

## MEDICAL ARRANGEMENTS.

War means destruction of many lives—the result of skirmishes and battles, and from disease contracted on the line of march and in camps. The two latter are the most prolific causes of death. Up to the close of the Indian Mutiny the British army depended almost entirely upon regimental surgeons and assistant surgeons, and the result was that in that campaign, as well as during the Crimean War, the system was a pronounced failure. The result was the abolishment of regimental medical officers and the formation of the Army Medical Department. This department consists of medical officers now named as follows: Surgeon-Lieutenant, Surgeon Captain, Surgeon-Major, Surgeon-Lieutenant-Colonel, Surgeon-Colonel, Surgeon-Major-General, and Director-General, and of a corps known as the Army Hospital Corps. This corps consists of 11 captains, 10 lieutenants, 264 surgeon-majors and 1,060 rank and file. They are employed entirely on hospital duties, and act under the direction and control of the medical officers. The men enlisted in this corps are selected for their general intelligence and good conduct, and volunteers from the army of this class are encouraged to join it. They are variously employed as clerks, compounders of medicine, surgical dressers and cooks, but principally as attendants on the sick in hospitals in peace and during war in field hospitals and ambulances. In peace medical officers are attached to regiments, but when war is declared they act entirely as a distinct department. Ambulances consist of light waggons specially constructed for the carriage of sick and wounded, and a large company from the corps is detailed as stretcher bearers, and is provided with stretchers. This company is charged with the immediate removal of the wounded from the battlefield, their first dressings, under the direction of a medical officer, and conveyance to the nearest field hospital. These field hospitals consist of large tents or marquees and are supplied with beds and all the requirements of a hospital and a sufficient staff of medical officers and attendants. They are generally placed in a sheltered position, and as near the scene of engagement as is possible. This department is admitted to be a success, for it is very expensible. When the army is operating in a country of an unhealthy character it is possible to supply it with an apparently excessive amount of medical material. Such was the case in the very recently completed Ashantee expedition. In the campaigns of 1866 and 1870—during the Fenian troubles in Canada—the Canadian militia were absolutely without either medical or surgical material of its own. I was, in 1866, with the Prince of Wales' Rifles on frontier service, and my entire medical and surgical stock consisted of a medical field companion issued me from the Imperial stores, and my own pocket surgical case. In 1870 I was no better supplied. I well remember the night alluded to in the early part of my lecture, when the entire force was moved from St. John's to Pigeon Hill, when I was ordered to report to my friend and old fellow-student, Surgeon-Major Corbett, of the Rifle Brigade, then in the barracks at St. John's. He assured me that there was warm work in store for us next day—that most likely they would join us before the day was over. He then handed me a case of instruments for operations, a bundle of bandages, a tin case containing plaster, a package of lint and two bottles of brandy. This was quite an armful, and I conveyed it to the

train then waiting for us. This condition of things was immediately afterwards attempted to be remedied, in a small way; and about 1872, under the direction of Dr. Girwood, then acting as P.M.O. of the militia, tin boxes, containing drugs, were deposited in each military district. These were sent to brigade camps, and, judging by the condition in which they were returned into store—almost depleted of their contents—the demands of the sick must, indeed, have been great.

They, however, did not give satisfaction—the Department was yearly in receipt of complaints of their insufficiency from the regimental surgeons. Attempts were made, spasmodically, to increase their efficiency, with a certain amount of success. Absolute success was impossible, for one of the weak points in a militia surgeon is his apparent inability to recognize the fact that it is impossible to furnish for his use in the field a stock of medicine such as he can find in a city drug store or in his own surgery. The weak point, however, in these boxes was the almost total absence of surgical appliances. This condition of things continued till Major-General Herbert assumed command of our militia. He had not been long in the country before he appointed Deputy-Surgeons-General Neilson, Strange and myself as a permanent committee for the medical and surgical equipment of the militia, and succeeded in getting placed in the Estimates yearly, during his command, a considerable sum to be expended for that purpose. This committee first met in Ottawa in 1893, and made a report to Government, which report was acted upon at once; and in the camps that year of certain districts was found a medical and surgical equipment fairly good, certainly far ahead of anything previously attempted. In 1894 the same committee assembled twice—once in the spring at Ottawa, and in August at the camp at Levis. At the last meeting the report adopted made full provision for the entire force of active militia. We are, therefore, to-day in the position, if war was declared and the entire force in the field, to supply it with a medical and surgical equipment, such as would accompany (excepting ambulances) a similar number of the British army going on active service. The point, however, in which we are still weak is that we adhere to the regimental system. I know it is hard, possibly impossible, to get rid of it in our militia. I have given much thought to this subject, and although my advice has more than once been asked, I have not seen my way to advise its extinction, although fully recognizing its weakness. Our only safeguard, and it is that which has made me acquiesce in its continuance, is that our regimental surgeons would be such for only a brief period. If war should ever exist in this country we would soon have with us a full staff of the Army Hospital Corps, with its medical staff, with which our surgeons would at once be amalgamated. Surgeons, however, cannot be everywhere, on all outpost or detached duty. Hours may elapse before the services of a surgeon can be procured. It is advisable, therefore, that both officers and men should be in possession of a few useful hints, such as the following:

Bleeding from wounds is either from a vein or artery. From the former it is seldom of much consequence. It is distinguished by the darkish color of the blood. It merely requires the application of a compress and a bandage over the site of the wound; the limb should also be raised to a higher level than the body. In all cases of

bleeding the first consideration is to put the wounded man in a recumbent position. A man unconscious from loss of blood will often revive at once when placed on his back, with his head on a level or a little lower than his body. The clothes around his neck should be loosened and a small quantity of stimulant given.

Bleeding from an artery is known by the bright red color of the blood and by its spurting out in jets corresponding with the beats of the pulse. Unless stopped at once the wounded man must die. To do so it should be remembered that it is only necessary to compress the injured artery against the bone between the wound and the body. Having placed the man in a recumbent posture, feel for the pulsating artery on the inside of the limb, above the wound, and when found, keep up a steady pressure with the tips of the fingers, which will control the bleeding. Two men, or at most three men, one relieving the other every few minutes, can stay it for a long time. The pressure should be in towards the bone. If a tourniquet is to be had, apply it just above where the pressure of the fingers is found to control the bleeding. A silk or cotton handkerchief twisted tight by means of a stick passed through the slack is a good substitute, a bullet or round stone being placed over the artery. The inside seam of the coat or jacket follows the general course of the arteries of the arm. If the wound is in the leg the artery can be easiest found in the groin, whence it passes down inside of the thigh, winding round underneath to the hollow behind the knee. If wounds are below the elbow or knee the pressure should be applied above those joints. If you cannot find the artery, fill up the wound with some cotton or linen and bandage as tightly as you possibly can directly over the wound. Bleeding from gun-shot wounds is generally slight at first. Medical officers tell us that they have seen a limb carried off by a round shot, and there really be no bleeding from the stump. This is the surgical rule—that torn wounds bleed slightly. Sabre wounds should have the edges sewn together, or, if one competent to do this is not at hand, they can be brought into exact contact by means of adhesive plaster. In removing the wounded from the field when you have no ambulance or stretchers you can make a temporary stretcher by constructing a frame work with two poles six feet long, leaving 6 inches at each end as handles; lash 3 short pieces across so as to keep the poles  $2\frac{1}{2}$  feet apart, one piece to come just behind the man's head, one in the centre, and one at his feet. To this a blanket is securely fastened at each corner and along the sides. A wounded man can be carried very comfortably on this temporary stretcher.

I have now occupied your time quite sufficiently long, and I hope I have not been tiresome. War is indeed a great calamity, but if it should ever come to this country, its militia will never shirk the ordeal. As a race, we are admitted to be of material such as has produced good soldiers in the past, and can produce them in the future. We have a country worth fighting for, and imbued with a loyalty to our beloved Queen, we will, I believe, ever be prepared to spring to arms to keep our land the brightest gem in Britain's crown.

"The Regiment:" Such is the title of a new paper devoted to the interests of soldiers in the British Army. THE GAZETTE wishes it every success.