

wetted first, she suddenly let me drop out of her arms, and it was some instants before she fished me out of the water again. I was horrified, although too young then to know the danger of drowning. It was a long time before I would go into the sea again, and some sort of aversion to deep water must have remained in my nature from that date. I was very slow in learning to swim and never could dive, very different to my brothers and sisters, who all have been passionately fond of bathing. Both my brothers even distinguished themselves by saving lives at sea.

My sense of touch and the consciousness of it must have made rapid strides that year. It was in the palmy days of the Second Empire when the dimensions of ladies' crinolines had become stupendous. Even our nursemaid wore such a large one that in our walks abroad, when we came to a crossing where the traffic was great, she would gather us children around her as near as she could, and I being the little one, was told to hold on to her dress. I soon learnt to grasp one of the steel hoops of the crinoline which I would cling to until we were safely over. The sensation produced by those steel hoops in my fingers would linger in them were I to live another three score years.

#### SENSE OF VISION AND EARLY MEMORY OF EVENTS.

I was four years old when I saw the earliest scene that I can remember, connected with the events of the day or the march of history. In the summer of 1859 the Franco-Austrian war ended and masses of troops landed at Marseilles on their return from the victories of Magenta and Solferino. The town used to entertain them at great open-air banquets under the trees in the Allées de Meilhan. I have distinct visions of the scene, the endless tables with the soldiers sitting at them, the huge crowd around whose heads I could only see over when lifted on to my father's shoulders. This is a typical example of a scene which was probably not forgotten because the locality remained such a familiar one for many years, and because the event was often spoken about.

The bishop of Marseilles died when I was five years old. He was buried with great pomp, and I was taken by our nurse and housemaid to see the funeral procession. There was a very great crowd, and the two maids held me up between them so that I had a very good view as the street we were in was very narrow. The dead bishop, clad in the episcopal robes and with his mitre on, was carried high up on an open bier. There was something very uncanny in his appearance, and this first sight of a dead man made a great impression on me, and one often recalled. I never saw another dead body until I became a student at St. Bartholomew's Hospital.

When anyone is asked what is the earliest impression that he can recall, the answer given almost invariably seems to refer to a suit of clothes or some article of apparel.

Sometimes it is

#### THE RECOLLECTION OF HIS MOTHER'S VOICE.

This is the one which has found its way into works of fiction and poetry. But it can hardly be called the earliest impression to be fixed in the memory. It must have been produced long before memory came into existence. It must have been acquired in the early days of mental chaos when one's mother's milk had to satisfy the pangs of hunger. At that early age it would no more be remembered than the process of being "short-coated."

To judge by the complete blank left in my memory of the voice and appearance of the nurse that I was so fond of for some ten years, I doubt whether my own mother's voice would still linger in my ears if I had not continued to hear it many years after I grew up. Yet I agree with Alfred de Musset when he says:

*"Mais jamais l'insensé, jamais le moribond,  
Celui qui perd l'esprit, ni celui qui rend l'âme  
N'ont oublié la voix de la première femme  
Qui leur a dit tout bas ces quatre mots si doux  
Et si mystérieux: 'My dear child, I love you.'"*

To refer to impressions of the sense of vision again, those that I have mentioned might all have some reference to my mother, who was the guiding spirit at the time. Yet I was four years old before any vision of her became fixed in my mind.

The earliest vision that I have retained of her was when she came up to see me one night in my bedroom. I woke up and saw her standing on the right side of the cot with a candle in her hand. She had been out to dinner and was in evening dress. I thought she looked lovely. I do not know what she said to me, but the remembrance of the sight of her at that moment remains, charming and comforting. I could not swear that this vision was not a dream, but the impression remains as of an angel's visit, like our little life, "rounded with a sleep."

The general remembrance of my childhood is typically that of "Golden Days," full of happiness and sunshine. Yet, strange to say, when an analysis is made of these early impressions left behind, one sees that they nearly all refer to something not quite pleasant, as do most of the dreams that we can recall.

We remember the pricks, but the roses have left no permanent impression. We recall the bitter taste of the medicines administered to us, but we forget the first delight of sucking sweets, indulging in fruit and cakes. We do not remember the first time we felt the glow of the sunshine. No first recollections remain of being taken into a garden, the first pleasure which was provided for Adam and Eve, nor of going into the country, which was the last left to Falstaff when on his death-bed "a' babbled of green fields."



## EXAMINATIONS, ETC.

UNIVERSITY OF CAMBRIDGE.

At the Congregation held at Cambridge on February 2nd, 1917, the following degree was conferred:

M.D.—F. G. Chandler.

UNIVERSITY OF LONDON.

*First Examination for Medical Degrees.—December, 1916.*

C. J. Donelan, S. A. Gunter, L. S. Morgan, A. C. D. Telfer, E. H. Weatherall.\*

\* Distinction in Biology.

CONJOINT BOARD.

*Final Examination.—January, 1917.*

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

K. N. G. Bailey, E. R. Longstaff, G. H. Rosedale, J. P. Ross, E. M. Atkinson, L. P. L. Firman-Edwards, J. Cretin, K. Masson, A. R. Dingley, J. B. Mudge, E. A. C. Langton, K. A. I. Mackenzie, G. F. Cooke, D. J. Batterham, A. A. Fitch, C. J. L. Blair, A. Arias, W. G. Verniquet.

## APPOINTMENT.

GEACH, R. N., F.R.C.S., appointed Temporary Assistant Surgeon with charge of Outpatients at St. George's Hospital.

## NEW ADDRESSES.

CLARK, Capt. A. E. D., A.A.M.C., 23, Bedford Gardens, Kensington, W. 8.

JACKSON, Capt. F. W., R.A.M.C., 48th General Hospital, Salonica.

KEATS, W. J. C., The Hollies, Wanstead.

LANDER, H. D., Surgeon, R.N., H.M.S. "Reliance," c/o G.P.O., E.C.

MILLER, T. M., Capt., R.A.M.C. Sp. R., No. 4, Casualty Clearing Station, B.E.F.

TURNER, P. E., 17, Pagoda Avenue, Richmond.

## BIRTHS.

ALEXANDER.—On March 20th, at Cade House, Riverhead, Sevenoaks, the wife of J. Finlay Alexander, M.A., M.D. (Cantab.), of a son.

DYSON.—On March 28th, at 5, St. Mark's Square, N.W., the wife of Capt. E. A. Dyson, R.A.M.C.—a daughter.

GRAY.—On February 7th, at Brackley House, Newmarket, the wife of Dr. Norman Gray—a daughter (Phyllis Eleanor).

HAIGH.—On March 30th, at the Deanery, Winchester, the wife of Bernard Haigh, Lieut. (temp.) R.A.M.C., of a daughter. Malay papers, please copy.

PENNEFATHER.—On March 26th, at Deanhurst, Harrow, the wife of C. M. Pennefather, M.B., B.S., prematurely of a daughter, who survived her birth only a few hours.

REICHWALD.—On March 5th, at Timber Hill, Ashted, Surrey, the wife of M. B. Reichwald, M.B., B.S., of a son.

WOOLLEY.—On March 22nd, at Lucknow, the wife of Lieut.-Col. J. Maxwell Woolley, I.M.S., of a son.

## MARRIAGES.

BREWITT-TAYLOR—ELLIS.—On January 27th, at Rosslyn Hill Chapel, Hampstead, by the Rev. H. Gow, Raymond Brewitt-Taylor, M.B., younger son of C. H. Brewitt-Taylor, of China; to Evelyn, youngest daughter of Henry Ellis, of Potter's Bar.

BURNE—TURNER.—On November 22nd, 1916, at St. Andrew's Cathedral, Singapore, by the Bishop of Singapore, Thomas W. H. Burne, M.B. (Lond.), Acting Surgeon, General Hospital, Singapore, second son of the late Col. S. T. H. Burne and Mrs. Burne, of Loynton Hall, Staffordshire, to Catherine Violet Turner, M.D. (Lond.), second daughter of the Rev. W. H. and Mrs. Turner, of Hazelwood, Derbyshire.

HURRY—HILL.—*Silver Wedding*.—On February 16th, 1892, at St. Mary Abbot's Church, Kensington, by the Rev. H. Cecil Grainger, M.A., assisted by the Rev. Canon Payne, M.A., of Reading, and the Rev. H. E. Hill, M.A., brother of the bride, Jamieson Boyd Hurry, M.D., of Reading, to Gertrude Louisa, daughter of Arthur Hill, Esq., J.P., of Erleigh Court, Reading.

McCALL—PRITCHARD.—On February 17th, at the Church of "Our Lady Help of Christians," Blackheath, by the Rev. W. Pritchard, brother of the bride, assisted by the Rev. Francis Sheehan, Henry Dundas McCall, M.R.C.S., L.R.C.P., R.A.M.C., youngest son of the late Charles McCall and Mrs. McCall, Heathside, Blackheath Park, to Margaret Ruth Mary, third daughter of Mr. and Mrs. W. R. Pritchard, Glenwood, Lee.

MACKENZIE—TWINING.—On March 16th, at St. Saviour's, Walton Street, S.W., very quietly, Kenneth Alexander Ingleby Mackenzie, M.B., Surgeon, R.N., elder son of Kenneth Walter and Mrs. Ingleby Mackenzie, of Lansdowne House, Ryde, Isle of Wight, to Dorothea Elizabeth, widow of Capt. Cecil F. H. Twining, Hampshire Regiment.

PRITCHARD—LITTLE.—On January 31st, at St. George's Church, Hanover Square, W., Harold Pritchard, Major, R.A.M.C., of 82, Harley Street, W., to Edith Margaret, younger daughter of the late Henry Ward Little and of Mrs. Little, lately of Cove, Ecclefechan, N.B.

TODD—HINCKS.—On February 19th, at St. Mary's Hay, Breconshire, Francis Richard Todd, M.B., B.S., son of the late Dr. Todd, of North Petherton, Somerset, to Dorothy, only daughter of Dr. and Mrs. Hawksford Hincks, Hay.

## DEATHS.

BISHOP.—On February 17th, at Fareham, Hants, after a few hours' illness, Sydney Olive Bishop, surgeon and physician, formerly of Assam, aged 69.

BRUCE.—On February 3rd, suddenly, in London, Robert Bruce, J.P., M.R.C.S., of Hillyfield, Milford-on-Sea, Hants, aged 63.

BURTON.—In March, 1917, Bindon Francis V. Burton, M.D. (Brux.), L.R.C.S.I., of 29, East Grove Road, Exeter, aged 68.

GROVES.—On January 31st, 1917, E. Groves, M.R.C.S., L.R.C.P., of Farnley House, Church Street, Hunslet, Leeds.

HAMMOND.—Died from wounds on March 15th, 1917, John Maximilian Hammond, M.B., B.S., Lieut. R.A.M.C., of Nonington, Talbot Avenue, Bournemouth, the dearly beloved husband of Julia Mary Hammond and son of the late Henry A. and Catherine C. Hammond, of Sundridge House, Bournemouth, aged 41.

IRELAND.—On February 5th, 1917, after a few hours' illness, A. E. Ireland, D.P.H. (Oxon.), M.R.C.S., L.R.C.P., of 9, Brunswick Mansions, Brunswick Square, W.C.

KINSEY.—On February 18th, 1917, after a short illness, Robert Henry Kinsey, the beloved husband of Agnes Eliza Kinsey, aged 76.

LEGGE-CURRIE.—On February 16th, at Trinity Hall, Bungay, John Legge Currie, L.R.C.P. (Lond.), M.R.C.S., Trinity Hall, Bungay, and for some time of Tower House, Ipswich.

PEACEY.—On February 22nd, suddenly, of heart failure, at Rydal Mount, St. John's Road, Eastbourne, William Peacey, M.D.

ROWLAND.—On March 6th, 1917, of cerebro-spinal fever, Sydney Domville Rowland, M.R.C.S., L.R.C.P., Major R.A.M.C., of the Lister Institute, eldest son of the Rev. W. J. Rowland, aged 44.

WILLIAMS.—On January 5th, 1917, at Oak Villa, St. Mary Church, Torquay, Isaac Menell Williams, M.R.C.S., L.S.A., after four days' illness, aged 86.

WYBORN.—On March 26th, 1917, suddenly, Dr. A. H. Wyborn, of 181, Camden Road, N.W., and 30, Finsbury Square, dearly beloved husband of Emma Caroline Wyborn.

## NOTICE.

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

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

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

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



# St. Bartholomew's Hospital



"Æquam memento rebus in arduis  
Servare mentem."

—Horace, Book ii, Ode iii.

## JOURNAL.

Vol. XXIV.—No. 8.]

May 1ST, 1917

[PRICE SIXPENCE.]

### CALENDAR.

- Wed., May 2.—Clinical Lecture (Surgery). Mr. Waring.  
Thurs., " 3.—Primary F.R.C.S. Exam. begins.  
Fri., " 4.—Clinical Lecture (Medicine). Dr. Drysdale.  
Mon., " 7.—Exam. for M.B., B.S. (London) begins.  
Tues., " 8.—Exam. for Part II. of Second M.B. (Camb.) begins.  
Wed., " 9.—Clinical Lecture (Surgery). Mr. Waring.  
Fri., " 11.—Clinical Lecture (Medicine). Dr. Morley Fletcher.  
Mon., " 14.—Exam. for Matthews Duncan Medal.  
Wed., " 16.—Clinical Lecture (Surgery). Mr. Waring.  
Thurs., " 17.—Final F.R.C.S. Exam. begins.  
Fri., " 18.—Clinical Lecture (Medicine). Dr. Calvert.  
Wed., " 23.—Clinical Lecture (Surgery). Mr. McAdam Eccles.  
Exam. for Brackenbury Medical Scholarship begins.  
Thurs., " 24.—Exam. for Brackenbury Surgical Scholarship begins.  
Fri., " 25.—Clinical Lecture (Medicine). Dr. Drysdale.  
Sat., " 26.—Sir G. Burrows Prize.  
Skynner Prize.  
Wed., " 30.—Clinical Lecture (Surgery). Mr. McAdam Eccles.  
Fri., June 1.—Clinical Lecture (Medicine). Dr. Calvert.  
Mon., " 4.—Exam. for Matriculation (London) begins.  
Wed., " 6.—Clinical Lecture (Surgery). Mr. McAdam Eccles.  
Thurs., " 7.—Applications for the Lawrence Scholarship to be sent in.

### EDITORIAL NOTES.

**O**UR heartiest congratulations are extended to Mr. Foster Moore, F.R.C.S., who has been appointed Assistant-Surgeon to the Ophthalmic Department of this Hospital.

No less than five old Bart.'s men have received decorations for service on the field of battle.

The late Temp.-Lieut. John Maximilian Hammond, R.A.M.C., whose death we referred to in our last issue, has received the D.S.O. "In evacuating the wounded under the most difficult conditions, he was himself subsequently wounded, and, although both his feet were practically

blown off, he ordered his stretcher-bearers to carry away another wounded man first."

Capt. R. A. Peters, M.C., R.A.M.C., has received a Bar to the Military Cross which he gained last year. "He continually tended the wounded under very heavy fire. He set a splendid example, and showed an absolute disregard for his own personal safety. He has on many previous occasions done fine work."

Temp.-Capt. J. C. Sale, M.C., R.A.M.C., has received a Bar to the Military Cross which he gained last year. "He displayed great courage in collecting and dressing the wounded in the face of a very heavy hostile barrage. He set a splendid example to all ranks."

Temp.-Surgeon F. H. L. Cunningham, R.N., has received the Military Cross. "He displayed great courage and determination in searching for the wounded in exposed positions, and tending them under very heavy fire. He has previously done fine work."

Temp.-Lieut. C. G. Kemp, R.A.M.C., has received the Military Cross. "He worked unceasingly for two days under very heavy fire, and succeeded in evacuating a large number of wounded. He displayed great courage and determination throughout operations."

\* \* \*

The following is the list of the new Resident Staff:

#### House Physicians—

Dr. Calvert.	R. French.
Dr. Fletcher.	E. E. Llewellyn.
Dr. Drysdale.	I. L. Braun.

#### House Surgeons—

Mr. Waring.	R. S. Corbett.
Mr. Eccles.	A. O. Bolton.
Mr. Bailey.	N. F. Smith.

Extern Midwifery Assistant . . . A. H. Samy.

Intern Midwifery Assistant . . . G. F. Cooke.

Medical Receiving Room Officers {  
H. Beckton.  
E. F. S. Gordon.  
D. Cameron.

Surgical Receiving Room Officers {  
F. E. G. Watson.  
S. L. Higgs.  
E. D. Spackman.

House Surgeon to Throat Dept. . . H. J. Churchill.

House Surgeon to Ophthalmic Dept. D. Blount.



## ROLL OF HONOUR.

It is with very much regret that we have to record the names of no less than four old Bart.'s men this month. Of these only one was qualified, the others have been students at the Hospital, and having joined various branches of the service at their country's call.

Lieut. J. Naylor, R.A.M.C., is reported "missing—believed drowned"—and from our knowledge of the terms used generally in these reports, we fear that there can be no doubt about his death.


Second-Lieut. V. H. Butcher, of the Essex Regiment, who was a student at this Hospital, has died of wounds.

Pte. F. H. V. Thompson, R.A.M.C., another of our students, has died from septic pneumonia.

Lieut. Alfred Foster, R.F.A., who was also a student here, was killed in action on April 14th.

Our deepest sympathy is extended to the relatives of these past fellow workers of ours who have fallen in their country's cause.

## AN ECHO FROM KUT-EL-AMARA.

N April 1st, 1916, it rained heavily at Kut-el-Amara, so that the Turks ceased from troubling for the time being, and gave a quiet afternoon for the medical meeting which had been arranged for that day, which, it will be remembered, was during the fifth month of the siege. This remarkable meeting, at which about twenty-five medicos were present, will long be remembered by all who attended it. The meeting had twice been arranged and twice postponed on previous occasions owing to the heavy rains, and even on this occasion many of those who had promised to attend found the weather outweighed their zeal. Of the twenty-five present, five were Bart.'s men—Capt. H. H. King, I.M.S., Capt. E. G. S. Cane, R.A.M.C., Capt. T. E. Osmond, R.A.M.C., Capt. R. C. Clifford, I.M.S., and Lieut. W. C. Spackman, I.M.S.

Three members of the meeting gave demonstrations of cases, and of these three two were Bart.'s men.

Capt. Cane, starting at the British General Hospital, showed a series of twenty-six cases of beri-beri, and the following extract of the demonstration is quoted from the *British Medical Journal*:

"Case 1, now convalescent, showed only muscular atrophy and absence of knee-jerks, but had previously suffered from œdema of legs, abdomen, and lungs, cardiac dilatation, and tachycardia.

"Case 2 now showed tachycardia only.

"Case 3 was an example of great emaciation—a 13 st. man reduced to 8 st. He had previously suffered from paralysis of both arms. He now felt quite well, but was not able to walk. He ate everything he could get of meat, rice, and bread, but did not put on weight.

"Case 4 had loss of tactile sensation in the legs from just above the knees downwards.

"Case 5 at one time had become suddenly unconscious and had remained so for three days, with no after-effects.

"In Cases 6 and 7 there was abdominal distension, now without ascites. The distension varied with the time of day, generally being worse at night.

"Cases 8 and 9 showed great emaciation.

"Capt. Cane said that unfortunately for purposes of demonstration only the chronic cases were left, all the slighter cases—some sixty in all—having been discharged. Of these only two had returned to hospital. In answer to questions, he said that the men usually came in complaining of swelling in the legs, inability to walk in consequence, and palpitation. The pain was in the calf, in the shin bone, and especially just behind and above the knee. The earliest signs were usually tenderness in the calf, œdema of the legs and loss of knee-jerks, and tachycardia; there were no heart murmurs, but œdema and distension of the abdomen with occasional ascites, and slight œdema of the face; sometimes, not often, areas of anæsthesia occurred on any part of the lower extremities, not confined to any particular nerve areas. Paralysis of the arms was occasional but rare; anæmia was a constant feature. Later on the œdema of the legs went down and wasting was ushered in. Wounds in beri-beri cases, several of which had occurred in hospital, healed very slowly, the granulation process in soiled and open wounds being especially dilatory.

"In fatal cases death was usually due to heart failure in the early days of and before the siege, but, later on, uncontrollable dysentery was the determining factor. Two nursing orderlies who were looking after cases of the latter kind contracted the disease, but it was possible that they were already previously affected. Progress was on the whole very good. As regards treatment, no drug appeared to be of much use. Tonics of various sorts were given. Early in the siege the white bread of the ration was replaced by brown, and much improvement in the beri-beri cases followed this change."

Capt. Clifford, at the 57th Stationary Hospital, showed some cases of scurvy, illustrating all the classical signs, and again the extract is from the *British Medical Journal*:

"The first case was one showing the extent to which the gums may be involved without the occurrence of any suppuration. The whole of the gums of the lower jaw were puffy and inflamed; the papillæ stood out from the teeth, and the mucous membrane of both cheeks and palate was œdematous. The case was one of six weeks' standing and had previously suffered from infiltration of the thigh muscles. This had resolved, and there was now extreme emaciation of the lower extremities. The next case was one with little or no mouth signs, but with marked œdema of the feet and induration of the calf and flexor thigh muscles. When made to stand up he could only attain to a bent-



kneed crouching attitude, but complete flexion was easy and painless. The next case illustrated one of the commonest sites of the vicarious hæmorrhages met with in this disease. The patient's right eye showed a subconjunctival hæmorrhage of some extent. It was limited on the inner side by the corneo-scleral junction, but on the outer the effusion was diffuse and passed to the back of the eye above. No permanent harm had resulted from these hæmorrhages; there had been only very temporary diminution of vision and no pain, but there was still some photophobia present after three weeks. A fourth case was again an example of an effusion of blood. The man had a hard, tumour-like swelling in the region of the gall-bladder. When admitted three weeks earlier the swelling was more diffuse and less indurated, and appeared to be situated in the subperitoneal tissue. The patient at first had suffered some pain, but this soon passed off; there were other undoubted signs of scurvy present.

"The next two cases illustrated the adverse effect of scurvy on wounds. The first was a gunshot wound of the hand with compound fracture of the bones. Instead of healing up, the wound had deteriorated, and become full of thick grey pus, which on being washed away left an unhealthy-looking grey surface, covered with pin-point hæmorrhages, and dark plugs of blood-clot were seen scattered over the surface, closing bleeding capillaries. The wound was three months old, and refused to heal, although all dead bone had been removed. There was no surrounding induration, and the edges of the wound were thin and undermined. The second case showed a large wound over the glenoid cavity of the scapula. The arm had been removed two months previously on account of extensive bone injury and continued suppuration. Scurvy had attacked the patient twelve days after the amputation, and the wound at once began to bleed from numerous points on the already granulating area. The progress of the case was checked, and, on account of the abundance of pus, fomentations had once more to be applied to the wound. The scurvy was being checked by giving the patient tinned pineapple, which, Capt. Clifford said, caused a very remarkable improvement in these cases. The granulations now looked fairly healthy, though they bled extremely easily: there was no induration around the wound, such as would have been found in an otherwise healthy person with a chronic granulating ulcer."

#### NOTICE.

Two civilian resident medical officers are required for the First London General Hospital. Each should be over military age or should be ineligible for military service. The pay is 24/- a day and the expenses of the mess come to about two guineas a week.

## SOME CASES OF FACIAL DEFORMITY TREATED IN THE DEPARTMENT OF PLASTIC SURGERY AT THE CAMBRIDGE HOSPITAL, ALDERSHOT.

By CAPT. H. D. GILLIES.



CASE 1. *Formation of the upper half of the bridge of the nose (vide Photos 1 and 1 A).—The loss of tissue comprised:*

- (1) The nasal bones, underlying portion of septum, frontal spine, and upper portions of nasal process of superior maxillæ.
- (2) The skin that should cover this part of the nose.
- (3) The right eye.

There was a small opening into the nose surrounded by scar-tissue and granulations, which, when excised, left a bare area of about  $\frac{1}{2}$  in. square.

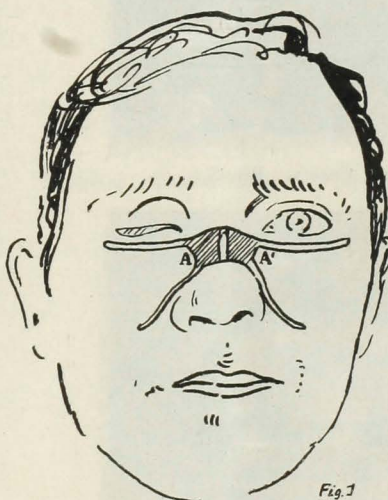


Fig. 1

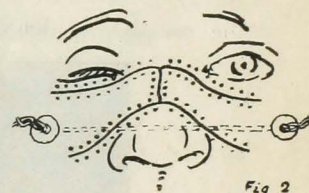


Fig. 2

Note: Wire retention sutures

#### CASE 1.

*First operation* (June 4th, 1916).—Excision of scar, and submucous resection of a piece of the perpendicular plate of the ethmoid, which was swung forward to form a bridge, and sutured below to the septum of the lower nose with catgut. Two sliding lateral flaps from the cheek were cut, undermined, and sutured over this bridge with fine interrupted silk (*vide* Figs. 1 and 2).

*Result.*—Slight breaking-down near the angle of the right eye, which socket was not entirely clean. Primary healing of the rest, with excellent cosmetic results. As anticipated, the bridge gradually sank, as the bridge of cartilage was not strong enough to support the contracting skin flaps.

*Second operation* (September 3rd, 1916).—Gas and oxygen anæsthesia by Capt. H. E. G. Boyle, who, on a visit, kindly gave a very satisfactory demonstration of this method.



Small skin incision ; skin very carefully undermined from below upwards, and when the frontal bone was reached the depth was increased, and the periosteum incised and raised. A piece of rib cartilage of the necessary length was cut and

With the fitting of an artificial eye the result was very satisfactory (*vide* Photos 2 and 2 A).

CASE 2. *Temporal muscle transplantation for deformities caused by loss of the malar bone.*—These cases show a dis-

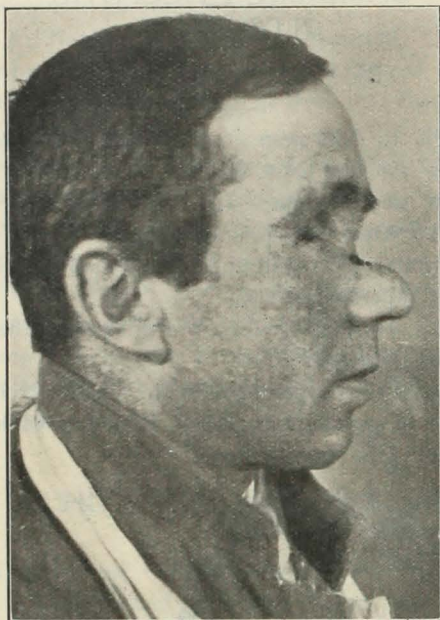


PHOTO 1. Case 1. Pte. S—.

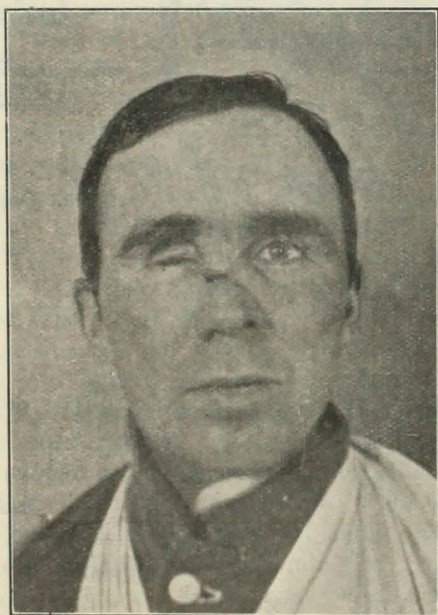


PHOTO 1A. Case 1. Pte. S—.

fashioned, and then inserted under the skin and periosteum, and its lower end made to rest on the cartilage of the lower part of the septum. Catgut ligatures were inserted to hold it central, but, as the photos taken two months after show, this end slipped off the cartilage and produced a slight deformity.

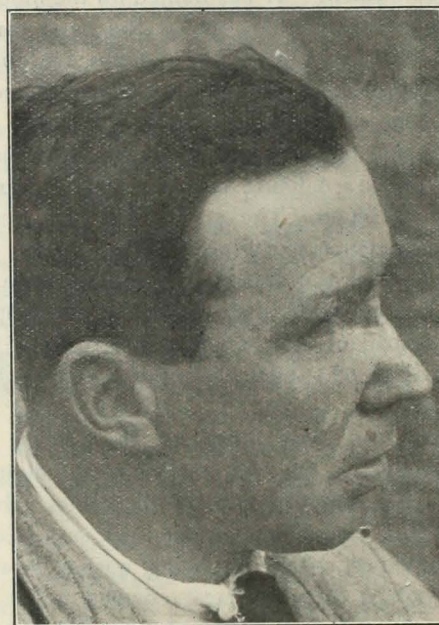


PHOTO 2. Case 1. Pte. S—.

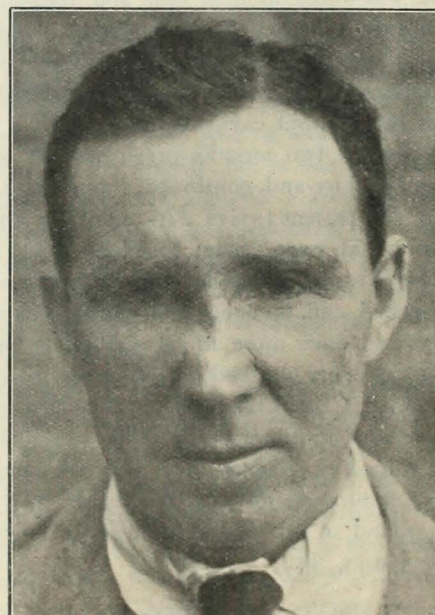


PHOTO 2A. Case 1. Pte. S—. (Cartilage graft of nose.)

ressing and very depressed scar, which can be remedied by the following means : fat graft, cartilage graft, or by foreign body, such as celluloid or wax.

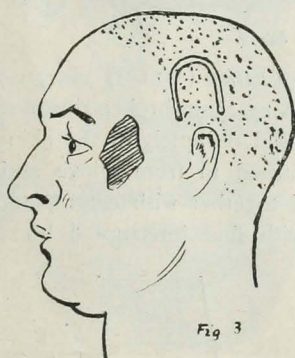
Fat grafts are, in my experience, a little uncertain. When primary union has occurred aseptic fat necrosis often sets in about the tenth day. Moreover, as this wound is nearly



always connected with a discharging eye-socket, the free graft (fat or cartilage) is liable to become infected.

I tried celluloid plates, but found them unsatisfactory.

I have used the temporal muscle flap in a good many cases to date, and have had uniformly good results. The incision in my later cases is in the hairy scalp, and overcomes the disadvantage of producing a scar across the temporal region, where the skin does not heal usually without marked scarring.



CASE 2.

Fig. 3 shows the U-shaped incision in the scalp to expose the temporal muscle. The anterior third or two-thirds of the fleshy origin of the temporal muscle is elevated from the bone, passed under the bridge of skin, and sutured to the deep tissues below the eye, or wherever it is needed to make up the contour.

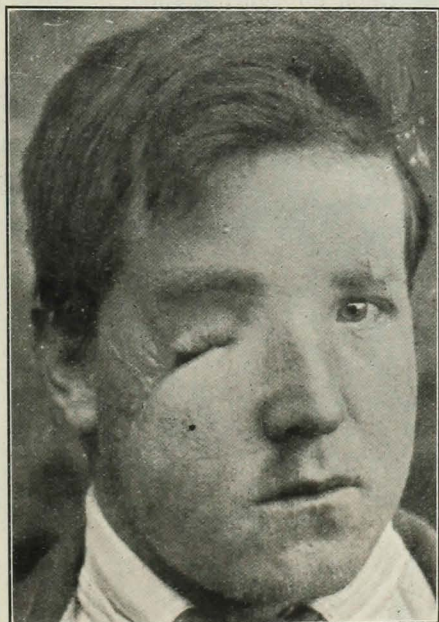


PHOTO 3. Case 2. Pte. F—. Loss of malar.

When freeing the muscle it is necessary to separate the anterior portion from the part left behind, either with the

knife or scissors, starting from above, and working down towards the insertion of the fibres into the mandible. The attachment to the zygoma and the temporal fascia must also be severed before the flap will come forward easily.

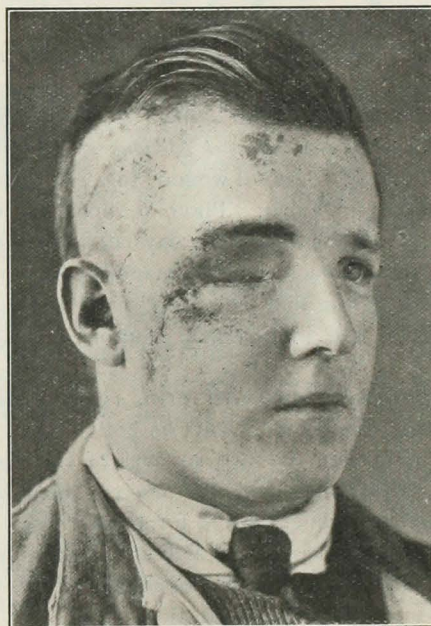


PHOTO 4. Case 2. Pte. F—. Temporal muscle transplant.

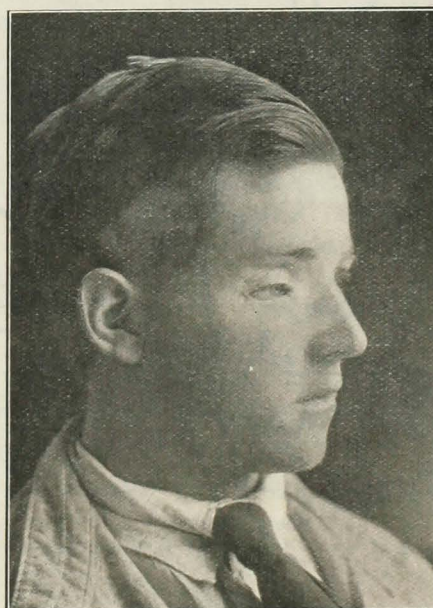


PHOTO 5. Case 2. Pte. F—. Later.

The blood and nerve supply is not apparently seriously interfered with, for in the majority of cases the transplanted muscle can be made to contract, and gives a very colourable imitation of the action of the orbicularis oculi, which is usually paralysed from the associated upper facial paralysis.



No inconveniences in mastication appear to result, and the hollow temporal region makes the new zygoma more prominent. The method is variable within limits as to the amount of muscle taken, and as to the positions into which it may be swung. Drainage for the hollow produced by the transplantation is always necessary.

Photos 3, 4, and 5 illustrate an actual case treated by this method.

**CASE 3.** *Formation of new corners to the mouth, together with the repair of the adjacent portions of lips and cheek; fracture of the jaw.*—Date of wound, July 1st, 1916; stated to be machine-gun bullet. Photo 6 shows the condition of Private D—on admission two days after being wounded. The X rays showed fracture of the mandible in two places—in the region of the first molar tooth, and in the region of the symphysis, the intermediate portion of bone being displaced.

*Plastic operation* (September 11th, 1916).—This operation consisted in excision of scars on both sides.

On the right side the two surfaces of the cheek were merely drawn together, and the mucous membrane from inside the mouth brought out to form a new angle.

On the left side a combined skin and mucous membrane flap was swung towards the oral opening both in the upper and lower lips (*vide* Figs. 4 and 5).

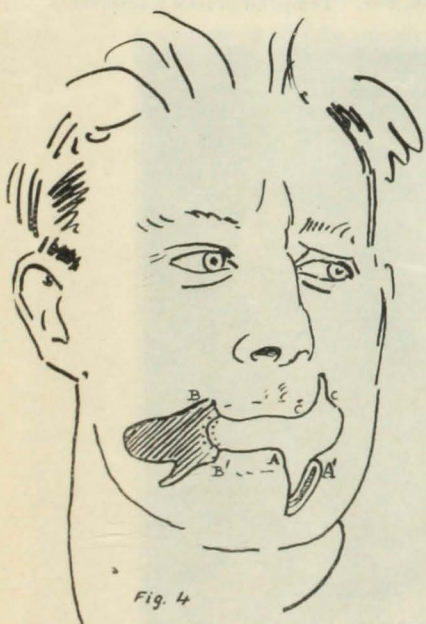


Fig. 4

CASE 3.

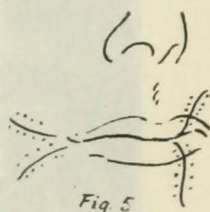


Fig. 5

The result of this operation was satisfactory, except that the movement of the lower jaw began to stretch the line of union of the flaps on the right side of the cheek, and the wound partially broke down near the corners of the mouth. It was limited by immediately fitting a closely applied chin splint and attaching it over the head. Since then, in all

cases in this region I have been careful to support the lower jaw until the operation wound is well healed.

*Second plastic operation* (October 31st, 1916).—Scar re-excised, and in order to raise the corner of the mouth a little, a flap was outlined as per diagram (Fig. 6) and sutured to the lower lip.



Fig. 6

*Third plastic operation* (January 1st, 1917).—A portion of the right scar having again broken down, it was re-excised, the knife being used obliquely to the skin surface. Local fat flaps were turned in from above and below the depression, sutured together with catgut, and the skin sewn over this pad with fine interrupted horse-hair. A small

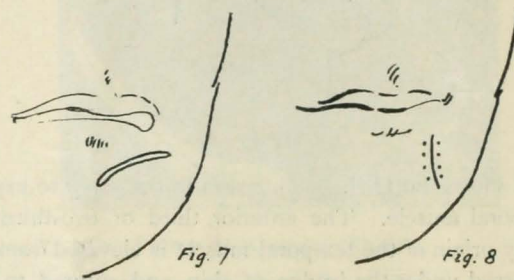


Fig. 7

Fig. 8

mucous membrane correction was made on the left upper lip, and the left lower lip was raised at the corner by a horizontal incision through the whole thickness of the lip being sewn up perpendicularly (Figs. 7 and 8).

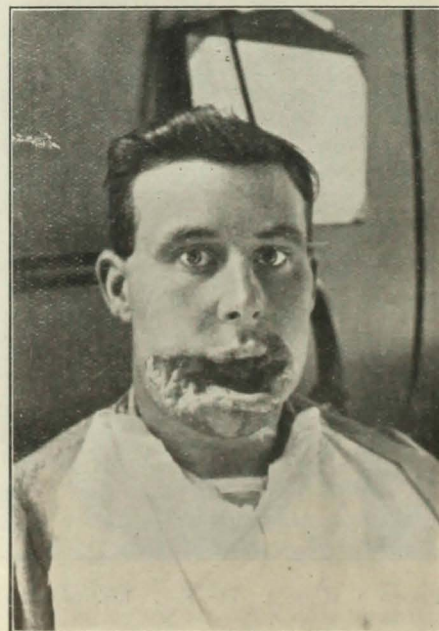


PHOTO 6. Case 3. Pte. D— On admission,



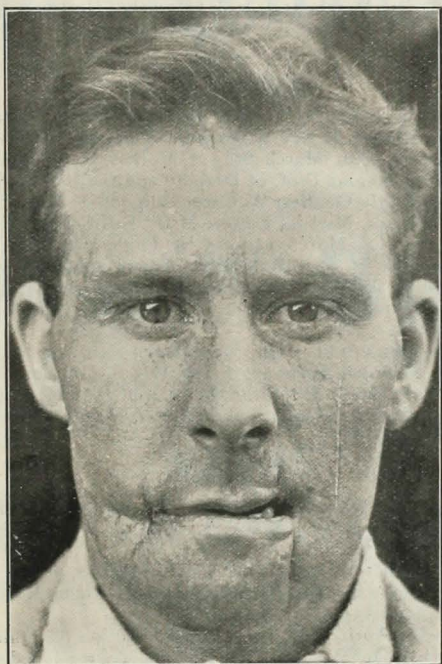


PHOTO 7. Case 3. Pte. D.—Result 1st plastic.

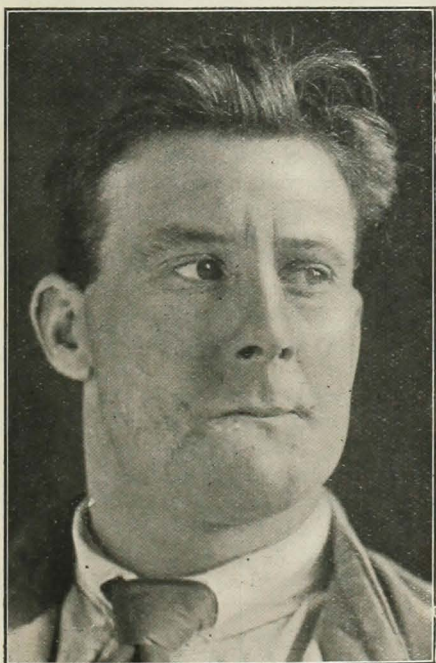


PHOTO 8. Case 3. Pte. D.—Final.

Photos 6, 7, and 8 show the condition before and after treatment, and the stage after the first operation.

Firm bony union of the lower jaw has occurred, and the patient can eat solid food. Further improvement could be effected by bringing down the upper lip at the left angle, but as, functionally, the man is fit to serve again, he has

been sent back to duty. The dental work was carried out by Capt. F. E. Sprawson, R.A.M.C.

The diagrams illustrating the operations were drawn by Henry Tonks (late Lieut. R.A.M.C.).

## STUDENTS' UNION.

**T**HE Annual General Meeting of the Students' Union was held on March 14th.

The Hon. Treasurer's report was read by Captain Ball, who stated that although the general expenditure had been less, the revenue had diminished very considerably.

Even with the Catering Company's kind gift, added to the profits of the JOURNAL, there still remained a fairly considerable adverse balance.

The Hon. Secretary's report was then read and received.

The tellers then announced the results of the general elections to the Council:

*Constituency A.*—Messrs. H. B. Bullen, P. C. Horsburgh, E. A. Crook, W. B. Christopherson, A. D. Wall.

*Constituency B.*—Messrs. C. Shaw, H. L. Sackett.

*Constituency C.*—Messrs. I. de B. Daly, B. B. Sharp, P. Smuts.

*Constituency D.*—Mr. T. B. Vaile.

*Constituency E.*—Mr. G. A. Fisher.

Mr. Waring, after warning the Union that he would only accept office until the end of the war, was again unanimously re-elected President.

Captain Ball and Major Gask were unanimously re-elected Hon. Treasurers.

After it had been decided to cut down the list of daily papers by five and the weekly papers by two, votes of thanks to the President and Hon. Treasurers for their devoted work on behalf of the Union were passed with acclamation.

## EXAMINATIONS, ETC.

### UNIVERSITY OF LONDON.

*Second Examination for Medical Degrees.*—March, 1917.

*Part I.*—C. H. Andrewes; J. L. McK. Brown; F. C. W. Capps; J. V. Landau.\*

*Part II.*—S. M. Cohen †; H. J. Levy; Campbell Shaw.

### CONJOINT BOARD.

*First Examination.*—March, 1917.

*Part I. Chemistry.*—N. L. Capener.

*Part II. Physics.*—N. L. Capener.

*Part III. Elementary Biology.*—N. K. Aboutigi; N. L. Capener; H. W. Hammond; C. Huntsman; K. W. Leon; G. Manët-Wallett; B. A. J. Mayo; S. R. Simaika.

*Part IV. Practical Pharmacy (April).*—H. B. Bullen.

*Second Examination.*—April, 1917.

*Anatomy and Physiology.*—H. E. Archer; H. D. Kelf; E. D. Macmillan; G. M. J. Slot; W. G. D. H. Urwick.

\* Awarded a mark of distinction.

† Distinguished in Anatomy.



## APPOINTMENTS.

BOUSFIELD, PAUL, M.R.C.S., L.R.C.P., appointed R.M.O., American Women's Hospital for Officers, 98-99, Lancaster Gate, W. 2.  
 HORNER, N. G., M.B., B.C.(Cantab.), M.R.C.S., L.R.C.P., late Temp. Capt. R.A.M.C., appointed Assistant Editor of the *British Medical Journal*.  
 MOORE, R. FOSTER, M.A., B.Sc.(Cantab.), F.R.C.S., appointed Assistant Ophthalmic Surgeon at St. Bartholomew's Hospital.

## CHANGES OF ADDRESS.

ARCHER, C. W., Surg. R. N., H.M.H.S. "Garth Castle," c/o G.P.O., E.C.  
 BOUSFIELD, PAUL, American Women's Hospital for Officers, 98-99, Lancaster Gate, W. 2.  
 BROWN, W. G. S., 120, Albany Road, Camberwell, S.E. 5.  
 MAXWELL, J. PRESTON, 31, Hammelton Road, Bromley, Kent.  
 TUCKER, A. B., 176, Eighth Avenue, Mayfair, Johannesburg, South Africa.

## BIRTHS.

BAILEY.—On March 31st, at "Clayton," Bourne End, Bucks, the wife of Selborne Bailey, M.D.(Cantab.), of a daughter.  
 BARNETT.—On April 25th, at Gernode, Berkhamstead, Herts, the wife of Dr. Burgess Barnett, of a daughter.  
 MAIDLOW.—On April 21st, at Ilminster, Somerset, the wife of Dr. W. H. Maidlow—twin sons.  
 REICHWALD.—On March 5th, at Timber Hill, Ashted, Surrey, the wife of M. B. Reichwald, M.B., B.S., Temp. Lt. R.A.M.C., of a son.  
 RYLAND.—On April 28th, at West Cottage, Wrecclesham, Farnham to Capt. (R.A.M.C.) and Mrs. Archer Ryland—a son.

STANSFELD.—On March 31st, at Hardwycke, Hailsham, the wife of R. Stansfeld, B.C.(Cantab.), M.R.C.S., of a son.

## MARRIAGES.

AUSTEN—MAZET.—On April 4th, at Holy Trinity Church, Hull, Lt. Harold Austen, R.N.V.R., to Juliette Mazet, of Cete, France.  
 CARTE—FOSTER.—On March 8th, at Holy Trinity Church, Cambridge, by the Regius Prof. of Divinity and the Rev. A. E. Stodart, Vicar of Madingly, Geoffrey W. Carte, Surgeon, R.N., and Georgina, daughter of Capt. Michael Foster, M.D., F.R.C.P.  
 FRY—BECKER.—On March 14th, at St. Paul's Church, Tottenham, Capt. Augustin P. Fry, R.A.M.C., second son of the late Rev. Lucius G. Fry, former Vicar of St. James's, Upper Edmonton, to Elsie Blanche, eldest daughter of G. Becker, Esq., and Mrs. Becker, Tottenham, N.  
 HAMILTON—MACPHEE.—On December 29th, at St. Andrew's Church of Scotland, Bombay, by the Rev. J. Drummond Gordon, B.D., William Gavin Hamilton, Major I.M.S., to Helen, daughter of the late Dugold Macphee and of Mrs. Macphee, Helensburgh, Dumbartonshire.

## DEATHS.

BESWICK.—On April 12th, 1917, at 62, Thistlewaite Road, Clapton, N.E., Robert Beswick, M.R.C.S., B.Sc. (late of Bishopsgate, London), aged 75.  
 JONES.—On April 13th, 1917, after a short illness, at his residence, 16A, Abercromby Square, Liverpool, Hugh Richard Jones, M.D. (Cantab.), aged 53.  
 WRE福德.—On April 23rd, 1917, killed in action, Captain Bertram William Heyman Wreford, 1st Devons, dearly loved and elder son of Dr. and Mrs. Heyman Wreford, of Exeter, aged 22.

## TIMES OF ATTENDANCE OF THE STAFF IN THE WARDS AND OUT-PATIENT DEPARTMENTS.

*This Time-table will be Published Quarterly and also whenever there are any Important Alterations.*

		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
Medical Wards	Dr. CALVERT	1.30	1.30	—	1.30	1.30	—
	Dr. H. MORLEY FLETCHER	1.30	1.30	—	1.30	1.30	—
	Dr. DRYSDALE	1.30	1.30	—	1.30	1.30	—
Medical Out-patients	Dr. LANGDON BROWN	—	10	—	—	10	—
	Dr. HORTON SMITH HARTLEY	—	—	10	—	—	10
	Dr. HORDER	10	—	—	10	—	—
Surgical Wards & Theatres	Mr. WARING	1.30	1.30	—	1.30	1.30	—
	Mr. ECCLES	1.30	1.30	—	1.30	1.30	—
	Mr. BAILEY	1.30	1.30	—	1.30	1.30	—
Surgical Out-patients	Mr. BLAKEWAY	10	—	—	10	—	—
	Mr. MORETON	—	10	—	—	10	—
	Mr. BALL	—	—	10	—	—	10
Gynæcological Wards	Dr. GRIFFITH	2	—	2	—	2	—
Maternity Wards	Dr. WILLIAMSON	—	2	—	—	2	—
Diseases of Women	Dr. WILLIAMSON	9	—	—	1.30	—	—
Orthopædic Department	Mr. ELMSLIE	1.30	—	—	—	—	—
Diseases of the Throat and Nose	Mr. HARMER	—	—	—	1.30	—	—
	Mr. ROSE	—	9.30	—	—	—	—
Ophthalmic Department	Mr. SPICER	1.30	—	—	—	—	—
	Mr. WEST	1.30	—	—	1.30	—	—
Aural Department	Mr. SCOTT	—	—	—	—	9	—
	Dr. ADAMSON	—	9	9	—	9	—
Diseases of Children	Dr. H. MORLEY FLETCHER	—	—	1.30	—	—	—
	Mr. ACKLAND	—	10	—	—	—	—
	Mr. WHITE	9	9	—	9	—	—
Dental Department	Mr. VERHEYDEN	—	—	—	—	10	—
	Mr. HUDDART	—	—	9	—	9	9
X-Ray Department	Dr. WALSHAM	9.30 and 1.30	9.30 and 1.30	9.30	9.30 and 1.30	9.30 and 1.30	9.30
		(males)	(females and children)	—	(males)	(females and children)	—
		1.30 (females)	1.30 (males)	1.30 (females)	2 (males)	1.30 (females)	—
Electrical Department	Dr. CUMBERBATCH	3 (males)	1.30 (females)	—	—	2.30 (males)	—
Exercises and Massage Department							



# St. Bartholomew's Hospital



"Æquam memento rebus in arduis  
Servare mentem."

—Horace, Book ii, Ode iii.

## JOURNAL.

VOL. XXIV.—No. 9.]

JUNE 1ST, 1917

[PRICE SIXPENCE.]

### CALENDAR.

- Fri., June 1.—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.  
Clinical Lecture (Medicine). Dr. Calvert.
- Mon., „ 4.—Exam. for Matriculation (London) begins.
- Tues., „ 5.—Dr. Drysdale and Mr. Bailey on duty.
- Wed., „ 6.—Clinical Lecture (Surgery). Mr. McAdam Eccles.
- Thurs., „ 7.—Applications for the Lawrence Scholarship to be sent in.
- Fri., „ 8.—Dr. Calvert and Mr. Waring on duty.  
Clinical Lecture (Medicine). Dr. Drysdale.
- Mon., „ 11.—First and Second Exams. for M.B. (Camb.) begins.
- Tues., „ 12.—Exam. for Third M.B. (Camb.) begins.  
Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
- Wed., „ 13.—Clinical Lecture (Surgery). Mr. Bailey.
- Fri., „ 15.—First and Second Exams. for M.B. (Oxford) begins.  
Dr. Drysdale and Mr. Bailey on duty.  
Clinical Lecture (Medicine). Dr. Calvert.
- Tues., „ 19.—Dr. Calvert and Mr. Waring on duty.
- Wed., „ 20.—Clinical Lecture (Surgery). Mr. Bailey.
- Fri., „ 22.—Clinical Lecture (Medicine). Dr. Morley Fletcher.  
Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
- Mon., „ 25.—D.P.H. Conjoint Exam. begins.
- Tues., „ 26.—Dr. Drysdale and Mr. Bailey on duty.
- Wed., „ 27.—Clinical Lecture (Surgery). Mr. Bailey.
- Thurs., „ 28.—Second Exam. Conjoint Board begins.
- Fri., „ 29.—Exam. for Shuter Scholarship begins.  
Clinical Lecture (Medicine). Dr. Morley Fletcher.  
Dr. Calvert and Mr. Waring on duty.
- Mon., July 2.—Second Exam. for Med. Degrees (London), Part II, begins.  
M.D. and M.S. Exams. (London) begins.  
Second Exam. of Society of Apothecaries begins.
- Tues., „ 3.—Final Exam. Conjoint Board (Medicine) begins.  
Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
- Wed., „ 4.—First Exam. of Society of Apothecaries begins.
- Thurs., „ 5.—Final Exam. Conjoint Board (Midwifery) begins.
- Fri., „ 6.—Final Exam. Conjoint Board (Surgery) begins.  
Dr. Drysdale and Mr. Bailey on duty.

### EDITORIAL NOTES.



R. W. S. A. GRIFFITH has been appointed as representative of the Royal College of Surgeons on the Central Midwives Board.

\* \* \*

We are happy to congratulate Lieut.-Col. and Brvt.-Col. M. H. G. Fell, R.A.M.C., of the Indian Expeditionary Force "D," on having been awarded the Russian decoration of the Order of St. Stanislas, 2nd Class with Swords, for "distinguished services rendered during the course of the campaign."

\* \* \*

#### ROLL OF HONOUR.

We regret that each month now brings us several names of Old Bart's men who have fallen in the war. This month we have to mention no less than four such.

Lieut.-Col. William Briggs Grandage, commanding a brigade of R.F.A., was killed on May 14th in his thirty-eighth year. He was educated at Sedbergh and Clare College, Cambridge, and at St. Bartholomew's Hospital. He was a fine cross-country runner, representing Cambridge against Oxford; he also played Rugby football for his University, though he did not get his blue. He took his M.B. and B.C. degree in 1906 and his M.D. in 1908. In 1905 he joined the 3rd Kent Royal Arsenal Artillery, and remained with them when they became the 2nd London Brigade R.F.A. (T.), and held the rank of Captain when the war broke out. On mobilisation he gave up his practice, and shortly after was promoted to Major. For a time he was second in command of a reserve brigade, and afterwards had charge of the artillery section of the O.T.C. at London University. Later he was promoted Lieut.-Colonel, and given command of a brigade, proceeding to the Front only three months ago.

Capt. Edward Harrison, R.A.M.C. (T.), who was attached to the Gloucester Regiment, was killed in France by the explosion of a mine on April 17th.

He was the third son of the late Mr. Stockdale Harrison, architect and surveyor of Leicester, and was educated at the



Wyggeston School and Trinity College, Cambridge, 1897-1900. He then proceeded to St. Bartholomew's Hospital to continue his medical studies, obtaining the degrees of M.B., B.C. (1904-1905). He then became Resident Medical Officer at the Womens' Hospital, Soho, and afterwards Junior and Senior House Surgeon at Scarborough Hospital.

Temp.-Lieut. J. G. B. Smith, R.A.M.C., is reported "missing, believed drowned," and, as we have had to

to give us the benefit of his advice and assistance as well as of his instruments. Naturally the patient is doing very well! Such an assembly of Bart.'s men could not go unrecorded. A few days later Griffiths was posted here for duty, and had charge of some wounded Turkish prisoners. He was transferred to another sphere soon afterwards, so the balance of power was somewhat upset, for there are now only four Bart.'s men here.



*Left to right, standing.*—Lieut. Weir. Major Hamill. Major Maclaren. Capt. Dobson.  
*Left to right, sitting.*—Major Rawling. Col. Collins, A.D.M.S. Basra, 1914-1916. Major Whitehead.

remark in a previous issue, such an announcement unfortunately gives no hope of his rescue.

Temp.-Capt. A. B. Bernard, K.R.R.C., is reported missing, believed killed.

With much sorrow we tender our deepest sympathy to the relatives and friends of these gallant men.

### FROM THE FRONT.

#### EXTRACT OF LETTER FROM TEMPORARY MAJOR P. HAMILL, R.A.M.C.

*March 28th, 1917.*

**H**EAR ———,—Enclosed is a photo which may be of interest. It was taken on the occasion of our operating to decompress a patient with a cerebral tumour, when Rawling very kindly came down from Deolali

Bombay is full of Bart.'s men; Col. Anderson is at Alexandra Hospital, Napier at Cumballo, Wallis at Parel Laboratory. I saw Pigeon, of I.M.S.—a former Herringham clerk—in the distance the other day. E. N. Russell is on a hospital ship, and there were several others about.

Basra was also full of them: there were six of us in the Reinforcement Camp alone when I first went there. Armstrong was going strong at Nos. 9 and 10 Indian Hospitals, and Boney at 3 B.G.H., whither Crossman soon followed. The career of Willett and myself in Mesopotamia was brief, but from what I hear, Crossman and Charles, who went out with me, are still going strong. The latter seemed at one time to have turned his hand to clinical medicine, for some of the case records of patient arriving here bore his signature. Murray arrived at Basra a few weeks after us, but did not remain long. When last I heard of him he had



gone on medical certificate to South Africa. C. R. Taylor is still at No. 3; I see his signature on the transfer sheet of nearly every case of the enteric group which comes into my wards.

Memories of Mesopotamia are far from unpleasant, in spite of having spent over 70 per cent. of my time in hospital, and I feel sorry at not being there for the present push, but Shiga's bacillus is a fierce and toxic organism, and a medical board to-day still judges me unfit.

We all send best wishes.

Yours sincerely,

P. HAMILL.

## A CASE OF PERFORATING WOUNDS OF THE HEART.

By CAPTAIN G. L. KEYNES, R.A.M.C.

**P**RIVATE A. P—, a very large and well-built Australian, was admitted to the Casualty Clearing Station on February 21st, 1917. He had two small entrance wounds over the lower edge of the fifth rib on the left side internal to the mid-clavicular line, and his right eye was destroyed. He was very much collapsed, and, in accordance with the usual practice in cases of penetrating chest wounds, he was propped up in bed and not disturbed more than was absolutely necessary. His general condition slowly improved, and by February 24th was good enough to enable me to enucleate the remains of his right eye under a general anæsthetic. His respiration was not greatly embarrassed, but as he had obvious signs of a large hæmo-thorax on the left side I took the opportunity, after the operation on his eye had been completed, of aspirating his chest; 55 oz. of blood were slowly removed and the fluid was not obviously infected. More fluid still remained, but this was left owing to the danger of too far reducing the intrathoracic pressure. The patient stood the operation very well, and for the next twenty-four hours his condition appeared to be materially improved. On the next day he had very little respiratory distress, but pericardial friction could be heard at the base of the heart; this had disappeared twelve hours later, and from then onwards his condition became gradually worse, the signs being those rather of cardiac failure than of respiratory embarrassment. He died on February 27th, seven days after receiving his wounds.

A post-mortem examination showed that a considerable amount of blood and clot still remained in the left plural cavity; the pericardium was also distended with fluid and the heart itself was covered with fibrin. Both the missiles had passed through the heart muscle within a few millimetres of the cavity of the left ventricle. The larger one was found lying in the pleural cavity behind the

pericardium, and had left a suppurating track in the heart wall. There was also a fragment of rib embedded in the posterior surface of the heart. Death was evidently due to the pericarditis, the patient having recovered from the initial hæmorrhage in spite of its very large amount.

Wounds of the heart are not commonly seen, and this is the only one that has come under my notice during seven months' experience of work at Casualty Clearing Stations. Colonel Herringham has recently recorded a case in which the myocardium was injured, but his patient died three days after being wounded. It appears, therefore, that patients but seldom survive a wound of the heart long enough even to reach the Casualty Clearing Station, and I record this case in the hope that its unusual course may render it interesting.

## TREATMENT OF MALARIA BY INTRA-VEINUS INJECTIONS OF QUININE URETHANE.

By W. B. GRIFFIN, F.R.C.S.Eng.

**I**N a base hospital for cases from Salonica one had a great opportunity of seeing malaria in its most severe form and comparing the various methods of treatment. The men arrived in a very exhausted condition from anæmia, fever, and the gastric complications of malaria, and the loss of weight in many of the patients was very marked.

All the men had quinine treatment by the mouth up to 15 or 20 gr. daily, and many had had intramuscular injections. This treatment had failed to overcome the fever in a large majority of cases, rigors with the temperature reaching 107° and 108° F. occurring daily.

The utter weariness and loss of strength was the symptom complained of by most, the rigors being heroically endured. In several cases the symptoms of coma developed soon after reaching the hospital, the so-called "cerebral" cases. Difficulty in swallowing was quickly followed by loss of speech, loss of power in the limbs, unconsciousness, and incontinence of urine and fæces. This state would be reached in twenty-four hours from the onset.

The pupils were dilated and reacted sluggishly to light, pulse quick and feeble, and respiration was often Cheyne Stokes in character. The spleen was large and tender, knee-jerks diminished, and there was no ankle clonus or Babinski's sign.

We first tried intravenous injections of quinine urethane for this type of case and the results were really astonishing. The mixture used was as follows:

Chlorhydrate of quinine	0.40 c.c.
Urethane	0.20 c.c.
Distilled water	1 c.c.



To this solution, in an antitoxin syringe mounted with a fine needle, was added 14 c.c. of warmed physiological serum, and the whole was slowly injected into the median basilic vein. In the coma cases complete recovery occurred in all cases in periods varying from twelve to twenty-four hours. It was a fine sight to see men who had been unconscious twenty-four hours ago demanding their breakfast. The temperature fell at once, and in thirty-six hours it was possible to see evidence of disintegration of the gametes and schizostes in the blood from a film examined microscopically. Sometimes one or two injections were given at intervals of twelve hours, and repeated again in a week.

We soon began to treat all cases of malaria with persistent fever with intravenous injections of quinine, and I never saw one bad symptom in over a hundred cases. Intramuscular injection gave rise to pain, which sometimes lasted for weeks, and many cases arrived with large inflammatory masses in the buttocks, which broke down later into abscesses.

The night round in the wards was a different matter after we started intravenous treatment. Instead of high fevers and rigors on every chart, the temperatures were normal. The men stated that the result they noticed most was the loss of fatigue which followed the injection, and that they felt so much better. From past experience they dreaded intramuscular injections, but intravenous ones were painless.

French doctors told me that thrombosis of the veins was a common sequela at Salonica, but I only saw one transient case in our series. We hardly ever gave more than 6 to 8 gr. of quinine at one injection, and experience proved it to be sufficient. French doctors stated that they gave up to 18 gr. at Salonica.

Parasites in the blood rapidly disappeared, and patients put on weight and lost their anæmia in a short time. After seeing these cases one felt that for severe and persistent fever in malaria intravenous treatment was the most valuable remedy to be obtained.

## ON THE CAUSES AND AVOIDANCE OF ABDOMINAL RIGIDITY DURING ANÆSTHESIA.

By J. D. MORTIMER, M.B., F.R.C.S.,

Anæsthetist, Royal Waterloo Hospital, St. Peter's Hospital for Stone, etc., Temporary Anæsthetist, St. Bartholomew's Hospital.

**T**HIS difficulty is, or should be, usually absent, or present only to a slight extent, but its results when it is marked may be serious, especially when the operation involves the same region. There is interference with respiration, and consequently with due intake and elimination of the anæsthetic; dilatation of the

heart will follow; the surgeon is hampered by extrusion of the bowels, by venous oozing, and by the difficulty or impossibility of reaching the part at which he is aiming. His work is interrupted and prolonged, and his intentions may be to a great extent frustrated. There is increased probability of vomiting and other after-effects. Fatalities have even occurred as an indirect consequence.

*Causation.*—Rigidity is due to mechanical *tension* and to active *contraction* in proportions varying according to circumstances, including of course the muscular development and nervous sensitiveness. Reflex contractions are usually marked in neurotic people, in alcoholic subjects, in drug-takers and in children, especially when rickety.

As is well known, the presence of *food or much fluid in the stomach* sets up persistent straining, and it may be difficult or impossible to prevent vomiting.

*Faulty anæsthetisation*, as in failure to choose an *anæsthetic appropriate* to the patient, operation, and position, in uneven or too hurried induction, in allowing a degree too light for the occasion, and so forth, may be expected to cause trouble when the administrator is inexperienced.

*Local disease*, such as the presence of acute appendicitis, or of a gastric ulcer, may set up rigidity of over-lying muscles persistent under anæsthesia.

*The position of the patient.*—Certain positions which in some ways greatly facilitate the work of the surgeon tend to increase the trouble under consideration to an extent that is, I believe, not fully realised, and to which special attention may be drawn. This can be well appreciated by anyone will lie down on his side with a firm bolster-shaped cushion underneath it, and in that position will try to breathe freely, or will put himself for a few minutes in the Trendelenberg position. Even the ordinary recumbent position with the patient at full length is not such as we prefer when we wish to relax the abdomen for diagnostic purposes, and tension is obviously increased by putting a cushion or sandbag, as sometimes required, under the lower ribs or pelvis.

The Trendelenberg position not only causes some tension, but also disturbance of the respiration by impeding the action of the diaphragm, upon which the abdominal contents are thrown, and by congestion of the medullary centre and upper air-passages, especially in fat and plethoric subjects, in whom it may, however, for surgical reasons be imperative.

*Operative proceedings.*—These, as was some years ago pointed out by Macewen, may set up spasmodic contraction, even under very deep anæsthesia.

Traction on the mesentery or broad ligaments, enucleation of an adherent prostate, injection of a bladder ulcerated from tuberculosis, are especially likely to cause trouble.

Hiccough may be set up by manipulation in the region of the diaphragm.

*Prevention and remedies.*—To render abdominal operations easier much may be done by those in previous charge of the



case, if there is time and opportunity for improvement of the general condition, particularly in correction of states of obesity, plethora, alcoholism, and rickets.

Means, which need not be here detailed, should, when practicable, be taken to get the stomach empty and kept it empty, particularly in emergencies and when there is intestinal obstruction. Straining and vomiting when a patient is in position for an abdominal operation are not merely troublesome, but very dangerous from the risk of ejecta entering the air-passages. This has occurred even under spinal analgesia, and is, of course, still more likely to happen under general anaesthesia.

Faults of anaesthetisation such as those already mentioned must of course be avoided. In the supine position, if not inconvenient to the surgeon, both shoulders should be raised (the one from which the head is turned rather more than the other). In the lateral position the uppermost arm must be supported on a rest; the patient is steadied and breathing less hampered. Loin cushions are sometimes faulty as regards size and adaptability to the patient's contour, or may be in a wrong position, so that there is needless tension of structures and interference with breathing. In the Trendelenberg position the shoulders should always be supported, and the weight of the head taken off as much as possible by one or two pillows, which may sometimes with advantage rest on the anaesthetist's knees. If support is lacking rigidity is markedly increased.

After *hypodermic injection* of omnopon or morphine and atropine, one often finds absence of reflex rigidity in cases (for instance, hysterectomies) in which it might have been otherwise expected. There is, as a rule, a considerable saving of the anaesthetic. It is worth while to inject (if previously omitted) just after induction or even at the onset of rigidity, for an effect generally follows in about ten minutes. I think, however, there is more liability afterwards to intestinal atony, and consequently to nausea and other ill-effects dependent thereon. After-pain, and vomiting which may be associated with it, is however alleviated. It need hardly be said that the customary precautions must be taken in administering such drugs, and that the patients need careful watching after the conclusion of the operation until their effects have passed off.

Ether from an inhaler preceded by nitrous-oxide or ethyl-chloride, or even ether by the open method although atropine has been given beforehand, will, in unsuitable subjects, cause laboured respiration and excessive secretion of mucus, persistent even when a change to another anaesthetic is made after induction. Under prolonged administration of nitrous-oxide, or of nitrous oxide and oxygen, rigidity is very liable to occur, as is admitted by those who advocate their use for abdominal operations. Chloroform cannot be relied upon when given in a low percentage, and in a higher one its dangers are much increased by the existence of irritation of

vital centres, and of any degree of asphyxia; it is also when fully given apt to be followed by persistent after-vomiting. Still, it answers well for some patients, particularly in the Trendelenberg position, which lessens the probability of shock. Ether by the open method or a chloroform-ether mixture (according to the state of the patient and the stage of the operation) are usually more effectual, and can be pushed with less risk. With a more extended use of C.F. mixture instead of chloroform for prostatectomy I have found that depression and rigidity can generally be avoided. Whatever method be employed, it is of first importance to attend to respiration, and if this becomes unsatisfactory, to discover why it is so, and apply the appropriate remedy. Oxygen is often valuable, but should not be used merely to counteract cyanosis dependent on causes otherwise remediable. For example, one should not give ether from a closed inhaler to a full-blooded elderly person, and then turn on oxygen to alleviate its bad effects, masking a symptom after the manner of the prescribing chemist. Reflex rigidity from surgical proceedings is accompanied by more or less spasmodic closure of the larynx and retraction of the tongue, and efforts must be made to maintain a free air-way by such means a pushing forward the lower jaw, drawing out or levering forward the tongue, and introducing a tube between the tongue and palate.\* Non-aeration increases rigidity, the extraordinary respiratory muscles being called into action, so that a vicious circle is formed. The depth of anaesthesia must be cautiously increased. It may be necessary to ask the operator to desist for a few moments whilst these measures are being pursued. I need hardly remind readers how surgical authorities have insisted on the need for minimising reflex disturbances by making an adequately long incision, by clamping and cutting adhesions when possible instead of tearing them, and by avoidance of rough handling.

*Spinal analgesia* usually abolishes the trouble, besides keeping the bowels still, and is especially useful for this purpose in pelvic operations. It should, however, be combined with morphine and atropine or (in many cases) with general anaesthesia, which may be light when it would otherwise need to be deep. I have known instances of serious psychic shock and other interruptions to the operation, also prolonged mental disturbance afterwards, when spinal analgesia has been employed alone.

It may be well to mention incidentally that in some patients, such as those who are the subjects of chronic bronchitis and emphysema, respiration is habitually mainly

\* It may be remarked in passing that tongue-forceps should *not* be clamped on the tongue; this causes much after-pain and swelling, interfering with the patients' comfort and ability to speak and take nourishment. If necessary, e.g., when the tongue has to be drawn out for some time during certain operations, a thread should be passed through its middle near the tip. But usually, it can be pushed down and gently levered forwards by putting the tongue-forceps (closed and on the flat) against its base.



abdominal, and the excursions of the diaphragm and abdominal walls may be very troublesome to the operator, although there is not tonic contraction. For obvious reasons this trouble unfortunately cannot be abolished, although much be done by proper selection and administration of the anæsthetic to reduce it to a minimum.

I venture to say, in conclusion, that on difficulty arising from rigidity the surgeon and anæsthetist do not always appreciate each other's position. Whilst witnessing operations I have sometimes been struck by the forbearance of the surgeon when rigidity, apparently avoidable by the anæsthetist, has occurred. On the other hand, I have known the anæsthetist blamed when it arose from causes beyond his control, and could not be abolished by him without risking a fatality.

## A HOUSE IN HARLEY STREET.

By PERCY DUNN, F.R.C.S.



CLOSE observer of Nature learns many things of interest, and the pastime becomes a passion: no opportunity is lost of exercising it. Its fascination leads, oftentimes, to the task of attempting the solution of problems, apparently inscrutable, problems exciting an insatiable curiosity—while Nature smiles at her subtlety. But this observation, as an asset in life, is profitable in many diverse ways. The roof of a house, for example, in Harley Street, would presumably provide but a sorry vista for anyone in search of new knowledge. The chimney-pots would be the only noticeable, commanding feature in that aerial landscape. And yet these self-same humble, though indispensable appendices of civilisation have a tale to tell—a lesson to teach—for a casual glance indicates that the abnormal is greatly in excess of the normal. This alone is reflective of scenes of recrimination, of numberless outbursts of human execration, of violent interviews with anatomical professors of bricks and mortar, of febrile pursuance of research work in order to disclose a remedy for that diabolical infliction, a smoky chimney. Again, from the hypertrophied abnormality present, the chimney-pots suggest a fertile field for the study of orthopædic surgery. In this regard they form an aggressive reminder to the surgeon practising that specialty. Every deformity to which the human body is subject, and many others, is thus delineated, majestically outlined. Typical examples of genu valgum abound. Club foot is present in all its varieties. Talipes calcaneus and talipes equino-varus are noticeable over a wide area. Wry neck is not uncommon. Lateral curvature of the spine is prominent. Rickety curvature of the femur can be easily recognised. Flat foot admits of no difficulty in diagnosis; pes cavus is equally distinguishable. Other varieties of deformity are visible, which in the monstrosity

of their angular eccentricities would require a new book of Euclid to explain. Indeed, an orthopædic student would see from the roof of a Harley Street house more examples of human deformity in five minutes than he would see in a year in an orthopædic department.

This new acquaintance with orthopædic surgery was gained in this wise: When Bruce-Clarke's house was in process of construction he invited me one day inside, to observe the progress that was being made. Now the development of a house is peculiar. It differs entirely from the embryological details recorded in the text-books on human anatomy: there is no embryo stage, no notochord, nothing to correspond with the cerebral vesicles. All the vital processes concerned in the evolution of a house are expended only in one direction—that of ensuring completion of development, separately, in every structure and part. The foundations are fully developed from the first, and the same is true, in successive order, of everything else which follows. The development in Clarke's house, at the time of my visit, had proceeded to the upper stories and the roof. But certain visceral structures were still lacking, among which may be mentioned the stairs to the higher altitudes. Thus in order to gain access to these latter a perilous adventure was necessary, by means of ladders. These ladders were fixed at an angle of  $89^{\circ}45'$  from the horizon—as carefully determined by a protractor. In ascending them one's mind became glued upon the possibility of a sudden and precipitous descent to the horizon, with consequences gruesome to contemplate. But the peril of the enterprise was worth it. The orthopædic prospect from the roof was magnificent. The prospect glowed with the glory of orthopædic ingenuity. Nothing, in this sense, could have been grander as a scenic display. But scenery is relative in its attractiveness. A lover of expansive woodland scenery would find nothing congenial to his taste by gazing at chimney-pots; nor would the orthopædic surgeon find anything to remind him of the deformities he was accustomed to treat while testing his vision from the top of Ben Lomond. The roof adventure came to an end, and then followed the soul-stirring business of descending the ladders to the lower floor. The safest mind occupation during the incident was to imagine an ophthalmoscopic examination involving a differential diagnosis between some minute changes in the macular region. This ensured a full relaxation of the accommodation, under the influence of which the ill-definition of near objects tended to detract from the realities of the situation until the lowest rung of the ladders had been favourably negotiated.

The continuance of the inspection to the basement was facilitated by two flights of fully-developed stairs. The first feature attracting notice was a large, pallid-looking door, resting by itself against one of the walls. This basement-neoplasm suggested some diagnostic comment and ætiological reflections. On both of these points Clarke, however,



was quite explicit. Characteristically he said: "I was down at the docks one day, and I happened to see this door in an auction-room for sale. I bought it. Over there a strong-room is being built. When it is finished, a plastic operation with concrete being necessary, the strong-room will fit the door." Macroscopically the structure of the door corresponded with a hard metallic tissue, hopefully designed to offer successful resistance to the instruments of the surgeons whose operations must necessarily be confined to the silent hours of the night. The strong-room was partially formed out of a cellar. The cellars of the house showed much hypertrophy, extending far beneath the roadway. Formerly, as is commonly known, a public-house occupied the site, in name, the "Old Turk's Head," as Mrs. Bruce Clarke reminded me the other day—a slummy, dowdy building as I remember it, as incongruous amid its aristocratic environment is as a large, pulpy, sebaceous cyst upon an alopeciated scalp.

Bruce-Clarke bought the site, pulled down the house, and put an end to the "shoulder-shrugging" of its distinguished neighbours. At the same time there disappeared from that moment in Harley Street an alcoholic anachronism, of a distinctly heterogeneous type, having regard to the residential district which had grown up around it. From his own designs Clarke erected the present academic, manorial structure, thus establishing an object-lesson in his many-sided capacity, and his shrewdness as a business man.

Another feature of the house was the shape and arrangement of certain of the doorways. They were narrow and low. Furthermore, they illustrated examples of "astigmatism against the rule." The rule of house doors is to open inwards: these opened outwards, and their structure showed a teak formation. Diagnostically their appearance seemed to be familiar, though the diagnosis, for the moment, was difficult. What was their history? They were cabin doors. Clarke bought them at the sale of the wreckage, some years ago, of the German liner, "Eider," whose dissolution occurred off the Isle of Wight, the ship having become ankylosed to some rocks. The parietal injuries, thus inflicted, were most serious from the first. All efforts at relief were unavailing; nevertheless, the sea adopted a treatment of its own, exclusively empirical—that of persisting in passive movements, occasionally violent, showing want of education, the effects of which were deplorable. Thus there was lost to the Huns, formerly known as Germans, a valuable property—a loss which must have created an unsightly cicatrix in the financial region of the nation.

Incidentally, an outcome of the inspection of the house was an invitation from Bruce-Clarke to join him on the following Sunday in a "joy"-ride in his car. This car was one of the earlier sort, small and unpretentious in appearance. The cars of those days were calculated to develop asthmatic, emphysematous signs, especially during hill

climbing, and to be subject to attacks of sudden cardiac failure. Whenever they displayed a moribund condition, it is now a matter of history to recall that unfeeling bystanders, instead of exhibiting becoming human sympathy, always evinced an unrestrained hilarity. Nevertheless, ignoring all forebodings, we made an optimistic, if not a brilliant start. The car performed commendably for some miles, until it reached "somewhere in a suburb." Then, while negotiating a sudden turn in the roadway, something happened—the car came peacefully to rest. Some lesion had occurred. Bruce-Clarke's knowledge of the surgery of his car was apparently only exceeded by that demanded by his human patients. He decided at once that the abdomen must be opened. This he accomplished without difficulty, and the operation was successful in revealing the cause of the symptoms—that is to say, the diagnosis of hyperpyrexia of the sparking plug was confirmed. This necessary operation occupied forty minutes, the abdomen being closed in the usual manner. At the ordinary rates for private patients the fee for the operation was estimated at a hundred guineas.

The journey afterwards was successfully continued to Windsor Park. But there, in a beautiful glade, with the sunshine gleaming through the forest trees, reflecting its brilliance from their foliage, the car slowly panted to a standstill for a second time. Laparotomy again became necessary. Upon this occasion the diagnosis was involved in considerable doubt. All the viscera were subjected to a careful inspection without disclosing the cause of the symptoms. At last, merely by chance, Clarke discovered a coloboma of the carburetter. Ophthalmoscopic examination confirmed that this was not of congenital origin. The text-books being silent upon the subject of a lesion of such rarity, Clarke was called upon to devise a treatment for the purpose of meeting the requirements of the case. But the operation was tedious. A passing motor-car surgeon offered his services, in consultation, during the course of it; nevertheless, this proffered assistance Clarke declined. At length the operation was completed, and its estimated cost was 250 guineas, including after-treatment. In the dim light of the advanced evening we eventually reached town. On the return journey there was no appreciable mishap.

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## REVIEW.

**MILITARY SURGERY.** By DUNLAP PEARCE PENHALLOW, S.B., M.D., with an Introduction by SIR ALFRED KEOGH. London: Henry Frowde and Hodder and Stoughton. (Oxford Medical Publications.) Price 15s. net.

This is a book by an American surgeon, who has gained his experience of military surgery as chief surgeon to the American Women's War Hospital at Paignton, South Devon. It is, therefore, the surgery of a base hospital that is presented, rather than that of the field or the casualty clearing station. So that we find that the chapters dealing with the soft tissues, bones, and joints are fuller and



more comprehensive than those dealing with the head and trunk. It is chiefly a record of the author's actual experience; but its value is further increased by the inclusion of accounts of important original communications such as Sir Anthony Bowlby's Bradshaw Lecture.

The great problem of military surgery—the treatment of infected wounds—is discussed adequately and without bias. We gather that treatment by hypertonic saline solution is the method at present in chief use at the author's hospital. The practice of plating septic compound fractures of the long bones is strongly advocated in selected cases; and a full account of the author's technique is given.

We are surprised to see that in cases of secondary hæmorrhage we are advised to ligature the main artery in continuity proximal to the wound rather than to open up the wound and attempt to ligate the vessel immediately above and below the seat of hæmorrhage.

The book provides a concise summary of its subject. At the end of each chapter is a short list of references, which will be appreciated.

It is fully illustrated, chiefly by well-reproduced skiagrams and drawings by the author.

### APPOINTMENTS.

HAWES, C. S., M.R.C.S., L.R.C.P., appointed Anæsthetist, South African Hospital, Richmond Park.

MACMAHON, C., B.A. Oxon., appointed to deal with cases of speech affections due to shell shock at Lord Knutsford's Special Hospitals for Officers.

SHAH, J. M., M.R.C.S., L.R.C.P., Lieut. (temp.), I.M.S., appointed Specialist in Advanced Operative Surgery, No. 5, Indian General Hospital, Egyptian Expeditionary Force, Egypt.

### CHANGES OF ADDRESS.

BREWERTON, E. W., 73, Harley Street, W. 1. Tel., Padd. 1077.

CORFIELD, E. C., 189, Balham High Road, Upper Tooting, S.W. 17.

DRAKE, D. J., Boughton, Faversham, Kent.

### BIRTHS.

EVERY.—On May 19th, at 63, Wimborne Road, Bournemouth, the wife of Dr. John Stanley Every, of a daughter.

COOK.—On May 12th, to Evelyn Russell and Joseph Basil Cook, M.D., D.P.H., R.A.M.C., of the Infirmary, Isleworth—a daughter.

GANDY.—On April 21st, the wife of T. H. Gandy, Peppard Common, Henley-on-Thames, of a son.

MAWHOOD.—On May 4th, at Chalcots, Ascot, the wife of R. H. Mawhood, M.B., B.C. (Cantab.), F.R.C.S. (Eng.), of a son.

WIPPELL.—On Tuesday, May 22nd, at 3, Maitland Road, Reading, the wife of Lieut. D. H. Wippell, the Yorkshire Regiment, of a daughter.

### MARRIAGES.

CAMPBELL—DAVID.—On Wednesday, May 9th, at Charles Street Congregational Church, Cardiff, Captain F. W. Campbell, R.A.M.C., son of the late John Campbell and Mrs. Campbell, of Ballywillan, Portrush, Ireland, to Olive, third daughter of Mr. T. W. David, J.P., and Mrs. David, of Ely Rise, Cardiff.

KEYNES—DARWIN.—On May 12th, at St. Bartolph's, Cambridge, by the Rev. Hugh Stewart, assisted by the Rev. A. W. Goodman, Captain G. L. Keynes, M.A., R.A.M.C., younger son of Dr. Keynes, Registrar of the University of Cambridge, and Mrs. Keynes, to Margaret Elizabeth, younger daughter of the late Prof. Sir George Darwin, K.C.B.

MONCKTON—JONES.—On April 17th, at Gartheli Church, Cardigan-shire, by the Rev. J. W. Jones, B.A., cousin of the bride, Robert Vernon Giraud Monckton, M.D., of 14, Sumner Place, S.W., to Elizabeth, youngest daughter of the late Timothy Jones, Esq., and Mrs. Jones, of Panthrew, Llanio Road.

PEARSE—WILBURN.—On March 30th, at St. Saviour's Church, Colgate, Captain Robin Pearse, F.R.C.S., C.A.M.C., of Toronto, younger son of Mr. and Mrs. E. B. Pearse, New Burn, Colgate, Sussex, to Amy Christine, eldest daughter of Mr. and Mrs. E. J. Wilburn, The Croft, Southwick.

ROBBINS—DUCHESNE.—On May 28th, by special licence, by the Rev. C. W. Hutchinson, Captain Frank Hubert Robbins, R.A.M.C. (T.), only son of C. Robbins, of 13, Brondesbury Park, N.W., and Dorothy Muriel Duchesne, elder daughter of Ernest Collier Duchesne, of Oakwood, Bishop Stortford, Herts.

### DEATHS.

COALBANK.—On Saturday, May 5th, 1917, at Teddington Lodge, Teddington, Isaac Coalbank, M.R.C.S. (Eng.), L.S.A., M.D. (Paris), younger son of the late Rev. Robert Coalbank, Vicar of Old Dalby, Leicestershire, and beloved husband of Sarah Coalbank, aged 73.

FOSTER.—On April 14th, killed in action, Second Lieut. Alfred Foster, R.F.A., dearly loved younger son of Mrs. Gaisford and of the late Alfred Foster, Bakewell, and stepson of Engineer Captain Gaisford, R.N., aged 20.

GRANDAGE.—On May 14th, 1917, of wounds received in action half an hour earlier, Lieut.-Colonel William Briggs Grandage, commanding a brigade of R.F.A., the dearly loved husband of Helen Mary Grandage, of 74, Gloucester Road, W., and fifth son of Mr. and Mrs. Grandage, of Kent House, Rawdon, near Leeds, aged 37.

HARRISON.—On April 17th, 1917, by a mine explosion in France, Captain Everard Harrison, M.B., B.C. (Cantab.), R.A.M.C.T., of 1, De Montford Street, Leicester, aged 37.

POPE.—On May 4th, 1917, officially reported missing, believed drowned, on the occasion of the torpedoing of s.s. "Transylvania," Charles A. W. Pope, M.A., M.B. (Cantab.), Captain, R.A.M.C., of St. Leonards-on-Sea, beloved husband of Marion Ruth Pope, and fourth son of Alfred Pope, J.P., of Dorchester, Dorset.

SHEPHERD.—On May 22nd, 1917, at 24, St. Andrew's Crescent, Cardiff, Charles Carter Shepherd, M.D., dearly loved husband of Maud Maria Shepherd, aged 61.

### ACKNOWLEDGMENTS.

*The Nursing Times, The Shield, The British Journal of Nursing, The New York State Journal of Medicine, Guy's Hospital Gazette, L'Attualità Medica, The Hospital, Long Island Medical Journal, The Medical Review, The Middlesex Hospital Journal, St. Thomas's Hospital Gazette, St. Mary's Hospital Gazette, Revue de Chimio-thérapie, Sidney University Medical Journal, Magazine of the London (Royal Free Hospital) School of Medicine for Women, St. Bartholomew's Hospital League News, Adelaide Medical Students' Society "Review."*

### NOTICE.

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

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

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

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# St. Bartholomew's Hospital



"Æquam memento rebus in arduis  
Servare mentem."

—Horace, Book ii, Ode iii.

## JOURNAL.

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JULY 1ST, 1917.

[PRICE SIXPENCE.]

### CALENDAR.

- Mon., July 2.—Second Exam. for Med. Degrees (London), Part II, begins.  
M.D. and M.S. Exams. (London) begins.  
Second Exam. of Society of Apothecaries begins.
- Tues., „ 3.—Final Exam. Conjoint Board (Medicine) begins.  
Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
- Wed., „ 4.—First Exam. of Society of Apothecaries begins.
- Thurs., „ 5.—Final Exam. Conjoint Board (Midwifery) begins.
- Fri., „ 6.—Final Exam. Conjoint Board (Surgery) begins.  
Dr. Drysdale and Mr. Bailey on duty.
- Sun., „ 8.—Oxford Trinity Term ends.
- Mon., „ 9.—First Exam. for Med. Degrees (London) begins.
- Tues., „ 10.—Dr. Calvert and Mr. Waring on duty.
- Thurs., „ 12.—Second Exam. for Med. degrees (London) Part I begins.
- Fri., „ 13.—Junior Scholarship Exam.  
Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
- Sat., „ 14.—**Summer Session ends.**
- Tues., „ 17.—First Exam. Conjoint Board begins.  
Dr. Drysdale and Mr. Bailey on duty.
- Fri., „ 20.—Dr. Calvert and Mr. Waring on duty.
- Tues., „ 24.—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
- Fri., „ 27.—Dr. Drysdale and Mr. Bailey on duty.
- Tues., „ 31.—Dr. Calvert and Mr. Waring on duty.
- Fri., Aug. 3.—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.
- Tues., „ 7.—Dr. Drysdale and Mr. Bailey on duty.

### EDITORIAL NOTES.

 OUR congratulations are given to Dr. Shipley, Master of Christ's College, Cambridge, who has been appointed Vice-Chancellor of the University of Cambridge.

\* \* \*

We are again proud to congratulate several Bart's men on having received the Military Cross :

Capt. Francis Heygate Ellis, M.D., Rhodesian R. "He has at all times displayed a total disregard of personal safety, and has set a fine example to all ranks."

Temp. Capt. Bertram Henry Barton, R.A.M.C. "He worked continuously under very heavy fire, and succeeded in bringing in many wounded men. His devotion to duty saved many lives."

Capt. Alfred George Timbrell Fisher, R.A.M.C. "The advanced dressing-station of which he was in command was destroyed by shell-fire, and, although himself severely shaken, he succeeded in forming a fresh dressing-station."

Temp. Sec. Lt. Henry Ernest Karslake Eccles, Gen. List and R.F.C. "He has shown great skill and gallantry in carrying out night raids on the enemy lines. He has also caused material damage to enemy railways while flying at a low altitude."

\* \* \*

Among the recipients of Birthday Honours we have to congratulate a large number of Bart's men :

T. Hood, M.R.C.S., L.R.C.P., Director of Medical and Sanitary Services, Nigeria, has been appointed C.M.G.

Col. H. E. Banalvala, I.M.S., Inspector of General and Civil Hospitals, Assam, and Member of Council of Chief Commissioner for making Laws and Regulations, has been appointed C.S.I.

Capt. R. H. Bott, I.M.S., Professor of Surgery in the Medical College and School, Punjab, has been awarded the Kaiser-i-Hind Medal for Public Services in India.

Other Honours have been awarded for valuable services rendered in connection with military operations in the field :

Lt.-Col. (temp. Col.) H. S. Thurston, C.M.G., R.A.M.C., Lt.-Col. and Bt. Col. Sir B. G. Seton, Bt., I.M.S., and Surg. Lt.-Col. (Hon. Surg. Col.) R. J. Reece, H.A.C., have been appointed C.B. Military Division (additional).

Surg.-Gen. F. H. Treherne, C.M.G., has been appointed K.C.M.G. (additional).

Lt.-Col. S. B. Smith, I.M.S., and Temp. Hon. Lt.-Col. M. H. Gordon, R.A.M.C., have been appointed C.M.G. (additional).



## ROLL OF HONOUR.

With great regret we learn that Capt. Charles Alfred Whiting Pope, R.A.M.C., was on board the "Transylvania" when she was torpedoed, and that he is now reported "missing; believed drowned." To Mrs. Pope and her three children we beg to offer our deepest sympathy in their sad loss.

## THE AIR RAID ON LONDON.

**O**N Wednesday, June 13th, as everybody knows, there was an air raid over London, as the result of which there were several hundred civilians wounded. About one hundred and fifty of these were brought to this Hospital.

We had scarcely expected to have so many to cope with as the result of a raid, but facts showed that our organisation was sufficiently elastic to do so, and do so effectually.

As the wounded were brought in they were placed in the various house-surgeons' boxes in the surgery, and there first aid was rendered by a large number of members of the senior and junior staff, together with a few old Bart.'s men, who came to assist, and the students and nurses.

Some of the members of the St. John Ambulance and other associations, who arrived with the patients, also did very good work.

Having rendered first aid, the worst cases were quickly sent into the wards for preparation for operation. And the physicians' beds were filled as impartially as the surgeons' beds with surgical cases. A state of affairs which is surely unique in the annals of the Hospital.

Immediately this first part of the work had been accomplished, all the operation-theatres in the Hospital were requisitioned, and in at least one department emergency-tables were organised. There was, of course, some difficulty in finding enough anæsthetists, but even this was speedily overcome—and in one instance a single anæsthetist managed successfully to attend simultaneously to two operation-tables, which he continued to do throughout the afternoon.

It is to be regretted that several of the unfortunate victims have since died in the Hospital, some of the wounds being of a terribly extensive nature.

During the afternoon the King visited the Hospital and spoke to some of those who were less severely injured. His Majesty's thoughtfulness in thus at once coming to express his personal sympathy was very much appreciated.

On June 25th H.M. the Queen visited the Hospital, and gave to each of the patients who were injured in the raid a present.

## MENTAL STATES AND THE WAR: IN PARTICULAR THE PSYCHOLOGICAL EFFECTS OF FEAR.

By MAJOR SIR ROBERT ARMSTRONG-JONES, M.D.,  
F.R.C.P., F.R.C.S.,

Lecturer on Mental Diseases, St Bartholomew's Hospital, Consulting  
Physician in Mental Diseases to the London and the Aldershot  
Military Commands.

**T**HE instincts or the innate tendencies of the mind to act have of recent years received considerable attention. They would probably be grouped under the section cognition or intellect, and some authorities do not distinguish them from the intellect. They are certainly the basis of our social life, and they often afford the truest and the best solution of our emotional and intellectual life, as well as of our bodily actions. It is not easy to examine the instincts or the emotions introspectively, and it is difficult to study them whilst they are being experienced or excited within ourselves; for, in the nature of things, they are fleeting and the bodily perturbations associated with them are therefore recalled only in memory. It needs for their analysis a great effort and much concentration of attention to realise them. The war has given us all a much wider psychic experience and some of the emotions have been brought into greater relief. The war has excited in the neural organ many of the emotions not usually experienced. It is doubtful if those of disgust or anger have ever been more unreservedly expressed than since the blood of martyred hostages, of women outraged and of children mutilated has streamed upon the soil of Belgium and France. In regard to the revolting cruelties of the Huns possibly our vocabulary in regard to horror, disgust, and shame has already been extended to its full descriptive limits. Fear, which has varying degrees of quality and intensity, from dread through terror to fright, has also been deeply experienced. Hope, on the other hand, has been our greatest national asset, and the vital energy imparted by it to the civil population, as also to the military, has been a considerable moral factor in our fight for liberty and existence. The psychology of the war has brought us into contact with life in a manner that no other national upheaval has ever done before, and emotions, instincts, and sentiments have been felt that have never occurred before in our time. The relation of class to class has been tested, the sentiment of patriotism, the love of home and family, feelings of self-sacrifice and pride in our race have been roused and the world of idealism kindled to a degree never before experienced.

Looked upon psychologically, war is the manifestation of a biological law, for it is the embodiment in man of a primordial and deep-rooted instinct, viz. the resistance or opposition to the exercise of an innately organised



instinct to be free: an instinct which is invariably associated with the emotions of anger and of hate. For a long time the instincts have been the debating ground for controversy and the field of comparative psychology has been explored to clear the subject. The Peckhams, J. Loeb, H. S. Jennings and Lloyd Morgan have worked upon the subject, and psychologists and physiologists teach how the instincts and the emotions have a definite physical correlation. W. B. Cannon, C. S. Sherrington, Pawlow and others have investigated the emotions from their physical aspect. It has been pointed out experimentally that during pain, anger, fear, and rage, adrenin or epinephrin is secreted and produced reflexly, and results are obtained which correspond precisely to those found when adrenin is injected experimentally. Sugar is liberated from the liver into the blood for the use of the muscles to restore their irritability when this has disappeared through fatigue; the blood-pressure is raised, because the blood is driven from the abdominal viscera into the lungs and central nervous system; and there is a more rapid coagulation of the blood in anticipation of hæmorrhage during the life and death struggle. These results are not due to the action of adrenin upon the central nervous system, but by its direct effects upon the sympathetic or the autonomic nervous system. This fact that the same visceral results occur after the injection of adrenin as are associated with the strong emotions show that during the experience of these emotions—of which fear is the chief—certain adaptive or purposive reflexes occur which tend to preserve the organism or to safeguard it against harm; or, in other words, during fear, anger, hate or fright there are protective automatic responses physically roused which help the organism in danger or pain. During the strong emotional excitement of pain and danger the movements of the abdominal viscera are inhibited, whilst in the opposite emotion of pleasure and joy they are accelerated, and this observation harmonises with the anatomical fact that there are two series of nerve fibres to the visceral organs,—one which accelerates their movements and the other which inhibits them. Pawlow demonstrated the physical effects of fear and of the pleasurable emotions upon the secretion of the digestive juices, for he found that pleasant æsthetic appeals to taste and smell assist digestion—the sight of appetising food made the mouth water—whilst unpleasant associations, fright, vexations, and anxieties retard the excretion of saliva as well as of the gastric juice, bile, pancreatic, and intestinal juices. The Psalmist knew this when he described the tongue as cleaving to the mouth in emotion, and another presentation to consciousness of the organic sensations was that the bowels yearned. We all know the physical accompaniments of fear, which are shown by the pallor of the skin, the lowering of the surface temperature; the surface perspiration or “cold sweat,” the dilated pupils, the hair standing erect, the rapid heart-beats, the hurried respirations, and the tremblings and twitchings of the facial muscles,

especially those about the lips. These are precisely the symptoms which are seen in some shell-shock cases when they awake out of terrifying dreams at night; and in the record of these cases of shell-shock the blood-pressure, taken soon after the men are seen at the dressing-stations, is found to be raised, whilst there is a lowering of 20 to 40 mm. after a short rest at the base.

Dreams are of frequent occurrence in shell-shock. Driver F. M. T—, who had been at the Front, had at first no fear of shells, but he developed nervousness on the approach of air-craft. He afterwards dreamed that aeroplanes were overhead and were dropping bombs upon him. The nurses stated he woke up in sudden frights, and with his night-clothing saturated, his body trembled, and his pupils were dilated. He was only calmed when reassured that no air-craft was near and he was safe. In this case, as in many others who dream of trench warfare, the bodily commotion appeared to have preceded the emotion of fear, which supports the theory of William James, that the arousal of bodily changes leads to the emotion, the latter being the mental interpretation of the physical changes. Stout and others maintain, on the contrary, that in an emotion the first exciting factor is the mental disturbance and not the physical, that the emotion precedes the bodily commotion. It is, of course, open to anyone to suggest that some noise in the ward during the night initiated the emotion which caused the unpleasant dream and that the dream preceded the bodily commotion. It is interesting that bodily commotion may be of such varying kinds. There is the airman's commotion when in the air, and there is the airman's commotion when on the ground. Both these are well known. We know that as the result of attention, habit, and practice both reflex and instinctive movements, as well as those movements which were originally carried out as the result of an explicit act of attention, tend to become automatic, and this fact is made use of in military as well as in other spheres. We know that repeated drill movements become so familiar that they can be carried out without any thought, and once the first of a series is initiated the rest will follow automatically. Precisely the same with the emotions: it is possible to experience an emotion without a personal knowledge of it, the final behaviour indicates the end attained, and the emotion may be one of the series passed over. The first time the young soldier goes into action he realises danger, but the excitement of action tends to drive the emotion from the mind; the next time, although fear may be present, it is hardly realised or appreciated, and it is only after long continued stress of action that the resistance to the emotion begins to wear down: a man suddenly finds that all his “pals” have gone under and he himself collapses and is exhausted. In many shell-shock cases, however, there is no nerve exhaustion, the symptoms come on quite suddenly; the cases may be aphasic and aphonic, but most of these are



able to walk to the dressing-stations. The experience of Capt. William Brown, of the 4th Army, is most interesting in this respect, for he states "there was very little neurasthenia, *i.e.* of nervous and mental exhaustion about these cases, although there was some diminution of nerve energy, most of the cases were hysterical and neurotic."

As to the nature of fear, it is without doubt a very fundamental emotion, and James says that progress from the brute to man is characterised by nothing more than a decrease in the frequency of occasions for fear. Fear connotes a mental state in which the future appears to dominate the present, whilst the actual present is a revived experience of the past, this experience being a painful one. Fear is described as a vestigial form of our former or ancestral type of "mentation," and it is defined as the anticipation of pain. Fear must follow a preceding pain, and it presupposes its previous experience. It is this revival of a previous pain that constitutes the emotion of fear. It is fear that urges the organism to avoid a previous danger, and therefore fear has a definite biological value. The power to experience fear is necessary to self-preservation, and it is met with in early conscious life, as also in all animals, the most easily frightened member of the herd has the best chance, *ceteris paribus*, of survival. The apprehension of an impending danger which is experienced in some fears is a very generalised feeling, and it has a very definite bodily accompaniment, but, although danger may be a cause of fear, there are many instances of adventurous persons who long to meet danger in order to conquer and to overcome it; very often peril and danger is an inducement and an incentive to action. Graham Wallas said if wars were to cease Alpine clubs would have to be multiplied, for people must have opportunities for actions which have risks attached to them. Fear, when considered psychologically, seems to be a very unitary and unique division of the affective life—too little of it leads to rashness and too much to timidity, and it is not the man who is incapable of fear, as Tallentyne has said, who is the most courageous; for many people are not afraid because they have never experienced fear, and many others are too unimaginative to feel it. To many of our brave soldiers at the front life without danger would be insipid and flat, and there are some of them who have become renowned for daring who were known as children and in youth as timid or shrinking. To the man in perfect health fear would seem to be impossible, but this is not the case, although probably the fear of death is not normally present in health, because then it seems so remote, and the uncertainty of its happening creates no fear. To many persons it is danger and not pain that causes fear, and some who bear pain without flinching will experience marked fear in the presence of danger. There is no doubt that very brave men experience fear. Capt. Scott when he undertook the terrible Antarctic experiences to which he and some of his

party succumbed had experienced fear as well as danger and pain, because from his former Arctic travels he knew the risks and dangers he had to face, yet he dared to make the voyage. When fear is experienced it may come on suddenly or gradually; if gradually, it is the result of many and repeated small subconscious shocks, which, as Crile has shown, bring about exhaustion, and so induce a lowered threshold of nervous stimulation, *i.e.* a minor stimulus elicits a major response, and since a low threshold is lavish of nervous energy, recuperation will be slow, therefore there is support in theory for the practice of treating shell-shock cases with prolonged rest. Even after recuperation is believed to have been completed, a fresh exposure to the same causes will soon induce relapses. P—, after four months' treatment for shell-shock, was sent again to the Front. He arrived September 29th, but on October 2nd was returned home once more stolid, aphonic, and aphasic. When fear is induced suddenly, as was demonstrated by Crile and his collaborators, the strong psychic stimulus still leaves traces upon the cortical cells, the conductivity of the nervous arc is lowered, so that a state of increased sensibility is left; any loud noise or sudden sound will cause a general bodily perturbation. About a dozen convalescent shell-shock cases were sent from No. 3 General Hospital to the Surrey Theatre, a part of the melodrama was the explosion of a mimic shell on the stage; six of the soldiers had to be carried home to the hospital, whilst another became aphonic and aphasic. The suddenness with which fear acts is only equalled by the suddenness with which "shell-shock" results disappear. A young officer who had been decorated with the Military Cross informed me that on one occasion when in charge of a gun and all his men were hit a sudden feeling overcame him which he could not describe but which he hoped he should not again go through. His whole body seemed to feel as if something had been taken out of him, then his legs began to tremble, and his body to quiver, but he realised the situation and faced it. A young Australian out on parole, who had been speechless and voiceless for months, was suddenly struck on the shoulder from behind by his brother, whom he had not seen for years, and from that moment he spoke. It is certain that fear has more power to effect dissociative dissolutions than any other emotion, and such a fear may, by suggestion, be conveyed with extreme rapidity to other men, as is seen in panic. The Silvertown explosion in one hospital caused a large number of shell-shock cases to exhibit all the symptoms of fear and terror, even to falling into fits of muscular contraction resembling epilepsy, and clonic spasms of this panic fear spread among them. To show the suggestibility of fear, a young soldier, suffering from shell-shock, who was out on parole saw a horse and van in the street; the horse went down when suddenly he himself went down "as flat as a flounder," and had to be helped home. It is often the case that sudden and unexpected or



loud noises aggravate those suffering from shell-shock, and it is interesting in this connection that Homer associated fear with sounds, for he stated, "terror and consternation at that sound, the mind of Priam felt; erect his hair, bristled his limbs, and with amaze he stood motionless." The reason for this association is probably connected with the fact that the sense of hearing is the most highly evolutionised, and therefore the least stable of the senses and is thus the most easily disturbed. Also, it may be due in part to the fact that the auditory nerve is closely related to the vestibular nerve, which is again connected with the static sense and with the control of movement. The vestibular nerves, though giving rise to no sensations, are nevertheless closely connected at their roots with the roots of the motor-oculi nerves as well as with other motor centres in the medulla and cerebellum. The auditory nerves are thus correlated and continuously associated with movements, yet there is no knowledge in consciousness that there is a connection between the eyes, the bodily movements, and hearing. In many, if not in most, shell-shock cases there is a marked disturbance of muscular control and co-ordination. The movements which are initiated voluntarily by ideas and which control standing, walking, or moving, *e.g.* the hands and arms, often cannot be carried out, because there is a state of conflict between these and the muscles which subserve the emotions (noted in tremors, agitations, and paresis). Incontinence has been noticed in a few cases, and this is due to the functional inhibition of cerebro-spinal influence as the result of fear and the unrestricted action of the sympathetic. Although we can boast that our warriors are among the best troops in the world, there are instances within the knowledge of those who have the care of shell-shock cases, where the men who were in close proximity to high explosive shells that had burst, have wandered away confusedly and aimlessly, and in whom memory and the power of speech have both disappeared, sometimes for weeks and months, but under the influence of suggestion these have been regained and the men have been able to recall the whole of the forgotten incidents. I have notes of cases upon whom Capt. Wm. Brown, R.A.M.C., has effected a complete return of lost memory through suggestion practised early after the onset of shock. In fact, at a recent discussion upon the subject at the Medical Society of London, Capt. Wm. Brown himself stated that 66 per cent. of these men return to duty without going to the casualty clearing-station, and that he has never failed to effect a return of speech. He goes further than this and states it to be his belief that no soldier who has lost his speech ought ever to be sent to England, that all these cases are curable at once or quite soon by ab-reaction and re-association, which, as an expert psychologist, he is able to carry out successfully in every case that has come under his care. The element of fear enters into every functional nervous case and it is present normally in all actions directed

by desire, the conflict between the wish to succeed in carrying out the desire and the risk of failure is a mental state into which some element of fear always enters.

Fear was formerly considered by the Legislature to be the essential deterrent factor in the application of punishment for crime, and only since the wiser policy of improving the environment for the criminal rather than regard him as selecting vice automatically and punishing him for it repeatedly, has the treatment of the criminal had a reforming influence. In most schools, also, fear has been abandoned as a deterrent for unruly boys, for it was found that it lowered intellectual efficiency. It is said that if the theologians were deprived of the use of fear as a moral agent and a deterrent from evil doing, they would lose much of their influence for good, but Miss Mackenzie has said that the fear of exchanging this world for the unknown would lose much of its delightful sense of adventure if we knew whence we came or whither we were going. I believe it is a fear of the *unknown*—an indefinite, sub-conscious sensation—that is at the bottom of most, if not of all, shell-shock cases.

(To be continued.)

## RAHERE LODGE.



THE Installation Meeting of the Rahere Lodge, No. 2546, was held in the Great Hall of St. Bartholomew's Hospital, on Tuesday, June 19th, 1917.

In the absence on foreign service of the Worshipful Master, W.Bro. W. J. Gow, Ivan de Burgh Daly was initiated, and W.Bro. C. H. Perram was installed by the I.P.M., W.Bro. Anderson. The charges were delivered by W.Bro. Ernest Clarke and W.Bro. Laming Evans. The following officers were appointed:

W.Bro. C. H. PERRAM, P.Pr.S.G.D., Beds. L.R.	W.M.
W.Bro. W. J. GOW, L.R.	I.P.M.
W.Bro. A. HEPBURN, L.R.	S.W.
W.Bro. J. SWINFORD EDWARDS	J.W.
Bro. The Rev. H. S. CLOSE	Chaplain.
W.Bro. ERNEST CLARKE, P.M., P.G.D.	Treasurer.
W.Bro. E. LAMING EVANS, P.M., L.R.	Secretary.
W.Bro. T. G. A. BURNS, P.M., P.G.D.	D.C.
Bro. E. BREWERTON	S.D.
Bro. A. S. WOODWARK	J.D.
W.Bro. M. L. TRECHMANN, P.M., L.R.	1st Asst. D.C.
W.Bro. H. MORLEY FLETCHER, P.M., S.G.D.	2nd Asst. D.C.
W.Bro. P. S. ABRAHAM, P.M., P.G.D.	Almoner.
Bro. NORMAN F. SMITH, Asst. G. O. Oxfordshire	Organist.
Bro. The Rev. R. B. DAND	Asst. Chaplain.
Bro. A. L. MORETON	Asst. Secretary.
Bro. GIRLING BALL	I.G.
W.Bro. E. P. FURBER, P.Pr.G.J.W., Surrey	Sen. Steward.
Bro. J. H. GRIFFITHS	Steward.
Bro. G. H. WHITAKER, L.R.	Steward.
Bro. J. CUNNING	Steward.
Bro. F. A. ROSE	Steward.
W.Bro. FRANCIS W. CLARK, P.G.D.	Steward.
W.Bro. A. H. COUGHTREY	Tyler.
Bro. E. W. HALLETT	Asst. Tyler.



W.Bro. D'Arcy Power was appointed to act as I.P.M. during the absence of W.Bro. Gow.

Fifty-two members and guests were present. W.Bro. Perram, in proposing the health of the Grand Officers, gave an historical summary of Grand Lodge during the last 200 years. Lieut.-General Sir Francis Lloyd, K.C.B., responded.

## CORRESPONDENCE.

### WAR EMERGENCY FUND OF THE ROYAL MEDICAL BENEVOLENT FUND.

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

SIR.—The time has come to make a further appeal for the War Emergency Fund.

This Fund was instituted last year to afford assistance to members of our profession who, in consequence of having joined the Army Medical Service, find themselves in temporary difficulties.

Many medical men, when called up, had to leave on very short notice, without time to make adequate provision for the continuance and maintenance of their practices during their absence. As a result they have had to face a severe fall in income even when supplemented by Army pay; while many expenses, such as rent, insurance, taxes, family maintenance, and education, could not be reduced. Although in a year or two after their return it may be hoped those affected will recover their position, still in the interval help is, and will be, necessary, and it is to meet these needs that the War Emergency Fund was established.

To be effective the grants must be made on a liberal scale, and the fund from which they are to be drawn must be a large one. The sum obtained last year was about £4000. This is quite inadequate, as at least £25,000 will be required, if even a small proportion of those requiring assistance is to be helped. From the wealthier members of the medical profession, it is hoped, substantial sums will be received, but every one should feel it a duty which he owes to his less prosperous colleagues to give the most liberal donation he can afford.

At the same time the appeal is not, and ought not to be, restricted to the medical profession. The public, too, may be rightly called upon to bear its share, and to show, by liberal contributions, its appreciation of the special services so freely rendered by the medical profession to the country.

The War Emergency Fund is a special department of the Royal Medical Benevolent Fund. It is kept separate and distinct from the ordinary operations of the general fund, and is under the management of a committee specially appointed for the purpose.

Communications should be addressed to the Honorary Secretary, War Emergency Fund, 11, Chandos Street,

Cavendish Square, W. 1, to whom cheques should be made payable.

We are, etc.,

SAMUEL WEST

(President).

CHARTERS J. SYMONDS, Colonel A.M.S.

(Honorary Treasurer).

G. NEWTON PITT, Major R.A.M.C. (T.)

(Honorary Secretary).

London, W. 1,  
June 8th.

*Cases of Special Distress caused by the War which the Committee have helped.*

A lieutenant in the R.A.M.C., who had only been in practice a few years, volunteered for service, and was killed in action a few days later. He left a widow, with two children,  $\text{æ}t.$  3½ and 1, without means except the War Office pension. The Fund voted £25 for her immediate necessities, and the Officers' Families Fund gave further help.

A captain in the Territorials was called out, and had to leave his practice in the hands of a *locum*, who proved a failure. There were seven children,  $\text{æ}t.$  2 to 14. Financial difficulties arose, and payment of the school fees became impossible. Between the Fund and Guild, and the Officers' Families Fund, the necessary fees were raised, and sorely-needed clothing provided.

A captain in the Territorials, who was called out when the army mobilised, and had to leave his practice worth £800 at a day's notice, could not pay the fees for his son's education, who was in his last year at school. The Fund, the Guild, and the Professional Classes War Relief Council together raised the necessary money.

A captain in the Territorials was killed in action, and left a widow, and two children,  $\text{æ}t.$  3 and 4½. The Fund investigated the case, and referred it to the Officers' Families Fund, who gave her a grant to meet her immediate necessities. The Fund also obtained work for the widow, a trained nurse, who was thus enabled to earn her own living.

A major, R.A.M.C., Territorial, was called out at the beginning of the war and was abroad for over two years. He was invalided to England and put on home service. His practice was completely lost by his absence. There are three children—one in the Navy, one in the Army, and one at school. He had to give up his house, as he was in difficulties with rent, taxes, and education. The Fund gave £50, and further help was obtained from other sources.

A captain in the R.A.M.C. (T.), with a wife and six children, found the income derived from his practice, left in charge of a *locum*, and the balance of his army pay insufficient to meet his expenses. He obtained assistance from the Civil Liabilities Committee and the Officers' Families Fund, and a grant was made from the War Emergency Fund towards the education of the children.

A practitioner, earning £700 to £800, volunteered for service, leaving his practice in the hands of a neighbour, who was not a success. There were two children,  $\text{æ}t.$  7 and 10, and another baby was born shortly after the husband left. The wife contracted pneumonia and nearly died. A resident patient had to leave the house. Rent and other expenses led to a debt of about £80. This the doctor could not meet, and he hurried back from the trenches to save his home from being sold up. The Fund voted £25, the Guild gave £15, the Officers' Families Fund £25, and the Professional Classes War Relief Council offered further help, with the result that he returned to the Front with his immediate anxieties relieved.

SIR,—We beg to support the urgent letter of appeal to this Fund which appeared in the last week's medical journals.

This Fund was instituted by the Royal Medical Benevolent Fund last year to afford assistance to members of the profession who, in consequence of having joined the Army Medical Service, find themselves in temporary difficulties.



We very strongly commend the claims of this Fund to the generous support of both the profession and the public.

We are, etc.,

- FREDERICK TAYLOR  
(President, Royal College of Physicians).  
W. WATSON CHEYNE  
(President, Royal College of Surgeons).  
W. H. NORMAN, Surgeon-General, R.N.  
(Director-General of the Medical Department of the Navy).  
ALFRED H. KEOGH  
(Director-General, Army Medical Service).  
WILLIAM OSLER  
(Regius Professor of Medicine, University of Oxford).  
T. CLIFFORD ALLBUTT  
(Regius Professor of Physic, University of Cambridge).  
JOHN TWEEDY  
(Past-President, Royal Medical Benevolent Fund).

11, Chandos Street,  
Cavendish Square, W. 1,  
June 16th.

## REVIEW.

BAILLIÈRE'S POPULAR ATLAS OF THE ANATOMY AND PHYSIOLOGY OF THE FEMALE HUMAN BODY. Descriptive text by H. E. J. BISS. Plates by G. H. DUPUY. (Baillière, Tindal & Cox.) Third edition. Price 4s. net.

A really good and useful piece of work, and, what is rare in this type of thing, it is of British workmanship and origin throughout. The descriptive text conveys clearly and concisely more information than we should have thought possible in so small a space. There is no doubt that for students of massage, nurses, and others who require some fairly accurate general knowledge of the subject, this Atlas should be of great service.

## APPOINTMENT.

JAMESON, R. W., M.D. (Brux.), D.P.H. (Cantab.), appointed Temporary M.O.H., Chesterfield.

## ROYAL COLLEGE OF PHYSICIANS OF LONDON.

H. W. GARDNER, of Shrewsbury, has been elected a Fellow.

## CHANGES OF ADDRESS.

JAMESON, R. W., 26, Gladstone Road, Chesterfield.  
MARSHALL, J. C., Capt., R.A.M.C., 2/2 North Midland Field Ambulance, B.E.F.  
MOUATT-BIGGS, C. E. F., Capt., R.A.M.C., 29th Casualty Clearing Station.  
PINKER, H. G., 16, The Crescent, Plymouth.

## BIRTHS.

CANTI.—On June 12th at The Gables, Wedderburn Road, Hampstead, the wife of R. G. Canti, of a son.  
HILL.—On June 7th, at a nursing home, the wife of J. Percival Hill, M.A., M.D., of Stowmarket, Suffolk, of a daughter.

HILL.—On June 18th, at Armaside, Purley, the wife of Lieut. R. Gordon Hill, R.A.M.C., attached to Welsh Guards, of a daughter (Elizabeth Gordon).

TREWBY.—On June 29th, at 4, Duchess Street, Portland Place, W., to Mr. and Mrs. J. F. Trewbly—a daughter.

WHITEHEAD.—On June 10th, at Rougemont, Salisbury, to Winifred (née Dunphy), wife of Capt. Brian Whitehead, R.A.M.C.—a daughter.

## MARRIAGES.

CAREY EVANS—LLOYD GEORGE.—On June 19th, at the Welsh Baptist Church, Castle Street, Oxford Street, W., by the Rev. James Nicholas, Minister of the Church, assisted by the Rev. Owen Davies, D.D., of Carnarvon, and the Rev. John Clifford, D.D., Thomas John Carey Evans, M.C., Capt. I.M.S., son of Dr. R. D. Evans, of Bryn Meddyg, Blaenau Festiniog, N. Wales, to Olwen Elizabeth Lloyd George, elder daughter of the Prime Minister and Mrs. Lloyd George.

FULLER—O'DONNELL.—On June 4th, at the Oratory of the Sacred Heart, Bournemouth, Capt. R. Annesley Fuller, M.C., R.A.M.C., only son of the late Joseph Fuller, Esq., F.R.C.S., of Long Ashton, Somerset, to Madeleine Mary, younger daughter of the late W. M. O'Donnell, F.R.C.S., of Glenreigh, Tipperary.

KEMP—DAVEY.—On June 6th, at Hampstead Parish Church, by the Rev. R. Gibbons Binnall, Rector of Manton, Lincs, assisted by the Rt. Rev. Bishop Goldsmith, V.D., Charles Gordon Kemp, M.C., M.D., Temp. Capt., R.A.M.C., youngest son of Dr. and Mrs. W. G. Kemp, St. Helens, Hastings, to Kathleen Emily Davey, niece of Col. J. and Mrs. Stollery, Hove.

## DEATHS.

BERNARD.—On May 4th, died of wounds as prisoner of war, Capt. Arthur B. Bernard, King's Royal Rifles, elder son of Mr. and Mrs. B. Bernard, 178, Clive Road, Surrey, aged 20.

BURGESS.—On April 9th, Edward John Burgess, of 111, High Street, Brentwood.

BURN.—On June 7th, at Beechwood, Upper Tooting, S.W., William Barnett Burn, M.D. (Lond.), B.Sc. (Lond.), M.R.C.S., L.S.A., F.R.M.S., aged 73.

COTTON.—On June 28th, at his residence, Highland House, Camden Road, N., Thomas Cotton, M.D. (St. And.), M.R.C.S., L.R.C.P., aged 80.

CUTTING.—On April 2nd, at West View, Stalham, Norfolk, Ernest Buxton Cutting, M.R.C.S., L.R.C.P. (Lond.), aged 49.

THORNE.—On June 11th, after a short illness, William Bezly Thorne, M.D., of 16, Harley Street, W. 1.

UPTON.—On April 10th, at 78, Tisbury Road, Hove, Alfred Upton, M.R.C.S., L.R.C.P.

WINKFIELD.—On June 3rd, at 26, Beaumont Street, Oxford, Alfred Winkfield, M.A., F.R.C.S., aged 79.

## NOTICE.

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

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

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

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



# St. Bartholomew's Hospital



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

## JOURNAL.

VOL. XXIV.—No. II.]

AUGUST 1ST, 1917

[PRICE SIXPENCE.]

### CALENDAR.

Fri., Aug. 3.—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.  
Tues., „ 7.—Dr. Drysdale and Mr. Bailey on duty.  
Fri., „ 10.—Dr. Calvert and Mr. Waring on duty.  
Tues., „ 14.—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.  
Fri., „ 17.—Dr. Drysdale and Mr. Bailey on duty.  
Tues., „ 21.—St. Bartholomew.  
„ „ 21.—Dr. Calvert and Mr. Waring on duty.  
Fri., „ 24.—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.  
Tues., „ 28.—Dr. Drysdale and Mr. Bailey on duty.  
Fri., „ 31.—Dr. Calvert and Mr. Waring on duty.  
Tues., Sept. 4.—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.  
Fri., „ 7.—Dr. Drysdale and Mr. Bailey on duty.

### EDITORIAL NOTES.

**W**E notice with much pleasure that three more Barts.'s men have attained the Military Cross:

Temp. Capt. J. D. Batt, R.A.M.C. "For conspicuous gallantry and devotion to duty in digging out a number of men who had been buried by a shell. Whilst doing so another shell killed or wounded all who were there, and he was partially buried himself. He continued his work of rescuing other men and dressing their wounds regardless of all danger."

Temp. Capt. R. Hodson, R.A.M.C. "When in charge of the bearers he ensured the rapid clearance of wounded by closely following the advance of shell fire. Throughout he set a fine example of coolness and courage."

Temp. Capt. A. C. Sturdy, R.A.M.C. "He attended wounded for many hours under fire. He showed a complete disregard for danger in organising search parties, and recovered wounded who had been left for several days."

\* \* \*

We congratulate Dr. Edward Coker Adams, whom His Majesty the King has appointed a member of the Executive Council and an official member of the Legislative Council of the Colony of the Gambia.

\* \* \*

Our heartiest congratulations are extended to Temp. Major E. Hey Groves, R.A.M.C., who has obtained the Jacksonian Prize of the Royal College of Surgeons, the subject of his essay being "Method and Results of Transplantation of Bone in the Repair of Defects, caused by Injury or Disease."

\* \* \*

We warmly congratulate B. Whitchurch Howell, F.R.C.S., who has been awarded the Order of St. Sava of Serbia in addition to the Serbian Red Cross decoration.

\* \* \*

Sir George Newman, Chief Medical Officer of the Board of Education, has joined the Committee appointed by the President of the Board of Agriculture to investigate the production and distribution of milk.

\* \* \*

At an ordinary meeting of the Council of the Royal College of Surgeons of England, held on July 26th, Mr. Waring was elected a member of the General Section of the Board of Examiners in Dental Surgery.

\* \* \*

Sir Robert Armstrong-Jones, M.D., has been placed by the Lord Chancellor on the Commission of the Peace for the County of London, upon the recommendation of the Lord Lieutenant.

\* \* \*

On the afternoon of July 10th, Her Majesty Queen Alexandra, accompanied by Her Royal Highness Princess Victoria, visited the victims of the recent air raids. The visit extended over nearly two hours and Her Majesty's gracious and sympathetic interest in the sufferers was keenly appreciated by them all. Several pleasing photo-



graphs were taken whilst Her Majesty was crossing the Quadrangle, and will be treasured as memorials of a most interesting occasion.

\* \* \*

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

*House Physicians and Assistant House Physicians—*

Dr. Calvert.	R. French.
	P. Selwyn Clarke.
Dr. Fletcher.	L. K. Ledger.
	W. U. D. Longford.
Dr. Drysdale.	E. H. Glenny.
	J. A. van Heerden.

*House Surgeons and Assistant House Surgeons—*

Mr. Waring.	H. C. C. Joyce.
	A. J. Copeland.
Mr. Eccles.	P. A. Smuts.
	C. M. Titterton.
Mr. Bailey.	E. A. Crook.
	S. W. Page.

*Intern Midwifery Assistant . . . G. H. Cooke.*

*Extern Midwifery Assistant . . . H. Beckton.*

*House Surgeon to Throat, Nose, and Ear Department . . . J. E. A. Boucaud.*

*House Surgeon to Venereal Dept. . . H. R. Buttery.*

\* \* \*

ROLL OF HONOUR.

With great regret we learn of the deaths of the following Old Bart.'s men on active service :

Lt. J. G. Bradley-Smith, R.A.M.C., who was previously reported "missing; believed drowned," is now officially reported drowned. He was on the "Arcadian," which was torpedoed on April 15th.

Capt. A. B. Bernard, K.R.R., died from wounds on May 4th, which he received in action, near Croisilles, eleven days previously.

2nd Lt. C. A. Brown, King's Own Yorkshire Light Infantry, has been killed in action, in France.

Major Adrian Drewe, R.G.A., was killed in action on July 12th. He was educated at Eton, Trinity College, Cambridge, and St. Bartholomew's Hospital. He was in the winning boat of the University Trial Eights in 1911, and in 1913 he won the University Trial Pairs.

Lt. F. Whincup, R.A.M.C., was accidentally drowned in France on July 2nd.

2nd Lt. P. Lindsey, Oxford and Bucks Light Infantry, has been killed in action in France.

Our deepest sympathy is extended to the relatives and friends of these past fellow Bart.'s men who have died in their country's service.

## NOTES OF A CASE OF OLD ECTOPIC GESTATION :

### GIVING RISE TO SYMPTOMS IN THE COURSE OF AN OTHERWISE NORMAL PREGNANCY.

By C. MAITLAND TITTERTON, B.Sc., M.R.C.S., L.R.C.P.,  
Lieut., R.A.M.C.



S—, æt. 39, married, was admitted to Lawrence Ward of this Hospital, on July 25th, 1917, complaining of abdominal pain and vomiting.

*History of the present condition.*—Patient is seven months pregnant. For about three weeks she has been troubled by slight pain felt upon the right side of the abdomen. Three days ago the pain became worse, and she began to vomit; these intensified symptoms have continued since. The bowels last acted two days ago. No abnormal pelvic symptoms can be elicited.

*Past history.*—Patient has not suffered from such an attack before. She has had one child, born fifteen years ago; since when, she states, her periods have been perfectly regular, and the monthly loss has shown no variation, until she ceased to menstruate at the beginning of the present pregnancy. With the exception of "slight rheumatic fever," about one year ago, she remembers no other serious illness.

*Condition on admission.*—Fairly well nourished. The uterus corresponds to a seven months' pregnancy. There is very acute tenderness in the right iliac fossa, situated exactly over McBurney's point with definite resistance on palpation, but no swelling can be detected, and no abnormal dullness. Both flanks are resonant.

Urine: Normal. No albumin, sugar, blood, pus, or bacteria. Temperature, 99° F.; pulse rate, 84.

Per vaginam: The signs correspond to those of normal pregnancy at the seventh month. No swelling or undue tenderness in Douglas's pouch or lateral vaginal fornices.

Per rectum: Nothing abnormal discovered.

Leucocyte count, 14,000.

The provisional diagnosis was that of acute appendicitis, complicating pregnancy, and immediate operation was advised.

An emergency operation was performed by Mr. Moreton. Through a right rectus sheath incision, as for appendicectomy, a blackish body presented, which was thought at first to be a gangrenous appendix. This body was found to be adjacent to the cæcum, and free in the peritoneal cavity, being only loosely adhered to the ileo-cæcal junction by flakes of lymph. It was removed with the finger—no vessels being ligated as there was no pedicle. The neighbouring visceral peritoneum was congested and had some flakes of lymph upon it. After careful cleansing of the neighbouring peritoneum, the appendix and right ovary and



tube were examined and found to be normal. The abdomen was then closed without drainage. The size of the uterus and the position of the parietal incision prevented any examination of the left uterine appendages.

The patient made a good recovery, only rendered slow by slight superficial suppuration induced by tension upon the skin of the physiologically enlarging abdomen.

The abdominal symptoms did not recur, and she was discharged on August 13th, with a healed wound. She was advised to wear an abdominal belt until the pregnancy terminated.

The body removed consisted of a flattened wedge-shaped mass, 2 in. across and 1 in. deep at its thickest part, of tough consolidated tissues. It presented superficially a mosaic of brown and yellowish areas, separated by shallow sulci, forming a resemblance to "hardbake." On section the mass was firm and carneous, and of a brown colour. Attached to it at one point was a thin-walled pyriform cyst, about 2 in. in length, filled with two teaspoonfuls of clear fluid. Upon opening this cyst (after careful hardening of the specimen) no trace of an embryo could be found.

*Microscopically.*—The solid part of the specimen consisted, for the most part, of well-formed connective tissue, plentifully supplied with blood-vessels. At one point some papilla-like processes were seen, but they had no epithelial covering.

Careful search through several sections taken from different parts of the specimen showed in several places groups of cells having considerable resemblance to "Langhan's cells."

Dr. Williamson was kind enough to see the case, and also to examine the specimens. He was of the opinion that the body was undoubtedly the conceptional products of an old ectopic gestation.

The interest of the case lies in the following points:

(1) An ectopic gestation of which no symptoms could be obtained.

(2) Its extrusion into the abdominal cavity, probably as a "Tubal abortion" through the fimbriated end of the Fallopian tube, where it remained for an unknown and probably prolonged period of time, until it gave rise to symptoms towards the end of a subsequent normal pregnancy.

The specimen is being prepared with a view to preservation in the Museum.

I am indebted to Mr. Moreton for permission to publish details of this case.

## AN OLD "BILL OF MORTALITY."



WE have received from one of our readers the following "Bill of Mortality," date unknown, but probably sixteen hundred and something. The marginal notes are his own, and we should be glad if any other readers could elucidate some of the curious diseases enumerated.

		NOTES.
Plague . . . . .	68,596	
Rising of the lights . . . . .	397	? What. Wind?
Surfeit . . . . .	1251	Over eating?
Tisick and consumption . . . . .	4808	
Chrisomes and infants . . . . .	1258	"Chrisoms" are unbaptised children.
Mould fallen . . . . .	—	I did not copy number. What on earth is this? Sounds nasty!!
Purples . . . . .	14	Apoplexy?
Head mould shot . . . . .	—	? What. Number, I did not copy.
Flox . . . . .	—	Ditto.
Sciatica . . . . .	1	
Lethargy . . . . .	14	Lots of Hereford people should die of this!!
Frighted . . . . .	23	
Blasted . . . . .	5	If all who are this died the number would be larger!! ? Struck by lightning.
Calenture . . . . .	3	
Leprosie . . . . .	2	
Teeth and worms . . . . .	2614	
Ague and feaver . . . . .	5257	
Convulsion and mother . . . . .	2056	What is "mother"? Over laying?
Total . . . . .	97,306	
Males . . . . .	48,569	
Females . . . . .	48,737	
	97,306	

I have somewhere another "bill" wherein is a heading "Burst"!! How awful for those in the neighbourhood!! Many look as if they would!!

Note the great infantile mortality, also the ague.

## MENTAL STATES AND THE WAR: IN PARTICULAR THE PSYCHOLOGICAL EFFECTS OF FEAR.

By MAJOR SIR ROBERT ARMSTRONG-JONES, M.D.,  
F.R.C.P., F.R.C.S.,

Lecturer on Mental Diseases, St Bartholomew's Hospital, Consulting  
Physician in Mental Diseases to the London and the Aldershot  
Military Commands.

(Concluded from page 98.)



ONE of the most painful forms of fear is the *Pavor Nocturnus*, or the night-terrors so often experienced by children between 3 and 8 years of age. Among soldiers suffering from shell-shock, it is not at all unknown in the early stages, when sleep is disturbed by horrible dreams of the parapet and "going over the wall," of Hun atrocities and high explosives. So marked was this in the case of one



man that he feared going to sleep—a condition described as hypno-phobia. The “phylogeny” of sleep appears to suggest that early man may have originally started as a semi-nocturnal animal, and that dreams and *pavor nocturnes* were protective states which prevented the long, sound sleep that must have been a danger to primitive man, as he might at any moment have needed some sudden extrinsic call in order to save his life by acting immediately and at once with promptness and energy.

Fear has many bodily pictures of its presence: there is flight, clinging, cringing, supplicating, extension of hands, sudden starts, convulsions, paralysis, shrieks, and cries; and fears, therefore, vary according to their somatic expression. Some authorities say there are at least 140 different kinds of fears, but the inherited phobias and fears such as those of snakes, spiders, and cats, do not come within the category under discussion. Fears have generally been regarded as signs of cowardice and as indicating a lack of moral fibre; but fear is a protective emotion and of biological utility, and every stimulus, physical or mental, awakens, or tends to awaken, some response along ancestral tracks in the nervous centres; every stimulus also acts through various associations that are peculiar to the individual. In every emotion there are nervous currents discharging impulses to the various muscles, to the viscera and to the vital organs, and it is upon the nature of these reactions that we are able to observe or classify the emotions, and, although it would be true to state that it is not the emotions we observe but the bodily accompaniments which are instincts, still the emotions may be regarded as having their associated bodily states. If the emotions act for a long time continuously or for short periods intensely; they are able to bring about a marked state of mental and nervous exhaustion such as are met with in many shell-shock cases. If the emotions are accompanied by definite somatic changes which call certain powers of the body into action, and if these favour survival, then the emotions are supplementary reflexes, and they help the individual to live, and have a protective and purposive end. If this be so, why is the emotion of fear sometimes physiologically depressing? Why should there occasionally be collapse or paralysis accompanying fear—a condition incompatible with activity, with combat or with flight and escape. The answer is, that the deeper and the stronger emotions do not stimulate because when an emotion is intense it ceases to stimulate. It is of no biological utility to an organism when it has been severely damaged to show combat or to flee, for activity would not be to its interest; any effort at flight or any activity would aggravate the damage received, and concealment, or collapse, would be its only chance of survival. As we have already pointed out, when mental and physical stress were induced artificially by terrifying caged cats with barking dogs—the effect of any continuous mental stress or physical strain is to destroy the cortical neurons, to alter muscle structure, and to break up glandular tissue.

This happens in shock, and a similar state is induced by the continuous stress of the trenches, where sleep and restoration are impossible. There should, therefore, be no reflection upon personal devotion and valour in cases of shell-shock which is mainly a state of sheer exhaustion. There is, however, another kind of fear which comes on suddenly and in neuropathic or hysterical men. As an example of the former may be quoted the case of a brave officer who was in and out of first line trenches for many months. He seemed to lead a “charmed life” until at last he also was wounded. In hospital he presented symptoms of marked nervous exhaustion, and although his valour and courage were never called in question, he cried whenever spoken to. As an example of the latter was the case of a young officer who was only ten days in France when he complained of inability to mount ladders, stand on a wall, or cross a trench. In most cases of shell-shock there is a record of excessive fatigue, of intense anxiety bordering on fear, irregularity on occasions—inevitable under the circumstances—of obtaining proper food, and, lastly, of loss of sleep. In some there was a lowering of the defences of the body through the infection of malaria and fever (venereal disease among them), and there is in many a record of sudden fright from the effects of high-explosive shells; the 5.2, 9, and 12 in. artillery as they themselves describe it. All these are conditions antecedent to physical exhaustion. Add to this the fact that 33 per cent. of them came from neurotic families and you have the summary of the ætiology of so-called shell-shock, most of whom had no wounds, but many of them were “buried.” Not only from among our own men, but Australia, Canada, South Africa, and New Zealand have all contributed to shell-shock. France, Egypt, Gallipoli as well as the high seas, have all presented cases, or they have all suffered analogous symptoms. It is a fact without doubt that most if not all showed symptoms of diminished nervous energy, and Crile has demonstrated this diminished store of nerve potential in nerve shock, which presents definite changes in the nervous system as well as in the thyroid gland, the liver, the muscles, and the suprarenals. The neurons show hyperchromatism followed by disintegration of the cytoplasm, a rupture of the cell membrane, a dislocation and, subsequently, a disappearance of the nucleus itself. In some cases there has been a definite enlargement of the thyroid and both Dr. Vernon Cargill and Major Newton Pitt have described such changes within their own experience. In a case quoted by Capt. William Brown, R.A.M.C., one man with shell-shock rapidly developed Addison's disease with typical bronzing.

As to the physical factors of causation in cases of shell-shock, various theories have been advanced to account for the symptoms, and the knowledge that the sudden pressure of 7000 kilos. to the square centimetre from the bursting of high explosives would suggest a mechanical percussion-shock to the central nervous system, through the medium



of the cerebro-spinal fluid, upon which the nervous system rests or in which it is suspended. The sudden fright caused by the noise and the continued stress of bursting shells have also been mentioned as the cause of emotional shock. Another view advanced is that carbon monoxide gas, or carbonyl (phosgene), causes a disintegration of the red blood-corpuscles with consequent blocking of capillaries and hæmorrhage. Still another cause that has been suggested, viz., hypothyroidism, and by some hyperthyroidism, as well as adrenalism. In regard to the percussion theory there is no doubt that the air pressure in the neighbourhood of bursting shells is intense, sudden, and enormous, and the delicate neurons must suffer, especially those in the anterior horns, which would be less protected although situated within the spinal cord than are those of the posterior spinal root ganglia, which are covered with a sheath of dura mater in the intervertebral spaces. Mr. Ernest Clarke has shown that the sudden pressure from high explosives is sometimes positive and sometimes negative, and he has seen eyes actually torn out of their sockets by the negative pressure. At the explosion near St. Bartholomew's Hospital some of the windows were blown in whilst others were drawn out by negative pressure. It is also a fact of experience that in many shell-shock cases, motor lesions and abnormalities are more frequently met with than sensory; which appears to support the view that in percussion-shock or molecular injury to the central nervous system, that part of the spinal cord which is least protected suffers the greatest injury and sustains the greatest harm: the delicate neurons of the motor section, with their fine anastomosing network of arborisations all around them, being more exposed to percussion-shock or concussion than the fibrils which carry afferent impulses within the posterior columns. From whatever cause, whether concussion or gas, the term shell-shock should be limited to physical lesions. It has been suggested by some that the sympathetic disturbances so frequently seen in these cases: dilated pupils, pre-cordial anxiety, visceral perturbations, irregular and profuse perspirations and tremors may be the effect of the same material shock to the tractus-intermedio-lateralis of the cord, the part through which cerebro-spinal impulses exercise their regulative functions over the lower mechanism of the autonomic system. The effect of loud explosions at the Front upon the nervous system of those in close proximity to them is unimaginable to us at home. We ourselves are sometimes terrified by the "back-firing" of a motor car; or by the "pop" of a burst tyre and we recoil petulantly. If a maid whistles for a taxi—we write to *The Times* because the strain and stress upon our nerves "has become unendurable." We can only very feebly imagine what the strain and shock of gun-fire at the Front can be. As to the unreasonable and infectious fear which seizes upon one or more persons in a crowd and spreads as panic fear, it occurs often without a visible cause and has been

known from the earliest times. It occurs also in animals, and is believed to be of a protective nature; one animal in the gregarious herd scents or sees danger, possibly one bird only in a flock of grouse sees anything strange, the warning cry is heard by the group, which flees; not one of the others seeing, smelling, or hearing danger. In some instances experience has shown the futility of always fleeing at the sight of something strange, and animals will often approach danger through curiosity or wonder, an emotion in human beings which is the basis of scientific research, of investigation and progress. It is frequently noticed in sheep, horses, and cattle; and if the Gadarene swine had not been seized with panic fear they would probably have been preserved to their owner.

It is not generally appreciated that the term panic is derived from the god Pan, whose face it was dangerous to behold, and whose voice struck terror even to armies on the march. When the Persians were about to pillage the sacred city of Delphi they heard the voice of Pan and fled without being pursued. In the Biblical records of antiquity during the war (2 Chron. xiv) about 1000 B.C. between Egypt and Assyria, panic and plague destroyed the army of Sennacherib. In the battle of Salamis, which is the first recorded naval battle in which women took part, panic seized upon Xerxes, when he and his fleet fled in disorder. At the battle of Actium, although the fleet of Cleopatra was twice as numerous as that of Cæsar, a panic fear seized upon Cleopatra at the decisive moment with the result that Egypt thenceforth became a Roman province. The news of the victory of the battle of Marathon shows not only the effect of panic fear but also of panic joy. The aid of Pan greatly contributed to the victory of the Greeks over the Persians who outnumbered the former at Marathon by more than ten to one. The messenger running into Athens with the news of victory was greeted with great excitement by the chief magistrate, who exclaimed "Rejoice! Rejoice!" and then fell dead through the overwhelming effects of the strong emotion of joy. Any emotion whether of intense sorrow or of extreme joy, due either to the fulfilment of a strong desire or to the removal of overwhelming obstacles, is known to exercise through the autonomic system, a fatal effect upon the heart's action. The retreat of the 10,000 described by Xenophon, who was not only present but led the retreat, records the effect of a night panic when the camp became a scene of clamour, dispute and alarm. Early the next morning Clearchus ordered the troops under arms. "and, desiring to expose the groundless nature of the alarm, caused the herald to proclaim that whoever would denounce the person who had let the ass into the camp on the preceding night should be rewarded with a talent of silver." This seems to have been a standing military jest to make the soldiers laugh at their past panic. There are many records in military history of the effects of panic fear, but these are much more common as is well known among the



civil population, and they occur in times of war, during plagues, as well as during great political and financial crises or upon invasion. During the plague at Athens and during the Plague of London there are numerous records of the effects of panic fear among the people. Col. F. N. Maude in his book *War and the World's Life* (p. 408) gives many instances. He refers with great interest to the crowd feeling or the "collective will power," which is of supreme moment among fighting armies and constitutes their *morale*; an element which Napoleon had the gift to initiate, and to which as the "resultant thought wave" he attributed the greatest importance.

In addition to panic fear occurring during war, pestilence, and famine, there are many sudden fears that occur from other disasters on land and sea as well as from disasters in the air; some of the worst recorded being those due to fires, especially when occurring on board ship. The panic that occurred on board the pleasure steamer, "Princess Alice," when 700 persons lost their lives almost within reach of the banks of the Thames, although not of this type, stands in strong contrast with the cool self-possession that occurred and the perfect order that was maintained when the "Titanic" went down after the order, "Ladies first," had been respected. Theatre panics and earthquake panics are other forms of panic fear which occur among large groups of people, and in regard to fear it is most interesting to learn the views of artists in portraying this emotion. In sculpture there are the "Niobids" in the Uffizzi Gallery showing all the tender emotions as well as those of terror, pity, grief, sympathy, appeal, repulsion, and fright; possibly the Niobids in the main exhibiting more sorrow than fear. Then the Laocoon in the Vatican, which Lecky describes as showing "traces of mental anguish exhibited with exquisite skill and without contorting the features or disturbing the prevailing beauty of the whole." In the dying Gladiator, of the Capitoline Museum, is the sculpture of a brave warrior in his last agony and even with his last breath repelling his adversary.

Because the facial expression so often reveals the emotions better than do any spoken words, I recently wrote to Mr. C. H. Collins Baker, the Director of the National Gallery, asking him which pictures in his opinion best represented, in the National collection, the ideas of painters upon the emotion of fear, and he very kindly gave me much assistance and referred me to the study called "Horror," by Reynolds, and painted from himself for the "Tragic Muse." In this picture the eyebrows are contracted, the face is tense, and the mouth is open and fixed, as if hissing the Hymn of Hate. A picture of the destruction of Niobe's children, by Richard Wilson, shows the physical expression of all the sadder emotions, and the "Plague at Ashdod," by Poussain, represents figures weeping and supplicating, showing fear, terror, horror, or disgust. "Christ bearing the Cross and appearing to St. Peter," by Carracci, is a mingled represen-

tation of awe, surprise, and fright, St. Peter being literally "petrified" in the picture. Then there is a work dating back to the fifteenth century by Ercole Grandi, called the "Conversion of St. Paul," with Jerusalem in the distance; panic, bewilderment, fear, and collapse being exhibited. In the "Transfiguration," by Duccio, are awe, fright, and curiosity, commingled with reverence.

Some of the Guildhall collection, which I visited by the courtesy of the Director, Mr. A. G. Temple, showed fear in a marked degree. The "Murder of David Rizzio," by Opie, shows anger, horror, fear, and the beseeching attitude. Another by the same artist, "The Assassination of James I of Scotland," depicts horror, fright, and clinging affection. "The Frown," by T. Webster, illustrates curiosity, determination and effort, fear and weeping. The "Banquet Scene in Macbeth," by D. Maclise, shows the paralysing and flaccid effects of fear as well as action and determination. The face is pallid, the right hand clutches the seat, while the left is powerless and yet it repels the ghost. The stronger mind of the Queen defying the audience is well shown. Lastly, there is the picture of "Edward the Third at the Siege of Calais." The need of the inhabitants, the kindly help and the pity which spares their lives, depict some of the horrors of war on a mild scale. The "Fight for the Standard," also by Sir John Gilbert, represents the *mêlée* of an actual combat, such as does not occur in the warfare of to-day.

In regard to the portrayal of the emotions in art, more especially those of fear and terror, Lecky states (*Rationalism in Europe*, p. 250) it was one of the most subtle and at the same time most profoundly just criticism, that it was the custom of the Greeks to enhance the perfection of their ideal faces in sculpture by transfusing into them some of the higher forms of animal life, and one may add that the proper study of the emotions is to trace them back to their earliest appearance in animals. This was actually carried out by the Greeks, and in the god Pan the human features approach as near as human features can to the characteristics of the brute. Busts of Jupiter also manifest a resemblance to the lion, and one of the distinctive characters of Greek art was that they personified mental faculties; as is stated, the two natures, human and animal, are fused into a harmonious whole, quite unlike Egyptian sculpture, which made no effort to soften the incongruity. Mr. Arthur H. Smith, of the British Museum, believes the Greeks to have been somewhat reserved in the expression of feeling, but an apparent exception to this is the great frieze on the altar of Zeus at Pergamon, in Asia Minor. The original has long since been removed to Berlin, but facilities were given to me to inspect photographs, which depict with marvellous expression the whole of the emotions of fear, terror, anger, and hate shown in these colossal figures. All are familiar with the work of Sir Charles Bell upon the expression of the feelings. He associates fear with "staring and startling



eyes, dilated pupils, the eyeballs largely uncovered, and the eyebrows elevated to the utmost, the nostrils are dilated, the mouth is opened as if convulsed, the tongue is seen, yet the lips conceal the teeth"; terror in his opinion being an exaggerated fear, but he considered that terror was more often associated with astonishment; the person experiencing terror being appalled and stupefied; he stands motionless and rooted to the ground; a marked contrast to a person in the act of flight, who, as Sir Charles Bell believes, is "unnerved by fear" whilst fleeing.

Fear is something more than an avoiding reaction or an elementary reflex. It is a protective emotion and the most fundamental of all the emotions on account of its highly self-guarding value. It is the deepest and the most elemental, and it is common to man and animals. It is the most profoundly dissociative of all the feelings experienced by human beings, and it has very definite and distinct bodily accompaniments. During its experience all the other emotions are interrupted, and physical changes occur which are helpful to protect the life of the organism. It is possible to experience or go through the feeling of fear without actual consciousness of it as fear; but when felt it "takes possession" of the whole being. The two different kinds of fear described have possibly a different locality in the brain; reasoned fear being of cortical origin, whilst the unreasoned fear which is so "suggestible" and so infectious, and which gives rise to panic and takes hold of groups of people and herds of animals is of thalamic or, at any rate, of subcortical origin. The psychology of fear is at the present time being studied by a number of thoughtful and careful students, and it is not improbable that one of the consequences may be a reconstruction of much of our present attitude in regard to the relationship between mind and body.

## CORRESPONDENCE.

### "FRECKLED FEVER."

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

DEAR SIR,—Would it be possible for us to have a description of the "Freckled Fever" in your next number of ST. BARTHOLOMEW'S HOSPITAL JOURNAL? If so, I should be much obliged. This fever has been mentioned in the *Times*, but no one seems to know anything about it.

Yours truly,  
A SUBSCRIBER.

### "MALARIA."

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

DEAR SIR,—I was very interested in an article in the JOURNAL on the "Treatment of Malaria by Intravenous Injection of Quinine Urethane," and decided to try it on a case of chronic malaria from either Ceylon or the Dardanelles, but found a difficulty at once, and that was to measure 40 cc. of chlorhydrate of quinine, and 20 cc. of urethane. Eventually, in the *British Pharmaceutical Codex*, I found what I required under "Giemsa's Injection":

Quinine hydrochloride	10 grm.
Ethyl-urethane	5 grm.
Water	to 30 cc.

Dose, 1·5 mil.

I have given my patient one injection so far, using sterilised distilled water as a diluent instead of the physiological serum, and three days after he told me that he was free from headache, and felt more like work than he had done since his discharge from the Army.

My friend, Capt. H. A. Scholberg, has done the preliminary blood examination for me, and is looking for cases at the 3rd Western General Hospital to try the same treatment on, if my case is successful.

I remain,  
Yours faithfully,  
ROBERT WALKER.

## REVIEWS.

COMMON DISEASES OF THE MALE URETHRA. By F. KIDD. (Longmans, Green & Co.). Pp. 132. Price 5s. net.

A short, but excellent, little work dealing for the most part with gonococcal infections, and with the various pathological conditions of the urethra and its appendages arising therefrom. The work is exceedingly practical, as it deals at some length with the study of the disease in the human being rather than in the laboratory. It consists, in fact, of a series of lectures given, when in 1917 it became clear that special clinics were to be started under the County Councils. The illustrations are excellent, and we can cordially recommend this book to students and practitioners alike.

PHYSICAL REMEDIES FOR DISABLED SOLDIERS. By R. FORTESCUE FOX. (Baillière, Tindall & Cox). Pp. 277. Price 7s. 6d. net.

The object of this book is to present general information on physical remedies for the treatment of most diseases, surgical and medical, from a common cold to diseases of the skin, with fractures, dyspepsia, and most other lesions thrown in.

The treatment includes that by heat and cold in baths, by electricity and radiation, by massage, mechanical apparatus, exercises, and medical gymnastics, as well as by medicinal waters and climate in British health resorts. Obviously such an enormous scope can be only inadequately covered in such a small book. However, in spite of this drawback, the authors have succeeded in giving an excellent *résumé* of these matters, which, with the aid of some very good illustrations, should be of assistance to anyone intending to take up the subject. It would be necessary, however, to consult other and more detailed works before a practitioner could hope to deal successfully with the subject in person.

MALINGERING; OR, THE SIMULATION OF DISEASE. By A. B. JONES and L. J. LLEWELLYN. (Heinemann.) Pp. 708. Price 25s.

The authors of this book point out that the study of malingering has been somewhat neglected by the scientific physician, but as it is a subject of great import, due thought might well be given to it.

Much ground is covered in this book—including an endeavour to assist in the detection of malingering. Some useful information dealing with the definition and classification of the various forms of malingering and its relation to the nervous system, internal and external diseases.

One of the objects of the book is that it may prove helpful to Naval and Military surgeons, to those interested in the subject of Pensions, Assurance, and Compensations, or responsible for the maintenance of discipline in large communities or institutions, and to members of the legal profession as well as to political and social reformers.

SURGICAL NURSING AND AFTER-TREATMENT. By J. DARLING. (J. & A. Churchill.) Pp. 582. Price 8s. 6d.

This book should be of great help to nurses studying for examinations and may also prove useful to students and dressers as well as to the junior members of the medical profession.

It deals only with surgical nursing, and contains many illustrations from the surgical catalogues of Messrs. Allen & Hanbury, and various other instrument makers.

The work is well arranged, and besides elucidating the duties of the nurse it reduces them to the necessary state of orderly sequence.



## EXAMINATIONS.

## UNIVERSITY OF OXFORD.

*Second B.M. Examination. June, 1917.*

*Materia Medica and Pharmacology.*—J. C. Dixey, C. F. Krige.  
*Pathology.*—H. W. Toms, K. F. D. Waters.  
*Forensic Medicine and Public Health.*—E. A. Crook, J. J. Savage.  
*Medicine, Surgery, and Midwifery.*—E. A. Crook.

## UNIVERSITY OF CAMBRIDGE.

*Third Examination. June, 1917.*

*Part I. Surgery and Midwifery.*—A. J. Copeland, E. T. D. Fletcher, A. R. Jennings.

*Second Examination.*

*Part I. June, 1917. Human Anatomy and Physiology.*—B. H. Cole.

*Part II. April, 1917. Pharmacology and General Pathology.*—H. B. Bullen, S. L. Higgs, A. G. Shurlock.

## UNIVERSITY OF LONDON.

*Second Examination. July, 1917.*

*Part II. Anatomy, Physiology, and Pharmacology.*—J. J. da Gama Machado, E. Gallop, C. E. E. Herington, R. W. P. Hosford, S. F. Mahmood, H. L. Sackett, N. S. B. Vinter, I. G. Williams.

## CONJOINT EXAMINATION BOARD.

July, 1917.

The following have completed the examinations for the diplomas of M.R.C.S., L.R.C.P.:

J. E. A. Boucaud, H. R. Buttery, A. J. Copeland, E. H. Glenney, H. C. C. Joyce, L. K. Ledger, S. W. Page, A. H. Samy, P. A. Smuts, C. M. Titterton, J. A. van Heerden.

*Second Examination. June, 1917.*

F. C. W. Capps, L. E. R. Carroll, P. C. Collyns, J. J. da Gama Machado, F. P. de Caux, T. B. Hodgson, J. V. Landau, J. A. M. Ross, C. W. Narbeth.

*First Examination.*

*Practical Pharmacy. July, 1917.*—K. W. Leon, E. D. Macmillan, G. Manët-Wallett, S. R. Simaika.

## APPOINTMENT.

HEATH, CHARLES J., F.R.C.S., appointed Consulting Aurist to the Metropolitan Asylums Board Infirmary for Children, London, W.

## BIRTHS.

DEANE-BUTCHER.—On July 11th, at Pittsworth, Queensland, to Dr. and Mrs. Bazett Deane-Butcher, a daughter.

ELLIS.—On August 5th, at 2, Naval Terrace, H.M. Dockyard, Sheerness, the wife of Surgeon G. E. D. Ellis, Royal Navy, of a daughter.

JONES.—On July 2nd, at Coleford House, near Bath, the wife of Capt. Philip T. Jones, R.A.M.C., T.F.R., of a daughter.

KIDNER.—On July 17th, at a nursing home, Manor Park, Lee, the wife of H. Ratcliff Kidner, M.B., D.P.H., 14, Valley Road, Shortlands, of a daughter.

KITCHING.—On July 4th, at 77, Marine Parade, Great Yarmouth, the wife of Captain R. L. Kitching, R.A.M.C., of a daughter.

## MARRIAGES.

LYSTER—NEAL.—On July 28th, at St. Bartholomew's the Great, Smithfield, by the Rev. Stanley Power, Vicar of St. Mark's, Noel Park, Ronald Guy Lyster, Surgeon, R.N., second son of Dr. A. E. Lyster, M.D., J.P., and Mrs. Lyster, Great Baddow, Essex, to Ada Erica, elder daughter of Mr. and Mrs. John Neal, 22, Highbury Quadrant, London.

MANSFIELD—CATHELS.—On August 5th, Harold Young Mansfield, M.D., Capt., R.A.M.C., and Katharine Stuart, eldest daughter of the Rev. and late Mrs. Cathels, Hawick, Scotland.

## DEATHS.

ANDERSON.—On May 8th, in New York City, Winslow Anderson, M.D.(California), M.R.C.P.(Lond.), of 1065, Sutter Street, San Francisco.

BENNETT.—On July 13th, Charles John Bennett, M.R.C.S., of Buxton, aged 82.

BRADLEY-SMITH.—Previously reported missing, believed drowned, now officially reported drowned on the torpedoed Hospital Ship "Arcadian," April 15th, 1917, John Godfrey Bradley-Smith, Temporary Lieutenant, R.A.M.C., younger son of the late John Bradley-Smith and Mrs. Bradley-Smith of Croydon, and dearly loved husband of Sophia Bradley-Smith, of Yeovil.

BROWN.—Killed in action, Charles Arthur Brown, K.O.Y.L.I., son of Mr. R. C. Brown, 4, Grove Gardens, Osterley Park, W., aged 19.

DREWE.—Killed in action, on July 12th, Major Adrian Drewe, R.G.A., the dearly-loved eldest son of Mr. and Mrs. J. C. Drewe, Wadhurst Hall, Sussex, and beloved husband of Jane Drewe, aged 26.

KENT-HUGHES.—On December 14th, 1916, at Melbourne, Australia, Tina, the wife of W. Kent-Hughes (née Rankin).

TWEEDY.—On the 12th inst. at Newquay, Cornwall, Reginald Carlyon Tweedy, M.D., etc., of Kenilworth, late Temporary Major, R.A.M.C.

WHINCUP.—On July 2nd, in France, accidentally drowned, Lieut. Frank Whincup, R.A.M.C., of Shrewsbury, aged 43.

## NOTICE.

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

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

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

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



# St. Bartholomew's Hospital



"Æquam memento rebus in arduis  
Servare mentem."

—Horace, Book ii, Ode iii.

## JOURNAL.

VOL. XXIV.—No. 12.]

SEPTEMBER 1ST, 1917.

[PRICE SIXPENCE.]

### CALENDAR.

Tues., Sept. 4.—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.  
Fri., „ 7.—Dr. Drysdale and Mr. Bailey on duty.  
Mon., „ 10.—Examination for Matriculation (London) begins.  
Tues., „ 11.—Dr. Calvert and Mr. Waring on duty.  
Fri., „ 14.—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.  
Tues., „ 18.—Dr. Drysdale and Mr. Bailey on duty.  
Fri., „ 21.—Dr. Calvert and Mr. Waring on duty.  
Mon., „ 24.—Examination for Entrance Scholarship begins.  
Tues., „ 25.—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.  
Wed., „ 26.—First Examination Conjoint Board begins.  
Thurs., „ 27.—Second Examination Conjoint Board begins.  
Fri., „ 28.—Dr. Drysdale and Mr. Bailey on duty.  
Tues., Oct. 2.—Dr. Calvert and Mr. Waring on duty.  
Fri., „ 5.—Dr. Morley Fletcher and Mr. McAdam Eccles on duty.

### EDITORIAL NOTES.

**I**T is with much pleasure that we note that two Bart.'s men have been awarded the D.S.O.:

Staff-Surgeon G. B. Scott, R.N. "In recognition of his services with a Naval Armoured Car Squadron in France, Russia, Turkey, and Roumania. On active service he has shown a devotion to duty and forgetfulness of self which cannot be too highly praised."

Lieut.-Col. J. S. Purdy, A.M.C. "Although continually under shell-fire for seven days, he exercised close, personal supervision over the evacuation of the wounded, and by his own example of courage and disregard of danger he animated all ranks with a similar attitude of mind. His work during preliminary preparations displayed the same untiring energy and devotion to duty."

\* \* \*

We are also gratified to note that three more of our past students have obtained the Military Cross:

Temp. Capt. L. L. Satow, R.A.M.C. "He established a dressing-station within effective range of the enemy's position, where he attended to the wounded throughout the day and the following night, under fire the whole time. It was entirely owing to his disregard of danger and devotion to duty that many of the wounded were collected and evacuated."

Temp. Lieut. J. E. Sandilands, R.A.M.C. "For conspicuous gallantry and devotion to duty in leading his bearers forward under heavy barrage to evacuate wounded. He continued throughout the day to organise and superintend the removal of casualties under heavy shell-fire."

2nd Lieut. C. H. Bulcock, R.F.A. "For conspicuous gallantry and devotion to duty when in charge of ammunition supplies. By sheer force of example and energy he succeeded in rallying his carrying parties, who were thrown into confusion by heavy shell-fire and suffering many casualties. Although slightly gassed himself, he made several journeys into the enemy barrage to search for and remove the wounded, showing complete disregard for personal safety, and it was due to his tenacity and courage under difficulties that the guns were kept supplied each night with ammunition."

\* \* \*

We congratulate Capt. F. G. Lescher, R.A.M.C., on having received a bar to the Military Cross. "He showed the greatest skill and fearlessness by leading his bearer parties and establishing forward collecting posts under heavy hostile shell-fire. He worked ceaselessly for three days, and by his personal example and devotion inspired his men with courage under very difficult conditions."

\* \* \*

We have also to congratulate several other recipients of honours:

Fleet-Surgeon A. R. H. Skey has received the Military Order of Savoy from the King of Italy.

The C.M.G. has been awarded to no less than seven of our past students: Col. W. H. Starr, R.A.M.C.; Lieut.-Col. M. H. G. Fell, R.A.M.C.; Lieut.-Col. E. V. Hugo, I.M.S.; Temp. Lieut.-Col. T. B. Legg, R.A.M.C.; Lieut.-Col. G. S.



Rankine, R.A.M.C.; Temp. Lieut.-Col. W. N. Barron, M.V.O., R.A.M.C.; Lieut.-Col. B. E. Myers, N.Z.M.C.

Major (Temp. Lieut.-Col.) W. H. Hamilton, D.S.O., I.M.S., has been made a Cavalier of the Order of the Crown of Italy.

Miss McIntosh, our Matron, has been awarded the C.B.E.

Col. C. Gordon Watson, C.M.G., has been made a Knight of Grace of St. John of Jerusalem.

Fleet-Surgeon J. H. Pead, R.N., has received the Order of St. Stanislas, 2nd Class (with Swords).

\* \* \*

#### ROLL OF HONOUR.

We have unhappily to record five deaths on active service:

Capt. G. D. East., R.A.M.C., attached to Grenadier Guards, was killed in France on July 1st. He was one of the House-Surgeons of this Hospital when the war broke out.

Surgeon-Capt. R. A. Bostock has died of illness contracted on active service. During the Boer War Capt. Bostock was employed on the Staff for general medical work. Early in the present war he was mentioned for valuable services.

2nd Lieut. G. H. Greenfield, R.F.A., died on August 17th from wounds received the previous day. He was a student at the time of the outbreak of war, and was gazetted to the R.F.A. in August, 1916.

2nd Lieut. J. D. Johnston, K.O.L.I., has been killed in France on a date not yet ascertained.

Capt. H. A. Harris, R.A.M.C., was killed in action on July 31st in France.

To the relatives and friends of these gallant men our deepest sympathy is extended in their loss.

#### OUR RETROSPECT.

**D**URING the last two years in this retrospect we have been compelled to review our Roll of Honour as something of more importance than the progress of our medical school.

This year the same duty devolves upon us. When we reviewed the situation in last September over 1800 of our physicians, surgeons, students, past students, nurses, and lay-staff were serving with the forces either at home or abroad.

This year has brought the number well over 2000. It is with much regret that we have to announce that during the last twelve months many of these have been killed or have died indirectly from causes attributable to active service.

Many have obtained decorations and honourable mention of which we shall speak later.

In the medical school the number of students, though fewer than that of old, has been well kept up according to war standards. The lectures and laboratory classes have been held as usual, and in the examination halls our students have fully upheld the reputation of St. Bartholomew's.

With very much sorrow we have had to note during the past year the deaths of several old students who have since become famous in their spheres of actions.

Sir William Henry Power passed away on July 28th, 1916. In 1871 he was appointed a Medical Inspector of the then new Public Health Department of the Local Governing Board, and in 1900 he was appointed their Chief Medical Officer. Amongst his well-known investigations was that concerning the local investigation of outbreaks of infectious diseases. He first demonstrated in 1878 the spread of diphtheria by means of milk and the manner of which it is often carried by means of slight sore throat.

He further investigated smallpox and the routine removal of smallpox cases to hospitals away from populous areas was due to his work. He closely guided and followed the work of the Board's medical experts and gave it the stamp of his unrivalled knowledge, memory, and power of constructive criticism. He was created K.C.B. in 1908, and was the recipient of the Buchanan medal of the Royal Society and other honours.

We have also to record with sorrow the death of Sir T. Lauder Brunton, whose name is familiar to every medical man throughout the world.

He studied successively in Vienna, Berlin, Leipsic, and Amsterdam under the best masters of the time, and was appointed Assistant Physician to the Hospital in 1876, associated with Sir William Church as his senior. He travelled widely throughout the world, and was elected a member of several foreign medical societies. He received the honour of Knighthood in 1900, and was created a Baronet in 1908. In the midst of a strenuous and useful life spent largely in the service of our Hospital he yet found time to take an active part in many patriotic movements, such as the second International Congress for School Hygiene, of which he was President, the City of London Cadet Brigade, the National League for Physical Education and Improvement, and the National Association for the Prevention of Infant Mortality.

He was a prolific writer, and sought persistently to apply in practice such remedial measures as gave promise on physiological grounds of affording relief to various maladies and symptoms. His position in the medical world was probably unique. His health gave way two or three years ago, yet he carried on his work prudently and bravely. The loss of his second son, killed by a shell in France, was a severe shock to him, and he died on September 6th, 1916, in his 73rd year.

We also note with very much sorrow the death of Mr



W. H. H. Jessop, who passed away very suddenly on February 16th of this year after an illness of only six days.

His earliest position after qualifying at the Hospital was as House-Surgeon to Mr. Willett. He was afterwards Ophthalmic House-Surgeon and became Demonstrator of Anatomy in 1882. In 1894 he was elected Junior Ophthalmic Surgeon to St. Bartholomew's Hospital.

At the time of his death he was Senior Ophthalmic Surgeon to the Hospital and President of the Ophthalmological Society of the United Kingdom. In the latter position he used his power to set on foot the establishment of a British Journal of Ophthalmology, securing for that purpose the amalgamation of the *Royal London Ophthalmic Hospital Reports*, the *Ophthalmic Review*, and the *Ophthalmoscope*.

Jessop was a good friend and a warmhearted man. He was an enthusiastic lover of art—his knowledge and judgment being extremely good. His collection of Whistler lithographs is famous. With his death the students have lost one of their best friends, and the Hospital one of her greatest sons.

During the year many appointments have been made which reflect credit upon our Hospital and Medical School. The Right Hon. Dr. Christopher Addison has been made a member of the Cabinet and Minister of Munitions. Dr. Robert Armstrong-Jones has received the honour of Knighthood, and has also been appointed Consulting Physician in Mental Diseases to the London Command. Dr. Shipsley, Master of Christ's College, Cambridge, has been appointed Vice-Chancellor of the University of Cambridge.

Among other distinctions awarded to St. Bartholomew's men we may mention the following:

Surgeon General Sir C. P. Lukis has been appointed Director-General Indian Medical Service.

Col. C. Gordon Watson has been appointed Consulting Surgeon to the Expeditionary Forces in France.

Dr. Stansfeld has been appointed Physician to the Metropolitan Hospital.

Sir Frances Champneys has been re-elected as Representative of the Royal College of Physicians of London on the Central Midwives Board, and Sir Dyce Duckworth has been re-elected Representative of the same body on the Council of the Queen Victoria Jubilee Institute for Nurses.

Mr. H. J. Waring has been elected to represent the Royal College of Surgeons of England on the General Medical Council.

Dr. W. S. A. Griffith has been appointed as Representative of the Royal College of Surgeons on the Central Midwives Board.

Dr. Edward Coker Adams has been appointed a member of the Executive Council and an official and member of the Legislative Council of the Colony of the Gambia.

Mr. R. Gill, shortly after resigning his post as Chief Chloroformist of this Hospital, has been elected a Governor.

Dr. Arthur J. Hall, Professor of Medicine at the University of Sheffield, has been appointed Examiner of Medicine at the University of London.

The honours accorded to St. Bart.'s men who are on war service have been very numerous. Space will not permit a detailed list and it would be invidious to mention some and leave out others. The list comprises the following: K.C.M.G., 1; C.B., 5; C.S.I., 1; C.M.G., 10; D.S.O., 15; M.C., 35; Bar to M.C., 3; D.S.C., 1; T.D., 2; Mentioned in Despatches, 140; Promotion for valuable Service in the Field, 1; Knight of Grace of St. John of Jerusalem, 2; Kaiser-i-Hind Medal, 1; Serbian Order of the White Eagle, 6; Legion of Honour of the French Republic, 2; Order of St. Stanislas (Russia), 2.

Unfortunately the Roll of Honour has been a heavy one this year. No less than 29 have been killed or died on service. One is missing, 35 have been wounded, 4 have been taken prisoners, of whom 2 have been released.

During the year we have maintained a high reputation at the various examinations.

At the University of Cambridge two have obtained the M.D., two have obtained the B.C., two have taken the M.B., B.C., and one the D.P.H.

At the University of Oxford one has taken the M.B., and one the M.B., B.Ch.

At the University of London five have obtained the M.B., B.S.

At the University of Durham one has obtained the M.D., and one the D.P.H.

At the Royal College of Physicians of London one has been elected a Fellow, and one has obtained the M.R.C.P.

At the Royal College of Surgeons of England two have obtained the F.R.C.S.

Of the Conjoint Board Examinations one has obtained the D.P.H., and 58 the M.R.C.S., L.R.C.P.

One has taken the Diploma L.M.S.S.A.

## FROM THE FRONT.

**T**HE following is an extract from a delayed letter we have received from Capt. L. B. Cane. In spite of the delay, we believe it will prove interesting, more especially on account of the advertisement, which perhaps some Bart.'s man might like to tackle!

"The enclosed advertisement perhaps the Editor of the JOURNAL might like to republish, in case any Bart.'s man wishes to try for the Rs. 1,500 reward!



"The advertiser is very broad-minded, and has 'no prejudice to any kind of treatment—alopathy, homœopathy, ayurvedi, yunani, kabach maduli, etc.'—so there ought to be an opening for someone! I pity, however, the poor hysterical patient.

"I am now stationed in Peshawar, and have been given command of No. — Cavalry Field Ambulance, mobilised here for service if required on the North-West Frontier.

"We are ten miles from the opening to the Khyber Pass, with a ring of mountains almost all round. I was up in the Khyber Pass last week, and saw thousands of camels, donkeys, and wild men in caravans going and coming from Cabul.

"Capt. Holroyd, I.M.S., a Bart.'s man, is also stationed in Peshawar."

#### A REWARD OF RS. 1,500

IS hereby announced for successful treatment of a hysterical patient in the Raj family. No prejudice to any kind of treatment, Alopahy, Homœopathy, Ayurvedi, Yunani, Kabach, Maduli, etc. If personal attendance of the doctor be necessary arrangements will be made on application for his conveyance to Rajdhani, otherwise attention will be paid for strict compliance with the directions. The amount of the reward will be paid after a year of the recovery on satisfaction that the cure is permanent.—Apply sharp to MAHARAJA BAHADUR, Feudatory Chief, Sirguja State, C. P.

### DEPARTMENT FOR THE TREATMENT OF VENEREAL DISEASE.



NEW Department has recently been added to the already long list of special departments of the Hospital in the shape of one to deal with venereal diseases and their complications.

This Department has been formed by the Hospital authorities in conjunction with the Corporation of the City of London, to act under the Local Government Board scheme for the treatment of these diseases.

A special building, known as the Special Treatment Centre, situated in Golden Lane, next door to the City Mortuary, has been converted from other intentions to its present purpose, for which it is admirably suited. The building was formally opened by Col. W. R. Smith, Chairman of the Sanitary Committee of the Corporation of the City of London, on July 27th, 1917, on which occasion the origin of the Department, and the purposes for which it was to be used, were explained by the Chairman. Having equipped the Department, the Corporation authorities have left it to the Hospital authorities to administer. This will

be done in a manner similar to that carried out in the other special departments of the Hospital.

Mr. Girling Ball is in charge of the Department, and under him there is a staff consisting of a full-time Chief Assistant, House-Surgeon, Dressers, Clinical Assistants, and Pathological Dresser. There is also a Sister-in-Charge, who is resident in the institution, with nurses under her.

The building has adapted itself admirably for the purpose for which it is required. On the lowest floor is the Medical Officer's room, in which patients can be seen by the Surgeon separately, and as privately as can be hoped for by any class of patient that may attend the institution. Adjoining this are waiting-rooms, a small dispensary and a record room.

On the floor above are two wards capable of holding ten or more beds, which are to be used for the treatment of such patients as may require admission; one of these is set apart for males and the other for females.

On the top floor is a large demonstration room (with a pathological bench for minor examinations), capable of holding a large number of men desiring to attend demonstrations. Adjoining this are two smaller rooms, one set apart for dealing with the cases suffering from syphilitic lesions, and the other for gonococcus cases; dressing-rooms are attached to each.

For the present, the hours of attendance for new patients are on Mondays (women and children) from 12–2 p.m., on Wednesdays (men) from 12–2 p.m., and Fridays (men) from 5–7 p.m. It may be necessary to extend these times, but not during the period of the war. Special hours are set apart, by arrangement with the patients, for the inoculation of salvarsan and its substitutes, and for such special investigations as may be required.

Minor pathological investigations are carried out in the Department, but the more elaborate methods, including Wassermann reactions, are to be performed in the Pathological Department of the Hospital. This work is done by the Chief Assistant of the Department.

#### CASES TO BE TREATED AT THE SPECIAL TREATMENT CENTRE.

Under the scheme of the Local Government Board, any person who applies for treatment can obtain such, without payment of fee and irrespective of the district in which he lives, providing that he has either syphilis or gonorrhœa in a communicable stage. So far as this Department is concerned, all other cases not in the communicable stage are referred to the department of the Hospital to which they rightly belong, unless they are only sent for an opinion by a practitioner outside the Hospital, or are expressly sent by a member of the Hospital Staff or practitioner for treatment. In the event of the case not being suitable for treatment at the Centre, notification will be sent to the doctor in charge of the case. Cases may also be sent for pathological in-



vestigations, for which purpose application forms as to the examination required may be obtained from the Medical Officer of Health of the City of London, Guildhall, E.C. All cases of venereal disease (in any shape) in the various hospital departments are to be notified to the Department on cards provided for the purpose, in order to comply with the request of the Local Government Board, whether they are to be dealt with by the Department or not.

The notification cards are to be sent to the Dispensary, from which they will be sent to the medical officer in charge of the Department.

If the case is to be treated by the Department, it can be transferred from the hospital with a card provided for that purpose.

It should be pointed out that when a patient reaches the Centre his name is entered in a book opposite a number, which number he is known by, and appears on all his records.

#### WASSERMANN REACTIONS.

All the necessary blood tests throughout the Hospital are in future to be carried out by the Chief Assistant of the Venereal Department. The tests will be carried out once a week. When it is desired that such should be done in departments other than the Venereal Department, due notice should be given to the Chief Assistant, who, together with the House-Surgeon, will be willing to collect the blood if so desired.

With regard to the cases in which blood tests are requested by medical practitioners outside the Hospital, apparatus for collecting the blood can be obtained on application to the Medical Officer of Health of the City of London at the Guildhall. It is preferable that the patients should come to the Centre for the collection of the blood, which thus is not interfered with by the necessary transference through the post.

#### SALVARSAN AND ITS SUBSTITUTES.

The State and the City Corporation are prepared to pay the expense of these drugs free to all patients who are willing to come for treatment at the Department. The distribution of these drugs to medical practitioners or others not connected with the Department is only allowed on these lines under certain conditions: by the presentation of a certificate of competency to administer the drug, obtained from an officer recognised by the Local Government Board; such certificates can be obtained from the Medical Officer in charge of the Department. This allows general practitioners to treat their own cases if they wish to do so, at the same time obtaining the drug required free of charge.

In order to obtain salvarsan or its substitutes a practitioner outside the Hospital must apply to the Medical Officer of Health of the City of London, at the Guildhall, having got his name placed on his register by forwarding to him the certificate obtained from the Department.

Certain hours are set aside for the administration of these drugs apart from the periods during which the clinics are held. At these hours the medical officers of the Department are anxious to demonstrate their methods to any and all who may wish to attend.

Notification of every dose of salvarsan given in the Hospital must be made to the Medical Officer in charge of the Department, in order that returns of the numbers and the doses of drugs used can be returned quarterly. Special cards of request for these drugs are provided, and before such can be obtained from the Dispensary the card must be duly filled in, and the notification of the case must have reached the Department.

#### TEACHING IN THE DEPARTMENT.

A course of lectures in venereal disease will be given during each Summer Session on these subjects, open to all who may desire to attend.

Demonstrations are held at each attendance at the Clinic, including an exhibition of cases, simple pathological methods, the taking of blood for Wassermann's reaction, urethroscopies, general urethral examinations, and local methods of treatment.

The methods of giving salvarsan and its substitutes are also demonstrated at fixed hours, and it is hoped that all who desire to become accomplished in these methods will take the opportunity of attending in order to learn for themselves the practice of these methods.

These subjects have suddenly become of considerable importance, both from the point of view of treatment and in public health, that it is very desirable that all who can should make themselves familiar with up-to-date methods. It is hoped that the Department of St. Bartholomew's Hospital will take a high place in this direction, and it is for this purpose that all are cordially invited to visit its clinics.

W. G. B.

### SOME PROBLEMS IN BONE SURGERY.

*The Mid-Sessional Address before the Abernethian Society,  
June 7th, 1917.*

By ERNEST W. HEY GROVES, M.S., F.R.C.S., Major  
R.A.M.C.(T.).



LADIES AND GENTLEMEN,—I deeply appreciate the honour which you have done me in asking me to address you to-night, and although it is more than twenty years since I have spoken in this Theatre, I feel the glamour of the old school as an inspiration to give you of my best. I propose to ask your consideration of five different problems in the surgery of bones and joints, and if these appear to you to be disconnected with one another I must ask your patient indulgence until the conclusion,



when I hope to show you the guiding thought which is common to them all.

#### THE PROBLEM OF GUNSHOT FRACTURES OF THE FEMUR.

I show you here the splint which was designed in the stress of active service in Egypt for the treatment of fractured femurs associated with septic wounds. It consists of a wire frame in which the limb is slung. This is supported on a metal framework which rests on the bed, and bears at its lower end two uprights, with a pulley-wheel which can be fixed at varying heights. The leg is slung to this frame by double strips of flannel bandage and by special slings of stout rubber, the latter being employed in the neighbourhood of the wound. The limb is suspended in such a position that both hip- and knee-joints are semi-flexed. Not only does this relax the tension of the great flexor muscles, but it greatly facilitates the proper alignment of fractures at the upper and lower ends of the femur, in the former the upper fragment always tilting forwards, and in the latter the lower fragment always tilting backwards. The replacement of the fracture and its maintenance in correct position is carried out by means of weight extension, applied by means of a transfixion pin passed through the head of the tibia, and a weight of 15 lb. attached to the pin by means of a horse-shoe claw. Counter-extension is necessary, and must be applied by a padded band passing round the opposite thigh and tied to the head of the bed. This not only prevents the patient being pulled down by the weight, but it tilts the pelvis so as to secure abduction of the fractured thigh. This method of extension has the great merit of efficiency, so that within a few days of its application the femur is actually longer than on the sound side. This means that the broken fragments of bone are entirely disengaged from one another, and as the weight is gradually reduced the broken bone re-joins in correct position. It also has the advantage of being much less painful than any form of extension which is applied by adhesive plaster, and it leaves the limb quite free for massage and movements of the joints. The dressing can be done as often as may be necessary by merely throwing aside the rubber sling which supports the wounded portion of the limb. In fractures below the knee the foot is to be fixed to a foot-piece which allows of adjustment in any direction, and by means of which extension can be applied, the leg being slung on the same splint as described above. The special advantages of this foot-piece are that the exact degree of eversion required can be obtained, and that by the provision of a valgus pad, so pivoted that it can be fitted to a right or left foot, the arch of the foot is maintained and the foot is prevented from slipping backwards on the foot-piece. If there is no wound in the lower part of the leg, the foot-piece can be attached to the foot by means of glue and bandages. If there is a wound near the ankle it is better to use a transfixion pin passing through the os calcis.

#### THE PROBLEM OF CLOSED FRACTURES OF THE FEMUR.

You are probably all aware that the operation of plating the femur is not only a difficult one, but is one which often fails on account of the screws becoming loose. It is not difficult to explain this. A long plate, however many-holes it contains, will only provide for screws holding the bone in one plane. The great force of the adductor muscles tends to bend the bone and to pull the screws out from one fragment or the other. This problem may be solved by using little metal clips shaped like the quadrant of a circle, which can be fitted on to an ordinary Lane's plate at any point in its length. These clips give bearing to two screws, each of which perforate the bone at right angles to one another. If four such clips are used, one at each end of the plate and one on each side of the fracture, then there will be a mechanical system provided in which the fixing screws all lie outside the plane of force which tends to move the fracture.

#### THE PROBLEM OF THE OLD MAL-UNITED FRACTURE.

In the case of an old fracture of the femur with much angulation and deformity, it is a matter of common experience that the correction of this deformity is an exceedingly difficult matter if undertaken as the first stage of an open plating operation. The correction of the deformity should never be undertaken at a single sitting. It is sufficient by a simple osteotomy to divide the point of mal-union, and then to place a transfixion pin through the lower end of the bone, attaching to the latter a weight of 50 lb. Such a big weight is best arranged by using two multiplying pulley-blocks and a weight of 10 lb. The patient is kept under morphia for twenty-four hours, and then the weight is reduced to 30 lb. At the end of a week the bone has been drawn out to its full length, and a plating operation can be undertaken to fix it. But as under such circumstances the ends of the bone are sclerotic and slow to unite, it is necessary to fix the plate by a method which will hold the bone in position for an indefinite period. This is carried out by passing a series of bolts right through the bone, and by means of nuts screwed to these fixing it to the plate.

#### THE PROBLEM OF FIXING A BONE-GRAFT.

Time forbids me to enter into any general discussion about the principles of bone-grafting, but the practice of this method for repairing bone defects is becoming more important every day, and I will confine myself to touching upon a few details of practical importance. In transplanting a piece of bone so that it will become incorporated in the skeleton in its new position, the processes of transition between a dead bone strut and a piece of living bone are matters of unsettled controversy. But there are two facts about which there can be no doubt whatever, and these relate to the mass and the fixation of the graft. In regard to the mass or bulk of the graft, this should be cut of the



full size that is required in the defect to be filled, because new growth of bone from the grafted area is very slow and uncertain. It is a fallacy to suppose that by dividing up a bone-graft into little bits that it will increase the ultimate bulk of bone produced; in fact, quite the contrary is the case: little pieces of bone, loose in the tissue, remain indolent or become absorbed unless they are fixed in close contact with living vascular bone. The second point relates to the method of fixing the graft to its bed. In general terms four principles are to be observed: The graft should be fixed to the outer surface or cortex of the bone, and not driven into its medullary cavity. The area of contact between the graft and the bed should be as wide as possible. The fitting of the graft to its bed should be exact and accurate. The fixation of the two bones should be so secure that not the slightest movement between them is permitted. When the bone to be repaired is merely one of the forearm bones, the fellow to which is intact, then the fixation of the graft may be of a simple character, as there will be but little tendency to move it. But if the bone to be repaired has no companion bone to support it, *e.g.* the humerus or femur, the method of fixation requires careful arrangement. First the ends of the bone to be united are exposed and all the superfluous scar-tissue cut away; then a portion of each fragment of the same length as the gap to be filled, and of a thickness representing rather more than one quadrant of the bone, is cut out by means of a circular saw. The transverse cuts which separate these quadrants removed from the fragments are made not exactly at right angles to the axis of the bone, but recessed inwards. The effect of this shaping of the socket for the graft is that when the latter is in place it is held in its socket in the same way as a dovetailed joint. The graft is cut from the patient's own tibia, the size and shape being made to exactly correspond with the grooves cut in its future bed together with the gap between. Thus, for example, if a 2-in. gap has to be filled, then a 6-in. graft is used, a third of which is morticed into the fragment above and below. There are two methods by which the graft can be fixed in its place: the one is by a piece of soft iron wire, which surrounds both bones, and the second is by ivory nails, which pierce both structures. These nails, to the number of three or four on each side of the gap, are placed in different directions, generally as two series at right angles to one another.

#### THE PROBLEM OF RUPTURED CRUCIAL LIGAMENTS OF THE KNEE-JOINT.

You are probably aware that rupture of one or both crucial ligaments of the knee is a much commoner accident than used to be supposed. You will also readily appreciate the great difficulty which confronts the surgeon in the operative repair of these lesions. A little frayed remnant of tissue in the depths of the joint will not hold any kind of suture in a manner which will support the weight of the body.

Hitherto all these cases have had to resort to the use of a cumbersome jointed apparatus which is far from satisfactory. But I think this problem also can be quite efficiently solved by a method which is the outcome of anatomical and mechanical principles. Take first the case of the anterior crucial ligament. This runs obliquely from the external condyle of the femur above to the front of the tibial tubercle below. The exact recognition of the nature of the lesion can only be made by an adequate exposure of the interior of the joint, gained by cutting through the tubercle of the tibia and turning up the patella. The knee is fully flexed, and the torn ends of the crucial ligament fully exposed. A wide twist drill  $\frac{1}{4}$  in. in diameter is taken, and with it a hole is bored, first in the external condyle of the femur upwards and outwards, and then through the internal tuberosity of the tibia downwards and inwards. In each case this hole is commenced from the interior of the joint, starting from the exact point of attachment of the torn ligament. Then the ilio-tibial band is defined and separated from its lower attachments, so as to form a strong ligament attached above, but with a free lower extremity. The latter is then threaded through the canal already made in the femur and the tibia, drawing it first of all down into the knee-joint, and then through the head of the tibia from the latter situation.

After it has been drawn out on the surface of the tibia the end of the new ligament is turned up and sewn to the fascia and periosteum. In this way a new, strong, living ligament is made to take the exact place originally occupied by the ruptured crucial. In the skiagram which I show you, you can see the new canal made for the ligament in the two bones. In the same way a new posterior crucial ligament can be made by the employment of the tendon of the semitendinosus muscle.

It now only remains for me to justify the putting together of these somewhat disjointed remarks. If I have convinced you of the importance and the difficulty of the various problems which we have been considering, and if you are impressed with the idea that the methods which I have suggested represent practical solutions for these problems, then my final task will be easy. There is one underlying principle which has inspired all these ideas, and that principle is one of mechanical efficiency. Anyone who aspires to do good work in the realm of the surgery of bones and joints must be prepared to make himself master of mechanical technique. At present I am aware that many branches of recondite study are forced upon your attention, and you are expected to be familiar with physiology, bacteriology, and pathology. But however great are the claims which these things make upon you, let me remind you that the comparatively simple art of the mechanic is none the less essential for the training of the surgeon who would mend bones and joints.



## CORRESPONDENCE.

## OLD BILLS OF MORTALITY.

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

DEAR SIR,—With regard to the Bill of Mortality appearing in your August issue, it may be noticed that these Bills were published in the vernacular, a practice which was continued well into the nineteenth century. As a result many of the old terms are not to be found in contemporary medical books; on the other hand some of them linger on among the people to this day.

"Rising of the lights" is "wind," a feeling of oppression or suffocation after food which clearly has no real connection with the lungs or lights. I have reliable information about a man who was in the habit of taking a dose of small shot after a meal "to keep the lights down." He lived to a good old age! The term is quite common locally in application to pigs.

"Surfeit" is over-eating, the great number of deaths quoted being doubtless due to our fore-fathers' fondness for eating and drinking competitions; possibly apoplexy and other sudden seizures are included.

"Mould fallen." "Mould" is the anterior fontanelle; "head mould" is the skull. "Mould fallen" is collapse of the fontanelle. "Head mould shot" a condition in new-born infants in which the edges of a suture, especially the coronal, ride or are shot over one another; also, contradictorily, hydrocephalus. Mauriceau in his *Diseases of Women with Child*, 1736 and other dates, devotes a chapter to "The Mould of the Head."

"Purples" is purpura both as a symptom and disease; any condition, in fact, having petechiæ as a symptom. Culpepper in his *London Dispensatory*, 1654, speaks of "the Plague, the smallpox, measles, purples, or other infectious disease."

"Flox" is a misprint for "flux."

"Mother" is hysterical convulsions, also the uterus.

Trusting that these notes may be of some assistance to your correspondent.

Believe me, yours faithfully,

GEOFFREY C. HOBBS.

September 9th, 1917.

## OPERATING IN SPECTACLES.

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

DEAR SIR,—I have been doing Dr. Griffith's work at Milbank Military Hospital of late. I picked up two little hints which might be valuable to "old" Bart's men like myself who "have to wear glasses when they operate," and who find that "with a mask on" the "steam" from one's breath dimming the glasses is very annoying during an operation. The tips I was told of are:

(a) Before operating dip your glasses in *warm lysol solution* and polish with soft towel or lint. This leaves a thin film of soap on the lenses.

(b) Use a nose and mouth mask as usual, but along upper border sew in a piece of soft dental wire. This allows the mask when tied over the nose and mouth to be moulded to the shape of nose and face and the glasses go over this, thus one's breath does not reach the glasses and cause any dimming. I have tried it myself and it's very good.

Very truly yours,

C. HUBERT ROBERTS.

21, WELBECK STREET, W.

August 30th, 1917.

## APPOINTMENTS.

ALDOUS, G. F., F.R.C.S.Ed., appointed Consulting Surgeon to the Kingsbridge Cottage Hospital.

HEATH, C. J., F.R.C.S., appointed Consulting Aurist to the Metropolitan Asylums Board Infirmary for Children.

SALT, A. P., M.R.C.S., L.R.C.P., appointed M.O. to the Totnes Workhouse, and M.O. and Public Vaccinator to the Totnes and Haberton Districts of the Totnes (Devon) Union.

SAMY, A. H., M.R.C.S., L.R.C.P., appointed House-Surgeon to the Metropolitan Hospital, Kingsland Road.

## CHANGES OF ADDRESS.

CLARK, FRANCIS, 13, New Road, Rochester, Kent.

FAWKES, M., Surg. R.N., H.M.S. "Raglan," c/o G.P.O., E.C.

Joy, N. H., Theale, Berks. Tel.: Theale, 23.

KENT HUGHES, W., Major, A.A.M.C., c/o Bank of Australasia, 4, Threadneedle Street, E.C. 2.

MAINPRISE, C. W., Lt.-Col., R.A.M.C., 61, Gunterstone Road, West Kensington, W.

MARSHALL, J. C., Capt., R.A.M.C., Ophthalmic Centre, 2nd Army, attached to 50th Casualty Clearing Station, B.E.F.

ROWORTH, A. T., 56, Waldegrave Park, Twickenham.

SAMY, A. H., Metropolitan Hospital, Kingsland Road, E. 8.

TURNER, P. E., 36, Halford Road, Richmond.

WILLES, C. F., Surg. R.N., H.M.S. "Halcyon," c/o G.P.O., E.C., and "Ringstead," Milton Road, Bournemouth.

## BIRTHS.

BLAKEWAY.—On August 7th, at 1, Weymouth Street, W. 1, the wife of Harry Blakeway, M.S., F.R.C.S., of a son.

CARTER.—On August 19th, at Balgownie, Oak Hill Park, Liverpool, the wife of Major R. Markham Carter (temp. Lt.-Col.), F.R.C.S., Indian Medical Service, of a daughter.

GLOVER.—On August 3rd, at Hill Crest, Husbands Bosworth, Rugby, the wife of Norman Glover, B.M., of a son.

HAINES.—On August 29th, at St. Luke's House, Gloucester, the wife of Lieut. R. L. Haines, R.A.M.C., of a daughter.

ROXBURGH.—On August 30th, at 19, Belgrave Crescent, Edinburgh, the wife of Temporary Surgeon A. C. Roxburgh, R.N., of a son.

SANGER.—On August 28th, at Rendcomb, near Cirencester, to Cicely (née Crewdson), wife of Frederick Sanger, M.D., a son.

STATHERS.—On August 12th, at the Elms, Turweston, Brackley, the wife of Surgeon Gerald Stathers, R.N., of a daughter.

TRAVERS.—On August 8th, at 2, Phillimore Gardens, W., the wife of Ernest Travers, M.D. Lond., of a son.

## DEATHS.

BOSTOCK.—On August 17th, 1917, at 4G, Portman Mansions, W., Surgeon Captain R. Ashton Bostock, Scots Guards, of Penmaen, Glamorgan, son of the late Surgeon-General John Ashto Bostock, C.B., Scots Guards.

CUFFE.—On August 31st, 1917, at Parkstone, Robert Cuffe, M.R.C.S., formerly of Guildford Street, London, and Woodhall Spa, aged 88.

EAST.—On July 31st, 1917, killed in action, Captain Gordon Doulton East, M.B., R.A.M.C., att'd. Grenadier Guards, only son of the late Mr. and Mrs. J. F. East, of Lewisham, and 27, Lytton Grove, Putney, aged 28.

GREENFIELD.—On August 17th, from wounds received in action on August 16th, Gerald Henry Greenfield, Second Lieut., R.F.A., elder son of the late Henry Greenfield, of Belle Eau Park, Southwell, and Mrs. Greenfield, Edenmore, Woking, aged 20.

"Quo fas et gloria ducunt."

SYMONS.—On August 25th, 1917, William Henry Symons, M.D., D.P.H., of 39, Combe Park, Bath, aged 62.

## NOTICE.

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

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

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

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