

THE RUSSIAN RED CROSS IN THE ANGLO-BOER WAR 1899—1902

The Report of a Russian Doctor translated by C. Moody
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Introduction

It is a well established fact that as in most other European countries, sympathy for the Boers during the 1899—1902 war ran high in Russia. And public interest in the war was enormous. Although they did not have their own correspondents in South Africa, the St. Petersburg and Moscow press gave the war very thorough coverage, drawing on the reports of newsagencies and the European and American press. For a few months in 1900 the "War in the Transvaal" as it was called, was the principal news story, to which were added frequent lengthy editorials and background articles. There was a vociferous lobby demanding direct intervention or at least a diversionary campaign against British India.

Although official military action was never likely, there was a significant Russian participation in the war. There were several thousand volunteers anxious to fight in South Africa and only lack of personal means and the Government's unwillingness to provide them prevented these men from embarking. In fact about 100 Russians did join the Commandos, several losing their lives and others serving with distinction, under Danie Theron, for instance, and in the Russian Scouts under Alexis Ganetsky. The Russian Colonel Evgenii Maximov briefly succeeded Count de Villebois as Commander of the European Legion and then led the Hollander Corps at Thaba Nchu where he was severely wounded. In gratitude for his services he was elected *Veg-generaal* by the Boers.

No less significant than the Russian military involvement in the war was the medical assistance rendered to the Boers. Two Russian ambulances were equipped and despatched to South Africa. The first, a joint Russo-Dutch venture, was mounted entirely on Russian public subscription and was active in several theatres of the conflict. One of its doctors subsequently became General de la Rey's personal physician. The other ambulance was sent officially by the Russian Red Cross and served almost exclusively on the eastern front, where it established hospitals in Newcastle, Volksrust and Machadodorp and several forward first aid posts with the Commandos.

The enthusiastic send-off accorded the Russian Red Cross ambulance from St. Petersburg in November 1899 was vividly described in the Russian press. The entire personnel were presented to the Empress, the Patron of the Russian Red Cross, who bestowed on each a small icon for their protection on the journey.

On the return of the Red Cross ambulance to Russia in September 1900, two of its doctors published accounts of their experiences. Doctor A.O. Sadvosky read a paper entitled "Recollections and Impressions of the Transvaal" at a military meeting in Helsinki and it was subsequently published in the *Voenno-meditsinskii Zhurnal* (Military-Medical Journal) St. Petersburg, May 1902, pp.499—1534. A second, more substantial report on the activities of the ambulance was published in the same Journal (November 1901, pp.3145—3211) by a doctor of the 99th Ivangorod Infantry

Regiment, A.K. Ebergardt, entitled "At the Theatre of War in the Transvaal". Doctor Ebergardt's article is divided into two parts. The first is a detailed description of the work of the ambulance and the services it gave to the Boers, both military and civilian. The second part consists of medical descriptions of 32 of the most interesting cases he treated in the various Russian hospitals.

This is a translation of the first part of Doctor Ebergardt's article.

I

The organization of hospitals and medical personnel in the theatre of war in the Transvaal was undertaken by a Medical Commission instituted especially for the purpose. Its members consisted of representatives of the Transvaal Red Cross Society and doctors and it sat in Pretoria, the capital of the Transvaal. Representatives of the Commission were attached to the military headquarters and to all large concentrations of troops. More than 200 doctors practicing in the Transvaal were listed in the so-called *Staatalmanak vor de Zuid Afrische Republiek* (sic), of whom 15 were permanently resident in Pretoria, 55 in Johannesburg and the remainder dispersed throughout the Republic. For the most part these doctors were Hollanders, Germans and English and had received their specialist medical training in German, American, English, French and Dutch universities. There were also three Russian doctors. In addition, there was a considerable number of persons with lower medical qualifications (missionaries) and some charlatans, occupying Government posts and practicing medicine alongside the doctors. Permission to practice is at the discretion of the Secretary of the so-called Examining Council, provided that documents and diplomas meet with the approval of the permanent Medical Commission (*Geneeskundige Commissie*) which administers public health in the country in time of peace. This Commission consists of four doctors, of whom one is its president, and meets once a month.

Military doctors occupied a special position. Two were assigned to each artillery battery, the only military unit organized according to European practice. These doctors were subordinate only to the commander of the battery on whose staff they served. At the very outset of the war in the Transvaal a Society of the Red Cross was formed which assisted with the establishment of hospitals in all towns (settlements might be a better word) in the Republic and supplied the medical units at the theatre of operations. Already in the 1880s there were exemplary hospitals in Pretoria, Johannesburg and Barberton, but in many small places the establishment of hospitals had only recently got underway.

By the time the Russian Red Cross ambulance arrived in the Transvaal, several ambulances sent by various European states and by America were already active. There was therefore no shortage of medical aid and every unit or commando of 700 to 1 000 men had a doctor with his assistants and all necessary medical supplies of which there was also an abundance in the Transvaal.

Since the main military operations were concentrated close to the railway lines, the wounded were transported along them almost exclusively. For this purpose, the Netherlands-South African Railway Society (ZASM for short) provided an adequate number of carriages which were placed by the Medical Commission at the disposal of any ambulance. First aid to the sick or wounded was given at first aid posts in the camps or near the battle fields. They were then transferred to the railway to be sent to

the place indicated by the doctor in charge. The system of dispersing patients throughout the entire country was widely applied, especially in view of the fact that it accords closely with the practices and tastes of the Boers who generally prefer to convalesce at home and go to hospital unwillingly. Consequently, every effort was made to despatch the sick and wounded as quickly as possible to medical centres close to their farms or dorps although this was often to the detriment of their health. As already observed, because of lack of training the medical representatives in many places were unable to give adequate treatment or to take the necessary measures to prevent the spread of epidemics. Fortunately, in this war, the Boers soon realised the drawbacks of this system and, thanks to the generally available right to free rail-travel, soon became used to the sick remaining in hospital, which, if far from their native parts, were at least well equipped. Thus the choice of hospital for further treatment came to depend entirely on the doctor giving aid at the forward first-aid post. Naturally, every doctor wanted to accord the greatest possible help to the Boers and so it is not surprising that there soon arose an element of competition between the various ambulances, which resulted in unequal distribution of patients among the hospitals. Some were always full, others empty. Those which required more patients were obliged to maintain a close link with the forward first-aid posts.

When we had made some acquaintance with this method of conducting medical matters in the Transvaal our Russian ambulance came to the conclusion that in order to optimize its activity, it would be necessary to depart somewhat from that form of mobile hospital of 25 to 50 beds which had been envisaged originally in Russia. It was necessary to split up and operate in various centres.

At the suggestion of the Military-Medical Commission, our ambulance was to operate in the eastern theatre of war, at that time the Boers were still laying siege to Ladysmith. In order to carry out a preliminary reconnoitre and devise a plan of action on the spot, the representative of the Russian Red Cross, State Councillor Kuskov, accompanied by myself and our agent Mr Ludwig set out on February 1st for Volksrust, a small border town, and then for Newcastle in Natal. These two towns are situated three hours apart by train while Newcastle is four hours journey from Ladysmith. In Newcastle we found a hospital of 34 beds in the building of the local hotel, abundantly supplied with medicines. At that time the hospital was run by a Jewish feldsher who had emigrated from Russia. On the day we inspected the hospital there were 17 patients of whom five were wounded. Medical care was extremely unsatisfactory and there was much to be changed and improved. This work was entrusted to the doctors of our ambulance, Sadovsky and Chistovich, who took over the running of the hospital. The subsequent history of the hospital will, doubtless, be recorded in the reports of these two most respected colleagues. In Newcastle there was also a temporary hospital in the charge of an English doctor who was obliged to leave on receiving another appointment from the Medical Commission. This hospital, of 50 beds was situated in the spacious building of the local school but it was in an even sorer state than that at Volksrust. The infectious patients and the wounded lay side by side and the doctor's assistants had no medical training whatever. The whole building was so dirty that we refused to accept it for the establishment of our own hospital although it had been assigned to us by the Medical Commission. We resolved to look elsewhere and found what we were seeking that same day in a Dominican

monastery abandoned by fleeing English nuns. The monastery, situated 10–15 minutes walk from the Natal railway leading to Ladysmith, consisted of two stone buildings which had only recently been completed. Around the buildings was a huge garden with a vineyard, arbours and fruittrees. Leading off the courtyard was a large kitchen, the church, a large iron construction for use as a theatre and a workshop. Everywhere in the building there was fresh-tasting water, piped from the spring which served the whole town. The latter was almost submerged in the high green verdure of the gardens and one could immediately see that it was one of the healthiest places from a climatic point of view in Natal. Both buildings of the monastery were double-storied and could hold 75 sick or wounded patients in comfort.

The hospital was established in three days and supplied most satisfactorily with all necessities. The personnel comprised the representative of the Russian Red Cross, two doctors, two feldshers, six sisters, five orderlies, one interpreter and one agent in charge of domestic matters. The hospital opened on February 8th. My duties there as a doctor lasted until April 18th with a nine-day interval when I visited a laager near Glencoe. I was in charge of the outpatients' department, all internal and infectious diseases, and for some of the time, the surgery.

The outpatients was used not only by the military personnel, but also by women and children from the town of Newcastle and its more distant environs. With the exception of a small number of bullet wounds the outpatients did not present particular interest from the military medical point of view. In the outpatients, at the request of the Boers, examinations were carried out to determine fitness for military service. For this purpose each man being examined was obliged to produce a note from his commandant or field-cornet. The question of fitness or unfitness for military service or of release on leave on account of illness was decided by the doctor alone. The doctors enjoyed the full confidence of the military command and gave out leave certificates and certificates conferring the right to free rail travel. These certificates were written out on small forms or, in emergency, simply on a piece of ordinary white paper. In the Transvaal there were no special instructions for medical examinations and no list of illnesses permitting exemption from military service, thus the individual doctors had to decide on their own discretion. Considering that official medical practice in the Transvaal was under the direction of people with lower medical training (missionaries, bloodletters etc.), it is hardly surprising that mistakes and even abuses occurred in these examinations. These, however, did not remain unnoticed by the Boers and their Government thanks to the wide publicity given to public affairs and the complete freedom of the press. Every abuse was subjected to severe censure in the Transvaal newspapers and proclamations and appropriate measures were recommended for curbing them.

Of the 256 outpatients whom I treated in Newcastle 36 were surgical cases, namely 9 with empyaema, 7 with lacerations, 1 with cuts, 6 with sores, 1 with contusion, 1 fracture, 1 blockage of the urinary canal, 5 with bullet wounds, 5 with injuries to the cornea or with foreign bodies lodged in it. There were 28 women patients of whom 8 were gynaecological cases. There were also 28 children (16 girls and 12 boys). In all, the 256 outpatients made 382 visits.

By far the most frequent internal and infectious illnesses in the inpatients section were typhoid and malaria. Catarrhal complaints and diseases of the respiratory organs were encountered very rarely. The course run by illnesses in our hospital could be considered very satisfactory. Normal complications such as in the case of typhoid

were not observed at all. Intermittent fever and typhoid usually responded quickly to antifever treatments. There was also a considerable number of patients in whom we had difficulty in diagnosing any indisposition save extreme physical and mental exhaustion as a result of the privations of life on the march. The Boers themselves pointed out that the prolonged nature of the war with the armies of the British Empire was something to which they were unaccustomed and was particularly exhausting. The Boers had no reserves of manpower and it was difficult or impossible to obtain leave. In their wars against the natives the Boers usually relieved their forces after eight or twelve weeks. I kept these exhausted patients in the hospital for two or three days where they received refreshing showers, were supplied with clean linen and enjoyed much better food than they got in their laagers. The result of this treatment was usually a speedy restoration of health and return to the commando. There were also some entirely healthy men who simulated various illnesses in order to be allowed to return home. These were, of course, not detained in our hospital.

One case of traumatic neurosis may be noted of which a brief case history was as follows: A Boer of 22 years of age from the Johannesburg area, Jacob N., entered our hospital on March 7th declaring that after a bomb had exploded close to him 11 days previously (at the Battle of Colenso) he found he could not move his right leg. There was no visible injury or wound. The patient, of average build and well nourished, lay on his back. His right leg hung out to the side. Feeling, reflexes and passive movement of the joints were normal. The patient could slowly and apparently with great difficulty bend his leg at the knee. He could get up and walk with a stick, standing on his right toe. His general condition was excellent. A daily treatment of a weak current of faradization for a space of five minutes was prescribed. After each session the patient's movements became stronger and on March 11th after five days in hospital he was released to his commando completely recovered. At the same time, in another part of the hospital, a second patient and a comrade of the first appeared with weakness in the legs following shock sustained as a result of the same explosion. He was examined by Dr Golbeck and treated with doses of potassium bromide. The result was the same — a speedy return to health. I will not deny that these patients aroused involuntary suspicions of simulation, but thanks to the absence of any personal motive for this on the part of our patients we did not feel obliged to make any special efforts to diagnose the trouble.

The equipment of the surgical department in the Newcastle hospital was very satisfactory, the instruments and dressing sent out by the Red Cross Society were excellent; the operating theatre was spacious and light and isolated from the other departments. The rooms for patients were also light and comfortable. The patients were divided between two doctors, myself and Doctor Golbeck. The number of surgical patients was not great. There were 49 in all during the existence of the Newcastle hospital from February 8th to May 14th. 18 of these came under my care from February 8th to April 17th. The largest proportion of the surgical patients were bullet wound cases then empyaema. Except for the bullet wound cases the surgical afflictions did not present particular interest from a military-surgical point of view.

There were two deaths among the surgical cases.

Of the 33 operations performed by the doctors in the Newcastle hospital, I personally performed 15, namely:

amputations:	2 (of these one was a reamputation)
sequestrations:	2

craniectomy:	1
draining an abscess:	1
Ingrowing nail:	1
removal of a bullet:	1
empyaema:	7

Among the surgical cases there were two women. One of these, our first patient, entered the hospital on February 12th, brought unconscious with a complex fracture of the skull received in a fall from a carriage onto the hard road. She died six hours after entering the hospital. I cannot omit to recall that the death of our first patient left a gloomy impression on all the personnel of our ambulance.

During the first days we had some difficulties in connection with food for our patients. They did not care for the preserves we had brought with us and we had to take into account the times when the Boers were accustomed to eating their meals. The local executives of the Medical Commission, the landdrost and the field-cornet supplied us with fresh fruit, meat, bread, milk, vegetables etc. In addition many of the local inhabitants brought fruit and greens for the patients so that there was no shortage in the supply of foodstuffs. But to prepare something suited to the tastes of the Boers from all these materials proved difficult, for there was no one in the ambulance with a knowledge of their tastes or how to cook for them. The attempts of one sister who volunteered to help in this respect were unsuccessful so that she soon lost all desire to remain in charge of the kitchen, a task entrusted to her by the head of the unit. Later another sister undertook the job and with the help of a cook from among the Transvaalers managed to set matters in the kitchen on a satisfactory footing.

Food was distributed four times a day: at 7.30am, 12.00 noon, 3.00pm and 6.30 pm. The menu for the patients was not drawn up according to any particular diet and was usually the following: at 7.30 oatmeal or millet porridge, roast beef and tea or coffee; at 12.0 meatsoup, a hot or cold dish and tea; at 3.0 tea or coffee with bread; at 6.30 a cold meat dish or something hot and tea. Fruit preserves which the Boers ate with relish were almost constantly available.

In spite of not knowing the Boers' language our orderlies and sisters carried out their duties at Newcastle very successfully. The resourcefulness of the Russian military orderly did not desert him here and led to the establishment of excellent relations between themselves and the patients. Thanks to free use of the telegraph our patients were frequently in touch with their families and kept them informed as to their state of health. On the initiative of the Medical Commission numerous copies of newspapers were sent to the hospital for our patients. Visitors had free access to the patients and I cannot say that there were any abuses. If at any time visiting was inconvenient I only had to explain to the visitors and they readily accepted our advice not to disturb the patients. We were frequently visited by representatives of the Medical Commission and the Government and all admired the good organization of our improvised hospital.

II

Above it was recorded that in order to keep the hospital supplied with patients,

in view of the local military-medical practices, it was necessary to have the closest links with the forward first-aid posts and the medical posts in the laagers or on the battlefields. This necessity was particularly strong in the case of our Russian ambulance with its large (by comparison with the other ambulances) personnel and supplies of dressings and medicines. We also had additional supplies provided by the Military-Medical Commission of the Transvaal.

It was decided by the Medical Commission and the representative of the Russian Red Cross Society before we left Pretoria that the Headquarters of the Commander of the Transvaal forces, General Joubert, should be immediately informed of the opening of our Newcastle hospital. Then a forward unit would be formed without delay and despatched to the Tugela River at Colenso. In Newcastle it was necessary to obtain the transport for movement with the field and the Medical Commission promised its assistance. Unfortunately, for various reasons our forward unit to which I and my Russian Colleague, Doctor Davydov were assigned and for which two days were spent in dividing equipment and supplies were prevented for a long time from setting off, mainly because we did not receive transport facilities (horses, mules and carriages) in time. While, for example, several volunteer-soldiers who arrived in the Transvaal literally without a kopeck, managed with the aid and at the expense of the Transvaal Government within a few days to form and supply with all necessities whole units of troops, our unit supplied with sufficient financial resources awaited vainly for our transport for almost a month. For almost a month we were obliged to sit in our well-established hospital in Newcastle in comparative inactivity (during February we had 103 outpatients and 12 inpatients) and watch wounded, naturally not without detriment to their health, being transported by rail through Newcastle past our hospital and being subjected to all the hardships of being transferred from the theatre of war to distant hospitals in Pretoria and Johannesburg. The Headquarters of General Joubert was informed of our existence only in the last days of February. According to the bulletins of the Transvaal Medical Information Bureau between February 5th and 27th in various battles along the Tugela and at Colenso (February 5, 16, 17, 18, 20 and 27) the Boers suffered 104 killed and 400 wounded, 14 of the latter of whom died soon afterwards. Of this large number of wounded our Newcastle hospital received into its care six and these only thanks to my chance personal acquaintance with a doctor travelling with a hospital train, who passed on to us wounded whose serious condition rendered them unfit to undergo a long train journey.

It is now known, that after the raising of the siege of Ladysmith there was comparative quiet in the eastern theatre of war and the further Boer losses were insignificant. Thus the opportunity of receiving a large number of patients and from the military-medical point of view interesting material disappeared irrevocably. Meanwhile, on the western front other ambulances (German, Dutch, Swiss and Russo-Dutch) were operating successfully and there was no chance of our receiving patients from there, even if we had despatched a forward post to that quarter. To this must be added that initially it was proposed that our activity in the Transvaal should be terminated on May 1st, consequently had our Newcastle hospital closed and the entire ambulance (very immobile in view of the nature of its organization) been transported to the west we would have only had time to pack and unpack our equipment. Consequently it was necessary to leave the hospital where it was and form a forward post to be sent to Glencoe whither at the end of February the Headquarters of the

Republican forces were moved and where the remains of the main Boer force in the east was concentrated.

Thanks to the assistance of the agent of the Medical Commission, assigned to our ambulance at the request of the representative of the Russian Red Cross (a former missionary practicing as a doctor in the Transvaal) the head of the trading firm T. V. Beckett and Co., who was also a member of the Transvaal Society of the Red Cross, put at the disposal of our ambulance the equipment and personnel of a field ambulance he had formed at the beginning of the war. The members of this ambulance, known under the name *Becketts Sectie van het Transvaalse Ruid* (sic) *Kruis* were young assistants from the firm of Beckett and several other private institutions. The head of the ambulance was a Transvaal doctor who had received his specialist medical training in England. The young people, who numbered six had all received training in first aid at the courses run in peacetime in the Transvaal for Samaritans. Two of them, the sons of a doctor, had earlier been vaccinators and dentists, but they were all excellently trained in field first aid and in addition, as true Afrikaners were skilled in the use of various items of domestic equipment. Work in co-operation with this unit began on March 3rd and continued until March 20th with the participation of only one Russian doctor (Doctor Davydov), one feldsher and two Russian orderlies. The Transvaal doctor also remained with the unit as did the agent-missionary in the capacity of a doctor.

Concerning the activities of this combined unit I can report that within the short space of time from March 3rd to 20th it received as outpatients, treated and despatched to our hospitals in Newcastle and Volksrust in all 1 007 patients (1 180 visits). Although thanks to the ever diligent participation in diagnosis patients who ailed nothing or who did not require such treatment were sent to hospital, the operations of this unit can be considered the beginning of greatly increased activity in our hospitals at Newcastle and Volksrust.

On March 20th I took charge of the forward unit at Glencoe and I continued there for eight days. Then, after a three week break during which Doctors Davydov and Golbeck took it in turns to head the unit I returned and from then until July 7th I worked with the unit without a break.

In March the Headquarters of the Commander of the South African Republican forces, General Louis Botha, was situated around the Glencoe station of the Natal railway in the centre of the Boer positions in the Biggarsberg Hills. The furthest position was about eight to ten miles from this station. Close around the railway station were positioned the Commandos of special police, the reserves of artillery, Edwards' corps of Scouts, foreign volunteers under the command of Ganetsky, the staff and foreign volunteers under General Lucas Meyer. Then the commandos which interested us less — those of Pretoria, Krugersdorp, Middelburg, Zoutpansberg, the Irish Brigade and the German volunteers — were situated on the northern side of Biggarsberg. Our forward unit was situated directly beside the branchline leading from Glencoe to Dundee, about two hundred yards from the station. Here stood a small house which had been abandoned by its owners and in it and in tents pitched in the yard we set up our ambulance. The distance separating the ambulance from the furthest commandos was approximately 1½ to eight miles. Good roads suitable for a carriage or riding on horseback led to all the camps. The position of the ambulance with all roads leading to it proved to be very convenient for the Boers and could not fail to have favourable consequences since, from the moment we began work to the

removal of the laager, our ambulance received more patients than any other forward medical post.

Our transport consisted of three hospital wagons and one trolley. Our hospital wagons had been improvised from vehicles for transporting furniture and from the outside greatly resembled our Russian hospital wagons used in infantry regiments. The interior, however, differed in that there were no folding benches along the side. There were six stretchers to each wagon. One pair inside was suspended from rods attached to the sides, another pair lay on the floor, while the third pair was fastened beneath the wagon. The stretchers were fitted with small wheels and a folding hood of red tarpaulin to shield the patients' heads from the sun. Another characteristic of these wagons was the brake operated by a pedal at the driver's seat. The wheels were stopped from turning by small wooden blocks which were pressed to all four wheels. The rear wheels were larger than the front ones. The trolley was long with a tarpaulin hood and was used for carrying tents, provisions and the rest of the equipment of the ambulance. The wagons and the trolley were drawn by three or four mules depending on their size.

Besides the 30 mules the ambulance also had the use of riding horses, one for each of the orderlies. Six blacks were assigned to the ambulance for looking after the horses and other menial duties. All these items were on Becketts' inventory. To this, besides the tents, we Russians added surgical instruments sufficient for operations which could not be postponed (including equipment for amputations), Professor Turner's disinfection apparatus, a Berkenfeld filter, medicines, mainly in tablet form, and medical utensils. We also had meat and dairy preserves, a supply of wine, vodka, tea, sugar and coffee. Finally, there were 25 folding field stretchers, blankets, pillows and fresh linen for the men. A large part of all the equipment which we had originally separated from the hospital supplies in the Newcastle hospital was now not needed in view of the changed circumstances afforded by Becketts' ambulance.

When I arrived at Glencoe; the Transvaal doctor who had been serving with Becketts' ambulance left on receiving another assignment from the Military-Medical Commission. Since I had no need of his services the agent-missionary also left and went to Newcastle. There remained with me one feldsher, two Russian and six Boer orderlies. Being now independent I organized the ambulance as follows: both outpatients' and inpatients' departments were made available, the latter to accommodate the minimum and their stay as short as possible. The speediest possible evacuation of the casualties from a forward ambulance must be the measure of its successful operation. The reception of outpatients began at 7.0am and continued all day until sunset, that is until 6.0pm. Between 1.0pm and 3.0pm there was a break since at that time the whole laager observed a lunch break and only extreme emergency would persuade the Boers to visit the ambulance at that time.

The feldsher worked in the pharmacy providing medicines on my instructions and helping with dressing. The Russian orderlies participated in the care of the patients while the Boer orderlies distributed food and one of them was in charge of its preparation. Two of them went out every day with the hospital wagon to collect and return patients from the laager or to deliver them to the railway station. Serious patients being transferred to our hospitals at Newcastle or Volksrust were accompanied on the train by an orderly. A Mister Fisher, a very energetic and efficient man and an employee of the firm of Beckett was in charge of Boer orderlies. He administered the domestic side and all the equipment provided by Beckett. All requests for

provisions to the commissariat were also countersigned by him.

Since the Middelburg commando had no doctor of its own our forward medical unit, at the suggestion of the Medical Commission, took upon itself the task of administering to its personnel, besides our general activities devoted to the sick of all the commandos stationed round the headquarters at Glencoe. Our work with all the commandos was basically of a therapeutic character, but with regard to the Middelburg commando it had to expand to include considerations of general hygiene. To attend to this I set off to the laager at the foot of the Nidumeni (sic) hills on the day after my arrival. The laager was typical of all those along the Biggarsberg and so I shall give a detailed description.

Already along the road to the laager from our ambulance I came upon the corpses of animals which had not been cleared away. They were in a state of decomposition and gave off a powerful stench. As I drew closer across a small muddy river towards the concentration of tents and wagons called a laager, I became aware that the stench was becoming stronger and for a person unaccustomed to it, to begin with it was unbearable. Beginning on the banks of the river a short distance from which were pitched the first tents were piles of the remains of slaughtered cattle and the corpses of other animals. The Boers had arranged their huge wagons in the form of an irregular quadrangle at varying distances from each other, the shafts facing outward and their rears to the centre. Between the wagons and behind them was the most motley collection of tents. In the middle of the laager and between the tents there was a space where a large number of pack and slaughter animals, horses and mules, was herded for the night. Well-known from numerous descriptions, the huge Boer wagons were laden with goods, provisions, clothing, pillows, the woollen blankets so beloved of the Boers, trunks and even furniture such as tables and chairs. The inhabitants of these wagons even included domestic fowls such as geese and ducks. Many of the Boers who did not possess tents slept in their wagons or on the ground beneath them. There was little overcrowding in the canvas tents. The earth was usually covered with either dry grass or blankets and mattresses with waterproof oilcloth sewn to the underside. Around the tents and wagons on fireplaces improvised out of stones, fires were burning and food was being prepared in pots and pans of every kind imaginable. Coffee was on the boil, meat and potatoes were being roasted, millet bread and buns were being baked. Jars and tins which had held all kinds of fish, meat, dairy and fruit preserves, rubbish from the kitchen — all these lay in profusion around the tents and campfires. Amongst all this domestic profusion I was struck by the absence of fresh fruit and vegetables, remarkable in that meat was available in abundance. The Boers drew their drinking water from the stream I have already referred to, and in so doing condoned the absence of the most primitive rules of hygiene. While the blacks were washing linen and other clothes a little way upstream and fouling the water being used by the Middelburgers, their neighbours of the Krugersdorp Commando were drawing their water a few hundred yards further downstream. There were quite a few who drank this water without boiling it, unaware apparently of the danger to their health. Similarly there were some who quite unnecessarily pitched their tents in marshy places, simply to be nearer the other tents of the main laager.

The Boers' supplies of clothing and footwear were more than adequate in quantity and of excellent quality. Most of the men wore knitted woollen shirts and jerseys as a protection against the sharp changes in day and night temperatures.

Most of the Boers gave the outward impression of excellent health. The Middelburg commando consisted of some six or seven hundred men, ranging in age from 15 to 70 at the time of my inspection. It was remarkable to observe that sobriety prevailed throughout the entire camp and that this crowd of armed Boers conducted itself comparatively quietly and modestly. The youngsters and those of middle age occupied themselves with games of croquet and checkers, while the older men sat around in small groups drinking the coffee beloved of the Boers, reading newspapers or listening to them being read. Others were apparently deep in conversation about their national affairs. This laager was no exception. In the neighbouring camps there was the same organization and the same disdain for the rules of hygiene. A greater degree of order and cleanliness was visible in the laager of the special police situated near the station and adjacent to our ambulance. Here the tents were pitched in a familiar horseshoe arrangement some three or four metres apart and the surrounding area was kept tidy. But the slaughter of cattle for meat went on next to the nearest tents and the stench from the decomposing discarded meat reached our ambulance. A peculiar feature of the special police laager was that in many of the tents there were also living wives and children of the Boers.

The absence of order in the laagers could not but have adverse consequences for the health of their occupants, in spite of the Boers' convictions about their hardiness, and would lead to the spread of epidemic diseases, some instances of which began to appear soon after the establishment of the laagers near Glencoe. I therefore considered it necessary to warn the Boers about this, advise that the place be cleared up, that they should space their laagers more widely and take more care about the purity of their water. I then informed the army commander General Louis Botha of the results of my inspection and of the measures I considered necessary for the establishment of hygiene, warning him of the possibility of the spread of infectious diseases, especially typhoid, among his men. The army commander thanked me for the information and immediately gave orders to all the commanders and field-cornets who had assembled that day for a war council to look to the clearing up of the laagers in accordance with my directions. Although after this there were some changes in the laagers, the Middelburg commando spreading its laager and on higher ground, although partly for strategic reasons as a consequence of the transfer of the neighbouring Krugersdorp commando to the western front, significant improvements were not apparent. The Boers' understanding and knowledge of military hygiene was as limited as it was of military science. Now in a war with a major European nation they could not divest themselves of the habits they had formed in wars against the native tribes when their laagers rarely stood for long in one place and the clearing up was done by the vultures. The hygienic significance of these birds is valued highly by the Boers and according to law in the Transvaal the killing of a vulture is punishable in court by a heavy fine.

After the raising of the siege of Ladysmith several medical units (including the Dutch) withdrew so swiftly that they lost their equipment and consequently they were obliged to cease their activities until they had received new supplies. These circumstances and the convenience for the Boers of the positioning of our ambulance meant that patients began coming to us in increasing numbers. And this was after the personnel of the Boer army after the transfer of several large commandos (the Krugersdorp, Zoutpansberg, foreign volunteers etc.) to the western theatre of the war, had become markedly fewer. The transfer of patients from the army in Natal was

almost exclusively in the hands of the Russian forward ambulance. Our permanent hospitals in Newcastle and Volksrust were at one time so full that they had to ask us in Newcastle to temporarily withhold patients, whom we then had to send on to Pretoria or Middelburg. My warnings about the possibility of the spread of infectious diseases began to be fulfilled. The number of outpatients with disorders of the digestive organs (constipation and diarrhoea) as a result of the monotonous meat intake, was high by comparison with diseases of other organs. Typhoid taken by patients from the Middelburg commando to their home town began to spread rapidly to the civilian population and claimed many victims since there was no doctor there at the time. Requests were published in the press for doctors to move to Middelburg where there were already some 400 typhoid cases. The low spirits produced by this circumstance among the Boers resulted in many expressing a wish to return to their farms and at the slightest sign of indisposition they applied for sick leave. The task of the doctors responsible became in these circumstances very difficult, especially as a result of cases of undoubted abuse which led to doctors' certificates being regarded with suspicion in the Transvaal. People who sat at home with doctors' certificates in their pockets while their fellows were shedding their blood for the freedom and independence of the Republics were ridiculed in the Transvaal newspapers.

The ranks of the Middelburgers were thinned drastically and by the beginning of May when the typhoid epidemic among them began to recede there were no more than 300 men in the commando. Next, typhoid began to appear more frequently among the Pretoria commando, which incidentally, had not abandoned its unhygienic habits, although its position on high ground and the accessibility of clean drinking water would have led one to expect the opposite.

The treatment of typhoid patients in the casualty ward of the forward first aid post was usually confined to observation for the shortest possible time (one to two days) and when diagnosis had been established despatch to the appropriate hospital. Of the 37 typhoid cases which I sent on to hospital, 25 had received preliminary treatment as inpatients at the forward first aid post. I followed the same procedure with other patients, permitting a longer stay in the ambulance, with the exception of those whose complaint allowed them to live in laager conditions. Since I had at my disposal only very small supplies of hospital linen intended for emergencies, I was obliged to accept patients in their own clothing. They were only given blankets and pillows. To avoid the bedding becoming soiled the patients had to lie in bed with their boots off and after the discharge of each patient the bedding was aired in the sun and cleaned. Only when serious infection was suspected was the straw removed from the pillows and the pillowcases boiled in water. Thanks to the favourable weather conditions drying the linen presented no problem. Food for the patients differed in no way from that of the healthy burgers. Only for suspected infectious cases did we have a supply of milk foods and porridge. The Military-Medical Commission also supplied our ambulance with a cow for milk in the event of the Swedish and Swiss milk preserves which we had in abundance not being to a patient's taste. I refer to this "luxury" for a forward ambulance not of course because I regard it as worthy of imitation but to reveal the military habits characteristic of the Boers whereby their wagontrains are swollen and slowed down by large herds of cattle.

The internal diseases which we met in the outpatients department and in the casualty ward of our forward ambulance in Glencoe did not differ significantly from those I have described in the Newcastle hospital. I would only like to refer to the

23 cases of veld sores which passed through my hands. These sores were notable in that they were exclusively confined to horsemen, in all probability as a result of the friction of dirty reins against the skin of the hands. The small blister which appeared first soon broke and formed a surface ulcer which granulates poorly and soon becomes covered with scabs beneath where there is suppurative serous liquid. The ulcers are inclined to multiply and spread from the back of the hand where they first appear to the palm and then to the skin of the forearm. Slow to heal and accompanied by pain, they cause great suffering to an otherwise healthy man. Usually, treatment of these ulcers consisted of careful cleaning and the application of damp Zaltzvedel bandages which soon effect a cure.

The small number of bullet wounds among our patients is explained by the fact that during our stay at Glencoe the Boers were generally inactive. The minor skirmishes between Boer and British patrols usually ended in favour of the Boers and their returning to their laagers with the captured British patrol. The Boers lost two dead: one was an Italian during a night raid by the volunteer Scouts commanded by the Italian Ricciardi on a British advance post and the other was a gunner on the day of the withdrawal from Biggarsberg.

On April 20th — 21st I, together with the forward ambulance (the Russians with me were feldsher Maslov and reserve under-officer of the Egersky Life Guard Regiment, Golev) accompanied the Boer forces when they attacked Elandslaagte where the British had occupied positions after the earlier skirmish with the Boers on April 10th on the Sand River. This expedition gave me the chance to be practically involved in the choice of position and the setting up of a first-aid post on the battlefield. The place where the clash was expected to take place was 25 kilometres from Glencoe. The position I chose for the three hospital carts and one tent about 100 paces from the river and directly beside the road leading to Glencoe was well sheltered by steep hillocks and was as close as possible to the front firing line — about two kilometres. The hospital carts stood outside the firing line of the British artillery on dead ground and shells could not fall upon it. All day only one shell fell about 150 metres from the carts. Later when we went forward from our first-aid post to the front line which was under British artillery fire, feldsher Maslov and I had an opportunity to witness conditions in battle. The barrage, which began at 6.30 in the morning and continued with short intervals until 4.0 in the afternoon did not injure a single one of the 2 000 Boers, whose only losses were one dead and two wounded horses. Having received the order to return to their original positions at Biggarsberg the forces set out for Glencoe at 4.0. Our first-aid post returned with him.

III and IV

On May 14th at 4.0 in the afternoon, after the battle at Helpmekaar, the Transvaal forces under General Lucas Meyer began to retreat from Biggarsberg to the south-eastern border of the Transvaal. In the process the Boers suffered three wounded and one killed. One of the wounded was captured by the British, but the other two received first aid from our ambulance at Glencoe. One had a Lee Metford bullet extracted from the right thigh and the other was given an antiseptic bandage on a bullet-wound in the chest. These wounded and three others (a broken left forearm, phlegmon of the right foot and a broken left wrist caused by a bullet) who had been in our ambulance for the previous three days, I sent on without delay by rail to hospitals

in Volksrust and Pretoria when I heard of the general retreat.

Since I only heard of the withdrawal late, at 5.0 in the afternoon, we were obliged to pack our belongings in great haste. Our lack of transport, the main shortcoming of our Russian ambulance, left me in a difficult situation. I was only able to overcome it thanks to the commandant of special police Mr Shroeder who put at my disposal the only open railway wagon not commandeered by the retreating forces. I quickly loaded up the tents and all the medical supplies which I could not get into our only Beckett cart. The convenience of the situation of our ambulance next to the railway line was again apparent as the railway wagons could be brought right up to our tents and we were able to load them up with little difficulty. The great efficiency of the railway (ZASM) personnel which throughout the war did splendid service to the Republics, aided us greatly in the transportation of wounded and equipment. I appointed the Russian orderly to look after the latter and sent him with the wagon to Volksrust, the end-point of our retreat. In the hospital cart which remained with me, we packed almost all the dressings, the surgical instruments, the mobile Professor Turner disinfection apparatus, certain essential medicines and food preserves for three days.

At 8.0 in the evening, three hours after the notification of the withdrawal our forward ambulance left Glencoe. It comprised 14 people (one doctor, one feldsher, six orderlies and six blacks with a supply wagon, three tents, three hospital carts, five horses, 30 mules and one cow with a calf). Two shells which were aimed at the railway line by the British artillery at the moment of our departure, caused no damage. The last to leave Glencoe, an hour after us, were Edwards' Scouts and the Italian volunteers under Ricciardi. The German doctors who were working close to our ambulance failed to hear of the withdrawal in time and were captured by a British cavalry detachment and taken to Dundee which had been occupied by the British. Travelling all the time among the retreating forces along the excellent dirt road through the Drakensberg mountains, our ambulance reached Charlestown at midday on May 17th, having covered the 120 kilometres in 64 hours. In spite of the severe midday heat and the relatively cold nights there seemed to be no exhausted stragglers. The morale of those retiring was apparently high. There was no shortage of food and drink if one bears in mind that meat, rice and coffee are the Boers' main diet. They preferred fresh mutton roasted in its own fat or boiled with rice to the tinned meat we had brought with us from Russia. We did not see any abuse of liquor, but at every stop the Boers quickly heated white or black coffee with which they also filled their water flasks. The latter came in the most varied kinds, metal, glass, and wooden such as are used by our soldiers in Russia. Aluminium flasks covered with grey canvas are light and convenient. A chilled drink maintains its temperature in them, imparting to the water a pleasant freshness. Hot drinks, such as coffee, on the other hand do not grow cold provided the canvas with which the flask is covered remains dry. On themselves the Boers carried only a rifle and ammunition belts. They carried no bayonets or swords. Everything else was attached to the saddle.

Methods of carrying ammunition also varied. Some had them fastened over the shoulders, others wore a belt round the waist. A few wore special tunics covered with small pockets secured by a single button. In each of these pockets was a packet of five rounds. This method of carrying ammunition, like a coat of mail consisting of 200 rounds was convenient in that the weight was equally distributed over both halves of the body. However, it was not so convenient in another sense in that the rounds on the

back could not easily be reached and had to be transferred in advance. Also when lying on the back the pressure of the rounds was uncomfortable. The latter, as a good conductor of heat rapidly absorbed changes in temperature, especially unpleasant on the back. We had three patients on the retreat, two of them surgical.

The Boer forces halted at Charlestown, at the foot of the historic Majuba Hill, and on May 17th occupied positions along the heights of Majuba, Laingsnek, Pokwani, Maulsnek and on the Drakensberg mountains close to Botha's Pass. The headquarters of the commander of the eastern army, the recently appointed Assistant-Commandant-General Christiaan Botha, was located in Charlestown, a small and deserted town on the border of the Natal Colony. The representative of the Military-Medical Commission and the Supply Commissariat of the Army were stationed near the railway at Volksrust, some five kilometres north of Charlestown and linked to it by railway.

In order to organise the distribution of ambulances among the commandos on the eastern front the representative of the Military-Medical Commission at Volksrust, Advocate Stegman invited a military doctor from Sweden, Doctor Hammar, an American doctor, Doctor Conroy, and myself to a special meeting. It was decided at the meeting that responsibility for the affairs of the Military-Medical Commission should be temporarily entrusted to Doctor Hammar. Because of the shortage of ambulances, I established ours in Charlestown to give general service to the commandos encamped at Laingsnek, Majuba and in Charlestown itself close to the Headquarters of General Christiaan Botha (the Johannesburgers, Edwards' Scouts, the artillery, the special police, the Wakkerstroom, Pretoria and Zoutpansberg commandos, in all about 2 000 men). Arriving in Volksrust from Glencoe on May 14th the wagon carrying the equipment of our forward first aid post was sent on the evening of May 18th at 7.0pm by persons still unknown to me to Pretoria where all the personnel of our hospital in Newcastle which had been closed on the day of the general retreat from Natal now were. Being thus left in need of medicines I immediately telegraphed to Pretoria to the representative of the Red Cross, Doctor Kuskov, with the request that he should send back the wagon with the equipment, if it should be found. I received no reply, however, because as it transpired my message was never delivered. After five days hope of receiving the wagon was abandoned, as the British had occupied Heidelberg and had thus cut railway contact with Pretoria. Other arrangements had to be made. With the permission of the authorities I acquired for the ambulance a large, attractive house on the outskirts of Charlestown which had previously belonged to an English doctor who had left the town on the approach of the Boers. In this house (consisting of five airy rooms) I found among other things a small chemical laboratory and a domestic pharmacy from which I did not hesitate to augment my supply of medicines. In addition I was supplied with certain medicines by the doctors of the Russian hospital in Volksrust which had just closed. Later on, the doctors of the German ambulance and the pharmacy in Standerton, on the instructions of the Medical Commission, let me have what they could.

There was a certain amount of wooden furniture and kitchen utensils in the house which we occupied. We settled in quite comfortably, one room for myself and the feldsher, one for the patients, one for outpatients, one as an operating theatre and one as a general dining room. Water, with a pleasant taste and very clean, was piped from the hills.

Situated less than two miles from the Boer positions, centrally between where

the commandos were serving and finally only a quarter of a mile from the railway station, our forward first aid post occupied a most favourable position and, adequately supplied, we were ready for serious work. With respect to the topography of the Boers' laager, close to their newly adopted positions, from a sanitary point of view they were most satisfactory. The laagers were sited on sheltered slopes of the mountains, from three to four thousand feet above sea level. The small but unpolluted mountain springs assured a good water supply. The general decrease in temperature from the beginning of May together with small amounts of rain did not have a particularly adverse effect on the health of the forces, particularly in view of the fact that they began to be excellently supplied with warm clothing from the Commissariat at Volksrust. Food supplies were also entirely satisfactory. Large quantities of fresh white bread were prepared every day in the Charlestown bakery; more than sufficient oxen and sheep were driven from Natal for slaughter although the meat had become somewhat inferior as a result of the low rainfall in this period — the Transvaal winter. The general level of illness was significantly small and the one case of typhoid was a black worker, whom I sent to Volksrust.

The forward first aid post at Charlestown began work on May 18th when our orderlies delivered three maimed patients by rail to the Volksrust hospital. Then our orderlies took an active part in the forced evacuation of the Volksrust hospital, which began sending patients to Pretoria.

From May 21st to June 11th the Boer positions close to our ambulance on Majuba and Laingsnek were subjected to a British artillery barrage every day with surprising accuracy from 7.30am to midday and then from 2.0 to 4.0 in the afternoon. Such regularity in the barrages was very convenient from our point of view since we always knew where and when services might be needed. From June 2nd to 5th there was an armistice during which the British fortified themselves in Botha's Pass. At 3.45pm we were notified by a salvo aimed by the British at the position of the Boer Long Tom that the truce was at an end and at 7.30 next morning the accurate bombardment started up again, although, as before, without inflicting injury on a single person. Only one Boer of the Zoutpansberg commando came to our ambulance, declaring that he had been deafened in the left ear by the explosion of British shells. A dose of one ounce of castor oil cured the deafness by morning. On June 8th two were wounded (a Boer with his black servant) by buckshot. On June 9th the Boers began to relinquish their positions near Botha's Pass and at 8.0pm on June 11th we received news of a general withdrawal from all positions to Amersfoort. During the existence of our ambulance at Charlestown from May 18th to June 11th we had altogether 191 patients who made 227 visits; four of them were inpatients. Only one suffered a bullet wound, accidentally wounded from a Mauser by a comrade.

The withdrawal from Charlestown to Amersfoort was accomplished in full order; the Boers left nothing for the enemy. Our ambulance completed the move from Charlestown to Amersfoort, a distance of approximately 40—50 kilometres in 20 hours, with stops for rest and feeding the horses. En route medical aid was administered to five people.

At Amersfoort, a small place with 18 houses and two churches, was stationed the headquarters of General Louis Botha, the artillery reserve and the Middelburg and Lydenburg commandos. The Lydenburg commando was guarding the approaches to Botha's Pass and was the first to admit the British avant-garde. The commando lost its ambulance which was captured by the British. Thus the Lydenburg sick and

wounded came to our ambulance at Amersfoort and on the road between Volksrust and Amersfoort.

Remaining in Amersfoort from June 12th to June 17th, our ambulance established itself on the square in the middle of the village, using its own tents, one of which was used as an outpatients' department. Of our 52 patients at Amersfoort, six were suffering from bullet wounds. Five of the latter were from the Lydenburg commando, sent to us from the battle near Botha's Pass where some 12 to 15 men were killed and nine were received by the ambulances. They were brought to the home of the local pastor where we administered the appropriate dressings. Then they were sent on at their own request to Ermelo. One Boer from the Wakkerstroom commando accidentally wounded in the right foot by a comrade with an English rifle was treated by us on the day of our departure from Amersfoort and was sent to Wakkerstroom. During the five days we spent at Amersfoort we only had to make one journey (two hours riding) to the Boer artillery positions to give assistance to a Boer who had broken his leg. After a rigid dressing had been applied he was conveyed in a post vehicle to Carolina about 100 kilometres to the north of Amersfoort.

On the evening of June 17th, at 10 o'clock, on the suggestion of General Fourie, I left Amersfoort with the ambulance and moved to the Vaal River where it was proposed to establish the headquarters of General Christiaan Botha commanding the remnants of the Boer eastern army. Their numbers were greatly reduced as a consequence of several commandos (the Zoutpansberg, Pretoria and Wakkerstroom) having dispersed to their homes. On reaching the Vaal River on June 18th, however, I learned that plans had been changed and that the artillery had withdrawn to Ermelo. Accordingly I set off for Ermelo. The journey to Ermelo was in no way remarkable from a military-medical point of view. I should, however, note, perhaps, that along the road we met many Boers and blacks proceeding on foot who were apparently coping very well with the difficulties of a hasty retreat and were almost keeping up with the mounted troops.

The ambulance reached Ermelo (an attractive little place with a White population of about 500) on the morning of June 19th and pitched its tents on the outskirts of the town close to the river. An hour after our arrival in Ermelo a party of 590 British Yeomanry captured by De Wet near Lindley was brought in. They were escorted by the commando of special police under Shroeder which left Charlestown at the same time as we did.

I, together with Doctor Suter of the Swiss Ambulance gave medical treatment to 86 of these prisoners in their camp close to Ermelo. Most of these patients had digestive disorders and various external afflictions such as exema and boils. One had a bullet wound in the soft regions of the thigh. Two of them had to remain in Ermelo, one suffering from typhoid and the other a serious case of angina. Although for the most part from well-to-do backgrounds, these men were extremely dirty and several had sores on their bodies and extremities while their clothes swarmed with lice. One of the patients complained to us of the shortage of medical services on the British side and was overjoyed when we put him, together with two Boer patients, in the temporary hospital run by the Swiss ambulance. From June 19th to 25th we had 14 outpatients.

There were five ambulances in Ermelo (Swiss, German, Belgian, Transvaal and our own) and for a long time the supply of medical services would exceed demand. The special police were setting off for Machadodorp the residence of the Transvaal Government, consequently on June 25th I left Ermelo and at 4.0pm on June 28th

reached Machadodorp.

V

On arrival in Machadodorp I set off to nearby Waterval-Boven where the representative of the Russian Red Cross Society was stationed together with the greater part of the Russian ambulance. There a hospital with eight beds had been opened. On the instructions of the representative I was to hand over the medical unit which I had been heading to Doctor Sadvosky who set off with it to the troops on the eastern front. Since there were too many medical personnel at Waterval-Boven and hardly any outpatients, I asked permission of the representative of the Russian Red Cross to open an outpatients post at Machadodorp where they were again assembling and fortifying positions under General Lucas Meyer. In Machadodorp there were infantry, foreign volunteers, the artillery reserve, the special police, the railway guards, the Commissariat and the field post and telegraph.

I was unable to obtain the use of either tents or a vacant house but managed, with the assistance of Attorney Jacobs, to secure the use of a goods wagon from the ZASM and converted it into a mobile outpatients' post. The interior was very simple: furniture was improvised from a few wooden boxes and some wooden shelves were secured to the sides. The purpose of this outpatients' post was to serve as an assembly point for the troops at the station, while in emergency it could be transferred to the nearest station to the south, Dalmanutha or to the Boer positions further forward. Also, should it prove necessary, it was envisaged that wounded could be moved within the space of 20 minutes to our Russian hospital at Waterval-Boven.

I worked at this outpatients' post for about four weeks, during which time there took place significant changes in the fortunes of the Transvaal army. The Commander of the Boer forces, General Louis Botha, retreating before the superior numbers of Lord Roberts, transferred his headquarters during the first days of August to Dalmanutha and took up positions to the north and south of the railway in order to stem the British advance on Waterval-Onder and Lydenburg. Thus towards the end of the period of its existence the mobile outpatients' wagon would have become a forward first-aid post, but this did not happen in view of the departure of the Russian Red Cross ambulance from Transvaal soil on August 14th.

Besides the bullet and other wounds which I treated at the outpatients' post, of particular interest was an outbreak of measles which occurred among the population and troops in Machadodorp. In all there were 11 cases, four children and the rest adults aged from 16 to 38. From inquiries which I made I learned that there had previously been epidemics of measles at this time of the Transvaal winter.

On August 11th several of the tents in which the personnel of our Russian ambulance were billeted were torn by a strong wind. This was the reason for the departure of the Russian Red Cross ambulance from the Transvaal, two weeks before the passenger liner sailed for Europe from Lorenzo Marques. On August 12th the outpatients' post at Machadodorp which had treated 152 patients on 190 visits was closed.