In his report Colonel Ollech suggests the advisability of forming, presumably as an experiment, though this is not stated,—“One battalion of genuine Light Infantry.” Von Moltke’s *Minuté* on this runs as follows:

“From the standpoint of the higher strategy what we want is not a “light battalion” but a “light army” . . . . A tactical victory is only decisive when it occurs at the strategically correct position, and that can only be attained by an army equally mobile in all respects . . . . An Army which, starting from Rossbach on November 5th, could fight at Leuthen on December 5th, would be as good as doubled . . . . Such mobility is only to be expected when the army is formed of sturdy men, well practised in peace, well fed in the field, and carrying as regards all arms a really practical equipment . . . . An Army which marches light will also manoeuvre freely. Therefore every weight that man or horse carries is of importance, and also the way in which it is carried. Everyone agreed that our equipment must be lightened, but when it comes to the point, there is endless variety of opinion.” As Colonel Kraus says, this last sentence of Von Moltke’s speaks volumes.”

ECHOES FROM THE PAST

“A Medical Officer in the Mutiny” Part II Being the Experiences of Francis William Innes, Surgeon 84th Foot, in India (1857-58)

Major-General A. MACLENNAN, O.B.E., M.B. (Retd.)

READERS will recall that in Part I of Innes’ narrative (which was published in the previous number of the Journal) he dealt with the overall picture relating to the relief of Lucknow. In this second part of his narrative the author covers in detail his experiences from 19th Sept. to 27th Nov. 1857 when he was in charge of the Field Hospital in the Allum Bagh. Again the account is so clear and well written that I have not altered it in any way and only the minimum of footnotes have been required. Now read on.

Medical Report on the Oude Field Force and Hospital Allum Bagh from 19th September to 27th November 1857

This little Army was composed of the Allahabad moveable Column* reinforced by the arrival on the 15th September 1857 of 1500 men under Sir James Outram consisting of the 5th Fusiliers⁽¹⁾ from “Mauritius” H.Ms 90th Light Infantry⁽¹⁾ from Home, Evers Battery and details of Corps composing General Havelock’s original force, which had suffered frightfully in the first expedition into Oude. They were however progressively recovering under the benign influence of the shelter and good food they enjoyed for a month at Cawnpore. Cholera however still lurked about the camp, many men suffered from Diarrhoea, and more from the debility with Anorexia and white flabby indented tongue, which were all but universal when (12th August) the force retreated to the right bank of the Ganges.

* H.Ms 64th 78⁽²⁾, 84, and the 1st Madras Fusiliers, Bengal Volunteer Cavalry and Artillery in all, 1500.

Early on the morning of the 19th the united force re-crossed the sacred river on a bridge of boats. Here the Enemy, though in force, offered no opposition, though they made a nominal resistance at our advance to the sand hills, a mile from the river's bank, there we encamped-halted and on Sunday the 20th, waiting for our heavy guns and baggage, all of which arrived in the course of that day. The foe entertained us with their drums and bugles and an occasional shot. At day break on the 21st in drizzling rain. we marched for Lucknow, and at Mungalwars, the village at which we had halted so often and suffered so much on our first advance, we found the Enemy in great force and strongly posted. As we approached their position the sun came out for a few minutes and shone brightly on our advance. In half an hour this strong positioning was turned and the Enemy, losing three guns, were driven out of the place in some confusion, which was speedily converted into a total rout by the Horse Artillery and Cavalry, led by Sir James Outram, in person, who captured two more guns, tents, camels and cattle. †

As we marched on to Busherat Gunge, we found the road strewn with shoes, accoutrements and etc., which the fugitives had thrown away. Rain fell in torrents with scarcely any intermission, during the whole day. In the afternoon we reached Busherat Gunge, when the Troops found the same shelter as on former occasions. The baggage did not come up until very late, and some men had nothing until next morning. The wet did not damp the men's spirits, they marched admirably.

At 8 a.m. on the 22nd we resumed our march, reaching about noon "Benny" bridge which to our great delight we found uninjured. This doubtless was owed to the Cavalry's charge of yesterday. At Beeby Gunge three miles further on we halted, part of the force finding shelter from the still pouring rain in a vilely filthy village, while others had to bivouack on the wet ground. Two men of the 5th Fusiliers were severely wounded by the accidental discharge of a comrade's rifle, one artillery man was shot through the head by some of the many men who were firing off their pieces rendered damp by the rain, in spite of all orders to the contrary.

At 8 a.m. on the 23rd the march was resumed, the men in high spirits and heart, notwithstanding the constant wet by day and night, to which they had been exposed. The day was dry and rather hot and about 2 p.m. we saw the minars and domes of Lucknow, and not long afterwards the Enemy appeared in vast numbers drawn up to oppose us. As we advanced along the road the shot and shell fell thick amongst us, one of the latter killed one and wounded 2 officers of H.Ms 90th very severely, both of whom died a few days afterwards in this hospital. None of the men were injured by this shell and the ill fated officers were all in different portions of the column. As the Army advanced in line the enemy retired taking their guns with them. At Allum Bagh⁽³⁾ house and garden they made more resistance but they were soon driven out with considerable loss and the Force bivouacked on the grounds they had won, which shortly after sunset was deluged by a storm of wind and rain that most men had to walk about all night in mud ankle deep. Immediately after the fight Sir James Outram announced the fall of "Delhi". This day's work sent 19 wounded Europeans into the Allum Bagh Hospital, of whom two were by musketry, the others by larger projectiles. On the morning of the 24th many of our tents were got up for the men and the Army halted for the day in and

† Wounded 1 man of 1st Madras Fusiliers, 1 of H.Ms 84th, 1 of H.Ms 90th and 6 of the Volunteer Cavalry. Killed *None*.

around the Allum Bagh Garden, and suffered much from the Enemys guns, which every now and then dropt a shot amongst us and were so well concealed by the dense topes around the City that our Artillery failed to silence them. So exactly had they got our range that H.Ms 78th while lying down in line had 4 men struck by one shot, and immediately afterwards there fell a shot within 3 yards of where we had established an operating surgery which literally cut a man in two at the hips, carrying away penis and scrotum. Our surgery was soon removed to a safer position and I was fully occupied during the day in assisting the surgeons of the Force in various amputations. Of the men wounded this day 22 were by round shot and shell.

About midday the Enemy's cavalry made a dash at our baggage and being mistaken for our sowers were allowed to come so close that our men began patting their horses on the neck. Two men of H.Ms 84th, 1 Lt. and men of the 90th were killed by the Enemy. Late in the evening I heard accidentally (not having seen the orders) that the Force was to advance on Lucknow next morning and that previous to doing so, all the sick and wounded were to be left in the Allum Bagh with the heavy baggage and cattle of the Force, also the Native followers except the syces of Field Officers. How to furnish the additional Medical aid which this arrangement rendered necessary was no easy matter. The attempt to form a Field Hospital for the Force, before it left Cawnpore was abandoned, from the utter want of means, which were scarcely sufficient to supply the ordinary peace establishments for Regiments and no Corps had more than two and many only one Medical Officer. Fortunately there were two more who had no distinct executive duties, the Medical Store Keeper and Officiating Superintending Surgeon Dr. Domenichitti and myself and upon these the duties of this Field Hospital devolved.

At day break on the 25th I rode round to the different hospitals to make arrangements with Medical Officers particularly as regarded the sick men's rations, which had already been drawn by their Regiments, also promised to feed their sick for that day. By 7½ o'clock the sick began to pour into this place but as the Garden and buildings were fully occupied by H.Ms 5 Fusiliers and the General Staff, no arrangements could be made until 8½ o'clock, when the troops vacated the buildings. The sick had to be brought into them at once as the Dooleys were to accompany the Column. Long before this could be done there began to come from the advancing Column many men with frightful wounds the results mostly of shell and round shot. Of these 22 men were admitted into this hospital, besides several who died before their names could be entered in the hospital books. Indeed it was two days before any complete list of admissions could be obtained owing to several Regiments in the hurry of starting, sending no nominal returns with their men.

Of four Medical Subordinates, one was prostrated by fever, one laid up with a broken arm, two were mere lads of little experience, so that the duties in consequence devolved on Asst. Apothecary Doyle, who was himself suffering from Liver and Dysentery. The great majority of the Hospital menials left by Regiments took advantage of there being no one present who knew them, either to absent themselves entirely from duty or to perform it in a very negligent manner.

Of the wounded first brought in nearly all seemed to think, that their injuries demanded immediate amputation, and that if done under chloroform, this would at once end their suffering. Their screams for aid were therefore incessant and heart rendering. Fortunately there was one native table, about a foot high in the building

and this was at once made available for operations. Of these, there were then performed two amputations of the thigh, both very high, two of the leg, one of the thumbs with fracture of the humerus on Europeans, besides an amputation of the thigh and one of the arm on native followers. These with the extractions of balls and dressing wounds, occupied the early part of the day, and before night fall all the patients in the hospital had been seen and prescribed for, but it was late before any of them got food, and some had only a supply of Sago and Port Wine, which I had prepared for them. Early next morning 3 more amputations were performed.

“The Allum Bagh” or Gardens of the World destined to be our Field Hospital is the suburban Palace of the Queen of Oude. It is distant from the entrance to Lucknow one mile, and four from our Garrison, on the Bailie Guard. The Garden is a square of 450 paces surrounded by a brick wall 8 feet high, with octagonal towers surmounted by gilded domes at the corners. On the N.E. face is a large gate way and posterns on each of the other sides. In the centre of the enclosure is a large house (with towers at each corner) consisting of two stories each. Containing a centre hall 50 x 35 x 15 feet surrounded by two x 15 feet verandahs the inner completely inclosed below and partially above, the outer completely open above and partially so below. The roof flat-terraced. The area available for the accommodation of the sick was 110 x 65 feet below or 50 x 55 feet above, without deducting dividing walls. The house was substantial and in good repair, containing no furniture save lamps and mirrors. The Garden is laid out in mathematical figures by roads radiating from the central house. The plots are all enclosed by hedges 4 or 5 feet high and contained fruit trees—chiefly oranges, are adapted for irrigation, and mostly under water when we took possession. The cultivation had however been neglected for some time and the whole place was full of filth and ordure, and it took some time to establish and enforce sanitary regulations in a mass of animated nature consisting of 400 Europeans, one third of whom were sick, 5000 natives, 200 elephants, 200 camels, 5000 bullocks, and 300 horses, all confined within the 4 walls of the Garden.

The Regiments took some supplies of medicine with them into the City, but left the heavy hospital baggage here, and supplies of medicines and dressings etc. were readily obtained from their large medicine chests. That belonging to the 5th Fusiliers was left for us in the building by Staff Surgeon Swettenham⁽⁴⁾. When the supplies there were exhausted, the chests of the 84th, 78th and 90th Regiments were indented upon. In this way a sufficiency of all essential medicines and instruments was at once obtained. For some days no one was allowed to go outside the walls and all attempts to get in supplies of any kind from the surrounding country proved futile.

On the 28th we first heard from Sir James Outram, that at 8 p.m. on the 25th he had succeeded in relieving the Garrison of Lucknow, but from that day until 25th November communication with the Force in the City there was none, save by spies, carrying (for enormous rewards) infinitely small notes, in the Greek character inclosed in quills or other envelopes easily swallowed or secreted. Of notes so despatched not one third ever reached their destination.

About this time the supplies of food for native followers became very scarce, and the famine soon increased to the verge of actual starvation. Foraging parties with strong European escorts were often sent out, but they found very scanty supplies of flour and rice in the villages but abundance of food for cattle, many of the natives subsisted on

gram and sugar cane, and when on searching for this food they were often cut off, or cut up, by the Enemy's cavalry. On the 1st October the killed and wounded brought in amounted to five followers. Bheestie "Sallum" is given at page⁽⁵⁾ and shows how rapidly and easily natives recover from the most serious injuries.

In consequence of our close investment, the only diet for the sick was these ordinary rations with the addition of beef tea, mutton broth, sago and arrowroot. Onions were the only vegetables the Commissariat had. Fortunately there was an abundant supply of wine and beer and spirits for the worst cases, and one dram of Arrack was allowed daily to all parties for whose cases it was suitable. The great wants of this hospital were beds, furniture, utensils, stationery and clothing, of these there were literally none. A few chatties and flowers pots, were picked up about the Garden. Preserved meat and sardine tins etc, the packing tins of the medicine chest were made available for washing and dressing wounds, and of lint and calico there was an ample supply. But by no such expedients could the want of warm clothing be obviated.

The few Corps that had any hospital clothing were obliged to leave it at Cawnpore for want of carriage. The bedding etc. of all the men employed in the first expedition were completely rotted by incessant wet, and such as they were they could seldom be found as the kits of the whole Force were brought in here on the morning of the 25th and were immediately used to render musket proof the verandahs of the hospital and the picquet house, at the corners of the Garden wall. For the first week the majority of sick had no covering but their coats and no beds but the hard floor. Mattresses and pillows from the Doolies were however found for the worst cases. Fortunately the weather in the end of September and the beginning of October was warm and muggy, so that the want of clothing was less felt, and by the 15th October when the nights began to get cold, a sutringie (cotton mattress) or blanket of some sorts was found for every sick man. If his own bed could not be got, that of an absent comrade was taken.

For the first fortnight the sick and wounded did right well, and their numbers decreased from 128 to 104, but on the 6th October there arrived a convoy from Cawnpore (the first communication from that station) under a guard of 250 men, a great number of whom had contracted Ague on the road. A few days afterwards this disease, the endemic of the country at this season, began to prevail amongst the sick and wounded as well as the duty men, and on the wounded, whether by gun shot or sword cut, it exercised a most unfavourable influence. A healthy granulating surface became suddenly converted by an aguish paroxysm into a livid, bleeding and perhaps sloughing sores. On the cure of the Fever by Quinine, the sore generally resumed its favourable aspect, but when the disease relapsed, as it was apt to do once or twice, the same favourable result was not obtained, as shown in 2 cases detailed in the appendix⁽⁵⁾, in which the fever seemed to aggravate the wound, and the wound the fever, until between the two the poor victims perished (McGrath and Appleton).

As the weather became colder diarrhoea and dysentery became very common complications of the intermittent, and were often more intractable and distressing than the original disease. The men whose health had been undermined by service during the rains in Oude, but even in these, was neither so severe nor fatal, as the form of dysentery I have usually seen in many Madras and Burmah stations. It differed from these in the tongue continuing clean and moist throughout, and in the absence of haemorrhage and sloughing.

At an early period there appeared in hospital a form of phagedenic ulceration very like hospital gangrene.

It was at first attributed to the contusing effects of gun shot, extending further than was at once apparent. When this occurred early it was unaccompanied with pain or much constitutional disturbance, and the slough separated speedily leaving a healthy sore vide cases of Grace and Roberts.

In others, when the contusion was slighter the wound appeared indolent at first, and made no progress for a week or ten days, when great pain was complained of, and in about three weeks from receipt of the injury sloughing commenced, extended rapidly, and was checked by the application of native aid and the use of opium (4 grs per diem), stimulus and nourishment.

The slough then rapidly separated and the sores did well. This phagedena however that has been most intractable, was that connected with the accession of endemic fever.

In a good many of the stumps, sloughing commenced about a fortnight after the operation but in all, save one, was rapidly arrested, only two cases of secondary haemorrhage, both from sloughing occurred, and in none of the amputations had we to contend with this untoward symptom.

The famine so far as regarded the natives was but partially relieved by the arrival of the convoy which brought but little Attah or Rice, and on the 12th October when orders were received to fortify the Allum Bagh it was resolved to issue rations only to such Doolie bearers etc. as could work in the trenches. The wages being 6 Annas $\frac{1}{2}$ Seer of attah or rice per diem. On my representation rations were allowed to the native hospital servants. From the 12th to the 26th the scarcity of food was so great that many of the natives deserted, the Doolie bearers going off in scores, cattle or sheep were slaughtered nearly every day, and the flesh sold at one Anna per Seer (2 lbs) no man being allowed to purchase more than 72 lbs per day. The crowds of buyers struggling to get forward showed how pressing were their necessities.

On the 25th October Major Barnstone H.Ms 90th Regiment arrived with a Medical Officer and large supplies of hospital clothing and escorted by 560 men and 4 guns, when there was plenty for once in the Allum Bagh.

As the Enemys shot was dropping rather frequently into the Garden and falling close to the hospital, the Commanding Officer, on the 27th commenced the erection of a traverse on the North Eastern face of the hospital, by which several shot were stopt in the career towards the sick. On the 28th all the wounds and sores that had become gangrenous or were not doing well, were removed from the house into tents and with these were intermixed a good many of the less severe cases of fever. This move was attended with the best effects on the sloughing sores, while it relieved the crowded state of the hospital.

On the morning of the 5th November the advance guard of the Delhi Column arrived with an immense Convoy of provisions and stores, under the Command of Colonel Hope H.Ms 93rd Regiment⁽⁶⁾, who had orders to return at 3 p.m. to the main body which was waiting the arrival of the Commander-in-Chief at Bunnie Bridge. He intimated that he was to take with him the sick and wounded who were fit to travel towards Cawnpore. Of Europeans I immediately selected 30 wounded and 40 sick and, of natives 6 wounded and 8 sick, all of whom were despatched in Doolies and Commis-

sariat four wheeled carts. There were some delay and confusion in starting this party owing to 20 Doolies having been sent to the hospital as being available for the conveyance of sick, which were, at 2 p.m. reclaimed for the service of the escort. In consequence of this I had to collect bearers at a moments notice from the Public Works, to take them from their cooking pots, and to get them together in any way. These men having not time to prepare for the journey, their sets being broken, and they all fasting, in many instances set down these Doolies and ran away. However the party were all outside the gate by 4 p.m. and their progress onward was hastened by a cannonade from the Enemy which did no harm. Supplies of wine and food were put into the Doolies with the worst cases, and a sufficiency of medical comforts for the march handed to the Assistant Surgeon Kindall⁽⁷⁾ in medical charge of the party. Those of the patients who had not sufficient clothing of their own, had hospital blankets etc. sent with them.

From this date the Enemys fire on the Allum Bagh became much heavier and many shot struck the building and riddled the tents, and others fell in the compound and wounded several native followers, horses and cattle. On the 10th November a man of H.Ms 64th was killed by a round shot striking him on the liver while lying on his bed in the upper ward of the hospital suffering from fever. The same shot graised the right knee of Private J. Thompson H.Ms 78th. This injury caused much effusion into the joint and constitutional irritation followed by excessive prostration, but by a free administration of wine and other stimulants the man ultimately did well. On the 11th Private J. Jenkinson of H.Ms 78th was wounded by the accidental discharge of a comrades rifle in the right thigh, the ball peeping to appearance through the middle of Hunter's Canal. A gush of blood immediately followed the shot which caused collapse, and the haemorrhage returned on the slightest motion. For 20 hours after the accident the leg was quite moist and cold and the veins were filled by dark blood and it was feared the artery vein and nerve might all be divided or injured, but by pressure with the finger on the artery in the groin steadily kept up, the haemorrhage was arrested and on the second day the circulation was restored in the limb the numbness afterwards passed off, the wound healing with great rapidity.

On the 14th November His Excellency the Commander-in-Chief⁽⁸⁾ arrived with a Force amounting to about 7000 men of all arms. After leaving 70 sick Europeans and 40 natives suffering mostly from fever and dysentery, on the morning of the 15th he proceeded towards Lucknow and nothing worthy of special notice occurred until the 25th when the Army and relieved Garrison returned to Allum Bagh and immediately afterwards this Field Hospital was broken up, the patients being either sent down to Cawnpore or to their respective Regiments.

Result of operations

Of 15 primary amputations 6 were in the thigh. Of these 2 recovered and 4 died from shock. Of the recoveries, one was in the upper and one in the lower third. Of the deaths, one was close to the hip, one in the middle and two in the lower third.

Of the nine amputations of the leg, six recovered and three died. Of the deaths, one was complicated by comminuted fracture of both bones of the other leg, one died of endemic fever. Of the recoveries, one was Syme's operation at the ankle, but the heel pad sloughed. The others were all near the knee.

There was only one amputation of the arm, which did very well. It was the only case in the hospital in which union by the first intention was in any degree obtained, though it was complicated by an enormous slough in the thigh (vide Graves case in the appendix⁽⁵⁾).

Conservative surgery

Our attempts in this direction were very disastrous. Of nine cases in which the propriety of amputation was matter of discussion. Two only survived and one of these I am told had to undergo amputation (of the arm) at Cawnpore. Two cases of musket shot wound of the foot were lost after secondary amputation and the remaining five all succumbed before secondary operative proceedings were admissible. Contusions of the knee though not producing fracture on opening the joint were very fatal.

The general type of disease was adynamic and stimuli in considerable quantities were required. Water dressings were chiefly resorted to and poultices ignored.

Footnotes

1. The 5th were the Northumberland Fusiliers. The 90th were the Perthshire Volunteers.
2. The 78th were the Ross-shire Buffs.
3. Alum-bagh—The garden of the Lady Alum (or beauty of the world) was a summer palace which with its large garden or park was surrounded by a brick-wall. It was occupied as an advanced base by the British.
4. William Kilner Swettenham. Born 1817. Died 1901. He entered the Army in 1841 and joined the 5th Fusiliers in 1857. He retired in 1868 as a Deputy Inspector General.
5. The Appendices to this report are missing.
6. The 93rd were the Sutherland Highlanders.
7. Bernard Kindall. Born 1831. Died 1912. He entered the Indian Army as an Ass/Surgeon in 1855 and retired as a Surgeon Major in 1879.
8. Sir Colin Campbell.

LETTERS TO THE EDITOR

SIXTY YEARS AGO

SIR—Under the heading Sixty Years Ago in your last issue, a plea for the employment of aurists in connection with recruiting is of interest.

In the years preceding World War II a common, if not the commonest cause of invaliding from the Middle East was chronic suppurative otitis media.

In late 1940 a careful and diligent R.M.O. with a Territorial infantry battalion from East London, examining personnel for fitness for service in the Middle East discovered that almost one third had wet or dry perforations of the ear drum. The astonished C.O. was reluctant to accept that these men were unfit for such service. As acting A.D.M.S. of the Division I was required to examine and confirm the diagnosis, which was one hundred per cent correct, and to advise disposal and replacement.

It would be of interest to those of us no longer in the service to know if ear disease