

ful spirit of inquiry for which contact with discovery at first hand is almost essential.

In the next place I expect him to be not only himself a discoverer, but an inspirer of such work in others. Many of us can do such work when it is set us by a superior. Some of us can invent such work for ourselves. But the rarest gift—and this I expect of a professor—is the inspiration of other men. His assistants would be the first circle. But I should hope that his influence would spread more widely, and that he would be of assistance to all his colleagues in working out the problems, some of which most of us are attempting to solve, just as he himself will be assisted by them, both in the supply of such special cases as he may need, and also by advice in special subjects which they know better than he.

For it must not be forgotten that the Professor of Medicine will not be omniscient. He will not know as much chemistry or physics or bacteriology as the special teachers of those subjects. He will, like the rest of us, be better acquainted with some parts even of medicine than with others. The better man he is the more ready will he be to acknowledge this and to ask help from his colleagues. He will give, but he will indubitably receive.

In the third place I expect him, both by the quality of his work and by the quantity which, under his guidance, his unit will be able to turn out, to advance medical science in general, and to recover for England that place in it which she has lost.

It need not be said that it will be difficult at present not only to find a man capable of this work, but also to guarantee that he will do it. The name of "Professor" does not possess any magical charm. There are plenty of places both in England and abroad where the existence of a professor (I am not thinking of medicine) has not raised the level of teaching or research in the very least. We all know men who are professors with no original fitness for the position, and others who, though originally brilliant, have subsided into useless drones.

Various precautions can be suggested, and a terminable tenure is probably desirable. But the chief guarantee will always be the character of the man himself, and that is generally ascertainable upon inquiry. At forty a man usually has enough enemies to enable one to obtain a good idea of his vices, and his virtues he can tell you himself.

There are a few desirable men on the market now, and as the system grows it is to be expected that others will develop out of the staff of the Professor's assistants.

I do not despair of the possibility of the system, and that it is desirable I have long been entirely convinced.

Yours obediently,

G.H.Q., France.

W. P. HERRINGHAM.

[A supplementary communication on post-graduate teaching from Major-General Sir Wilmot Herringham will appear in our next issue.]

## SOME PRACTICAL POINTS IN THE USE OF THE CYSTOSCOPE.

By Capt. W. GIRLING BALL, F.R.C.S.

It is not so many years ago that the cystoscope was first used in this Hospital, yet during this period, so rapid has been its development, that it is now regarded as an essential in the armamentarium of the general surgeon, not only in making a diagnosis of cases of vesical disease, but also as an instrument in aiding the diagnosis, prognosis and treatment of both vesical and renal affections. This has become possible by the introduction of the irrigating and catheterising cystoscope. The introduction of the former of these marked an exceedingly important step in the evolution of the instrument, for whereas previously it was frequently impossible to make a diagnosis owing to the turbidity of the distending fluid in the bladder, which arose in the interval between distension and introduction of the cystoscope, it is now possible to obtain the necessary view before such a condition arises. Whereas cystoscopy previously had to be delayed often for days and weeks owing to the discharge of pus and blood into the interior of the bladder, it can now be carried out at any time—in fact, it is an advantage to do so during such periods in order to discover the source of origin of the abnormal urinary constituents. It is for these reasons that the irrigating cystoscope has replaced the older types of instruments. It is not my intention to dilate on this, however, but rather to point out the value of the catheterising cystoscope in connection with a number of conditions found in the urinary tract. The instrument used is also of the irrigating type, with the addition of a tube alongside and encompassed in the wall of the main shaft of the apparatus, capable of carrying specially made bougies and catheters.

Catheters can be used for a variety of purposes :

(1) To define the presence or absence of one or both kidneys.

(2) To collect the urine from either kidney.

(3) To empty a hydro- or pyonephrosis.

(4) To fill the renal pelvis with fluid opaque to X rays (pyelography).

(5) To wash out the renal pelvis.

(6) To act as insulators of platinum terminals for diathermic treatment of bladder lesions.

Bougies have a more limited use :

(1) To define the presence and abnormalities (*e.g.* strictures) of both ureters.

(2) To outline the position of both ureters by radiography if opaque instruments are used.

(3) To demonstrate the relation of small shadows discovered by X rays to the lumen of the ureter.



(4) To mark the course of the ureter in certain abdominal or pelvic operations.

For many of these purposes catheters can be equally well utilised, but as they are more liable to kink and thus destroy the lumen of the tube and render it useless, bougies are to be preferred, thus avoiding the destruction of an expensive piece of apparatus. Both catheters and bougies can be rendered opaque to X rays by impregnation of the necessary materials into their composition, which renders them exceedingly valuable for radiographic purposes. Moreover, alternate translucent and opaque markings on the catheter serve a purpose of locating the exact distance of an obstruction or shadow from the vesical orifice in the bladder. Let me now turn to some of the points of advantage of these instruments.

#### THE DEMONSTRATION OF THE PRESENCE OF A KIDNEY.

There are, unfortunately, a number of instances in the annals of surgery in which the only kidney present has been removed for some diseased condition, with the obvious unbeneficial result. Congenital absence of one kidney is a rare condition, however, but unless some investigation has been made to certify the fact that both kidneys are present, an accident will happen from time to time. Again, even though both kidneys are present, it is oftentimes important to know that they are each of them carrying out their allotted task; more especially is this the case if one kidney is known to be diseased, and one must be satisfied that the other is capable of carrying out the renal function to an extent compatible with safety in the event of some radical operation, such as nephrectomy, being carried out on the diseased organ. No operation ought to be performed on a kidney, especially if it is likely that it may have to be removed, unless the surgeon is satisfied that the opposite kidney is present, and further, that if it is known to be present, before he has ascertained the fact that it is capable of maintaining equilibrium during the temporary and possibly permanent inaction of the kidney operated upon.

It is not sufficient to make a cystoscopic examination to observe the ureteric orifices; both of these may be present, and both appear to be working, and yet a kidney may be missing. Routine ureteric catheterisations, prior to the recommendation of renal operations, should always be performed on the grounds of safety to the patient.

*Separation of the urine.*—The natural sequence of events to the recognition of the presence of both kidneys relates to their respective capacities of carrying on the renal function. By far the best method of performing this examination is by the passage of catheters into the ureters of the two kidneys.

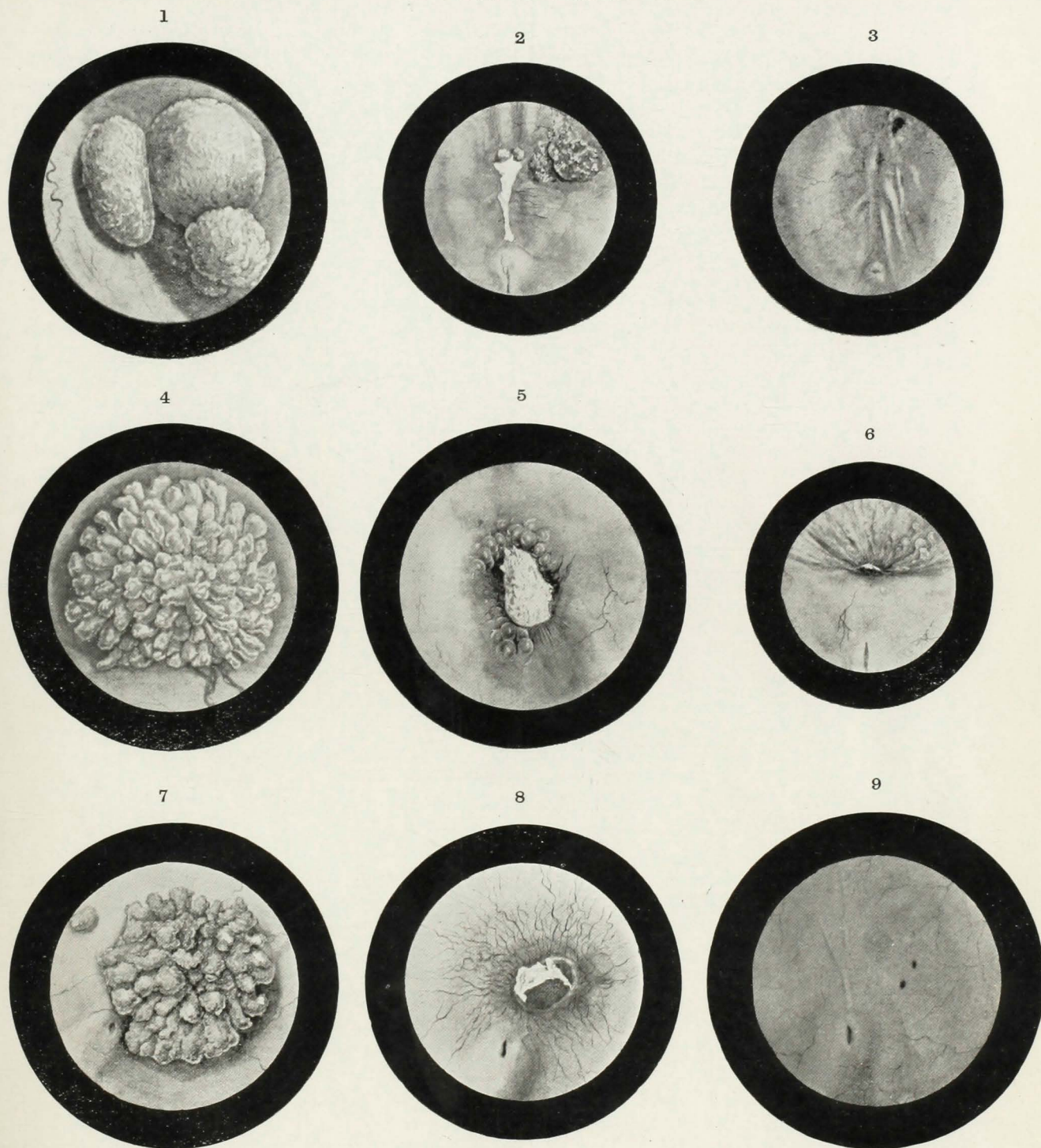
The older methods of segregation are becoming obsolete and are unreliable; it is impossible to be quite sure in the case of disease of both kidneys that the bilateral collections have not become contaminated by the condition present in the bladder-wall, and that the kidneys are really the cause

of trouble. This is specially tiresome in those diseases in which both the kidneys and the bladder are so often involved—*e.g.* tubercle, pyogenic pyelitis, etc. A negative result on one side with positive evidence on the other is obviously valuable information, but the simultaneous collection of pathological urinary contents in both tubes is not of the same value. The passage of the catheters obviously avoids this fallacy, eliminating the bladder as a possible source. The argument may be put forward that it is not without its dangers, and that the chances of infecting an otherwise undiseased kidney are considerable. This is, of course, a possibility, and has occurred, but very rarely. Attention to obtaining free diuresis before the examination, scrupulous care in sterilisation of all the instruments used, and repeated and thorough washing out of the bladder, are essential. The use of a direct-vision cystoscope still further minimises the risk. It has fortunately been my lot never to see any harmful result from this method of investigation.

There are one or two points of practical importance. It is desirable to have complete information as to the character of a 24-hours' specimen of the urine before the examination is made, in order to be able to compare the composition of each renal specimen with the combined excretion. The patient should be given large measured quantities of fluids to drink prior to the catheterisation; the use of diuretics is also indicated. No anæsthetic is necessary for the examination—in fact it is better that such should not be used, so that the patient can continue to drink while the catheters are in position. The information to be obtained from the specimens collected (in sterilised flasks) includes an estimation of the amount of urine passed by each kidney in a given time, the specific gravity, the presence or absence of abnormal constituents, the estimation of the urea, and, if large quantities are collected, the nitrogen content, the reaction of each to the phloridzin and phthalein tests which constitute the more important pieces of evidence which are required to estimate the renal function of each kidney. With regard to the value of this examination, it corresponds to the demonstration of the presence of both kidneys, in that unless the remaining kidney is sound or has sufficient renal capacity, nephrectomy must not be performed, and other operations should only be advised under conditions of great urgency. It frequently happens that both kidneys are involved in calculus disease, giving rise to considerable trouble, and requiring operation for the relief of suffering. Such an examination as the above will define which kidney is to be tackled, if either, and so forth. The test is of exceeding value, and in my experience has avoided a catastrophe on more than one occasion.

*To diagnose a hydro- or pyonephrosis.*—The diagnosis of these conditions does not commonly present any formidable difficulty, but on occasion the distinction of cystic swellings in the abdomen is not easy. The time-honoured trio of gall-bladder, kidney and ovary, to which may be added





TO ILLUSTRATE CAPT. W. GIRLING BALL'S PAPER ON "SOME PRACTICAL POINTS IN THE USE OF THE CYSTOSCOPE."

*W. Thornton Shiells.*

*Adlard & Son & West Newman, Ltd.*





pancreas, may each and all of them resemble each other, and that which any may resemble more than another is a distended renal pelvis. The passage of a catheter into the ureter will soon decide the point. The contents of a pyonephrosis are often too thick to pass along the lumen of the catheter, and thus the investigation may be misleading in its results, but it is always worthy of a trial, for should the swelling collapse, the diagnosis is certain. There is yet another value of the method: granted that an abdominal tumour is connected with the kidney, it serves to differentiate between a solid and a fluid swelling.

#### PYELOGRAPHY.

Of recent years the catheter has been utilised in order to define the shape and capacity of the renal pelvis by the passage of measured quantities of fluid along the catheter after it has been passed. Certain innocuous fluids such as collargol or thorium citrate—the latter for preference—are used for this purpose, owing to their opacity to X rays, thus serving the double purpose mentioned above. The latter fluid is preferred, owing to its being a cleaner fluid to work with, its greater opacity, and thus possible use of dilute solutions, its apparently harmless effect on the kidney tissues, for in no case that it has been used has albuminuria followed—a condition frequently seen with the use of collargol, although the same method of introduction has been used. The fluid is run into the renal pelvis under the pressure of height rather than by means of a syringe, although the latter, if carefully carried out, is not harmful. This is best done under the X-rays screen, the in-flow thus being watched. When the pelvis is filled the back-flow can be observed to pass down the ureter; the second indication of full distension of the pelvis is noted by the patient, who has a sensation of pain in the renal region under examination. Over-distension of the pelvis is rigorously to be avoided, otherwise albuminuria, and even hæmaturia, usually lasting for a few days, may be set up, suggesting damage to renal tubules, which has been shown by experimental evidence to occur.

In my opinion this method of examination should not be carried out as an experiment, but only when it is considered desirable as a means of making an exact diagnosis of some of the more obscure abdominal conditions. The occasion for its use does not thus arise very frequently, but it has given very valuable information.

Normally the renal pelvis holds from 4–10 c.c. of fluid when fully distended. An amount of fluid required to give the above tests beyond this indicates a distension of the pelvis.

The use of an anæsthetic in carrying out the investigation is contra-indicated, the pain experienced by the patient acting as the chief indicator in defining full distension. It is inadvisable to pyelograph both kidneys at the same sitting.

Let us now pass on to define some of the uses of pyelography. A knowledge of the normal appearance of the renal pelvis as seen in a pyelogram is essential. Certain definite types are recognised; deviations from these types are evidence of abnormality. The demonstration of a normally shaped pelvis is sometimes an important clinical observation; for example, the absence of a distended pelvis in a case of ren mobile serves as an indicator as to the inadvisability for a fixation of the kidney in that type of person whose symptoms are largely those of the neurasthenic type; conversely, the demonstration of a distended sac demands that nephropexy should be performed. Again, the presence of a normal pelvis by this method in a case of cystic swelling in the region of the kidney excludes a disease of that organ. The following case is interesting in this connection: A patient was admitted to hospital with symptoms suggesting appendicitis, but with an associated hæmaturia. Cystoscopy and radiography failed to demonstrate the cause of the latter; there was no bacilluria. The patient had a moveable kidney, and it was thought that the hæmaturia might have been due to this condition, possibly with an abnormal renal artery over which the ureter was kinked. A typical picture can be obtained of this condition, and thus pyelography was performed. No such picture was obtained. Beyond the presence of blood, there was no other renal abnormality in the urine. Appendectomy was performed, the tip of the appendix being found attached to the renal pelvis. The normal pyelogram, in this case, excluded the kidney or the ureter as being the primary cause of this condition.

Cases of early hydronephrosis associated with moveable kidney cannot be diagnosed by any other method than that under discussion. It is easy enough to do this when a definite sac can be felt, but at this period a certain amount of destruction of renal tissue has occurred, which can be avoided if pyelography is carried out when symptoms first appear, as a routine measure, and repeated, if necessary, at intervals. Not only can the early dilatation of the pelvis and the calices be observed, but the actual site of the ureteric kink can be demonstrated. So far as an abnormal renal artery is concerned as being the cause of the kink, a typical picture aids materially in making an exact diagnosis. In the more advanced cases of hydronephrosis, as a rule pyelography is not called for, except as a means of demonstrating the full extent of the disease and if there is any doubt in confirming clinical observation.

Yet a further value of the method is to demonstrate the shape of the pelvis in cases of renal growth. In this condition the growth usually bulges into the pelvis and distorts its shape, giving rise to a characteristic picture. The clinical diagnosis of these growths is frequently difficult, and can only be arrived at by a process of exclusion of other conditions. This method may thus be helpful in confirming the diagnosis. Other conditions have been met with in which



some help has been obtained, but in the main these are the most important so far as the kidney in its normal position is concerned. The following case, however, is an instructive one, as illustrating its use in diagnosis of a kidney in an abnormal position. A man came under observation with a firmly fixed swelling in the right iliac fossa. It was thought to be a carcinoma of the cæcum, although there was little clinical evidence of this beyond some pain in this region. The kidney, however, on that side of the abdomen could not be felt, although the patient was thin. Pyelography demonstrated this swelling in the right iliac fossa to be the kidney abnormally placed, which proved to be the case at a subsequent exploratory operation for the removal of his appendix. Kidneys abnormally placed often give rise to difficulty in diagnosis, hence the obvious application of the method.

#### USES OF THE OPAQUE CATHETER OR BOUGIE IN URETERIC CONDITIONS.

The ureter does not frequently depart from its normal relationship to the surrounding structures with which it is in contact. On the other hand, it quite frequently happens that in radiograms of the abdomen and pelvis shadows are demonstrated which, though lying in the neighbourhood of the ureter, have in reality nothing to do with lesions of it. It is often important to demonstrate whether such shadows are in the lumen of the ureter or not, especially if renal symptoms suggest that such may be the case. From time to time cases of hæmaturia come under observation in which the routine radiography demonstrates a shadow which, although lying in the region of the ureter, from its appearance indicates that it is due to some other condition than appertaining to the ureter—for example, pelvic phlebitis, tuberculous glands in the iliac fossa, appendicular concretion, faecal concretions in other parts of the bowel, and so forth. The passage of an opaque bougie and the demonstration of the relation of the latter to the shadow by radiography confirms the suspicion that such are not connected with the renal tract. On the other hand, if the shadow is really one of a stone in the ureter, the intimate contact of the bougie will the better confirm the diagnosis. Passing still further, the passage of the bougie in a case of ureteric calculus serves two other purposes; it proves whether or not the calculus is blocking the ureter completely, if it cannot be passed beyond it, and this serves as an indicator for early operative procedures; and, secondly, it may serve to dislodge a temporarily arrested calculus and encourage its passage down the ureter. This has happened more than once in my experience. Yet again, by the use of bougies with alternate opacities of equal measure marked on them, the exact distance of the calculus from the vesical orifice may be estimated, and if necessary on a subsequent observation, any alteration in its position notified. The method can also be used to

demonstrate the site of a ureteric stricture, or by the passage of opaque fluids through a catheter, the cause of a ureteric or renal fistula—clinical evidence of primary importance preceding radical operations. Furthermore, a bougie can be inserted into either or both ureters preceding an operation on structures with which they lie in intimate contact, and where they can be easily damaged during the course of such—for example, in such operations as removal of the uterus in malignant disease, or abdomino-perineal resection of the rectum. It is also useful to carry out this procedure in certain operations on the bladder such as local excision of papillomata or carcinomata, which may be situated near or at the ureteric orifice. Recently it proved to be a useful guide in the transplantation of the bladder with its ureters into the sigmoid flexure in a case of ectopia vesicæ.

#### USES OF CATHETERS IN TREATMENT.

Not only does ureteric catheterisation prove to be useful in diagnosis, but there are a variety of instances in which it can be utilised in treatment. At the present moment the ground has been comparatively little explored, but with experience it is recognised that there are many conditions in which advantage can be taken of the apparatus.

*Hydronephrosis and Pyonephrosis.*—During the course of an operation for the removal of a large hydro- or pyonephrosis it is sometimes necessary to aspirate the sac on account of the large amount of fluid which it contains. It may even be necessary to perform this operation in two stages, first a nephrostomy being done and later a nephrectomy; even if this is not the case, the sac may be accidentally punctured during the operation, thus filling the wound with the contents of the sac. It is obvious that it would be an advantage to get rid of this collection prior to the operation in order to avoid these disadvantages during its performance. This is the case. Moreover, when a pyonephrosis is present, by irrigation through a catheter carried out for some days previously a better condition of affairs can be reached than would otherwise be the case. Unfortunately it is not always possible to drain a pyonephrosis owing to the mucoid consistency of its contents; this does not, however, preclude an attempt being made; even if the fluid fails to be evacuated, the mere passage of a catheter frequently stimulates the evacuation of pus alongside the catheter, or down the ureter itself after its removal. The passage of a catheter is also helpful in displacing a calculus from the mouth of the ureter in cases of temporary acute hydronephrosis associated with severe symptoms of renal colic. Some years ago I reported a case in which this was done for acute kinking of the ureter in a case of mobile kidney with very severe pain lasting for some hours, with considerable relief of the symptoms.

The avoidance of two operations, and the lessening of the chances of fouling a wound, together with the relief of



acute symptoms, are the advantages claimed for this plan of procedure.

*Pyelitis*.—The renal pelvis has been the site of attention of urinary surgeons of recent years. In cases of chronic pyelitis due to *B. coli communis* or micro-organisms other than *B. tubercle*, in which there is no causative factor such as a renal calculus or ureteric kink, irrigation of the renal pelvis has been tried, and is said to be of service. It is difficult to satisfy oneself that this is the case. It is still a question much in dispute as to the origin of these infections, but in all probability it takes place through the blood or lymph stream, at least through the kidney substance itself. It is difficult, therefore, to understand the rationale of pelvic irrigations unless there is some blockage to the discharge of the urine. Moreover, if this method is to prove of any service at all it is obvious that it must be carried out frequently, or the catheter must be left in for considerable periods, which has obvious disadvantages. Views on this form of treatment are very various.

#### "FULGURATION" OF BLADDER GROWTHS.

This is not in reality connected with this question except that the instruments used are the same, the catheter serving as the insulating material for the platinum wire which is used as the terminal for burning the growth. The operation consists in the removal of bladder papillomata by passing a high-frequency current along this wire, the circuit being completed by affixing a leaden plate to some other part of the body.

The platinum terminal is embedded into the portion of the growth which it is intended to destroy.

This method of treatment is chiefly applicable to dealing with papillomata of the bladder, either single or multiple and of moderate size; the tissues are burned until whole of growth has been destroyed, special attention being paid to its base. For the most part it is useful in the treatment of small papillomata, either single or multiple, which can be completely destroyed in quite a short period of time. As a matter of fact it is applicable to even the larger growths, if the surgeon is prepared to spend a considerable period of time in the performance of the operation, which may last for anything up to two hours. It is desirable from the point of view of the patient that as far as possible the destruction should be carried out at one sitting, but frequently several attempts must be made ere the whole has been destroyed. It may not be necessary to destroy the growth if the pedicle of the growth can be reached and dealt with; in this way the whole can be washed out through an evacuator. It is not essential that an anæsthetic should be given unless the sitting is likely to be prolonged. The advantages of dealing with growths in this way are considerable. The liability to recurrence is said to be diminished; certainly there is no fresh tissue, such as along the site of the suprapubic incision, for

implantation to occur upon. In my series there has been no recurrence.

Secondly, the disagreeable consequences of a suprapubic cystotomy are avoided.

Thirdly, the patient seldom requires to remain in bed for more than forty-eight hours and not at all in the case of small growths.

Fourthly, in none of the cases that I have treated in this way has there been any subsequent cystitis—a sequel of suprapubic cystotomy which is liable to occur.

Fifthly, it is quite easy to avoid damage to the ureter or its orifice—a factor not always the case with the open operation.

These, then, are the many uses to which the cystoscope has been put, and no doubt with the improvement both in the instruments and surgical technique there are other methods which will follow. It is not essential for me to point out that many of the facts that have been described are purely of theoretical value, but at the same time the methods of research which have led to these findings have so improved the technique of genito-urinary surgery that the theory has led to practical results of primary importance. Both in diagnosis, prognosis and treatment the cystoscope is having and will continue to have its day.

The illustrations demonstrate the effect of high-frequency currents on bladder papillomata. 1, 4, 7 are pictures of the original papillomata. 2, 5, 8, the appearance seen ten days after the treatment has been carried out, namely ulceration at the root of the pedicle. In Case 2 a further application of the current was necessary. 3, 6, 9 show the appearance at the end of a month. All have been examined since; the lesions are completely healed and there is no evidence of recurrence.

## MEDICAL NOTES.

By Sir THOMAS HORDER, M.D.

(Continued from p. 26.)

### ON PULMONARY TUBERCULOSIS.—continued.

(62) Hæmoptysis in a young man who is apparently healthy should be regarded as evidence of phthisis, and he should be treated accordingly. But the practitioner who gives this advice must be prepared for a lack of gratitude, if not for actual complaint, later on. The prompt treatment of phthisis at this early stage usually results in a cure, in which event the patient may throw doubt upon the diagnosis, and may resent such interruption of his career as was entailed by his treatment. If, however, the practitioner makes light of the hæmoptysis, the disease is likely to become more firmly established, in which case he lays himself open to a charge of neglect in that he did not insist upon treatment after the initial hæmorrhage.



Whence it is seen that, whether the doctor is competent or careless, he stands an equal chance of incurring his patient's displeasure.

(63) *Hæmoptysis* occurs at three different stages in the course of *phthisis*. The source of the blood and the significance of the hæmorrhage are also different in the three stages:

(i) *Early in the disease*.—The hæmoptysis is often the first symptom (*vide* § 62), and it may be the only one. The blood is small in amount, rarely more than a couple of drachms. It is unaccompanied by sputa, and often unaccompanied by cough, welling up into the mouth by the act of clearing the throat (*fluor sanguinis*). Constitutional symptoms are often quite absent. Not infrequently the incident wakens the patient in the night. The source of the blood is the congested bronchi near to the tuberculous focus. The chief significance of this type of hæmoptysis is its relation to diagnosis.

(ii) *During the course of a well-established case*.—The hæmorrhage is accompanied by cough and often by slight fever. After the first bout of bleeding the hæmorrhage "tails off" slowly, the whole process lasting from a few hours up to a week or ten days. Recrudescences sometimes occur, especially if treatment is casual. The blood comes from an ulcerated vessel in the wall of a cavity. A period of considerable betterment may follow the event, or it may usher in a serious set-back with extension of the disease-process.

(iii) *As a late event in an advanced case*.—The hæmorrhage is large in amount and is often fatal. The blood comes from a ruptured pulmonary aneurysm lying in a cavity. The cavity fills rapidly, the blood overflows into the neighbouring bronchus and reaches the trachea, whence it is in part inhaled into other parts of the lung and in part escapes from the mouth.

(64) The blood of a hæmoptysis in a suspected case of early *phthisis* is often sent to the laboratory to be examined for tubercle bacilli—a futile proceeding, and, if the practitioner is influenced against a diagnosis of tuberculosis by receiving a negative report, a dangerous one. Even when the disease has reached the ulcerating stage blood is very unlikely material in which to find tubercle bacilli; in the blood which is expectorated at the outset of the disease (*vide* § 62) the search is hardly worth undertaking.

(65) Never neglect to confirm the diagnosis of *phthisis* by the demonstration of tubercle bacilli in the sputa, however "classical" the signs and symptoms may be. Anæmia, wasting, sweats, quotidian intermittent fever, purulent sputa, hæmoptysis—in association with physical signs of consolidation or of cavity—may all of them occur in new-growth, lymphadenoma or bronchiectasis.

(66) There are three diseases in which the normal

resistance to infection by the tubercle bacillus is so much lowered that *phthisis* may be present in a latent fashion for a considerable time without discovery—diabetes, cirrhosis of the liver and leukæmia. So low is the tissue reaction to the tubercle bacillus in diabetes that it is not uncommon to find the development of pneumothorax the first evidence of the presence of *phthisis*.

(67) There is a marked family tendency to *phthisis*; there is also a marked family tendency to particular types of *phthisis*. In one family hæmoptysis is common, in another pleurisy with effusion, in a third extensive fibrosis of the lung. In reference to any particular case, it is useful to know not only the family incidence of the disease but the family type of tissue reaction.

(68) Although certain general principles governing treatment in *phthisis* are well established, there are so many differences observable in the manifestations of the disease in individual cases that it is of great importance to select carefully a scheme of treatment which gives promise of success in each case. This selection calls for judgment and experience on the part of the medical adviser, who does well to consider not only the type of case as regards the pathological process in the lungs and other organs, but also the patient's temperament; for intelligent co-operation is essential to success.

(69) Some of the most difficult patients to help are those who leave the whole burden of the treatment to the doctor and themselves evince complete inertia. It is true that in a few cases, despite this attitude, things go well; but in many more cases such an attitude spells failure, and patients should be warned against it at the very beginning of their treatment. It should be explained to them that in order to regain health, and to keep it, they must make the business of their cure a matter of hard work over a lengthy period, just as they would make any other goal that is worth reaching a matter of concentrated effort under expert guidance.

(To be continued.)

## A CASE OF SARCOMA OF TONGUE.

By W. E. HEATH, M.R.C.S., L.R.C.P.



AM indebted to Colonel D'Arcy Power for permission to publish the details of this case.

The patient, Emma A—, æt. 50, came to the Hospital in March, 1918, complaining of a lump at the back of her tongue.

She stated that she had been quite well until January, 1918, when she noticed a lump at the back of her tongue. As the lump was increasing in size, the patient was advised to come to Hospital.

In March, 1918, she was seen in the Out-patient Department by Mr. Blakeway, and a diagnosis of sarcoma of the tongue was made.



On first coming to Hospital the patient seemed to be a fairly healthy-looking woman, but was said to have lost weight for the last two years. Her eyes reacted to light and accommodation, and her teeth were mostly false. There was found to be a hard, round lump at the back and left side of the tongue, which was  $1\frac{1}{2}$  in. in diameter, and invading the left anterior pillar of the fauces. There were no glands palpable in the anterior or posterior triangles of the neck.

The growth had not caused the patient any pain, nor had it caused any difficulty in swallowing.

The case was shown at "consultations," where it was suggested that the lump might be a gumma, so a course of injections of arsenic was given, extending over some weeks, but the lump did not seem to get any smaller.

On September 7th, 1918, the patient was admitted to Hospital for the removal of the growth, which, by this time, had become a little larger. She still appeared quite healthy, and the lump was not causing her any pain.

On September 13th, 1918, Major Rawling removed the growth. It was found to possess a capsule, from which it was shelled with a certain amount of difficulty. The edges of the wound were brought together with silk sutures, and the operation was completed with a very small amount of hæmorrhage. The patient made a rapid recovery, and was feeling quite comfortable when discharged from Hospital.

The tumour which was removed was found to be a round lump of hard consistency, about  $1\frac{1}{4}$  in.  $\times$   $1\frac{1}{2}$  in., covered on its dorsal surface with epithelium. Tongue muscle could be recognised in the growth.

On microscopical examination the growth was found to be a round-celled sarcoma.

On October 8th, 1918, the patient came to the Hospital with a recurrence at the site of the original growth. She was admitted to Hospital for further operative treatment.

On October 14th Colonel Power removed the growth with a wide margin of healthy tissues. It was not encapsuled, and microscopically it resembled the original growth in all respects. Up to now there has been no further recurrence.

The rarity of cases of sarcoma of the tongue makes it worth while publishing individual cases. The record of those hitherto operated upon will be found in the *Guy's Hospital Reports*.

#### REFERENCE.

A paper by Fripp and Swan in the *Guy's Hospital Reports* for 1902, vol. lvii, pp. 89-131.

## STUDENTS' UNION.

### RUGBY FOOTBALL CLUB.

ST. BARTHOLOMEW'S HOSPITAL *v.* ARTISTS' RIFLES XV.

On January 4th the Hospital visited Gidea Park to meet the Artists' Rifles, but unfortunately they could only field a somewhat

weakened side on account of the recent demobilisation, and were defeated by 3 goals and 5 tries (30 points) to a try (3 points). Settling down at the outset Bart.'s soon asserted their superiority, and showing excellent form behind the scrum crossed the Artists' line on six occasions.

During the whole of this half the play was in our opponents' half, and it was their keen tackling alone which prevented even a bigger score.

Crossing over, Bart.'s were content with their lead of 24 points, and the play was left largely to the rival packs, which were very evenly matched, with the result that the Hospital three-quarters had few opportunities of adding to the score.

Tries were scored by Thomas (3), Griffith-Jones (2), Melle, Sanderson and Johnstone, who also placed 3 goals.

ST. BARTHOLOMEW'S HOSPITAL *v.* N.Z.M.G.C. (GRANTHAM).

The New Zealanders—one of the strongest teams in the Midlands—were the opponents at Winchmore Hill on January 18th.

The game, which was most keenly contested throughout, ended in a well-deserved win for the Hospital by 3 goals (15 points) to *nil*.

Attacking from the start, a clever movement sent in Melle on the right wing with an excellent try, which the same player converted, while shortly afterwards Krige, breaking away from the line-out, scored a typical individual try for Johnstone to goal.

The remainder of the half was vigorously contested by the forwards, in which department the New Zealanders were especially strong, but no further score resulted.

For some time after the re-start the Hospital were kept on the defensive—the spoiling tactics of our opponents being most effective—while their fierce forward rushes were quite a feature of the game.

Returning to the attack clever work between Cockell and Melle ended in Shaw scoring a try in an easy position for Johnstone to convert.

## CORRESPONDENCE.

### "HEART-STRAIN."

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

SIR,—I trust you will allow me a small space in the JOURNAL to reply to Sir Thomas Horder's criticism of my letter on the above subject, which appeared in the January number. I was, as Sir Thomas Horder says, dealing with the young healthy heart when I stated that—"I was of opinion it could not be damaged by the muscular exertion involved in the training and life of an athlete." I entirely agree with Sir Thomas that the heart of the ordinary sedentary citizen—especially if he is middle-aged—can be damaged by over-strain.

With regard to the question of sinus arrhythmia indicating an impairment of the heart, I am fully aware that both Mackenzie and Lewis differ from me on this point. I cannot, however, believe that an irregularly acting heart, whatever the cause of that irregularity, is as good and stable as a regularly acting one, and I speak from practical experience when I say that the large majority of young men I have seen whose hearts have broken down under strain have had sinus arrhythmia and a history of some heart trouble in the past; whereas, in cases of shell-shock, etc., where there is a regularly acting heart, I have usually found that heart has remained quite sound despite the mental and physical strain. It would be of great interest to get the opinions of those Bart.'s men who have had experience of such cases in military hospitals, with regard to the connection and co-existence of sinus arrhythmia and cardiac and circulatory trouble, and I shall look forward to seeing some letters in the JOURNAL on this subject. I have always regarded Sir Thomas Horder's opinion on points of clinical medicine as exceptionally well-balanced and well-considered, and I have valued it accordingly. I am quite open to altering my opinion if it does not stand the test of time and further research. At present, however, my clinical experience leads me to believe that—other things being equal—a heart exhibiting sinus arrhythmia does not stand unusual strain, and is not so stable as one that has a perfectly regular rhythm.

I am, Sir,

Yours faithfully,

LESLIE THORNE-THORNE.

108, HARLEY STREET;

January 8th, 1919.



## MITRAL STENOSIS.

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

SIR,—Mitral stenosis, I believe, is a condition very rarely found in men. But during the last eight months, in the battalion to which I am attached, I have met with something between twelve and twenty cases of what I consider to be mitral stenosis. During that period there has been a large turnover of men arriving on drafts and disappearing as casualties, and I regret that, owing to exigencies of the times, I was unable to collect and make notes on the cases as they cropped up. I mention them now, since it seems to me that, from the point of view of ætiology, there may be some relation between the occurrence of the disease and the conditions of hardship to which soldiers on active service are exposed, involving continual and often prolonged exposure to wet and cold.

I had it frequently drilled into me at Bart.'s that mitral stenosis by itself was a chronic and progressive condition, and not found as the result of acute rheumatic endocarditis. Now none of the men in question gave a history of acute rheumatism or scarlatina. Is it not possible, therefore, that prolonged exposure to conditions of wet and cold favours the production of this chronic, progressive condition, possibly of rheumatic nature, in the same way that it gives rise to myalgia? If so, mitral stenosis would then be another war disease.

Now with regard to the cases themselves. Symptoms were present in some cases and absent in others, the latter were only discovered accidentally. Symptoms, when present, were attacks of giddiness, shortness of breath and præcordial pain. The latter was not constant. There were never any signs of hypertrophy of the left ventricle. A thrill at the apex, presystolic in time, was detected in a few cases, but not in all. In all cases a rough murmur was heard running up to the first sound, which was short and sharp.

I should be glad to know if any other medical officer has noticed anything in this direction or can give me information on this subject.

Yours faithfully,

B.E.F., FRANCE;

January 14th, 1919.

B. B. SHARP,

Lieut., R.A.M.C.

## REVIEW.

MUSINGS OF A MEDICO. By KENNETH ROGERS, M.D. (Erskine Macdonald, Ltd.) Pp. 72. Price 3s. 6d. net.

Dr. Rogers is an old Bart.'s man, and we are glad to have the opportunity of bringing his very pleasing little book of verse to the notice of our readers. The volume contains some sixty short poems, which deal with a variety of topics. Some of the verses are suggested by the war, others by travel. But the author is undoubtedly in his happiest vein when his pen leads him to thoughts of the country. Dr. Rogers is an obvious lover of flowers. "On Man, Bees and Flowers" is a delightful effort; equally good is the rhyme of "The Dragon Fly." Lovers of verse will appreciate these musings, and we commend the book to our readers.

## APPOINTMENTS.

CLARKE, P. SELWYN, M.C., M.R.C.S., L.R.C.P., appointed House Physician, Royal Victoria Hospital, Dover.

GALSTAUN, G., M.R.C.S., L.R.C.P., appointed R.M.O. at Lord Mayor Treloar Cripples' Hospital and College, Alton.

## CHANGES OF ADDRESS.

BOURKE, J. B., c/o Dr. Colmer, Yeovil.

CLARKE, P. SELWYN, Royal Victoria Hospital, Dover.

GALSTAUN, G., Lord Mayor Treloar Cripples' Hospital and College, Alton, Hants.

GURNEY-DIXON, S., Deerhurst, Lyndhurst.

HAMILL, P., 84, Wimpole Street, W. 1. (Tel. Padd. 2452.)

PADWICK, J. C., 154, Oakwood Court, Kensington, W. 14.

DE SEGUNDO, C. S., 39, Howitt Road, Belsize Park, N.W. 3.

WHALE, L., 132, Harley Street, W. 1. (Tel. Padd. 2828.)

## BIRTHS.

BOWER.—On December 20th, the wife of Capt. H. J. Bower, R.A.M.C., Netley, of a son.

BURTON.—On December 3rd, at Bethnall House, N.E., Dorrit, the wife of G. E. Burton, Surgeon-Lieut. R.N. (Temp.), of a daughter.

CLEMENTI-SMITH.—On December 12th, at a nursing home in Clifton, the wife of Major H. Clementi-Smith, R.A.M.C.—a daughter.

FOSTER.—On December 11th, at St. Loyes, Exeter, Anita, wife of Major Raymond L. V. Foster, R.A.M.C., of a son.

KITCHING.—On December 6th, at 24, Charleston Road, Eastbourne, the wife of Capt. R. L. Kitching, R.A.M.C., prematurely of a daughter (stillborn).

LYSTER.—On December 7th, at Sandgate, Kent, Ada Erica (*née* Neal), wife of Capt. R. G. Lyster, R.A.F., of a son.

PERKINS.—On January 5th, to Dr. and Mrs. Philip M. Perkins, Tunbridge Wells—a son.

RIVIERE.—On January 5th, at St. Giles' Plain, Norwich, to Veronica, wife of Bernard B. Riviere, F.R.C.S.—a son.

## MARRIAGES.

CHAMBERS—ALDERSON.—On November 30th, at St. Mary Abbot's, Kensington, Lieut.-Col. Guy Oldham Chambers, R.A.M.C., son of Dr. and Mrs. H. W. Chambers, 101, Goldhawk Road, W. to Adèle Maude, widow of Lieut. A. R. Alderson, R.E., of Cirencester.

FRANKLIN—CARVER.—On October 17th, at St. Margaret's Church, Ockley, Major George Denne Franklin, B.A., M.B., B.C. (Cantab.), M.R.C.P. (Lond.), Indian Medical Service, to Ethel Janet Carver, formerly Sister Rahere, eldest daughter of the late Rev. H. J. Carver, of Melbury Abbas, and Mrs. Carver, "Hatchlea," Ockley, Surrey.

GURNEY-DIXON—CHAMBERLAIN.—On December 10th, at Essex Church, Notting Hill Gate, Capt. Samuel Gurney-Dixon, M.A., M.D. (Cantab.), M.R.C.S. (Eng.), L.R.C.P. (Lond.), of The Orchard, Lyndhurst, to Hilda, widow of Capt. John Chamberlain, M.C., and daughter of the late Prof. J. H. Poynting, D.Sc., F.R.S., J.P., of Deerhurst, Lyndhurst, Hants.

HADFIELD—IRVINE.—On December 14th, at St. Stephen's Church, Westminster, Geoffrey Hadfield, M.D. (Lond.), Capt., R.A.M.C. (temp.), eldest son of the late J. H. Hadfield, of Plymouth, to Eileen, only daughter of the late W. C. D. Irvine, Irvestown, co. Fermanagh, Ireland.

WHITE-COOPER—TRACEY.—On November 27th, at St. Saviour's, Dartmouth, by the Rev. Stewart Sim, uncle of the bride and Vicar of Lower Brixham, William Ronald White-Cooper, Capt. S.A.M.C., eldest son of Mr. and Mrs. William White-Cooper, of Cradock, S. Africa, to Rosamond Nancy, daughter of Col. H. F. Tracey, C.F., and Mrs. Tracey, of North Ford, Dartmouth, Devon.

## DEATH.

JOYNT.—On December 30th, 1918, at 3rd London General Hospital, Wandsworth, Ivor Wm. Joynt, B.A., B.C. Cantab., only surviving son of Lieut.-Col. H. W. Joynt, of Bournemouth.

## ACKNOWLEDGMENTS.

*A Medical Service for the Genuinely Necessitous Classes of the Community*, by V. T. Greenyer, F.R.C.S.

*The Cholera Controversy*, by A. C. Evarts, M.B.

*The Nation's Welfare: The Future of the Medical Profession*, by Maj.-Gen. Sir Bertrand Dawson.

*The British Journal of Nursing*, *St. Mary's Hospital Gazette*, *The Nursing Times*, *The Medical Review*, *London Hospital Gazette*, *Long Island Medical Journal*, *Journal of the Department of Public Health, Hospitals and Charitable Aid*, *New York State Journal of Medicine*, *The Hospital*, *Guy's Hospital Gazette*, *St. Mary's Hospital Gazette*, *The Journal of the American Medical Association*, *Giornale della R. Società Italiana d'Igiene*.

## 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.



# St. Bartholomew's Hospital



"Æquamemento rebus in arduis  
Servare mentem."

—Horace, Book ii, Ode iii.

## JOURNAL.

VOL. XXVI.—No. 6.]


MARCH 1ST, 1919.

[PRICE SIXPENCE.]

### CALENDAR.

Fri., Feb.	28.—Dr. Calvert and Mr. D'Arcy Power on duty.
Tues., Mar.	4.—Dr. Fletcher and Mr. Waring on duty.
Wed., "	5.—Clinical Lecture (Surgery), Mr. McAdam Eccles.
Fri., "	7.—Dr. Drysdale and Mr. McAdam Eccles on duty.
	Clinical Lecture (Medicine), Dr. Drysdale.
Tues., "	11.—Dr. Tooth and Mr. D'Arcy Power on duty.
Wed., "	12.—Clinical Lecture (Surgery), Mr. McAdam Eccles.
Fri., "	14.—Dr. Calvert and Mr. Waring on duty.
Tues., "	18.—Dr. Fletcher and Mr. McAdam Eccles on duty.
Fri., "	21.—Dr. Drysdale and Mr. D'Arcy Power on duty.
Tues., "	25.—Dr. Tooth and Mr. Waring on duty.
Fri., "	28.—Dr. Calvert and Mr. McAdam Eccles on duty.
Tues., Apr.	1.—Dr. Fletcher and Mr. D'Arcy Power on duty.

### EDITORIAL NOTES.

 WITH the very deepest regret we have to record the death from pneumonia following influenza of Mr. Harry Blakeway, M.S., F.R.C.S., Surgical Registrar to the Hospital. He was taken ill on February 6th and died in Etherington-Smith Ward on February 15th. It is only a few weeks since we had to report the death of Dr. A. E. Stansfeld; to have lost in so short a space of time two of the most brilliant of the younger members of the Hospital Staff is nothing short of a calamity.

Mr. Blakeway had established a reputation which many an older and more experienced surgeon might have envied. As a teacher he was exceptional. For some months he had acted as Resident Assistant Surgeon, and there is no doubt that the strain of his Hospital work had considerably lowered his vitality.

To his widow and children we offer our deepest sympathy.

An obituary notice and appreciation appears elsewhere in this issue.

\* \* \*

It is also with much regret that we have to report the death of two Bart.'s students, namely, Francis Wharton Lemarchand and Lofty Effendi Abdalla Simaika, both of

whom died in Mark Ward, the former on February 12th from pneumonia following influenza, the latter on February 16th from tuberculous peritonitis.

Francis Wharton Lemarchand was perhaps the best-known student Bart.'s has had during recent years. He was the only son of Dr. Arthur Wharton Lemarchand, of Barnstaple, himself an old Bart.'s man, and was born in 1893. He was educated at Mostyn House School, Parkgate, and Malvern College. In his early days he showed promise of becoming a fine athlete, but while at Parkgate he contracted a very severe septic pneumonia with pericarditis and an interlobular empyema. His heart never properly recovered and he had to abandon in a great measure his athletics. He was, however, a fine swimmer and a boxer considerably above the average.

When the war broke out he was at Bart.'s, and after being rejected several times on account of his heart eventually obtained a commission in the Navy as a Surgeon-Probationer. He served six months on H.M.S. "Nessus," and later after a period of study at the Hospital was appointed to H.M.S. "Whirlwind," taking part in the Zeebrugge Expedition. During the action he was transferred to H.M.S. "Phoebe," on which ship he performed gallant service. After serving six months' he returned to the Hospital and quickly passed his Medicine and Midwifery. He was to have taken Surgery in April. Last year before going to Zeebrugge he married.

"Binney," as he was affectionately known to his friends, will be sorely missed at Bart.'s. It was impossible to be dull in his company—he was, in fact, the life of the Hospital, and he leaves a niche which will not be easily filled.

Lofty Effendi Abdalla Simaika was the eldest son of Abdalla Bey Simaika, Legal Adviser to the Egyptian State Railways, and a nephew of Marcos Pasha Simaika, of Cairo. He came to this country about two years ago, and just before his illness was studying for his Final. In his quiet unassuming way he was very popular. His memory was extraordinary, and there is no doubt that had he lived he



would have gone far in the profession of which he was so keen a student.

To the relatives and friends of these Bart.'s men we tender our sincere sympathy.

\* \* \*

Our congratulations to Capt. D. B. Pascall, R.A.M.C., and Capt. H. J. Pickering, R.A.M.C., on being awarded the Military Cross. The following are the official details:

"Temp. Capt. (Act.-Maj.) D. B. Pascall, M.B., No. 11 Field Amb., R.A.M.C.—For conspicuous gallantry and devotion to duty during the operations astride the Arras-Cambrai Road on September 2nd, 1918. He was in charge of the evacuation of casualties from the Front, and repeatedly made journeys over the shell-swept area around Dury and Eteripigny, locating and maintaining touch with R.A.Ps. and bearer posts. Through his disregard of danger the casualties were speedily evacuated."

"Temp. Capt. H. J. Pickering, No. 15 Field Amb., R.A.M.C.—For conspicuous gallantry and devotion to duty from September 25th to 30th, 1918, near Cambrai, especially one night, when, hearing that there was a congestion of wounded at a R.A.P., he went forward through heavy shell-fire and remained all night, collecting bearers from every available source and supervising the clearing of the post. Throughout the whole period he had only one other officer to assist him in the forward area. He inspired his men with his own cheerfulness, energy and endurance."

\* \* \*

We are most pleased to learn that there has been a very generous response to the appeal made in our last issue on behalf of the wife and children of the late Dr. A. E. Stansfeld. It has been suggested that the sum should be devoted to educational purposes, but whatever form the help shall take, it is hoped that a substantial amount will be forthcoming.

May we again remind our readers of the appeal and the desirability of completing this memorial as soon as possible. Dr. Stansfeld was a young man; he was on the threshold of a great career; his all had been put into his advancement in the profession he loved so much. Unfortunately that career was cut short, and we feel sure that many Bart.'s men will wish to honour his name and show their appreciation in a practical form.

To those who have already contributed the Committee tender their sincere thanks.

Subscriptions should be sent to Dr. F. W. Andrewes, the Pathological Department.

\* \* \*

Dr. Norman Moore's book on *The History of St. Bartholomew's Hospital* is a magnificent production, and we desire to congratulate the author most heartily on the completion of a work which must have involved an enormous amount of time, search and patience. The history of London's Senior Hospital is always extraordinarily

fascinating, especially to Bart.'s men, but we must confess that it was not until we came to read Dr. Moore's book that we realised what a large part the old Hospital has contributed to the history of this great city. The author proposes to hand over all profits accruing from the sale of the book to the Hospital funds, and for this reason alone we hope that the first edition will be quickly exhausted. The book is reviewed at some length in this issue.

\* \* \*

Major-General Sir Wilmot Herringham's letter on Medical Education in London, which appeared in the February issue of this JOURNAL, has attracted much attention. The *British Medical Journal* (February 16th, 1919) devotes a column to Sir Wilmot's communication, and fully endorses all he has to say on this most important topic.

The letter we are printing in this issue, if anything, is even more important—in fact we do not remember having read anything more practical on the question of post-graduate study.

There is no reason why London should not become the great universal centre for medical instruction. The opportunity is a unique one, and it is on the lines suggested in Sir Wilmot Herringham's letter that such a desirable end might be attained.

\* \* \*

In view of our comments in the last issue of the JOURNAL, in which we deplored the decadence of the Abernethian Society, we are most pleased to learn that this old and honoured Society has once more been set going. Soon after the publication of our note a meeting was called, over which Mr. Girling Ball was asked to preside. The following officers were elected:

*Presidents:* G. A. Fisher, G. Lyon Smith.

*Vice-Presidents:* H. Corsi, C. Dixey.

*Extra Committee Men:* B. Melle, C. J. Wells.

*Secretaries:* T. Zerolo, N. B. Vinter.

The first Clinical Evening was held on February 20th and proved highly successful. The enthusiasm and interest which was evident throughout the evening left no doubt that Bart.'s is as alive as ever, and still capable of making its presence felt as a potent factor in the medical life of this great city.

\* \* \*

Major R. C. Elmslie, M.S., F.R.C.S., has been appointed Honorary Surgeon to the Royal National Orthopaedic Hospital.

\* \* \*

Sir George Newman, late Lecturer in Public Health at this Hospital, has been appointed Principal Medical Officer to the Local Government Board. Sir George is also retaining his position as Chief Medical Officer of the Board of Education.

\* \* \*



The following gentlemen were nominated to the Resident Staff, commencing February 1st, 1919:

*House-Physicians—*

Dr. Tooth.	A. Gregson Williams.
Dr. Calvert.	F. T. Burkitt.
Dr. Fletcher.	G. Lyon-Smith.
Dr. Drysdale.	G. A. Fisher.

*Medical Receiving Officers—*

C. F. Krige.	H. D. Kelf.
H. W. C. Vines.	N. B. Thomas.

*House-Surgeons—*

Mr. D'Arcy Power.	M. V. Boucaud.
Mr. Waring.	R. L. Williams.
Mr. Eccles.	H. Corsi.

*Surgical Receiving Officers—*

F. Gray.	H. Barbash.
J. E. A. Boucaud.	

*Intern Midwifery Assistant . . .* W. B. Heywood-Waddington.

*Extern Midwifery Assistant . . .* C. W. Bennett.

*House-Surgeon to Ophthalmic Department . . .* N. J. Macdonald.

*House-Surgeon to Throat, Nose and Ear Department . . .* J. A. van Heerden.

*House-Surgeon to Venereal Department . . .* J. J. Gasperine.

*Resident Anæsthetists . . .* D. A. Blount.

C. H. Thomas.

\* \* \*

It is with much sorrow that we learn of the death of Sir Archibald Garrod's last surviving son, who died of pneumonia on February 4th. Lieut. Basil Rahere Garrod passed out of Sandhurst in December, 1915, and was gazetted to the 1st Loyal North Lancashire Regiment. After serving some time in France he became attached to the R.F.C., and was serving with the squadron at the time of his death. His brothers, Lieut. A. Noel Garrod, R.A.M.C., and 2nd Lieut. Thomas A. Garrod, were both killed in France.

The sympathy of Bart.'s men, both past and present, will go out to Sir Archibald and Lady Garrod in their inexpressibly sad bereavement.

\* \* \*

We regret to learn of the death of Dr. William George Kemp, of Oakhurst, Hastings, which occurred with tragic suddenness while in a tramcar on January 24th. Dr. Kemp was born at Alnwick in 1846, and educated at King's School, Canterbury, and at this Hospital. After qualifying M.R.C.S. and L.R.C.P.(Lond.), he was House-Surgeon at Nelson Hospital, N.Z., and in 1870 began practice in Wellington, N.Z., holding the appointment of Surgeon to the Wellington Hospital, and having a wide consulting general practice. He was the first surgeon to perform ovariectomy in New Zealand, where he was highly esteemed for his skill and sterling character. He returned to England in 1892 and took the M.D.(Durham), but retired from all practice shortly afterwards. Dr. Kemp married Charlotte, daughter of Dr. J. D. Greenwood, and leaves a widow, four

sons, and three daughters. One daughter, a King's College Hospital sister, was killed by a German bomb while working at a Red Cross Hospital in Belgium. One son is Major in the N.Z. Medical Corps, one Captain, R.A.M.C., and a third son is in medical practice in New Zealand.

## ON MEDICAL EDUCATION IN LONDON.

(SECOND COMMUNICATION—POST-GRADUATE TEACHING.)

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

**S**IR,—The reform of our education of medical students by the introduction of the professorial system is not the only improvement in medical education that is needed. Post-graduate instruction is hopelessly deficient and its extension is greatly to be desired. We have not only our own graduates to think of, but we are likely to have, and ought to have, a much larger number of Canadian and American graduates than before the war. What are the needs of such men, and how can they best be met?

One feature of the post-graduate teaching in Germany, which was so marked as to strike all visitors, was the immense prevalence of coaching classes given by teachers of the Privat-dozent type. These men, either utilising in-patients or paying out-patients a few pence for attendance, were able to give courses on special subjects, often well illustrated by living examples, which were just of the kind that we call revision classes, though, by reason of the limited scope of each one, they pursued the subject more deeply. I attended such classes nearly forty years ago at Vienna. Since then Berlin has become a great centre for them.

A second attraction was the provision of clinical facilities. If you wished to learn the use of the laryngoscope, the otoscope, the ophthalmoscope, or of any other instrument of clinical research, there were large classes either of in-patients or out-patients held by the professors or by extra-mural teachers, where you could obtain a considerable facility and experience. It was also possible to obtain an appointment as assistant to a professor of surgery, and thereby a large experience in operations such as in England are never done but by the hospital staff. In Germany they are handed over to the assistant.

The lectures of the professors are sometimes extremely good. They are rather elaborate clinical demonstrations than lectures, and were in my day sometimes combined with question and answer which prevented interest from flagging. Both Germans and French, especially the latter, take great pains to learn to lecture. The French certainly have a greater gift of speech than we. But I should like to know how many English lecturers have really practised themselves in speaking fluently and with expression. I



have heard lecturers in our own school who were not fit to talk to the parish pump. Even it would have gone to sleep—as I always did.

Lastly, many men obtain a place in a professor's laboratory. This is done not so much for the sake of the actual work that they are given to do, which is usually some very uninteresting and monotonous series of tests, but that they may have the run of the laboratory, see all that is being done there, and learn the methodical system of work for which the Germans are justly famed.

Would it be advisable, if we could, to provide some such means of instruction as these I have mentioned, and how far, if advisable, would it be possible?

I have heard it said that we do not want strangers, and strangers have said to me that that fact was made so evident that they retreated to France or Germany with all convenient dispatch. I think that view is both churlish and short-sighted. But the same mechanism would suit both strangers and our own graduates, and in providing for the one we should be supplying the wants of both.

We must start by realising that general hospital schools are not the places for post-graduate teaching. It is impossible to combine undergraduates and graduates, and there is too much to do for the former to allow of separate classes. This difficulty applies both to what I have called coaching classes and to clinical work in the wards or out-patient departments. At St. Bartholomew's we, for several years before the war, organised special long-vacation classes in the summer for such of our own old students as wished. But this was all we could do.

On the other hand, there would be no difficulty in admitting graduates to lectures if they wished to come, and it is conceivable that clinical lectures which rose to the level of those of Müller at Munich would attract. It is also possible for a graduate, even if a stranger, to obtain a place in a pathological laboratory, but the scantiness of our resources usually obliges us to require him to pay his own expenses. If professorial units were established, a place as assistant would probably not be difficult to obtain for a man with good credentials.

It is rather, however, to the special hospitals that those graduates look who come to London to improve their knowledge—to Great Ormond Street, Queen Square, Brompton, Golden Square, Moorfields and similar places.

Coaching classes they can get practically nowhere. They do not perhaps represent a high form of education. But they are extremely useful for men who, finding themselves rusty in a particular subject, wish within a limited time to rub up their knowledge of it. As there is no supply there is now no demand for them. But there soon would be, and it is well worth considering whether opportunity should not be given to resident medical officers, registrars, or even assistant physicians to hold such classes in their hospital buildings. It would be a useful addition to many a scanty

income, and since there is no way of learning so good as teaching, it would improve the teachers themselves.

The out-patient practice and instruction at Queen Square and Moorfields is highly admired, and offers as great facilities—especially if a man takes a clinical post—as any hospital in the world can give. Great Ormond Street, too, is much appreciated. But men have told me that the same does not hold good for others. They feel that the visiting physician is in a hurry and does not want to teach, and, going there with a rather high idea of the standard of knowledge and practice at the place, they come away feeling not only that they have not benefited, but that they have been looked upon as rather a nuisance than otherwise. That seems a great pity. We have an immense wealth of clinical material in London. We have many men whose clinical work is as good as any there is, and it is bad for the reputation of London that so little attempt should be made to allow graduates, whether English or strangers—but my remarks apply especially to the latter—to obtain instruction. We shall probably have a very much larger number of visitors in future than we have had in the past. They are, many of them, honestly anxious to learn what they can, and it is much the better policy to give as much, and not as little as possible.

Any such system would require organisation. Those officers of special hospitals who were willing to take part in it, for the good of the country and also in some measure for their own, should form a committee among themselves and see what they could promise. Some hospitals will be able, by means of their crowds of patients, to give more varied clinical demonstration. Others can give greater facility for personal clinical work because the crowd is less. Some men want the one, some the other. There should be some attempt to provide instruction and clinical facilities in all special branches.

Then arrangements should be in some regular fashion brought to the knowledge of graduates in search of such things. They should be able to apply to someone, not necessarily a doctor, who could tell them where they could get the particular things they want, and who might even make the arrangements for them. A regular list of classes, and of the times and places where clinical demonstrations are given, or clinical appointments can be held, would be kept in print and given to applicants. The expenses could be easily covered, and the benefit would be considerable.

I am ambitious for London. I feel that she does not do herself justice, partly through a natural hatred of self-advertisement, partly out of sheer dislike of trouble, and partly also out of dislike of strangers. That indolent and repellant policy is, in my view, a great mistake. It has prevented us from being known, and therefore valued, as individuals, and it has prevented the excellence of English teaching and practice, which is, in my opinion, very high indeed, from being appreciated. I feel inclined to take the



words out of the Royal mouth, and to reiterate, "Wake up England!"

And let me say finally that I feel such a step as this to be not only of medical, but of national, and even of world-wide importance. I am sure that one of the greatest results of the war has been the creation of closer relations between this country and the Dominions on the one hand, and between the Empire and America on the other. But in France I have been brought into close contact with doctors from Canada, from Australia, and from the United States, and I can say, without the least reserve, that their relations with us have been of the most cordial character. We have indubitably learnt much from them and they from us. I think it has been a great pleasure to all of us. America especially had a feeling that we were insular and somewhat stiff and prejudiced. The cordiality with which they were instantly received, the facilities which they were instantly given, and the co-operation which we were as eager to welcome as they to offer, made, as I have reason to know, as great an impression upon their medical officers as upon the combatants. I feel sure that a great deal of misapprehension has been cleared away, and a great deal of very good will created. To continue that should be the aim of all classes in England, and we doctors, by the means I have indicated, can do our share in that work. I hope that in the International Co-operation of Science, which I see has been formally inaugurated, we shall be drawn into specially close connection with those who speak our tongue. I hope to see medicine and the allied sciences in England systematically acting in combination with those of America, and a continuous intercourse established between the two. Nothing is more likely to strengthen that friendship, which, for the preservation of peace, is of the last importance, than personal intercourse. If we can do something to bring men over here from the Dominions and the States, we shall be advancing the interests not only of English medicine, not only of the British Empire, but of the world.

I am, Sir,

Yours obediently,

G.H.Q., France.

W. P. HERRINGHAM.

## MEDICAL NOTES.

By Sir THOMAS HORDER, M.D.

(Continued from p. 54.)

### ON PLEURISY.

(70) There are probably few diseases more often diagnosed without adequate reasons than pleurisy; there are probably few diseases that exist more often unsuspected.

(71) The pain of pleurisy is capable of very extensive

reference: it may be felt as high in the body as the cervical vertebræ, and as low as Poupart's ligament. One of the commonest remote points of reference is the extreme tip of the shoulder, and pain in this situation should always lead to careful examination of the chest for pleuritic rub.

(72) Two sounds are at times mistaken by the beginner for pleuritic friction and must be distinguished from it: (i) muscular rumble, especially when exaggerated by shiver, and (ii) rhonchus. (i) is heard all over the chest, and universal pleurisy does not occur; moreover (i) is a continuous sound, whereas pleuritic rub is rhythmical. (ii) is nearly always bilateral, which acute pleurisy uncommonly is; but of much greater differential value is the fact that whereas pleuritic rub is a constant sound, rhonchus is inconstant, being affected by cough and by deep breathing.

(73) The presence of skodaic resonance beneath the clavicle, though highly suggestive of pleural effusion, is not pathognomonic of this; the sign is occasionally present in cases of solid lung (cancer, massive collapse, and pneumonic consolidation).

(74) Rheumatic pleurodynia is a common condition, especially in children, but it is doubtful if true rheumatic pleurisy occurs apart from rheumatic fever.

(75) Primary pleurisy with serous effusion is most often due to infection of the pleura by the tubercle bacillus. The evidence for this statement is as follows: (i) *Clinical evidence*.—(a) Many of the patients develop phthisis later in life. The percentage of cases in which this happens is less nowadays than formerly, for the reason that more of them are treated on the lines of early pulmonary tuberculosis, and consequently the lung infection is more often delayed, or altogether prevented, than was wont to be the case. (b) In a few of the cases there is co-existent early phthisis. (ii) *Cytological evidence*.—The cell-content of the effusion is usually very highly lymphocytic, and this is known to be the case in tuberculous serous effusions. (iii) *Morbid anatomical evidence*.—In the few cases that are fatal, and are subjected to autopsy, tubercles are demonstrable on the pleural membrane. (iv) *Bacteriological evidence*.—If appropriate tests be made, the tubercle bacillus can be demonstrated in the effusion in over 70 per cent. of the cases; rarely by searching the clot (which forms in the effusion) for the bacillus by the simple film method; seldom even if the clot be digested prior to making the films; but more often than not if a considerable quantity of the effusion (not less than 20 c.c.) be centrifugised and the deposit be injected into a guinea-pig.

(76) Pleural effusion complicating nephritis is of two very different kinds: (i) hydrothorax, in most cases part of a general œdema, and (ii) pleuritic exudate, due to acute inflammation of the serous membrane. (ii) is often quite



acute in its onset and course, and is generally accompanied by fever. It is in many cases associated with infection by a streptococcus of low virulence, less often by the pneumococcus.

(77) Pleurisy, usually left-sided, may be the first event drawing attention to the existence of gastric ulcer. The diagnosis, as may be supposed, is not easy. But when the patient is a young woman subject to attacks of dyspepsia of the hyperacid type; when the pleurisy is insidious in its onset; when liquid effusion appears slowly, is purulent in character and contains a mixture of micro-organisms—in the presence of these facts the diagnosis may be made with some confidence.

(78) It is not very uncommon to find pleurisy developing between the third and eighth day after an operation for gastro-enterostomy. Although the event is somewhat alarming, the prognosis is not necessarily bad; most of the cases recover and not a few recover without the aid of further surgical procedures. The occurrence of such cases, and their recovery without serious consequences, remind us how very susceptible the pleura is to infection, and how extremely well equipped it is for dealing with infection.

(79) Pleural effusion discovered to have been latent, or to be much smaller in amount than the physical signs led the observer to anticipate, or the withdrawal of which affects the physical signs and the symptoms, but little: consider the possibility of new growth in association with the effusion.

(80) The commonest cause of blood-stained pleural effusion is not malignant disease of the lung or pleura, but the commonest cause of pleural effusion in general—tuberculosis. A third common cause of sanguineous effusion is hæmorrhagic infarct, complicating dilated right heart, and in most cases associated with mitral stenosis. Pleural effusion complicating influenza may also be blood-stained.

(81) Movements of the accessory muscles of respiration, and especially of those connected with the shoulder girdle, are liable to prolong an attack of pleurisy. This may sometimes be demonstrated by the effect on the temperature chart of three or four days during which the patient is allowed free movements of the arms in bed, followed by a similar period during which he is kept strictly at rest. A valuable adjunct to the treatment of pleurisy is to immobilise the arm on the affected side by strapping it to the chest.

(82) The indications for aspiration of a serous pleuritic effusion are three: (i) The effusion is very large: the fluid should be drawn off as soon as the condition is diagnosed. (ii) The effusion is not very large, but there are symptoms of cardiac or of respiratory distress: the effusion should be aspirated in the hope that this procedure may relieve the distress. (iii) The effusion has been present for ten to

fourteen days and shows no signs of being absorbed. Concerning the cases coming into this group two questions may reasonably be asked: (a) Why not aspirate before the tenth day? Because the evolution of the process of exudation is not usually complete before that day, and removal of the fluid before the high tide is reached is likely to lead to recurrence of the effusion. (b) Why aspirate at the end of this particular interval? Because an effusion that is allowed to remain unabsorbed longer than this period of time is liable to cause permanent collapse of lung with associated deformity of the chest.

(83) A very important, though a subsidiary, reason for not aspirating every pleuritic effusion so soon as it is diagnosed, is that the lung on the side of the effusion may be the seat of active tuberculosis. If this is the case the early removal of the fluid may prove an actual danger to the patient, by causing rapid expansion of the collapsed lung and consequent risk of extension of the tuberculous process. Another occasional consequence of such unwise treatment is the occurrence of pneumothorax with its attendant dangers. The presence of the fluid keeps the lung collapsed, and so tends to check an acute tuberculous inflammation. In other words, the incidence of a pleural effusion in association with active phthisis is a "conservative" process, the benefit of which to the patient may be undone by hasty treatment.

(84) The use of respiratory gymnastics and special breathing exercises designed to restore the function of the lung after an attack of pleurisy with liquid effusion requires careful supervision. Graduation is the essence of the treatment; but given an enthusiastic patient, and a demonstrator bent on rapid results, and anything may happen, from mere prolongation of the period of convalescence to a recurrence of the effusion.

## INFLUENZAL EMPYEMA.

By GEOFFREY BOURNE, M.B., M.R.C.P.

**S**INCE the commencement of the present influenza epidemic till the end of January, 1919, thirty-one cases of empyema, associated with influenza, have been treated in the civilian wards of this Hospital. The following remarks are based upon facts observed in connection with these cases.

Many pathologists have studied the bacteriology of the present epidemic: some have claimed Pfeiffer's bacillus, others a Gram-negative diplococcus, others a streptococcus, as the causative organism of the disease.

The very disparity of the claims suggests that none are correct. The truth probably is that the causative organism is unknown, and may be a filter-passer. There is no doubt



however, that the organisms above mentioned, together with the pneumococcus and others, occur in association with the undiscovered virus. It is to this symbiosis that many of the complications are due. Prominent among these stands empyema.

Empyema, as known before the present epidemic, occurred almost entirely in association with pneumonia; and the organism present in 90 per cent. of the cases was the pneumococcus. In the present series of cases, however, although the pneumococcus is not uncommon, the predominating organism is undoubtedly a streptococcus.

Thus the empyema of influenza is radically different from that of lobar pneumonia, and must be considered from all points of view, including that of treatment, from a totally new standpoint.

*Ætiology.*—It is commonest below the age of 30. There seem to be two periods when it is especially common, *i. e.* between the ages of 4 and 7 and between the ages of 17 and 27. Pneumococcal cases are commoner in children and adolescents, streptococcal cases in adults.

Influenzal empyema is apparently commoner in females. In the sixty female beds of this Hospital there have been 22 cases within the above-stated period, and in the 56 civilian male beds there have been 9 cases.

A very marked feature of post-influenzal empyema is its predilection for the left side. It is, according to the figures at present available, three times as common on the left side: of 31 cases 24 have been left-sided.

These figures should be contrasted with records of empyemata occurring previous to the present epidemic. Of 29 empyemata occurring in Luke before the epidemic, 21 were on the right side. The cause for this localisation is a matter for conjecture. Probably the congestion of the bases of the lungs, almost invariably present to some extent in influenza, is increased on the left side by the mechanical presence of the heart. Possibly also this congestion, though inimical to the growth of the more delicate pneumococcus, favours the growth of the hardier streptococcus. Pathological evidence on this point would be interesting.

Classification of influenzal empyemata is necessary in order that each case may have appropriate treatment.

The penny-in-the-slot idea, "empyema"—"resection," can only lead to unsatisfactory, if not disastrous treatment. Classification according to bacteriology is most useful and most scientific.

Thus we have:

- (1) Streptococcal.
- (2) Pneumococcal.

#### (1) STREPTOCOCCAL EMPYEMA.

##### (a) *Acute Streptococcal Empyema.*

Acute streptococcal empyema occurs within the first fortnight, usually the first ten days of the disease, and is

coexistent with an acute streptococcal infection of the lung, usually a broncho-pneumonia.

On aspiration the fluid is seen to be thin and watery. Its colour varies from that of blood to that of amber. On standing it separates into two layers—a clear, coloured upper layer and a thicker opaque deposit. The deposit, which consists chiefly of pus-cells, reaches only to about a quarter of the height of the fluid in the test-tube. The more acute the infection the redder and thinner is the fluid.

Streptococci, often in chains of considerable length, are found in the film in large numbers, and in the culture in pure growth.

The characteristic clinical features may be said to be:

- (1) Rapidity of collection of the fluid and of re-collection after aspiration.
- (2) The extreme accompanying toxæmia.
- (3) A considerable degree of cyanosis.

#### *Treatment.*

*Specific treatment*, though theoretically the most hopeful of any, seems as yet to be of little use.

Antistreptococcal sera have been tried, but, probably owing to the difficulty of hitting off the exact strain of organism, the results have been disappointing.

Vaccines have been similarly unsatisfactory.

*Symptomatic treatment.*—Resection of a rib is contra-indicated. It seems almost invariably to be followed by death. Information received from a naval colleague concerning a series of cases in a naval hospital bears out the same point. Of these cases every one treated by resection died. The only cases that did not were treated by repeated aspiration.

The treatment of the toxæmia consists in fresh air, large quantities of fluid, looseness of the bowels. On one occasion venesection was temporarily beneficial.

To recapitulate: In acute streptococcal empyema do not resect. Aspirate repeatedly; try sera; wash out the toxins; treat symptoms.

The terminations are three: Death, absorption of fluid; chronicity.

##### (b) *Chronic Streptococcal Empyema.*

Chronic streptococcal empyema occurs usually by the infection of the pleura by an organism of a lesser degree of virulence than is found in the acute type. In only a small percentage of cases has the infection started as the above-described acute streptococcal empyema.

Whereas the acute empyema arises during the height of the attack of influenza, the chronic one arises as it were out of its ashes. A usual history is that the patient had influenza four or five weeks ago, being in bed about a week, got up, felt fairly well till a fortnight ago, when she began to notice cough, dyspnoea, and general lassitude. On



examination signs of a large effusion are found. Aspiration gives yellow pus.

So far as can be judged from the history and from the few cases available, the onset of the condition is fairly gradual, the effusion not reaching its maximum size for a fortnight or three weeks. During this period of onset there is fever, rapid pulse, lassitude, some headache, and other symptoms, due to the presence of active streptococcal inflammation of the pleura. As time goes on the acuteness of the inflammation dies down, and with it fall the temperature, and to some extent also the pulse-rate. Now, however, are added the symptoms due to the embarrassment of heart and lungs by the large quantity of fluid. Thus the pulse-rate rises again.

Whereas the toxic signs of an acute inflammation have now died down, there still are present in the effusion a good reservoir of poisons. To the absorption of these are due the wasting and pallor.

For the sake of lucidity it is advisable to describe two types of chronic streptococcal empyema. But it must be remembered that these are merely two stages in the progress of a single pathological condition. Between the two types are many gradations.

*Type A.*—"Subacute type."

*Type B.*—"Chronic type."

*Type A.*—The usual history is that the patient had influenza four weeks ago or less. The signs and symptoms of an active toxic condition—fever, malaise, headache—are present. The pus withdrawn on aspiration is yellow, fairly opaque, but of a thin and watery consistency. A film shows streptococci present in fair numbers. Their chains are usually short. Briefly the organisms present in the pleural cavity are active, parasitic, pathogenic.

*Type B.*—There is a longer history than four weeks since the attack of influenza. The patient is possibly afebrile. The symptoms are due to the mechanical presence of the effusion. The pus is thicker than in type A.

Microscopically the streptococci are few in number. They are alive, but dormant, passive, saprophytic.

In the above brief sketches of the two types the predominant colours only have been used. There is no intention of suggesting that symptoms of mechanical origin are always absent in the subacute type, or that the large collection of pus often found in the chronic type gives rise to no toxic symptoms.

The first picture is one of a subacute, still progressing infection; the second is one of a condition in which active inflammation has pretty well ceased.

The necessity for recognising these two stages of chronic streptococcal empyema is shown by their different response to treatment.

#### *Treatment of Chronic Streptococcal Empyema.*

Resection of a rib in type A is followed by several weeks

of pyrexia, continuous discharge in which streptococci are found, and a condition of œdema and often of brawny induration of the edges of the wound, which ultimately heals.

In type B resection is followed by a rapid disappearance of symptoms and a normal period of healing and convalescence. Thus, to reconsider the evidence, in acute streptococcal empyema resection is followed by death; in type B of chronic streptococcal empyema resection is followed by rapid recovery; and in type A by an unsatisfactory and delayed recovery. In the first of these cases resection is the wrong treatment, and in the second is correct. The treatment of the third case must therefore be considered. Bearing in mind the pathology of the condition, it would seem ideal to transform type A into type B and then to resect. By merely waiting this change will in most cases come about. In the meantime, however, the patient is exposed to certain dangers.

These are—

- (1) Renewed increase in the activity of the streptococcal infection.
- (2) Mechanical embarrassment of the heart.
- (3) Mechanical embarrassment of respiration.
- (4) An intractable cough due to the presence of the large effusion, which adds greatly to the handicap to heart and respiration.

The three last symptoms can be relieved by aspiration, for the pus in these cases is rarely too viscid to pass through the needle.

In addition to this symptomatic treatment, an endeavour should be made to shorten the period of acute inflammation during which resection is inadvisable. This, shortly, consists of bed, plenty of good food, extra fluids, looseness of bowels, and specific treatment with antistreptococcal sera and autogenous vaccines, preferably sensitised.

Resect as soon as the temperature chart and the cessation of increase of fluid show that stage B has been reached.

To recapitulate: In chronic streptococcal empyema first determine whether the streptococcal infection is still active; if so, wait till it subsides before resecting, meanwhile treating symptoms by aspiration and attacking the infection.

#### (2) *Pneumococcal Empyema.*

The pneumococcal empyema of influenza differs very little, as regards pathology and treatment, from that of lobar pneumonia. The pneumococcus is found. The pus is green, not yellow, as in the streptococcal cases. Resection of a rib in the acute stage is followed by rapid recovery. This latter point must be emphasised in contrast to the streptococcal cases. No further remarks are necessary as regards pneumococcal empyema. Information regarding them is available elsewhere.

It may perhaps be worth mentioning that several cases of acute influenza-pneumococcal empyema have been treated



by incision of the parietes, without resection of a rib, and by insertion of a rigid tube. This treatment, if efficient drainage is kept, and if subsequent rises of temperature are treated by efficient probing for retained loculi of pus, seems to be followed by more rapid healing and convalescence than if a rib had been resected. Chronic pneumococcal empyema, however, must be treated by resection, owing to the fibrinous flakes present in the pus.

#### CONCLUSIONS.

- (1) Influenzal empyema is chiefly streptococcal.
- (2) It is twice as common in females.
- (3) It has a predilection for the left side.
- (4) Never resect a rib in acute streptococcal empyema.
- (5) In chronic streptococcal empyema wait till the infection has died down, then resect.
- (6) An acute pneumococcal empyema can sometimes be given a more rapid convalescence by incising the parietes between the ribs and by not resecting a rib.
- (7) A chronic pneumococcal empyema is best treated by resection.

[I am indebted to the kindness of the members of the Medical Staff for permission to quote these cases.]

## A CASE OF MALFORMATION OF THE TRACHEO-ŒSOPHAGEAL SEPTUM.

By J. A. VAN HEERDEN, M.R.C.S., L.R.C.P.

**A** MALE full-time child was born on September 8th by forceps delivery for prolonged second stage and distress. It was noticed soon after birth that the child had more than the average amount of mucus in its air-passages; its breathing was accompanied by tracheal *râles*. When suckled it very soon got blue and distressed, but it would recover after regurgitation of its feed mixed with frothy mucus.

Partly on account of the mother's retracted nipples, and partly because there appeared to be an excess of mucus in the air-passages, thus interfering with breathing when suckling, the child was forthwith fed artificially.

Here, again, after swallowing a drachm or two of milk and water in successive quantities of a few minims at a time, it would invariably become cyanosed and distressed, and it would not settle down until the feed had been slowly regurgitated.

There never occurred any true act of vomiting, and the regurgitated fluid was not acid. No visible peristalsis was observed, and no tumour was seen or felt in the stomach region. The nostrils and nasopharynx were repeatedly cleared with pledgets of wool soaked in bicarbonate of

soda, but, even along with the administration of small doses of atropine, no apparent change was observed, and frothy mucus would repeatedly collect in the mouth and nasopharynx.

On the fourth day, and repeatedly afterwards, a soft nasal tube was passed with the greatest ease for  $9\frac{1}{2}$  in. and no obstruction was apparent. All attempts to introduce fluid by this tube failed. The child was never distressed with the tube *in situ*, and the end of the tube was never found coiled in the pharynx.

An attempt to pass an œsophageal tube by mouth failed, as some obstruction was encountered about 3 in. from the epiglottis.

Mr. Rose pointed out that the tube, which was introduced by the nose, might very easily be coiled up in a dilated *cul-de-sac* of the œsophagus.

On the sixth day Mr. Blakeway was asked to see the child. While the diagnosis was regarded as uncertain, it was considered that the condition was probably to be ascribed to a congenital malformation of the œsophagus, but that pyloric stenosis had also to be considered; against the latter were the absence of dilatation of the stomach, visible peristalsis, or any real act of vomiting; against the former only the apparently easy passage of the nasal tube.

In either case laparotomy was necessary without more delay if the child's life was to be saved. It was supposed that such a course would make the diagnosis clear, an empty stomach with a normal pylorus indicating the performance of gastrostomy (if the parents were willing that such a procedure should be carried out), or on the other hand, a thickened pylorus pointing to the necessity of gastro-enterostomy or some form of pyloroplasty.

The operation was immediately carried out through a median epigastric incision. The stomach was at once seen to be somewhat dilated, while the jejunum was contracted, pale and empty. The pylorus was certainly natural, and stomach contents (apparently chiefly wind) could be squeezed through into the duodenum.

Gastro-enterostomy was decided upon, as on the one hand it was possible that, as is not infrequent, a congenital obstruction of the duodenum might be present, but the very poor condition of the child forbade further investigations; while on the other the prospect of permanent gastrostomy in an infant was viewed with the greatest reluctance. The posterior operation was performed in the usual manner, using clamps, and the incision in the abdominal wall was rapidly closed.

Though the operation was completed in less than twenty minutes the child showed few of the signs of life by the time it was over; it responded, however, to the ordinary restorative measures.

After its return to the ward the infant's condition for a time gave ground for hope, and during the first nine hours it had taken 14 drachms of milk and water—a feat it



had never accomplished before. (Where this fluid went to was never subsequently discovered !)

Later, however, regurgitation, not of milk but of what appeared to be bile-stained material, took place after each attempt at feeding, and death finally occurred twenty-nine hours after the operation.

At the post-mortem examination it was found that the upper segment of the œsophagus formed a widely-dilated *cul-de-sac* and reached to the bifurcation of the trachea.

The lower segment of the œsophagus opened in the posterior wall of the trachea, a third of an inch above the bifurcation of that channel. Its orifice was bounded below by a crescentic fold, the lateral margins of which turned upwards over the free ends of the tracheal rings. The *cul-de-sac* of the upper segment of the œsophagus overlapped the origin of the lower segment, to which it was

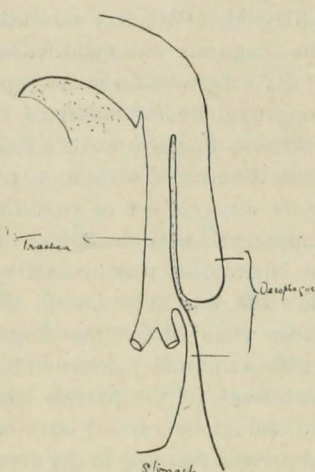


DIAGRAM TO ILLUSTRATE THE CASE.

joined by a strand of muscular tissue ; this latter portion of the gullet had no communication with the upper segment. Only meconium and a little blood were present in the intestine.

The family history showed that the parents and their one other child were normally developed.

The mother gave a negative Wassermann reaction.

The case is of interest not only on account of the comparative rarity of the condition, but also in virtue of the symptoms which occurred immediately after birth—regurgitation of its feed following attacks of cyanosis and distress.

No true act of vomiting ever occurred.

It illustrates the deceptive facility with which a soft nasal tube may appear to pass down the gullet while it is in reality coiled up in a dilated upper part of that tube.

To produce this malformation of the tracheo-oesophageal septum Keith says the lateral tracheo-oesophageal ridges and folds, instead of proceeding horizontally backwards so as to meet between the lung buds and œsophagus and so divide the primitive œsophagus into a dorsal and ventral

division, proceed obliquely backwards and dorsalwards so as to meet on the dorsal wall of the foregut.

On referring to reports on other similar cases it was found that in the majority of these malformations there is present a right aortic arch or its representative—a right subclavian artery arising as the last trunk from the aortic arch ; other malformations in order of sequence were hare-lip, cleft palate, atresia ani and malformation of the heart.

In this case no other malformation was found.

By courtesy of Dr. Williamson and the late Mr. Blakeway I am permitted to publish the note on this case.

#### REFERENCES.

MACKENZIE, SIR MORELL.—*Manual of Diseases of Throat and Nose*, vol. ii, p. 126 *et seq.*

BALLANTYNE, J. W.—*Antenatal Pathology*, vol. ii, p. 462.

KEITH, ARTHUR.—*Human Embryology and Morphology*.

#### OBITUARY.

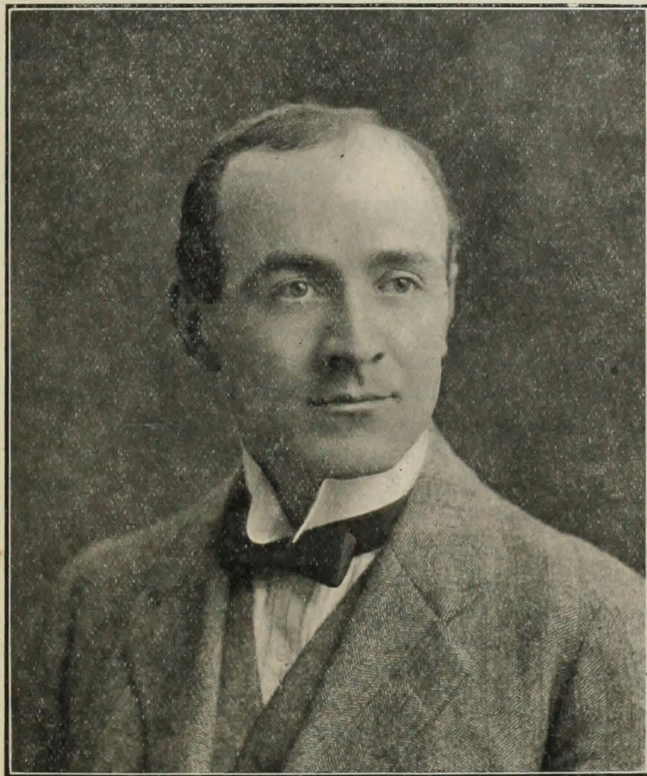
HARRY BLAKEWAY, B.Sc., M.S., F.R.C.S.



HARRY Blakeway, Resident Assistant Surgeon to our Hospital, died on February 15th in the Etherington-Smith Ward for Medical Officers, from pneumonia following an attack of influenza. He was the second son of Mr. James Blakeway, veterinary surgeon at Stourbridge, in Worcestershire. He came to our Medical School in 1903 as an undergraduate of the University of London, and throughout had a distinguished student's career, taking a considerable number of our prizes and scholarships, amongst which were the Harvey Prize in Practical Physiology, the Willett Medal in Operative Surgery, the Matthews Duncan Medal in Obstetrics, the Walsham Prize in Surgical Pathology, and the Brackenbury Scholarship in Surgery. He qualified in 1908 as M.R.C.S., L.R.C.P., and soon afterwards was appointed House-Surgeon to Mr. Lockwood. In 1910 he took the Fellowship of the Royal College of Surgeons and the M.S. at the University of London. He was then appointed Demonstrator of Anatomy and held this post for several years, during which period he proved himself to be an excellent teacher, and in addition did good original work in anatomy, publishing papers on congenital absence of gall-bladder, etc., and investigations in the anatomy of the palate. In 1905 he took the degree of B.Sc. (Lond.), with Honours in Physiology. Whilst working in the Anatomical Department he was appointed to the surgical posts of Surgeon to Out-patients at the Victoria Hospital for Children and Assistant Surgeon to the Truss Society. At the Victoria Hospital he



pursued his investigations in connection with the surgical treatment of hare-lip and cleft palate, and in 1915 was Hunterian Professor at the Royal College of Surgeons, where he lectured on the operative treatment of cleft palate. In 1913 he was appointed Surgical Registrar to the Hospital, which appointment he continued to hold until his untimely death. At the commencement of the war in 1914 he desired to place his services at the disposal of the War Office for service abroad, but at the request of the authorities of the School and Hospital he continued to work at the Hospital and Medical School, doing the work



HARRY BLAKEWAY, B.Sc., M.S., F.R.C.S.

at various times of Surgical Registrar, Demonstrator of Morbid Anatomy and Surgical Pathology, Demonstrator of Anatomy, Temporary Assistant Surgeon, and lastly, that of Resident Assistant Surgeon. Without his able assistance and untiring energies in whatever department the authorities of the School or Hospital found desirable, it would have been difficult to have carried on so satisfactorily the teaching of those of our students who remained, or returned to pass their examinations and complete their curriculum. Personally, I feel a great debt of gratitude to him for the help he gave me during the period he acted as my Assistant Surgeon, both as regards the surgical work of the Hospital and the instruction of the dressers and students.

I regarded Blakeway as one of the most promising of our young surgeons, who would without doubt have made his mark in the surgical profession if his career had not been brought to this early termination.

He married Margery Campbell, daughter of Mr. Frank Griffith, of Woking, and leaves one son and two daughters.

H. J. W.

HARRY BLAKEWAY was a man in a thousand—one of those men whom natural ability and intense industry raise high above the average of their day and generation. The long list of successes won by him in his undergraduate days—and he took the B.Sc. Honours Degree in Physiology in the University of London “in his stride”—were indeed the promise of that hunger for work and brilliance of achievement which followed him to the end.

From among the past Demonstrators of Anatomy in this Hospital who have gone to their rest, three stand out of whom it can be said with certainty that had they devoted themselves to Anatomy as their life-work they would have ranked among the foremost names in that science—Walsham, Lockwood, Blakeway.

Blakeway was indeed the anatomist born: he had the technical skill, the patience, the scientific insight and the real *flair* for making and demonstrating a specimen that are given to few. He never undertook a lecture without the most careful preparation, and to his thoughtful, clear delivery was added the charm of a stimulating personality. As a teacher he was a constant inspiration to the willing student and a mirror of shame to the “slacker.” Indeed, when he showed anger it was only when faced by some standard of duty or work which could not withstand the white heat of his own.

His dissections of the pharynx and palate—his most notable anatomical work—were exquisitely done, and find a fitting home in the Museum of the Royal College of Surgeons. In later work, on the intricacies of an abnormal heart, he showed the same genius for dissection and observation. His interest in Anatomy never waned, and ideals which he had long cherished, and had only recently expressed, will be of great use, it is to be hoped, in the reconstruction of the Department.

Others are better qualified to appraise his later record than the writer, but he can say this much with truth—that he has never known a young surgeon of more brilliant promise. Blakeway's mastery of its literature and methods, his consideration for the patient, the deftness of his touch and the skill of his hands all seemed to point to a brilliant future in the Science and Art of Surgery. Something more than admiration had grown out of his steady regard for the great traditions of Paget's life and work: he himself had attained many of the high qualities associated with a name he revered so much.

The heavy toll of war has not been taken in foreign



lands alone. With youth and vigour in his blood Blakeway naturally longed to be on active service somewhere near our fighting men; but thrice over, as in the case of Stansfeld, his services were appealed for as indispensable by the Hospital and Medical School. Both men, thus called on to take a heavy share in the work of our greatly depleted Staff, undoubtedly so undermined their health by tireless energy and incessant work that, when they were stricken, Death laid both low in their prime—

"And straight was a path of gold for them,  
And the need of a world of men for us."

No words can express the loyal friend that Blakeway was. Memories of him in his home are too sacred to touch upon here. Good books he loved, and from the storehouse of an accurate memory he would readily recall much of the best in them; good music he loved, too, and often some tedious dissection would be relieved by whistled fragments of favourite melody. He was always at his best in the open country, in whose sights and sounds he revelled with simple joy. In earlier years a keen horseman to hounds, in later years he took to golf with the same zest with which he tackled everything; his swinging drive was a treat to see. To be with him on these occasions, rare of late, when he sought relaxation in the open was like being in the company of a boy on happy holiday.

Vale! Yet—

"No, at noonday in the bustle of man's work time  
Greet the unseen with a cheer!  
Bid him forward, breast and back as either should be,  
'Strive and thrive!' cry 'Speed,—fight on, fare ever,  
There as here!'"

A. M.

#### LEONARD GEORGE GUTHRIE, M.D.(Oxon.), F.R.C.P.

**B**Y the death of Dr. Leonard Guthrie, which took place on December 24th as the result of a severe accident, St. Bartholomew's Hospital is called upon to mourn the loss of one of her most distinguished students. More than thirty years have elapsed since Leonard Guthrie first began the study of medicine at St. Bartholomew's after having been educated at Magdalen College, Oxford, where his academic career was most successful. Although his professional life was spent away from the Hospital, few men were more widely known and respected by those who had been his fellow students in the past.

Leonard Guthrie belonged to a type of physician—too rarely met with—in which high qualities of mind and character were most happily blended. He was a learned physician, and his well-trained mind contained vast stores of knowledge and erudition which enabled him to throw unusual and interesting lights upon the medical problems with which he came into contact. His medical writings

were, therefore, of a high order, and he had the power of clear and even elegant exposition, which, while it charmed, never left the reader in doubt as to his meaning. In practical medicine the domains of neurology and disease in children claimed his entire attention, and to these subjects he contributed much valuable work. The history of medicine also interested him intensely and gave him opportunities for the exhibition of his undoubted literary skill. In 1907–8 he was appointed to deliver the Fitz-Patrick Lectures in that subject before the Royal College of Physicians, and they were justly admired on account of the learning displayed and their high literary merit. Besides the many papers of a strictly medical nature, Guthrie was the author of that charming work, *Hospital Sketches*, by Galen, which shows him to have been a most capable master of blended humour and pathos.

But the mental attainments of Leonard Guthrie could never have exerted such an influence upon those with whom he came into contact without those personal qualities which endeared him to all. Throughout life he had no thought of self, and was ever ready to sacrifice himself in the cause of others. His conception of the duty of a physician was high, and there is no instance in his career where personal advantage tempted him to swerve a hair's breadth from the path he believed to be right. Guthrie could always be trusted to take the straight road, and for this reason his services were often requisitioned in cases where internal differences had arisen. With many of the views expressed at the present time he had no sympathy, but if he permitted himself a criticism, it was without rancour and left no sting. Indeed, his keen sense of humour rather led him to stand aside from the contest and to be amused while others were breaking lances in the arena. Few men had such a wide circle of friends, and many will feel to-day the poorer for his loss. He has gone, but he has left behind him a memory that any one would be proud to have—a memory of unselfish services faithfully performed, of high purpose, and of sympathy open to all.

A. C.

#### NOTE ON A NEW PRODUCT.

We have received from Genatosan Ltd. (the British Purchasers of the Sanatogen Co.) a sample of Genaspirin, a brand of acetyl-salicylic acid which they have recently placed on the market. We have no hesitation in describing the sample as excellent. Its purity is unquestioned. The product contains no free salicylic or acetic acid, and even on the addition of 0.2 per cent. hydrochloric acid there was no reaction with ferric chloride.

There is no doubt that many samples of acetyl-salicylic acid on the market are far from being up to B.P. standard. Medical men prescribing Genaspirin may rest assured that their patients are getting a particularly pure form of the drug.



## STUDENTS' UNION.

## RUGBY FOOTBALL CLUB.

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

Over a thousand spectators—with strong contingents from both Hospitals, many in gala costume—saw Guy's defeat Bart.'s by a goal and a try (8 points) to a try (3 points) at Queen's Club on January 25th.

Both sides were at full strength, and from the kick-off to "no-side" equally keen to score a win over their rivals.

Guy's, possessing an excellent pack of forwards, were somewhat favoured by the soft and slippery ground, but, if overweighted, the Bart.'s pack put every ounce into their work, and at one period of the game more than held their opponents.

The three-quarters and halves were well matched and equally well marked, and no one was allowed to run far on account of the keen tackling on both sides.

The only score of the first half came through the Bart.'s scrum-half, Llewellyn, who was always to the fore throughout the game, and his try was the result of a clever individual effort and thoroughly deserved. Melle failed to goal from a difficult angle, but almost put the Hospital further ahead from a penalty kick, the ball just falling short. Bart.'s thus crossed over with a well-deserved lead of 3 points.

Early in the second half Guy's attacked vigorously, and Aspenwall, taking advantage of a misunderstanding between the Hospital backs, ran over with a try, which Crook improved upon with an exceptionally fine kick.

Two points down, Bart.'s made desperate efforts to regain the lead, but Guy's defence was sound, their tackling excellent, and their heavier pack now beginning to assert its superiority in the tight scrummages.

The only other score came ten minutes from the end, when P. Krige ran over after a clever combined movement. The kick at goal failed.

It was a great game in every respect, and on their play, especially in the second half, Guy's thoroughly deserved their win.

## ST. BARTHOLOMEW'S HOSPITAL v. THE CANADIANS.

Played at Winchmore Hill on Saturday, February 22nd. The ground was in a terrible state after the recent rain and good handling amongst the backs was impossible. The game developed into a struggle between the opposing forwards. The visiting pack was much the heavier, but the Hospital forwards held them and were cleverer in the loose.

In the first half, Krige, picking up and running strongly, scored far out. Mellé converted from a difficult angle. The Canadians attacked after this and had bad luck in not scoring. In the second half Horder scored from a forward rush and Mellé just failed to convert. From a clever cross-kick by Llewellyn Hendley scored, but the try was disallowed. The Canadians scored an unconverted try a few minutes before "no-side." Thus a strenuous game was won by the Hospital by 8 points to 3.

The Hospital was without Shaw, Skaife and Capps from the forwards. Krige and Morlock were the best of the pack, and Thomas and Llewellyn the best of the outsiders.

## ASSOCIATION FOOTBALL CLUB.

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

Played at Winchmore Hill on January 25th. Bart.'s soon took the offensive, and after a bout of passing Morton opened the score with a good shot, and Corfe shortly after increased the lead. The Guy's team rallied, but apart from a few movements initiated by the Guy's centre-half, who was always prominent, play was confined to their half. Just before half-time Frost dribbled through and scored on the left wing with a good shot high up in the corner of the net. Play ruled more even in the second half, and a very pretty piece of work by the Guy's centre-half enabled their centre-forward to score. Another good run by Frost on the left wing resulted in a fourth

point being registered for Bart.'s, the final score being 4—1 in their favour. The Bart.'s defence was very sound; Gray played a very good game at centre-half, while the forwards kept well together.

## ST. BARTHOLOMEW'S HOSPITAL v. THE OLD CITIZENS.

Played at Winchmore Hill on February 8th. The ground was frozen and several inches deep in snow. Despite this the game was very fast. Bart.'s opened the score; early taking the offensive they quickly found the net after a corner. Two more goals were added, and then a combined rush by their forwards ended in their scoring. After half-time Bart.'s continued to press, and four more goals were scored. All the attempts of the Old Citizens to break through the defence failed, and Bart.'s were left winners by 7 goals to 3. The goal-getters were Summers 3, Spencer 3, and Samy 1.

## ST. BARTHOLOMEW'S HOSPITAL v. LONDON HOSPITAL 1ST XI.

Played at Hale End on February 15th. Bart.'s turned out a rather depleted side, three regular members of the team being down with influenza. The London team had been playing together before Christmas, and their combination and shooting on a very fast and slippery ground were excellent. Bart.'s defence was overwhelmed by the London forwards, who were much heavier and faster, and the score was 11—1 in their favour. Bart.'s were unlucky not to score on several occasions, and the score is not quite a true reflection of the balance of play.

## CORRESPONDENCE.

## THE LATE DR. L. G. GUTHRIE.

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

DEAR SIR,—I saw a good deal of Leonard Guthrie, whose death was announced early in January, and I took him to his first maternity case. I was leaving "Mackenzie's" when he began his cases. He was always a very sedate student, and one day in the wards, at a time when everyone was reading *Vice Versa* (1883), a probationer said to him: "You always remind me of old Bultitude when he found himself at school." To which Guthrie quietly replied: "Perhaps my brother was thinking of me when he wrote the book." And we knew for the first time that F. Anstey was a Guthrie.

Yours sincerely,  
EDMUND F. BINDLOSS.

THE BOLTONS,  
S. FARNBOROUGH.

## "MITRAL STENOSIS": "HEART-STRAIN."

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

SIR,—The question raised by Lieut. Sharp in the current issue of the JOURNAL is a particularly interesting one. He suggests that his identification of a considerable number of cases of mitral stenosis in soldiers—a number far in excess of that he has learned to expect in the male population as a whole—argues the influence of certain familiar war circumstances in the production of this condition.

I think, however, the majority of medical officers will be inclined to agree with me that this is only one of many instances in which their military experience has changed their ideas as to the relative frequency or infrequency of ailments among the population. I have so often heard a reference in some such terms as—"I had no idea there were so many men in the world with chronic bronchitis, or so much nervous dyspepsia or chronic rheumatism," and so on.

Now in my opinion there has been too great a tendency—pardonable enough, of course, in view of the obvious coincidence—to suppose that the exposure, the hardships, the enforced activity and other circumstances inseparable from a military life are the cause of this frequency. To take one condition for example. The innumerable explanations which even to this day confuse and cloud the ætiology and pathology of "soldier's heart" are very largely due to the attempt so to determine its causation.

The war has had the effect of stirring up sediment and so render



ing turbid a previously clear medium—if I may be permitted the simile. For two reasons a large number of men who before the war never enjoyed the advantage of medical examination are now displaying their lesions before the eyes, fingers and stethoscopes of the Profession.

In the first place the periodical examination of drafts referred to by Lieut. Sharp leads to the recognition of conditions like valvular disease which have caused no symptoms, but are brought to light by the careful examination of such observers as Lieut. Sharp.

Secondly, a large number of conscripts who in civilian life would nurse their trivial ailments without calling upon medical assistance, taking a day off whenever they felt so disposed, naturally find such a proceeding impossible under army conditions; and to escape the irksomeness of duty they report sick, thus swelling the number of "chronics" who haunt the hospitals and medical inspection rooms.

In these ways there is produced a fictitious picture of the incidence of disease contrasting with civilian life. War has been responsible not so much for producing as for unmasking these "war diseases."

Whilst I am writing, may I beg the hospitality of a little space for a further reference to "heart-strain." I had not intended to continue the discussion, since Sir Thomas Horder's kind and most illuminating reply to my original letter seemed to render any addition from my pen unnecessary. But Dr. Thorne-Thorne has raised the question of sinus arrhythmia, and has invited discussion on the subject.

I must confess myself a whole-hearted supporter of Sir James Mackenzie and Dr. Lewis in holding that this form of irregularity is no indication of cardiac impairment.

I have never come across an athlete with sinus arrhythmia. On two or three occasions I have seen very definite valvular disease clearly compatible with extreme physical exertion. I particularly recall one of the finest runners this country ever produced who had well-marked mitral regurgitation and suffered from periodic attacks of typical articular rheumatism. During the summer of 1909 he insisted on competing in the Mile Amateur Championship within three weeks of an attack, in spite of my protestations, and although he did not win the event he put up a magnificent performance by finishing third in a great race. He continued to compete regularly, without, so far as I could see, the slightest cardiac distress up to the day of his death—he was killed very early in the war. And readers of the *British Medical Journal* will recall the remarkable case recently recorded of a Canadian athlete who was able to achieve first-class performances, although the possessor of a much enlarged heart and a pronounced degree of aortic regurgitation! But sinus arrhythmia I have never seen in an athlete, and this is precisely what I should expect, because this condition would seem to denote a nervous instability which accords badly with the stuff of which a good athlete must be made.

I have therefore no hesitation in agreeing with Dr. Thorne-Thorne that "the large majority of young men . . . whose hearts have broken down under strain have had sinus arrhythmia," although my explanation of the coincidence and his are diametrically opposed.

Of course, it is open to anyone to argue that what I stigmatise as want of pluck is really an indication of cardiac disease, and what I dismiss airily as symptoms due to vaso-motor instability are really an indication of "heart-strain." And I do not think we should ever get any further than agreeing to differ, for indeed, as Sir Thomas Horder most appositely sums up the whole matter—"Opinions can only be expressed: they scarcely admit of discussion."

I am, Sir,

Yours faithfully,  
ADOLPHE ABRAHAMS.

CONNAUGHT HOSPITAL, ALDERSHOT;  
February 10th, 1919.

#### "HEART-STRAIN."

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

SIR,—The correspondence on "heart-strain" in the recent numbers of the JOURNAL has been very interesting. May I add my little experience out here, which supports Dr. Thorne-Thorne's views in my opinion.

Since the armistice I have had to examine a great number of men with a view to possible claims on the country to compensate them for disabilities attributable to military service.

All that have come before me joined the Army as category A men and were subsequently classified B ii or B iii.

I have been struck by the frequency with which I have found sinus arrhythmia and nothing else abnormal in men who have been put into the lower categories on account of "D.A.H."

I am, Sir,

Yours faithfully,

D. S. PRACY,

Capt., R.A.M.C.

B.E.F., FRANCE;

February 15th, 1919.

## REVIEWS.

THE HISTORY OF ST. BARTHOLOMEW'S HOSPITAL. By NORMAN MOORE, M.D. (London: C. Arthur Pearson, Ltd., 1918.) 2 vols., 4to. Pp. 614 and 992. Illustrated. Price £3 3s. net.

The *History of St. Bartholomew's Hospital* "whereof by parcels we have sometime heard but not intently," has at length appeared, and the wonder is, not that it has been delayed so long, but that it has appeared so soon. Dr. Norman Moore is to be congratulated most heartily upon the two fine volumes in which it is enshrined. The long and almost unbroken existence of the Hospital on its original site has allowed of the accumulation of a vast number of documents, whilst the position of the Hospital in regard to the City of London and of the City in relation to England has brought it into touch with the history of our country at many points. Dr. Moore has proved himself a skilful guide and interpreter, for he has stores of knowledge on many subjects, a wide acquaintance with men and their affairs throughout the ages, and above all, the gift of interesting his readers in what he writes. We are thankful, therefore, that he has been spared to bring the work of a lifetime to so successful an issue, for any future historian of the Hospital will merely have to continue his work on the same lines.

The early chapters are based necessarily upon the *liber fundacionis*, with such additional facts as Dr. Moore has been able to obtain about our founder and his immediate successors. The real historical value of the work begins with a series of Bulls, Charters and Chirographa telling of the slow acquisition of privileges and property by the Hospital. These important documents are not only printed *in extenso*, but, thanks to the liberality of Miss Ethel Mary Portal, are skilfully reproduced in facsimile by Mr. Emery Walker. They give a marvellous picture of contemporary life and thought, with occasional hints of the tragedies and other motives which led the donors to bequeath some of the property to the Hospital. They afford opportunities, too, of correcting some traditional mistakes in London nomenclature, as in the case of Wood Street and Basinghall Street. The Hospital should certainly move to have the little blind alley between the Pathological Institute and the Out-patient block in Giltspur Street renamed Vitry Lane—instead of Windmill Court by which it is now known—in memory of William of Viteri, who was a good friend to the Hospital in the reign of Henry II. Dr. Norman Moore has done much to lighten the perusal of these charters by those who are not trained historians. He introduces numerous personal touches and sidelights, and it is clear in many cases that he has visited the places which they mention. In 1249 the Hospital owed £11 to the butcher for meat, and made the following agreement by which the debt would be paid off in eight years and a quarter: "To all the faithful of Christ to whom the present writing happeneth to come, Bartholomew the Chaplain, proctor of the hospital of St. Bartholomew of London and the brethren of the same place health in the Lord. Be it known to you all that we owe Walter of Hendon butcher, eleven pounds sterling for meat received by us from him on loan for the use of our house and of the sick lying therein. Which money we by common agreement have assigned to the said Walter . . . under the form here written namely each year twenty-six shillings and eightpence at the four principal terms of the year, at each term six shillings and eightpence." Such an agreement shows that the Hospital credit was good and the butcher was long-suffering, whilst money, as money, was scarce.

The human, as opposed to the more purely historical, interest begins with John Cok, the first Renter, who lived through the long Mastership of John Wakering or Blakberd. The Hospital is nearly as much indebted to Brother Cok as to Dr. Norman Moore himself.



He wrote a beautiful hand and compiled the Cartulary, thereby preserving nearly all that is known of the early history of the Hospital. Like Dr. Moore, he was fond of asides which shed light upon contemporary occurrences. "'Thanks be to God,' quoth John Cok," he writes frequently, and we may re-echo his sentiment on account of Mrs. Moore, who has provided so excellent and accurate an index to the two volumes of the present history. We learn that Lady Joan Astley lived within the Hospital. She was a nurse to King Henry VI. The brass\* in St. Andrew's Church at Cranford, Northamptonshire, tells of another nurse who looked after him when he lived at Cranford Hall. She was the widow of John ffossebrok and received £10 per annum "for decent support of herself about the Royal person." This sum being insufficient she complained, and it was accordingly doubled. Seventeen years afterwards (1444), when she is styled "quondam sicca nutricis nostræ," she had a grant for life of "a dolium of red wine of Gascony per annum." One of her lineal descendants is now the wife of a member of the surgical staff, so that the Hospital has still a link with King Henry VI.

There is not much fresh information to be gathered about the Hospital at the time of the dissolution, for this period has attracted the attention of several previous writers, but there are many interesting facts in the extracts from the ledgers and journals which show how faithfully the various officers have at all times carried out their charges.

The latter half of the second volume is of absorbing interest to everyone educated at St. Bartholomew's Hospital, for it deals largely with those who have made the Hospital famous throughout the world. Beginning with Dr. Caius, who lived in, but was not otherwise of, the Hospital, Dr. Moore writes with the pen of a skilled biographer about the physicians and surgeons. He has produced a charming series of pen portraits. There is nought set down in malice, but each man is weighed carefully and a just estimate is formed of his character and ability. He has fortunately written only of our predecessors: the living are not judged. In the account of the Officials there is a particularly pleasing picture of the old Steward—Mark Morris—whose portrait still looks down upon the scene of his former labours. There are also chapters on the medical school and the present buildings. The last chapter, treating of the patients, contains many good stories told in a style which is curiously reminiscent of George Borrow. Lastly, it should be added that everyone who buys a copy of the history will not only have obtained his money's worth, but will have done an act of charity, for the profits have been generously allocated by the author to the Building Fund of the Hospital.

MANUAL OF BACTERIOLOGY. By ROBERT MUIR and JAMES RITCHIE. Seventh Edition. (Oxford University Press.) Pp. 751. Price, 16s. net.

The present volume has been thoroughly revised as the result of the impetus given to bacteriological research following on the war. Much new matter has been incorporated in the chapters dealing with cerebro-spinal fever, with intestinal infections, with tetanus, and with the grave conditions occurring in wounds; also a number of new methods have been described, and several new illustrations have been added. A working knowledge of bacteriology is absolutely essential to the medical student of to-day, and we know of no better book than the volume under review. The study of microbiology (we prefer the term to bacteriology) bids fair to revolutionise both medicine and surgery, and no medical library is complete without it contains a copy of this most valuable work.

A MANUAL OF CHEMISTRY. By ARTHUR P. LUFF and HUGH C. H. CANDY. (Cassell & Co., Ltd.) Price 12s. net.

This admirably concise volume is excellently suited to the requirements of the first professional examination. The theoretical side of chemistry is explained with thoroughness and lucidity. Both the inorganic and the organic sections are fully dealt with, the organic compounds receiving special attention. Part V is devoted to chemical

problems, a section of the book which might prove even more valuable if the answers had been separated from the questions. The practical chemistry in the concluding part of the volume contains all and more than is likely to be required for examination purposes.

THE EARLY TREATMENT OF WAR WOUNDS. By Col. H. M. W. GRAY, C.B., C.M.G. (Henry Frowde and Hodder & Stoughton. Oxford Medical Publications.) Pp. 299. Price 10s. net.

Col. Gray's book is one of the most valuable works on war surgery that has yet appeared, but its excellence emphasises the unfortunate fact that it has only been published after the urgent need for it has vanished. It was just some such work as this that was wanted long ago to help the surgeons working in France to co-ordinate their efforts along the best lines, and it would have spread the sphere of Col. Gray's inspiring influence far beyond the limits of the Army in which he worked. Many books and papers have been written on special sections of war surgery, but in no other book can be found so true and vivid a picture of the work in field ambulances and casualty clearing stations, or so sympathetic a view of the difficulties to be overcome. The excellence of the book lies not so much in the detailed descriptions of surgical technique, for Col. Gray has necessarily been brief in attempting to cover almost the whole subject of the treatment of the wounded, but rather in the sound general principles which it enunciates and its realisation of the conditions which limit their application. In matters of detail it might be possible to find points for criticism, and already in the *British Medical Journal* for January 25th Sir Anthony Bowlby has corrected Col. Gray's figures of the percentage mortality due to fractures of the femur; but it is notoriously difficult to collect under war conditions statistics which can truly be called accurate, so that shortcomings in this respect may be readily forgiven. It is not so easy to understand why Col. Gray has dismissed so summarily the whole subject of abdominal wounds, which he refers to only in the preface, and why he has made practically no reference to such important matters as the surgery of blood-vessels and nerves. If he had dealt with these in the same manner as he has with wounds of the thorax and brain and with fractures of the femur, he would have greatly increased the value of the book without making any considerable increase in its size. Nevertheless he has given us an extraordinarily interesting and valuable book which ought to be read by everyone, whether in the medical profession or not, who wants to gain a general knowledge of the principles and practice of surgery at the front. Principles which before the war were generally accepted have been profoundly modified, and Col. Gray has been one of the leaders in an immense surgical undertaking, the results of which will leave an enduring mark on the practice of surgery in the future.

G. L. K.

MATERIA MEDICA AND THERAPEUTICS. By J. MITCHELL BRUCE and WALTER J. DILLING. (Cassell & Co., Ltd.) Pp. 675. Price 9s. net.

The new edition of this well-known work has been revised and brought up-to-date in order to correspond with war conditions. As a text-book on Materia Medica it can be thoroughly recommended. The therapeutical section is well arranged and not too advanced, so that it can be easily understood in conjunction with the study of Materia Medica. It is unfortunate that a higher standard of dispensing has not been set before the student, several of the pharmaceutical details being very lax.

THE WHOLE DUTY OF THE REGIMENTAL MEDICAL OFFICER. By Capt. P. WOOD. (Forster, Groom & Co.) Price 2s. 6d. net.

The author, who writes from Salonika, lays stress on an aspect of the medical officer's work which is apt to be overlooked by civilian medical men—the fact that he is an officer as well as doctor. He describes the duty of the R.M.O. under three headings: (1) His duty to the State, (2) his duty to the unit, and (3) his duty to himself. In the appendix he enumerates the points to be attended to in inspecting a camp, and describes some easily improvised sanitary

\* "Hic jacent Johes ffossebrok Armig. qui obiit vii die mensis Octobris anno Dni Millmo ccccxxviii. Et Matilda uxor ejus que fuit sicca Nutrix Dno. Regi Henrico Sexto. Quor aiabs ppietur Deus. Amen.



appliances. The author's description of anti-malarial methods is useful, and is not to be found as a rule in books of a similar nature. The book should prove useful to newly-joined M.Os. and to candidates for Certificates "A" and "B" of the O.T.C.

## BY THE WAY.

Overheard in the Operative Surgery Class:

*Surgeon*: What are the indications for cholecystostomy?

*Student*: I don't know, Sir.

*Surgeon*: Come! come! Whom did you dress for?

*Student*: You, Sir.

(Collapse of the Surgeon.)

Surgeon in Out-patient Department telling dresser to examine patient's foot:

*Surgeon*: What do you think it is?

*Dresser*: An adventitious bursa.

*Surgeon* (in his gruff manner): Yes; well, what is the common name for it?

*Dresser*: Sometimes known as a bunion.

*Surgeon*: Why is it called a bunion?

*Dresser* (somewhat rattled): Because it interferes with the pilgrim's progress!

We are indebted to an old Bart.'s man for the details of the following amusing episode:

Entering my consulting room the other day I found a Belgian examining with interest the "Spy" Cartoons of Celebrated Doctors issued by *Vanity Fair*. He had reached the one of Sir Walter Foster and seemed greatly excited—"Excuse me Mistaire," he said, "Spy—eh?"

I nodded acquiescence.

"And all these other gentlemen. *Spies*—eh?"

Then I had to explain.

## EXAMINATIONS, ETC.

CONJOINT EXAMINATION BOARD.

*First Examination. January, 1919.*

*Elementary Biology.*—T. M. Marcuse.

*Practical Pharmacy.*—T. A. Eccles.

*Second Examination. January, 1919.*

*Anatomy and Physiology.*—H. S. Bell, L. M. Billingham, H. Shannon, C. G. Martin, S. G. Harrison.

The following have completed the examinations for the M.R.C.S., L.R.C.P.: H. W. C. Vines, H. D. Kelf, R. H. Clarke, H. Barbash, R. L. Williams, F. Gray, R. I. Rhys.

## CHANGES OF ADDRESS.

BREWITT, B. J., Estcourt, Natal, S. Africa.

CUNNINGHAM, F. H. L., 13, Marlborough Road, St. John's Wood, N.W.8.

GOW, A. E., 37, Queen Anne Street, W. (after March 18th). (Tel. Mayfair 5011).

JEANS, F., 30, Rodney Street, Liverpool.

SYMONDS, H., Kimberley, S. Africa.

WALLIS, R. L. M., Wooburn, Bucks.

WILLIAMS, F. S., Broome Cottage, Bedlington, Northumberland.

WORBOYS, Capt. T. S., R.A.M.C., Willow Dene, Hassocks, Sussex.

## BIRTHS.

BURKITT.—On February 14th, at 24, St. Stephen's Avenue, W. Ealing, to Mary, the wife of Capt. F. T. Burkitt, M.A., M.R.C.S., L.R.C.P., late (S.R.) "The Queen's" Regt.—a daughter.

FRASER.—On Sunday, December 15th, the wife of Forbes Fraser, of 5, The Circus, Bath—a daughter.

ROBERTS.—On January 30th, at Sydney, N.S.W., the wife of Surgeon-Lieut.-Commander W. E. Roberts, Royal Australian Navy, of a daughter.

## MARRIAGES.

BLAIR—STEEGE.—On December 27th, at St. Matthias Church, Richmond, Surrey, by the Rev. A. A. Blair, Charles James Longworth Blair, Surgeon, R.N., to Lilian, daughter of Mr. and Mrs. F. W. Steege, of Richmond.

CATFORD—CARASSO.—On January 23rd, at Kasr-el-Nil Garrison Church, Cairo, Capt. Eric Catford, R.A.M.C., only son of Mr. and Mrs. Catford, of Crouch End, N., to Mary, elder daughter of Mrs. Carasso, of Alexandria.

CHANDLER—RAIMES.—On February 4th, at Cavendish, by the Rev. J. D. Barnard, M.A., and the Rev. O. G. Bolton, Frederick George Chandler, M.A., M.D.(Cantab.), to Marjorie, younger daughter of the late Frederick Raimès, J.P., and Mrs. Raimès, of Hartburn Lodge, Stockton-on-Tees.

WATERHOUSE—CONNOR.—On February 11th, at St. Peter's Church, Paddington, Rupert Waterhouse, M.D., M.R.C.P., of 25, The Circus, Bath, to Mabel Dorothy Connor, of 34, Charlton Street, Maidstone.

## DEATHS.

ADAMS.—On February 14th, 1919, at his residence, The Lawn, Martock, Somerset, Joseph Dixon Adams, M.D.

BLAKEWAY.—On February 15th, 1919, at St. Bartholomew's Hospital, from pneumonia, Harry Blakeway, B.Sc., M.S., F.R.C.S., of 1, Weymouth Street, W., aged 35.

CORY.—On February 15th, 1919, at Soham, Cambs., Charles George Cory, M.R.C.S., L.R.C.P., youngest son of the late Rev. E. W. Cory, M.A., R.D., Vicar of Meldreth, Cambs., aged 47.

FINCH.—On February 5th, 1919, at his residence, Holmdale, Stoneygate, Leicester, John Edward Montague Finch, M.D.(Cantab.), aged 77.

HAMPTON.—On February 13th, 1919, T. Hampton, M.B.(Lond.), M.R.C.S., of Grosmont, Hereford, from influenza.

HAWES.—On December 15th, 1918, at Stanmer, Bexhill, after a long illness, patiently borne, Colin Sadler Hawes, M.R.C.S., elder son of the late James and Caroline Hawes, and dearly loved husband of Lilian Hawes, aged 42.

## ACKNOWLEDGMENTS.

*The British Journal of Nursing, St. Mary's Hospital Gazette, The Nursing Times, The Medical Review, London Hospital Gazette, Long Island Medical Journal, Journal of the Department of Public Health, Hospitals and Charitable Aid, New York State Journal of Medicine, The Hospital, Guy's Hospital Gazette, St. Mary's Hospital Gazette, The Journal of the American Medical Association, University of London Military Education Report.*

## 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.*



# St. Bartholomew's Hospital



"Æquam memento rebus in arduis  
Servare mentem."

—Horace, Book ii, Ode iii.

## JOURNAL.

VOL. XXVI.—No. 7.]

APRIL 1ST, 1919.

[PRICE SIXPENCE.]

### CALENDAR.

Fri., Mar.	28.—	Dr. Calvert and Mr. McAdam Eccles (Mr. Gordon Watson) on duty.
Tues., Apr.	1.—	Dr. Fletcher and Mr. D'Arcy Power on duty.
Fri., "	4.—	Sir Archibald Garrod and Mr. Waring on duty.
Tues., "	8.—	Dr. Tooth and Mr. McAdam Eccles (Mr. Gordon Watson) on duty.
Fri., "	11.—	Dr. Calvert and Mr. D'Arcy Power on duty.
Tues., "	15.—	Dr. Fletcher and Mr. Waring on duty.
Fri., "	18.—	Sir Archibald Garrod and Mr. McAdam Eccles (Mr. Gordon Watson) on duty.
Tues., "	22.—	Dr. Tooth and Mr. D'Arcy Power on duty.
<b>Summer Session begins.</b>		
Fri., "	25.—	Dr. Calvert and Mr. Waring on duty.
Tues., "	29.—	Dr. Fletcher and Mr. McAdam Eccles (Mr. Gordon Watson) on duty.

### EDITORIAL NOTES.

**F**OR several years it has been customary to forward copies of the April issue of the JOURNAL to all St. Bartholomew's men whose addresses could be traced, irrespective of whether they were subscribers or not.

Since 1915 we have also published at intervals a supplement giving details of the Hospital men and their connection with the war. This latter has been held over *pro tem.*, the proposal being to publish a complete souvenir as soon as the necessary details can be got together.

In view of the enormous importance which the Hospital is attaching to reconstruction, the Publication Committee have decided to make the May issue a special Reconstruction Number, a copy of which will be forwarded to all "Bart.'s" men instead of the usual April issue.

\* \* \*

The voting papers for the coming election of Fellows into the Council of the Royal College of Surgeons have just been issued. There are two vacancies, and to fill these six Fellows have been nominated.

We notice with much interest that one of these is a Fellow of the College who is in general practice. This is an innovation as regards candidates for the Council. Dr. John Frederick Jennings, a former House-Surgeon of the late Sir Henry Butlin, and a late Demonstrator of Anatomy in our Medical School, has been duly nominated.

We trust that when St. Bartholomew's Fellows are sending in their voting papers they will consider giving one of their votes to him as a representative of general practitioners on the Council. Dr. Jennings is a distinguished "Bart.'s" student, and we look forward with confidence to his election.

\* \* \*

We note with considerable pleasure that Dr. F. A. Bainbridge, Professor of Physiology in the University of London and Lecturer on Physiology at this Hospital, has been nominated for election as a Fellow of the Royal Society.

Professor Bainbridge fully deserves the honour which has been conferred upon him, and "Bart.'s" men will wish to join with us in offering him our heartiest congratulations.

The two other members of the Hospital Staff who hold this distinction are Sir Archibald Garrod and Prof. F. W. Andrewes.

\* \* \*

Sir Archibald Garrod has resigned his temporary commission in the A.M.S. and is back at work in the Hospital. Sir Archibald has been doing most valuable work in Malta, and we extend a warm welcome to him after his long absence.

\* \* \*

Sir Thomas Horder's "Notes," to which our readers have become somewhat accustomed, but we trust not with any sense of weariness (these words come from the author of the "Notes" and not from ourselves) are held over. Sir Thomas has decided to take his holiday earlier this year, and has availed himself of an invitation to visit Constantinople on H.M.S. "Emperor of India." He expects to be away for about five or six weeks.

With true editorial instinct we scent possible "copy" of a less technical nature than the notes above referred to.



Dr. Gow's paper on "Protein Shock and Intravenous Vaccine Therapy" is one of the most original and illuminating papers read before the Abernethian Society for a long time, and it affords us considerable pleasure to be able to print the paper almost in its entirety. The author is to be congratulated on his handling of a most difficult subject, concerning which very little has as yet appeared in English Medical Literature.

We are very glad to hear that subscriptions to the Stansfeld Memorial Fund are still coming in. As the Committee is desirous of closing the fund as soon as possible it is hoped that intending subscribers will take the opportunity of forwarding any donation they may intend to make to Prof. F. W. Andrewes as soon as possible.

Our readers will recall the interesting account we published some months ago of the "capture" of a German gun from the Mall. For some weeks this interesting relic was allowed to remain in the Square, where, needless to say, it was the subject of much interest. A letter was forwarded to the commanding officer of the battalion responsible for the capture of the gun in France asking for permission to retain the trophy, and the following letter was received in return:

"Dear —,

"I was much interested to hear what had happened to one of our guns. I shall be proud to think of it in your Square. Of course I cannot give you any official authority to keep the gun, but bar that I think the best place is the one you suggest.

Speaking on behalf of my Brigade I am only too glad that your Hospital, which has done so much to help us win the war, should keep the trophy.

"Yours sincerely,

"M. CROFTON,

"Lt.-Col. R.F.A.,

"O.C. 317 Bde., R.F.A."

A week or two later the gun was removed, and now we are most pleased to learn that Viscount Sandhurst has received a letter from the War Office granting permission to the Hospital to have the gun back and to keep it as a permanent memento.

The Bradshaw lecture, which was delivered by Lt.-Col. D'Arcy Power before the Royal College of Surgeons on November 14th of last year, has been published in book form. The subject of the lecture was "Cancer of the Tongue," and we feel sure that many Hospital men will be glad to avail themselves of the opportunity of possessing a copy of Col. Power's most interesting paper. The publishers are Messrs. John Wright & Sons, Ltd., Bristol.

We owe an apology to the Association Football Club anent our statement in a previous issue of the JOURNAL that with the exception of the Rugby Football Club the social side of the Hospital had been non-existent. We are very pleased to learn that this club has also had a very successful season, especially since the beginning of the year.

We are asked to state that the Annual Meeting of the St. Bartholomew's Hospital Women's Guild will be held on View Day, Wednesday, May 14th, in the Great Hall. Particulars and cards of invitation to the meeting may be obtained from the Hon. Secretary, Mrs. Norman Moore, 67, Gloucester Place, W. 1.

It is with much regret that we have to record the death of Dr. Thomas Hampton, which occurred on February 13th, from pneumonia, at Grosmont, near Hereford.

An appreciation of Dr. Hampton, with some details of his career, appears elsewhere in this issue.

We learn with much regret of the death of Dr. Joseph Baldwin Nias, which took place at a nursing home on February 20th. Some details of Dr. Nias's career and an appreciation of his work appear in a later page of this issue.

We also have to report the death of Dr. R. W. Brigstocke, which occurred at an advanced age at Scole, Norfolk. Dr. Brigstocke received his education at this hospital when Sir James Paget was Warden. He took the diplomas of M.R.C.S. and L.S.A. in 1859, and entered the Navy as surgeon. He served in ships engaged in the suppression of the slave trade, and while thus employed accompanied the expedition which found David Livingstone, with whom he stayed for some time. After leaving the Navy, and having obtained the degree of M.D. in Constantinople, Dr. Brigstocke settled in Beyrout. For forty years he had a very large practice in that cosmopolitan city. He was an accomplished linguist, and when Lecturer on Obstetrics, Gynaecology, and Diseases of Children at the Syrian Protestant College and Medical School, Beyrout (1870-1882), lectured both in Arabic and English. For services rendered during the cholera epidemic in 1896 Dr. Brigstocke received the Order of the Medjidie, third class, and for similar work among the Italian colony in Beyrout was made Chevalier of the Order of St. Maurice and Lazare by the King of Italy. On his return to England he settled at Scole, in Norfolk.

Dr. Brigstocke was a delightful companion and had many friends, not only in this country but also in the Far East. His wife, to whom he had been married fifty-three years, survives him, and he leaves a family of four daughters and two sons.

## THE LATE MR. HARRY BLAKEWAY.



deeply regret that the early death of Mr. Blakeway makes it necessary to appeal to the members of our Hospital to help to provide for the needs and future education of his family.

He leaves a widow and three children, the eldest of whom



is five years of age. During the last five years he devoted himself so completely to hospital work that he was unable to take that share of private practice which he might reasonably have expected to obtain in normal times. The position Mr. Blakeway had attained was won entirely by his own ability and hard work, and he was just passing through that critical period of a surgeon's career when, as Sir James Paget said, the work done is largely in excess of the income gained.

We feel sure that all colleagues and students who knew him and appreciate the work he has done for the Hospital and School will gladly help by sending a donation to any of the undersigned:

ANTHONY A. BOWLBY.	H. MORLEY FLETCHER.
D'ARCY POWER.	J. H. DRYSDALE.
H. J. WARING.	A. MACPHAIL, <i>Treasurer,</i>
W. MCADAM ECCLES.	<i>Anatomy Department.</i>
JAMES CALVERT.	R. M. VICK, <i>Secretary,</i>
	<i>Pathology Department.</i>

ST. BARTHOLOMEW'S HOSPITAL;  
March 20th, 1919.

## CONCERNING "PROTEIN SHOCK" AND INTRAVENOUS VACCINE THERAPY.

(An abstract of a Paper read before the Abernethian Society on March 27th, 1919.)

By A. E. GOW, M.D.

**T**HE protein shock reaction, which so far has attracted more attention as a therapeutic measure in America than in this country, is induced by the intravenous injection of a "foreign" protein—that is, a protein not normally present in the tissues of man. Various substances have been employed, mostly in the form of bacterial emulsions, though a similar reaction may follow the intravenous injection of horse-serum, proteose, egg-albumen, red blood-cells of a different species of animal, or certain colloidal metals, though in the latter case it would appear that the protective suspension may be responsible, in part at least, for the resulting phenomena. With regard to bacterial emulsions, it is found that the proteins constituting the *coli-typhoid* group are more efficacious in inducing the shock reaction than are those of other species, and it is therefore a vaccine of typhoid or colon bacilli that is most frequently employed. I have succeeded in producing a modified shock reaction with *Streptococcus pyogenes* in one case, but have found *S. salivarius* and a diphtheroid bacillus to be incapable of inciting the desired reaction. Pfeiffer's influenza bacillus is uncertain, but *Bacillus coli* apparently never fails when given in suitable dosage.

The diseases in which benefit by this form of treatment has been reported fall into four main groups:—

(1) Infective disease in which the causal organism is unknown or not certainly determined. This group includes Rheumatic Fever and Acute Arthritis of toxic origin.

(2) Infective disease in which the causal organism is known, but in which specific vaccine therapy is of little value, *e. g.* Gonorrhoeal Arthritis.

(3) Infective disease in which the causal organism is known, and in which intravenous vaccine is given for both its specific and shock effect, *e. g.* Typhoid and Paratyphoid Fevers, Coliform infections of the urinary tract, etc.

(4) Chronic disorders of unknown aetiology, *e. g.* Psoriasis, Pemphigus, Lupus erythematosus (1), and certain other diseases of the skin.

The vaccine may consist either of a plain or sensitised emulsion.

In the preparation of sensitised vaccine the antiserum employed is commonly derived from the horse, and it is possible that the vaccine may contain a trace of horse-serum protein. As so many patients nowadays have received at some time or other an injection of horse-serum, in the form of antitetanus serum or diphtheria antitoxin for example, which may have served as the sensitising dose, it is well, for safety's sake, to carry out a simple intradermal test as a routine to exclude anaphylaxis to horse-serum before an intravenous injection of serum or sensitised vaccine is undertaken. Further, a few individuals, particularly those with an unstable vasomotor system, may exhibit an idiosyncrasy to the form of protein (*coli* or typhoid vaccine) chosen, and it is therefore advisable that a similar test with the bacillary protein should be performed.

The intradermal test with serum is carried out as follows: Serum is diluted 1 in 10 with normal saline solution. This may be done conveniently in a sterile hypodermic syringe. A very fine and sharp needle is then fitted to the syringe already filled and the air is expelled. The outer aspect of the arm just above the elbow is a suitable site for the injection, and the skin there is well cleansed with ether. The needle is inserted through the skin as though a subcutaneous injection were about to be given; the syringe is then brought parallel to the skin and the point of the needle so manoeuvred that it again pierces the deeper layers of the skin without completely coming through. I have found it easier to get the point of the needle intradermal by this means than by a partial perforation of the skin from outside. That the needle point is in the correct layer is shown by any attempt to depress it causing a small pucker of the skin in the neighbourhood. A small quantity of the fluid—a drop or two is ample—is then injected; it should produce a small white wheal as big as a split-pea. The needle is withdrawn and a control injection made with sterile normal saline in similar fashion in the same neighbourhood. This saline wheal fades rapidly, as also does that produced by the serum if the test is negative. Should the patient show hypersensitiveness however, an urticarial wheal on an ery



thematous base begins to develop within five minutes, reaching its maximum usually in an hour and then fading rapidly. Other forms of foreign protein, *e. g.* vaccine, may be substituted for the serum in appropriate cases. Should the test prove positive "desensitisation" of the patient must be carried out before an intravenous injection is given, or otherwise alarming and even fatal symptoms of anaphylactic shock may ensue.

The protein employed to produce "protein shock" being most frequently a *coli* or typhoid vaccine, the remarks immediately following apply solely to the reaction induced by that type of antigen.

*Dosage.*—With fairly wide limits the size of the dose has but little effect on the severity of the reaction. Thus I have experienced a higher temperature response after an initial intravenous dose of 50 million killed *coli* vaccine in one patient than after 200 million of the same vaccine in another, though it must be admitted that the general constitutional disturbance was greater in the latter. So far as my experience goes, and according to American observers, the initial dose for an average adult may with perfect safety lie between 50 and 100 million, though Gay (2) in the treatment of typhoid fever advocates the use of 150 million sensitised typhoid bacilli as the initial dose. Cecil (3) mentions that by a mistake in technique 400 or 500 million killed typhoid bacilli were given as a first dose to three of his patients with arthritis, yet the reaction was little if any more severe than that caused by smaller doses and the therapeutic effect was no better.

In order to effect the desired result it is necessary to produce a moderate reaction. The dosage in successive injections must be progressively slightly increased so that a like train of symptoms may follow after each inoculation.

*Technique of the Injection.*—The patient is confined to bed for twenty-four hours at least. In order to lessen as far as possible the nausea and liability to vomiting commonly met with, especially after a first injection, a mild aperient is given the evening before. A light breakfast is advisable, and the injection should be made, if possible, before midday, so that the transitory unpleasantness of the reaction may be over before night.

Intravenous injections of one sort or another are of such common occurrence at the present day that these remarks on technique must appear superfluous to many, but I venture to include them as success is so dependent on attention to detail.

The requirements are: (1) Ether and wool to clean the skin. (2) A sterilised needle and syringe of 10 c.c. capacity. (3) The vaccine containing 100 million *coli* or typhoid bacilli per c.c. (4) Ten c.c. of sterile, warm, normal saline solution. It is more convenient if the total volume of the injection measures 10 c.c. rather than  $\frac{1}{2}$  or 1 c.c., as the larger quantity is easier to handle and the dose of protein can be given more slowly. (5) Adrenalin solution

1:1000 or  $\frac{1}{100}$ -gr. tabloids of atropine sulphate. An assistant to help in filling the syringe and to constrict the patient's arm and thus render prominent the veins in the ante-cubital fossa is also desirable. Dr. Canti has designed a very simple tourniquet, easy to release, which is admirably suited for the latter purpose.

The skin over the selected vein is cleansed and the desired dose of vaccine, whether  $\frac{1}{2}$ ,  $\frac{3}{4}$  or 1 c.c., is drawn up into the syringe and the volume made up to 10 c.c. with normal saline solution. The assistant now applies the tourniquet, or constricts the upper arm, which is lying flat on the bed fully extended, and the patient is told to open and clench the fist several times until the vein on the front of the elbow becomes prominent; in some individuals the veins are more easily felt than seen. The needle of the syringe is inserted into the vein in the usual manner of vein-puncture; a successful puncture is indicated by a flow of blood into the syringe. The assistant now relaxes the tourniquet (or his hold of the arm) and the injection is made very slowly; that the fluid is entering the vein and not the perivascular tissues is shown by complete absence of swelling in the region of the needle-point. When the contents of the syringe have been pushed into the vein the needle is withdrawn and the arm held vertically upwards for a few minutes to prevent extravasation of blood; no dressing is required.

#### THE REACTION.

*General.*—In the afebrile human subject the intravenous injection of from 50 to 100 million killed *coli* vaccine is followed by a very definite train of symptoms which comprise the so-called "protein shock reaction." For a period varying from three-quarters of an hour to four hours the patient will experience no abnormal sensations, but after that symptoms will appear somewhat suddenly. The earliest symptom is commonly an involuntary twitching of the muscles of the legs. This may spread to the trunk and become general with or without the patient feeling cold, and last, perhaps intermittently, for from fifteen to forty-five minutes; the onset of this rigor is occasionally preceded by a dull ache in the back or shins. Before the shivering is finished the patient commonly has abdominal discomfort, with nausea, and not infrequently vomits; he has headache, which is usually frontal and sometimes pronounced. In the more severe instances the patient may be very restless; dyspnoea and cyanosis have been reported, but I have never met with any symptoms of respiratory distress. Should such occur it is said a hypodermic injection of 1 c.c. adrenalin or of  $\frac{1}{100}$ -gr. atropin sulph., or both, give speedy relief. As the reaction passes off, especially if it be after a second or third injection, general pains in the limbs with marked cutaneous hyperaesthesia may be complained of for a short time and yawning is frequently seen. As a rule the patient is quite free from headache and other



discomfort after the seventh hour, though exceptionally facial herpes may develop two or three days later, with or without tender areas in the skin.

Just prior to the onset of the shivering the temperature begins to rise and continues to do so until about the sixth hour. It commonly reaches  $103^{\circ}$  or  $104^{\circ}$  F. before returning to normal at the end of twenty-four hours; defervescence may be interrupted by a short secondary rise of a degree or so.

With succeeding injections of increased dose the fever, though reaching an equal height, is apt to set in earlier and be of shorter duration.

The pulse-frequency is increased during the reaction, and extra systoles may occur during the rigor and for a short time afterwards. The increase of the pulse-frequency is generally of somewhat longer duration than is the raised temperature. The spleen may become enlarged during the reaction; in two cases of coliform infection of the urinary tract the organ was just palpable for a short time twelve hours after the injection.

*Blood-pressure changes.*—The systolic blood-pressure, in my experience, usually shows a fall of a few millimetres before any symptoms are evident. During the rigor I have met with a small rise on two occasions only, and that either to the pre-injection figure or a few millimetres above it; more generally the fall continues for twelve hours or so, the reading then being about 20 mm. below the initial figure. The systolic blood-pressure is commonly normal again after twenty-four hours.

The diastolic pressure generally rises appreciably within the first half-hour. In three instances it showed an increase of 12, 22 and 20 mm. Hg. respectively during that period. The rise may continue until the end of the rigor, but more frequently this pressure drops rapidly after the first half-hour and may be at its lowest by the end of the second hour—perhaps a drop of 30 mm. in one and a-half hours. It tends to remain at about this level for twelve hours or so, but is normal again in twenty-four hours.

Pulse-pressure is the term applied to the difference between the systolic and diastolic blood-pressures. The fall in systolic pressure coinciding with the rise in diastolic pressure soon after the injection obviously leads to a marked diminution of pulse-pressure. In two instances (in the same patient following a second and third injection) the pulse-pressure at the end of the first half-hour appeared to measure only 6 and 2 mm. respectively. This state of affairs was of very short duration, and fifteen minutes later the pulse-pressure had risen considerably owing to the rapid fall in diastolic pressure. So far as could be determined with the patient lying quietly in bed, this transitory low pulse-pressure was unaccompanied by any symptoms whatever.

*Cytological changes in the blood.*—The intravenous injection of *B. coli* vaccine causes an almost immediate fall in the white blood-cells, in which polymorphonuclears, lymphocytes,

and large mononuclears are all early involved; eosinophil and basophil cells appear to stand fast until later. Following a first injection the retreat of the Polymorphonuclears from the peripheral circulation is extremely hurried, and at the end of the first hour they may be outnumbered by the lymphocytes. By the second hour signs of a rally may be evident, and at about the fourth hour the pre-injection figure may be reached. A rapid increase then takes place, and the maximum of 20,000 to 30,000 per c.mm. is reached in twenty-four hours. This rise is succeeded by a fall during the next forty-eight hours to the pre-injection figure, or even below it, the whole cycle occupying approximately seventy-two hours. During the leucocytosis neutrophil myelocytes frequently appear, and normoblasts have also been met with.

Though the fall in the Lymphocytes is less abrupt it is a very striking feature, and of far longer duration than the polynuclear leucopænia. For the first half-hour the lymphocytes as a rule show little change, but before the hour is passed the departure of many from the peripheral blood is apparent and the exodus continues for two or three hours, when perhaps not more than a tenth of the original number will remain. By the eleventh hour there will be indications of recovery, and the number of lymphocytes gradually rises till it reaches the normal at about the forty-eighth hour. There is no lymphocytosis.

After second and third injections I have found the polynuclear leucopænia to be of shorter duration, and the leucocytosis more rapid in development, though less sustained. The lymphocytes, however, do not disappear so early from the peripheral circulation, and with later injections may even show signs of an actual increase before the fall sets in.

With smaller doses of coli or mixed typhoid vaccine the reaction is comparatively feeble. Dr. Adamson, who has kindly permitted me to refer to cases under his charge in this Hospital, has been treating successfully certain diseases of the skin with intravenous injections of mixed typhoid vaccine, the initial dose being 10 million killed bacilli. Some hours after the injection the patients commonly complain of slight headache, some general pains, and perhaps a little nausea. The temperature only rises a degree or two, and no chill or shivering results, but with subsequent injections a brisk reaction may take place.

It is obvious from the foregoing description of the clinical symptoms and signs that are wont to follow upon the intravenous injection of a foreign protein in certain doses that the reaction is in no sense a "shock" in the usually accepted surgical application of the term. Following immediately on a surgical operation, if the patient survive, three phases are commonly seen, termed respectively "shock," "reaction," and "traumatic fever." The stage of "shock" is characterised in the main by subnormal temperature, high pulse-frequency, and lowered blood-pressure. This is succeeded by reaction,







gonorrhœal arthritis appeared to benefit but little, if at all, by the vaccine; the injection gave relief for twenty-four hours or more, and then the joint pains returned.

In one case of chronic gonorrhœal arthritis marked improvement followed the intravenous injection of a diphtheroid bacillus which I isolated in quantity from the urine after prostatic massage.

Peterson (5) records a case of "acute multiple arthritis" which received at intervals doses of 50 to 75 million typhoid vaccine intravenously on three occasions, and was thereby much improved. The precise nature of the arthritis is not revealed.

Miller and Lusk (6) also report favourable results in the treatment of acute and chronic arthritis by the injection of foreign protein.

Acute disease, other than arthritis, has also been treated—in some cases satisfactorily—by the intravenous injection of typhoid vaccine. In typhoid fever itself both sensitised and unsensitised vaccine has been used by several workers. Gay (2) summarises their results and adds ninety-eight cases of his own, which show a mortality of 6.6 per cent., and thirteen complications. He states that the milder cases of the disease react better to the treatment than the more severe, but even the most severe will in some instances at least be benefited and even aborted. The usual dose of the initial injection was 150 million, and the dosage in successive inoculations was slightly increased in order to produce a similar reaction. He states that in typhoid fever the injection is followed in from fifteen minutes to an hour by a chill, which may last for fifteen minutes, and is accompanied by a rise in temperature of one to three degrees, reaching its maximum within three hours and then falling. With the chill is associated a rise in the pulse-frequency, and there may be slight cyanosis, some respiratory distress, and a sense of discomfort. The temperature reaches normal or subnormal in about twelve hours, with sweating, and usually improvement of such symptoms as headache, delirium, etc. If the temperature again rises over a period of two or three days a slightly increased dose is given; if no striking result follows three or four injections at two or three days' interval, very little good from further treatment on the same lines is to be expected. The disease was aborted in one-third of the cases in his series, benefited in another third, while in the remainder it was unaffected. The liability to complications appeared to be diminished, but as a means of preventing relapse the injections are of little value.

Typhoid vaccine has also been administered intravenously in the treatment of lobar pneumonia (Scully (7)), and other acute infections. I have employed an autogenous coli vaccine intravenously in the treatment of subacute *pyelonephritis* with good result. One case of two months' duration showed a tender swelling in the right renal region, pyrexia, and 10 per cent. of pus in the urine. After four injections the urine became free from cells

and bacilli, and was still sterile when last examined, two months later.

A *traumatic ulcer* of the foot, consequent on a wound sustained in the Zeebrugge raid, resisted ordinary vaccine and antiseptic treatment for five and a-half months. It healed rapidly after one intravenous injection of autogenous sensitised vaccine prepared from the streptococcus which was found to be the predominant organism. The dose of 100 million produced a sharp reaction with shivering and a rise of temperature which lasted for eighty hours, reaching its maximum of 104.2° F. at the twentieth hour.

A case of *broncho-pneumonia following influenza* was treated with vaccine intravenously. A lusty New Zealander, æt. 25, contracted influenza in hospital, and, as he appeared very ill in the first twelve hours, a swab was taken of his nasopharynx and plated out on blood-agar. A small Gram-negative bacillus, morphologically indistinguishable from Pfeiffer's influenza bacillus, was obtained in practically pure culture. An emulsion of this organism was put up with the serum of a patient recently convalescent from a sharp attack of the disease, but otherwise healthy, and in whose nasopharynx a like organism had been demonstrated; sensitisation of the bacillus appeared to take place.

During the third day this patient's temperature fell from 104.8° F. to 99.8° F. and all seemed to be going well, but on the fourth day the temperature shot up again, headache returned, he developed severe pain in the right chest, a frequent painful cough, and brought up a quantity of bright blood-stained sputum, obviously from the lung. Herpetic vesicles rapidly developed on the left lower lip. The same evening movement of the right chest was greatly diminished and percussion much impaired in the axilla and below the right nipple. There was no marked increase of vocal vibrations, but the breath-sounds were very weak in this area, and many fine crepitations were heard with marked increase of voice-sounds.

A film of the sputum showed large numbers of this Gram-negative bacillus and a few organisms resembling pneumococci. As his leucocyte count was only 6560 per c.mm. it was considered that the pneumococcus was not the main infecting organism.

His general condition appearing serious, it was decided, with his permission, to give the vaccine intravenously.

A dose of 75 million sensitised bacilli was given intravenously fourteen hours after the onset of the signs and symptoms suggestive of broncho-pneumonia, his temperature at the time being 103.8° F. An hour later the temperature was unchanged, but at the second hour it had risen to 105.4° F.; yet there had been no chill and he volunteered the statement that his headache had gone, his chest was more comfortable, and that he "felt much better in himself." Four hours after the injection the temperature had returned to 103.8° F.; it continued to fall by lysis, being subnormal in seventy-two hours.



The sputum remained blood-stained for twenty-four hours after the injection, when it became more copious and purulent, and the pneumococcus appeared to be the predominant organism. Cough persisted for several days, and the signs in the chest slowly cleared.

It is regretted that frequent observations on the behaviour of the leucocytes after the injection were not possible, but no leucocytosis was detected, the highest count recorded being 7320 per c.mm. at the tenth hour.

The writer does not for one moment bring this forward as a convincing case of the value of intravenous vaccine, but he believes it can at any rate be said that it was productive of no ill-effect, and the almost immediate improvement in the general condition of the patient was certainly striking. Unfortunately one is rarely in a position to give an autogenous sensitised vaccine at so early a stage of disease.

#### REFERENCES.

- (1) ENGMAN and MCGOERY.—*Journ. Amer. Med. Assoc.*, 1916, lxvii, p. 1741.
- (2) GAY.—*Typhoid Fever*, The Macmillan Company, 1918.
- (3) CECIL.—“Report on Forty Cases of Acute Arthritis treated by Intravenous Injection of Foreign Protein,” *Arch. Int. Med.*, December, 1917, p. 951.
- (4) AULD.—“Pyrogenic Therapy,” *Brit. Med. Journ.*, 1918, i, p. 195.
- (5) PETERSON.—“Protein Shock Therapy,” *Arch. Int. Med.*, November, 1917.
- (6) MILLER and LUSK.—“Foreign Protein in the Treatment of Arthritis,” *Journ. Amer. Med. Assoc.*, 1916, lxvi, p. 1756.
- (7) SCULLY.—*Journ. Amer. Med. Assoc.*, 1917, lxix, p. 20.

## SOME POINTS IN THE TREATMENT OF INTRA-OCULAR FOREIGN BODIES IN FRANCE.

By R. FOSTER MOORE, M.A., B.C.(Cantab.), F.R.C.S.

**T**HERE are, of course, a number of points in which military differs from civil eye practice, but there are two which especially strike one.

The most important is the large number of wounds of the eyeball and orbit; the second is the presence of the ubiquitous scrimshanker, a genus almost unknown in ordinary everyday work.

The most interesting part of the work is the treatment of the intra-ocular foreign bodies.

The writer had charge of the ophthalmic work of one of the three areas in France at which a giant magnet for the removal of these was provided, and was very fortunate in

having two most excellent colleagues, one of whom, Mr. H. P. Gibb, was a Bart.'s man.

We drew upon a large area for penetrating wounds, and consequently had exceptional experience in all forms of intra-ocular operations.

In ordinary hospital practice the tale of the man who comes up with an intra-ocular foreign body is usually that he was hammering a chisel or similar tool when a fragment flew off and struck him in the eye. He is probably seen within an hour or two of the accident, the fragment is often clean, smooth, and sharp, and is usually magnetic, and consequently can be removed.

In France, on the other hand, the man was frequently not seen till the second day, the fragments which entered the eye were of various material, *e.g.* stone, bone, wood, copper, aluminium, iron, etc., and of these the last only was capable of removal (with few exceptions), and then only if it was magnetic.

The fragments, too, were often dirty and had rough, fractured surfaces.

It will be gathered that the prognosis in the case of perforation of the eyeball by a foreign body is greatly worse in military than in civil practice.

A new type of giant magnet has recently been introduced, which will, I believe, completely displace the old Haab. Ours was of this new type, and was the only one of its kind in France. We have recently substituted this magnet for the Haab at Moorfields, and as one is shortly to be installed at this Hospital it may be of interest to describe it and the method of its use. The figure on p. 81 gives a good idea of its general appearance.

It consists of an oval of soft iron wound with insulated copper wire. When a continuous current is passed a magnetic field is generated within the ring, which has its greatest saturation at the centre, and soft iron rods, such as those supplied with the instrument, when taken in the hand and brought within this field, become magnets for the time being. If one individual holds the largest rod within the ring on one side, and another individual applies to this the next largest rod from the other side, the two will find themselves unable to pull the rods apart.

The need for so great power will be realised when it is remembered that many intra-ocular foreign bodies are smaller than a pin's head, that they may be but feebly magnetic, and that it may be impossible to approximate the rod nearer than to within 18 mm. of the foreign body. It should be made clear that the magnet is not used to pull the fragment forcibly out of the eye, but to draw it into some position from which it is easily removed—usually into the anterior chamber.

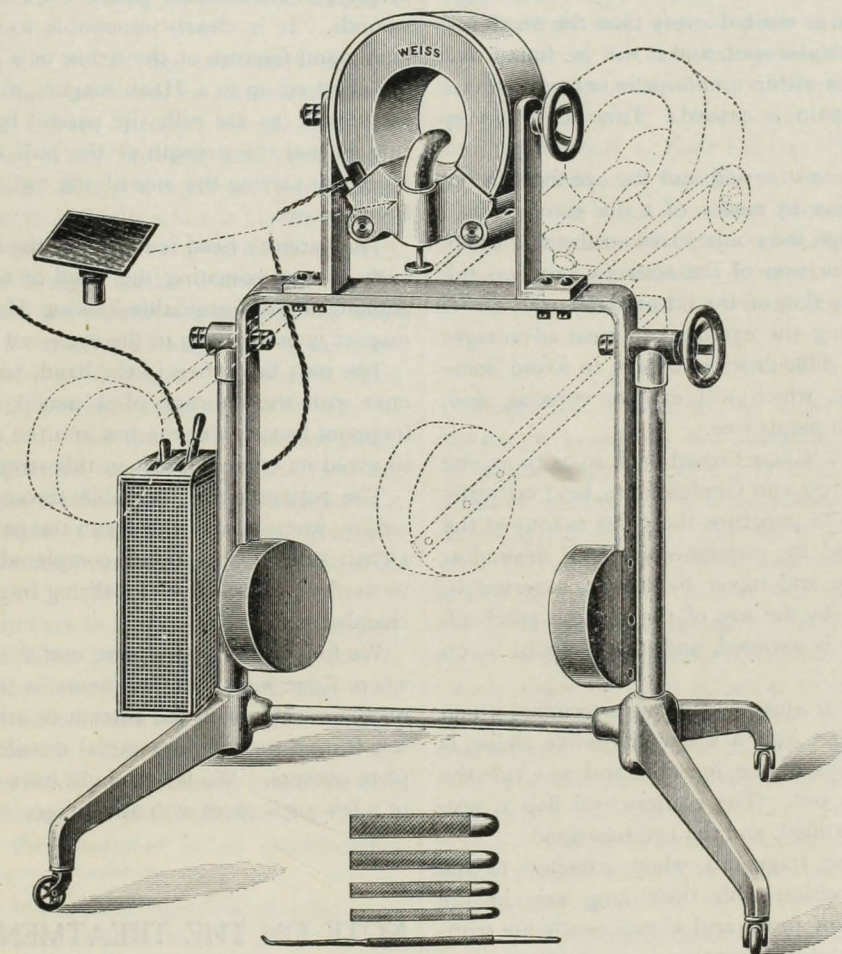
#### METHOD OF USE.

The patient is placed on an ordinary operating table, the pupil having been previously fully dilated so as to facilitate



the entry of the foreign body into the anterior chamber, the eye is cocainised and a speculum introduced. The magnet is then brought up behind the patient and the ring swung down into the horizontal position so that it encircles his head. The head and magnet are now manipulated so that the eye to be examined is exactly in the centre of the magnetic field. The smallest rod is now brought up to the centre of the cornea until it actually touches it, and any sort of reaction, whether subjective in the way of pain, or

The reason for applying the magnet always to the centre of the cornea is that by this means a fragment, wherever it may be in the eye, is brought up against the lens, over the highly convex posterior surface of which it glides till it reaches its edge. It then comes through the fibres of the suspensory ligament and presents behind the iris. From this position it is coaxed into the anterior chamber by means of one of the small rods, and left resting on the front of the iris for the time being.



GIANT RING MAGNET.

objective in the way of movement of the iris, etc., is conclusive proof of the presence of a magnetic foreign body.

If no response is elicited the larger rods are used in turn until the largest one of all is applied, taking care always to apply them to the centre of the cornea only. If now, however, the greatest power available has been used with a negative result, the largest rod should be applied to the sclerotic all round as far back as possible, with the idea of getting nearer to a foreign body which may possibly be present, but which has not responded hitherto because it was perhaps too minute, or too far back, or too feebly magnetic.

The giant magnet has now completed its function, and the actual removal is effected by means of a small hand electro-magnet.

A keratome incision is made through the cornea above, taking care in withdrawing the keratome to avoid loss of the aqueous by keeping its point forward. The hand magnet is now applied to the cornea immediately over the foreign body, which can then be guided along the posterior surface of the cornea to the keratome incision, through which it is drawn without introducing the magnet terminal inside the eye or even between the lips of the wound.

It will be evident that the success of this manœuvre wit



the small magnet depends upon avoiding the escape of the aqueous.

The foregoing is an account of what is known as the anterior route for removal, but in a few cases, owing to the minute size of the fragment, to its low magnetic affinity, to its position far back in the globe, to its entanglement in the retina or choroid, or sometimes to its large size, it becomes necessary to incise the sclerotic and effect the removal by this, the posterior route.

The presence of a magnetic foreign body is made sure of by the fact that pain is elicited every time the small rod is brought up to a particular spot, and it will be found that the patient is able to say within a millimetre or two the exact point at which most pain is caused. This point is very carefully noted.

The patient is now anæsthetised and the eye fixed in the most convenient position by means of a silk stitch, passed on the one hand through the conjunctiva on the side opposite to the projected incision of the sclerotic, and on the other hand through the skin of the lid or cheek.

This method of fixing the eye has two great advantages over forceps, first it is difficult with forceps to avoid some pressure on the globe, which will express vitreous, and, secondly, it leaves both hands free.

A flap of conjunctiva is now turned back so as to expose the sclerotic, and a narrow von Græfe's knife, held vertically to the surface, is made to puncture the coats exactly at the predetermined spot, and the incision enlarged if desired as *the knife is withdrawn* and never by see-saw movements. By this expedient and by the use of the fixation stitch all pressure on the globe is avoided, and there should be no loss of vitreous.

The small hand electro-magnet, having a terminal which has been hammered out into a screw-driver-like shape, is now brought to the lips of the incision, and as a rule the fragment at once slips out. The conjunctival flap is now sewn over, atropine instilled, and the eye bandaged.

Fortunately all these fragments when attracted to the magnet take up a position with their long axis in the direction of the lines of force, and consequently are withdrawn with their narrowest diameter engaging the wound and never broad side on.

No mention has been made of X-ray localisation. The most important reason for this is that so far as immediate treatment is concerned the magnet tells everything that is necessary, *i. e.* it demonstrates whether a foreign body which is magnetic is present, and this X rays do not tell; and in times of pressure (I speak of war conditions) the radiographer is sufficiently occupied without having relatively unessential work put upon him. It is true he can localise very accurately the position of the fragment, but this is almost immaterial, for, with few exceptions, an endeavour is made to bring it forward into the anterior chamber from whatever position it may be in the eye. If the magnet

proves negative, the aid of X rays is called in to determine the presence or absence of a non-magnetic foreign body, in this way influencing the ultimate prognosis, and the question as to whether the eye should be removed. It should be stated, however, that the presence of an intra-ocular foreign body does not necessarily render enucleation advisable, for some such eyes recover good vision and retain it.

The advantages of this magnet over the Haab will, I think, be obvious, and they are especially great in war surgery, where so many patients are the subject of multiple wounds. It is clearly impossible to make a patient with a compound fracture of the femur or a penetrating wound of the chest sit up to a Haab magnet, and it is a very clumsy instrument to use with the patient lying down. With the ring magnet the strength of the pull can be graduated to a nicety by varying the size of the rod used and its distance from the eye.

The patient's head is fixed on the table, and so the difficulty of approximating the head of a scared and reluctant patient to the formidable-looking Haab is avoided. The magnet is brought up to the eye—not the eye to the magnet.

The rods being free in the hand, one can use the smaller ones with the delicacy of a pencil and carefully coax a fragment from under the iris into the anterior chamber, and so avoid its entanglement in this structure.

The patient is on the table throughout the whole procedure, whereas with the Haab the patient is first sitting on a chair and the operation is completed on the table. It can be used as described for localising fragments in the vitreous chamber.

We found this instrument useful in a number of cases where there were shell fragments in the tissues of the face, neck, or scalp, or in the antrum or orbit. In one case only was it used for an intracranial missile, but then with complete success. We felt it might have been used more often in a few such cases with advantage.

## NOTE ON THE TREATMENT OF CHRONIC AMÆBIC DYSENTERY.

By S. R. PRALL, M.B., B.C.(Cantab.), Capt. R.A.M.C.



THE object of this note is to call attention to a method of treatment which I have found to produce very good results, and which is perhaps deserving of wider use.

The essential factors of treatment are: (1) The combined administration of ipecacuanha by the mouth and emetine by the rectum.

(2) A modified Lenhart diet; and—

(3) The use of rectal carminatives twenty-four hours after the rectal injection of emetine.



The diet on the first day consists of one egg and eight ounces of milk, which are beaten up together and given every hour in teaspoonfuls from 8 a.m. to 8 p.m. This diet is increased each day by one egg and four ounces of milk until the patient is taking daily eight eggs and two pints of milk, when these quantities are continued.

Ipecacuanha is given in the form of a pill at 11 p.m. on the first day—that is, three hours after the last meal. On the first day 60 grs. is given, and this is decreased by 5 grs. each day until the patient is taking 10 grs., after which he ceases to take any more.

On the morning of the second day one ounce of mag. sulph. is given; when this has acted, emetine is given by the rectum—one half of a grain dissolved in eight ounces of distilled water is injected in the morning and again in the afternoon. It is essential that the injection should reach the cæcum; the patient will usually retain it for two or three hours. On the third day a rectal carminative is injected. I used for this purpose issufgoll seeds—a drachm to a pint of water—and this gives the patient a good deal of relief from the pain which is usually, although not always, experienced after the emetine injections. Emetine is again given on the fifth, eighth, eleventh days, and so on until six grains have been given. By this time the patient has invariably improved, his weight has increased, amœbic cysts are reported absent from the stools, and his usual complaint is that he wants more food. The diet is then gradually increased, scraped raw beef and rusks being the first additions.

To effect a permanent cure in a case of chronic dysentery is undoubtedly very difficult in this country.\* Cases of chronic dysentery supposed to have been cured may recur after twelve months—whether from the same infection or a fresh one it is difficult to say. It is impossible to say if the cases with which I dealt were permanently cured, as they passed out of my care during convalescence, but it is certain that they reacted to the treatment in an extraordinary manner.

I observed that the hypodermic injection of emetine in cases of chronic dysentery, whilst it had no effect on the appearance of amœbic cysts in the stools, frequently resulted in disordered action of the heart, especially after patients had had a prolonged treatment. This toxic effect of emetine never resulted after rectal injections as far as I observed, even though some patients continued injections for two or three months whilst waiting for a boat to England.

The value of emetine in dysentery is well known and undoubted, but the points I have emphasised indicate that administering emetine *per rectum* is more rational than the hypodermic method, because the emetine is able to act at once at the seat of the infection, and also because it does not produce any toxic effects on the heart.

\* The note was written in India.—Ed.

## BILHARZIOSIS.

By S. A. EL DAAB, M.R.C.S., L.R.C.P.



URING my short practice in this country I have already met with a case of bilharziosis. Considering that many Englishmen have been to Egypt and Mesopotamia, where this disease is endemic, it is very likely that more of these cases will be met with in due course by my hospital colleagues who have not given the disease much consideration before. It has thus occurred to me to formulate a few points which I have gathered from my teachers at Kasr El Ainy Hospital who have had a vast experience of the subject.

Bilharziosis is not a modern disease. Certain engravings on the walls of one of the ancient Egyptian temples in Kena, dating thousands of years B.C., give a clue to its having been known to the ancient Egyptians (Madden).

### ÆTIOLOGY.

Bilharziosis is due to the *Schistosomum hæmatobium*, commonly known as the bilharzia worm. It is similar to the liver-fluke of cattle, and lives in the radicles of the portal circulation. It is usually found in couples, the male enclosing the female. The male is cylindrical in shape, white in colour, 11–15 mm., and possesses an oral and a ventral sucker; there is a ventral folding of the two sides which encloses the female. The female is longer and darker in colour, 20 mm. The outer surface of the body is closely beset by small cuticular prominences. The exact method by which the ovum leaves the human body is now understood. The female migrates from larger to smaller veins where it sticks and sheds its ova. The walls of the bladder are the site of election, particularly round the trigone. The ovum with the help of its spine passes through smaller venules and finally pierces their walls and lies in the peri-vascular spaces of the submucous layer, whence by muscular contraction of the bladder during micturition it is expelled with the urine. If the urine gets mixed with fresh water, the ova hatch in from twenty to thirty minutes, letting loose the free larva (miracidium), which swims about by virtue of its cilia; if this meets the intermediate host, which is a small mollusc abounding in the irrigation canals of Egypt, reaching the liver of the intermediate host, it undergoes metamorphosis and migrates as an immature worm (1–2 mm.). These immature worms, and not the miracidia, have the capacity of getting into the human circulation, either through the mucous membrane or skin.

The points of interest are:

- (1) The intermediate host has only recently been discovered by Leiper (1916).
- (2) The miracidium (free larva) can only live in stagnant



water—a point which explains the fact of its rare occurrence in Upper Egypt (there being no stagnant water there).

(3) A hot climate (Egyptian summer) is essential for the completion of the cycle.

#### PATHOLOGY.

For the sake of convenience I shall confine myself to lesions of the bladder, but the observations hold good for rectum, colon, ureters or kidneys.

The presence of the ova excites an irritating process of the submucous tissue, while hæmorrhages are produced by the action of their spines. The morbid anatomy of the condition is that in the early stages there are hyperæmia and petechial hæmorrhages. The condition known as "sandy patches" is very characteristic. This is due to the collection of numerous ova in patches in the submucous layer of the bladder, which look and feel very much like a thin layer of sand. In the later stages there are papillomatous, ulcerative and gangrenous conditions of the bladder, and in very old cases the walls of the bladder are extremely rough and the lumen is reduced to a minimum.

#### CLINICAL ACCOUNT.

(1) Frequent painful micturition is sometimes the earliest symptom, but frequent hæmorrhage, which may be microscopical, but as a rule macroscopical, is the first alarming symptom.

(2) Retention of urine is a frequent symptom.

(3) Later on secondary septic cystitis supervenes, and the case takes the form of an ascending infection.

(4) Still later there is a very nasty complication—hydro- and pyonephrosis from implication of the ureteric openings.

(5) Bilharzial masses in perinæum or penis or vulva, leading to abscesses and fistulæ.

(6) A bilharzial mass may act as a nucleus for a stone.

(7) A clay pipe is responsible for a cancerous lip in England, and bilharziosis is responsible for a cancerous bladder in Egypt (Ferguson).

#### TREATMENT.

*Prophylactic.*—It would be necessary to dry Egypt every five years in order to eradicate the disease. (Ideal but rather drastic!) The following lines of treatment are taken by different surgeons:

*Palliative.*—Male fern, etc.

*Symptomatic.*—Hot douches of antiseptics, etc.

*Curative.*—Intravenous injection of—(1) Emetine, which stops the bleeding and produces negative result by the microscope, but immediately the injection is stopped there is a relapse. (2) Tartar emetic, claimed to be encouraging by Christopherson.

*Operative.*—Perinæal drainage. In the early stages it is unnecessary; in the late stages it is fatal. Operate on masses and fistulæ.

## EPISODES OF WARD-LIFE.

### "THE JOLLY RONUKERS."

**L**OOKING back over that period during which I was a patient, a student, not of medicine, but of hospital technique, I remember at least one item which might claim the epithet "exciting."

Of course, the ordinary commonplace medical student or nurse would see nothing worthy of the term "exciting" in the monthly appearance of two or three men who come to polish the floors. Indeed, to appreciate, and to appreciate fully, is of the sick a privilege; and one consolation awarded to our patients is the thrill to the backbone which they experience when The Jolly Ronukers give their entertainment in the wards.

Monotony tones all colour to a dull grey. Grey indeed was the ward on that dull autumn morning. Monotony was King and Routine his Commander-in-Chief.

The sequence of awakening day had been mechanically waded through as it had been mechanically waded through each morning for past decades—seen, but not realised; the same kind of probationer swept the same floor in the same conscientious way as probationers of 1818 A.D. conscientiously swept the floor. Brasses were cleaned, slabs were cleansed, and a sleepy patient had risen at 6.15 and had rubbed up the electric light switches. The two-year stripes made the same speculations on their chances in the next blue-belt exam. as their predecessors have done back into the dim past. Even the final flourish at the end of a bed-making was in the daily programme, when the curtain is slung up, away from harm, over the half-hoop, and the two nurses marching to the foot end of the bed clutch the bar of the bed *en passant*, and jerk the bed and its occupant to a position fourteen inches further from the wall.

One of the nurses commenced pulling down the curtains, carefully folding each and slapping it in a professional manner against the wall. It was all habit.

Suddenly, as if she had heard a whistle and "Take Cover" from the street below, she stopped, thought one moment, then sharply addressed another nurse on the opposite side of the ward: "Nurse! The Ronukers!"

Immediately the air was electric with bustling and excitement. Involuntary became voluntary; potential became kinetic; no longer the ordinary was received, but the extraordinary was expected. O men of Bartholomew! what a change was there!

Nurses began to run hither and thither, no longer unnoticed by the vulgar crowd, no longer unheeded in their thankless task. Pull out the beds again; sling once more the curtains on the hoops!



Wake, O thou that slumberest ; waken this joyous morning ! Rejoice with the world ! Be glad in your heart for this day of all days the enjoyable and the gladsome is not rationed ! No therapeutic doses to-day ; to-day is Free Beer ! Take full measure ! The brim is sparkling with beaded bubbles. Take it now, lest you awake and to-morrow has come—to-morrow with its likeness to the past, to-morrow with its ever-recurring ablutions, meals, ablutions, and the sleepy afternoon droning of the physician's voice as it slowly proceeds from bed to bed, moving only to linger again, lingering only to fade away in your dreaming.

Lunch came and was cleared away. The excitement had developed and had reached a degree of silent tension which was only equalled in the highly-strung nervous state of the febrile.

Solemnly the clock ticked out the minutes till the event of the month should take place. Titterings of nurses in the kitchen seemed irreverent. To cough was to profane the sacred moment, big as it was with the future.

At last the future was born.

Into the ward strode those great men, proud in their power, stout with muscle, slow in their strength, prepared—not to act—but to perform their life-work.

I respected them as, when a boy, I respected an engine-driver ; I envied them as I envied the postmen who drive red-painted Post-office carts. I revered them.

It was calmly that each took off his hat, his coat, and then his waistcoat. It was with calm deliberation that each rolled up his sleeve. But beneath the still surface deep under-currents flowed swiftly.

Thus prepared, the three heroes stood up, glanced around like experienced batsmen to see how their opponents (passive in this game, and helpless) were placed, and then, spitting into their hollowed hands, they leapt to their work.

My memory gives me no clear picture. The atmosphere was that of a futurist cinematograph show. The Ronukers darted in all directions. Clutching on to bed-rails they slung the beds from this side to that, and from one end of the ward to the other. They juggled with stools and chairs. I remember the last nurse dodging a bed and disappearing from view, hoping to evade purgatory at least in this life.

After a second or two, when the beds and other articles of furniture and the patients were all piled in one corner of the ward, these frantic men of herculean strength seized what I remember as large tree-trunks, and ran madly up and down and round about, swinging the tree-trunks and making hideous grimaces—a very fetish of wild movement and savage ecstasy over living.

After this frenzied dance of liberty the beds were again seized and hurled over to another corner of the ward, and another mad frolic commenced.

But I was weak from my continued fever ; I fainted in the fulness of pleasure.

When I revived in the evening the ward had reverted to type : the time for washing came round as usual. But for the absence of a nurse who fell on the slippery floor and sprained her ankle, no trace remained of the spirited antics which had been performed for us that very morning by The Jolly Ronukers.

D. W. W.

## OBITUARY.

JOSEPH BALDWIN NIAS, M.D.(Oxon.).



JOSEPH Baldwin Nias died on February 20th, 1919.

He was born at Bath on December 13th, 1857, the eldest son of Admiral Sir Joseph Nias, K.C.B., whose name was given to that remote island in the Pacific from the folk lore of whose inhabitants Sir James Frazer has gathered so many illustrations in his recently published volumes on *The Folk Lore of the Old Testament*.

After spending five years at Winchester Nias entered Exeter College, Oxford, in 1875, and was elected to an open scholarship in Science in 1876. He thus came under the teaching of Ray Lankester, who was then in residence and was actively engaged in College tuition. In 1879 he obtained a First Class in the Final School of natural Science at a time when candidates were not allowed to specialise. He entered St. Bartholomew's Hospital for his medical training in October, 1879, and in 1882 he was elected Burdett-Coutts scholar in the University of Oxford for proficiency in Geology and Natural Science as bearing on Geology. In the same year he was chosen a Radcliffe Travelling Fellow, and spent the statutable period abroad, chiefly in Paris. He was admitted a Bachelor of Medicine in 1883, and a Member of the Royal College of Physicians. He filled the post of Casualty Physician during the years 1885 and 1886, having Dr. Haig and Dr. Arthur Davies as his colleagues. In 1893 he graduated M.D. at Oxford with a dissertation "On Mastication in Young Children." He then settled in general practice at 5, Rosary Gardens, South Kensington, where he remained until his death.

A very courteous gentleman, and somewhat of the old school, Nias had original ideas upon the subject of medical education. He determined from the beginning of his career that he would practise medicine, and it was popularly believed amongst his contemporaries that he succeeded in obtaining his medical qualifications without having seen more surgery than was visible in an occasional visit to the out-patient room. It is certain that he never became an in-patient dresser. In later life he devoted his attention to bacteriology, and worked in the Laboratory at St. Mary's Hospital. He wrote a report on the Greek manuscripts in the Library of the Medical Society of London, which was published in 1905.



At the International Congress of 1914, in which a section for the history of medicine was formed for the first time, Nias was placed upon the council of the section, and read an excellent paper entitled "Typhoid Fever in the Civil War" (1642-46).

The Clarendon Press issued in 1918 his sketch of the life of Dr. John Radcliffe, with an account of his Fellows and Foundations. This work had occupied much of his spare time for many years, and it was a source of great satisfaction to him that he had lived to complete it. D'A. P.

#### COLIN SADLER HAWES, M.R.C.S., L.R.C.P.

It was with very great regret that his many friends heard of Colin Hawes's death on December 15th, 1918, from pulmonary hæmorrhage at the age of 42, for he was a man with many close friends, and in spite of being an invalid for so long his interest in his friends never flagged.

His circle of correspondents was exceptionally large. Letter-writing was his *forte*, and he wrote such a good letter that his letters had to be answered if for no worthier reason than to bring a reply again from him. He had a wide acquaintance with Bart.'s men and their movements. A reference to him would infallibly elicit information as to the whereabouts and present occupation of most of his contemporaries and many who were not of his own time.

Colin Hawes was educated at Haileybury and Bart.'s, taking the Conjoint qualification in 1900. As a student he was very keen on games, and played regularly for the Hospital in the 2nd XI at cricket and 2nd XV football, though probably even then his health prevented his attaining more distinction in athletics.

From October, 1900, to October, 1901, he was House-Surgeon to Mr. Walsham, and a great favourite in the residents' quarters and mess.

Shortly after going out of residence the signs of early phthisis were detected. The remainder of his life was spent in searching for a climate and a cure. Having tried South Africa, he journeyed to the Argentine and finally returned to England, becoming assistant to Dr. Thurnam at Nordrach-on-Mendip Sanatorium. Unfortunately, although his disease progressed but slowly its course was never completely arrested, and his work at the Sanatorium was a constant struggle in spite of his intense interest in the problems of tuberculosis.

In 1908 he married Lilian, daughter of the late Robert and Mary Gibson, of Keighley, Yorks.

During the war he braced himself to another effort and undertook medical work again at the South African Hospital in Richmond Park. His heart was thoroughly in this work, and he dearly loved to give his time and his strength to his soldier patients. But his strength was unequal to the call. He was compelled after ten months at this hospital to give up work altogether.

After many months of more complete invalidism he died,

unexpectedly and rapidly, of a hæmoptysis, having lived to his great joy to see the war brought to a successful end.

J. A. N.

#### THOMAS HAMPTON, M.B.(LOND.), M.R.C.S., L.R.C.P.

Dr. Thomas Hampton, whose death occurred on February 13th, at Grosmont, near Hereford, was a St. Bartholomew's man. After taking the qualification of the Conjoint Board, he was appointed House-Physician to Dr. Philip Hensley. Other appointments he filled in London were House-Physician to the Metropolitan Hospital, and then Resident Medical Officer to the Royal Chest Hospital. He came to me as assistant in my practice in 1898, and stayed until October, 1900, when I persuaded him to go back to London and take the final M.B. This he did with apparently little trouble. He afterwards settled down in practice at Grosmont, where he has made himself universally beloved. He has been a very staunch friend of mine all these years, and I have had an enormous number of opportunities of judging his sterling worth in practice. He was especially shrewd in the diagnosis of surgical emergencies arising out of medical cases, and never lost time—even at the greatest personal trouble and inconvenience to himself—in getting them operated on without delay. When Hampton made a diagnosis it was never very far off the mark. I have never forgotten the clear and definite clinical picture he drew in a case of sub-diaphragmatic abscess following old ulcer of the stomach. It was operated on with perfect result, and the lady has been in good health ever since. (Such cases were not recognised twenty-one years ago as early and satisfactorily as they are at the present day.)

He married a daughter of Albert Estcourt, Esq., of Gloucester. His wife survives him without children, to whom is extended the heartfelt sympathy of all with whom he came in contact.

C. F. C.

#### ABERNETHIAN SOCIETY.



HE Midsessional meeting of the Abernethian Society was held in the Medical and Surgical Theatre on March 13th, the President, Mr. Lyon-Smith, being in the Chair.

A large audience of members and visitors, including the Nursing Staff, gathered to hear Baron Meyendorff's discourse on "Various Aspects in the Origin and Development of Bolshevism in Russia."

The Baron, who was President of the Russian Duma during the years 1907 to 1908, was introduced by the President.

In fluent English Baron Meyendorff gave a most interesting account of the history, development and psychology of the Russian revolution. Comparing the Russian to the French and other revolutions he discussed the local and general causes, which he divided into physiological and



psychological. In his opinion the war had upset the normal sentiment of certain classes in Russia. When the revolution was initiated the general opinion was that it would not succeed. The Baron had close relations with leading members of all parties, and was therefore in a position to study the feelings of the country.

The garrison of Petrograd, 200,000 men in all, was the first part of the army to join the workmen. The majority of these soldiers had not been to the front. At this time the fighting forces still remained loyal. The workmen's programme was then accepted, although disapproved of by M. Kerenski.

The moderate Socialists, aided by part of the army, wanted a more energetic interference in the war. There is no doubt that these persons were true patriots, but the people were tired of the war and wished to keep on the defensive. Furthermore, they desired to give up all offensive tactics, as well as all ideas of conquering Constantinople. This made an excellent medium for Bolshevism, which started then under Lenin, who preached that the war was waged and kept up by the capitalists merely for commercial purposes.

The triumph of Bolshevism was as unexpected as that of the first revolution. The Bolsheviks were in power in two days, and they themselves were astonished at their success. Symptoms of spontaneous anarchy quickly followed. Soldiers began to steal and shoot at random. Policemen and officers were murdered in cold blood, whilst women looked on and jeered.

New military laws were introduced to moderate the outrages and bloodshed, but, there being no mutual confidence, various new powers sprang up spontaneously. "When the individuals of a race become suspicious," said the Baron, "they give way to cruelty, and this has no limits."

Soldiers returning from the Front were classed as "heroes," and displayed their heroism by committing outrageous crimes.

Baron Meyendorff made an interesting study of the psychology of the feelings of the people. Individual responsibility, he stated, is the result of modern ideas. This fact has been misunderstood in Russia, where the innocent mother of a soldier is shot because she is a militarist, and similarly any German is considered a criminal because he is a German.

The first principles to be lost in a psychological disease of this kind are those of decency.

Bolshevism is a form of Socialism worked by a degenerate crowd. It is a battle of classes, and its aim is to destroy bureaucracy and ownership.

Lenin, the Bolshevik leader, is by birth a Russian nobleman. In 1897 he published a book in Switzerland on Socialism, basing his theories on those of the well-known German Socialist Carl Max. The Socialists were divided into evolutionists, who wished to reach their goal by gradual

innovation, and the revolutionaries, whose means were blood and steel. It was to the latter class that the Bolsheviks belonged, clamouring for the immediate extermination of the *bourgeois* and landowners.

Baron Meyendorff concluded his brilliant and most interesting discourse by saying that Socialism deprives a nation of all the qualities and attributes which lead to progress.

The President called on Col. D'Arcy Power, who, in a brief speech, thanked Baron Meyendorff for his brilliant address. Mr. Harmer seconded the vote of thanks, which was carried unanimously amidst great applause.

Baron Meyendorff expressed his gratitude to the Society and audience, and Mr. Lyon-Smith closed the meeting.

T. F. ZEROLO,  
*Hon. Sec.*

## STUDENTS' UNION.



THE Annual General Meeting of the Students' Union Council was held in the Abernethian Room on March 12th, 1919.

Colonel Waring was unanimously re-elected President of the Students' Union and Capt. Girling Ball and Capt. Macphail Treasurers for the ensuing year.

C. SHAW,  
*Hon. Sec.*

## RUGBY FOOTBALL CLUB.

ST. BARTHOLOMEW'S HOSPITAL v. OXFORD UNIVERSITY.

On March 9th the Hospital visited Oxford and defeated the University XV by 1 goal (5 points) to *nil*. Although the game was keenly contested and the teams equally matched, Bart.'s suffered severely through injuries to players.

Llewellyn had to retire for the greater part of the first half, but fortunately returned at half-time; Melle and Parkes, however, had to leave the field early in the second half, and for the last twenty minutes the Hospital played with thirteen men. The only score of the game came after a quarter of an hour's play. Melle, who played a great game, intercepted a pass, and beating the full-back, scored under the posts for Johnstone to convert.

During the whole of the first half Bart.'s had the most of the game, and were unfortunate in not adding to their score; but the Oxford centres kicked and fielded well, and it was mainly owing to their efforts that the Oxford line remained intact.

Soon after the re-start Melle intercepted again, and it was in the race for the ball that he was injured. Shortly afterwards Parkes, while stopping a dangerous rush, collided with the Oxford wing. For the remainder of the game Bart.'s were kept on the defensive, although on one occasion Krige, who was the most prominent player on the field, might have put Cockell in.

The final whistle went, leaving the Hospital winners by 5 points.

## CORRESPONDENCE.

### MITRAL STENOSIS.

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

SIR,—Lieut. Sharp's letter in your February number raises several points of great interest. Mitral stenosis is not very uncommon in men; hospital impressions are open to the fallacy that patients do not as a rule come up unless they have symptoms severe enough to warrant their missing a day's work in order to attend. Mild degrees of mitral stenosis are easily missed, especially if the room is not free



from noise during auscultation and if the patient has rested for a few minutes before examination. Slight exertion accentuates the murmur and the thrill. In the earlier days of the war, when large numbers of recruits were being rapidly examined, many men were passed into the Army who should have been rejected. Several of those who were sent to me later for special examination had definite mitral stenosis.

From early 1916 until about the time of the armistice "doubtful" heart cases were sent by the recruiting boards in the London area to the Heart Hospital for special examination. Some 10,000 were examined under this scheme (about 2000 during the six months that I worked there). Detailed histories were taken on a special form, electro-cardiographic and X-ray examinations were made, and, in addition, the response to standard work was investigated in all cases.

The statistical analysis of the mass of data obtained by my colleagues is a formidable undertaking and is not yet complete, though certain brief preliminary reports have already been published. The figures for mitral stenosis are not yet available, but it is clear that the factor of "strain" is negligible. A history of febrile attacks with slight pains and aches was common, but my impression is that frank attacks of rheumatic fever were recorded with less frequency than the accepted teaching would lead one to expect. Lieut. Sharp will doubtless look forward with interest to the publication of the full report.

Many patients with mitral stenosis feel little inconvenience and are capable of considerable exertion. One recruit referred to me had rowed in his college boat, and until war broke out was an active oarsman. He had well-marked aortic regurgitation as well as mitral stenosis and regurgitation. Two of my former patients with the same lesion are active riders. One regularly follows hounds over very difficult country; the other, a lady, has ridden long distances in South Africa, and had no inconvenience during a pregnancy.

I am, Sir,  
Yours, etc.,

1, Weymouth Street, W. 1.

P. HAMILL.

#### A CASE OF SARCOMA OF THE TONGUE.

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

SIR,—I have read with interest the account by Mr. W. E. Heath in the February issue of the JOURNAL of a case of sarcoma of the tongue, and venture to offer my humble criticism of the manner in which the case was managed. It illustrates one or two important points.

The patient came to the Hospital in March with a short history of a lump in the tongue. This was diagnosed correctly by Mr. Blakeway as a sarcoma. In spite of this, time was wasted giving injections of arsenic, and an operation was not performed until September 13th. The tumour was then "shelled out with a certain amount of difficulty." The growth returned quickly and was widely removed on October 14th. This case illustrates in a very striking manner the value of a preliminary microscopic examination of tumours before operation, either by cutting out a piece and having it prepared in the laboratory, or by having a section cut at the time of the operation. This would have avoided the risk of incomplete removal of a malignant growth by "shelling" it out. Also it would have prevented the delay in operating and the unnecessary injections of arsenic. The writer does not state whether the Wassermann test was performed, but even if it were positive I should have had a piece out of this tumour for microscopic examination.

I am, Sir,  
Yours faithfully,

355, Camden Road,  
Holloway, N.

ERNEST H. SHAW.

#### CHANGES OF ADDRESS.

BELL, K. D., Surg.-Commander, R.N., Oakcroft, Fareham, Hants.  
CHATER, J. S., Epworth, Bristol Road, Sherborne, Dorset.  
FORBES, Capt. J. G., R.A.M.C., Oakridge, Linkfield Lane, Redhill, Surrey.  
GRAHAM, G., 12, Ladbroke Gardens, W. 11; tel. Park 2985 (private address). 37, Queen Anne Street, W. 1; tel. Mayfair 5011 (consulting room).  
HAMILL, P., 1, Weymouth Street, W. 1. (Tel. Gerrard 4339.) (After April 23rd.)  
HUDSON, B., Palace Hotel, Montana-sur-Sierre, Switzerland. (After May 1st.)

MORGAN, C. C., 25, White Friars, Chester.

ROPER, F. A., 5, Dix's Field, Exeter.

VINER, G., 27, Queen Anne Street, Cavendish Square, W. 1. (Tel. Mayfair 188.)

#### APPOINTMENTS.

BRASH, E. J. Y., M.B., B.C.(Cantab.), appointed Medical Officer to the Exeter Dispensary.

HUTT, C. W., M.B., B.C.(Cantab.), appointed whole-time Medical and School Medical Officer for Dudley.

MAWHOOD, R. H., M.B., B.C.(Cantab.), F.R.C.S.(Eng.), appointed Honorary Assistant Surgeon to King Edward VII Hospital, Windsor.

WATERHOUSE, R., M.D., M.R.C.P.(Lond.), appointed Physician to the Royal United Hospital, Bath.

#### BIRTHS.

BURRA.—On January 20th, at Little Kimble, the wife of Dr. L. T. Burra of a daughter.

EDMOND.—On February 15th, at Cruck Meole House, Hanwood, Shropshire, the wife of Major W. S. Edmond, F.R.C.S., R.A.M.C., of a daughter.

LONGSTAFF.—On January 21st, at Thornhill, St. Mary's Road, Ditton Hill, Surbiton, to Capt. E. R. Longstaff, R.A.M.C. (S.R.), and Mrs. Longstaff—a daughter.

RAWLING.—On March 21st, at 11, Wyndham Place, Bryanston Square, the wife of L. Bathe Rawling, F.R.C.S., of a daughter.

STIDSTON.—On March 20th, at 14, Waterloo Road, Wolverhampton, to the wife (née Olive Cumberland) of Dr. C. A. Stidston—a daughter.

#### MARRIAGES.

DANKS—AIKMAN.—On February 26th, at St. Mary's Parish Church, Wimbledon, by the Rev. H. Monro, Vicar, and the Rev. A. G. M. Mengens, Vicar of Kingston Vale, Walter Seymour Danks, M.D., Sutton (Major, R.A.M.C.), to Isobel Theodora, youngest daughter of Thomson Aikman, Esq., Pendreath, Wimbledon, and Bramley Croft, Hindhead, Surrey.

JONES—THATCHER.—On February 15th, at St. John of Jerusalem, South Hackney, by the Rev. G. T. McLean, M.A., William Henry Jones, M.B., B.S.(Lond.), Temp. Lieut., R.A.M.C., fifth son of the late Mr. J. Jones, of Talybont, Cardiganshire, to Gwendolen Frances Mildred, second daughter of the Rev. and Mrs. W. Romaine Thatcher, of South Hackney.

NICHOLAS—HACKING.—On February 18th, at Holy Trinity, Sloane Street, by the Right Rev. Bishop Bury, D.D., Capt. C. F. Nicholas, R.A.M.C., second son of the late William Nicholas, Esq., Bothwell, Tasmania, and Mrs. Nicholas, of 17, Edwardes Square, Kensington, to Ann Kathleen, fourth daughter of the Ven. Archdeacon and Mrs. Hacking, Hill House, Southwell, Notts.

SOLTAU—WRIGHT.—On March 13th, at St. Mary's Church, Stafford, by the Rev. J. S. D. Rider, M.C., S.C.F., assisted by the Rev. J. E. Jones, Capt. H. K. V. Soltau, R.A.M.C., only son of the late Dr. Henry Soltau, F.R.G.S., and of Mrs. Soltau, to Nora Ramsar, youngest daughter of Mr. Charles H. Wright, of Tillington Hall, Stafford.

#### DEATHS.

ANDREWS.—On February 20th, 1919, at Gaisgill, Elstree, Samuel Andrews, M.R.C.S., L.R.C.P., late of Basingstoke, aged 68.

FREEMAN.—On December 24th, 1918, suddenly, at his residence, 30, London Road, Reading, William Thomas Freeman, M.D.(Durh.), F.R.C.S., R.A.M.C.

GUTHRIE.—On December 24th, 1918, at Kensington Infirmary, from injuries received in an accident on the previous evening, Leonard George Guthrie, M.A., M.D.(Oxon.), F.R.C.P., 15, Upper Berkeley Street, W., aged 60.

KEMP.—On January 17th, 1919, suddenly, of heart failure, William George Kemp, M.D.(Durh.), of Oakhurst, Hastings, formerly of Wellington, New Zealand, aged 72.

LE QUESNE.—On January 24th, 1919, at Melbury, Havre des Pas, Jersey, Edwin Joseph Le Quesne, M.R.C.S., L.R.C.P. late of Tring, youngest son of the late Philip Le Quesne, aged 67.

NIAS.—On February 20th, 1919, at a nursing home, Joseph Baldwin Nias, M.D.(Oxon.), of Rosary Gardens, S.W.

SYRETT.—On February 20th, 1919, at his residence, Stour House, Dovercourt, Ernest Frank Syrett, M.D.(Durh.), formerly of Nayland, Suffolk, aged 49.



# St. Bartholomew's Hospital



"Æquam memento rebus in arduis  
Servare mentem."

—Horace, Book ii, Ode iii.

## JOURNAL.

VOL. XXVI.—No. 8.]

MAY 1ST, 1919.

[PRICE SIXPENCE.]

### CALENDAR.

Fri., Apr.	25.—Dr. Calvert and Mr. Waring on duty.
Tues., "	29.—Dr. Fletcher and Mr. McAdam Eccles on duty.
Wed., "	30.—Clinical Lecture (Surgery), Sir Anthony Bowlby.
Fri., May	2.—Sir Wilmot Herringham and Sir Anthony Bowlby on duty.
	Clinical Lecture (Medicine), Sir Wilmot Herringham.
Tues., "	6.—Dr. Tooth and Mr. D'Arcy Power on duty.
Wed., "	7.—Clinical Lecture (Surgery), Mr. D'Arcy Power.
Fri., "	9.—Sir Archibald Garrod and Mr. Waring on duty.
	Clinical Lecture (Medicine), Dr. Tooth.
Tues., "	13.—Dr. Calvert and Mr. McAdam Eccles on duty.
Wed., "	14.—View Day.
Fri., "	16.—Dr. Fletcher and Mr. Bailey on duty.
	Clinical Lecture (Medicine), Dr. Calvert.
Tues., "	20.—Sir Wilmot Herringham and Sir Anthony Bowlby on duty.
Wed., "	21.—Clinical Lecture (Surgery), Mr. Waring.
Fri., "	23.—Dr. Tooth and Mr. D'Arcy Power on duty.
	Clinical Lecture (Medicine), Sir Archibald Garrod.
Tues., "	27.—Sir Archibald Garrod and Mr. Waring on duty.
Wed., "	28.—Clinical Lecture (Surgery), Mr. D'Arcy Power.
Fri., "	30.—Dr. Calvert and Mr. McAdam Eccles on duty.
	Clinical Lecture (Medicine), Dr. Calvert.
Tues., June	3.—Dr. Fletcher and Mr. R. C. Bailey on duty.

### EDITORIAL NOTES.

**I**N placing this Reconstruction Number before our readers our first duty must be to thank those members of the Hospital Staff, both past and present, who have so kindly supplied us with such useful, interesting and valuable data. It affords us a considerable amount of satisfaction to be able to state that each particular branch of Hospital work has been handled by an expert.

For some reason or other Bart.'s has had the reputation of being conservative in its ways and methods, and if this issue does nothing else than prove that, far from lagging behind, our Hospital is actually leading in the van of progress, our efforts will not have been in vain.

It would be invidious to single out any one name to whom our thanks are especially due, but we cannot let the occasion pass without expressing our indebtedness to Major McAdam Eccles for the great assistance he has rendered us in preparing this number for the press.

Not the least important of the many departments of the Hospital which are most in need of reconstruction is the Nurses' Home. A scheme to erect a new and thoroughly up-to-date building is definitely in hand, and at least £150,000 is required for the purpose. We are enclosing with this issue a short statement giving some details of the proposed building. Funds are urgently needed in order that the work may be got in hand as soon as possible.

We feel sure that Bart.'s men will gladly avail themselves of the opportunity of subscribing to such a worthy object.

\* \* \*

With the return to the Hospital of Sir Wilmot Herringham and Sir Anthony Bowlby our Senior Staff is complete. We extend a warm welcome to our Senior Physician and Surgeon, and congratulate them on the well-merited honours they have earned and incidentally have conferred upon the Hospital.

We are also glad to welcome back Dr. H. Thursfield and Mr. G. E. Gask, both of whom have carried out important work on the Western Front.

\* \* \*

Our warmest congratulations to Sir Norman Moore on the Baronetcy bestowed upon him by His Majesty so soon after his re-election as President of the Royal College of Physicians of London.

We also heartily congratulate Sir Thomas Jenner Verral on the well-deserved honour of knighthood for his work during the war in securing medical officers for the Services.

\* \* \*

It has been decided to resume the Annual Dance, which this year will be held at the Prince's Restaurant on May 23rd, commencing at 10 o'clock. Tickets, price one guinea, may be obtained from the Secretaries, E. F. Peck and W. B. A. Lewis.

\* \* \*

Seeing that this issue should reach every old St. Bartholomew's man, we desire to state that the Blakeway and the Stansfeld Memorial Funds are still open. For the Blakeway Fund cheques should be sent to Capt. Alex. Macphail, Anatomical Department, and for the Stansfeld Fund to Prof. F. W. Andrewes, Pathological Department.



It is officially announced that another expedition to the Antarctic regions has been formed, and is now in an advanced stage so far as the organisation is concerned.

It will be known as the "British Imperial Antarctic Expedition," its leader being Mr. John L. Cope, F.R.G.S., who accompanied the Imperial Trans-Antarctic Expedition, 1914-17, as surgeon and biologist to the Ross Sea party, and who was one of the party of nine who were left on the Great Ice Barrier to lay depots after the "Aurora" had broken away from her moorings, and when the fate of all the men was almost disastrous.

Until recently Mr. Cope was studying Medicine at this Hospital, and those who attended the most interesting lecture which he gave before the Abernethian Society last year on his experiences in the Antarctic will wish him every success in his new venture.

\* \* \*

Rugby enthusiasts will join with us in congratulating M. G. Thomas, who is completing his last year in Hospital, on being chosen to play for Wales against New Zealand. Mr. Thomas also represented the Principality earlier on in the season.

\* \* \*

It affords us much pleasure to congratulate Lieut.-Col. W. H. Hamilton, D.S.O., I.M.S., and Lieut.-Col. F. E. Swinton, I.M.S., on receiving the Companionship of the Order of the Indian Empire.

\* \* \*

We are pleased to congratulate the following St. Bartholomew's men on being awarded the Military Cross: Capt. E. J. Bradley, R.A.M.C., S.R.; Capt. (Act.-Maj.) Frank Coleman, R.A.M.C.T.; Capt. (Act.-Maj.) H. R. Dive, R.A.M.C.; Temp. Capt. W. B. Gourlay; Temp. Capt. T. Howell, R.A.M.C.; Temp. Capt. C. W. B. Littlejohn, R.A.M.C.; Capt. (Act.-Maj.) H. W. Maltby, R.A.M.C., S.R.; Lieut. A. V. Pegge, R.A.M.C., S.R.

\* \* \*

The King of the Belgians has conferred the Cross of Chevalier of the Order of the Crown on Mr. G. R. Fox and Mr. H. C. Manning in recognition of services to the Belgian civil population in the Yser district 1914-15, while serving with the Friends' Ambulance Unit.

\* \* \*

Our congratulations to the following St. Bartholomew's men whose names have been brought to the notice of the Secretary of State for War for valuable services rendered: Maj. A. Bird, R.A.M.C.; Temp. Lieut.-Col. J. J. G. Blandford, R.A.M.C.; Temp. Maj. R. J. D'A. Irvine, R.A.M.C.; Capt. J. G. F. Hosken, R.A.M.C.T.; Lieut.-Col. F. J. Paley, R.A.M.C.T.; Temp. Capt. F. J. Rawlinson, R.A.M.C.; Surg.-Maj. J. Soutter, R.G.A. (Vol.); Temp. Capt. (Act.-Maj.) A. W. G. Woodforde, R.A.M.C.; Temp. Capt. E. D. Wortley, R.A.M.C.

\* \* \*

We note with much interest that the following have been mentioned in Despatches:

*British Salonica Force.*—Temp. Capt. J. C. M. Bailey, O.B.E., R.A.M.C.; Capt. T. S. Hele, R.A.M.C.T.; Capt. (Act.-Maj.) H. A. Playfair-Robertson, R.A.M.C.T.; Lieut.-Col. F. E. A. Webb, O.B.E., R.A.M.C.T.

*East African Force.*—Temp. Capt. S. Mason, S.A.M.C.; Lieut.-Col. R. F. Standage, I.M.S.

*Egyptian Expeditionary Force.*—Temp. Capt. F. H. Diggle, O.B.E., R.A.M.C.; Maj. (Temp. Lieut.-Col.) E. C. Hodgson, D.S.O., I.M.S.; Lieut.-Col. (Temp. Col.) E. P. Sewell, C.M.G., D.S.O., R.A.M.C.; Temp. Capt. (Act.-Maj.) E. B. Smith, R.A.M.C.; Maj. G. C. Taylor, O.B.E., R.A.M.C.T.

*Mesopotamian Expeditionary Force.*—Temp. Capt. K. D. Atteridge, R.A.M.C.; Temp. Capt. F. B. Ambler, I.M.S.; Temp. Capt. B. E. A. Batt, R.A.M.C.; Lieut.-Col. W. R. Battye, D.S.O., I.M.S.; Capt. A. M. Dick, I.M.S.; Temp. Capt. A. Feiling, R.A.M.C.; Lieut.-Col. and Bt.-Col. M. H. G. Fell, C.M.G., R.A.M.C.; Col. S. F. St. D. Green, A.M.S.; Maj. and Bt.-Lieut.-Col. W. H. Hamilton, D.S.O., I.M.S.; Temp. Capt. A. R. Jennings, R.A.M.C.; Maj. F. P. Mackie, I.M.S.; Temp. Capt. H. H. Raw, R.A.M.C.; Capt. J. M. Weddell, R.A.M.C.; Capt. P. A. With, R.A.M.C.

\* \* \*

It is with much pleasure that we notice the names of nearly fifty St. Bartholomew's men in civil practice in the list which has recently been brought to the notice of the Secretary of State for War for valuable medical services rendered in the United Kingdom.

The names are too numerous to publish in this issue, but will be included in the next Roll of Honour.

\* \* \*

We regret to have to record the death of the following well-known Bart.'s men:

Dr. Ralph Winnington Leftwich died on March 25th after a short illness. He studied at this Hospital and the University of Aberdeen, and afterwards visited Paris and Vienna. He graduated M.B. with honours and C.M. at the University of Aberdeen in 1873, and took the degree of M.D. in 1875. He was House-Surgeon, and afterwards for a time Assistant Physician, to the Shadwell Children's Hospital. Later on he engaged in general practice in Ebury Street, London, and held various medical appointments in connection with London tramway companies. Dr. Leftwich took a keen interest and showed high capabilities in the practice of medicine. In 1888 he published *An Index of Symptoms*, which reached a seventh edition this year. Of another book, *The Pocket-Book of Treatment*, a third edition appeared in 1917. In 1913 he published a volume entitled *Tabular Diagnosis*, and in 1918 another on *Rational Therapeutics*. Dr. Leftwich was a keen student of Shakespeare's life and time, and to his paper showing that St. Saviour's, Southwark, was the poet's parish church when he lived in London, and presumably his place of worship, was due the erection of the Shakespeare Memorial there. So recently as March 19th Dr. Leftwich read before



Notū sit uniuersis fidelibus qđ ego raherus scī bartholomei qđ ē in smethefeld por-  
 tator ecclesie nre conuenit. ecclesia s. sepulchri hagnom elegio singula alia p̄fessionis  
 n̄ inierit usq; ad fine dieŕū suor̄ in elemosina concessim. Illud autē scitote quod  
 idem p̄dict' hagno. singulis annis ad usus canonicorū simul & paupum in hospi-  
 tali degentiu. quingenta sol' nob' reddet. In festiuitate scī michaelis. xxv. sol'. xxv.  
 in pascha. Anno incarnationis dñi millesimo. c. xxx. vij. Anno ū scđo impij stephani  
 regis in anglia. his existencib; test'. haco decan'. hugo. s. martini can'. Gualter' ff  
 Gwilti archidiaconi. Thold' can'. Radus' magist'. Gilebr'. p̄. Ostr'. p̄. Rodbr' de scā  
 maria. Algar' p̄. Godefrid' fili' haldewini sac. Rog' m̄. Alexander. Odo. Gau-  
 frid' cunestable. Ric'. p̄. Ludo. oligic'. Gaufrid' de heli.



RAHERUS TO HAGNO, A.D. 1137.







the Historical Section of the Royal Society of Medicine a paper founded on a detailed study of the authentic signatures of Shakespeare, in which it was shown that in each case there were clear indications, increasing with age, of writer's cramp; it was suggested that to this cause might properly be assigned the fact that during his last years Shakespeare added little or nothing to his earlier plays and poems, a circumstance for which no satisfactory explanation had hitherto been found.

Dr. Ernest Frank Syrett died after a brief but painful illness on February 20th. He was born at Ramsgate in 1869, and was educated at Maidstone. He studied medicine at this Hospital and obtained the London Conjoint diplomas in 1891 and the M.B. and B.S. degrees at Durham University in 1893, proceeding to the M.D. degree two years later. After holding the post of Resident Medical Officer to the Fleming Memorial Hospital for Sick Children at Newcastle-on-Tyne, he served for a short period as a medical officer in the Peninsular and Oriental Line. Subsequently he practised first at Nayland, near Colchester, and later at Dovercourt, where he held most of the public medical appointments, including that of M.O.H. for the borough of Harwich. Dr. Syrett was typically an able country general practitioner. Quick at absorbing knowledge and ready in applying it, he was also very competent in organising his work. In this way he was able to carry on a wide general practice in addition to performing satisfactorily the duties connected with his numerous public appointments. His services in connection with the war hospitals and other military matters at the fortified town of Harwich had obtained for him the friendship and respect of the naval and military authorities. He was extremely popular with his patients, and his popularity was increased in private life by his keenness as a sportsman. He married in 1899 Maude, elder daughter of the Rev. J. D. Gray, M.A., and leaves a widow and three children.

Dr. John Albert Manton, a well-known Sheffield medical practitioner, died on February 4th from pneumonia following influenza. He was born at Wakefield in 1864, and studied medicine at this Hospital and at the medical schools of Leeds and the University of Durham, obtaining the M.R.C.S. and L.R.C.P. diplomas in 1886. Two years later he began practice in the Park district of Sheffield. Among other early appointments he was Demonstrator of Anatomy in the Sheffield School of Medicine. For many years Dr. Manton took a prominent part in municipal life as a member of the city council and a guardian. In addition to the work of a large private practice, he held the appointments of Medical Officer to the Sheffield Post Office and to the Education Department. He spent his holidays in travel and made good use of his experiences, both on the platform and in various literary contributions. He visited Serbia in 1899, and wrote a series of sympathetic articles on life in the Balkans, in recognition of which he was appointed by King

Alexander of Serbia a Chevalier of the Order of St. Sava. He was an enthusiastic cyclist, and was for many years President of the Sheffield Road Club, in this way adding year by year to his knowledge of local roads and of the antiquarian lore of the countryside. Dr. Manton leaves a widow, a son and two daughters.

\* \* \*

We would again draw the attention of those old Bart.'s men who do not subscribe to the JOURNAL to the fact that since the war began it has been most difficult to keep up with the increasing cost of its production. We are naturally proud of the fact that during the whole period of the war the JOURNAL has appeared regularly each month, and we would ask non-subscribers to help us in this matter. The subscription is comparatively small, being 5s. a year, or £1 1s. for five years.

This appeal is made particularly to newly qualified men who may be taking up outside posts or starting in practice, and with whom we would like to keep in touch through the medium of the JOURNAL.

## FOUNDATION OF HOSPITAL AND SCHOOL.



T. Bartholomew's Hospital will in four years attain the eight hundredth year of its existence. Its principal gate occupies the situation in which it was placed in 1123, the year of its foundation. Richard of Beaumes, Bishop of London, by whose authority it was dedicated to its present purpose—the relief of the poor and the sick—had been consecrated by St. Anselm and was a chosen Councillor of King Henry Beauclerc. His own energy, aided by the secular power of the Conqueror's son, King Henry, and the spiritual power of Bishop Richard of Beaumes, enabled Rahere, the founder, to whom all London, and, beyond London, all the world of medicine, is so much indebted, to establish the Hospital which, when sick in Italy, he had vowed to build outside the walls of London. One charter sealed by him in the second year of the reign of King Stephen, 1137, remains the single unchanged relic of his time, the one object which he had actually touched. It is a grant of the benefice of the church of St. Sepulchre. Two seals are attached to it—those of the Prior of St. Bartholomew's church and of the Hospital. The Prior's shows the church, the Hospital's the figure of a brother, perhaps Rahere himself, holding an almsbox, and in the margin the words, "*Sigillum hospitalis sancti bartholomei de smethefeld.*"

This ancient document may be taken as typical of the foundation and its time. The Hospital stood outside the



city wall and its ditch and in view of all going in and out of that part of the city.

It became well known to the citizens, and from the twelfth to the fifteenth century received numerous augmentations to its emoluments from inhabitants of the City and of the neighbouring counties. The hungry were fed, the wretched were consoled, and the sick treated in accordance with the teaching of St. Isidore of Seville, of John Mirfield's *Breviarium Bartholomei*, and of some of the authors known to Chaucer's "Doctor of Physik."

"Deiscorides and eke Rufus,  
Old Ypocras, Haly and Galien,  
Serapyon, Rasis and Avycen,  
Averrois, Damascien, and Constantyn,  
Bernard and Gatesden and Gilbertyn."

Such was the Hospital life and work of the Middle Ages.

Then came King Henry VIII's attempt to seize the lands and revenues of the Hospital, successfully resisted by the citizens of London. The size of the Hospital was increased, and soon after surgeons were appointed who had been trained and examined by members of their guild. Next, physicians trained in universities and belonging to a learned college became chiefs of the staff. On February 1st, 1664, students of medicine appear as apprentices of the surgeons, having clearly been in existence for some time before, and from this the steady development of the School of Medicine progresses. Harvey was Physician to the Hospital, and it is clear that students had definitely appeared in his lifetime. It continued to develop, and in the next century regular lectures, of which the first were those of Nourse, began to be given.

John Freke, a surgeon learned in obstetrics and electricity, took charge of the beginnings of a museum, and after him Percival Pott, one of the greatest of English surgeons, carried on the traditions of teaching, and after him Abernethy appeared, who firmly established the teaching of anatomy in relation to surgery and of surgery in relation to pathology. His teaching was such that the buildings had to be increased, and in a famous memorandum he pointed out to the Governors the advantage of the school to the patients. He said: "The number of students resorting to hospitals may be considered as an evidence of the good medical practice which they have an opportunity of observing, and of the instructions which they receive in them. This attendance forms also a strong incentive to the medical officers to perform their duties diligently and with skill and science, since their conduct is open to the public expression of praise or censure by these vigilant observers."

These remarks of Abernethy cannot be too much dwelt upon and enlarged. The goodness of the hospital depends on the publicity of the work done within it. The teachers in its wards and out-patient rooms work under the critical eyes of students. They teach the students, whether these are working before taking their degrees, or after, not as

infallible authorities, but as men digging in the same mine and walking on the same paths. It is this openness to criticism and invitation to it which makes the teaching in the wards so valuable—valuable at the same time to the teacher, to the student and to the patient.

## RECONSTRUCTION.

### 1. RECONSTRUCTION IN STAFF.



HE articles from the illuminating pen of Sir Wilmot Herringham have shown that matters are moving in relation to the question of clinical units.

Hitherto the units (or "firms" as they were called almost affectionately) have answered well, and the team- or group-work thus exemplified has shown the manner in which an advance can be made.

Take the old unit of physician, assistant physician, pathological clerk, house-physician, junior house-physician and clinical clerks which so many remember so well, and it can be shown that when all were pulling well together excellent work was done. Then came the time when it was found that a chief assistant was desirable, and, although this appointment was not always made, it was tried sufficiently often to show that it ought to and did prove a most valuable addition to the unit.

In spite of this good work there were, however, some grave defects in inter-relation work. For instance, no definite out-patient department was associated with the in-patient wards; the physician or the surgeon did not have a definite time each week in which to see cases which had been in the wards, cases sent up to him for diagnosis, or cases sent from the ordinary out-patient department with a view to admission. There was not a sufficiently close touch between the wards and the pathological department, and there was hardly any association between such departments as those of anatomy or physiology and the clinical departments.

Then came the war, and all the possibilities of improvement had to wait. Now the war is over and these matters have again been taken up promptly and seriously. Possibilities of "professorial units" and good "team clinical units," and of much greater inter-departmental work are foreshadowed, particularly in Sir George Newman's most suggestive *Notes on Medical Education*. All these require men, time and money, and they will no doubt be forthcoming, and that fairly soon.

Why should there not be a thoroughly manned professorial unit in medicine and in surgery, say with a "professor" and "assistant professor," a first assistant and second assistant, a senior and junior house-physician (or surgeon) and clerks (or dressers), making a team of, say, fourteen men?



Why should not the professor and his assistants have adequate time for teaching and research?

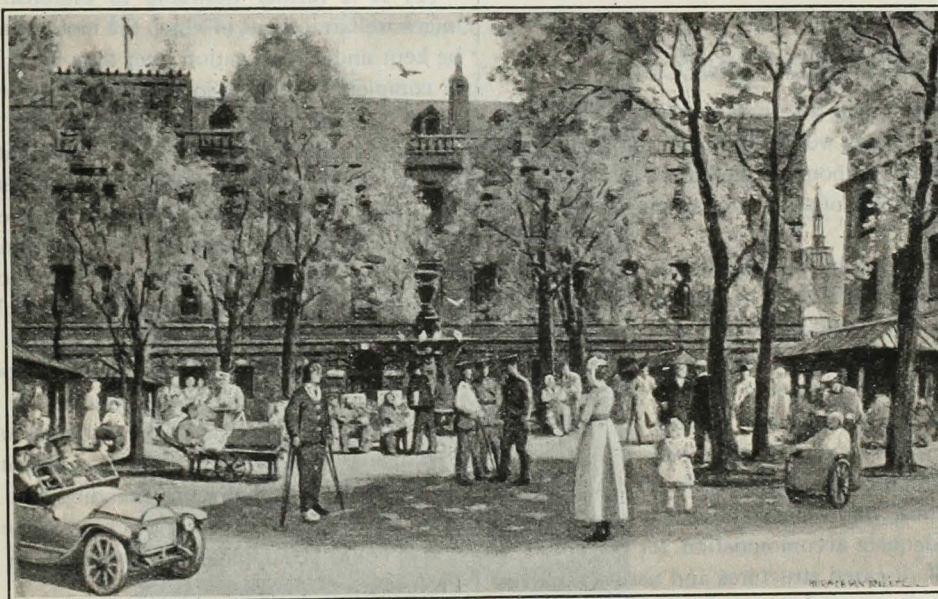
Why should not there be money available to give them opportunities for extra good work?

We believe such will be the group or "firm" of the near future.

A very important question arises in connection with a "clinical professor," or, as he might be called, "director of clinic"—should he be a whole-time man or not? For a physician or a surgeon in London to devote his whole time to teaching and research means he must be paid a real competency. In these days of inflated prices it is difficult to say to what this should amount.

displaced, if ever! The actual contact of the student with the patient is essential, and breeds that type of excellent general practitioner of which we have a right to be proud. But bedside teaching and clinical lectures can be made more thorough even yet.

Take a case, for example, of carcinoma of the rectum—a fairly common disease. The teaching upon such a case, in one or more clinical lectures, might embrace: (1) The development of the rectum and anus; (2) the normal anatomy of the same; (3) the normal histology of the same; (4) a discussion as to the possible causes of carcinoma in this region; (5) the types of carcinoma found here, with museum specimens; (6) the morbid histology



"THE SQUARE," ST. BARTHOLOMEW'S HOSPITAL.

From the original water-colour drawing by Horace Van Ruith (1916).

To debar private practice entirely would deprive him of an important part of his training, and therefore the man appointed to the professorship should preferably have had some years of private work before he takes office.

In addition the ordinary clinical units will have to be elaborated so as to make them the best possible for patients and pupils. Here, again, team-work is highly desirable, and men, and probably money, are required.

## 2. RECONSTRUCTION IN CLINICAL TEACHING.

It cannot be asserted that the clinical teaching in our School has been bad, or even behind the times. It has been good and fairly up-to-date, but it can be better and quite up-to-date.

Bedside teaching is the bed-rock of British medical education, and may the time be far distant when it is

o. carcinoma recti; (7) methods of examination—digital, proctoscope, sigmoidoscope, barium enema and X-rays, etc.; (8) the spread of carcinoma recti; (9) operative methods of treatment, radical and palliative; (10) prognosis after operation; (11) treatment of advanced cases; (12) conditions causing death of patients suffering from carcinoma recti; (13) post-mortem findings; (14) a discussion as to the prevention of carcinoma recti, and the need for early diagnosis if present.

It is along such lines that a professor would find time and scope for what may be termed super-clinical lectures.

Then, again, the inculcation of a scientific spirit, and the cult of observation, while rightly belonging to all teaching, is apt to be neglected by those whose time for teaching is limited, and whose methods of teaching are, perforce, sometimes hurried.

The teaching also of clinical laboratory procedure in



close connection with the ward is of great value, and by no means adequately provided for.

Education in the after-results of the treatment of disease in in-patients is greatly neglected, chiefly owing to the fact that the ward and the out-patient department are each almost a water-tight compartment.

It must ever be remembered that teaching in a professorial unit is supplementary to that in an ordinary clinical unit, and must never be allowed to take the place of, or allow neglect of, such excellent, though routine teaching.

In a large clinical hospital like St. Bartholomew's it is quite a question as to whether the clinical material is used as fully as it might be for the purpose of the education of the student.

### 3. OBSTETRICS AND GYNÆCOLOGY.

The establishment of an adequate professorial clinic in obstetrics and gynaecology would, it is felt, afford the best opportunity of improving upon our methods of teaching and of increasing the facilities for advancing original research in these subjects.

The clinic, in order to be adequate, should consist of a Professor or Director, who should be a whole-time man, an Assistant Director, who should devote a certain number of hours each week to the clinic, and two whole-time assistants, in addition to the ordinary resident medical officers. The Professor ought to have under his control at least thirty obstetric and twenty-five gynaecological beds. He should have a clinical pathological laboratory fully equipped for routine examinations, both chemical, bacteriological and histological, and adequate accommodation for the preservation and storage of diseased structures and tissues removed from the operating theatre and post-mortem room, together with a room for housing the notes and records of the Department (with cabinets for a card-index system) and a special library of the clinic.

It will readily be seen that it would not be possible to find room in the Department as it is at present constituted for a professorial clinic on these lines, and that such a clinic is possible only if a special building is provided to house it and if the grant of a considerable sum of money is made.

Until such provision is forthcoming can anything be done meanwhile for the benefit of the patients and students and to facilitate research? The whole question has recently been considered by the Board of Studies in Midwifery and Gynaecology.

#### OBSTETRICS.

(1) The Obstetrical Department differs from the other departments of the Hospital in that the majority of the patients are not necessarily suffering from disease, but are admitted into hospital for what should be a physiological process. Midwifery is essentially a branch of preventive medicine. It is felt, therefore, that the scope of the *ante-*

*natal* work of the Department might be enlarged with advantage. One of the four out-patient sessions might be reserved for this work, whereby greater opportunities could be obtained for the study of normal and abnormal pregnancy, and the detection of the earliest manifestations of departure from the normal with a view to the diagnosis and prevention of pathological pregnancy and difficult labour.

At the same time the patients themselves should receive instruction, in order to help them to become good mothers, in the necessity for personal and home hygiene, in the feeding and care of the expected infants, and in the circumstances in which they should consult a doctor during the pregnancy.

(2) It is further desirable to establish a *post-natal* or infant welfare centre, in which the mothers and infants could be kept under observation after they have left the Hospital or completed the lying-in time on the District.

(3) A thorough training of students in the conduct of labour is of great national importance. In order that the material may be used to the best advantage, both to student and instructor, every labour should be conducted in the presence of a senior medical officer of the Department. This opinion found expression at a recent meeting of the Obstetric Section of the Royal Society of Medicine, at which considerable dissatisfaction was felt that this important part of the subject was not taught as a rule by the one most competent to do so. Unfortunately it is not often possible for the visiting physician so to time his visit that it coincides with the arrival of the infant. The remedy lies in the appointment of a whole-time medical officer of senior standing who would always be available. If the professorial clinic came into being such a man could be supplied from among the assistants to the Professor.

But if a professorial clinic is not possible within the Hospital, it has been suggested that separate maternity hospitals should be taken over or established and run on the lines of the professorial clinic.

#### GYNÆCOLOGY.

(1) A closer association between this Department and others of the Hospital should be established. As an instance, consider the X-ray or radium treatment of uterine hæmorrhage. Each case should be seen in consultation between a member of the X-ray and the Gynaecological Department, the frequency and number of applications and the dosage should be discussed, and the clinical progress of the case watched by both. Similarly, in a pathological investigation the case should be discussed at the bedside by the gynaecologist and pathologist in consultation. When a physiological problem arises the physiologist should be called in consultation.

(2) Further, a closer association is called for not only between this and other departments but between the various portions of the Department itself. For example, a patient

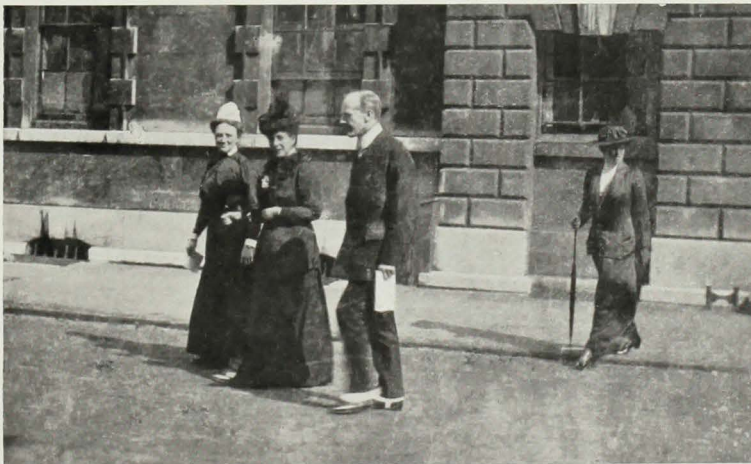




H.M. THE QUEEN, H.R.H. PRINCESS MARY, THE TREASURER.



LITTLE BRITAIN GATE, SHOWING SCARS FROM ZEPPELIN BOMB.



H.M. QUEEN ALEXANDRA, H.R.H. PRINCESS VICTORIA, THE MATRON, THE CLERK.







who has been attending as an out-patient should, on entering the ward as an in-patient, be accompanied by her out-patient notes, in which her history is recorded, together with the clinical findings at previous examinations, and a record of what drugs have already been given, with their effects noted.

Similarly, on leaving hospital and transfer to the Out-patient Department these notes should again be available, with a record of the treatment adopted while the patient was in the ward.

(3) It is felt that the present arrangements for carrying on the pathological work of the Department might be still further improved upon by the provision of a special laboratory on the lines indicated for the professorial clinic, or failing this by the setting aside of a portion of the present laboratory if it were possible. It is felt also that the best use is not being made of the material. All structures removed from the operating theatre or the post-mortem room should be preserved entire for investigation in the Department, and a weekly demonstration (both macroscopic and microscopic) be instituted.

(4) Finally, the Department should have its own Registrar as an officer separate from the Midwifery Tutor. When the work of the Department is in full swing the Tutor has so much of his time occupied by routine work that he is unable to carry out original research to the best advantage. Were his duties shared by a Registrar, who, together with the Tutor, should be paid an adequate sum, it would be to the benefit of the Department.

#### 4. RECONSTRUCTION IN PATHOLOGY.

The Pathological Department is a comparatively new feature of the Hospital, having been in existence little more than twenty years. It might hence be thought in little need of reconstruction, and indeed it presents many valuable elements which one would be sorry to see altered. The system of pathological clerkships is one which it would be difficult to improve upon, save perhaps that care might be taken to ensure closer contact on the part of the clerk with the ward case from which his material comes. Again, as a training ground for the man who aspires to a post on the medical or surgical staff the Pathological Department would be hard to beat.

Nevertheless, the progress of the last twenty years has rendered certain changes in the Department advisable and even necessary. Pathology is now a profession in itself, hitherto worse paid than medicine and surgery, but no less honourable, and to men of the requisite bent fully as interesting and agreeable. The time seems now to have come when the Hospital should no longer be content to regard the Pathological Department merely as a transient training-ground for its younger physicians and surgeons, invaluable though such training may be for them, but should also

endeavour to use it for the training of men who wish to make pathology their career in life. To accomplish this two things are necessary. Provision must be made not only for temporary demonstratorships for clinicians, but also for more permanent posts for those who desire to remain pathologists. And these latter posts must be paid on such a scale as to enable men to become pathologists without too great a financial sacrifice.

Again, pathology has developed along many lines. No one man can now hope to become equally competent as a morbid anatomist and histologist, a bacteriologist, an experimental pathologist and a pathological chemist. It has hitherto been a feature of our Pathological Department that these branches have not been divided up into water-tight compartments, but that those in training there have done something in most of the subjects. Up to a point this has doubtless been a good thing; it has preserved a certain unity and perspective in pathology, and it has made the Department a broader and better training-ground. For those who are merely passing through it for a year or two some degree of this absence of specialisation can doubtless be maintained, and it is desirable that those who are teaching clinical pathology should be all-round pathologists. But for those who intend to remain pathologists some degree of specialisation is now imperative, and it is probable that the time has arrived when the more permanent officers of the Department should be men devoting themselves each to a special branch of the subject. In the case of chemical pathology this is already an accomplished fact, but we equally need the specialised bacteriologist and the morbid anatomist and histologist. The latter may well be permanent Curator of the Museum—a post which has long urgently needed filling.

It is certain that such changes as are here indicated, though they will cost more money, will greatly advance the efficiency of the Pathological Department. The clinical material from the wards will receive more expert examination, and the practical teaching of the students will be more satisfactorily carried out. Nor need it be supposed that such increased specialisation in pathology will involve any sacrifice on the part of the clinical curriculum. Pathology, medicine and surgery advance as a whole; and if pathology has been named first of the three it is because it is inseparable from the others, and forms the basis upon which they must rest.

#### 5. RECONSTRUCTION IN INTERMEDIATE TEACHING.

##### ANATOMY.

The most urgent need of our Anatomy Department is not a matter of local reconstruction, but is one that is shared by all the anatomical schools in the country, namely, the want of an adequate supply of material. Since 1832, when it



became law, the Anatomy Act has for the most part failed to secure the facilities for dissecting and operative surgery work which it was meant to do. Recently many efforts have been made to have the precarious conditions of anatomical supply improved, and it is hoped that they may soon be crowned with success. In these efforts several members of our Hospital have taken a not unimportant part.

The chief function of the Anatomy Department must always be to furnish and direct the students' opportunity of gaining a first-hand knowledge of the details of the human body by dissection. The present inadequate supply of material makes it necessary for two students to share a part; and, while this has certain advantages if they always work systematically together, it has the great disadvantage that half the requisite experience in handling instruments and displaying structures, and half the individual training in accurate observation, is lost, and the laudable "pride in a part" is more difficult to foster.

Important additions to the main work of the Department which are in contemplation are systematic demonstrations of surface anatomy on the living model, and of bones and viscera by means of departmental X-ray apparatus.

While the present Dissecting Room is adequate and excellent in many respects, several improvements are required in the Department: (1) A reading room, with which might be combined a bone room equipped with a full set of well marked human and comparative specimens; (2) a laboratory for practical embryology and elementary histology; (3) a room to serve the double purpose of demonstration on the living model and X-ray demonstrations; while those who have had business in these places know that the Lecturer's and Demonstrators' Rooms lack accommodation. The Lecture Room is in need of a better set of blackboards and an epidiascope.

With regard to staff, at least one whole-time demonstrator is required in addition to the part-time demonstrators, through whom valuable touch is kept with the practical applications of anatomy.

The whirligig of time and experience has exposed some disadvantages in concentrating the teaching and examinations in anatomy on the end of the second year. In former times anatomy was one of the subjects included in the Final examination, and to-day advocates are to be found for the principle of spreading the teaching over the fourth and fifth years in addition to the second and third. But any drastic change in the place of anatomy in the curriculum can only take place if a common plan be agreed on by the Universities and Examining Boards as a whole. Meanwhile the institution of a lectureship on applied anatomy, to be held by an experienced demonstrator, who would conduct a systematic course throughout each term, would effect a valuable *liaison* between junior and senior years.

Much more might be done in the way of using the

Anatomy Rooms and Staff for medical and surgical consultations; given an adequate supply of subjects and reasonable notice, special dissections might be prepared to demonstrate to clinical classes important anatomical points involved in particular cases.

Another important *liaison* which might be carried out in the case of students engaged in the dissection of the thorax and abdomen is that they should be given an opportunity, at least once in the course of that study, to examine and handle the viscera available in a fresh state in the post-mortem room.

#### PHYSIOLOGY.

The maintenance of health depends not merely on the normal functional capacity of the individual organs of the body, but also on a constant and delicate adjustment and regulation of the functional activity of the different parts of the body; and it is the disturbance or the annulling of one or more of these regulative processes which constitutes the essence of disease. Further, the process of recovery from disease is brought about sometimes by the recovery by an organ of functional power which has been temporarily in abeyance, sometimes by the restoration of regulative adjustments, and sometimes by the compensatory exaggeration of adjustments and adaptations, which, though normally possessed by the body, are usually evoked to a comparatively limited extent. All these changes, when they occur, are brought about by the body itself—the so-called *vis medicatrix naturæ*—and the art of the physician lies, not in restoring the normal functions of the body (for this is beyond his power), but in providing the conditions under which the body can most effectively and rapidly cure itself.

It is evident, therefore, that a wide knowledge, both of the principles underlying the normal working of the body and of the many adjustments which it possesses (in other words, a knowledge of physiology), is necessary if the physician is to understand the significance of the symptoms which he observes, and to profit by his experience in the treatment of disease. Moreover, the physician whose medicine rests upon the sure foundation of scientific knowledge is not only better equipped than the pure empiricist for the treatment of the individual patient, but he possesses the inestimable advantage that his knowledge of medicine is living, progressive and productive instead of being sterile and stagnant. Physiology, in short, lies at the root of medicine, and the advancement of medicine is indissolubly bound up with the progress of physiological knowledge.

The principles just enunciated are so obvious and, except among the backwoodsmen of the medical profession, so generally accepted as almost to have become platitudes; and, from this point of view, the problem which the "reconstructionist" has to face is a purely practical one, namely, in what way can the future medical practitioner be most efficiently taught to apply to the study and treatment



of disease the physiological principles which he learns first, and to build up his knowledge of medicine on a rational basis.

Under the present system the student enters—or should enter—the wards with a fair grasp of the more important adjustments and regulative processes possessed by the body, and of the part which these play in the normal life of the body. In the acquisition of this knowledge the student has to learn a great many facts which are of value only in so far as they assist him to understand fundamental principles, and which he can with advantage forget later. But it is not always sufficiently realised that, without this “spade-work,” the student’s knowledge of principles which are vital to him later would be so vague and shadowy as to be valueless, and that the time now allotted to physiology in the curriculum is all too short for this purpose. At this stage, moreover, it is practically impossible to teach to the student the practical application of the principles which he is learning, because he lacks the clinical training necessary to enable him to understand such teaching.

It is therefore during his clinical training, and as a definite part of this training, that the student must be shown how to correlate his physiological knowledge with his clinical experience. A student, for example, enters the wards knowing that dyspnoea is caused by a change either in the reaction of the blood or in the excitability of the respiratory centre, or in both of these factors, and perhaps knowing also that these changes may originate in some disturbance of the respiratory or circulatory system or of the kidneys. Supposing the student to be confronted with a patient who is dyspnoeic, what is the best means of teaching him to apply this knowledge to the observation and interpretation of this and other symptoms, and to arrive at a rational conclusion as to the real nature of the morbid condition existing in the patient? Although he must of necessity rely primarily on his clinical teacher, there is a growing movement in favour of carrying on the teaching of applied physiology throughout the entire period of clinical training, and of including it in the final examination. The precise form which such teaching should take remains uncertain, but one plan would be a short course for each student dealing first with the adjustments normally at work in, for instance, the circulatory system, and then with the way in which these adjustments are utilised in maintaining the circulation in the face of conditions of disease. The student ought then to be able to adopt the same method in studying other forms of disease. In all probability such a course would be most advantageous if given by the clinician and the physiologist acting in concert, since the physiologist usually lacks clinical experience, and the physician is not always in touch with recent physiology. It may be that other methods may prove more satisfactory, but, whatever the method, the object is to bridge more securely the gap between the principles on which medicine is established and the practical application of those principles.

From this point of view, the most fully equipped teacher is a man who, on the one hand, has the necessary clinical experience, and, on the other hand, is actually engaged in research upon some of the problems which he meets in the wards. Many of these are physiological, and can be most successfully attacked in the laboratory by experiment; and the encouragement of physiological research among the younger qualified men, and especially among those who intend to become clinical teachers, is a most important factor in the advancement of scientific medicine. Research is the most direct road to real knowledge, and a man who spends even a year, not in teaching physiology, but in experimentally applying his physiology to some problem possessing a practical bearing on medicine, gains an insight into the real working of the body which will always be of the utmost value to him. A sufficiency of such men in the wards will gradually leaven the whole lump, and it is from men of this type that our future professors of medicine will be chosen.

Apart from the question of teaching, considerable development has taken place during the last few years in the direct application of purely physiological methods to the diagnosis of disease in the wards. In diabetes, for example, analysis of the patient’s alveolar air may give valuable information as to the imminence of coma, and the same method applied to various types of dyspnoea has thrown light on their causation. The application of such methods constitutes what may be termed clinical physiology, and, although its range is limited, there is no doubt that clinical physiology will play an increasingly larger part in the work of the wards, and that in this way physiology and clinical medicine are gradually being brought into closer touch with each other.

## 6. RECONSTRUCTION IN EQUIPMENT.

It is proverbial that bad carpenters complain of their tools, but it is equally true that frequently good carpenters are forced to use bad tools.

For teaching, both clinical and theoretical, good equipment is essential for good results.

Instruction is received not only through the ear, but also by the eye, by touch, and even by smelling and tasting, and any apparatus which renders perception by the organs of these senses is most valuable in education. Hence the epidiascope, the cinematograph, X-ray apparatus, cystoscope, œsophagoscope, the electro-cardiograph, and many another instrument of projection or of investigation are not only to be desired, but are essential at the present time in any well-equipped medical school. That our wards, laboratories, out-patient rooms, lecture theatres, and physiological, anatomical and other departments repeatedly require re-furnishing on these lines goes without saying, but apparatus of this type is expensive, and its upkeep and repair an ever-increasing source of expenditure.



In an up-to-date medical school money must be found for this purpose, and it is again with considerable interest that teachers have read Sir George Newman's suggestions and prophecies.

It is possible that a large lecture theatre, often maintaining avoidable waste of space, should be internally reconstructed so as to become much more compact, and often thereby more comfortable and more suitable for lecture purposes. Frequently in a theatre more or less devoted to clinical lectures no proper means of demonstrating patients are provided, and the demonstration is more or less of a farce.

When fresh equipment is determined on, it is of the utmost importance that it should be the best obtainable, for in the end the best is the cheapest, for it serves its proper purpose and lasts longest.

## 7. RECONSTRUCTION IN NURSES' HOME AND TEACHING.

### HOUSING.

It has always been the proud and rightful boast that the training of nurses at St. Bartholomew's has been good.

It cannot, however, be said that the housing of the nurses upon the Hospital site has been other than deplorable for many a long year. The time has come when the quarters occupied by the nurses must be reconstructed, and the need for reconstruction is obvious from the following. At present the nurses are accommodated in scattered buildings which stand within the Hospital precincts. At the south-west angle they live in houses which were once the homes of the vicar of the parish, of the apothecary, and of a clerk of the Hospital. A building at the northern corner of the Smithfield front supplies rooms for a few more. Others are lodged in the eastern end of the old College. A fourth contingent dwells in the houses which extend from near the Little Britain Gate towards the Post Office; while a fifth occupies the lofty buildings of what was the Mathematical School of Christ's Hospital. The mere fact of the irregular distribution of these buildings is a serious interference with their usefulness as residences for persons whose duties require their habitat to be certainly known and easily found. Moreover, they enjoy less light, air and quiet than could be obtained in a building carefully planned for a nurses' home. Such a building should have all the modern appliances for labour-saving, for sanitation, and for health. All parts of a new and thoroughly thought-out building could be kept clean and easily heated, and the cost of running it would be proportionately much less than that of numerous scattered dwellings.

A scheme has been successfully launched for the erection of a home capable of accommodating 400 sisters and nurses and 100 female domestic staff. It will provide the former in a practical way with all the necessities and comforts

which ladies in training to become nurses should have. Such a home must cost a considerable sum, and it is believed that to build wisely and well, but not extravagantly, at least £150,000 will be required. This amount must come from those who believe in the value of nurses, and from those who owe a debt of gratitude to a trained nurse for themselves or others.

### TRAINING.

Up till recently a probationer has usually been sent straight into a ward without any preliminary instruction or training. She is at once set to do things and deal with patients without those general principles upon which scientific nursing is based, and is largely at the mercy, to begin with, of other nurses often but little more experienced than herself. Frequently she may pass through a period of "stage-fright." She finds the work hard, possibly uncongenial, and often she has to attend lectures at the end of a day's toil, with little or no pleasure. Further, there is in many hospitals an examination in the preliminary subjects at the end of the first year of practical training. Practical experience is hampered by the constant drag of an examination in view. These drawbacks could be overcome by the following:

(a) A preliminary examination in general knowledge before entrance.

(b) A three months' course at the Hospital, for which a moderate fee should be charged. Such a course would include twelve lectures on anatomy, twelve lectures on physiology, and twelve lectures on hygiene, each series to be given by the heads of these departments in the Medical School; half a dozen lectures on the principles of nursing and of hospital administration, to be given by the Matron or a "sister-tutor"; and a short practical course in bandaging, etc.

(c) At the end of this preliminary course a qualifying examination is needed, and the names of those who pass this should be placed upon a waiting list, from which probationers are chosen as vacancies arise. Those who fail might be allowed to attend a second course without fee, and be given a second examination, but if they fail in this second test they should be dismissed.

(d) The successful candidates would pass into the wards, and, having been already instructed on sound principles, will be concerned henceforth solely in putting them into practice. Later courses of lectures would include more advanced nursing, and those parts of medicine, surgery and special subjects about which a nurse must have a sound knowledge.

(e) At the end of three (or perhaps four) years a final (certificate) examination would be held.

A nurse acts under a medical practitioner, but even so her responsibility in the present day is great. A good nurse, with a good medical practitioner, saves many lives,