . and with a smile at my own temerity I commenced history painting, and on a great staircase at St. Bartholomew's painted two scripture stories with figures seven feet high. These I presented to the charity." He hoped it might establish a fashion for such paintings in London, but was disappointed in that expectation. One of them represents the Good Samaritan pouring oil and wine into the wounds of the man who fell among thieves, the other the Pool of Bethesda. Among the halt and diseased in the latter picture is a beautifully modelled nude female figure which was formerly considered by many to represent a typical *malade imaginaire*, but when the picture was cleaned a conscientious workman was stopped just in time from scraping off some curious patches from her knees, and then it was found that Hogarth had accurately represented a case of psoriasis.

Entering the Great Hall, the first picture on the left hand of the door is Sir Joshua Reynolds' portrait of Percival Pott, who was Senior Surgeon to the Hospital when Hunter joined. Pott, who has given his name to three diseases, was then the acknowledged head of his profession, and it was to become his pupil that Hunter came to the Hospital after the death of his former master, Cheselden. Stephen Paget says of Hunter's stay at St. Bartholomew's: "He walked the wards, and was present at grave operations, which things a student may do without much profit, but it was his privilege to go straight from one good master to another and to see simplicity of treatment and avoidance of officious interference which made Pott so great in Surgery." Otley says: "The actual cautery and the charcoal pan were still considered an essential part of the dressing apparatus at the hospitals and a farrago of applications going under the name of suppuratives, digestives and sarcotics were implicitly relied on for affecting those changes which Nature was all the while performing in spite of her injudicious allies. Pott was the first surgeon in this country who successfully attacked these abuses." No doubt this had an influence on Hunter, who, in the last year of his life, wrote thus of Pott: "Mr. Pott, though one of the senior surgeons in London, gave lectures to the pupils of St. Bartholomew's Hospital, which lectures became the basis of his works on the operations of surgery, and do credit to the Governors of that charity for their choice of one so able to instruct." But in spite of this testimony it is a lamentable fact that in after life these two great men had become hostile towards one another. It is not pleasant to see the former pupil attack his teacher, more especially when the difference is on personal grounds. But the most determined panegyrist of Hunter would not claim that he was a peace-loving man. If we are to paint him as Oliver Cromwell wished himself to be painted, we must admit that his repeated disputes as to priority of discovery throw an unpleasant sidelight on his character. And it was a strange irony of fate that after his death his own brother-in-law

should have stolen his discoveries wholesale, and then have destroyed the evidence of his theft.

Pott was accused by the Hunters of stealing from them the discovery of the nature of congenital hernia. The accusation was made publicly in a lecture. Pott denied the truth of the charge and naturally objected to the manner in which it was made. In any case, all of them had been anticipated by Haller, though to John Hunter must certainly be conceded the explanation of the descent of the testis in its relation to congenital hernia. From what we know of Pott as a high-minded gentleman, the accusation of the Hunters seems improbable, and became all the more so when the Hunters fell to accusing one another of similar thefts. But the difference with Pott lay deeper than this. Pott was no favourite with the Scots' school in London. He possessed just those gifts which John Hunter lacked; he was well versed in the history of medicine and surgery, a clear and fluent lecturer, a classically correct and elegant writer, agreeable and courteous in manner, and prudent in regard to pecuniary matters. So Ottley says, and these were not Hunterian virtues. Moreover, he was not fond of employing physiological reasoning to guide his practice; he was an empiric, while John Hunter "was the first who taught us to bring the lights of physiology to bear upon the practice of our art." There was, therefore, antagonism in nationality, personality, and method. Added to this, no doubt, there was professional jealousy in that Pott achieved success early in life and retained it late, only leaving five years for John Hunter to reign as undisputed leader of his profession.

Hunter's association with the Pitcairns, two other members of the staff of St. Bartholomew's, was not thus clouded. William Pitcairn had been elected Physician to the Hospital two years before Hunter entered. He was then forty-eight, and he continued to hold office till he was seventy-nine, dying at the advanced age of ninety, only two years before Hunter. The fine old house in which he lived in Warwick Court is still standing, and is used as a residence by the employees of Messrs. Copestake, Crampton & Co. Later in life he had also a country residence, where he cultivated a botanic garden covering five acres. He was Goulstonian Lecturer at the Royal College of Physicians, of which body he was subsequently President. After retiring from practice he became the Treasurer of St. Bartholomew's, and at the end of his long life was buried in the Hospital church. His brother, Major John Pitcairn, who was the senior British officer to be killed in the battle of Bunker's Hill, had a son, David, who also became Physician to St. Bartholomew's, when he was thirty-one, in succession to his uncle. He was much younger than John Hunter, being only two years old when Hunter entered the Hospital, but in after life they became closely associated. David Pitcairn was educated at Cambridge; he was Goulstonian Lecturer and Harveian Orator

at the Royal College of Physicians, and became a Fellow of the Royal Society. He was the first to point out (in the course of his lectures at St. Bartholomew's) the association between acute rheumatism and valvular disease of the heart. This is the more interesting because he himself had mitral regurgitation. He was a handsome man, as his portrait by Hoppner proves; but, as Dr. Norman Moore pointed out to me years ago, his face bears a mitral aspect. I subsequently came across a report of the post-mortem examination of David Pitcairn, and Dr. Norman Moore's observation was strikingly confirmed therein. As he retired from the office of Physician to the Hospital at the early age of forty-four, it may be presumed that his valvular lesion made his health delicate. But he lived sixteen years after his resignation, and he also was buried in the Hospital church.

The long association of the Pitcairns with St. Bartholomew's has been perpetuated by the naming of a ward after them. The closeness of the association between David Pitcairn and John Hunter is shown by the facts that Pitcairn was one of those to whom John Hunter submitted his work on venereal disease for an opinion before publication, and that Hunter consulted Pitcairn about his own health. Hunter had his first attack of angina in April, 1785; he was again taken ill in May, and he consulted David Pitcairn on the 20th of that month. He told him that six weeks before he had cut his hand while examining the body of a patient who had died of hydrophobia, and that he had gone in fear of having contracted the disease, proving once again that even the most eminent practitioner may be incapable of diagnosing his own malady.

Hunter relates a consultation with David Pitcairn over a case of carbuncle as follows: "As neither bark nor calomel nor opium had been of any use I said to Dr. David Pitcairn, 'Now, do not let us permit this patient to be lost, whilst we are only using such means as experience shows to be of little or no effect, for, David, this is a case more belonging to my province than yours, and I being an older man have seen more of them than you have, and can tell you perhaps what you did not know, that we have no powers in this case that are known.' Now, David is a truly sensible man and not governed by form; he therefore agreed, but wanted to know where we were to begin. 'Why, with the first letter of the alphabet, and go through the catalogue of the materia medica; so that we do not stop too long on the letter B (bark) as is generally done.'"

We can see from all this that the relations between Hunter and David Pitcairn were cordial, and that each possessed the other's confidence.

Another eminent Bart.'s man with whom Hunter was friendly was John Abernethy. But here again the friendship began long after Hunter's student days, for Abernethy was not born till 1764. Like Hunter, he was a pupil of Pott's. Abernethy is too well known for it to be necessary

for me to give any review of his career. But it is interesting to recall that his daughter married Sir George Burrows, an eminent physician of the Hospital, and that their only daughter married Mr. Alfred Willett, whom most of us will remember as a distinguished Bart.'s surgeon, for he died as recently as 1913. His son, John Abernethy Willett, a fellow-student of mine, is well known to the present generation of Bart.'s men.

Abernethy was a man of kind heart but brusque manners. His appreciation of Hunter's personality he expressed thus: "I was acquainted with Mr. Hunter at a time when he must have greatly interested anyone who duly appreciated the results of his talents and labours, or who had any sympathy for the highly susceptible mind of genius, rendered still more so by excess of exertion and the perturbed feelings incident to bodily disease. He seemed to me conscious of his own desert, of the insufficiency and uncertainty of his acquirements, and of his own inability readily to communicate what he knew and thought. He felt irritated by the opposition he had met with. . . . "I know, I know," said he, "I am but a pigmy in knowledge, yet I feel as a giant when compared with these men." An attitude of mind which may explain Hunter's difficulties with some of his contemporaries. But Abernethy also bore witness to the existence of a saving grace, for he said that "Mr. Hunter was a man of very considerable humour."

* * *

To-day it is appropriate to recall that Hunter lived in warlike times. He owed his first professional advance to his position as Staff-Surgeon with the Fleet that captured Belleisle in 1761, and with the Army in Spain the following year. And when he was dead, it was war which militated against the purchase of his beloved museum by the Government. "What, buy preparations," said Pitt, "why I have not enough money to buy gunpowder!" A saying which we may yet find ominous for the advance of medical science, though its practical value in war may be recognised for the moment.

If we are to advance, the Hunterian tradition must be a living tradition; in the literal sense of the word, it is something to be handed on. There have been great men in the past, like Hippocrates and Galen, who, by the very weight of their authority, seem to have hampered subsequent advance—for it was held almost sacrilege to dispute their doctrines. But when a man says, as Hunter did in lecturing to his pupils, "You had better not write down that observation, for very likely I shall think differently next year," he discounts in advance any claim to infallibility that might be made for him by his disciples. The conclusions may be transient, but the method remains; the torch-bearer falls, but others carry on the light.

There was a custom in one of the American Universities that on Commemoration Day there should be a procession, starting with the most junior graduates, followed by those

of increasing majority. To the young men full of hope and ambition succeeded the middle-aged, bearing the heat and burden of the day, and to them the old men whose work was done; a procession full of meaning, enabling us to realise how our universities are constantly and successfully performing the miracle of putting new wine into old bottles. It visualises both the evanescence of the individual and the continuity of the institution—a feeling which, if a man lack, his school, his university, and his hospital have taught him but in vain.

In that procession there was a gap which has a poignant parallel for us to-day, for the years 1862 to 1865 had no representatives—all the graduates of those years had perished in the Civil War. In these days our thoughts turn to the gaps in our ranks, to the men we have lost from whom we hoped so much. But it is to those very gaps that we shall owe the vindication of our right to develop our traditions in our national way.

The same thought has been beautifully expressed by a recent writer on Rugby school:

"They . . . have fought the good fight and have finished their course, almost before the echo of their school-boy feet have died in quad. and cloister; but they are surely with us still—

"Endless battalions in the listening twilight,
Swinging home at evening the Army of our Dead!"

THE DAWN OF MEMORY.


REMINISCENCES OF MY THIRD YEAR.

By LEONARD PORTAL MARK, M.D.(Durham).

(Continued from p. 55.)

"These are begot in the ventricle of memory, nourished in the womb of *pia-mater*, and delivered upon the mellowing of occasion."
—*Love's Labour's Lost*.

SENSE OF HEARING. IMPRESSION OF WORDS.

 DO not remember our journey to Marseilles when I was three years and six months old. After my arrival there the very early impressions that I can remember are of a different character and are mixed up with other senses than vision. They are more difficult to fix as first impressions, as their influence may have lasted over a long period or become fixed during the years I spent there. I often think it strange that I should have no recollection of my nurse Elizabeth's voice any more than of her face. But I remember many songs and nursery rhymes that she taught me and to this day can think of some thirty of them that I could only have learnt from her. The others which I picked up were French, from the French children that I played with, from the servants, from songs I heard in the streets and street cries. Elizabeth had a very musical ear and often sang. She had little of the colloquial faculty and could not

learn French. She did not always teach me correct words. A curious mistake she instilled into my infant brain was when she taught me the Lord's Prayer and made me say, "Hallowited be Thy Name," putting four syllables to the first word. I cannot tell the age I reached before I realised the mistake. Even to-day I could not recite the prayer without having to think whether I mispronounced the word, so that :

"My words fly up, my thoughts remain below."

One of the earliest expressions which I picked up in the street was "Goddem," which the French boys used to shout at us when we were recognised as English. It was a nickname given to Englishmen in France ever since the days of Joan of Arc. It probably made an extra impression on me because I was told it was a naughty word to use.

One of my earliest recollections of words dates from my first visit to Toulon when I was four and half years old. It was in my father's consular jurisdiction, and he went there periodically, or when a man-of-war was to be launched, and sometimes took me with him. I have a vivid recollection of the ships in the harbour, the arsenal, the gangs of convicts being marched about in their bright yellow and red clothes, chained together in couples. These impressions became more fixed at subsequent visits. The first time that I was there we went to lunch at Six Fours, a small village on a hill overlooking the harbour, a spot which remained famous in the siege of Toulon. It was the one selected by Napoleon, when he went there to command the artillery in 1793, to establish the batteries so as to sweep the harbour and roadstead, and so force the English fleet to evacuate Toulon. At the inn were some old sailors or fishermen that my father got chatting with about early days when Toulon was occupied by the red-coats. I remember very vividly how funny they were when they kept repeating with gestures: "Soupe salad! Rosbif, oh my! Rosbif salad!" mimicking the English soldiers as they still remembered them clamouring for this food. The words made an indelible impression, although the interest attached to the spot could only have been revealed to me much later, when I was old enough to know that these men had been witnesses of the dawn of the Napoleonic legend, and that we were in the historical spot where Napoleon's genius first shone forth and where he first met the English—an interesting link with the past.

TASTE AND SMELL.

That day at Toulon (it must have been my first day's outing) seems full of memories. Perhaps the most important is one connected with the sense of smell. At the inn I could not bear the smell of some very savoury soup or stew which was served up. I think that my aversion

was partly due to the coarse earthenware plates and dishes with a yellow glaze placed on the table. No amount of coaxing would make me partake of it, the smell was too much for me, and while the rest of the party enjoyed their meal I stood in the doorway hungry and sulky. It must have been my first introduction to *Bouillabaisse*, a dish that I afterwards became very fond of. My father, no doubt, had ordered it so as to taste the real thing *in loco*. It was the occasion when he must have picked up the Provençal words "bén pebra e bén safrana" (well peppered and well saffroned), which he used to quote when we had the dish on our own dinner-table.

Sensations of smell were certainly late in becoming fixed in my memory, and I was seven years old before I can record another one. I went for a few months to a dame school. What I remember most vividly are two smells connected with the place. The small boys used every day to be turned out to play in a courtyard, at the further end of which fowls were kept. I disliked their smell so much that I could not go near them. Many a time since, in my walks or travels, has the smell of a poultry yard brought back visions of those days.

The other smell was the very strong one of pepper, which the mistress and her two daughters always carried about their persons. I only learnt the reason a few years after from one of the boys who again became my school-fellow at the Lycée. We were laughing about the old school and the mistress, and he remarked, that "elle puait le poivre." When he confided to me how he had discovered that it was because she kept pepper amongst her clothes to protect them from the moths I marvelled at his sagacity.

SENSE OF FEELING, MOTION, FRIGHT.

At the age of four I had two small adventures which made a vivid impression and caused me much fright. One day I went up to a hill not far from our house where there was a large open space laid out for the building of the town museum and picture galleries. There was a strong mistral blowing, and my brothers and some other boys were flying kites. One big boy flew a very large kite and was holding on to the stick used for winding the string, he wanted me to hold it, and, putting the stick in my hands, he let go himself. I suddenly felt myself lifted off my feet and dragged along by the force of the wind for a few paces, until the boy saw how frightened I was and caught hold of the string again.

The other adventure had more serious consequences, as it made me start in life with a dislike for sea-bathing and, I believe, deprived me of much pleasure in my early days. The first time that I was taken to bathe in the sea I was carried in the arms of one of my aunts, and when she got to where the water was about level with her waist, imbued no doubt with the popular idea that the head should be

wetted first, she suddenly let me drop out of her arms, and it was some instants before she fished me out of the water again. I was horrified, although too young then to know the danger of drowning. It was a long time before I would go into the sea again, and some sort of aversion to deep water must have remained in my nature from that date. I was very slow in learning to swim and never could dive, very different to my brothers and sisters, who all have been passionately fond of bathing. Both my brothers even distinguished themselves by saving lives at sea.

My sense of touch and the consciousness of it must have made rapid strides that year. It was in the palmy days of the Second Empire when the dimensions of ladies' crinolines had become stupendous. Even our nursemaid wore such a large one that in our walks abroad, when we came to a crossing where the traffic was great, she would gather us children around her as near as she could, and I being the little one, was told to hold on to her dress. I soon learnt to grasp one of the steel hoops of the crinoline which I would cling to until we were safely over. The sensation produced by those steel hoops in my fingers would linger in them were I to live another three score years.

SENSE OF VISION AND EARLY MEMORY OF EVENTS.

I was four years old when I saw the earliest scene that I can remember, connected with the events of the day or the march of history. In the summer of 1859 the Franco-Austrian war ended and masses of troops landed at Marseilles on their return from the victories of Magenta and Solferino. The town used to entertain them at great open-air banquets under the trees in the Allées de Meilhan. I have distinct visions of the scene, the endless tables with the soldiers sitting at them, the huge crowd around whose heads I could only see over when lifted on to my father's shoulders. This is a typical example of a scene which was probably not forgotten because the locality remained such a familiar one for many years, and because the event was often spoken about.

The bishop of Marseilles died when I was five years old. He was buried with great pomp, and I was taken by our nurse and housemaid to see the funeral procession. There was a very great crowd, and the two maids held me up between them so that I had a very good view as the street we were in was very narrow. The dead bishop, clad in the episcopal robes and with his mitre on, was carried high up on an open bier. There was something very uncanny in his appearance, and this first sight of a dead man made a great impression on me, and one often recalled. I never saw another dead body until I became a student at St. Bartholomew's Hospital.

When anyone is asked what is the earliest impression that he can recall, the answer given almost invariably seems to refer to a suit of clothes or some article of apparel.

Sometimes it is

THE RECOLLECTION OF HIS MOTHER'S VOICE.

This is the one which has found its way into works of fiction and poetry. But it can hardly be called the earliest impression to be fixed in the memory. It must have been produced long before memory came into existence. It must have been acquired in the early days of mental chaos when one's mother's milk had to satisfy the pangs of hunger. At that early age it would no more be remembered than the process of being "short-coated."

To judge by the complete blank left in my memory of the voice and appearance of the nurse that I was so fond of for some ten years, I doubt whether my own mother's voice would still linger in my ears if I had not continued to hear it many years after I grew up. Yet I agree with Alfred de Musset when he says:

*" Mais jamais l'insensé, jamais le moribond,
Celui qui perd l'esprit, ni celui qui rend l'âme
N'ont oublié la voix de la première femme
Qui leur a dit tout bas ces quatre mots si doux
Et si mystérieux: ' My dear child, I love you.' "*

To refer to impressions of the sense of vision again, those that I have mentioned might all have some reference to my mother, who was the guiding spirit at the time. Yet I was four years old before any vision of her became fixed in my mind.

The earliest vision that I have retained of her was when she came up to see me one night in my bedroom. I woke up and saw her standing on the right side of the cot with a candle in her hand. She had been out to dinner and was in evening dress. I thought she looked lovely. I do not know what she said to me, but the remembrance of the sight of her at that moment remains, charming and comforting. I could not swear that this vision was not a dream, but the impression remains as of an angel's visit, like our little life, "rounded with a sleep."

The general remembrance of my childhood is typically that of "Golden Days," full of happiness and sunshine. Yet, strange to say, when an analysis is made of these early impressions left behind, one sees that they nearly all refer to something not quite pleasant, as do most of the dreams that we can recall.

We remember the pricks, but the roses have left no permanent impression. We recall the bitter taste of the medicines administered to us, but we forget the first delight of sucking sweets, indulging in fruit and cakes. We do not remember the first time we felt the glow of the sunshine. No first recollections remain of being taken into a garden, the first pleasure which was provided for Adam and Eve, nor of going into the country, which was the last left to Falstaff when on his death-bed "a' babbled of green fields."

EXAMINATIONS, ETC.

UNIVERSITY OF CAMBRIDGE.

At the Congregation held at Cambridge on February 2nd, 1917, the following degree was conferred:

M.D.—F. G. Chandler.

UNIVERSITY OF LONDON.

First Examination for Medical Degrees.—December, 1916.

C. J. Donelan, S. A. Gunter, L. S. Morgan, A. C. D. Telfer, E. H. Weatherall.*

* Distinction in Biology.

CONJOINT BOARD.

Final Examination.—January, 1917.

The following candidates have completed the examination for the diplomas of M.R.C.S. and L.R.C.P.:

K. N. G. Bailey, E. R. Longstaff, G. H. Rossdale, J. P. Ross, E. M. Atkinson, L. P. L. Firman-Edwards, J. Cretin, K. Masson, A. R. Dingley, J. B. Mudge, E. A. C. Langton, K. A. I. Mackenzie, G. F. Cooke, D. J. Batterham, A. A. Fitch, C. J. L. Blair, A. Arias, W. G. Verniquet.

APPOINTMENT.

GEACH, R. N., F.R.C.S., appointed Temporary Assistant Surgeon with charge of Outpatients at St. George's Hospital.

NEW ADDRESSES.

CLARK, Capt. A. E. D., A.A.M.C., 23, Bedford Gardens, Kensington, W. 8.

JACKSON, Capt. F. W., R.A.M.C., 48th General Hospital, Salonica.

KEATS, W. J. C., The Hollies, Wanstead.

LANDER, H. D., Surgeon, R.N., H.M.S. "Reliance," c/o G.P.O., E.C.

MILLER, T. M., Capt., R.A.M.C. Sp. R., No. 4, Casualty Clearing Station, B.E.F.

TURNER, P. E., 17, Pagoda Avenue, Richmond.

BIRTHS.

ALEXANDER.—On March 20th, at Cade House, Riverhead, Sevenoaks, the wife of J. Finlay Alexander, M.A., M.D. (Cantab.), of a son.

DYSON.—On March 28th, at 5, St. Mark's Square, N.W., the wife of Capt. E. A. Dyson, R.A.M.C.—a daughter.

GRAY.—On February 7th, at Brackley House, Newmarket, the wife of Dr. Norman Gray—a daughter (Phyllis Eleanor).

HAIGH.—On March 30th, at the Deanery, Winchester, the wife of Bernard Haigh, Lieut. (temp.) R.A.M.C., of a daughter. Malay papers, please copy.

PENNEFATHER.—On March 26th, at Deanhurst, Harrow, the wife of C. M. Pennefather, M.B., B.S., prematurely of a daughter, who survived her birth only a few hours.

REICHWALD.—On March 5th, at Timber Hill, Ashtead, Surrey, the wife of M. B. Reichwald, M.B., B.S., of a son.

WOOLLEY.—On March 22nd, at Lucknow, the wife of Lieut.-Col. J. Maxwell Woolley, I.M.S., of a son.

MARRIAGES.

BREWITT-TAYLOR—ELLIS.—On January 27th, at Rosslyn Hill Chapel, Hampstead, by the Rev. H. Gow, Raymond Brewitt-Taylor, M.B., younger son of C. H. Brewitt-Taylor, of China; to Evelyn, youngest daughter of Henry Ellis, of Potter's Bar.

BURNE—TURNER.—On November 22nd, 1916, at St. Andrew's Cathedral, Singapore, by the Bishop of Singapore, Thomas W. H. Burne, M.B. (Lond.), Acting Surgeon, General Hospital, Singapore, second son of the late Col. S. T. H. Burne and Mrs. Burne, of Loynton Hall, Staffordshire, to Catherine Violet Turner, M.D. (Lond.), second daughter, of the Rev. W. H. and Mrs. Turner, of Hazelwood, Derbyshire.

HURRY—HILL.—*Silver Wedding.*—On February 16th, 1892, at St. Mary Abbot's Church, Kensington, by the Rev. H. Cecil Grainger, M.A., assisted by the Rev. Canon Payne, M.A., of Reading, and the Rev. H. E. Hill, M.A., brother of the bride, Jamieson Boyd Hurry, M.D., of Reading, to Gertrude Louisa, daughter of Arthur Hill, Esq., J.P., of Erleigh Court, Reading.

MCCALL—PRITCHARD.—On February 17th, at the Church of "Our Lady Help of Christians," Blackheath, by the Rev. W. Pritchard, brother of the bride, assisted by the Rev. Francis Sheehan, Henry Dundas McCall, M.R.C.S., L.R.C.P., R.A.M.C., youngest son of the late Charles McCall and Mrs. McCall, Heathside, Blackheath Park, to Margaret Ruth Mary, third daughter of Mr. and Mrs. W. R. Pritchard, Glenwood, Lee.

MACKENZIE—TWINING.—On March 16th, at St. Saviour's, Walton Street, S.W., very quietly, Kenneth Alexander Ingleby Mackenzie, M.B., Surgeon, R.N., elder son of Kenneth Walter and Mrs. Ingleby Mackenzie, of Lansdowne House, Ryde, Isle of Wight, to Dorothea Elizabeth, widow of Capt. Cecil F. H. Twining, Hampshire Regiment.

PRITCHARD—LITTLE.—On January 31st, at St. George's Church, Hanover Square, W., Harold Pritchard, Major, R.A.M.C., of 82, Harley Street, W., to Edith Margaret, younger daughter of the late Henry Ward Little and of Mrs. Little, lately of Cove, Ecclefechan, N.B.

TODD—HINCKS.—On February 19th, at St. Mary's Hay, Breconshire, Francis Richard Todd, M.B., B.S., son of the late Dr. Todd, of North Petherton, Somerset, to Dorothy, only daughter of Dr. and Mrs. Hawksford Hincks, Hay.

DEATHS.

BISHOP.—On February 17th, at Fareham, Hants, after a few hours' illness, Sydney Olive Bishop, surgeon and physician, formerly of Assam, aged 69.

BRUCE.—On February 3rd, suddenly, in London, Robert Bruce, J.P., M.R.C.S., of Hillyfield, Milford-on-Sea, Hants, aged 63.

BURTON.—In March, 1917, Bindon Francis V. Burton, M.D. (Brux.), L.R.C.S.I., of 29, East Grove Road, Exeter, aged 68.

GROVES.—On January 31st, 1917, E. Groves, M.R.C.S., L.R.C.P., of Farnley House, Church Street, Hunslet, Leeds.

HAMMOND.—Died from wounds on March 15th, 1917, John Maximilian Hammond, M.B., B.S., Lieut. R.A.M.C., of Nonington, Talbot Avenue, Bournemouth, the dearly beloved husband of Julia Mary Hammond and son of the late Henry A. and Catherine C. Hammond, of Sundridge House, Bournemouth, aged 41.

IRELAND.—On February 5th, 1917, after a few hours' illness, A. E. Ireland, D.P.H. (Oxon.), M.R.C.S., L.R.C.P., of 9, Brunswick Mansions, Brunswick Square, W.C.

KINSEY.—On February 18th, 1917, after a short illness, Robert Henry Kinsey, the beloved husband of Agnes Eliza Kinsey, aged 76.

LEGGÉ-CURRIE.—On February 16th, at Trinity Hall, Bungay, John Legge Currie, L.R.C.P. (Lond.), M.R.C.S., Trinity Hall, Bungay, and for some time of Tower House, Ipswich.

PEACEY.—On February 22nd, suddenly, of heart failure, at Rydal Mount, St. John's Road, Eastbourne, William Peacey, M.D.

ROWLAND.—On March 6th, 1917, of cerebro-spinal fever, Sydney Domville Rowland, M.R.C.S., L.R.C.P., Major R.A.M.C., of the Lister Institute, eldest son of the Rev. W. J. Rowland, aged 44.

WILLIAMS.—On January 5th, 1917, at Oak Villa, St. Mary Church, Torquay, Isaac Menell Williams, M.R.C.S., L.S.A., after four days' illness, aged 86.

WYBORN.—On March 26th, 1917, suddenly, Dr. A. H. Wyborn, of 181, Camden Road, N.W., and 30, Finsbury Square, dearly beloved husband of Emma Caroline Wyborn.

NOTICE.

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

The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER, W. E. SARGANT, M.R.C.S., at the Hospital.

All communications, financial, or otherwise, relative to Advertisements ONLY, should be addressed to ADVERTISEMENT MANAGER, the Journal Office, St. Bartholomew's Hospital, E.C. Telephone: City 510.

A Cover for binding (black cloth boards with lettering and King Henry VIII Gateway in gilt) can be obtained (price 1s. post free) from MESSRS. ADLARD & SON & WEST NEWMAN, LTD., Bartholomew Close. MESSRS. ADLARD & SON AND WEST NEWMAN have arranged to do the binding, with cut and sprinkled edges, at a cost of 1s. 9d. or carriage paid 2s.—cover included.

St. Bartholomew's Hospital



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

JOURNAL.

Vol. XXIV.—No. 8.]


May 1ST, 1917

[PRICE SIXPENCE.]

CALENDAR.

Wed.,	May	2.—	Clinical Lecture (Surgery).	Mr. Waring.
Thurs.,	"	3.—	Primary F.R.C.S. Exam. begins.	
Fri.,	"	4.—	Clinical Lecture (Medicine).	Dr. Drysdale.
Mon.,	"	7.—	Exam. for M.B., B.S. (London) begins.	
Tues.,	"	8.—	Exam. for Part II. of Second M.B. (Camb.) begins.	
Wed.,	"	9.—	Clinical Lecture (Surgery).	Mr. Waring.
Fri.,	"	11.—	Clinical Lecture (Medicine).	Dr. Morley Fletcher.
Mon.,	"	14.—	Exam. for Matthews Duncan Medal.	
Wed.,	"	16.—	Clinical Lecture (Surgery).	Mr. Waring.
Thurs.,	"	17.—	Final F.R.C.S. Exam. begins.	
Fri.,	"	18.—	Clinical Lecture (Medicine).	Dr. Calvert.
Wed.,	"	23.—	Clinical Lecture (Surgery).	Mr. McAdam Eccles.
			Exam. for Brackenbury Medical Scholarship begins.	
Thurs.,	"	24.—	Exam. for Brackenbury Surgical Scholarship begins.	
Fri.,	"	25.—	Clinical Lecture (Medicine).	Dr. Drysdale.
Sat.,	"	26.—	Sir G. Burrows Prize.	
			Skyner Prize.	
Wed.,	"	30.—	Clinical Lecture (Surgery).	Mr. McAdam Eccles.
Fri.,	June	1.—	Clinical Lecture (Medicine).	Dr. Calvert.
Mon.,	"	4.—	Exam. for Matriculation (London) begins.	
Wed.,	"	6.—	Clinical Lecture (Surgery).	Mr. McAdam Eccles.
Thurs.,	"	7.—	Applications for the Lawrence Scholarship to be sent in.	

EDITORIAL NOTES.

UR heartiest congratulations are extended to Mr. Foster Moore, F.R.C.S., who has been appointed Assistant-Surgeon to the Ophthalmic Department of this Hospital.

* * *

No less than five old Bart.'s men have received decorations for service on the field of battle.

The late Temp.-Lieut. John Maximilian Hammond, R.A.M.C., whose death we referred to in our last issue, has received the D.S.O. "In evacuating the wounded under the most difficult conditions, he was himself subsequently wounded, and, although both his feet were practically

blown off, he ordered his stretcher-bearers to carry away another wounded man first."

Capt. R. A. Peters, M.C., R.A.M.C., has received a Bar to the Military Cross which he gained last year. "He continually tended the wounded under very heavy fire. He set a splendid example, and showed an absolute disregard for his own personal safety. He has on many previous occasions done fine work."

Temp.-Capt. J. C. Sale, M.C., R.A.M.C., has received a Bar to the Military Cross which he gained last year. "He displayed great courage in collecting and dressing the wounded in the face of a very heavy hostile barrage. He set a splendid example to all ranks."

Temp.-Surgeon F. H. L. Cunningham, R.N., has received the Military Cross. "He displayed great courage and determination in searching for the wounded in exposed positions, and tending them under very heavy fire. He has previously done fine work."

Temp.-Lieut. C. G. Kemp, R.A.M.C., has received the Military Cross. "He worked unceasingly for two days under very heavy fire, and succeeded in evacuating a large number of wounded. He displayed great courage and determination throughout operations."

* * *

The following is the list of the new Resident Staff:

House Physicians—

Dr. Calvert.	R. French.
Dr. Fletcher.	E. E. Llewellyn.
Dr. Drysdale.	I. L. Braun.

House Surgeons—

Mr. Waring.	R. S. Corbett.
Mr. Eccles.	A. O. Bolton.
Mr. Bailey.	N. F. Smith.

Extern Midwifery Assistant . . . A. H. Samy.

Intern Midwifery Assistant . . . G. F. Cooke.

Medical Receiving Room Officers {
H. Beckton.
E. F. S. Gordon.
D. Cameron.

Surgical Receiving Room Officers {
F. E. G. Watson.
S. L. Higgs.
E. D. Spackman.

House Surgeon to Throat Dept. . . H. J. Churchill.

House Surgeon to Ophthalmic Dept. D. Blount.

ROLL OF HONOUR.

It is with very much regret that we have to record the names of no less than four old Bart.'s men this month. Of these only one was qualified, the others have been students at the Hospital, and having joined various branches of the service at their country's call.

Lieut. J. Naylor, R.A.M.C., is reported "missing—believed drowned"—and from our knowledge of the terms used generally in these reports, we fear that there can be no doubt about his death.

Second-Lieut. V. H. Butcher, of the Essex Regiment, who was a student at this Hospital, has died of wounds.

Pte. F. H. V. Thompson, R.A.M.C., another of our students, has died from septic pneumonia.

Lieut. Alfred Foster, R.F.A., who was also a student here, was killed in action on April 14th.

Our deepest sympathy is extended to the relatives of these past fellow workers of ours who have fallen in their country's cause.

AN ECHO FROM KUT-EL-AMARA.



ON April 1st, 1916, it rained heavily at Kut-el-Amara, so that the Turks ceased from troubling for the time being, and gave a quiet afternoon for the medical meeting which had been arranged for that day, which, it will be remembered, was during the fifth month of the siege. This remarkable meeting, at which about twenty-five medicos were present, will long be remembered by all who attended it. The meeting had twice been arranged and twice postponed on previous occasions owing to the heavy rains, and even on this occasion many of those who had promised to attend found the weather outweighed their zeal. Of the twenty-five present, five were Bart.'s men—Capt. H. H. King, I.M.S., Capt. E. G. S. Cane, R.A.M.C., Capt. T. E. Osmond, R.A.M.C., Capt. R. C. Clifford, I.M.S., and Lieut. W. C. Spackman, I.M.S.

Three members of the meeting gave demonstrations of cases, and of these three two were Bart.'s men.

Capt. Cane, starting at the British General Hospital, showed a series of twenty-six cases of beri-beri, and the following extract of the demonstration is quoted from the *British Medical Journal*:

"Case 1, now convalescent, showed only muscular atrophy and absence of knee-jerks, but had previously suffered from œdema of legs, abdomen, and lungs, cardiac dilatation, and tachycardia.

"Case 2 now showed tachycardia only.

"Case 3 was an example of great emaciation—a 13 st. man reduced to 8 st. He had previously suffered from paralysis of both arms. He now felt quite well, but was not able to walk. He ate everything he could get of meat, rice, and bread, but did not put on weight.

"Case 4 had loss of tactile sensation in the legs from just above the knees downwards.

"Case 5 at one time had become suddenly unconscious and had remained so for three days, with no after-effects.

"In Cases 6 and 7 there was abdominal distension, now without ascites. The distension varied with the time of day, generally being worse at night.

"Cases 8 and 9 showed great emaciation.

"Capt. Cane said that unfortunately for purposes of demonstration only the chronic cases were left, all the slighter cases—some sixty in all—having been discharged. Of these only two had returned to hospital. In answer to questions, he said that the men usually came in complaining of swelling in the legs, inability to walk in consequence, and palpitation. The pain was in the calf, in the shin bone, and especially just behind and above the knee. The earliest signs were usually tenderness in the calf, œdema of the legs and loss of knee-jerks, and tachycardia; there were no heart murmurs, but œdema and distension of the abdomen with occasional ascites, and slight œdema of the face; sometimes, not often, areas of anæsthesia occurred on any part of the lower extremities, not confined to any particular nerve areas. Paralysis of the arms was occasional but rare; anæmia was a constant feature. Later on the œdema of the legs went down and wasting was ushered in. Wounds in beri-beri cases, several of which had occurred in hospital, healed very slowly, the granulation process in soiled and open wounds being especially dilatory.

"In fatal cases death was usually due to heart failure in the early days of and before the siege, but, later on, uncontrollable dysentery was the determining factor. Two nursing orderlies who were looking after cases of the latter kind contracted the disease, but it was possible that they were already previously affected. Progress was on the whole very good. As regards treatment, no drug appeared to be of much use. Tonics of various sorts were given. Early in the siege the white bread of the ration was replaced by brown, and much improvement in the beri-beri cases followed this change."

Capt. Clifford, at the 57th Stationary Hospital, showed some cases of scurvy, illustrating all the classical signs, and again the extract is from the *British Medical Journal*:

"The first case was one showing the extent to which the gums may be involved without the occurrence of any suppuration. The whole of the gums of the lower jaw were puffy and inflamed; the papillæ stood out from the teeth, and the mucous membrane of both cheeks and palate was œdematous. The case was one of six weeks' standing and had previously suffered from infiltration of the thigh muscles. This had resolved, and there was now extreme emaciation of the lower extremities. The next case was one with little or no mouth signs, but with marked œdema of the feet and induration of the calf and flexor thigh muscles. When made to stand up he could only attain to a bent-

kneed crouching attitude, but complete flexion was easy and painless. The next case illustrated one of the commonest sites of the vicarious hæmorrhages met with in this disease. The patient's right eye showed a subconjunctival hæmorrhage of some extent. It was limited on the inner side by the corneo-scleral junction, but on the outer the effusion was diffuse and passed to the back of the eye above. No permanent harm had resulted from these hæmorrhages; there had been only very temporary diminution of vision and no pain, but there was still some photophobia present after three weeks. A fourth case was again an example of an effusion of blood. The man had a hard, tumour-like swelling in the region of the gall-bladder. When admitted three weeks earlier the swelling was more diffuse and less indurated, and appeared to be situated in the subperitoneal tissue. The patient at first had suffered some pain, but this soon passed off; there were other undoubted signs of scurvy present.

"The next two cases illustrated the adverse effect of scurvy on wounds. The first was a gunshot wound of the hand with compound fracture of the bones. Instead of healing up, the wound had deteriorated, and become full of thick grey pus, which on being washed away left an unhealthy-looking grey surface, covered with pin-point hæmorrhages, and dark plugs of blood-clot were seen scattered over the surface, closing bleeding capillaries. The wound was three months old, and refused to heal, although all dead bone had been removed. There was no surrounding induration, and the edges of the wound were thin and undermined. The second case showed a large wound over the glenoid cavity of the scapula. The arm had been removed two months previously on account of extensive bone injury and continued suppuration. Scurvy had attacked the patient twelve days after the amputation, and the wound at once began to bleed from numerous points on the already granulating area. The progress of the case was checked, and, on account of the abundance of pus, fomentations had once more to be applied to the wound. The scurvy was being checked by giving the patient tinned pineapple, which, Capt. Clifford said, caused a very remarkable improvement in these cases. The granulations now looked fairly healthy, though they bled extremely easily: there was no induration around the wound, such as would have been found in an otherwise healthy person with a chronic granulating ulcer."

NOTICE.

Two civilian resident medical officers are required for the First London General Hospital. Each should be over military age or should be ineligible for military service. The pay is 24/- a day and the expenses of the mess come to about two guineas a week.

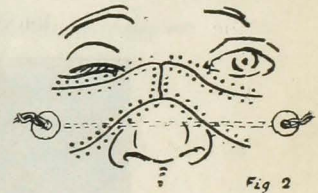
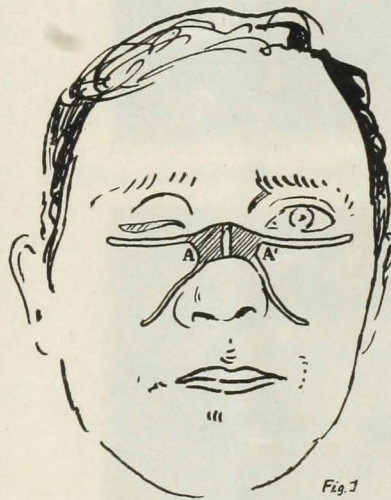
SOME CASES OF FACIAL DEFORMITY TREATED IN THE DEPARTMENT OF PLASTIC SURGERY AT THE CAMBRIDGE HOSPITAL, ALDERSHOT.

By CAPT. H. D. GILLIES.

CASE 1. *Formation of the upper half of the bridge of the nose (vide Photos 1 and 1 A).—The loss of tissue comprised:*

- (1) The nasal bones, underlying portion of septum, frontal spine, and upper portions of nasal process of superior maxillæ.
- (2) The skin that should cover this part of the nose.
- (3) The right eye.

There was a small opening into the nose surrounded by scar-tissue and granulations, which, when excised, left a bare area of about $\frac{1}{2}$ in. square.



Note: Wire retention sutures

CASE 1.

First operation (June 4th, 1916).—Excision of scar, and submucous resection of a piece of the perpendicular plate of the ethmoid, which was swung forward to form a bridge, and sutured below to the septum of the lower nose with catgut. Two sliding lateral flaps from the cheek were cut, undermined, and sutured over this bridge with fine interrupted silk (*vide* Figs. 1 and 2).

Result.—Slight breaking-down near the angle of the right eye, which socket was not entirely clean. Primary healing of the rest, with excellent cosmetic results. As anticipated, the bridge gradually sank, as the bridge of cartilage was not strong enough to support the contracting skin flaps.

Second operation (September 3rd, 1916).—Gas and oxygen anæsthesia by Capt. H. E. G. Boyle, who, on a visit, kindly gave a very satisfactory demonstration of this method.

Small skin incision ; skin very carefully undermined from below upwards, and when the frontal bone was reached the depth was increased, and the periosteum incised and raised. A piece of rib cartilage of the necessary length was cut and

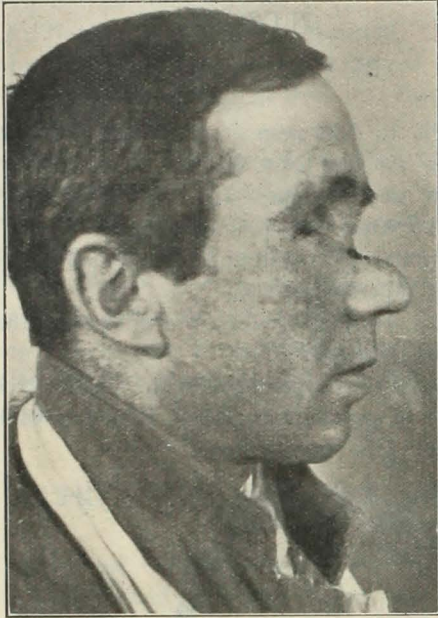


PHOTO 1. Case 1. Pte. S—.

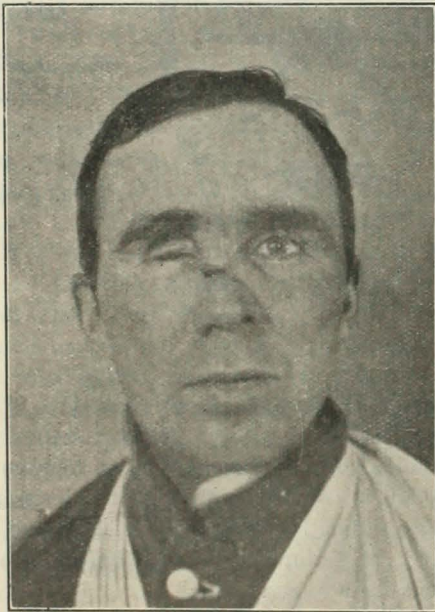


PHOTO 1A. Case 1. Pte. S—.

fashioned, and then inserted under the skin and periosteum, and its lower end made to rest on the cartilage of the lower part of the septum. Catgut ligatures were inserted to hold it central, but, as the photos taken two months after show, this end slipped off the cartilage and produced a slight deformity.

With the fitting of an artificial eye the result was very satisfactory (*vide* Photos 2 and 2 A).

CASE 2. *Temporal muscle transplantation for deformities caused by loss of the malar bone.*—These cases show a dis-

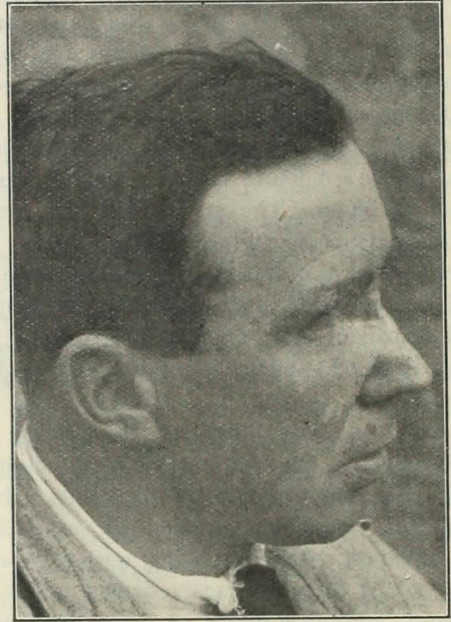


PHOTO 2. Case 1. Pte. S—.

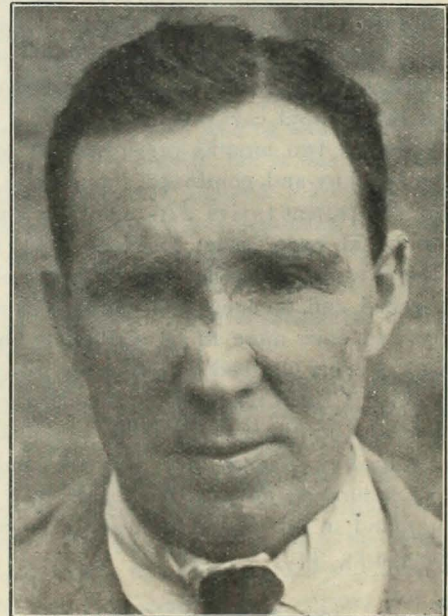


PHOTO 2A. Case 1. Pte. S—, (Cartilage graft of nose.)

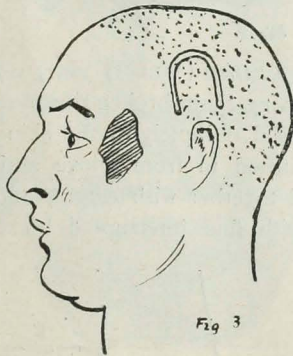
ressing and very depressed scar, which can be remedied by the following means : fat graft, cartilage graft, or by foreign body, such as celluloid or wax.

Fat grafts are, in my experience, a little uncertain. When primary union has occurred aseptic fat necrosis often sets in about the tenth day. Moreover, as this wound is nearly

always connected with a discharging eye-socket, the free graft (fat or cartilage) is liable to become infected.

I tried celluloid plates, but found them unsatisfactory.

I have used the temporal muscle flap in a good many cases to date, and have had uniformly good results. The incision in my later cases is in the hairy scalp, and overcomes the disadvantage of producing a scar across the temporal region, where the skin does not heal usually without marked scarring.



CASE 2.

Fig. 3 shows the U-shaped incision in the scalp to expose the temporal muscle. The anterior third or two-thirds of the fleshy origin of the temporal muscle is elevated from the bone, passed under the bridge of skin, and sutured to the deep tissues below the eye, or wherever it is needed to make up the contour.

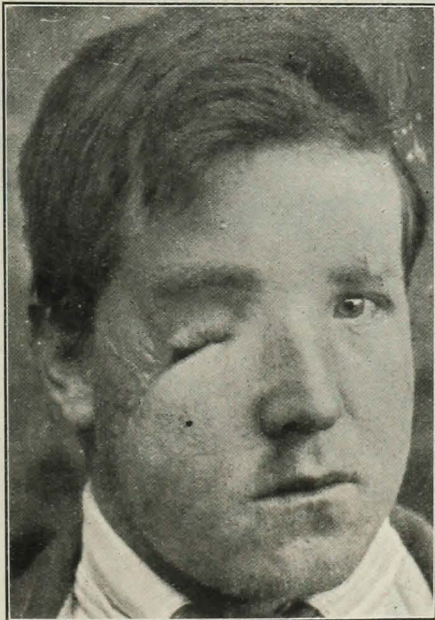


PHOTO 3. Case 2. Pte. F—. Loss of malar.

When freeing the muscle it is necessary to separate the anterior portion from the part left behind, either with the

knife or scissors, starting from above, and working down towards the insertion of the fibres into the mandible. The attachment to the zygoma and the temporal fascia must also be severed before the flap will come forward easily.

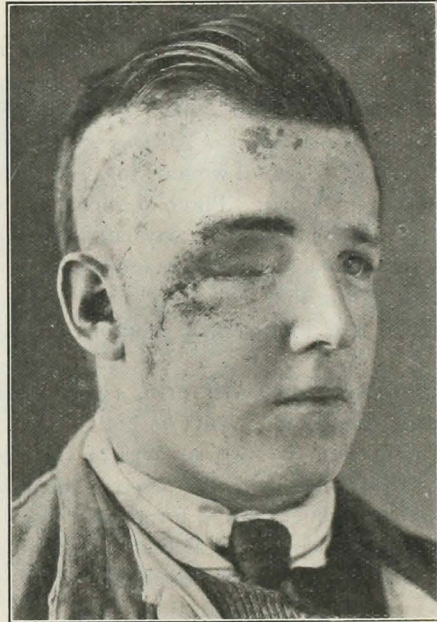


PHOTO 4. Case 2. Pte. F—. Temporal muscle transplant.

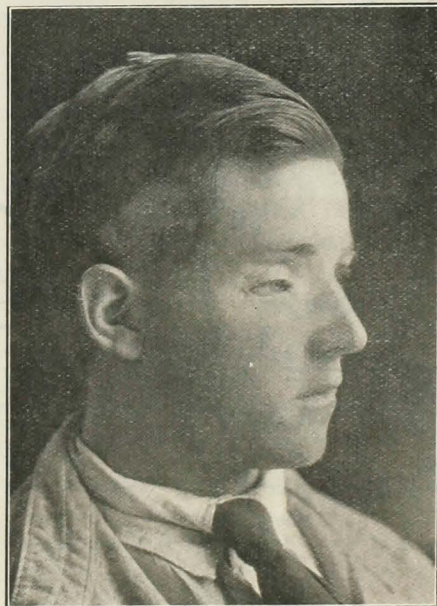


PHOTO 5. Case 2. Pte. F—. Later.

The blood and nerve supply is not apparently seriously interfered with, for in the majority of cases the transplanted muscle can be made to contract, and gives a very colourable imitation of the action of the orbicularis oculi, which is usually paralysed from the associated upper facial paralysis.

No inconveniences in mastication appear to result, and the hollow temporal region makes the new zygoma more prominent. The method is variable within limits as to the amount of muscle taken, and as to the positions into which it may be swung. Drainage for the hollow produced by the transplantation is always necessary.

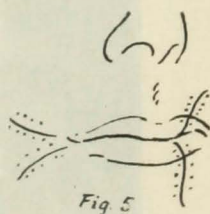
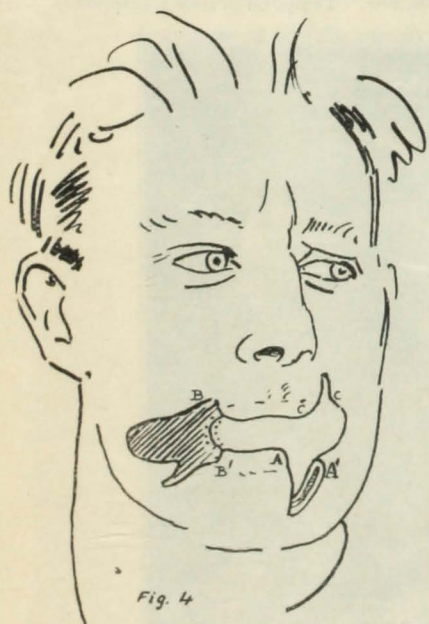
Photos 3, 4, and 5 illustrate an actual case treated by this method.

CASE 3. *Formation of new corners to the mouth, together with the repair of the adjacent portions of lips and cheek; fracture of the jaw.*—Date of wound, July 1st, 1916; stated to be machine-gun bullet. Photo 6 shows the condition of Private D— on admission two days after being wounded. The X rays showed fracture of the mandible in two places—in the region of the first molar tooth, and in the region of the symphysis, the intermediate portion of bone being displaced.

Plastic operation (September 11th, 1916).—This operation consisted in excision of scars on both sides.

On the right side the two surfaces of the cheek were merely drawn together, and the mucous membrane from inside the mouth brought out to form a new angle.

On the left side a combined skin and mucous membrane flap was swung towards the oral opening both in the upper and lower lips (*vide* Figs. 4 and 5).

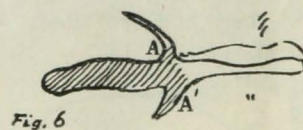


CASE 3.

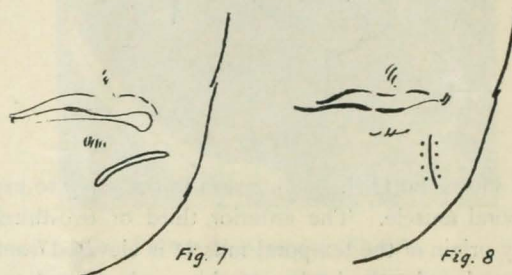
The result of this operation was satisfactory, except that the movement of the lower jaw began to stretch the line of union of the flaps on the right side of the cheek, and the wound partially broke down near the corners of the mouth. It was limited by immediately fitting a closely applied chin splint and attaching it over the head. Since then, in all

cases in this region I have been careful to support the lower jaw until the operation wound is well healed.

Second plastic operation (October 31st, 1916).—Scar re-excised, and in order to raise the corner of the mouth a little, a flap was outlined as per diagram (Fig. 6) and sutured to the lower lip.



Third plastic operation (January 1st, 1917).—A portion of the right scar having again broken down, it was re-excised, the knife being used obliquely to the skin surface. Local fat flaps were turned in from above and below the depression, sutured together with catgut, and the skin sewn over this pad with fine interrupted horse-hair. A small



mucous membrane correction was made on the left upper lip, and the left lower lip was raised at the corner by a horizontal incision through the whole thickness of the lip being sewn up perpendicularly (Figs. 7 and 8).

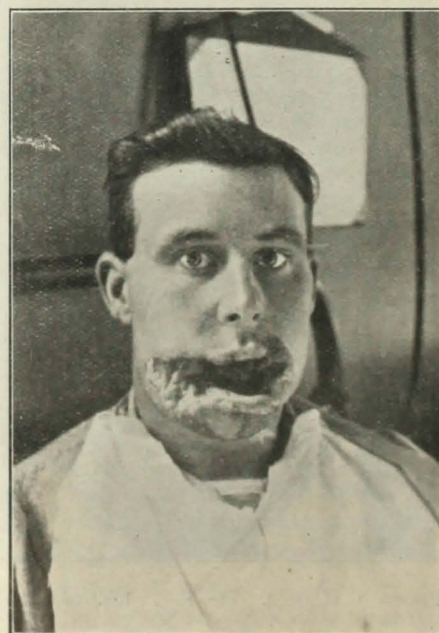


PHOTO 6. Case 3. Pte. D—. On admission,

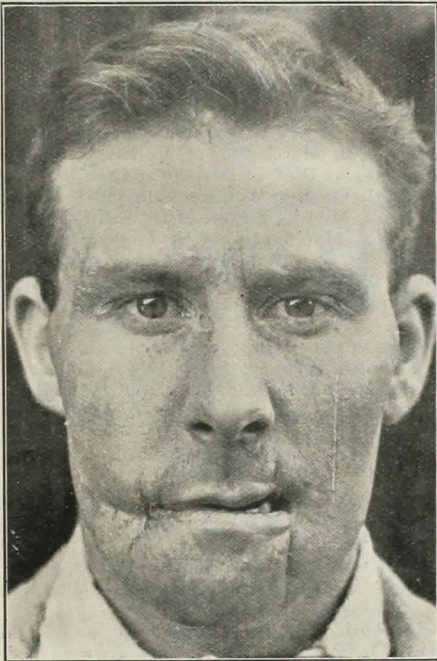


PHOTO 7. Case 3. Pte. D—. Result 1st plastic.

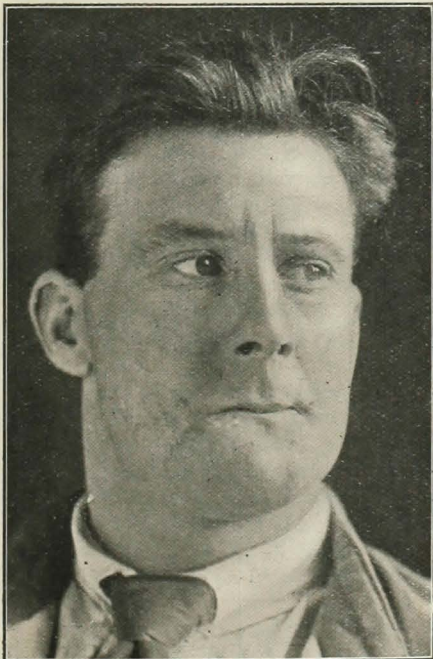


PHOTO 8. Case 3. Pte. D—. Final.

Photos 6, 7, and 8 show the condition before and after treatment, and the stage after the first operation.

Firm bony union of the lower jaw has occurred, and the patient can eat solid food. Further improvement could be effected by bringing down the upper lip at the left angle, but as, functionally, the man is fit to serve again, he has

been sent back to duty. The dental work was carried out by Capt. F. E. Sprawson, R.A.M.C.

The diagrams illustrating the operations were drawn by Henry Tonks (late Lieut. R.A.M.C.).

STUDENTS' UNION.

THE Annual General Meeting of the Students' Union was held on March 14th.

The Hon. Treasurer's report was read by Captain Ball, who stated that although the general expenditure had been less, the revenue had diminished very considerably.

Even with the Catering Company's kind gift, added to the profits of the JOURNAL, there still remained a fairly considerable adverse balance.

The Hon. Secretary's report was then read and received.

The tellers then announced the results of the general elections to the Council:

Constituency A.—Messrs. H. B. Bullen, P. C. Horsburgh, E. A. Crook, W. B. Christopherson, A. D. Wall.

Constituency B.—Messrs. C. Shaw, H. L. Sackett.

Constituency C.—Messrs. I. de B. Daly, B. B. Sharp, P. Smuts.

Constituency D.—Mr. T. B. Vaile.

Constituency E.—Mr. G. A. Fisher.

Mr. Waring, after warning the Union that he would only accept office until the end of the war, was again unanimously re-elected President.

Captain Ball and Major Gask were unanimously re-elected Hon. Treasurers.

After it had been decided to cut down the list of daily papers by five and the weekly papers by two, votes of thanks to the President and Hon. Treasurers for their devoted work on behalf of the Union were passed with acclamation.

EXAMINATIONS, ETC.

UNIVERSITY OF LONDON.

Second Examination for Medical Degrees.—March, 1917.

Part I.—C. H. Andrewes; J. L. McK. Brown; F. C. W. Capps J. V. Landau.*

Part II.—S. M. Cohen †; H. J. Levy; Campbell Shaw.

CONJOINT BOARD.

First Examination.—March, 1917.

Part I. Chemistry.—N. L. Capener.

Part II. Physics.—N. L. Capener.

Part III. Elementary Biology.—N. K. Aboutigi; N. L. Capener; H. W. Hammond; C. Huntsman; K. W. Leon; G. Manët-Wallett; B. A. J. Mayo; S. R. Simaika.

Part IV. Practical Pharmacy (April).—H. B. Bullen.

Second Examination.—April, 1917.

Anatomy and Physiology.—H. E. Archer; H. D. Kelf; E. D. Macmillan; G. M. J. Slot; W. G. D. H. Urwick.

* Awarded a mark of distinction.

† Distinguished in Anatomy.

APPOINTMENTS.

BOUSFIELD, PAUL, M.R.C.S., L.R.C.P., appointed R.M.O., American Women's Hospital for Officers, 98-99, Lancaster Gate, W. 2.
 HORNER, N. G., M.B., B.C.(Cantab.), M.R.C.S., L.R.C.P., late Temp. Capt. R.A.M.C., appointed Assistant Editor of the *British Medical Journal*.
 MOORE, R. FOSTER, M.A., B.Sc.(Cantab.), F.R.C.S., appointed Assistant Ophthalmic Surgeon at St. Bartholomew's Hospital.

CHANGES OF ADDRESS.

ARCHER, C. W., Surg. R. N., H.M.H.S. "Garth Castle," c/o G.P.O., E.C.
 BOUSFIELD, PAUL, American Women's Hospital for Officers, 98-99, Lancaster Gate, W. 2.
 BROWN, W. G. S., 120, Albany Road, Camberwell, S.E. 5.
 MAXWELL, J. PRESTON, 31, Hammelton Road, Bromley, Kent.
 TUCKER, A. B., 176, Eighth Avenue, Mayfair, Johannesburg, South Africa.

BIRTHS.

BAILEY.—On March 31st, at "Clayton," Bourne End, Bucks, the wife of Selborne Bailey, M.D.(Cantab.), of a daughter.
 BARNETT.—On April 25th, at Gernrode, Berkhamstead, Herts, the wife of Dr. Burgess Barnett, of a daughter.
 MAIDLOW.—On April 21st, at Ilminster, Somerset, the wife of Dr. W. H. Maidlow—twin sons.
 REICHWALD.—On March 5th, at Timber Hill, Ashted, Surrey, the wife of M. B. Reichwald, M.B., B.S., Temp. Lt. R.A.M.C., of a son.
 RYLAND.—On April 28th, at West Cottage, Wrecclesham, Farnham to Capt. (R.A.M.C.) and Mrs. Archer Ryland—a son.

STANSFELD.—On March 31st, at Hardwycke, Hailsham, the wife of R. Stansfeld, B.C.(Cantab.), M.R.C.S., of a son.

MARRIAGES.

AUSTEN—MAZET.—On April 4th, at Holy Trinity Church, Hull, Lt. Harold Austen, R.N.V.R., to Juliette Mazet, of Cette, France.
 CARTE—FOSTER.—On March 8th, at Holy Trinity Church, Cambridge, by the Regius Prof. of Divinity and the Rev. A. E. Stodart, Vicar of Madingly, Geoffrey W. Carte, Surgeon, R.N., and Georgina, daughter of Capt. Michael Foster, M.D., F.R.C.P.
 FRY—BECKER.—On March 14th, at St. Paul's Church, Tottenham, Capt. Augustin P. Fry, R.A.M.C., second son of the late Rev. Lucius G. Fry, former Vicar of St. James's, Upper Edmonton, to Elsie Blanche, eldest daughter of G. Becker, Esq., and Mrs. Becker, Tottenham, N.
 HAMILTON—MACPHEE.—On December 29th, at St. Andrew's Church of Scotland, Bombay, by the Rev. J. Drummond Gordon, B.D., William Gavin Hamilton, Major I.M.S., to Helen, daughter of the late Dugold Macphee and of Mrs. Macphee, Helensburgh, Dumbartonshire.

DEATHS.

BESWICK.—On April 12th, 1917, at 62, Thistlewaite Road, Clapton, N.E., Robert Beswick, M.R.C.S., B.Sc. (late of Bishopsgate, London), aged 75.
 JONES.—On April 13th, 1917, after a short illness, at his residence, 16A, Abercromby Square, Liverpool, Hugh Richard Jones, M.D. (Cantab.), aged 53.
 WRE福德.—On April 23rd, 1917, killed in action, Captain Bertram William Heyman Wre福德, 1st Devons, dearly loved and elder son of Dr. and Mrs. Heyman Wre福德, of Exeter, aged 22.

TIMES OF ATTENDANCE OF THE STAFF IN THE WARDS AND OUT-PATIENT DEPARTMENTS.

This Time-table will be Published Quarterly and also whenever there are any Important Alterations.

		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
Medical Wards	Dr. CALVERT	1.30	1.30	—	1.30	1.30	—
	Dr. H. MORLEY FLETCHER	1.30	1.30	—	1.30	1.30	—
	Dr. DRYSDALE	1.30	1.30	—	1.30	1.30	—
Medical Out-patients	Dr. LANGDON BROWN	—	10	—	—	10	—
	Dr. HORTON SMITH HARTLEY	—	—	10	—	—	10
	Dr. HORDER	10	—	—	10	—	—
Surgical Wards & Theatres	Mr. WARING	1.30	1.30	—	1.30	1.30	—
	Mr. ECCLES	1.30	1.30	—	1.30	1.30	—
	Mr. BAILEY	1.30	1.30	—	1.30	1.30	—
Surgical Out-patients	Mr. BLAKEWAY	10	—	—	10	—	—
	Mr. MORETON	—	10	—	—	10	—
	Mr. BALL	—	—	10	—	—	10
Gynæcological Wards	Dr. GRIFFITH	2	—	2	—	2	—
Maternity Wards	Dr. WILLIAMSON	—	2	—	—	2	—
Diseases of Women	Dr. WILLIAMSON	9	—	—	1.30	—	—
Orthopædic Department	Mr. ELMSLIE	1.30	—	—	—	—	—
Diseases of the Throat and Nose	Mr. HARMER	—	—	—	1.30	—	—
	Mr. ROSE	—	9.30	—	—	—	—
Ophthalmic Department	Mr. SPICER	1.30	—	—	—	—	—
Aural Department	Mr. WEST	1.30	—	—	1.30	—	—
	Mr. SCOTT	—	—	—	—	9	—
Diseases of the Skin	Dr. ADAMSON	—	9	9	—	9	—
Diseases of Children	Dr. H. MORLEY FLETCHER	—	—	1.30	—	—	—
	Mr. ACKLAND	—	10	—	—	—	—
	Mr. WHITE	9	9	—	9	—	—
Dental Department	Mr. VERHEYDEN	—	—	—	—	10	—
	Mr. HUDDART	—	—	9	—	9	9
	Dr. WALSHAM	9.30 and 1.30	9.30 and 1.30	9.30	9.30 and 1.30	9.30 and 1.30	9.30
Electrical Department	Dr. CUMBERBATCH	1.30 (males)	(females and children)	—	(males)	(females and children)	—
		1.30 (females)	1.30 (males)	1.30 (females)	2 (males)	1.30 (females)	—
		3 (males)	1.30 (females)	—	—	2.30 (males)	—

St. Bartholomew's Hospital



"Æquam memento rebus in arduis
Servare mentem."

—Horace, Book ii, Ode iii.

JOURNAL.

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JUNE 1ST, 1917

[PRICE SIXPENCE.]

CALENDAR.

- Fri., June 1.—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
Clinical Lecture (Medicine). Dr. Calvert.
- Mon., „ 4.—Exam. for Matriculation (London) begins.
- Tues., „ 5.—Dr. Drysdale and Mr. Bailey on duty.
- Wed., „ 6.—Clinical Lecture (Surgery). Mr. McAdam Eccles.
- Thurs., „ 7.—Applications for the Lawrence Scholarship to be sent in.
- Fri., „ 8.—Dr. Calvert and Mr. Waring on duty.
Clinical Lecture (Medicine). Dr. Drysdale.
- Mon., „ 11.—First and Second Exams. for M.B. (Camb.) begins.
- Tues., „ 12.—Exam. for Third M.B. (Camb.) begins.
Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
- Wed., „ 13.—Clinical Lecture (Surgery). Mr. Bailey.
- Fri., „ 15.—First and Second Exams. for M.B. (Oxford) begins.
Dr. Drysdale and Mr. Bailey on duty.
Clinical Lecture (Medicine). Dr. Calvert.
- Tues., „ 19.—Dr. Calvert and Mr. Waring on duty.
- Wed., „ 20.—Clinical Lecture (Surgery). Mr. Bailey.
- Fri., „ 22.—Clinical Lecture (Medicine). Dr. Morley Fletcher.
Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
- Mon., „ 25.—D.P.H. Conjoint Exam. begins.
- Tues., „ 26.—Dr. Drysdale and Mr. Bailey on duty.
- Wed., „ 27.—Clinical Lecture (Surgery). Mr. Bailey.
- Thurs., „ 28.—Second Exam. Conjoint Board begins.
- Fri., „ 29.—Exam. for Shuter Scholarship begins.
Clinical Lecture (Medicine). Dr. Morley Fletcher.
Dr. Calvert and Mr. Waring on duty.
- Mon., July 2.—Second Exam. for Med. Degrees (London), Part II, begins.
M.D. and M.S. Exams. (London) begins.
Second Exam. of Society of Apothecaries begins.
- Tues., „ 3.—Final Exam. Conjoint Board (Medicine) begins.
Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
- Wed., „ 4.—First Exam. of Society of Apothecaries begins.
- Thurs., „ 5.—Final Exam. Conjoint Board (Midwifery) begins.
- Fri., „ 6.—Final Exam. Conjoint Board (Surgery) begins.
Dr. Drysdale and Mr. Bailey on duty.

EDITORIAL NOTES.

 R. W. S. A. GRIFFITH has been appointed as representative of the Royal College of Surgeons on the Central Midwives Board.

* * *

We are happy to congratulate Lieut.-Col. and Brvt.-Col. M. H. G. Fell, R.A.M.C., of the Indian Expeditionary Force "D," on having been awarded the Russian decoration of the Order of St. Stanislas, 2nd Class with Swords, for "distinguished services rendered during the course of the campaign."

* * *

ROLL OF HONOUR.

We regret that each month now brings us several names of Old Bart's men who have fallen in the war. This month we have to mention no less than four such.

Lieut.-Col. William Briggs Grandage, commanding a brigade of R.F.A., was killed on May 14th in his thirty-eighth year. He was educated at Sedbergh and Clare College, Cambridge, and at St. Bartholomew's Hospital. He was a fine cross-country runner, representing Cambridge against Oxford; he also played Rugby football for his University, though he did not get his blue. He took his M.B. and B.C. degree in 1906 and his M.D. in 1908. In 1905 he joined the 3rd Kent Royal Arsenal Artillery, and remained with them when they became the 2nd London Brigade R.F.A. (T.), and held the rank of Captain when the war broke out. On mobilisation he gave up his practice, and shortly after was promoted to Major. For a time he was second in command of a reserve brigade, and afterwards had charge of the artillery section of the O.T.C. at London University. Later he was promoted Lieut.-Colonel, and given command of a brigade, proceeding to the Front only three months ago.

Capt. Edward Harrison, R.A.M.C. (T.), who was attached to the Gloucester Regiment, was killed in France by the explosion of a mine on April 17th.

He was the third son of the late Mr. Stockdale Harrison, architect and surveyor of Leicester, and was educated at the

Wyggeston School and Trinity College, Cambridge, 1897-1900. He then proceeded to St. Bartholomew's Hospital to continue his medical studies, obtaining the degrees of M.B., B.C. (1904-1905). He then became Resident Medical Officer at the Womens' Hospital, Soho, and afterwards Junior and Senior House Surgeon at Scarborough Hospital.

Temp.-Lieut. J. G. B. Smith, R.A.M.C., is reported "missing, believed drowned," and, as we have had to

to give us the benefit of his advice and assistance as well as of his instruments. Naturally the patient is doing very well! Such an assembly of Bart.'s men could not go unrecorded. A few days later Griffiths was posted here for duty, and had charge of some wounded Turkish prisoners. He was transferred to another sphere soon afterwards, so the balance of power was somewhat upset, for there are now only four Bart.'s men here.



Left to right, standing.—Lieut. Weir. Major Hamill. Major Maclaren. Capt. Dobson.
Left to right, sitting.—Major Rawling. Col. Collins, A.D.M.S. Basra, 1914-1916. Major Whitehead.

remark in a previous issue, such an announcement unfortunately gives no hope of his rescue.

Temp.-Capt. A. B. Bernard, K.R.R.C., is reported missing, believed killed.

With much sorrow we tender our deepest sympathy to the relatives and friends of these gallant men.

FROM THE FRONT.

EXTRACT OF LETTER FROM TEMPORARY
MAJOR P. HAMILL, R.A.M.C.

March 28th, 1917.

HEAR ———,—Enclosed is a photo which may be of interest. It was taken on the occasion of our operating to decompress a patient with a cerebral tumour, when Rawling very kindly came down from Deolali

Bombay is full of Bart.'s men; Col. Anderson is at Alexandra Hospital, Napier at Cumballo, Wallis at Parel Laboratory. I saw Pigeon, of I.M.S.—a former Herringham clerk—in the distance the other day. E. N. Russell is on a hospital ship, and there were several others about.

Basra was also full of them: there were six of us in the Reinforcement Camp alone when I first went there. Armstrong was going strong at Nos. 9 and 10 Indian Hospitals, and Boney at 3 B.G.H., whither Crossman soon followed. The career of Willett and myself in Mesopotamia was brief, but from what I hear, Crossman and Charles, who went out with me, are still going strong. The latter seemed at one time to have turned his hand to clinical medicine, for some of the case records of patient arriving here bore his signature. Murray arrived at Basra a few weeks after us, but did not remain long. When last I heard of him he had

gone on medical certificate to South Africa. C. R. Taylor is still at No. 3; I see his signature on the transfer sheet of nearly every case of the enteric group which comes into my wards.

Memories of Mesopotamia are far from unpleasant, in spite of having spent over 70 per cent. of my time in hospital, and I feel sorry at not being there for the present push, but Shiga's bacillus is a fierce and toxic organism, and a medical board to-day still judges me unfit.

We all send best wishes.

Yours sincerely,

P. HAMILL.

A CASE OF PERFORATING WOUNDS OF THE HEART.

By CAPTAIN G. L. KEYNES, R.A.M.C.

PRIVATE A. P—, a very large and well-built Australian, was admitted to the Casualty Clearing Station on February 21st, 1917. He had two small entrance wounds over the lower edge of the fifth rib on the left side internal to the mid-clavicular line, and his right eye was destroyed. He was very much collapsed, and, in accordance with the usual practice in cases of penetrating chest wounds, he was propped up in bed and not disturbed more than was absolutely necessary. His general condition slowly improved, and by February 24th was good enough to enable me to enucleate the remains of his right eye under a general anæsthetic. His respiration was not greatly embarrassed, but as he had obvious signs of a large hæmo-thorax on the left side I took the opportunity, after the operation on his eye had been completed, of aspirating his chest; 55 oz. of blood were slowly removed and the fluid was not obviously infected. More fluid still remained, but this was left owing to the danger of too far reducing the intrathoracic pressure. The patient stood the operation very well, and for the next twenty-four hours his condition appeared to be materially improved. On the next day he had very little respiratory distress, but pericardial friction could be heard at the base of the heart; this had disappeared twelve hours later, and from then onwards his condition became gradually worse, the signs being those rather of cardiac failure than of respiratory embarrassment. He died on February 27th, seven days after receiving his wounds.

A post-mortem examination showed that a considerable amount of blood and clot still remained in the left plural cavity; the pericardium was also distended with fluid and the heart itself was covered with fibrin. Both the missiles had passed through the heart muscle within a few millimetres of the cavity of the left ventricle. The larger one was found lying in the pleural cavity behind the

pericardium, and had left a suppurating track in the heart wall. There was also a fragment of rib embedded in the posterior surface of the heart. Death was evidently due to the pericarditis, the patient having recovered from the initial hæmorrhage in spite of its very large amount.

Wounds of the heart are not commonly seen, and this is the only one that has come under my notice during seven months' experience of work at Casualty Clearing Stations. Colonel Herringham has recently recorded a case in which the myocardium was injured, but his patient died three days after being wounded. It appears, therefore, that patients but seldom survive a wound of the heart long enough even to reach the Casualty Clearing Station, and I record this case in the hope that its unusual course may render it interesting.

TREATMENT OF MALARIA BY INTRAVENOUS INJECTIONS OF QUININE URETHANE.

By W. B. GRIFFIN, F.R.C.S.Eng.

IN a base hospital for cases from Salonica one had a great opportunity of seeing malaria in its most severe form and comparing the various methods of treatment. The men arrived in a very exhausted condition from anæmia, fever, and the gastric complications of malaria, and the loss of weight in many of the patients was very marked.

All the men had quinine treatment by the mouth up to 15 or 20 gr. daily, and many had had intramuscular injections. This treatment had failed to overcome the fever in a large majority of cases, rigors with the temperature reaching 107° and 108° F. occurring daily.

The utter weariness and loss of strength was the symptom complained of by most, the rigors being heroically endured. In several cases the symptoms of coma developed soon after reaching the hospital, the so-called "cerebral" cases. Difficulty in swallowing was quickly followed by loss of speech, loss of power in the limbs, unconsciousness, and incontinence of urine and fæces. This state would be reached in twenty-four hours from the onset.

The pupils were dilated and reacted sluggishly to light, pulse quick and feeble, and respiration was often Cheyne Stokes in character. The spleen was large and tender, knee-jerks diminished, and there was no ankle clonus or Babinski's sign.

We first tried intravenous injections of quinine urethane for this type of case and the results were really astonishing. The mixture used was as follows:

Chlorhydrate of quinine	0.40 c.c.
Urethane	0.20 c.c.
Distilled water	1 c.c.

To this solution, in an antitoxin syringe mounted with a fine needle, was added 14 c.c. of warmed physiological serum, and the whole was slowly injected into the median basilic vein. In the coma cases complete recovery occurred in all cases in periods varying from twelve to twenty-four hours. It was a fine sight to see men who had been unconscious twenty-four hours ago demanding their breakfast. The temperature fell at once, and in thirty-six hours it was possible to see evidence of disintegration of the gametes and schizostes in the blood from a film examined microscopically. Sometimes one or two injections were given at intervals of twelve hours, and repeated again in a week.

We soon began to treat all cases of malaria with persistent fever with intravenous injections of quinine, and I never saw one bad symptom in over a hundred cases. Intramuscular injection gave rise to pain, which sometimes lasted for weeks, and many cases arrived with large inflammatory masses in the buttocks, which broke down later into abscesses.

The night round in the wards was a different matter after we started intravenous treatment. Instead of high fevers and rigors on every chart, the temperatures were normal. The men stated that the result they noticed most was the loss of fatigue which followed the injection, and that they felt so much better. From past experience they dreaded intramuscular injections, but intravenous ones were painless.

French doctors told me that thrombosis of the veins was a common sequela at Salonica, but I only saw one transient case in our series. We hardly ever gave more than 6 to 8 gr. of quinine at one injection, and experience proved it to be sufficient. French doctors stated that they gave up to 18 gr. at Salonica.

Parasites in the blood rapidly disappeared, and patients put on weight and lost their anæmia in a short time. After seeing these cases one felt that for severe and persistent fever in malaria intravenous treatment was the most valuable remedy to be obtained.

ON THE CAUSES AND AVOIDANCE OF ABDOMINAL RIGIDITY DURING ANÆSTHESIA.

By J. D. MORTIMER, M.B., F.R.C.S.,

Anæsthetist, Royal Waterloo Hospital, St. Peter's Hospital for Stone, etc., Temporary Anæsthetist, St. Bartholomew's Hospital.



HIS difficulty is, or should be, usually absent, or present only to a slight extent, but its results when it is marked may be serious, especially when the operation involves the same region. There is interference with respiration, and consequently with due intake and elimination of the anæsthetic; dilatation of the

heart will follow; the surgeon is hampered by extrusion of the bowels, by venous oozing, and by the difficulty or impossibility of reaching the part at which he is aiming. His work is interrupted and prolonged, and his intentions may be to a great extent frustrated. There is increased probability of vomiting and other after-effects. Fatalities have even occurred as an indirect consequence.

Causation.—Rigidity is due to mechanical *tension* and to active *contraction* in proportions varying according to circumstances, including of course the muscular development and nervous sensitiveness. Reflex contractions are usually marked in neurotic people, in alcoholic subjects, in drug-takers and in children, especially when rickety.

As is well known, the presence of *food or much fluid in the stomach* sets up persistent straining, and it may be difficult or impossible to prevent vomiting.

Faulty anæsthetisaon, as in failure to choose an *anæsthetic appropriate* to the patient, operation, and position, in uneven or too hurried induction, in allowing a degree too light for the occasion, and so forth, may be expected to cause trouble when the administrator is inexperienced.

Local disease, such as the presence of acute appendicitis, or of a gastric ulcer, may set up rigidity of over-lying muscles persistent under anæsthesia.

The position of the patient.—Certain positions which in some ways greatly facilitate the work of the surgeon tend to increase the trouble under consideration to an extent that is, I believe, not fully realised, and to which special attention may be drawn. This can be well appreciated by anyone will lie down on his side with a firm bolster-shaped cushion underneath it, and in that position will try to breathe freely, or will put himself for a few minutes in the Trendelenberg position. Even the ordinary recumbent position with the patient at full length is not such as we prefer when we wish to relax the abdomen for diagnostic purposes, and tension is obviously increased by putting a cushion or sandbag, as sometimes required, under the lower ribs or pelvis.

The Trendelenberg position not only causes some tension, but also disturbance of the respiration by impeding the action of the diaphragm, upon which the abdominal contents are thrown, and by congestion of the medullary centre and upper air-passages, especially in fat and plethoric subjects, in whom it may, however, for surgical reasons be imperative.

Operative proceedings.—These, as was some years ago pointed out by Macewen, may set up spasmodic contraction, even under very deep anæsthesia.

Traction on the mesentery or broad ligaments, enucleation of an adherent prostate, injection of a bladder ulcerated from tuberculosis, are especially likely to cause trouble.

Hiccough may be set up by manipulation in the region of the diaphragm.

Prevention and remedies.—To render abdominal operations easier much may be done by those in previous charge of the

case, if there is time and opportunity for improvement of the general condition, particularly in correction of states of obesity, plethora, alcoholism, and rickets.

Means, which need not be here detailed, should, when practicable, be taken to get the stomach empty and kept it empty, particularly in emergencies and when there is intestinal obstruction. Straining and vomiting when a patient is in position for an abdominal operation are not merely troublesome, but very dangerous from the risk of ejecta entering the air-passages. This has occurred even under spinal analgesia, and is, of course, still more likely to happen under general anæsthesia.

Faults of anæsthetisation such as those already mentioned must of course be avoided. In the supine position, if not inconvenient to the surgeon, both shoulders should be raised (the one from which the head is turned rather more than the other). In the lateral position the uppermost arm must be supported on a rest; the patient is steadied and breathing less hampered. Loin cushions are sometimes faulty as regards size and adaptability to the patient's contour, or may be in a wrong position, so that there is needless tension of structures and interference with breathing. In the Trendelenberg position the shoulders should always be supported, and the weight of the head taken off as much as possible by one or two pillows, which may sometimes with advantage rest on the anæsthetist's knees. If support is lacking rigidity is markedly increased.

After *hypodermic injection* of omnopon or morphine and atropine, one often finds absence of reflex rigidity in cases (for instance, hysterectomies) in which it might have been otherwise expected. There is, as a rule, a considerable saving of the anæsthetic. It is worth while to inject (if previously omitted) just after induction or even at the onset of rigidity, for an effect generally follows in about ten minutes. I think, however, there is more liability afterwards to intestinal atony, and consequently to nausea and other ill-effects dependent thereon. After-pain, and vomiting which may be associated with it, is however alleviated. It need hardly be said that the customary precautions must be taken in administering such drugs, and that the patients need careful watching after the conclusion of the operation until their effects have passed off.

Ether from an inhaler preceded by nitrous-oxide or ethyl-chloride, or even ether by the open method although atropine has been given beforehand, will, in unsuitable subjects, cause laboured respiration and excessive secretion of mucus, persistent even when a change to another anæsthetic is made after induction. Under prolonged administration of nitrous-oxide, or of nitrous oxide and oxygen, rigidity is very liable to occur, as is admitted by those who advocate their use for abdominal operations. Chloroform cannot be relied upon when given in a low percentage, and in a higher one its dangers are much increased by the existence of irritation of

vital centres, and of any degree of asphyxia; it is also when fully given apt to be followed by persistent after-vomiting. Still, it answers well for some patients, particularly in the Trendelenberg position, which lessens the probability of shock. Ether by the open method or a chloroform-ether mixture (according to the state of the patient and the stage of the operation) are usually more effectual, and can be pushed with less risk. With a more extended use of C.F. mixture instead of chloroform for prostatectomy I have found that depression and rigidity can generally be avoided. Whatever method be employed, it is of first importance to attend to respiration, and if this becomes unsatisfactory, to discover why it is so, and apply the appropriate remedy. Oxygen is often valuable, but should not be used merely to counteract cyanosis dependent on causes otherwise remediable. For example, one should not give ether from a closed inhaler to a full-blooded elderly person, and then turn on oxygen to alleviate its bad effects, masking a symptom after the manner of the prescribing chemist. Reflex rigidity from surgical proceedings is accompanied by more or less spasmodic closure of the larynx and retraction of the tongue, and efforts must be made to maintain a free airway by such means a pushing forward the lower jaw, drawing out or levering forward the tongue, and introducing a tube between the tongue and palate.* Non-aeration increases rigidity, the extraordinary respiratory muscles being called into action, so that a vicious circle is formed. The depth of anæsthesia must be cautiously increased. It may be necessary to ask the operator to desist for a few moments whilst these measures are being pursued. I need hardly remind readers how surgical authorities have insisted on the need for minimising reflex disturbances by making an adequately long incision, by clamping and cutting adhesions when possible instead of tearing them, and by avoidance of rough handling.

Spinal analgesia usually abolishes the trouble, besides keeping the bowels still, and is especially useful for this purpose in pelvic operations. It should, however, be combined with morphine and atropine or (in many cases) with general anæsthesia, which may be light when it would otherwise need to be deep. I have known instances of serious psychic shock and other interruptions to the operation, also prolonged mental disturbance afterwards, when spinal analgesia has been employed alone.

It may be well to mention incidentally that in some patients, such as those who are the subjects of chronic bronchitis and emphysema, respiration is habitually mainly

* It may be remarked in passing that tongue-forceps should *not* be clamped on the tongue; this causes much after-pain and swelling, interfering with the patients' comfort and ability to speak and take nourishment. If necessary, *e.g.*, when the tongue has to be drawn out for some time during certain operations, a thread should be passed through its middle near the tip. But usually, it can be pushed down and gently levered forwards by putting the tongue-forceps (closed and on the flat) against its base.

abdominal, and the excursions of the diaphragm and abdominal walls may be very troublesome to the operator, although there is not tonic contraction. For obvious reasons this trouble unfortunately cannot be abolished, although much be done by proper selection and administration of the anæsthetic to reduce it to a minimum.

I venture to say, in conclusion, that on difficulty arising from rigidity the surgeon and anæsthetist do not always appreciate each other's position. Whilst witnessing operations I have sometimes been struck by the forbearance of the surgeon when rigidity, apparently avoidable by the anæsthetist, has occurred. On the other hand, I have known the anæsthetist blamed when it arose from causes beyond his control, and could not be abolished by him without risking a fatality.

A HOUSE IN HARLEY STREET.

By PERCY DUNN, F.R.C.S.



CLOSE observer of Nature learns many things of interest, and the pastime becomes a passion: no opportunity is lost of exercising it. Its fascination leads, oftentimes, to the task of attempting the solution of problems, apparently inscrutable, problems exciting an insatiable curiosity—while Nature smiles at her subtlety. But this observation, as an asset in life, is profitable in many diverse ways. The roof of a house, for example, in Harley Street, would presumably provide but a sorry vista for anyone in search of new knowledge. The chimney-pots would be the only noticeable, commanding feature in that aerial landscape. And yet these self-same humble, though indispensable appendices of civilisation have a tale to tell—a lesson to teach—for a casual glance indicates that the abnormal is greatly in excess of the normal. This alone is reflective of scenes of recrimination, of numberless outbursts of human execration, of violent interviews with anatomical professors of bricks and mortar, of febrile pursuance of research work in order to disclose a remedy for that diabolical infliction, a smoky chimney. Again, from the hypertrophied abnormality present, the chimney-pots suggest a fertile field for the study of orthopædic surgery. In this regard they form an aggressive reminder to the surgeon practising that specialty. Every deformity to which the human body is subject, and many others, is thus delineated, majestically outlined. Typical examples of genu valgum abound. Club foot is present in all its varieties. Talipes calcaneus and talipes equino-varus are noticeable over a wide area. Wry neck is not uncommon. Lateral curvature of the spine is prominent. Rickety curvature of the femur can be easily recognised. Flat foot admits of no difficulty in diagnosis; pes cavus is equally distinguishable. Other varieties of deformity are visible, which in the monstrosity

of their angular eccentricities would require a new book of Euclid to explain. Indeed, an orthopædic student would see from the roof of a Harley Street house more examples of human deformity in five minutes than he would see in a year in an orthopædic department.

This new acquaintance with orthopædic surgery was gained in this wise: When Bruce-Clarke's house was in process of construction he invited me one day inside, to observe the progress that was being made. Now the development of a house is peculiar. It differs entirely from the embryological details recorded in the text-books on human anatomy: there is no embryo stage, no notochord, nothing to correspond with the cerebral vesicles. All the vital processes concerned in the evolution of a house are expended only in one direction—that of ensuring completion of development, separately, in every structure and part. The foundations are fully developed from the first, and the same is true, in successive order, of everything else which follows. The development in Clarke's house, at the time of my visit, had proceeded to the upper stories and the roof. But certain visceral structures were still lacking, among which may be mentioned the stairs to the higher altitudes. Thus in order to gain access to these latter a perilous adventure was necessary, by means of ladders. These ladders were fixed at an angle of $89^{\circ}45'$ from the horizon—as carefully determined by a protractor. In ascending them one's mind became glued upon the possibility of a sudden and precipitous descent to the horizon, with consequences gruesome to contemplate. But the peril of the enterprise was worth it. The orthopædic prospect from the roof was magnificent. The prospect glowed with the glory of orthopædic ingenuity. Nothing, in this sense, could have been grander as a scenic display. But scenery is relative in its attractiveness. A lover of expansive woodland scenery would find nothing congenial to his taste by gazing at chimney-pots; nor would the orthopædic surgeon find anything to remind him of the deformities he was accustomed to treat while testing his vision from the top of Ben Lomond. The roof adventure came to an end, and then followed the soul-stirring business of descending the ladders to the lower floor. The safest mind occupation during the incident was to imagine an ophthalmoscopic examination involving a differential diagnosis between some minute changes in the macular region. This ensured a full relaxation of the accommodation, under the influence of which the ill-definition of near objects tended to detract from the realities of the situation until the lowest rung of the ladders had been favourably negotiated.

The continuance of the inspection to the basement was facilitated by two flights of fully-developed stairs. The first feature attracting notice was a large, pallid-looking door, resting by itself against one of the walls. This basement-neoplasm suggested some diagnostic comment and ætiological reflections. On both of these points Clarke, however,

was quite explicit. Characteristically he said: "I was down at the docks one day, and I happened to see this door in an auction-room for sale. I bought it. Over there a strong-room is being built. When it is finished, a plastic operation with concrete being necessary, the strong-room will fit the door." Macroscopically the structure of the door corresponded with a hard metallic tissue, hopefully designed to offer successful resistance to the instruments of the surgeons whose operations must necessarily be confined to the silent hours of the night. The strong-room was partially formed out of a cellar. The cellars of the house showed much hypertrophy, extending far beneath the roadway. Formerly, as is commonly known, a public-house occupied the site, in name, the "Old Turk's Head," as Mrs. Bruce Clarke reminded me the other day—a slummy, dowdy building as I remember it, as incongruous amid its aristocratic environment is as a large, pulpy, sebaceous cyst upon an alopeciated scalp.

Bruce-Clarke bought the site, pulled down the house, and put an end to the "shoulder-shrugging" of its distinguished neighbours. At the same time there disappeared from that moment in Harley Street an alcoholic anachronism, of a distinctly heterogeneous type, having regard to the residential district which had grown up around it. From his own designs Clarke erected the present academic, manorial structure, thus establishing an object-lesson in his many-sided capacity, and his shrewdness as a business man.

Another feature of the house was the shape and arrangement of certain of the doorways. They were narrow and low. Furthermore, they illustrated examples of "astigmatism against the rule." The rule of house doors is to open inwards: these opened outwards, and their structure showed a teak formation. Diagnostically their appearance seemed to be familiar, though the diagnosis, for the moment, was difficult. What was their history? They were cabin doors. Clarke bought them at the sale of the wreckage, some years ago, of the German liner, "Eider," whose dissolution occurred off the Isle of Wight, the ship having become ankylosed to some rocks. The parietal injuries, thus inflicted, were most serious from the first. All efforts at relief were unavailing; nevertheless, the sea adopted a treatment of its own, exclusively empirical—that of persisting in passive movements, occasionally violent, showing want of education, the effects of which were deplorable. Thus there was lost to the Huns, formerly known as Germans, a valuable property—a loss which must have created an unsightly cicatrix in the financial region of the nation.

Incidentally, an outcome of the inspection of the house was an invitation from Bruce-Clarke to join him on the following Sunday in a "joy"-ride in his car. This car was one of the earlier sort, small and unpretentious in appearance. The cars of those days were calculated to develop asthmatic, emphysematous signs, especially during hill

climbing, and to be subject to attacks of sudden cardiac failure. Whenever they displayed a moribund condition, it is now a matter of history to recall that unfeeling bystanders, instead of exhibiting becoming human sympathy, always evinced an unrestrained hilarity. Nevertheless, ignoring all forebodings, we made an optimistic, if not a brilliant start. The car performed commendably for some miles, until it reached "somewhere in a suburb." Then, while negotiating a sudden turn in the roadway, something happened—the car came peacefully to rest. Some lesion had occurred. Bruce-Clarke's knowledge of the surgery of his car was apparently only exceeded by that demanded by his human patients. He decided at once that the abdomen must be opened. This he accomplished without difficulty, and the operation was successful in revealing the cause of the symptoms—that is to say, the diagnosis of hyperpyrexia of the sparking plug was confirmed. This necessary operation occupied forty minutes, the abdomen being closed in the usual manner. At the ordinary rates for private patients the fee for the operation was estimated at a hundred guineas.

The journey afterwards was successfully continued to Windsor Park. But there, in a beautiful glade, with the sunshine gleaming through the forest trees, reflecting its brilliance from their foliage, the car slowly panted to a standstill for a second time. Laparotomy again became necessary. Upon this occasion the diagnosis was involved in considerable doubt. All the viscera were subjected to a careful inspection without disclosing the cause of the symptoms. At last, merely by chance, Clarke discovered a coloboma of the carburetter. Ophthalmoscopic examination confirmed that this was not of congenital origin. The text-books being silent upon the subject of a lesion of such rarity, Clarke was called upon to devise a treatment for the purpose of meeting the requirements of the case. But the operation was tedious. A passing motor-car surgeon offered his services, in consultation, during the course of it; nevertheless, this proffered assistance Clarke declined. At length the operation was completed, and its estimated cost was 250 guineas, including after-treatment. In the dim light of the advanced evening we eventually reached town. On the return journey there was no appreciable mishap.

REVIEW.

MILITARY SURGERY. By DUNLAP PEARCE PENHALLOW, S.B., M.D., with an Introduction by SIR ALFRED KEOGH. London: Henry Frowde and Hodder and Stoughton. (Oxford Medical Publications.) Price 15s. net.

This is a book by an American surgeon, who has gained his experience of military surgery as chief surgeon to the American Women's War Hospital at Paignton, South Devon. It is, therefore, the surgery of a base hospital that is presented, rather than that of the field or the casualty clearing station. So that we find that the chapters dealing with the soft tissues, bones, and joints are fuller and

more comprehensive than those dealing with the head and trunk. It is chiefly a record of the author's actual experience; but its value is further increased by the inclusion of accounts of important original communications such as Sir Anthony Bowlby's Bradshaw Lecture.

The great problem of military surgery—the treatment of infected wounds—is discussed adequately and without bias. We gather that treatment by hypertonic saline solution is the method at present in chief use at the author's hospital. The practice of plating septic compound fractures of the long bones is strongly advocated in selected cases; and a full account of the author's technique is given.

We are surprised to see that in cases of secondary hæmorrhage we are advised to ligature the main artery in continuity proximal to the wound rather than to open up the wound and attempt to ligate the vessel immediately above and below the seat of hæmorrhage.

The book provides a concise summary of its subject. At the end of each chapter is a short list of references, which will be appreciated.

It is fully illustrated, chiefly by well-reproduced skiagrams and drawings by the author.

APPOINTMENTS.

- HAWES, C. S., M.R.C.S., L.R.C.P., appointed Anæsthetist, South African Hospital, Richmond Park.
 MACMAHON, C., B.A.Oxon., appointed to deal with cases of speech affections due to shell shock at Lord Knutsford's Special Hospitals for Officers.
 SHAH, J. M., M.R.C.S., L.R.C.P., Lieut. (temp.), I.M.S., appointed Specialist in Advanced Operative Surgery, No. 5, Indian General Hospital, Egyptian Expeditionary Force, Egypt.

CHANGES OF ADDRESS.

- BREWERTON, E. W., 73, Harley Street, W. 1. Tel., Padd. 1077.
 CORFIELD, E. C., 189, Balham High Road, Upper Tooting, S.W. 17.
 DRAKE, D. J., Boughton, Faversham, Kent.

BIRTHS.

- EVERY.—On May 19th, at 63, Wimborne Road, Bournemouth, the wife of Dr. John Stanley Avery, of a daughter.
 COOK.—On May 12th, to Evelyn Russell and Joseph Basil Cook, M.D., D.P.H., R.A.M.C., of the Infirmary, Isleworth—a daughter.
 GANDY.—On April 21st, the wife of T. H. Gandy, Peppard Common, Henley-on-Thames, of a son.
 MAWHOOD.—On May 4th, at Chalcots, Ascot, the wife of R. H. Mawhood, M.B., B.C.(Cantab.), F.R.C.S.(Eng.), of a son.
 WIPPELL.—On Tuesday, May 22nd, at 3, Maitland Road, Reading, the wife of Lieut. D. H. Wippell, the Yorkshire Regiment, of a daughter.

MARRIAGES.

- CAMPBELL—DAVID.—On Wednesday, May 9th, at Charles Street Congregational Church, Cardiff, Captain F. W. Campbell, R.A.M.C., son of the late John Campbell and Mrs. Campbell, of Ballywillan, Portrush, Ireland, to Olive, third daughter of Mr. T. W. David, J.P., and Mrs. David, of Ely Rise, Cardiff.
 KEYNES—DARWIN.—On May 12th, at St. Bartolph's, Cambridge, by the Rev. Hugh Stewart, assisted by the Rev. A. W. Goodman, Captain G. L. Keynes, M.A., R.A.M.C., younger son of Dr. Keynes, Registrar of the University of Cambridge, and Mrs. Keynes, to Margaret Elizabeth, younger daughter of the late Prof. Sir George Darwin, K.C.B.
 MONCKTON—JONES.—On April 17th, at Gartheli Church, Cardiganshire, by the Rev. J. W. Jones, B.A., cousin of the bride, Robert Vernon Giraud Monckton, M.D., of 14, Sumner Place, S.W., to Elizabeth, youngest daughter of the late Timothy Jones, Esq., and Mrs. Jones, of Panthrew, Llanio Road.

PEARSE—WILBURN.—On March 30th, at St. Saviour's Church, Colgate, Captain Robin Pearse, F.R.C.S., C.A.M.C., of Toronto, younger son of Mr. and Mrs. E. B. Pearse, New Burn, Colgate, Sussex, to Amy Christine, eldest daughter of Mr. and Mrs. E. J. Wilburn, The Croft, Southwick.

ROBBINS—DUCHESNE.—On May 28th, by special licence, by the Rev. C. W. Hutchinson, Captain Frank Hubert Robbins, R.A.M.C. (T.), only son of C. Robbins, of 13, Brondesbury Park, N.W., and Dorothy Muriel Duchesne, elder daughter of Ernest Collier Duchesne, of Oakwood, Bishop Stortford, Herts.

DEATHS.

- COALBANK.—On Saturday, May 5th, 1917, at Teddington Lodge, Teddington, Isaac Coalbank, M.R.C.S.(Eng.), L.S.A., M.D.(Paris), younger son of the late Rev. Robert Coalbank, Vicar of Old Dalby, Leicestershire, and beloved husband of Sarah Coalbank, aged 73.
 FOSTER.—On April 14th, killed in action, Second Lieut. Alfred Foster, R.F.A., dearly loved younger son of Mrs. Gaisford and of the late Alfred Foster, Bakewell, and stepson of Engineer Captain Gaisford, R.N., aged 20.
 GRANDAGE.—On May 14th, 1917, of wounds received in action half an hour earlier, Lieut.-Colonel William Briggs Grandage, commanding a brigade of R.F.A., the dearly loved husband of Helen Mary Grandage, of 74, Gloucester Road, W., and fifth son of Mr. and Mrs. Grandage, of Kent House, Rawdon, near Leeds, aged 37.
 HARRISON.—On April 17th, 1917, by a mine explosion in France, Captain Everard Harrison, M.B., B.C.(Cantab.), R.A.M.C.T., of 1, De Montford Street, Leicester, aged 37.
 POPE.—On May 4th, 1917, officially reported missing, believed drowned, on the occasion of the torpedoing of s.s. "Transylvania," Charles A. W. Pope, M.A., M.B.(Cantab.), Captain, R.A.M.C., of St. Leonards-on-Sea, beloved husband of Marion Ruth Pope, and fourth son of Alfred Pope, J.P., of Dorchester, Dorset.
 SHEPHERD.—On May 22nd, 1917, at 24, St. Andrew's Crescent, Cardiff, Charles Carter Shepherd, M.D., dearly loved husband of Maud Maria Shepherd, aged 61.

ACKNOWLEDGMENTS.

The Nursing Times, The Shield, The British Journal of Nursing, The New York State Journal of Medicine, Guy's Hospital Gazette, L'Attualità Medica, The Hospital, Long Island Medical Journal, The Medical Review, The Middlesex Hospital Journal, St. Thomas's Hospital Gazette, St. Mary's Hospital Gazette, Revue de Chimiothérapie, Sidney University Medical Journal, Magazine of the London (Royal Free Hospital) School of Medicine for Women, St. Bartholomew's Hospital League News, Adelaide Medical Students' Society "Review."

NOTICE.

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

The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER, W. E. SARGANT, M.R.C.S., at the Hospital.

All communications, financial, or otherwise, relative to Advertisements ONLY, should be addressed to ADVERTISEMENT MANAGER, the Journal Office, St. Bartholomew's Hospital, E.C. Telephone: City 510.

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St. Bartholomew's Hospital



"Æquam memento rebus in arduis
Servare mentem."

—Horace, Book ii, Ode iii.

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JULY 1ST, 1917.

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CALENDAR.

Mon., July	2.—Second Exam. for Med. Degrees (London), Part II, begins. M.D. and M.S. Exams. (London) begins. Second Exam. of Society of Apothecaries begins.
Tues., „	3.—Final Exam. Conjoint Board (Medicine) begins. Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
Wed., „	4.—First Exam. of Society of Apothecaries begins.
Thurs., „	5.—Final Exam. Conjoint Board (Midwifery) begins.
Fri., „	6.—Final Exam. Conjoint Board (Surgery) begins. Dr. Drysdale and Mr. Bailey on duty.
Sun., „	8.—Oxford Trinity Term ends.
Mon., „	9.—First Exam. for Med. Degrees (London) begins.
Tues., „	10.—Dr. Calvert and Mr. Waring on duty.
Thurs., „	12.—Second Exam. for Med. degrees (London) Part I begins.
Fri., „	13.—Junior Scholarship Exam. Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
Sat., „	14.— Summer Session ends.
Tues., „	17.—First Exam. Conjoint Board begins. Dr. Drysdale and Mr. Bailey on duty.
Fri., „	20.—Dr. Calvert and Mr. Waring on duty.
Tues., „	24.—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
Fri., „	27.—Dr. Drysdale and Mr. Bailey on duty.
Tues., „	31.—Dr. Calvert and Mr. Waring on duty.
Fri., Aug.	3.—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
Tues., „	7.—Dr. Drysdale and Mr. Bailey on duty.

EDITORIAL NOTES.

OUR congratulations are given to Dr. Shipley, Master of Christ's College, Cambridge, who has been appointed Vice-Chancellor of the University of Cambridge.

* * *

We are again proud to congratulate several Bart's men on having received the Military Cross :

Capt. Francis Heygate Ellis, M.D., Rhodesian R. "He has at all times displayed a total disregard of personal safety, and has set a fine example to all ranks."

Temp. Capt. Bertram Henry Barton, R.A.M.C. "He worked continuously under very heavy fire, and succeeded in bringing in many wounded men. His devotion to duty saved many lives."

Capt. Alfred George Timbrell Fisher, R.A.M.C. "The advanced dressing-station of which he was in command was destroyed by shell-fire, and, although himself severely shaken, he succeeded in forming a fresh dressing-station."

Temp. Sec. Lt. Henry Ernest Karslake Eccles, Gen. List and R.F.C. "He has shown great skill and gallantry in carrying out night raids on the enemy lines. He has also caused material damage to enemy railways while flying at a low altitude."

* * *

Among the recipients of Birthday Honours we have to congratulate a large number of Bart's men :

T. Hood, M.R.C.S., L.R.C.P., Director of Medical and Sanitary Services, Nigeria, has been appointed C.M.G.

Col. H. E. Banalvala, I.M.S., Inspector of General and Civil Hospitals, Assam, and Member of Council of Chief Commissioner for making Laws and Regulations, has been appointed C.S.I.

Capt. R. H. Bott, I.M.S., Professor of Surgery in the Medical College and School, Punjab, has been awarded the Kaiser-i-Hind Medal for Public Services in India.

Other Honours have been awarded for valuable services rendered in connection with military operations in the field :

Lt.-Col. (temp. Col.) H. S. Thurston, C.M.G., R.A.M.C., Lt.-Col. and Bt. Col. Sir B. G. Seton, Bt., I.M.S., and Surg. Lt.-Col. (Hon. Surg. Col.) R. J. Reece, H.A.C., have been appointed C.B. Military Division (additional).

Surg.-Gen. F. H. Treherne, C.M.G., has been appointed K.C.M.G. (additional).

Lt.-Col. S. B. Smith, I.M.S., and Temp. Hon. Lt.-Col. M. H. Gordon, R.A.M.C., have been appointed C.M.G. (additional).

ROLL OF HONOUR.

With great regret we learn that Capt. Charles Alfred Whiting Pope, R.A.M.C., was on board the "Transylvania" when she was torpedoed, and that he is now reported "missing; believed drowned." To Mrs. Pope and her three children we beg to offer our deepest sympathy in their sad loss.

THE AIR RAID ON LONDON.

ON Wednesday, June 13th, as everybody knows, there was an air raid over London, as the result of which there were several hundred civilians wounded. About one hundred and fifty of these were brought to this Hospital.

We had scarcely expected to have so many to cope with as the result of a raid, but facts showed that our organisation was sufficiently elastic to do so, and do so effectually.

As the wounded were brought in they were placed in the various house-surgeons' boxes in the surgery, and there first aid was rendered by a large number of members of the senior and junior staff, together with a few old Bart.'s men, who came to assist, and the students and nurses.

Some of the members of the St. John Ambulance and other associations, who arrived with the patients, also did very good work.

Having rendered first aid, the worst cases were quickly sent into the wards for preparation for operation. And the physicians' beds were filled as impartially as the surgeons' beds with surgical cases. A state of affairs which is surely unique in the annals of the Hospital.

Immediately this first part of the work had been accomplished, all the operation-theatres in the Hospital were requisitioned, and in at least one department emergency-tables were organised. There was, of course, some difficulty in finding enough anæsthetists, but even this was speedily overcome—and in one instance a single anæsthetist managed successfully to attend simultaneously to two operation-tables, which he continued to do throughout the afternoon.

It is to be regretted that several of the unfortunate victims have since died in the Hospital, some of the wounds being of a terribly extensive nature.

During the afternoon the King visited the Hospital and spoke to some of those who were less severely injured. His Majesty's thoughtfulness in thus at once coming to express his personal sympathy was very much appreciated.

On June 25th H.M. the Queen visited the Hospital, and gave to each of the patients who were injured in the raid a present.

MENTAL STATES AND THE WAR: IN PARTICULAR THE PSYCHOLOGICAL EFFECTS OF FEAR.

By MAJOR SIR ROBERT ARMSTRONG-JONES, M.D.,
F.R.C.P., F.R.C.S.,

Lecturer on Mental Diseases, St Bartholomew's Hospital, Consulting
Physician in Mental Diseases to the London and the Aldershot
Military Commands.

THE instincts or the innate tendencies of the mind to act have of recent years received considerable attention. They would probably be grouped under the section cognition or intellect, and some authorities do not distinguish them from the intellect. They are certainly the basis of our social life, and they often afford the truest and the best solution of our emotional and intellectual life, as well as of our bodily actions. It is not easy to examine the instincts or the emotions introspectively, and it is difficult to study them whilst they are being experienced or excited within ourselves; for, in the nature of things, they are fleeting and the bodily perturbations associated with them are therefore recalled only in memory. It needs for their analysis a great effort and much concentration of attention to realise them. The war has given us all a much wider psychic experience and some of the emotions have been brought into greater relief. The war has excited in the neural organ many of the emotions not usually experienced. It is doubtful if those of disgust or anger have ever been more unreservedly expressed than since the blood of martyred hostages, of women outraged and of children mutilated has streamed upon the soil of Belgium and France. In regard to the revolting cruelties of the Huns possibly our vocabulary in regard to horror, disgust, and shame has already been extended to its full descriptive limits. Fear, which has varying degrees of quality and intensity, from dread through terror to fright, has also been deeply experienced. Hope, on the other hand, has been our greatest national asset, and the vital energy imparted by it to the civil population, as also to the military, has been a considerable moral factor in our fight for liberty and existence. The psychology of the war has brought us into contact with life in a manner that no other national upheaval has ever done before, and emotions, instincts, and sentiments have been felt that have never occurred before in our time. The relation of class to class has been tested, the sentiment of patriotism, the love of home and family, feelings of self-sacrifice and pride in our race have been roused and the world of idealism kindled to a degree never before experienced.

Looked upon psychologically, war is the manifestation of a biological law, for it is the embodiment in man of a primordial and deep-rooted instinct, viz. the resistance or opposition to the exercise of an innately organised

instinct to be free: an instinct which is invariably associated with the emotions of anger and of hate. For a long time the instincts have been the debating ground for controversy and the field of comparative psychology has been explored to clear the subject. The Peckhams, J. Loeb, H. S. Jennings and Lloyd Morgan have worked upon the subject, and psychologists and physiologists teach how the instincts and the emotions have a definite physical correlation. W. B. Cannon, C. S. Sherrington, Pawlow and others have investigated the emotions from their physical aspect. It has been pointed out experimentally that during pain, anger, fear, and rage, adrenin or epinephrin is secreted and produced reflexly, and results are obtained which correspond precisely to those found when adrenin is injected experimentally. Sugar is liberated from the liver into the blood for the use of the muscles to restore their irritability when this has disappeared through fatigue; the blood-pressure is raised, because the blood is driven from the abdominal viscera into the lungs and central nervous system; and there is a more rapid coagulation of the blood in anticipation of hæmorrhage during the life and death struggle. These results are not due to the action of adrenin upon the central nervous system, but by its direct effects upon the sympathetic or the autonomic nervous system. This fact that the same visceral results occur after the injection of adrenin as are associated with the strong emotions show that during the experience of these emotions—of which fear is the chief—certain adaptive or purposive reflexes occur which tend to preserve the organism or to safeguard it against harm; or, in other words, during fear, anger, hate or fright there are protective automatic responses physically roused which help the organism in danger or pain. During the strong emotional excitement of pain and danger the movements of the abdominal viscera are inhibited, whilst in the opposite emotion of pleasure and joy they are accelerated, and this observation harmonises with the anatomical fact that there are two series of nerve fibres to the visceral organs,—one which accelerates their movements and the other which inhibits them. Pawlow demonstrated the physical effects of fear and of the pleasurable emotions upon the secretion of the digestive juices, for he found that pleasant æsthetic appeals to taste and smell assist digestion—the sight of appetising food made the mouth water—whilst unpleasant associations, fright, vexations, and anxieties retard the excretion of saliva as well as of the gastric juice, bile, pancreatic, and intestinal juices. The Psalmist knew this when he described the tongue as cleaving to the mouth in emotion, and another presentation to consciousness of the organic sensations was that the bowels yearned. We all know the physical accompaniments of fear, which are shown by the pallor of the skin, the lowering of the surface temperature; the surface perspiration or “cold sweat,” the dilated pupils, the hair standing erect, the rapid heart-beats, the hurried respirations, and the tremblings and twitchings of the facial muscles,

especially those about the lips. These are precisely the symptoms which are seen in some shell-shock cases when they awake out of terrifying dreams at night; and in the record of these cases of shell-shock the blood-pressure, taken soon after the men are seen at the dressing-stations, is found to be raised, whilst there is a lowering of 20 to 40 mm. after a short rest at the base.

Dreams are of frequent occurrence in shell-shock. Driver F. M. T—, who had been at the Front, had at first no fear of shells, but he developed nervousness on the approach of air-craft. He afterwards dreamed that aeroplanes were overhead and were dropping bombs upon him. The nurses stated he woke up in sudden frights, and with his night-clothing saturated, his body trembled, and his pupils were dilated. He was only calmed when reassured that no air-craft was near and he was safe. In this case, as in many others who dream of trench warfare, the bodily commotion appeared to have preceded the emotion of fear, which supports the theory of William James, that the arousal of bodily changes leads to the emotion, the latter being the mental interpretation of the physical changes. Stout and others maintain, on the contrary, that in an emotion the first exciting factor is the mental disturbance and not the physical, that the emotion precedes the bodily commotion. It is, of course, open to anyone to suggest that some noise in the ward during the night initiated the emotion which caused the unpleasant dream and that the dream preceded the bodily commotion. It is interesting that bodily commotion may be of such varying kinds. There is the airman's commotion when in the air, and there is the airman's commotion when on the ground. Both these are well known. We know that as the result of attention, habit, and practice both reflex and instinctive movements, as well as those movements which were originally carried out as the result of an explicit act of attention, tend to become automatic, and this fact is made use of in military as well as in other spheres. We know that repeated drill movements become so familiar that they can be carried out without any thought, and once the first of a series is initiated the rest will follow automatically. Precisely the same with the emotions: it is possible to experience an emotion without a personal knowledge of it, the final behaviour indicates the end attained, and the emotion may be one of the series passed over. The first time the young soldier goes into action he realises danger, but the excitement of action tends to drive the emotion from the mind; the next time, although fear may be present, it is hardly realised or appreciated, and it is only after long continued stress of action that the resistance to the emotion begins to wear down: a man suddenly finds that all his “pals” have gone under and he himself collapses and is exhausted. In many shell-shock cases, however, there is no nerve exhaustion, the symptoms come on quite suddenly; the cases may be aphasic and aphonic, but most of these are

able to walk to the dressing-stations. The experience of Capt. William Brown, of the 4th Army, is most interesting in this respect, for he states "there was very little neurasthenia, *i. e.* of nervous and mental exhaustion about these cases, although there was some diminution of nerve energy, most of the cases were hysterical and neurotic."

As to the nature of fear, it is without doubt a very fundamental emotion, and James says that progress from the brute to man is characterised by nothing more than a decrease in the frequency of occasions for fear. Fear connotes a mental state in which the future appears to dominate the present, whilst the actual present is a revived experience of the past, this experience being a painful one. Fear is described as a vestigial form of our former or ancestral type of "mentation," and it is defined as the anticipation of pain. Fear must follow a preceding pain, and it presupposes its previous experience. It is this revival of a previous pain that constitutes the emotion of fear. It is fear that urges the organism to avoid a previous danger, and therefore fear has a definite biological value. The power to experience fear is necessary to self-preservation, and it is met with in early conscious life, as also in all animals, the most easily frightened member of the herd has the best chance, *ceteris paribus*, of survival. The apprehension of an impending danger which is experienced in some fears is a very generalised feeling, and it has a very definite bodily accompaniment, but, although danger may be a cause of fear, there are many instances of adventurous persons who long to meet danger in order to conquer and to overcome it; very often peril and danger is an inducement and an incentive to action. Graham Wallas said if wars were to cease Alpine clubs would have to be multiplied, for people must have opportunities for actions which have risks attached to them. Fear, when considered psychologically, seems to be a very unitary and unique division of the affective life—too little of it leads to rashness and too much to timidity, and it is not the man who is incapable of fear, as Tallentyne has said, who is the most courageous; for many people are not afraid because they have never experienced fear, and many others are too unimaginative to feel it. To many of our brave soldiers at the front life without danger would be insipid and flat, and there are some of them who have become renowned for daring who were known as children and in youth as timid or shrinking. To the man in perfect health fear would seem to be impossible, but this is not the case, although probably the fear of death is not normally present in health, because then it seems so remote, and the uncertainty of its happening creates no fear. To many persons it is danger and not pain that causes fear, and some who bear pain without flinching will experience marked fear in the presence of danger. There is no doubt that very brave men experience fear. Capt. Scott when he undertook the terrible Antarctic experiences to which he and some of his

party succumbed had experienced fear as well as danger and pain, because from his former Arctic travels he knew the risks and dangers he had to face, yet he dared to make the voyage. When fear is experienced it may come on suddenly or gradually; if gradually, it is the result of many and repeated small subconscious shocks, which, as Crile has shown, bring about exhaustion, and so induce a lowered threshold of nervous stimulation, *i. e.* a minor stimulus elicits a major response, and since a low threshold is lavish of nervous energy, recuperation will be slow, therefore there is support in theory for the practice of treating shell-shock cases with prolonged rest. Even after recuperation is believed to have been completed, a fresh exposure to the same causes will soon induce relapses. P—, after four months' treatment for shell-shock, was sent again to the Front. He arrived September 29th, but on October 2nd was returned home once more stolid, aphonic, and aphasic. When fear is induced suddenly, as was demonstrated by Crile and his collaborators, the strong psychic stimulus still leaves traces upon the cortical cells, the conductivity of the nervous arc is lowered, so that a state of increased sensibility is left; any loud noise or sudden sound will cause a general bodily perturbation. About a dozen convalescent shell-shock cases were sent from No. 3 General Hospital to the Surrey Theatre, a part of the melodrama was the explosion of a mimic shell on the stage; six of the soldiers had to be carried home to the hospital, whilst another became aphonic and aphasic. The suddenness with which fear acts is only equalled by the suddenness with which "shell-shock" results disappear. A young officer who had been decorated with the Military Cross informed me that on one occasion when in charge of a gun and all his men were hit a sudden feeling overcame him which he could not describe but which he hoped he should not again go through. His whole body seemed to feel as if something had been taken out of him, then his legs began to tremble, and his body to quiver, but he realised the situation and faced it. A young Australian out on parole, who had been speechless and voiceless for months, was suddenly struck on the shoulder from behind by his brother, whom he had not seen for years, and from that moment he spoke. It is certain that fear has more power to effect dissociative dissolutions than any other emotion, and such a fear may, by suggestion, be conveyed with extreme rapidity to other men, as is seen in panic. The Silvertown explosion in one hospital caused a large number of shell-shock cases to exhibit all the symptoms of fear and terror, even to falling into fits of muscular contraction resembling epilepsy, and clonic spasms of this panic fear spread among them. To show the suggestibility of fear, a young soldier, suffering from shell-shock, who was out on parole saw a horse and van in the street; the horse went down when suddenly he himself went down "as flat as a flounder," and had to be helped home. It is often the case that sudden and unexpected or

loud noises aggravate those suffering from shell-shock, and it is interesting in this connection that Homer associated fear with sounds, for he stated, "terror and consternation at that sound, the mind of Priam felt; erect his hair bristled his limbs, and with amaze he stood motionless." The reason for this association is probably connected with the fact that the sense of hearing is the most highly evolutionised, and therefore the least stable of the senses and is thus the most easily disturbed. Also, it may be due in part to the fact that the auditory nerve is closely related to the vestibular nerve, which is again connected with the static sense and with the control of movement. The vestibular nerves, though giving rise to no sensations, are nevertheless closely connected at their roots with the roots of the motor-oculi nerves as well as with other motor centres in the medulla and cerebellum. The auditory nerves are thus correlated and continuously associated with movements, yet there is no knowledge in consciousness that there is a connection between the eyes, the bodily movements, and hearing. In many, if not in most, shell-shock cases there is a marked disturbance of muscular control and co-ordination. The movements which are initiated voluntarily by ideas and which control standing, walking, or moving, *e.g.* the hands and arms, often cannot be carried out, because there is a state of conflict between these and the muscles which subserve the emotions (noted in tremors, agitations, and paresis). Incontinence has been noticed in a few cases, and this is due to the functional inhibition of cerebro-spinal influence as the result of fear and the unrestricted action of the sympathetic. Although we can boast that our warriors are among the best troops in the world, there are instances within the knowledge of those who have the care of shell-shock cases, where the men who were in close proximity to high explosive shells that had burst, have wandered away confusedly and aimlessly, and in whom memory and the power of speech have both disappeared, sometimes for weeks and months, but under the influence of suggestion these have been regained and the men have been able to recall the whole of the forgotten incidents. I have notes of cases upon whom Capt. Wm. Brown, R.A.M.C., has effected a complete return of lost memory through suggestion practised early after the onset of shock. In fact, at a recent discussion upon the subject at the Medical Society of London, Capt. Wm. Brown himself stated that 66 per cent. of these men return to duty without going to the casualty clearing-station, and that he has never failed to effect a return of speech. He goes further than this and states it to be his belief that no soldier who has lost his speech ought ever to be sent to England, that all these cases are curable at once or quite soon by ab-reaction and re-association, which, as an expert psychologist, he is able to carry out successfully in every case that has come under his care. The element of fear enters into every functional nervous case and it is present normally in all actions directed

by desire, the conflict between the wish to succeed in carrying out the desire and the risk of failure is a mental state into which some element of fear always enters.

Fear was formerly considered by the Legislature to be the essential deterrent factor in the application of punishment for crime, and only since the wiser policy of improving the environment for the criminal rather than regard him as selecting vice automatically and punishing him for it repeatedly, has the treatment of the criminal had a reforming influence. In most schools, also, fear has been abandoned as a deterrent for unruly boys, for it was found that it lowered intellectual efficiency. It is said that if the theologians were deprived of the use of fear as a moral agent and a deterrent from evil doing, they would lose much of their influence for good, but Miss Mackenzie has said that the fear of exchanging this world for the unknown would lose much of its delightful sense of adventure if we knew whence we came or whither we were going. I believe it is a fear of the *unknown*—an indefinite, sub-conscious sensation—that is at the bottom of most, if not of all, shell-shock cases.

(To be continued.)

RAHERE LODGE.



THE Installation Meeting of the Rahere Lodge, No. 2546, was held in the Great Hall of St. Bartholomew's Hospital, on Tuesday, June 19th, 1917.

In the absence on foreign service of the Worshipful Master, W.Bro. W. J. Gow, Ivan de Burgh Daly was initiated, and W.Bro. C. H. Perram was installed by the I.P.M., W.Bro. Anderson. The charges were delivered by W.Bro. Ernest Clarke and W.Bro. Laming Evans. The following officers were appointed:

W.Bro. C. H. PERRAM, P.Pr.S.G.D., Beds. L.R.	W.M.
W.Bro. W. J. GOW, L.R.	I.P.M.
W.Bro. A. HEPBURN, L.R.	S.W.
W.Bro. J. SWINFORD EDWARDS	J.W.
Bro. The Rev. H. S. CLOSE	Chaplain.
W.Bro. ERNEST CLARKE, P.M., P.G.D.	Treasurer.
W.Bro. E. LAMING EVANS, P.M., L.R.	Secretary.
W.Bro. T. G. A. BURNS, P.M., P.G.D.	D.C.
Bro. E. BREWERTON	S.D.
Bro. A. S. WOODWARK	J.D.
W.Bro. M. L. TRECHMANN, P.M., L.R.	1st Asst. D.C.
W.Bro. H. MORLEY FLETCHER, P.M., S.G.D.	2nd Asst. D.C.
W.Bro. P. S. ABRAHAM, P.M., P.G.D.	Almoner.
Bro. NORMAN F. SMITH, Asst. G. O. Oxfordshire	Organist.
Bro. The Rev. R. B. DAND	Asst. Chaplain.
Bro. A. L. MORETON	Asst. Secretary.
Bro. GIRLING BALL	I.G.
W.Bro. E. P. FURBER, P.Pr.G.J.W., Surrey	Sen. Steward.
Bro. J. H. GRIFFITHS	Steward.
Bro. G. H. WHITAKER, L.R.	Steward.
Bro. J. CUNNING	Steward.
Bro. F. A. ROSE	Steward.
W.Bro. FRANCIS W. CLARK, P.G.D.	Steward.
W.Bro. A. H. COUGHTREY	Tyler.
Bro. E. W. HALLETT	Asst. Tyler.

W. Bro. D'Arcy Power was appointed to act as I.P.M. during the absence of W. Bro. Gow.

Fifty-two members and guests were present. W. Bro. Perram, in proposing the health of the Grand Officers, gave an historical summary of Grand Lodge during the last 200 years. Lieut.-General Sir Francis Lloyd, K.C.B., responded.

CORRESPONDENCE.

WAR EMERGENCY FUND OF THE ROYAL MEDICAL BENEVOLENT FUND.

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

SIR.—The time has come to make a further appeal for the War Emergency Fund.

This Fund was instituted last year to afford assistance to members of our profession who, in consequence of having joined the Army Medical Service, find themselves in temporary difficulties.

Many medical men, when called up, had to leave on very short notice, without time to make adequate provision for the continuance and maintenance of their practices during their absence. As a result they have had to face a severe fall in income even when supplemented by Army pay; while many expenses, such as rent, insurance, taxes, family maintenance, and education, could not be reduced. Although in a year or two after their return it may be hoped those affected will recover their position, still in the interval help is, and will be, necessary, and it is to meet these needs that the War Emergency Fund was established.

To be effective the grants must be made on a liberal scale, and the fund from which they are to be drawn must be a large one. The sum obtained last year was about £4000. This is quite inadequate, as at least £25,000 will be required, if even a small proportion of those requiring assistance is to be helped. From the wealthier members of the medical profession, it is hoped, substantial sums will be received, but every one should feel it a duty which he owes to his less prosperous colleagues to give the most liberal donation he can afford.

At the same time the appeal is not, and ought not to be, restricted to the medical profession. The public, too, may be rightly called upon to bear its share, and to show, by liberal contributions, its appreciation of the special services so freely rendered by the medical profession to the country.

The War Emergency Fund is a special department of the Royal Medical Benevolent Fund. It is kept separate and distinct from the ordinary operations of the general fund, and is under the management of a committee specially appointed for the purpose.

Communications should be addressed to the Honorary Secretary, War Emergency Fund, 11, Chandos Street,

Cavendish Square, W. 1, to whom cheques should be made payable.

We are, etc.,

SAMUEL WEST

(President).

CHARTERS J. SYMONDS, Colonel A.M.S.

(Honorary Treasurer).

G. NEWTON PITT, Major R.A.M.C. (T.)

(Honorary Secretary).

London, W. 1,
June 8th.

Cases of Special Distress caused by the War which the Committee have helped.

A lieutenant in the R.A.M.C., who had only been in practice a few years, volunteered for service, and was killed in action a few days later. He left a widow, with two children, $\text{æ}t.$ $3\frac{1}{2}$ and 1, without means except the War Office pension. The Fund voted £25 for her immediate necessities, and the Officers' Families Fund gave further help.

A captain in the Territorials was called out, and had to leave his practice in the hands of a *locum*, who proved a failure. There were seven children, $\text{æ}t.$ 2 to 14. Financial difficulties arose, and payment of the school fees became impossible. Between the Fund and Guild, and the Officers' Families Fund, the necessary fees were raised, and sorely-needed clothing provided.

A captain in the Territorials, who was called out when the army mobilised, and had to leave his practice worth £800 at a day's notice, could not pay the fees for his son's education, who was in his last year at school. The Fund, the Guild, and the Professional Classes War Relief Council together raised the necessary money.

A captain in the Territorials was killed in action, and left a widow, and two children, $\text{æ}t.$ 3 and $4\frac{1}{2}$. The Fund investigated the case, and referred it to the Officers' Families Fund, who gave her a grant to meet her immediate necessities. The Fund also obtained work for the widow, a trained nurse, who was thus enabled to earn her own living.

A major, R.A.M.C., Territorial, was called out at the beginning of the war and was abroad for over two years. He was invalided to England and put on home service. His practice was completely lost by his absence. There are three children—one in the Navy, one in the Army, and one at school. He had to give up his house, as he was in difficulties with rent, taxes, and education. The Fund gave £50, and further help was obtained from other sources.

A captain in the R.A.M.C. (T.), with a wife and six children, found the income derived from his practice, left in charge of a *locum*, and the balance of his army pay insufficient to meet his expenses. He obtained assistance from the Civil Liabilities Committee and the Officers' Families Fund, and a grant was made from the War Emergency Fund towards the education of the children.

A practitioner, earning £700 to £800, volunteered for service, leaving his practice in the hands of a neighbour, who was not a success. There were two children, $\text{æ}t.$ 7 and 10, and another baby was born shortly after the husband left. The wife contracted pneumonia and nearly died. A resident patient had to leave the house. Rent and other expenses led to a debt of about £80. This the doctor could not meet, and he hurried back from the trenches to save his home from being sold up. The Fund voted £25, the Guild gave £15, the Officers' Families Fund £25, and the Professional Classes War Relief Council offered further help, with the result that he returned to the Front with his immediate anxieties relieved.

SIR,—We beg to support the urgent letter of appeal to this Fund which appeared in the last week's medical journals.

This Fund was instituted by the Royal Medical Benevolent Fund last year to afford assistance to members of the profession who, in consequence of having joined the Army Medical Service, find themselves in temporary difficulties.

We very strongly commend the claims of this Fund to the generous support of both the profession and the public.

We are, etc.,

- FREDERICK TAYLOR
(President, Royal College of Physicians).
W. WATSON CHEYNE
(President, Royal College of Surgeons).
W. H. NORMAN, Surgeon-General, R.N.
(Director-General of the Medical Department of the Navy).
ALFRED H. KEOGH
(Director-General, Army Medical Service).
WILLIAM OSLER
(Regius Professor of Medicine, University of Oxford).
T. CLIFFORD ALLBUTT
(Regius Professor of Physic, University of Cambridge).
JOHN TWEEDY
(Past-President, Royal Medical Benevolent Fund).

11, Chandos Street,
Cavendish Square, W. 1,
June 16th.

REVIEW.

BAILLIÈRE'S POPULAR ATLAS OF THE ANATOMY AND PHYSIOLOGY OF THE FEMALE HUMAN BODY. Descriptive text by H. E. J. BISS. Plates by G. H. DUPUY. (Baillière, Tindal & Cox.) Third edition. Price 4s. net.

A really good and useful piece of work, and, what is rare in this type of thing, it is of British workmanship and origin throughout. The descriptive text conveys clearly and concisely more information than we should have thought possible in so small a space. There is no doubt that for students of massage, nurses, and others who require some fairly accurate general knowledge of the subject, this Atlas should be of great service.

APPOINTMENT.

JAMESON, R. W., M.D.Brux., D.P.H.(Cantab.), appointed Temporary M.O.H., Chesterfield.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

H. W. GARDNER, of Shrewsbury, has been elected a Fellow.

CHANGES OF ADDRESS.

JAMESON, R. W., 26, Gladstone Road, Chesterfield.
MARSHALL, J. C., Capt., R.A.M.C., 2/2 North Midland Field Ambulance, B.E.F.
MOUATT-BIGGS, C. E. F., Capt., R.A.M.C., 29th Casualty Clearing Station.
PINKER, H. G., 16, The Crescent, Plymouth.

BIRTHS.

CANTI.—On June 12th at The Gables, Wedderburn Road, Hampstead, the wife of R. G. Canti, of a son.
HILL.—On June 7th, at a nursing home, the wife of J. Percival Hill, M.A., M.D., of Stowmarket, Suffolk, of a daughter.

HILL.—On June 18th, at Armaside, Purley, the wife of Lieut. R. Gordon Hill, R.A.M.C., attached to Welsh Guards, of a daughter (Elizabeth Gordon).

TREWBY.—On June 29th, at 4, Duchess Street, Portland Place, W., to Mr. and Mrs. J. F. Trewby—a daughter.

WHITEHEAD.—On June 10th, at Rougemont, Salisbury, to Winifred (née Dunphy), wife of Capt. Brian Whitehead, R.A.M.C.—a daughter.

MARRIAGES.

CAREY EVANS—LLOYD GEORGE.—On June 19th, at the Welsh Baptist Church, Castle Street, Oxford Street, W., by the Rev. James Nicholas, Minister of the Church, assisted by the Rev. Owen Davies, D.D., of Carnarvon, and the Rev. John Clifford, D.D., Thomas John Carey Evans, M.C., Capt. I.M.S., son of Dr. R. D. Evans, of Bryn Meddyg, Blaenau Festiniog, N. Wales, to Olwen Elizabeth Lloyd George, elder daughter of the Prime Minister and Mrs. Lloyd George.

FULLER—O'DONNELL.—On June 4th, at the Oratory of the Sacred Heart, Bournemouth, Capt. R. Annesley Fuller, M.C., R.A.M.C., only son of the late Joseph Fuller, Esq., F.R.C.S., of Long Ashton, Somerset, to Madeleine Mary, younger daughter of the late W. M. O'Donnell, F.R.C.S., of Glenreigh, Tipperary.

KEMP—DAVEY.—On June 6th, at Hampstead Parish Church, by the Rev. R. Gibbons Binnall, Rector of Manton, Lincs, assisted by the Rt. Rev. Bishop Goldsmith, V.D., Charles Gordon Kemp, M.C., M.D., Temp. Capt., R.A.M.C., youngest son of Dr. and Mrs. W. G. Kemp, St. Helens, Hastings, to Kathleen Emily Davey, niece of Col. J. and Mrs. Stollery, Hove.

DEATHS.

BERNARD.—On May 4th, died of wounds as prisoner of war, Capt. Arthur B. Bernard, King's Royal Rifles, elder son of Mr. and Mrs. B. Bernard, 178, Clive Road, Surrey, aged 20.

BURGESS.—On April 9th, Edward John Burgess, of 111, High Street, Brentwood.

BURN.—On June 7th, at Beechwood, Upper Tooting, S.W., William Barnett Burn, M.D.(Lond.), B.Sc.(Lond.), M.R.C.S., L.S.A., F.R.M.S., aged 73.

COTTON.—On June 28th, at his residence, Highland House, Camden Road, N., Thomas Cotton, M.D.(St. And.), M.R.C.S., L.R.C.P., aged 80.

CUTTING.—On April 2nd, at West View, Stalham, Norfolk, Ernest Buxton Cutting, M.R.C.S., L.R.C.P.(Lond.), aged 49.

THORNE.—On June 11th, after a short illness, William Bezly Thorne, M.D., of 16, Harley Street, W. 1.

UPTON.—On April 10th, at 78, Tisbury Road, Hove, Alfred Upton, M.R.C.S., L.R.C.P.

WINKFIELD.—On June 3rd, at 26, Beaumont Street, Oxford, Alfred Winkfield, M.A., F.R.C.S., aged 79.

NOTICE.

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

The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER, W. E. SARGANT, M.R.C.S., at the Hospital.

All communications, financial, or otherwise, relative to Advertisements ONLY, should be addressed to ADVERTISEMENT MANAGER, the Journal Office, St. Bartholomew's Hospital, E.C. Telephone: City 510.

A Cover for binding (black cloth boards with lettering and King Henry VIII Gateway in gilt) can be obtained (price 1s. post free) from MESSRS. ADLARD & SON & WEST NEWMAN, LTD., Bartholomew Close. MESSRS. ADLARD & SON and WEST NEWMAN have arranged to do the binding, with cut and sprinkled edges, at a cost of 1s. 9d. or carriage paid 2s.—cover included.

St. Bartholomew's Hospital



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

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AUGUST 1ST, 1917

[PRICE SIXPENCE.]

CALENDAR.

Fri., Aug. 3.—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
Tues., „ 7.—Dr. Drysdale and Mr. Bailey on duty.
Fri., „ 10.—Dr. Calvert and Mr. Waring on duty.
Tues., „ 14.—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
Fri., „ 17.—Dr. Drysdale and Mr. Bailey on duty.
Tues., „ 21.—St. Bartholomew.
„ „ 21.—Dr. Calvert and Mr. Waring on duty.
Fri., „ 24.—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
Tues., „ 28.—Dr. Drysdale and Mr. Bailey on duty.
Fri., „ 31.—Dr. Calvert and Mr. Waring on duty.
Tues., Sept. 4.—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
Fri., „ 7.—Dr. Drysdale and Mr. Bailey on duty.

EDITORIAL NOTES.

E notice with much pleasure that three more Barts.'s men have attained the Military Cross:

Temp. Capt. J. D. Batt, R.A.M.C. "For conspicuous gallantry and devotion to duty in digging out a number of men who had been buried by a shell. Whilst doing so another shell killed or wounded all who were there, and he was partially buried himself. He continued his work of rescuing other men and dressing their wounds regardless of all danger."

Temp. Capt. R. Hodson, R.A.M.C. "When in charge of the bearers he ensured the rapid clearance of wounded by closely following the advance of shell fire. Throughout he set a fine example of coolness and courage."

Temp. Capt. A. C. Sturdy, R.A.M.C. "He attended wounded for many hours under fire. He showed a complete disregard for danger in organising search parties, and recovered wounded who had been left for several days."

* * *

We congratulate Dr. Edward Coker Adams, whom His Majesty the King has appointed a member of the Executive Council and an official member of the Legislative Council of the Colony of the Gambia.

* * *

Our heartiest congratulations are extended to Temp. Major E. Hey Groves, R.A.M.C., who has obtained the Jacksonian Prize of the Royal College of Surgeons, the subject of his essay being "Method and Results of Transplantation of Bone in the Repair of Defects, caused by Injury or Disease."

* * *

We warmly congratulate B. Whitchurch Howell, F.R.C.S., who has been awarded the Order of St. Sava of Serbia in addition to the Serbian Red Cross decoration.

* * *

Sir George Newman, Chief Medical Officer of the Board of Education, has joined the Committee appointed by the President of the Board of Agriculture to investigate the production and distribution of milk.

* * *

At an ordinary meeting of the Council of the Royal College of Surgeons of England, held on July 26th, Mr. Waring was elected a member of the General Section of the Board of Examiners in Dental Surgery.

* * *

Sir Robert Armstrong-Jones, M.D., has been placed by the Lord Chancellor on the Commission of the Peace for the County of London, upon the recommendation of the Lord Lieutenant.

* * *

On the afternoon of July 10th, Her Majesty Queen Alexandra, accompanied by Her Royal Highness Princess Victoria, visited the victims of the recent air raids. The visit extended over nearly two hours and Her Majesty's gracious and sympathetic interest in the sufferers was keenly appreciated by them all. Several pleasing photo-

graphs were taken whilst Her Majesty was crossing the Quadrangle, and will be treasured as memorials of a most interesting occasion.

* * *

The following gentlemen have been nominated as Resident Medical Officers, commencing August 1st, 1917 :

House Physicians and Assistant House Physicians—

Dr. Calvert.	R. French.
	P. Selwyn Clarke.
Dr. Fletcher.	L. K. Ledger.
	W. U. D. Longford.
Dr. Drysdale.	E. H. Glenny.
	J. A. van Heerden.

House Surgeons and Assistant House Surgeons—

Mr. Waring.	H. C. C. Joyce.
	A. J. Copeland.
Mr. Eccles.	P. A. Smuts.
	C. M. Titterton.
Mr. Bailey.	E. A. Crook.
	S. W. Page.

Intern Midwifery Assistant G. H. Cooke.

Extern Midwifery Assistant H. Beckton.

House Surgeon to Throat, Nose, and Ear Department J. E. A. Boucaud.

House Surgeon to Venereal Dept. H. R. Buttery.

* * *

ROLL OF HONOUR.

With great regret we learn of the deaths of the following Old Bart.'s men on active service :

Lt. J. G. Bradley-Smith, R.A.M.C., who was previously reported "missing; believed drowned," is now officially reported drowned. He was on the "Arcadian," which was torpedoed on April 15th.

Capt. A. B. Bernard, K.R.R., died from wounds on May 4th, which he received in action, near Croisilles, eleven days previously.

2nd Lt. C. A. Brown, King's Own Yorkshire Light Infantry, has been killed in action, in France.

Major Adrian Drewe, R.G.A., was killed in action on July 12th. He was educated at Eton, Trinity College, Cambridge, and St. Bartholomew's Hospital. He was in the winning boat of the University Trial Eights in 1911, and in 1913 he won the University Trial Pairs.

Lt. F. Whincup, R.A.M.C., was accidentally drowned in France on July 2nd.

2nd Lt. P. Lindsey, Oxford and Bucks Light Infantry, has been killed in action in France.

Our deepest sympathy is extended to the relatives and friends of these past fellow Bart.'s men who have died in their country's service.

NOTES OF A CASE OF OLD ECTOPIC GESTATION :

GIVING RISE TO SYMPTOMS IN THE COURSE OF AN OTHERWISE NORMAL PREGNANCY.

By C. MAITLAND TITTERTON, B.Sc., M.R.C.S., L.R.C.P.,
Lieut., R.A.M.C.



S—, æt. 39, married, was admitted to Lawrence Ward of this Hospital, on July 25th, 1917, complaining of abdominal pain and vomiting.

History of the present condition.—Patient is seven months pregnant. For about three weeks she has been troubled by slight pain felt upon the right side of the abdomen. Three days ago the pain became worse, and she began to vomit; these intensified symptoms have continued since. The bowels last acted two days ago. No abnormal pelvic symptoms can be elicited.

Past history.—Patient has not suffered from such an attack before. She has had one child, born fifteen years ago; since when, she states, her periods have been perfectly regular, and the monthly loss has shown no variation, until she ceased to menstruate at the beginning of the present pregnancy. With the exception of "slight rheumatic fever," about one year ago, she remembers no other serious illness.

Condition on admission.—Fairly well nourished. The uterus corresponds to a seven months' pregnancy. There is very acute tenderness in the right iliac fossa, situated exactly over McBurney's point with definite resistance on palpation, but no swelling can be detected, and no abnormal dullness. Both flanks are resonant.

Urine: Normal. No albumin, sugar, blood, pus, or bacteria. Temperature, 99° F.; pulse rate, 84.

Per vaginam: The signs correspond to those of normal pregnancy at the seventh month. No swelling or undue tenderness in Douglas's pouch or lateral vaginal fornices.

Per rectum: Nothing abnormal discovered.

Leucocyte count, 14,000.

The provisional diagnosis was that of acute appendicitis, complicating pregnancy, and immediate operation was advised.

An emergency operation was performed by Mr. Moreton. Through a right rectus sheath incision, as for appendicectomy, a blackish body presented, which was thought at first to be a gangrenous appendix. This body was found to be adjacent to the cæcum, and free in the peritoneal cavity, being only loosely adhered to the ileo-cæcal junction by flakes of lymph. It was removed with the finger—no vessels being ligated as there was no pedicle. The neighbouring visceral peritoneum was congested and had some flakes of lymph upon it. After careful cleansing of the neighbouring peritoneum, the appendix and right ovary and

tube were examined and found to be normal. The abdomen was then closed without drainage. The size of the uterus and the position of the parietal incision prevented any examination of the left uterine appendages.

The patient made a good recovery, only rendered slow by slight superficial suppuration induced by tension upon the skin of the physiologically enlarging abdomen.

The abdominal symptoms did not recur, and she was discharged on August 13th, with a healed wound. She was advised to wear an abdominal belt until the pregnancy terminated.

The body removed consisted of a flattened wedge-shaped mass, 2 in. across and 1 in. deep at its thickest part, of tough consolidated tissues. It presented superficially a mosaic of brown and yellowish areas, separated by shallow sulci, forming a resemblance to "hardbake." On section the mass was firm and carneous, and of a brown colour. Attached to it at one point was a thin-walled pyriform cyst, about 2 in. in length, filled with two teaspoonfuls of clear fluid. Upon opening this cyst (after careful hardening of the specimen) no trace of an embryo could be found.

Microscopically.—The solid part of the specimen consisted, for the most part, of well-formed connective tissue, plentifully supplied with blood-vessels. At one point some papilla-like processes were seen, but they had no epithelial covering.

Careful search through several sections taken from different parts of the specimen showed in several places groups of cells having considerable resemblance to "Langhan's cells."

Dr. Williamson was kind enough to see the case, and also to examine the specimens. He was of the opinion that the body was undoubtedly the conceptional products of an old ectopic gestation.

The interest of the case lies in the following points:

(1) An ectopic gestation of which no symptoms could be obtained.

(2) Its extrusion into the abdominal cavity, probably as a "Tubal abortion" through the fimbriated end of the Fallopian tube, where it remained for an unknown and probably prolonged period of time, until it gave rise to symptoms towards the end of a subsequent normal pregnancy.

The specimen is being prepared with a view to preservation in the Museum.

I am indebted to Mr. Moreton for permission to publish details of this case.

AN OLD "BILL OF MORTALITY."



WE have received from one of our readers the following "Bill of Mortality," date unknown, but probably sixteen hundred and something. The marginal notes are his own, and we should be glad if any other readers could elucidate some of the curious diseases enumerated.

		NOTES.
Plague	68,596	
Rising of the lights	397	? <i>What. Wind?</i>
Surfeit	1251	<i>Over eating?</i>
Tisick and consumption	4808	
Chrisomes and infants	1258	" <i>Chrisoms</i> " are unbaptised children.
Mould fallen	—	<i>I did not copy number. What on earth is this? Sounds nasty!!</i>
Purples	14	<i>Apoplexy?</i>
Head mould shot	—	? <i>What. Number, I did not copy.</i>
Flox	—	<i>Ditto.</i>
Sciatica	1	
Lethargy	14	<i>Lots of Hereford people should die of this!!</i>
Frighted	23	
Blasted	5	<i>If all who are this died the number would be larger!! ? Struck by lightning.</i>
Calenture	3	
Leprosie	2	
Teeth and wormes	2614	
Ague and feaver	5257	
Convulsion and mother	2056	<i>What is "mother" ? Over laying?</i>
Total	97,306	
Males	48,569	
Females	48,737	
	97,306	

I have somewhere another "bill" wherein is a heading "Burst"!! How awful for those in the neighbourhood!! Many look as if they would!!

Note the great infantile mortality, also the ague.

MENTAL STATES AND THE WAR: IN PARTICULAR THE PSYCHOLOGICAL EFFECTS OF FEAR.

By MAJOR SIR ROBERT ARMSTRONG-JONES, M.D.,
F.R.C.P., F.R.C.S.,

Lecturer on Mental Diseases, St Bartholomew's Hospital, Consulting
Physician in Mental Diseases to the London and the Aldershot
Military Commands.

(Concluded from page 98.)



ONE of the most painful forms of fear is the *Pavor Nocturnus*, or the night-terrors so often experienced by children between 3 and 8 years of age. Among soldiers suffering from shell-shock, it is not at all unknown in the early stages, when sleep is disturbed by horrible dreams of the parapet and "going over the wall," of Hun atrocities and high explosives. So marked was this in the case of one

man that he feared going to sleep—a condition described as hypno-phobia. The "phylogeny" of sleep appears to suggest that early man may have originally started as a semi-nocturnal animal, and that dreams and *pavor nocturnes* were protective states which prevented the long, sound sleep that must have been a danger to primitive man, as he might at any moment have needed some sudden extrinsic call in order to save his life by acting immediately and at once with promptness and energy.

Fear has many bodily pictures of its presence: there is flight, clinging, cringing, supplicating, extension of hands, sudden starts, convulsions, paralysis, shrieks, and cries; and fears, therefore, vary according to their somatic expression. Some authorities say there are at least 140 different kinds of fears, but the inherited phobias and fears such as those of snakes, spiders, and cats, do not come within the category under discussion. Fears have generally been regarded as signs of cowardice and as indicating a lack of moral fibre; but fear is a protective emotion and of biological utility, and every stimulus, physical or mental, awakens, or tends to awaken, some response along ancestral tracks in the nervous centres; every stimulus also acts through various associations that are peculiar to the individual. In every emotion there are nervous currents discharging impulses to the various muscles, to the viscera and to the vital organs, and it is upon the nature of these reactions that we are able to observe or classify the emotions, and, although it would be true to state that it is not the emotions we observe but the bodily accompaniments which are instincts, still the emotions may be regarded as having their associated bodily states. If the emotions act for a long time continuously or for short periods intensely; they are able to bring about a marked state of mental and nervous exhaustion such as are met with in many shell-shock cases. If the emotions are accompanied by definite somatic changes which call certain powers of the body into action, and if these favour survival, then the emotions are supplementary reflexes, and they help the individual to live, and have a protective and purposive end. If this be so, why is the emotion of fear sometimes physiologically depressing? Why should there occasionally be collapse or paralysis accompanying fear—a condition incompatible with activity, with combat or with flight and escape. The answer is, that the deeper and the stronger emotions do not stimulate because when an emotion is intense it ceases to stimulate. It is of no biological utility to an organism when it has been severely damaged to show combat or to flee, for activity would not be to its interest; any effort at flight or any activity would aggravate the damage received, and concealment, or collapse, would be its only chance of survival. As we have already pointed out, when mental and physical stress were induced artificially by terrifying caged cats with barking dogs—the effect of any continuous mental stress or physical strain is to destroy the cortical neurons, to alter muscle structure, and to break up glandular tissue.

This happens in shock, and a similar state is induced by the continuous stress of the trenches, where sleep and restoration are impossible. There should, therefore, be no reflection upon personal devotion and valour in cases of shell-shock which is mainly a state of sheer exhaustion. There is, however, another kind of fear which comes on suddenly and in neuropathic or hysterical men. As an example of the former may be quoted the case of a brave officer who was in and out of first line trenches for many months. He seemed to lead a "charmed life" until at last he also was wounded. In hospital he presented symptoms of marked nervous exhaustion, and although his valour and courage were never called in question, he cried whenever spoken to. As an example of the latter was the case of a young officer who was only ten days in France when he complained of inability to mount ladders, stand on a wall, or cross a trench. In most cases of shell-shock there is a record of excessive fatigue, of intense anxiety bordering on fear, irregularity on occasions—inevitable under the circumstances—of obtaining proper food, and, lastly, of loss of sleep. In some there was a lowering of the defences of the body through the infection of malaria and fever (venereal disease among them), and there is in many a record of sudden fright from the effects of high explosive shells; the 5.2, 9, and 12 in. artillery as they themselves describe it. All these are conditions antecedent to physical exhaustion. Add to this the fact that 33 per cent. of them came from neurotic families and you have the summary of the ætiology of so-called shell-shock, most of whom had no wounds, but many of them were "buried." Not only from among our own men, but Australia, Canada, South Africa, and New Zealand have all contributed to shell-shock. France, Egypt, Gallipoli as well as the high seas, have all presented cases, or they have all suffered analogous symptoms. It is a fact without doubt that most if not all showed symptoms of diminished nervous energy, and Crile has demonstrated this diminished store of nerve potential in nerve shock, which presents definite changes in the nervous system as well as in the thyroid gland, the liver, the muscles, and the suprarenals. The neurons show hyperchromatism followed by disintegration of the cytoplasm, a rupture of the cell membrane, a dislocation and, subsequently, a disappearance of the nucleus itself. In some cases there has been a definite enlargement of the thyroid and both Dr. Vernon Cargill and Major Newton Pitt have described such changes within their own experience. In a case quoted by Capt. William Brown, R.A.M.C., one man with shell-shock rapidly developed Addison's disease with typical bronzing.

As to the physical factors of causation in cases of shell-shock, various theories have been advanced to account for the symptoms, and the knowledge that the sudden pressure of 7000 kilos. to the square centimetre from the bursting of high explosives would suggest a mechanical percussion-shock to the central nervous system, through the medium

of the cerebro-spinal fluid, upon which the nervous system rests or in which it is suspended. The sudden fright caused by the noise and the continued stress of bursting shells have also been mentioned as the cause of emotional shock. Another view advanced is that carbon monoxide gas, or carbonyl (phosgene), causes a disintegration of the red blood-corpuscles with consequent blocking of capillaries and hæmorrhage. Still another cause that has been suggested, viz., hypothyroidism, and by some hyperthyroidism, as well as adrenalism. In regard to the percussion theory there is no doubt that the air pressure in the neighbourhood of bursting shells is intense, sudden, and enormous, and the delicate neurons must suffer, especially those in the anterior horns, which would be less protected although situated within the spinal cord than are those of the posterior spinal root ganglia, which are covered with a sheath of dura mater in the intervertebral spaces. Mr. Ernest Clarke has shown that the sudden pressure from high explosives is sometimes positive and sometimes negative, and he has seen eyes actually torn out of their sockets by the negative pressure. At the explosion near St. Bartholomew's Hospital some of the windows were blown in whilst others were drawn out by negative pressure. It is also a fact of experience that in many shell-shock cases, motor lesions and abnormalities are more frequently met with than sensory; which appears to support the view that in percussion-shock or molecular injury to the central nervous system, that part of the spinal cord which is least protected suffers the greatest injury and sustains the greatest harm: the delicate neurons of the motor section, with their fine anastomosing network of arborisations all around them, being more exposed to percussion-shock or concussion than the fibrils which carry afferent impulses within the posterior columns. From whatever cause, whether concussion or gas, the term shell-shock should be limited to physical lesions. It has been suggested by some that the sympathetic disturbances so frequently seen in these cases: dilated pupils, pre-cordial anxiety, visceral perturbations, irregular and profuse perspirations and tremors may be the effect of the same material shock to the tractus-intermedio-lateralis of the cord, the part through which cerebro-spinal impulses exercise their regulative functions over the lower mechanism of the autonomic system. The effect of loud explosions at the Front upon the nervous system of those in close proximity to them is unimaginable to us at home. We ourselves are sometimes terrified by the "back-firing" of a motor car; or by the "pop" of a burst tyre and we recoil petulantly. If a maid whistles for a taxi—we write to *The Times* because the strain and stress upon our nerves "has become unendurable." We can only very feebly imagine what the strain and shock of gun-fire at the Front can be. As to the unreasonable and infectious fear which seizes upon one or more persons in a crowd and spreads as panic fear, it occurs often without a visible cause and has been

known from the earliest times. It occurs also in animals, and is believed to be of a protective nature; one animal in the gregarious herd scents or sees danger, possibly one bird only in a flock of grouse sees anything strange, the warning cry is heard by the group, which flees; not one of the others seeing, smelling, or hearing danger. In some instances experience has shown the futility of always fleeing at the sight of something strange, and animals will often approach danger through curiosity or wonder, an emotion in human beings which is the basis of scientific research, of investigation and progress. It is frequently noticed in sheep, horses, and cattle; and if the Gadarene swine had not been seized with panic fear they would probably have been preserved to their owner.

It is not generally appreciated that the term panic is derived from the god Pan, whose face it was dangerous to behold, and whose voice struck terror even to armies on the march. When the Persians were about to pillage the sacred city of Delphi they heard the voice of Pan and fled without being pursued. In the Biblical records of antiquity during the war (2 Chron. xviv) about 1000 B.C. between Egypt and Assyria, panic and plague destroyed the army of Sennacherib. In the battle of Salamis, which is the first recorded naval battle in which women took part, panic seized upon Xerxes, when he and his fleet fled in disorder. At the battle of Actium, although the fleet of Cleopatra was twice as numerous as that of Cæsar, a panic fear seized upon Cleopatra at the decisive moment with the result that Egypt thenceforth became a Roman province. The news of the victory of the battle of Marathon shows not only the effect of panic fear but also of panic joy. The aid of Pan greatly contributed to the victory of the Greeks over the Persians who outnumbered the former at Marathon by more than ten to one. The messenger running into Athens with the news of victory was greeted with great excitement by the chief magistrate, who exclaimed "Rejoice! Rejoice!" and then fell dead through the overwhelming effects of the strong emotion of joy. Any emotion whether of intense sorrow or of extreme joy, due either to the fulfilment of a strong desire or to the removal of overwhelming obstacles, is known to exercise through the autonomic system, a fatal effect upon the heart's action. The retreat of the 10,000 described by Xenophon, who was not only present but led the retreat, records the effect of a night panic when the camp became a scene of clamour, dispute and alarm. Early the next morning Clearchus ordered the troops under arms. "and, desiring to expose the groundless nature of the alarm, caused the herald to proclaim that whoever would denounce the person who had let the ass into the camp on the preceding night should be rewarded with a talent of silver." This seems to have been a standing military jest to make the soldiers laugh at their past panic. There are many records in military history of the effects of panic fear, but these are much more common as is well known among the

civil population, and they occur in times of war, during plagues, as well as during great political and financial crises or upon invasion. During the plague at Athens and during the Plague of London there are numerous records of the effects of panic fear among the people. Col. F. N. Maude in his book *War and the World's Life* (p. 408) gives many instances. He refers with great interest to the crowd feeling or the "collective will power," which is of supreme moment among fighting armies and constitutes their *morale*; an element which Napoleon had the gift to initiate, and to which as the "resultant thought wave" he attributed the greatest importance.

In addition to panic fear occurring during war, pestilence, and famine, there are many sudden fears that occur from other disasters on land and sea as well as from disasters in the air; some of the worst recorded being those due to fires, especially when occurring on board ship. The panic that occurred on board the pleasure steamer, "Princess Alice," when 700 persons lost their lives almost within reach of the banks of the Thames, although not of this type, stands in strong contrast with the cool self-possession that occurred and the perfect order that was maintained when the "Titanic" went down after the order, "Ladies first," had been respected. Theatre panics and earthquake panics are other forms of panic fear which occur among large groups of people, and in regard to fear it is most interesting to learn the views of artists in portraying this emotion. In sculpture there are the "Niobids" in the Uffizzi Gallery showing all the tender emotions as well as those of terror, pity, grief, sympathy, appeal, repulsion, and fright; possibly the Niobids in the main exhibiting more sorrow than fear. Then the Laocoon in the Vatican, which Lecky describes as showing "traces of mental anguish exhibited with exquisite skill and without contorting the features or disturbing the prevailing beauty of the whole." In the dying Gladiator, of the Capitoline Museum, is the sculpture of a brave warrior in his last agony and even with his last breath repelling his adversary.

Because the facial expression so often reveals the emotions better than do any spoken words, I recently wrote to Mr. C. H. Collins Baker, the Director of the National Gallery, asking him which pictures in his opinion best represented, in the National collection, the ideas of painters upon the emotion of fear, and he very kindly gave me much assistance and referred me to the study called "Horror," by Reynolds, and painted from himself for the "Tragic Muse." In this picture the eyebrows are contracted, the face is tense, and the mouth is open and fixed, as if hissing the Hymn of Hate. A picture of the destruction of Niobe's children, by Richard Wilson, shows the physical expression of all the sadder emotions, and the "Plague at Ashdod," by Poussain, represents figures weeping and supplicating, showing fear, terror, horror, or disgust. "Christ bearing the Cross and appearing to St. Peter," by Carracci, is a mingled represen-

tation of awe, surprise, and fright, St. Peter being literally "petrified" in the picture. Then there is a work dating back to the fifteenth century by Ercole Grandi, called the "Conversion of St. Paul," with Jerusalem in the distance; panic, bewilderment, fear, and collapse being exhibited. In the "Transfiguration," by Duccio, are awe, fright, and curiosity, commingled with reverence.

Some of the Guildhall collection, which I visited by the courtesy of the Director, Mr. A. G. Temple, showed fear in a marked degree. The "Murder of David Rizzio," by Opie, shows anger, horror, fear, and the beseeching attitude. Another by the same artist, "The Assassination of James I of Scotland," depicts horror, fright, and clinging affection. "The Frown," by T. Webster, illustrates curiosity, determination and effort, fear and weeping. The "Banquet Scene in Macbeth," by D. Maclise, shows the paralysing and flaccid effects of fear as well as action and determination. The face is pallid, the right hand clutches the seat, while the left is powerless and yet it repels the ghost. The stronger mind of the Queen defying the audience is well shown. Lastly, there is the picture of "Edward the Third at the Siege of Calais." The need of the inhabitants, the kindly help and the pity which spares their lives, depict some of the horrors of war on a mild scale. The "Fight for the Standard," also by Sir John Gilbert, represents the *mêlée* of an actual combat, such as does not occur in the warfare of to-day.

In regard to the portrayal of the emotions in art, more especially those of fear and terror, Lecky states (*Rationalism in Europe*, p. 250) it was one of the most subtle and at the same time most profoundly just criticism, that it was the custom of the Greeks to enhance the perfection of their ideal faces in sculpture by transfusing into them some of the higher forms of animal life, and one may add that the proper study of the emotions is to trace them back to their earliest appearance in animals. This was actually carried out by the Greeks, and in the god Pan the human features approach as near as human features can to the characteristics of the brute. Busts of Jupiter also manifest a resemblance to the lion, and one of the distinctive characters of Greek art was that they personified mental faculties; as is stated, the two natures, human and animal, are fused into a harmonious whole, quite unlike Egyptian sculpture, which made no effort to soften the incongruity. Mr. Arthur H. Smith, of the British Museum, believes the Greeks to have been somewhat reserved in the expression of feeling, but an apparent exception to this is the great frieze on the altar of Zeus at Pergamon, in Asia Minor. The original has long since been removed to Berlin, but facilities were given to me to inspect photographs, which depict with marvellous expression the whole of the emotions of fear, terror, anger, and hate shown in these colossal figures. All are familiar with the work of Sir Charles Bell upon the expression of the feelings. He associates fear with "staring and startling

eyes, dilated pupils, the eyeballs largely uncovered, and the eyebrows elevated to the utmost, the nostrils are dilated, the mouth is opened as if convulsed, the tongue is seen, yet the lips conceal the teeth"; terror in his opinion being an exaggerated fear, but he considered that terror was more often associated with astonishment; the person experiencing terror being appalled and stupefied; he stands motionless and rooted to the ground; a marked contrast to a person in the act of flight, who, as Sir Charles Bell believes, is "un-nerved by fear" whilst fleeing.

Fear is something more than an avoiding reaction or an elementary reflex. It is a protective emotion and the most fundamental of all the emotions on account of its highly self-guarding value. It is the deepest and the most elemental, and it is common to man and animals. It is the most profoundly dissociative of all the feelings experienced by human beings, and it has very definite and distinct bodily accompaniments. During its experience all the other emotions are interrupted, and physical changes occur which are helpful to protect the life of the organism. It is possible to experience or go through the feeling of fear without actual consciousness of it as fear; but when felt it "takes possession" of the whole being. The two different kinds of fear described have possibly a different locality in the brain; reasoned fear being of cortical origin, whilst the unreasoned fear which is so "suggestible" and so infectious, and which gives rise to panic and takes hold of groups of people and herds of animals is of thalamic or, at any rate, of subcortical origin. The psychology of fear is at the present time being studied by a number of thoughtful and careful students, and it is not improbable that one of the consequences may be a reconstruction of much of our present attitude in regard to the relationship between mind and body.

CORRESPONDENCE.

"FRECKLED FEVER."

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

DEAR SIR,—Would it be possible for us to have a description of the "Freckled Fever" in your next number of ST. BARTHOLOMEW'S HOSPITAL JOURNAL? If so, I should be much obliged. This fever has been mentioned in the *Times*, but no one seems to know anything about it.

Yours truly,
A SUBSCRIBER.

"MALARIA."

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

DEAR SIR,—I was very interested in an article in the JOURNAL on the "Treatment of Malaria by Intravenous Injection of Quinine Urethane," and decided to try it on a case of chronic malaria from either Ceylon or the Dardanelles, but found a difficulty at once, and that was to measure 40 cc. of chlorhydrate of quinine, and 20 cc. of urethane. Eventually, in the *British Pharmaceutical Codex*, I found what I required under "Giemsa's Injection":

Quinine hydrochloride	10 grm.
Ethyl-urethane	5 grm.
Water	to 30 cc.

Dose, 1·5 mil.

I have given my patient one injection so far, using sterilised distilled water as a diluent instead of the physiological serum, and three days after he told me that he was free from headache, and felt more like work than he had done since his discharge from the Army.

My friend, Capt. H. A. Scholberg, has done the preliminary blood examination for me, and is looking for cases at the 3rd Western General Hospital to try the same treatment on, if my case is successful.

I remain,
Yours faithfully,
ROBERT WALKER.

REVIEWS.

COMMON DISEASES OF THE MALE URETHRA. By F. KIDD. (Longmans, Green & Co.). Pp. 132. Price 5s. net.

A short, but excellent, little work dealing for the most part with gonococcal infections, and with the various pathological conditions of the urethra and its appendages arising therefrom. The work is exceedingly practical, as it deals at some length with the study of the disease in the human being rather than in the laboratory. It consists, in fact, of a series of lectures given, when in 1917 it became clear that special clinics were to be started under the County Councils. The illustrations are excellent, and we can cordially recommend this book to students and practitioners alike.

PHYSICAL REMEDIES FOR DISABLED SOLDIERS. By R. FORTESCUE FOX. (Baillière, Tindall & Cox). Pp. 277. Price 7s. 6d. net.

The object of this book is to present general information on physical remedies for the treatment of most diseases, surgical and medical, from a common cold to diseases of the skin, with fractures, dyspepsia, and most other lesions thrown in.

The treatment includes that by heat and cold in baths, by electricity and radiation, by massage, mechanical apparatus, exercises, and medical gymnastics, as well as by medicinal waters and climate in British health resorts. Obviously such an enormous scope can be only inadequately covered in such a small book. However, in spite of this drawback, the authors have succeeded in giving an excellent *résumé* of these matters, which, with the aid of some very good illustrations, should be of assistance to anyone intending to take up the subject. It would be necessary, however, to consult other and more detailed works before a practitioner could hope to deal successfully with the subject in person.

MALINGERING; OR, THE SIMULATION OF DISEASE. By A. B. JONES and L. J. LLEWELLYN. (Heinemann.) Pp. 708. Price 25s.

The authors of this book point out that the study of malingering has been somewhat neglected by the scientific physician, but as it is a subject of great import, due thought might well be given to it.

Much ground is covered in this book—including an endeavour to assist in the detection of malingering. Some useful information dealing with the definition and classification of the various forms of malingering and its relation to the nervous system, internal and external diseases.

One of the objects of the book is that it may prove helpful to Naval and Military surgeons, to those interested in the subject of Pensions, Assurance, and Compensations, or responsible for the maintenance of discipline in large communities or institutions, and to members of the legal profession as well as to political and social reformers.

SURGICAL NURSING AND AFTER-TREATMENT. By J. DARLING. (J. & A. Churchill.) Pp. 582. Price 8s. 6d.

This book should be of great help to nurses studying for examinations and may also prove useful to students and dressers as well as to the junior members of the medical profession.

It deals only with surgical nursing, and contains many illustrations from the surgical catalogues of Messrs. Allen & Hanbury, and various other instrument makers.

The work is well arranged, and besides elucidating the duties of the nurse it reduces them to the necessary state of orderly sequence.

EXAMINATIONS.

UNIVERSITY OF OXFORD.

Second B.M. Examination. June, 1917.

Materia Medica and Pharmacology.—J. C. Dixey, C. F. Krige.
Pathology.—H. W. Toms, K. F. D. Waters.
Forensic Medicine and Public Health.—E. A. Crook, J. J. Savage.
Medicine, Surgery, and Midwifery.—E. A. Crook.

UNIVERSITY OF CAMBRIDGE.

Third Examination. June, 1917.

Part I. Surgery and Midwifery.—A. J. Copeland, E. T. D. Fletcher, A. R. Jennings.

Second Examination.

Part I. June, 1917. Human Anatomy and Physiology.—B. H. Cole.

Part II. April, 1917. Pharmacology and General Pathology.—H. B. Bullen, S. L. Higgs, A. G. Shurlock.

UNIVERSITY OF LONDON.

Second Examination. July, 1917.

Part II. Anatomy, Physiology, and Pharmacology.—J. J. da Gama Machado, E. Gallop, C. E. E. Herington, R. W. P. Hosford, S. F. Mahmood, H. L. Sackett, N. S. B. Vinter, I. G. Williams.

CONJOINT EXAMINATION BOARD.

July, 1917.

The following have completed the examinations for the diplomas of M.R.C.S., L.R.C.P.:

J. E. A. Boucaud, H. R. Buttery, A. J. Copeland, E. H. Glenny, H. C. C. Joyce, L. K. Ledger, S. W. Page, A. H. Samy, P. A. Smuts, C. M. Titterton, J. A. van Heerden.

Second Examination. June, 1917.

F. C. W. Capps, L. E. R. Carroll, P. C. Collyns, J. J. da Gama Machado, F. P. de Caux, T. B. Hodgson, J. V. Landau, J. A. M. Ross, C. W. Narbeth.

First Examination.

Practical Pharmacy. July, 1917.—K. W. Leon, E. D. Macmillan, G. Manét-Wallett, S. R. Simaika.

APPOINTMENT.

HEATH, CHARLES J., F.R.C.S., appointed Consulting Aurist to the Metropolitan Asylums Board Infirmary for Children, London, W.

BIRTHS.

DEANE-BUTCHER.—On July 11th, at Pittsworth, Queensland, to Dr. and Mrs. Bazett Deane-Butcher, a daughter.

ELLIS.—On August 5th, at 2, Naval Terrace, H.M. Dockyard, Sheerness, the wife of Surgeon G. E. D. Ellis, Royal Navy, of a daughter.

JONES.—On July 2nd, at Coleford House, near Bath, the wife of Capt. Philip T. Jones, R.A.M.C., T.F.R., of a daughter.

KIDNER.—On July 17th, at a nursing home, Manor Park, Lee, the wife of H. Ratcliff Kidner, M.B., D.P.H., 14, Valley Road, Shortlands, of a daughter.

KITCHING.—On July 4th, at 77, Marine Parade, Great Yarmouth, the wife of Captain R. L. Kitching, R.A.M.C., of a daughter.

MARRIAGES.

LYSTER—NEAL.—On July 28th, at St. Bartholomew's the Great, Smithfield, by the Rev. Stanley Power, Vicar of St. Mark's, Noel Park, Ronald Guy Lyster, Surgeon, R.N., second son of Dr. A. E. Lyster, M.D., J.P., and Mrs. Lyster, Great Baddow, Essex, to Ada Erica, elder daughter of Mr. and Mrs. John Neal, 22, Highbury Quadrant, London.

MANSFIELD—CATHELS.—On August 5th, Harold Young Mansfield, M.D., Capt., R.A.M.C., and Katharine Stuart, eldest daughter of the Rev. and late Mrs. Cathels, Hawick, Scotland.

DEATHS.

ANDERSON.—On May 8th, in New York City, Winslow Anderson, M.D.(California), M.R.C.P.(Lond.), of 1065, Sutter Street, San Francisco.

BENNETT.—On July 13th, Charles John Bennett, M.R.C.S., of Buxton, aged 82.

BRADLEY-SMITH.—Previously reported missing, believed drowned, now officially reported drowned on the torpedoed Hospital Ship "Arcadian," April 15th, 1917, John Godfrey Bradley-Smith, Temporary Lieutenant, R.A.M.C., younger son of the late John Bradley-Smith and Mrs. Bradley-Smith of Croydon, and dearly loved husband of Sophia Bradley-Smith, of Yeovil.

BROWN.—Killed in action, Charles Arthur Brown, K.O.Y.L.I., son of Mr. R. C. Brown, 4, Grove Gardens, Osterley Park, W., aged 19.

DREWE.—Killed in action, on July 12th, Major Adrian Drewe, R.G.A., the dearly-loved eldest son of Mr. and Mrs. J. C. Drewe, Wadhurst Hall, Sussex, and beloved husband of Jane Drewe, aged 26.

KENT-HUGHES.—On December 14th, 1916, at Melbourne, Australia, Tina, the wife of W. Kent-Hughes (née Rankin).

TWEEDY.—On the 12th inst. at Newquay, Cornwall, Reginald Carlyon Tweedy, M.D., etc., of Kenilworth, late Temporary Major, R.A.M.C.

WHINCUP.—On July 2nd, in France, accidentally drowned, Lieut. Frank Whincup, R.A.M.C., of Shrewsbury, aged 43.

NOTICE.

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

The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER, W. E. SARGANT, M.R.C.S., at the Hospital.

All communications, financial, or otherwise, relative to Advertisements ONLY, should be addressed to ADVERTISEMENT MANAGER, the Journal Office, St. Bartholomew's Hospital, E.C. Telephone: City 510.

A Cover for binding (black cloth boards with lettering and King Henry VIII Gateway in gilt) can be obtained (price 1s. post free) from MESSRS. ADLARD & SON & WEST NEWMAN, LTD., Bartholomew Close. MESSRS. ADLARD & SON AND WEST NEWMAN have arranged to do the binding, with cut and sprinkled edges, at a cost of 1s. 9d. or carriage paid 2s.—cover included.

St. Bartholomew's Hospital



"Æquam memento rebus in arduis
Servare mentem."

—Horace, Book ii, Ode iii.

JOURNAL.

VOL. XXIV.—No. 12.]

SEPTEMBER 1ST, 1917.

[PRICE SIXPENCE.]

CALENDAR.

Tues.,	Sept. 4.	—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
Fri.,	" 7.	—Dr. Drysdale and Mr. Bailey on duty.
Mon.,	" 10.	—Examination for Matriculation (London) begins.
Tues.,	" 11.	—Dr. Calvert and Mr. Waring on duty.
Fri.,	" 14.	—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
Tues.,	" 18.	—Dr. Drysdale and Mr. Bailey on duty.
Fri.,	" 21.	—Dr. Calvert and Mr. Waring on duty.
Mon.,	" 24.	—Examination for Entrance Scholarship begins.
Tues.,	" 25.	—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
Wed.,	" 26.	—First Examination Conjoint Board begins.
Thurs.,	" 27.	—Second Examination Conjoint Board begins.
Fri.,	" 28.	—Dr. Drysdale and Mr. Bailey on duty.
Tues.,	Oct. 2.	—Dr. Calvert and Mr. Waring on duty.
Fri.,	" 5.	—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.

EDITORIAL NOTES.

IT is with much pleasure that we note that two Bart.'s men have been awarded the D.S.O.:

Staff-Surgeon G. B. Scott, R.N. "In recognition of his services with a Naval Armoured Car Squadron in France, Russia, Turkey, and Roumania. On active service he has shown a devotion to duty and forgetfulness of self which cannot be too highly praised."

Lieut.-Col. J. S. Purdy, A.M.C. "Although continually under shell-fire for seven days, he exercised close, personal supervision over the evacuation of the wounded, and by his own example of courage and disregard of danger he animated all ranks with a similar attitude of mind. His work during preliminary preparations displayed the same untiring energy and devotion to duty."

* * *

We are also gratified to note that three more of our past students have obtained the Military Cross:

Temp. Capt. L. L. Satow, R.A.M.C. "He established a dressing-station within effective range of the enemy's position, where he attended to the wounded throughout the day and the following night, under fire the whole time. It was entirely owing to his disregard of danger and devotion to duty that many of the wounded were collected and evacuated."

Temp. Lieut. J. E. Sandilands, R.A.M.C. "For conspicuous gallantry and devotion to duty in leading his bearers forward under heavy barrage to evacuate wounded. He continued throughout the day to organise and superintend the removal of casualties under heavy shell-fire."

2nd Lieut. C. H. Bulcock, R.F.A. "For conspicuous gallantry and devotion to duty when in charge of ammunition supplies. By sheer force of example and energy he succeeded in rallying his carrying parties, who were thrown into confusion by heavy shell-fire and suffering many casualties. Although slightly gassed himself, he made several journeys into the enemy barrage to search for and remove the wounded, showing complete disregard for personal safety, and it was due to his tenacity and courage under difficulties that the guns were kept supplied each night with ammunition."

* * *

We congratulate Capt. F. G. Lescher, R.A.M.C., on having received a bar to the Military Cross. "He showed the greatest skill and fearlessness by leading his bearer parties and establishing forward collecting posts under heavy hostile shell-fire. He worked ceaselessly for three days, and by his personal example and devotion inspired his men with courage under very difficult conditions."

* * *

We have also to congratulate several other recipients of honours:

Fleet-Surgeon A. R. H. Skey has received the Military Order of Savoy from the King of Italy.

The C.M.G. has been awarded to no less than seven of our past students: Col. W. H. Starr, R.A.M.C.; Lieut.-Col. M. H. G. Fell, R.A.M.C.; Lieut.-Col. E. V. Hugo, I.M.S.; Temp. Lieut.-Col. T. B. Legg, R.A.M.C.; Lieut.-Col. G. S.

Rankine, R.A.M.C.; Temp. Lieut.-Col. W. N. Barron, M.V.O., R.A.M.C.; Lieut.-Col. B. E. Myers, N.Z.M.C.

Major (Temp. Lieut.-Col.) W. H. Hamilton, D.S.O., I.M.S., has been made a Cavalier of the Order of the Crown of Italy.

Miss McIntosh, our Matron, has been awarded the C.B.E.

Col. C. Gordon Watson, C.M.G., has been made a Knight of Grace of St. John of Jerusalem.

Fleet-Surgeon J. H. Pead, R.N., has received the Order of St. Stanislas, 2nd Class (with Swords).

* * *

ROLL OF HONOUR.

We have unhappily to record five deaths on active service:

Capt. G. D. East, R.A.M.C., attached to Grenadier Guards, was killed in France on July 1st. He was one of the House-Surgeons of this Hospital when the war broke out.

Surgeon-Capt. R. A. Bostock has died of illness contracted on active service. During the Boer War Capt. Bostock was employed on the Staff for general medical work. Early in the present war he was mentioned for valuable services.

2nd Lieut. G. H. Greenfield, R.F.A., died on August 17th from wounds received the previous day. He was a student at the time of the outbreak of war, and was gazetted to the R.F.A. in August, 1916.

2nd Lieut. J. D. Johnston, K.O.L.I., has been killed in France on a date not yet ascertained.

Capt. H. A. Harris, R.A.M.C., was killed in action on July 31st in France.

To the relatives and friends of these gallant men our deepest sympathy is extended in their loss.

OUR RETROSPECT.

DURING the last two years in this retrospect we have been compelled to review our Roll of Honour as something of more importance than the progress of our medical school.

This year the same duty devolves upon us. When we reviewed the situation in last September over 1800 of our physicians, surgeons, students, past students, nurses, and lay-staff were serving with the forces either at home or abroad.

This year has brought the number well over 2000. It is with much regret that we have to announce that during the last twelve months many of these have been killed or have died indirectly from causes attributable to active service.

Many have obtained decorations and honourable mention of which we shall speak later.

In the medical school the number of students, though fewer than that of old, has been well kept up according to war standards. The lectures and laboratory classes have been held as usual, and in the examination halls our students have fully upheld the reputation of St. Bartholomew's.

With very much sorrow we have had to note during the past year the deaths of several old students who have since become famous in their spheres of actions.

Sir William Henry Power passed away on July 28th, 1916. In 1871 he was appointed a Medical Inspector of the then new Public Health Department of the Local Governing Board, and in 1900 he was appointed their Chief Medical Officer. Amongst his well-known investigations was that concerning the local investigation of outbreaks of infectious diseases. He first demonstrated in 1878 the spread of diphtheria by means of milk and the manner of which it is often carried by means of slight sore throat.

He further investigated smallpox and the routine removal of smallpox cases to hospitals away from populous areas was due to his work. He closely guided and followed the work of the Board's medical experts and gave it the stamp of his unrivalled knowledge, memory, and power of constructive criticism. He was created K.C.B. in 1908, and was the recipient of the Buchanan medal of the Royal Society and other honours.

We have also to record with sorrow the death of Sir T. Lauder Brunton, whose name is familiar to every medical man throughout the world.

He studied successively in Vienna, Berlin, Leipsic, and Amsterdam under the best masters of the time, and was appointed Assistant Physician to the Hospital in 1876, associated with Sir William Church as his senior. He travelled widely throughout the world, and was elected a member of several foreign medical societies. He received the honour of Knighthood in 1900, and was created a Baronet in 1908. In the midst of a strenuous and useful life spent largely in the service of our Hospital he yet found time to take an active part in many patriotic movements, such as the second International Congress for School Hygiene, of which he was President, the City of London Cadet Brigade, the National League for Physical Education and Improvement, and the National Association for the Prevention of Infant Mortality.

He was a prolific writer, and sought persistently to apply in practice such remedial measures as gave promise on physiological grounds of affording relief to various maladies and symptoms. His position in the medical world was probably unique. His health gave way two or three years ago, yet he carried on his work prudently and bravely. The loss of his second son, killed by a shell in France, was a severe shock to him, and he died on September 6th, 1916, in his 73rd year.

We also note with very much sorrow the death of Mr

W. H. H. Jessop, who passed away very suddenly on February 16th of this year after an illness of only six days.

His earliest position after qualifying at the Hospital was as House-Surgeon to Mr. Willett. He was afterwards Ophthalmic House-Surgeon and became Demonstrator of Anatomy in 1882. In 1894 he was elected Junior Ophthalmic Surgeon to St. Bartholomew's Hospital.

At the time of his death he was Senior Ophthalmic Surgeon to the Hospital and President of the Ophthalmological Society of the United Kingdom. In the latter position he used his power to set on foot the establishment of a British Journal of Ophthalmology, securing for that purpose the amalgamation of the *Royal London Ophthalmic Hospital Reports*, the *Ophthalmic Review*, and the *Ophthalmoscope*.

Jessop was a good friend and a warmhearted man. He was an enthusiastic lover of art—his knowledge and judgment being extremely good. His collection of Whistler lithographs is famous. With his death the students have lost one of their best friends, and the Hospital one of her greatest sons.

During the year many appointments have been made which reflect credit upon our Hospital and Medical School. The Right Hon. Dr. Christopher Addison has been made a member of the Cabinet and Minister of Munitions. Dr. Robert Armstrong-Jones has received the honour of Knighthood, and has also been appointed Consulting Physician in Mental Diseases to the London Command. Dr. Shipsley, Master of Christ's College, Cambridge, has been appointed Vice-Chancellor of the University of Cambridge.

Among other distinctions awarded to St. Bartholomew's men we may mention the following:

Surgeon General Sir C. P. Lukis has been appointed Director-General Indian Medical Service.

Col. C. Gordon Watson has been appointed Consulting Surgeon to the Expeditionary Forces in France.

Dr. Stansfeld has been appointed Physician to the Metropolitan Hospital.

Sir Frances Champneys has been re-elected as Representative of the Royal College of Physicians of London on the Central Midwives Board, and Sir Dyce Duckworth has been re-elected Representative of the same body on the Council of the Queen Victoria Jubilee Institute for Nurses.

Mr. H. J. Waring has been elected to represent the Royal College of Surgeons of England on the General Medical Council.

Dr. W. S. A. Griffith has been appointed as Representative of the Royal College of Surgeons on the Central Midwives Board.

Dr. Edward Coker Adams has been appointed a member of the Executive Council and an official and member of the Legislative Council of the Colony of the Gambia.

Mr. R. Gill, shortly after resigning his post as Chief Chloroformist of this Hospital, has been elected a Governor.

Dr. Arthur J. Hall, Professor of Medicine at the University of Sheffield, has been appointed Examiner of Medicine at the University of London.

The honours accorded to St. Bart.'s men who are on war service have been very numerous. Space will not permit a detailed list and it would be invidious to mention some and leave out others. The list comprises the following: K.C.M.G., 1; C.B., 5; C.S.I., 1; C.M.G., 10; D.S.O., 15; M.C., 35; Bar to M.C., 3; D.S.C., 1; T.D., 2; Mentioned in Despatches, 140; Promotion for valuable Service in the Field, 1; Knight of Grace of St. John of Jerusalem, 2; Kaiser-i-Hind Medal, 1; Serbian Order of the White Eagle, 6; Legion of Honour of the French Republic, 2; Order of St. Stanislas (Russia), 2.

Unfortunately the Roll of Honour has been a heavy one this year. No less than 29 have been killed or died on service. One is missing, 35 have been wounded, 4 have been taken prisoners, of whom 2 have been released.

During the year we have maintained a high reputation at the various examinations.

At the University of Cambridge two have obtained the M.D., two have obtained the B.C., two have taken the M.B., B.C., and one the D.P.H.

At the University of Oxford one has taken the M.B., and one the M.B., B.Ch.

At the University of London five have obtained the M.B., B.S.

At the University of Durham one has obtained the M.D., and one the D.P.H.

At the Royal College of Physicians of London one has been elected a Fellow, and one has obtained the M.R.C.P.

At the Royal College of Surgeons of England two have obtained the F.R.C.S.

Of the Conjoint Board Examinations one has obtained the D.P.H., and 58 the M.R.C.S., L.R.C.P.

One has taken the Diploma L.M.S.S.A.

FROM THE FRONT.



THE following is an extract from a delayed letter we have received from Capt. L. B. Cane. In spite of the delay, we believe it will prove interesting, more especially on account of the advertisement, which perhaps some Bart.'s man might like to tackle!

"The enclosed advertisement perhaps the Editor of the JOURNAL might like to republish, in case any Bart.'s man wishes to try for the Rs. 1,500 reward!

"The advertiser is very broad-minded, and has 'no prejudice to any kind of treatment—alopathy, homœopathy, ayurvedi, yunani, kabach maduli, etc.'—so there ought to be an opening for someone! I pity, however, the poor hysterical patient.

"I am now stationed in Peshawar, and have been given command of No. — Cavalry Field Ambulance, mobilised here for service if required on the North-West Frontier.

"We are ten miles from the opening to the Khyber Pass, with a ring of mountains almost all round. I was up in the Khyber Pass last week, and saw thousands of camels, donkeys, and wild men in caravans going and coming from Cabul.

"Capt. Holroyd, I.M.S., a Bart.'s man, is also stationed in Peshawar."

A REWARD OF RS. 1,500

IS hereby announced for successful treatment of a hysterical patient in the Raj family. No prejudice to any kind of treatment, Alopahy, Homœopathy, Ayurvedi, Yunani, Kabach, Maduli, etc. If personal attendance of the doctor be necessary arrangements will be made on application for his conveyance to Rajdhani, otherwise attention will be paid for strict compliance with the directions. The amount of the reward will be paid after a year of the recovery on satisfaction that the cure is permanent.—Apply sharp to MAHARAJA BAHADUR, Feudatory Chief, Sirguja State, C. P.

DEPARTMENT FOR THE TREATMENT OF VENEREAL DISEASE.



NEW Department has recently been added to the already long list of special departments of the Hospital in the shape of one to deal with venereal diseases and their complications.

This Department has been formed by the Hospital authorities in conjunction with the Corporation of the City of London, to act under the Local Government Board scheme for the treatment of these diseases.

A special building, known as the Special Treatment Centre, situated in Golden Lane, next door to the City Mortuary, has been converted from other intentions to its present purpose, for which it is admirably suited. The building was formally opened by Col. W. R. Smith, Chairman of the Sanitary Committee of the Corporation of the City of London, on July 27th, 1917, on which occasion the origin of the Department, and the purposes for which it was to be used, were explained by the Chairman. Having equipped the Department, the Corporation authorities have left it to the Hospital authorities to administer. This will

be done in a manner similar to that carried out in the other special departments of the Hospital.

Mr. Girling Ball is in charge of the Department, and under him there is a staff consisting of a full-time Chief Assistant, House-Surgeon, Dressers, Clinical Assistants, and Pathological Dresser. There is also a Sister-in-Charge, who is resident in the institution, with nurses under her.

The building has adapted itself admirably for the purpose for which it is required. On the lowest floor is the Medical Officer's room, in which patients can be seen by the Surgeon separately, and as privately as can be hoped for by any class of patient that may attend the institution. Adjoining this are waiting-rooms, a small dispensary and a record room.

On the floor above are two wards capable of holding ten or more beds, which are to be used for the treatment of such patients as may require admission; one of these is set apart for males and the other for females.

On the top floor is a large demonstration room (with a pathological bench for minor examinations), capable of holding a large number of men desiring to attend demonstrations. Adjoining this are two smaller rooms, one set apart for dealing with the cases suffering from syphilitic lesions, and the other for gonococcus cases; dressing-rooms are attached to each.

For the present, the hours of attendance for new patients are on Mondays (women and children) from 12-2 p.m., on Wednesdays (men) from 12-2 p.m., and Fridays (men) from 5-7 p.m. It may be necessary to extend these times, but not during the period of the war. Special hours are set apart, by arrangement with the patients, for the inoculation of salvarsan and its substitutes, and for such special investigations as may be required.

Minor pathological investigations are carried out in the Department, but the more elaborate methods, including Wassermann reactions, are to be performed in the Pathological Department of the Hospital. This work is done by the Chief Assistant of the Department.

CASES TO BE TREATED AT THE SPECIAL TREATMENT CENTRE.

Under the scheme of the Local Government Board, any person who applies for treatment can obtain such, without payment of fee and irrespective of the district in which he lives, providing that he has either syphilis or gonorrhœa in a communicable stage. So far as this Department is concerned, all other cases not in the communicable stage are referred to the department of the Hospital to which they rightly belong, unless they are only sent for an opinion by a practitioner outside the Hospital, or are expressly sent by a member of the Hospital Staff or practitioner for treatment. In the event of the case not being suitable for treatment at the Centre, notification will be sent to the doctor in charge of the case. Cases may also be sent for pathological in-

vestigations, for which purpose application forms as to the examination required may be obtained from the Medical Officer of Health of the City of London, Guildhall, E.C. All cases of venereal disease (in any shape) in the various hospital departments are to be notified to the Department on cards provided for the purpose, in order to comply with the request of the Local Government Board, whether they are to be dealt with by the Department or not.

The notification cards are to be sent to the Dispensary, from which they will be sent to the medical officer in charge of the Department.

If the case is to be treated by the Department, it can be transferred from the hospital with a card provided for that purpose.

It should be pointed out that when a patient reaches the Centre his name is entered in a book opposite a number, which number he is known by, and appears on all his records.

WASSERMANN REACTIONS.

All the necessary blood tests throughout the Hospital are in future to be carried out by the Chief Assistant of the Venereal Department. The tests will be carried out once a week. When it is desired that such should be done in departments other than the Venereal Department, due notice should be given to the Chief Assistant, who, together with the House-Surgeon, will be willing to collect the blood if so desired.

With regard to the cases in which blood tests are requested by medical practitioners outside the Hospital, apparatus for collecting the blood can be obtained on application to the Medical Officer of Health of the City of London at the Guildhall. It is preferable that the patients should come to the Centre for the collection of the blood, which thus is not interfered with by the necessary transference through the post.

SALVARSAN AND ITS SUBSTITUTES.

The State and the City Corporation are prepared to pay the expense of these drugs free to all patients who are willing to come for treatment at the Department. The distribution of these drugs to medical practitioners or others not connected with the Department is only allowed on these lines under certain conditions: by the presentation of a certificate of competency to administer the drug, obtained from an officer recognised by the Local Government Board; such certificates can be obtained from the Medical Officer in charge of the Department. This allows general practitioners to treat their own cases if they wish to do so, at the same time obtaining the drug required free of charge.

In order to obtain salvarsan or its substitutes a practitioner outside the Hospital must apply to the Medical Officer of Health of the City of London, at the Guildhall, having got his name placed on his register by forwarding to him the certificate obtained from the Department.

Certain hours are set aside for the administration of these drugs apart from the periods during which the clinics are held. At these hours the medical officers of the Department are anxious to demonstrate their methods to any and all who may wish to attend.

Notification of every dose of salvarsan given in the Hospital must be made to the Medical Officer in charge of the Department, in order that returns of the numbers and the doses of drugs used can be returned quarterly. Special cards of request for these drugs are provided, and before such can be obtained from the Dispensary the card must be duly filled in, and the notification of the case must have reached the Department.

TEACHING IN THE DEPARTMENT.

A course of lectures in venereal disease will be given during each Summer Session on these subjects, open to all who may desire to attend.

Demonstrations are held at each attendance at the Clinic, including an exhibition of cases, simple pathological methods, the taking of blood for Wassermann's reaction, urethroscopies, general urethral examinations, and local methods of treatment.

The methods of giving salvarsan and its substitutes are also demonstrated at fixed hours, and it is hoped that all who desire to become accomplished in these methods will take the opportunity of attending in order to learn for themselves the practice of these methods.

These subjects have suddenly become of considerable importance, both from the point of view of treatment and in public health, that it is very desirable that all who can should make themselves familiar with up-to-date methods. It is hoped that the Department of St. Bartholomew's Hospital will take a high place in this direction, and it is for this purpose that all are cordially invited to visit its clinics.

W. G. B.

SOME PROBLEMS IN BONE SURGERY.

*The Mid-Sessional Address before the Abernethian Society,
June 7th, 1917.*

By ERNEST W. HEY GROVES, M.S., F.R.C.S., Major
R.A.M.C.(T.).

LADIES AND GENTLEMEN,—I deeply appreciate the honour which you have done me in asking me to address you to-night, and although it is more than twenty years since I have spoken in this Theatre, I feel the glamour of the old school as an inspiration to give you of my best. I propose to ask your consideration of five different problems in the surgery of bones and joints, and if these appear to you to be disconnected with one another I must ask your patient indulgence until the conclusion,

when I hope to show you the guiding thought which is common to them all.

THE PROBLEM OF GUNSHOT FRACTURES OF THE FEMUR.

I show you here the splint which was designed in the stress of active service in Egypt for the treatment of fractured femurs associated with septic wounds. It consists of a wire frame in which the limb is slung. This is supported on a metal framework which rests on the bed, and bears at its lower end two uprights, with a pulley-wheel which can be fixed at varying heights. The leg is slung to this frame by double strips of flannel bandage and by special slings of stout rubber, the latter being employed in the neighbourhood of the wound. The limb is suspended in such a position that both hip- and knee-joints are semi-flexed. Not only does this relax the tension of the great flexor muscles, but it greatly facilitates the proper alignment of fractures at the upper and lower ends of the femur, in the former the upper fragment always tilting forwards, and in the latter the lower fragment always tilting backwards. The replacement of the fracture and its maintenance in correct position is carried out by means of weight extension, applied by means of a transfixion pin passed through the head of the tibia, and a weight of 15 lb. attached to the pin by means of a horse-shoe claw. Counter-extension is necessary, and must be applied by a padded band passing round the opposite thigh and tied to the head of the bed. This not only prevents the patient being pulled down by the weight, but it tilts the pelvis so as to secure abduction of the fractured thigh. This method of extension has the great merit of efficiency, so that within a few days of its application the femur is actually longer than on the sound side. This means that the broken fragments of bone are entirely disengaged from one another, and as the weight is gradually reduced the broken bone re-joins in correct position. It also has the advantage of being much less painful than any form of extension which is applied by adhesive plaster, and it leaves the limb quite free for massage and movements of the joints. The dressing can be done as often as may be necessary by merely throwing aside the rubber sling which supports the wounded portion of the limb. In fractures below the knee the foot is to be fixed to a foot-piece which allows of adjustment in any direction, and by means of which extension can be applied, the leg being slung on the same splint as described above. The special advantages of this foot-piece are that the exact degree of eversion required can be obtained, and that by the provision of a valgus pad, so pivoted that it can be fitted to a right or left foot, the arch of the foot is maintained and the foot is prevented from slipping backwards on the foot-piece. If there is no wound in the lower part of the leg, the foot-piece can be attached to the foot by means of glue and bandages. If there is a wound near the ankle it is better to use a transfixion pin passing through the os calcis.

THE PROBLEM OF CLOSED FRACTURES OF THE FEMUR.

You are probably all aware that the operation of plating the femur is not only a difficult one, but is one which often fails on account of the screws becoming loose. It is not difficult to explain this. A long plate, however many-holes it contains, will only provide for screws holding the bone in one plane. The great force of the adductor muscles tends to bend the bone and to pull the screws out from one fragment or the other. This problem may be solved by using little metal clips shaped like the quadrant of a circle, which can be fitted on to an ordinary Lane's plate at any point in its length. These clips give bearing to two screws, each of which perforate the bone at right angles to one another. If four such clips are used, one at each end of the plate and one on each side of the fracture, then there will be a mechanical system provided in which the fixing screws all lie outside the plane of force which tends to move the fracture.

THE PROBLEM OF THE OLD MAL-UNITED FRACTURE.

In the case of an old fracture of the femur with much angulation and deformity, it is a matter of common experience that the correction of this deformity is an exceedingly difficult matter if undertaken as the first stage of an open plating operation. The correction of the deformity should never be undertaken at a single sitting. It is sufficient by a simple osteotomy to divide the point of mal-union, and then to place a transfixion pin through the lower end of the bone, attaching to the latter a weight of 50 lb. Such a big weight is best arranged by using two multiplying pulley-blocks and a weight of 10 lb. The patient is kept under morphia for twenty-four hours, and then the weight is reduced to 30 lb. At the end of a week the bone has been drawn out to its full length, and a plating operation can be undertaken to fix it. But as under such circumstances the ends of the bone are sclerotic and slow to unite, it is necessary to fix the plate by a method which will hold the bone in position for an indefinite period. This is carried out by passing a series of bolts right through the bone, and by means of nuts screwed to these fixing it to the plate.

THE PROBLEM OF FIXING A BONE-GRAFT.

Time forbids me to enter into any general discussion about the principles of bone-grafting, but the practice of this method for repairing bone defects is becoming more important every day, and I will confine myself to touching upon a few details of practical importance. In transplanting a piece of bone so that it will become incorporated in the skeleton in its new position, the processes of transition between a dead bone strut and a piece of living bone are matters of unsettled controversy. But there are two facts about which there can be no doubt whatever, and these relate to the mass and the fixation of the graft. In regard to the mass or bulk of the graft, this should be cut of the

full size that is required in the defect to be filled, because new growth of bone from the grafted area is very slow and uncertain. It is a fallacy to suppose that by dividing up a bone-graft into little bits that it will increase the ultimate bulk of bone produced; in fact, quite the contrary is the case: little pieces of bone, loose in the tissue, remain indolent or become absorbed unless they are fixed in close contact with living vascular bone. The second point relates to the method of fixing the graft to its bed. In general terms four principles are to be observed: The graft should be fixed to the outer surface or cortex of the bone, and not driven into its medullary cavity. The area of contact between the graft and the bed should be as wide as possible. The fitting of the graft to its bed should be exact and accurate. The fixation of the two bones should be so secure that not the slightest movement between them is permitted. When the bone to be repaired is merely one of the forearm bones, the fellow to which is intact, then the fixation of the graft may be of a simple character, as there will be but little tendency to move it. But if the bone to be repaired has no companion bone to support it, *e.g.* the humerus or femur, the method of fixation requires careful arrangement. First the ends of the bone to be united are exposed and all the superfluous scar-tissue cut away; then a portion of each fragment of the same length as the gap to be filled, and of a thickness representing rather more than one quadrant of the bone, is cut out by means of a circular saw. The transverse cuts which separate these quadrants removed from the fragments are made not exactly at right angles to the axis of the bone, but recessed inwards. The effect of this shaping of the socket for the graft is that when the latter is in place it is held in its socket in the same way as a dovetailed joint. The graft is cut from the patient's own tibia, the size and shape being made to exactly correspond with the grooves cut in its future bed together with the gap between. Thus, for example, if a 2-in. gap has to be filled, then a 6-in. graft is used, a third of which is morticed into the fragment above and below. There are two methods by which the graft can be fixed in its place: the one is by a piece of soft iron wire, which surrounds both bones, and the second is by ivory nails, which pierce both structures. These nails, to the number of three or four on each side of the gap, are placed in different directions, generally as two series at right angles to one another.

THE PROBLEM OF RUPTURED CRUCIAL LIGAMENTS OF THE KNEE-JOINT.

You are probably aware that rupture of one or both crucial ligaments of the knee is a much commoner accident than used to be supposed. You will also readily appreciate the great difficulty which confronts the surgeon in the operative repair of these lesions. A little frayed remnant of tissue in the depths of the joint will not hold any kind of suture in a manner which will support the weight of the body.

Hitherto all these cases have had to resort to the use of a cumbersome jointed apparatus which is far from satisfactory. But I think this problem also can be quite efficiently solved by a method which is the outcome of anatomical and mechanical principles. Take first the case of the anterior crucial ligament. This runs obliquely from the external condyle of the femur above to the front of the tibial tubercle below. The exact recognition of the nature of the lesion can only be made by an adequate exposure of the interior of the joint, gained by cutting through the tubercle of the tibia and turning up the patella. The knee is fully flexed, and the torn ends of the crucial ligament fully exposed. A wide twist drill $\frac{1}{4}$ in. in diameter is taken, and with it a hole is bored, first in the external condyle of the femur upwards and outwards, and then through the internal tuberosity of the tibia downwards and inwards. In each case this hole is commenced from the interior of the joint, starting from the exact point of attachment of the torn ligament. Then the ilio-tibial band is defined and separated from its lower attachments, so as to form a strong ligament attached above, but with a free lower extremity. The latter is then threaded through the canal already made in the femur and the tibia, drawing it first of all down into the knee-joint, and then through the head of the tibia from the latter situation.

After it has been drawn out on the surface of the tibia the end of the new ligament is turned up and sewn to the fascia and periosteum. In this way a new, strong, living ligament is made to take the exact place originally occupied by the ruptured crucial. In the skiagram which I show you, you can see the new canal made for the ligament in the two bones. In the same way a new posterior crucial ligament can be made by the employment of the tendon of the semitendinosus muscle.

It now only remains for me to justify the putting together of these somewhat disjointed remarks. If I have convinced you of the importance and the difficulty of the various problems which we have been considering, and if you are impressed with the idea that the methods which I have suggested represent practical solutions for these problems, then my final task will be easy. There is one underlying principle which has inspired all these ideas, and that principle is one of mechanical efficiency. Anyone who aspires to do good work in the realm of the surgery of bones and joints must be prepared to make himself master of mechanical technique. At present I am aware that many branches of recondite study are forced upon your attention, and you are expected to be familiar with physiology, bacteriology, and pathology. But however great are the claims which these things make upon you, let me remind you that the comparatively simple art of the mechanic is none the less essential for the training of the surgeon who would mend bones and joints.

CORRESPONDENCE.

OLD BILLS OF MORTALITY.

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

DEAR SIR,—With regard to the Bill of Mortality appearing in your August issue, it may be noticed that these Bills were published in the vernacular, a practice which was continued well into the nineteenth century. As a result many of the old terms are not to be found in contemporary medical books; on the other hand some of them linger on among the people to this day.

"Rising of the lights" is "wind," a feeling of oppression or suffocation after food which clearly has no real connection with the lungs or lights. I have reliable information about a man who was in the habit of taking a dose of small shot after a meal "to keep the lights down." He lived to a good old age! The term is quite common locally in application to pigs.

"Surfeit" is over-eating, the great number of deaths quoted being doubtless due to our fore-fathers' fondness for eating and drinking competitions; possibly apoplexy and other sudden seizures are included.

"Mould fallen." "Mould" is the anterior fontanelle; "head mould" is the skull. "Mould fallen" is collapse of the fontanelle. "Head mould shot" a condition in new-born infants in which the edges of a suture, especially the coronal, ride or are shot over one another; also, contradictorily, hydrocephalus. Mauriceau in his *Diseases of Women with Child*, 1736 and other dates, devotes a chapter to "The Mould of the Head."

"Purples" is purpura both as a symptom and disease; any condition, in fact, having petechiæ as a symptom. Culpepper in his *London Dispensatory*, 1654, speaks of "the Plague, the smallpox, measles, purples, or other infectious disease."

"Flox" is a misprint for "flux."

"Mother" is hysterical convulsions, also the uterus.

Trusting that these notes may be of some assistance to your correspondent.

Believe me, yours faithfully,

GEOFFREY C. HOBBS.

September 9th, 1917.

OPERATING IN SPECTACLES.

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

DEAR SIR,—I have been doing Dr. Griffith's work at Milbank Military Hospital of late. I picked up two little hints which might be valuable to "old" Bart's men like myself who "have to wear glasses when they operate," and who find that "with a mask on" the "steam" from one's breath dimming the glasses is very annoying during an operation. The tips I was told of are:

(a) Before operating dip your glasses in *warm lysol solution* and polish with soft towel or lint. This leaves a thin film of soap on the lenses.

(b) Use a nose and mouth mask as usual, *but along upper border* sew in a piece of soft dental wire. This allows the mask when tied over the nose and mouth to be moulded to the shape of nose and face and the glasses go *over* this, thus one's breath does not reach the glasses and cause any dimming. I have tried it myself and it's very good.

Very truly yours,

C. HUBERT ROBERTS.

21, WELBECK STREET, W.

August 30th, 1917.

APPOINTMENTS.

ALDOUS, G. F., F.R.C.S.Ed., appointed Consulting Surgeon to the Kingsbridge Cottage Hospital.

HEATH, C. J., F.R.C.S., appointed Consulting Aurist to the Metropolitan Asylums Board Infirmary for Children.

SALT, A. P., M.R.C.S., L.R.C.P., appointed M.O. to the Totnes Workhouse, and M.O. and Public Vaccinator to the Totnes and Haberton Districts of the Totnes (Devon) Union.

SAMY, A. H., M.R.C.S., L.R.C.P., appointed House-Surgeon to the Metropolitan Hospital, Kingsland Road.

CHANGES OF ADDRESS.

CLARK, FRANCIS, 13, New Road, Rochester, Kent.

FAWKES, M., Surg. R.N., H.M.S. "Raglan," c/o G.P.O., E.C.

Joy, N. H., Theale, Berks. Tel.: Theale, 23.

KENT HUGHES, W., Major, A.A.M.C., c/o Bank of Australasia, 4, Threadneedle Street, E.C. 2.

MAINPRISE, C. W., Lt.-Col., R.A.M.C., 61, Gunterstone Road, West Kensington, W.

MARSHALL, J. C., Capt., R.A.M.C., Ophthalmic Centre, 2nd Army, attached to 50th Casualty Clearing Station, B.E.F.

ROWORTH, A. T., 56, Waldegrave Park, Twickenham.

SAMY, A. H., Metropolitan Hospital, Kingsland Road, E. 8.

TURNER, P. E., 36, Halford Road, Richmond.

WILLES, C. F., Surg. R.N., H.M.S. "Halcyon," c/o G.P.O., E.C., and "Ringstead," Milton Road, Bournemouth.

BIRTHS.

BLAKEWAY.—On August 7th, at 1, Weymouth Street, W. 1, the wife of Harry Blakeway, M.S., F.R.C.S., of a son.

CARTER.—On August 19th, at Balgownie, Oak Hill Park, Liverpool, the wife of Major R. Markham Carter (temp. Lt.-Col.), F.R.C.S., Indian Medical Service, of a daughter.

GLOVER.—On August 3rd, at Hill Crest, Husbands Bosworth, Rugby, the wife of Norman Glover, B.M., of a son.

HAINES.—On August 29th, at St. Luke's House, Gloucester, the wife of Lieut. R. L. Haines, R.A.M.C., of a daughter.

ROXBURGH.—On August 30th, at 19, Belgrave Crescent, Edinburgh, the wife of Temporary Surgeon A. C. Roxburgh, R.N., of a son.

SANGER.—On August 28th, at Rendcomb, near Cirencester, to Cicely (*née* Crewdson), wife of Frederick Sanger, M.D., a son.

STATHERS.—On August 12th, at the Elms, Turweston, Brackley, the wife of Surgeon Gerald Stathers, R.N., of a daughter.

TRAVERS.—On August 8th, at 2, Phillimore Gardens, W., the wife of Ernest Travers, M.D. Lond., of a son.

DEATHS.

BOSTOCK.—On August 17th, 1917, at 46, Portman Mansions, W., Surgeon Captain R. Ashton Bostock, Scots Guards, of Penmaen, Glamorgan, son of the late Surgeon-General John Ashto Bostock, C.B., Scots Guards.

CUFFE.—On August 31st, 1917, at Parkstone, Robert Cuffe, M.R.C.S., formerly of Guildford Street, London, and Woodhall Spa, aged 88.

EAST.—On July 31st, 1917, killed in action, Captain Gordon Doulton East, M.B., R.A.M.C., attd. Grenadier Guards, only son of the late Mr. and Mrs. J. F. East, of Lewisham, and 27, Lytton Grove, Putney, aged 28.

GREENFIELD.—On August 17th, from wounds received in action on August 16th, Gerald Henry Greenfield, Second Lieut., R.F.A., elder son of the late Henry Greenfield, of Belle Eau Park, Southwell, and Mrs. Greenfield, Edenmore, Woking, aged 20.

"Quo fas et gloria ducunt."

SYMONS.—On August 25th, 1917, William Henry Symons, M.D., D.P.H., of 39, Combe Park, Bath, aged 62.

NOTICE.

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

The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER, W. E. SARGANT, M.R.C.S., at the Hospital.

All communications, financial, or otherwise, relative to Advertisements ONLY, should be addressed to ADVERTISEMENT MANAGER, the Journal Office, St. Bartholomew's Hospital, E.C. Telephone: City 510.

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