THE WAR IN SOUTH AFRICA.

SURGICAL NOTES FROM THE MILITARY HOSPITALS IN SOUTH AFRICA.

[FROM OUR SPECIAL WAR CORRESPONDENT.]

Maritzburg, February 10th, 1900.

SLIGHTER BULLET WOUNDS.

OUT-PATIENTS.

THE graver varieties of gunshot wounds naturally attract chief attention, but the slighter injuries have also a peculiar interest in the present campaign. The recoveries are, indeed, often so remarkable that the term "slight injury" is a very elastic one, and must be construed only as signifying that the patient is likely within two months to be able to return to active duty. Through the kindness of Major Browning, R.A.M.C., I was enabled to see all the cases of gunshot wounds in the Fort and Lower Barracks Hospital at Pietermaritzburg, the men being specially paraded for the purpose. The bulk of these had been wounded in the action at Colenso on December 15th, and were seen about four weeks later. Practically, and in civilian phraseology, they were out-patients. Many of the cases were simple flesh wounds that had healed at once and completely without any trouble. The extent of extravasation in some of these cases was noteworthy, and suggested that the injury was by no means confined simply to the parts traversed.

FLESH WOUNDS.

The hard cicatricial cord resulting from the passage of the Mauser bullet was often more marked when the bullet had traversed a large muscle. In a remarkable number of the cases the wounds were of the thigh and in the close proximity of the femoral vessels. The apertures of entrance and exit resembled each other absolutely. In a case in which the gluteal region was traversed on both sides the four wounds were all exactly alike. Cases in which great and persistent pain follows a flesh wound where the bullet has passed close to a nerve have been already mentioned in a previous letter. Such are very common, but were naturally not among the patients attending medical inspection.

WOUNDS OF THE HAND AND WRIST AND FOOT.

In a few—a very few—instances fingers had been amputated, but more it seemed with the object of giving the most useful hand possible than because the injury of the bones of the finger or phalangeal joints was such that local recovery could not take place, or because any septic complications threatened. One man had three fingers wounded. The bullet grazed the skin over the back of the little finger, and just grooved the proximal phalanges of the third and fourth on the back. The wounds healed at once, but the power of extension was much impaired. Such grooving of the shafts of the longer bones appears to be rare; usually a fragment is broken off. The small bones of the carpus and tarsus are constantly drilled, without any apparent comminution, by the Mauser bullet. Thus, one patient showed a transverse wound of the anterior half of the tarsus; the wound healed throughout at once. In another case the entrance wound was over the middle cuneiform bone, and the exit through the os calcis. The bullet probably traversed the scaphoid and astragalus as well as the two bones named. There was no impairment of the utility of the foot. When the small diameter and the rapid rotation of the Mauser bullet are taken into consideration, it is of course not very remarkable that so little mischief is caused. The injury to the bones is scarcely greater than is involved in inserting a screw for fixing together the fragments in a bad fracture or a broken olecranon. So long as the wound is aseptic no harm should result, and in the great majority of Mauser bullet wounds the track is perfectly aseptic from the first apart from treatment.

WOUNDS OF THE PATELLA AND KNEE-JOINT.

Many cases have been noted in which the patella has been cleanly drilled through by bullets. Such cases almost uniformly do well unless complicated with injury of the popliteal vessels or nerve. Extensive hæmarthrosis may form in the knee, but subsides without trouble. A man with a wound of the knee received about a month previously illustrated this. The bullet had passed through the patella obliquely, and made its exit on the outer side of the joint. No trace of the injury to the bone could be felt, and the joint, in which there had been considerable effusion of blood, was perfectly movable. In one case, at Wynberg, the bullet (a Lee-Metford) caused a transverse fracture of the patella. In this instance the entrance wound was in the popliteal space. I have not been able to hear of any other cases of fracture of the patella, though very possibly some will come to light hereafter. The contrast between the results of wounds of the knee-joint in this and previous wars will certainly prove very striking.

HEATING OF THE MAUSER BULLET.

A curious case of possible burn from a bullet was shown in a wound received by a corporal in the Queen's Regiment. The bullet (possibly a spent one) had struck the shaft of the tibia close to the crest transversely, and apparently had drilled the bone. There was a little irregularity of the bone, and a fragment may have been displaced. Close to the exit wound was a mark resembling a burn the extent and shape of a bullet. The patient's account was that he had felt himself hit and felt something burning his leg. On removing the puttie the bullet was found lying underneath it. The man stated that it was "red hot," a perhaps pardonable exaggeration. The bullet, at any rate, was too hot to hold in the hand without pain. The bullet was not a ricochet in appearance. Another patient gave a somewhat similar account. In this instance the bullet entered 1 inch to the right side of the eighth dorsal spine, and made its exit 3 inches below the clavicle on the same side, without traversing the thoracic cavity. The bullet dropped down inside the shirt and burnt the skin of the abdomen. The bullet was found inside the clothes a day or two later. Such accounts have to be received with a certain amount of caution, but undoubtedly the mark on the skin of the abdomen did resemble a burn. It is often supposed popularly that the temperature of bullets is greatly raised by the friction of the air. The supposition does not seem to rest on an experimental basis. Arrest of movement would develop heat, of course, but the prodigious range of the small-bore bullet shows that the friction is exceedingly slight. Markers at rifle butts are familiar with the fact that ricochet shots (which are recognised by the peculiar hum they make in passing through the air, and which often fall dead by the shelters or drop back off the target), if picked up at once are warm or even hot; but in such cases the movement has been violently arrested. It is possible that some heat might be developed by the arrest of the bullet by the clothing, but in such a case the missile cannot have been travelling with any great velocity. A ricochet shot loses the spin in its longitudinal axis that it acquires in passing through the rifled barrel, but as it glances off after the impact it may revolve on a transverse axis, turning over and over in its flight. It is therefore unlikely to make the small wounds of entrance and exit characteristic of the perfect smallbore bullet. Moreover, the nickel sheath of the bullet will probably split up as the bullet strikes the earth and bounds up or glances from it. It is occasionally stated that the cicatricial cord resulting from the passage of a smallbore bullet through soft tissues is due to the cauterising action of the bullet. Such a view is hardly to be taken seriously. The cicatrix resembles no doubt that which might be caused by passing a thick galvanic wire through the tissues, and then raising it to a temperature sufficient to burn the tissues. But the cicatrix of a bullet wound is not produced in that way. The velocity with which it passes through the tissues is too great to allow time for any cauterising action, even if the bullet were at white heat.

INJURIES OF THE HEAD AND NECK.

The injuries of the head and neck were not numerous. A private showed a wound of the side of the neck. The exit wound was into the pharynx, and the man spat up the bullet. Instances of the kind were numerous enough in the days of round bullets and low velocity, but are not likely to occur often with modern firearms. Another patient showed a transverse linear scar over the frontal sinus. The bone beneath was deeply and irregularly grooved, and evidently the anterior plate of the bone had been rather extensively fractured, be-

having like the inner table of the calvarium in cases of "gutter fracture." No trouble had resulted save rather profuse epistaxis, and apparently the injury to the supraorbital nerve did not threaten any evil consequences.

WOUNDS OF THE THORAX.

A private in the King's Royal Rifles was wounded at the action of Elandslaagte by a bullet which traversed the scapula and thorax. Some hæmoptysis followed the injury, but there was no other untoward symptom. The wound healed throughout at once soundly. Many of the patients with similar injuries, though apparently completely recovered, are troubled with shortness of breath on slight exertion, and this seems usually to be the case where both lungs have been traversed, even when there has been no pneumothorax—which is seldom seen—or hæmothorax, a complication which occurs pretty frequently.

WOUNDS OF THE LIVER.

Another private, also wounded at Elandslaagte, had a more extensive wound. The bullet entered in front close to the right side of the sternum on a level with the seventh costal cartilage. The exit wound was seen 3 inches above the right sacro-iliac joint. The possibility of the wounds in such cases being caused by different bullets must always be taken into consideration, seeing that in a vast number of cases there is no appreciable distinction between the apertures of entrance and exit; but in this case there seemed no doubt that the bullet had traversed the right lung and the liver. The direction of the wound corresponded to the position the man was in when the wound was received. The wound had healed throughout without causing any trouble at all. In another case in which the bullet had probably traversed the upper part of the liver superficially, there had been some hæmatemesis, but practically no other symptom.

WOUNDS OF THE INTESTINE.

In the following case the small intestine was probably wounded. The injury was sustained at the action of Colenso on December 15th. The Mauser bullet entered close to the posterior superior spine of the ilium on the right side. The exit was on much the same horizontal level, between 3 and 4 inches from the umbilicus, and to its left. It is almost inconceivable, therefore, that the small intestine could have escaped injury. The man had been without any food for many hours before the wound was received, and stated that at the time the abdomen was collapsed. No vomiting followed the injury, but for two days there was much distension. This latter symptom gradually passed off, and recovery took place uninterruptedly. Four days after the injury the man, according to his own account, was able to walk about, having probably noted the absence of the medical officer and nursing sister. Whether true or not, it is at least possible, in the absence of any specific orders being given to the orderly to keep the patient in bed. For the best of hospital orderlies do not watch their patients with the unwearying and intelligent attention so characteristic of a good trained nurse. In this instance no operation was done. I can recall only a very few similar instances of recovery where the small intestine was presumably wounded. Cases in which the large gut was injured, as far as could be judged followed by complete recovery, are rare, but more common. Full statistics are needed before the question of operative interference in gunshot wound of the abdomen can be properly discussed, and these are not yet to hand. The impression at present seems to be that the results of laparotomy have not so far been encouraging. Everything depends, however, on the time that elapses between the infliction of the wound and the laparotomy. Hitherto, as far as I have been able to ascertain, the time that has elapsed has been so considerable that the chance of recovery was but remote. Very protracted operations are hardly feasible in a field hospital when there is any rush of wounded, and by the time that the patient has been transported to some place where there is opportunity for performing the exploration with due deliberation, the most favourable moment has passed, and the difficulties to the operator are vastly increased. Moreover, as the above and other cases show, recovery may take place in cases in which, if they were seen in civil hospitals soon after the injury, exploration would in most instances be advised.

CLINTON T. DENT.

THE HOSPITAL SHIPS AT DURBAN, NATAL.

By Sir WILLIAM STOKES, M.D., F.R.C.S.I.,

Surgeon in Ordinary to the Queen in Ireland, and Consulting Surgeon to the Field Forces in South Africa.

Pietermaritzburg, Natal, February 7th, 1900.

ON February 2nd, accompanied by Major MacCormac, R.A.M.C., Senior Medical Officer, Durban, I visited and inspected the four hospital ships then stationed in the harbour at Durban. These were the *Nubia*, the *Maine*, the *Lismore Castle*, and the *Avoca*. The first and two latter of these have in an incredibly short time—about ten days, I heard—been converted from passenger and troop ships into floating hospitals. The transformation was effected entirely at Durban. In the first-named vessel 216 patients were accommodated, of whom 100 were convalescents. The light, space, ventilation, baths, lifts—worked by hand—from one deck to another, movable electric fans, swinging cots, etc., showed that there were few requirements unthought-of to secure the comfort of the patients. Colonel Hodder had the medical and surgical care of the patients, assisted by four civil practitioners.

Dr. Ashton showed me two very remarkable cases that were under his care, both happily convalescent. In the first case the bullet entered about ½ an inch to the right of the eighth or ninth dorsal spinous process, and, passing through the lung, emerged 1½ inch below and to the right of the right nipple. The patient had some slight hæmoptysis after he was wounded, but since that no bad symptoms whatever. In another case the bullet entered about 1 inch below the spine of the right scapula and emerged a little to the left of the sacrum. The length of the traverse of the bullet was 18½ inches. The wound in this case remained perfectly aseptic, and is now quite healed; the patient does not suffer any inconvenience except occasional pain, which he refers to the lumbar region. In the *Lismore Castle* and *Avoca* the arrangements for the comfort and convenience of the patients were most satisfactory. Dr. Brodie, with three assistants, has medical charge of the first of these. It has accommodation for 264 cases; of these, 150 were convalescents and 114 under treatment, or "cot cases" as they are termed. In the officers' quarters there were 16 cases, of which 4 were "cot cases" and the remainder convalescents.

Dr. Hamilton, one of the assistants, showed me some very remarkable cases. The first was a multiple injury, the patient having been shot in four different places, namely, through the neck, the right knee, the left leg, and the forearm. He is rapidly recovering from all these injuries. In another case the ball penetrated the nose down to the frontal bone, passed downwards perforating the hard palate, and ultimately emerged at the left side of the neck without injuring the tongue or lower jaw. The third case was a very sad one. The bullet penetrated the lower dorsal spine. Immediate paralysis of the left lower limb followed, the right lower limb remaining normal.

The last case I saw on the *Lismore Castle* was to my mind the most remarkable of all. The bullet struck and penetrated the forehead on the left side high up, and emerged at the vertex a little to the right of the occipital protuberance. The only result of this wound was total blindness of the left eye with optic atrophy.

I next visited the *Maine*, which is under the direction of Lady Randolph Churchill, and is organised and financed by American ladies. The vessel had just arrived from Capetown, and was not yet ready for the reception of patients. There is accommodation for 187 patients, Although the arrangements were still in a state of unpreparedness owing to the vessel having just arrived, it was obvious that little or nothing had been omitted that experience, knowledge, and apparently unlimited financial resources could procure. There were spring beds of the latest design, thick india-rubber matting on each side of the beds, ingeniously constructed bed tables and head rests, electric fans, etc. The strong electric lights were modified by elegantly designed green shades, all of which Lady Randolph Churchill told me were manufactured by Mrs. Joseph Chamberlain. There are electric cooking appliances of all kinds, refrigerators, and floral and foliage decorations in abundance. In fact, everything that

could be suggested for the comfort of the patients was to be found.

The medical and surgical staff, with Colonel Hensman at their head, consist of forty-five persons; there are five surgeons, five sisters, the remainder being orderlies and nurses. The nursing staff is under the skilful direction of Lady Randolph Churchill. Messrs. Burroughs, Wellcome and Co., who have furnished the medicine in the dispensary, have presented a very beautiful and ingeniously-constructed cabinet fitted with medicines in the convenient tabloid form. On the outside of the cabinet is the appropriate motto, "No distance breaks the tie of blood." In addition to the fittings and appliances already mentioned, there are baths for fever cases, and provision is also made for Roentgen-ray photography. The operating theatre has all the most recent appliances, furniture of metal and glass, and perfect arrangements for sterilising instruments, dressings, etc. If anything could be fairly criticised about the *Maine* it would certainly not be in reference to its fittings and arrangements, but the vessel itself does not compare favourably with the other hospital vessels I inspected. The low ceilings between decks and the small port windows appeared to me to be structural defects likely to interfere with both ventilation and light. Lady Randolph Churchill most kindly spared no pains or trouble to let me see all the admirable arrangements she has made, and I cannot speak too highly of them.

Were it not that this communication has already reached too great a length, I should like to mention several cases of gunshot wounds I have seen. Many of these are of absorbing interest, and the results likely to be hardly credible to those who have not seen them; but later on I hope to forward you memoranda of some of these that I have seen and been consulted on. Many of them will doubtless furnish problems the solution of which will test the ingenuity, skill, and resources both of the physiologist and pathologist.

THE HOSPITALS AT RONDEBOSCH.

[From Our Special Correspondent at Capetown.]

February 20th, 1900.

Enteric Fever.

At present things are still fairly quiet at the general hospitals. The cases cleared out of the advance hospitals preparatory to Lord Roberts's brilliant march were not generally of much interest and were mostly convalescent, and the casualties hitherto in that march have been infinitesimal. A few cases have come down from the Colesberg operations and will be dealt with later when I come to speak of the Rondebosch hospitals, whither most of them have gone.

The influx of cases from the front has generally more of a medical than a surgical aspect. Enterics are coming in pretty freely to all the general hospitals, most of them of course in a convalescing stage. Still, they are not in sufficient quantity to shake one's belief in the sanitary arrangements at the front. At this time of year enteric is more or less rife all over the country, and to expect freedom from it in camps would be to expect the unattainable. The station hospital is getting a good number of cases in the earlier stages, from the camps at Green Point and Maitland, and from the various stations along the railway line. Four cases of this affection landed from the Australian transport a few days ago. Three of them commenced to be ill some ten days after commencing the voyage, the fourth only a few days before landing. The three first cases are convalescing steadily. The other cases of enteric recently admitted have been of a somewhat severe type generally. It is noticeable that at all the hospitals a large number of typhoid cases persist in a prolonged pyrexia of an erratic character, the temperature in the fourth, fifth, or sixth weeks running up to 103° or so every evening, with a drop nearly to normal in the mornings for a few days; then the range becomes less, the maximum being perhaps 100° for a few days more, but then mounting again. This constantly happens without any perceptible explanatory complication, and with the utmost care in diet and regimen. Exactly the some thing is observed in civil practice. One case died at the Station Hospital last week. Violent hæmorrhage came on on the twelfth day, and later symptoms of perforation with localised peritonitis. The case had been hitherto a mild one, with only very moderate diarrhœa. At the necropsy, a perforation quite the size of a shilling was found just above the ileo-cæcal valve. This perforation was evidently through a gangrenous patch, and a plugged vessel around it. The Peyer patch lesions corresponded to the assumed date of the disease. The medical officer in charge of the enteric ward informs me that he finds nothing controls diarrhœa in typhoid fever so effectively as the indigenous drug *Monsonia*, which I mentioned in my last letter.

Enteric Fever in the Inoculated.

At No. 3 General Hospital, where there are a large number of cases of enteric fever, a certain proportion of whom have been inoculated, it is very instructive to note the temperature charts. In all the inoculated cases which I have seen, except one, the temperature has dropped steadily and punctually at the fourteenth day or thereabouts, and has never gone up again. The uninoculated cases run on with the erratic temperatures I have described before. At Rondebosch the favourite drug in typhoid fever appears to be salol, but I think most of the elder hands at all the hospitals have very little faith left in drugs except in complications.

The New Bearer Companies.

Some modification of the arrangements with reference to the recently raised bearer companies has been made. D Company went up a few days ago under Major Nicol, R.A.M.C., but it has been taken over bodily by the officers of one of the R.A.M.C. companies, and Major Nicol has just returned. He is to take permanent command of E, and his senior subaltern will be Surgeon-Lieutenant Vaux of the Royal Canadian Medical Corps. The junior will be Lieutenant Fryer, whom I mentioned last week. Surgeon-Captain Black, on account of a breakdown in his health, is not able to go to the front after all. E Company, Medical Staff Corps, leaves to-night or to-morrow. Both these newly-raised companies present a very creditable appearance, and will be very fit for bearer work.

Movements of Hospitals.

No. 6 General Hospital has arrived, and is to be fixed at Nauuwport. Four Canadian nursing sisters have been posted to Wynberg.

It has been arranged that Lord Iveagh's hospital will be at Beaufort West. This Karoo town is extremely well situated, but is a perfect hotbed of typhoid. However, once on the Karoo, Matjesfontein and Beaufort West are practically the only places available, and for hospitals now being established it is perhaps as well to go inland, as well because of the moving forward of the troops as because of the continuous rains with which Capetown will shortly be visited practically daily. The Yeomanry Hospital is, I understand, to be fixed inland after all, and it is quite possible that one, if not two, of the general hospitals may make an up-country move.

Phthisis after Lobar Pneumonia.

Owing to the approaching change of seasons it is becoming a question what should be done with the phthisical cases which are accumulating. Apart from ordinary cases of the disease, there is a notable tendency which it is a little difficult to explain, for quite a number of men who had had lobar pneumonia to develop a rapidly-advancing form of phthisis directly as a sequel of the former affection. Dr. Darley-Hartley, who has charge of the medical wards in the right wing of the station hospital, emphasises this tendency, and has verified his diagnosis early by bacteriological investigation. Hitherto it has not been considered advisable to send those patients home to an English winter, while none of the base hospitals—the station hospital least of all (on account of its dusty and windy situation)—are suitable for open-air treatment, more especially as these cases are mostly of a rapid and high febrile type. Should any of the general hospitals be moved up-country the cases could be advantageously dealt with there, or, if not, they will probably be sent to Netley, which after another month or two will be a better climate than the Cape Peninsula.

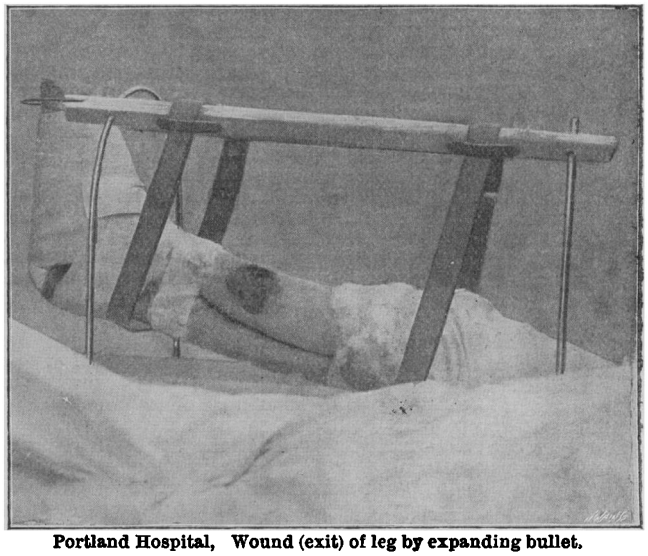
The General and Portland Hospitals at Rondebosch.

No. 3 General Hospital and the Portland Hospital are pitched on adjoining sites at Rondebosch, about a mile from the station, on shallow sandy ground with a clay subsoil, amidst

pine woods. The sand is so shallow—in parts of the camp not more than 3 or 4 inches deep—that one would have had some *primâ facie* fears about drainage, especially as the slope is very slight. However, Colonel Wood, in command of No. 3, has arranged so excellent a system of drainage and sanitation as to overcome all the difficulties, and both hospitals are in a hygienic respect well-nigh perfect. There are two or three points in the administration of No. 3 which are somewhat original, albeit deserving of the highest praise. Besides the ordinary sanitary supervision of the Principal Medical Officer, who makes a regular round of the whole extensive area every morning, and the usual inspections of the orderly medical officer, one of the staff, Captain Withers, is sanitary officer (in addition to his other duties), and has three men under him doing nothing but sanitary work. Consequently, the most constant personal attention to every sanitary detail is given. The enteric stools are, of course, dealt with in a special structure adjacent to the enteric wards, and, after being disinfected in the ordinary way, are mixed with a large quantity of sawdust, and this is again saturated with paraffin, and the whole removed to a site on the outskirts of the camp and burned. This addition of paraffin struck me as a remarkable instance of the thoroughness with which Colonel Wood carries out every detail. His favourite disinfectant appears to be formalin. Dressings are burned in three very handy little incinerators. Soiled linen from infectious cases is first of all soaked in formalin solution and then dealt with in the Theal disinfector, if that apparatus (which has to do duty for all the hospitals) is available. If not, prolonged boiling in large cauldrons is resorted to. One may point out that the soakage pit system of dealing with liquid refuse, so effective at Wynberg, is out of the question on a site like Rondebosch, where drainage clean away has to be resorted to. Another point is worth mention. For the enteric cases, hospital marquees are not used, but three of the larger store marquees. This strikes me as being a decided advantage. They are larger, containing fifteen beds each, arranged in a row down each side, and could contain sixteen, but for one bed space being occupied by a table. They have a more airy and cheerful appearance, owing to the greater width, and the larger number accommodated facilitates nursing arrangements. Of course they are only single tents, but this, in so airy a situation, and at this season of the year, does not interfere with either drainage or ventilation. Attached to the enteric wards is a spare marquee used by the sisters as a sort of office and ward annexe, in which Colonel Wood insists that all spare blankets and clothing, fruit and other articles of diet, and so on, shall be kept. I consider this arrangement a most admirable one. The other marquees have a maximum of seven patients, the serious surgical marquees only four, and most of the major operations are isolated for a few days. Another little convenience, not to be found in every London hospital, is a preparation tent adjoining the operating marquee, in which timid patients can be anæsthetised.

The Portland Hospital.

Among the cases in the Portland Hospital is one by far the most remarkable I have yet seen. It was shown to me by Mr. Bowlby, and I enclose a photograph, taken by Mr. Wallace, which he very kindly placed at my disposal. An expanding bullet entered the anterior edge of the tibia, making the ordinary small wound. It completely smashed the bone, destroying its continuity for fully two inches, and emerging by a huge circular wound about three inches in diameter, so large that one part of its circumference is within about ¾ of an inch of the edge of the entrance wound. Mr. Bowlby found that, not only was there most extensive comminution at the seat of injury, but that the lower fragment of the tibia was split longitudinally downwards as far as it could be followed. All the fragments having been removed, the two parts of the lower longitudinal split were wired togther, and then the lower fragment was wired as a whole to the upper. By this I do not mean that they were approximated, for that was found to be impossible, but they were fixed. Mr. Bowlby says that some new bone was certainly growing and the wound is now rapidly granulating up. The same patient was hit by a similar bullet also just above the elbow, which, however, missed the humerus, and then smashed the upper part of the radius and ulna. This wound also is doing excellently. It was put up straight at first, and is now on an angular splint. The movement of the elbow-joint is apparently all right, and the constitutional disturbance all through has been practically *nil*. The same Boer inflicted both wounds, deliberately emptying his rifle into the soldier.



Portland Hospital, Wound (exit) of leg by expanding bullet.

Another case illustrates the comparatively little harm done by the Mauser. A bullet had entered just behind the internal malleolus, drilled through the astragalus, and emerged about the centre of the external malleolus. Nothing was ever applied but the original field dressing and the wound has healed perfectly.

In another case the bullet had entered in the left buttock, had passed through the pelvis and emerged just below the great trochanter on the right side. There were no signs of any bladder trouble or other intra-abdominal injury, which is the more remarkable as the exit wound is rugged with everted edges and quite 1½ inch in diameter, showing that the bullet used was something softer than the Mauser. It is nearly healed.

The fittings at the Portland Hospital are superb, although everything is arranged for easy transport. The dispensary fittings both here and in No. 3 are entirely made out of the original packing cases. These are banked in various ways to serve as counters, tables, and cupboards, and each box has its lids sewed by hinges on one side to form a fall-down door. On moving, nothing is required but to pack the boxes and fasten them down. The operating tables take to pieces and pack up, but they are more substantial than the army regulation table, which has been found to collapse on occasion. The use of tortoise tents increases the mobility of the hospital, as these tents only weigh 300lbs. as against the 500lbs. of the army marquees. Those in use at the Portland, except two (green), are the ordinary white. The Australian tortoise tents are green. Of course No. 3 Hospital has the regulation marquee. The military officers seem to think that the tortoise tent is better than the marquee. It seems to me, however, hardly to stand the wind so well, and the flapping in a breeze is certainly more obvious. Mr. Bowlby and Mr. Wallace are certainly keeping up to their reputation as surgeons, and are doing some brilliant work.

No. 3 General Hospital.

At No. 3, also, some very fine surgery has been done. It has not, however, been of such a strictly military character as at the Portland. One development surprised me, as being somewhat unusual in a general hospital, but, all the same, strong evidence of the up-to-date methods of the men at No. 3. Colonel Wood, the P.M.O., who by no means confines himself to administrative matters, has done three successful (to date) operations for radical cure of hernia; and Civil Surgeon Robinson one, all by Bassini's method.

Another strikingly difficult operation has been done by Major Keogh and Captain Wade-Brown, and had been entirely successful, the man being practically well yesterday. The patient had been wounded by an expanding bullet passing into the calf from the front, but just missing the tibia. The wound completely healed; then, some days later, a very large swelling suddenly appeared, and a traumatic aneurysm was diagnosed, the diagnosis proving correct; when the swelling was cut down upon immense clots were turned out.

Mr. Bowlby was good enough to see the case, and advised plugging. This course was adopted, and the case did well for two days, when hæmorrhage recommenced. Major Keogh and Captain Wade-Brown cut down through a very well-developed gastrocnemius, and after much difficulty succeeded in tying the posterior tibial artery above and below, no mean surgical achievment. Major Keogh combines the offices of registrar and officer in charge of the surgical division, and does most of the *x*-ray work into the bargain, Colonel Wood himself helping a good deal in the latter. They have sueceeded admirably in localisation, some very deep fragments of shell having been fixed to a nicety, as proved by probe measurements when cut down upon.

A couple of Wheelhouse operations have been done for stricture, and one attempted, but abandoned in favour of the old-fashioned Cock's operation. This last was a man who complained of nothing but incontinence of urine. Careful examination showed that he had a perineal fistula, which he was concealing in his anxiety to get to the front. There was extensive extravasation, and he died very shortly after the operation had been performed. He had a huge prostatic abscess, a bladder about as bad as it could be, and pyelitis in both kidneys. And this man still tried to get away to fight for his country! Verily, we have some heroes amongst us still.

At present the Portland has about 90 beds occupied, and the No. 3 something over 300. Careful observation of the two institutions side by side is instructive, as showing that even when in close comparison with the work of two of the most brilliant London surgeons, the army men can still hold their own in an honourable rivalry. Colonel Wood's work shows that a R.A.M.C. officer does not necessarily rust when he grows grey in the service.

THE BATTLE OF SPION KOP.

[From an Occasional Correspondent.]

The Conditions of the Battle.

On January 15th the cavalry under Lord Dundonald, by a brilliant forced march, seized the passage of the Tugela at Potgieter's Drift, and at the same time reported that the passage of the river at Triegart's Drift, some five miles further up the river, was unoccupied by the Boers. The force under Sir Redvers Buller, which was then encamped at Springfield, paraded at 5.30 P.M. on January 16th, and made a forced night march of sixteen miles through a wild, rugged, barren, and mountainous district to Emmasdale, a high plateau which commanded the river at Triegart's Drift. Arriving there at 2.45 A.M. on January 17th the troops bivouacked until daybreak, when breakfasts were served. Immediately afterwards two batteries of field artillery were pushed forward to the edge of the plateau so as to command the crossing, and a company of Royal Engineers, supported by cavalry and infantry, were sent to throw a couple of pontoon bridges across the river.

These were completed about 4 P.M., and our advanced troops crossed at once. The remainder of the troops bivouacked on the south side of the river for the night. The whole of the following day was spent in getting the troops together with the transport, field hospitals, and bearer companies across the pontoon bridges. At 4 A.M. on January 19th the troops were hurried out of camp in the direction of Venter's Spruit, and were practically kept under arms all day in a broiling sun, as an attack by the Boers was believed to be imminent. The attack did not take place, however, and after sunset we bivouacked at Venter's Spruit. At daybreak on January 20th the troops advanced to attack the Boer position, which was situated amongst the steep hills of the Spion Kop range. The position was indeed a formidable one, composed as it was of masses of steep and rugged hills, which extended from north to south for nearly three miles. Many of these were very steep, and varied in height from 500 feet to 2,000 feet above the plain. Before reaching these the troops had to cross an open plain which sloped upwards to the hills at an angle of 20 to 25 degrees.

The Field Hospitals.

During the six days of the battle our losses were roughly 250 killed and between 800 and 900 wounded. To meet this great emergency the medical arrangements were carefully planned by the P.M.O., Colonel T. J. Gallwey, C.B., R.A.M.C. No. 4 Stationary Hospital, under Major R. Kirkpatrick, R.A.M.C., was moved up to Spearman's Hill, the accommodation being raised to 500 beds, whilst a bearer company and field hospital accompanied each brigade. The Fifth or Irish Brigade, under General Fitzroy Hart, C.B., was the first to attack, their object being to turn the Boer right flank at Rangworthy. The Fifth Brigade Field Hospital, under Major G. H. Younge, R.A.M.C.—which distinguished itself at the battle of Colenso—was pushed forwards to Seymour's Farm, a large dwelling-house with numerous outbuildings, situated on the lower range of hills at Rangworthy. The houses were cleared out and occupied as a hospital, tents being also pitched on a large grass-covered square in rear of the dwelling-house. Being in the most advanced position, a very large share of the work fell to this hospital. No fewer than 21 officers and 326 men were admitted for wounds received in action. As may be imagined under the circumstances, the hospital establishment was kept working practically day and night. The other hospitals, however, especially that under Major J. D. Moir, R.A.M.C., were far from idle. The arrangements made by Colonel T. J. Gallwey, and carried out by Lieutenant-Colonel W. B. Allin, P.M.O. of the Second Division, for evacuating the wounded were so admirable that the congestion of the field hospitals was rapidly overcome.

The Stationary Hospitals.

Convoys of wounded were sent back in wagons and ambulances to Triegert's Drift. There they were met by fresh ambulances and Indian dhoolie bearers from Spearman's Hill, who conveyed them across the river to the Stationary Hospital. To show the excellence of the arrangements I may mention that the order to fall back was received at the 5th Brigade's Field Hospital about 8 A.M. on January 25th. At 11 A.M. the hospital marched out of Seymour's Farm, having in the meantime struck their tents, packed their equipment, and despatched all their wounded to Spearman's Hill. Looked at as a whole no praise is too high for the manner in which the medical arrangements and treatment of the wounded was carried out during and after the battle. As may be imagined, the collection of the wounded from amongst the steep rugged hills, which formed the Boer position, where the use of ambulances was out of the question and each wounded man had to be carried on a stretcher, was no light task. Yet the wounded were collected and brought to the field hospitals with very little delay. Amongst the officers of the bearer companies Captain E. M. Morphew, R.A.M.C., was conspicuous for his untiring labour, his indifference to danger, and his ready resource amidst every difficulty. He scarcely left the field during the battle, and the absence of rest and food seemed not to affect him.

The medical department may well look back on the manner in which they acquitted themselves at the battle of Spion Kop with feelings of justifiable pride, and the way in which the evacuation of the wounded was carried out when the retirement was ordered was referred to by the General Officer Commanding as truly wonderful.

THE MEDICAL ASPECTS OF THE WAR.

By a South African Campaigner.

XVII.

Ladysmith and Kimberley.

Additional evidence, if such were needed, continues to reach us from time to time of the great sufferings endured by the garrison at Ladysmith, and the heavy mortality both in that town and in Kimberley during the last weeks of the state of siege. The state of things was bad in December, but was much worse in January, and as February advanced disease

worked ravages, and short inferior rations, bad water, foul smells, and fierce heat all played their part in spreading typhoid and dysentery. Medicines were exhausted, and the nurses were worked almost to death, while the plague of flies made life almost intolerable. The calculations by Dr. James Dunlop published below show how slight was the sustenance offered by the rations in the later days of the siege. A Reuter's telegram states that the mortality returns for February show that the death-rate per 1,000 was: Whites, 42.8; coloured population, 288.7; all races, 169.5. The returns for February last year were: Whites, 26.8; coloured population, 52.8; all races, 42.5. The death-rate among children under 1 year was: Whites, 394 4; coloured population, 760.0; all races, 583.7. Enteric fever was responsible for the death of 63 whites (excluding cases contracted elsewhere) and 9 coloured people. The deaths from scurvy among the coloured population amounted to 250. There are still 750 cases in the borough.

BRITISH PRISONERS IN PRETORIA.

Laffan's Pretoria correspondent, in a despatch dated January 24th, states that the Boer Government has endeavoured to maintain what it considers a correct attitude in its occasional communication with the British Government and its representatives. Whenever British prisoners have arrived at Pretoria, careful lists have been made of names, rank, and condition, and telegraphed to Sir Alfred Milner. This service has been scrupulously reciprocated by the High Commissioner at Cape Town. It is stated to be the intention of the Boer authorities, in case the supplies run short, to expel all foreigners from the country and to put the British prisoners upon a diet of mealies. The correspondent states that he has just returned from a visit to the Water Fall, the new military prison camp occupied by about 2,600 soldiers. The impression he gathered from this visit was that the prisoners were being well fed; they were allowed to purchase vegetables and fruit. The hospital arrangements he described as excellent, and the Government was sending a daily supply of fountain water in tanks from Pretoria. The State Model School, in which the officers in Pretoria are confined, is modern and well-built, having many large and lofty rooms and surrounded by a broad cool verandah. In painful contrast to the treatment of the British regulars, however, it would appear that the treatment of the Colonials of Natal or Cape Colony is harsh. Thus, even Laffan's correspondent, who is an American journalist, and by no means ill-disposed towards the Boers, says that "prisoners of this class, whenever identified, are separated from the others and sent to the ordinary gaol, where they are treated like common criminals."

This testimony is confirmed by the special correspondent of the *Daily Mail* writing from Pretoria gaol on March 2nd. He states: "In the gaol are about one hundred Colonials who were taken on the Natal frontier and at Kuruman; they are undergoing scandalous treatment, exactly as if they were criminals without hard labour; they have no coffee or tea, are locked in cells at 6 in the evening, are not allowed to see friends or relations, and are searched like felons." The treatment described by these correspondents as meted out to the Colonials was experienced by myself as a political prisoner with the Boers in 1895. The beggarly starvation rations here mentioned were for a time served out to the reform prisoners, with the result that sickness among several of their number rapidly supervened, and strong representations from both outside and within the prison compelled the Government to amend this diet scale, and thus save them from the reproach of doing men to death while nominally subjecting them to prison treatment. What justification can possibly be put forward by the Boer Government for this treatment of South African colonists? It is an infringement of international practice and the usages of civilised belligerents.

MAFEKING.

Kimberley and Ladysmith being relieved our anxieties are now centred chiefly upon the gallant little garrison under Colonel Baden-Powell still holding the little town of Mafeking. The reports that come through are sufficiently explicit to enable us to realise the gravity of their position. Thus Reuter's agent on February 19th says that dysentery and stomach evils through the want of vegetables and good food are rife amongst the garrison. Since the beginning of the siege 292 persons have been killed or wounded, or have died of disease. It is devoutly to be hoped that the statement that Colonel Plumer is sufficiently near to have got a waggon load of provisions into the town may turn out to be true, but it is to be feared that in any case the death-rate must have been enormous during the last few weeks.

BRITISH WOUNDED AT BURGHERSDORP.

An interesting letter from an officer of the R.A.M.C. who was at Burghersdorp with the British wounded and prisoners after the Stormberg reverse has been published. The letter dated Sterkstroom, January 24th, but was not allowed to be published until our forces had reoccupied Burghersdorp. From this letter it appears that the Englishmen in the town banded themselves together, refusing either to take the oath of allegiance to the Free State or leave, and did everything in their power for the British prisoners who were taken through from Gatacre's column to Pretoria as well as for the wounded. As many as 44 wounded were in the hospitals at one time, and the whole of the provision and the nursing of this force was undertaken by this small band of English men and women; books were supplied from the town library, and the Committee were unwearying in their efforts for the relief of the wounded. The stubborn refusal either to submit or fly, and the gallant efforts under the most trying and adverse circumstances, made by this little band of loyalists in Burghersdorp, deserves cordial recognition and permanent record in the history of the campaign.

ABUSE OF THE WHITE FLAG: EXPANDING BULLETS.

Lord Roberts's last despatch to the State Presidents of the two Republics referring to Boer misuse of the white flag puts the seal of the highest authority upon charges which have, on many previous occasions, been brought against the Boers. A large quantity of expanding bullets of three different kinds are said by Lord Roberts to have been found in Cronje's laager, and after other engagements with the Boer forces. As Lord Roberts says: "Such breaches of the recognised usages of war and of the Geneva Convention are a disgrace to any civilised Power." Mr. Treves is reported to have stated to Reuter's correspondent at Durban that a considerable proportion of the wounds received by our men in the recent fighting at Hlangwane and Pieters were caused by soft-nosed bullets.

BOER AMBULANCES.

The following telegram, which has reference to a telegram from St. Petersburg to the *Times*, which was quoted in the article under this head published last week, has been received: "Amsterdam, March 14th.—Please mention in your next that statements in article Boer Ambulances, page 603, are erroneously attributed to me, and quite in contradiction with my letters published in Dutch medical journal and with personal impression.—KORTEWEG."

THE FOOD RATIONS IN LADYSMITH.

WE are indebted to Dr. JAMES C. DUNLOP, of Edinburgh, for the following interesting note on the food rations given to the soldiers and other inhabitants of Ladysmith during the latter part of the siege:

It occurred to me that it might be of interest to formulate what the dietetic value of the rations were, and thus obtain some measure of one of the hardships undergone by the residents in that town. My estimation may be considered approximate only, exactitude in the matter being unobtainable. The particulars of the rations I have taken from a despatch from the *Daily Telegraph's* special correspondent, dated Ladysmith, March 1st, and the composition of the food stuffs I have estimated from the tables given in Atwater and Bryant's Composition of American Food Materials (United States Department of Agriculture, Office of Experimental Stations, *Bulletin* 28 (revised), 1899). In the following two tables are shown the approximate food value of daily rations, and the comparison of that to the "standards," and to some official dietaries:

Table showing Food Value of Ladysmith Rations.

Food and Quantity in Ounces.	Proteid.	Fat.	Carbo-hydrates.	Energy Value.
	Grams.	Grams.	Grams.	Calories.
Meat 16	56·9	58.1	0.0	771
Biscuit 4	2.8	5.6	56.1	293
Meal 3	13.7	6.1	57.5	348
Sugar 1	0.0	0.0	28.0	115
Tea $\frac{1}{2}$	0.0	0.0	0.0	0
Condiments (one pinch)	0.0	0.0	0.0	0
Total	73.4	69.7	141.6	1,527

Table comparing Ladysmith Rations with Standard Dietaries, etc.

	Proteid.	Energy Value.
	Grams.	Calories.
Ladysmith rations	73.4	1,527
Atwater's standard (moderate work)	125.0	3,500
Voit's standard (moderate work)	118.0	3,055
A convict's food (moderate work)	169.0	3,700
A prisoner's food (light work)	134.0	3,100
A poorhouse diet, idle	83.5	1,871
,, working	113.0	2,381

The comparison shown in the second table tells a sad tale of serious underfeeding, or, in other words, of partial starvation. It may be noted that the food value of the Ladysmith rations only amounts to half what the older authorities put down as the normal diet (see Voit's standard), and to only about 40 per cent. of the more modern standard (Atwater's). The comparison between Ladysmith rations with prison and poorhouse diets shows them to be of far less food value than the food of a prisoner, and of even less food value than the food of our underfed paupers.

These figures and comparisons give some conception of one of the hardships of a siege, and if when considering them one remembers that this deplorably short feeding was combined with fairly hard work, one can only express surprise at our gallant soldiers being able to continue such a struggle, and great admiration of their success in so doing.

CASUALTIES AMONG OFFICERS R.A.M.C.

Lieutenant HUGH BERNARD ONRAET.

Lieutenant Onraët, who was killed on February 27th during the fighting which preceded the relief of Ladysmith, was the Medical Officer of the 2nd Battalion Royal Scots Fusiliers. He was the son of Mr. Pierre Onraët, an indigo planter at Bhagalpur, Bengal, where Lieutenant Onraët was born. While yet a child he lost his father, and about 1879 his mother settled at Sydenham. He received his early education at Cranleigh, Surrey, and subsequently became a student at Guy's Hospital. We are indebted to Mr. Charters Symonds for the following note on his career there:

"As one of poor Bernard Onraët's teachers at Guy's Hospital, your readers may like to know what we thought of him. He was one of the most genial and pleasant of 'boys,' and his happy and bright disposition endeared him to all. Though less gifted than many as regards ability, he yet possessed those qualities that drew from his teachers a special regard. By patient and earnest attention to his duties he proved himself a reliable worker, and one left him in charge of important cases, feeling sure that nothing would be overlooked. His delightfully cheerful disposition, his keen interest in sport, and his attachment to military life marked him as eminently suited for the medical service of the army. When we nominated two men for the service last year, his name was placed third. We all wished to nominate him, but the unexpected application from a senior man compelled us to act otherwise. When I saw that he was sent to the front, I knew that in Bernard Onraët they had a man who would never fail to discharge his duty in the face of the greatest dangers, and would preserve a cool judgment in the most trying circumstances. His cheerful disposition would enable many a poor fellow to bear his sufferings with greater fortitude, and, last of all, that he knew how to do his special work, and would do it well. That he met his death in the discharge of his duties, that in doing so he scorned the dangers of the fighting line, none who knew Bernard Onraët will doubt. A career of much promise and a man of a lovable disposition has been cut off."

Mr. Onraët obtained the diplomas of the Conjoint Board in London in 1898, and entered the Royal Army Medical Corps in July, 1899.

Lord Roberts in his telegraphic despatch from Driefontein, dated March 11th, states that during the previous day when the brunt of the fighting fell on Kelly-Kenny's division (the Sixth) two officers of the R.A.M.C. were wounded. Major T. Du B. Whaite, originally attached to the Third Field Hospital of the Divisional Troops of the Sixth Division was severely wounded in the chest. Major Whaite entered the service in July, 1886, and was promoted to the rank of Major in July, 1898. The other officer, who is returned as slightly wounded in the neck, is Lieutenant J. G. Berne, who was Medical Officer of the Royal Field Artillery attached to the Sixth Division.

During an engagement at Britstown with the rebels in the Western part of the field of operations, an engagement in which the City of London Volunteers were in action, Civil Surgeon H. Moore was slightly wounded in the left foot.

To the list of deaths from enteric fever at Ladysmith must be added the name of Lieutenant G. W. Grey Jones, R.A.M.C., who died on February 20th. He was a student of St. Mary's Hospital, and qualified M.R.C.S. and L.R.C.P. early in 1898. For a few months he was House-Surgeon at the Horton Infirmary, Banbury, and entered the Service on October 1st, 1898. After passing the usual probationary period at Netley, he received his commission as Lieutenant R.A.M.C. from January 1st, 1899, and on September 30th he embarked with No. 12 Field Hospital on board the ss. *Kinfauns Castle* for South Africa, and immediately on arrival at Durban was urgently sent up to Ladysmith, and was on the field a few days before the investment of that town by the Boer army.

The following deaths from enteric fever are reported from Capetown: Assistant-Surgeon Jackson, typhoid fever, Pretoria, March 9th. Civil Surgeon W. E. Grigg, enteric fever, Wynberg, March 12th. (There is reason to believe that this is Dr. W. Chapman Grigg, formerly Obstetric Physician to Out-patients, Westminster Hospital.)

YEOMANRY FIELD HOSPITAL AND BEARER COMPANY.

The staff of the Imperial Yeomanry Field Hospital and Bearer Company, 143 strong, were inspected at Devonshire House on March 12th. The staff was under the command of Major C. Stonham, Chief Surgeon and Military Commandant of the Hospital, and Major G. E. Hale, R.A.M.C., D.S.O., who is in command of the Bearer Company. The Director-General of the Army Medical Department first made an inspection. Soon afterwards the Prince of Wales, who was accompanied by the Princess, arrived and inspected the detachment. After shaking hands with the officers he addressed the men as follows: "I am glad to have had the opportunity of inspecting you before your departure, and am sure that you will carry out well the duties which will devolve upon you. You are leaving this country because you wish to do something to assist those who are fighting for the honour of the flag." Three cheers were given for the Prince and were repeated for the Princess. The Royal party then returned to the terrace, and the men passed in single file before the Princess, who gave each man a parcel containing articles of clothing.

The staff left Liverpool Street Station for the Albert Docks on March 13th, when they had an enthusiastic send-off from the students of the Westminster Hospital, of which Major Charles Stonham is the Senior Surgeon, and of the London Hospital, to which Captain T. H. Openshaw, F.R.C.S., is Assistant Surgeon. The staff sailed in the *Winkfield* the same afternoon.

The telegraphic address of the Imperial Yeomanry Hospitals is "Hospitable, Capetown."

MEDICAL OFFICERS OF THE FIELD FORCE.

Additional Appointments.

For the following list of medical officers who have recently

proceeded, or are proceding to South Africa, we are indebted to the courtesy of the Medical Department of the War Office:

Table showing the Personnel of Medical Units on the Lines of Communication.

Unit and Place of Mobilisation.	Names.	Remarks.
No. 10 General Hospital (Depôt R.A.M.C., Aldershot)	Surgeon-Lieutenant-Colonel W. W. Lake, M.M.S.C. (*a*) *Royal Army Medical Corps.* Major R. H. Clement ,, E. C. Freeman (*b*) Lieutenant H. B. G. Walton Quartermaster and Honorary Lieutenant (*c*) *Militia Medical Staff Corps.* Surgeon-Captain W. K. Steele *Volunteer Regimental Medical Officers.* Surgeon-Captain C. A. MacMunn, 3rd Volunteer Battalion South Staffordshire Regiment Surgeon-Captain A. A. Watson, 2nd Volunteer Battalion East Lancashire Regiment Surgeon-Captain J. K. Butter, 2nd Volunteer Battalion South Staffordshire Regiment *Civil Surgeons.* Mr. D. V. M. Adams ,, L. B. Betts ,, A. Copland ,, R. Corfe ,, G. Grace ,, H. H. G. Knapp ,, W. H. May ,, J. G. Parker ,, M. W. Renton ,, J. H. Sheldon *Army Nursing Service Reserve.* (*d*) Nursing Sisters: Misses L. Ainsworth, N. V. Blythe, F. L. Carey, I. E. Church, S. Clark, L. M. Green, R. A. Humphrey, A. M. Joscelyne, M. W. B. Kendall, M. Lippiatt, M. L. MacAdam, M. McLeod, M. Pedler, A. I. Richardson, L. Shepherd, E. C. Stuart-Jones, B. Turner, L. Warriner, F. M. Wilkinson, and A. B. Wohlmann, and 3 female servants.	2 warrant officers, (1 to join the unit on its arrival in South Africa.) 133 non-commissioned officers and men (including 50 men St. John Ambulance Brigade), 1 special cook. Arrangements for charge of *x*-ray apparatus to be made in South Africa.

(*a*) Officer in charge. (*b*) Secretary and Registrar. (*c*) Will join the unit on its arrival in South Africa. (*d*) Superintendent or acting superintendent to be selected from Army Nursing Service in South Africa, and extra nursing sister being included in this detail to allow of the adjustment.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF SPECIAL MEETING.

A SPECIAL meeting of the Council will be held at the office of the Association, No. 429, Strand, London, W.C., on Wednesday the 21st day of March next, at 2 o'clock in the afternoon, to consider the Midwives Bill which has just passed the second reading in the House of Commons.

FRANCIS FOWKE, *General Secretary.*

429, Strand, March 14th, 1900.

BRANCH MEETINGS TO BE HELD.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.—The next meeting of this District will be held at the Grand Hotel, Brighton, on Thursday, March 29th. The chair will be taken by Dr. Mackey at 5.15 P.M. The following communications have been promised:—Dr. Mackey: A Case of Typhoid Spine (Osler). Dr. Morgan: Retropharyngeal Abscess. Dr. Maynard: Hæmorrhagic Pancreatitis (with specimen). Dr. Mackendee: Errors in Diagnosis (three cases). The Chairman will provide tea and coffee at 5 P.M. Dinner at 7 P.M.; charge 6s., without wine. Messrs. Down Brothers will exhibit instruments, etc., from 4.30 P.M.—J. W. BATTERHAM, M.B., 3, Grand Parade, St. Leonards-on-Sea, Honorary District Secretary.

SOUTH-EASTERN BRANCH: WEST SURREY DISTRICT.—The next meeting of this District will be held at the Royal Surrey County Hospital, Guildford, on Thursday, March 29th, at 4.15 P.M. Mr. F. Boxall, of Rudgwick, will preside. Agenda: Minutes of Guildford meeting. To decide where the next meeting shall be held, and to nominate a member of the Branch to take the chair thereat. Election of Honorary Secretary. To receive nominations for representations on the Council of the Association. Communication from East York and North Lincoln Branch and Hull Medical Society. The following papers will be read:—Dr. Sidney Martin: The Diagnosis of Early Tuberculous Disease of the Lungs. Mr. Battle: The Diagnosis of Early Tuberculous Disease of Joints. The Honorary Secretary: Remarks on the Treatment of Spasmodic Asthma. Members desirous of exhibiting specimens or reading notes of cases are invited to communicate with the Honorary Secretary at once. Dinner at the White Lion Hotel at 6.45 P.M.; charge, 6s., exclusive of wine. All members of the South-Eastern Branch are entitled to attend and introduce professional friends. N.B.—The Honorary Secretary would be much obliged if members would kindly inform him by postcard whether they intend to remain to dinner. By so doing they will materially facilitate arrangements, and promote the success of the dinner.—ALEX. HOPE WALKER, The Common, Cranleigh, Honorary Secretary.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The next meeting of this District will be held at the Town Hall, Sittingbourne, on March 22nd, at 3 P.M., Dr. Gosse in the Chair. Agenda: The Chairman: The Pathology of Death from Senility. Mr. Bertram Thornton: A case illustrating the value of Antistreptococcic Serum. Mr. R. Rigden: The Vaccination Act of 1898. Mr. Raven: A question of Medical Ethics. The Chairman kindly invites members to luncheon at the Sittingbourne Club, Crescent Street, at 2 P.M. Members intending to avail themselves of Dr. Gosse's hospitality are requested to send acceptances by Tuesday, the 20th, or they will not be expected. Tea and coffee will be served after the meeting. All members of the South Eastern Branch are entitled to attend these meetings and to introduce professional friends.—THOS. F. RAVEN, Barfield House, Broadstairs, Hon. District Secretary.

OXFORD AND DISTRICT BRANCH.—The next meeting of the Branch will be held at the Radcliffe Infirmary on Friday, March 23rd, at 3 P.M. Members wishing to read papers on show cases are requested to communicate as early as possible with WM. COLLIER, M.D., St. Mary's Entry, Oxford, Honorary Secretary.

METROPOLITAN COUNTIES BRANCH: SOUTH LONDON DISTRICT.—The next meeting of this District will be held at the Evelina Hospital on Thursday, March 22nd, at 4 P.M. Dr. Nestor Tirard will read a paper on Intestinal Hæmorrhage in Children. Cases of clinical interest from the wards of the Hospital will be shown by members of the staff.—MAURICE CRAIG, Bethlem Royal Hospital, S.E., Locum District Secretary.

STAFFORDSHIRE BRANCH.

A MEETING of this Branch was held at Stafford on February 22nd, Dr. J. B. SPENCE, President, in the chair. Eighteen members were present.

Confirmation of Minutes.—The minutes of the last general meeting were read, approved, and signed.

New Members.—G. Heaton, M.A., M.B., F.R.C.S. (Birmingham), and G. L. Lefevre, M.B., C.M. (Longton) were elected members of the Branch.

British Congress on Tuberculosis.—Dr. McAldowie was appointed delegate from the Branch.

Communications.—The Lancashire and Cheshire Branch having forwarded a copy of three resolutions which it had passed, the same were considered, and it was unanimously resolved:

That this Branch disagrees with Nos. 1 and 3, but agrees with No. 2 (Railway Expenses of Representatives), with the proviso that the finances of the Association will allow of it.

Medical Organisation.—A letter was read from Dr. Crawshaw *re* proposed conference on medical organisation, and it was resolved to leave the matter in the hands of the Secretary.

Medical Attendance on the Families of Soldiers and Sailors on Active Service.—The meeting approved the action taken by the Secretary in response to the letter received from the General Secretary on this question; 150 medical men in the county had replied in the affirmative offering their gratuitous services.

Case.—Dr. F. H. MARSON showed a boy, aged 10 years, the subject of partial paralysis of left arm and leg, and frequent epileptic fits.

The hemiplegia resulted from a fall on the head from a height of 25 feet, when the boy was 1½ year old. The fits commenced eight months ago, at first one, increasing to four daily, and simulating epilepsy, but always commencing with a cramp of the left leg. Dr. Marson trephined over a cranial depression about ¾ inch anterior to the motor area for the left leg. On removing the bone, about 3 drachms of fluid escaped, and a cyst was found about the size of an acorn between the skull and dura mater. After the operation the fits were much milder, being more of the nature of hysterical attacks; they appeared to depend only on the accumulation of fluid in the wound, and occurred at intervals of from three to six days. The last fit occurred five weeks after the operation, and that was five weeks ago. The boy had been skating since, and the use was returning in his arm and leg.

Septicæmia.—Dr. C. M. ALLAN read a paper on septicæmia,