twenty-five to thirty hundredweight, and this tension is obtained and secured by means of gearing and balance weights (see figs. 3 and 4); the weights are arranged round a hook bolt to facilitate handling, and are flat and weigh approximately twenty-eight pounds each.

Each rope carries twelve runners complete with rope slings (see figs. 5 and 6), the wheels—two—being so grooved as to pass readily over the rocking saddles with which each trestle is fitted. Further, each runner carries a contrivance which automatically releases the "whip" or hauling rope on passing trestles "E" and "F."

The hangers (see fig. 6) are fitted with leaf springs to take up any shock when riding over saddles, and on the ends of each spring are fitted "adjusters" through which the slings are threaded, the object of the "adjuster" being to permit of the patient's head being raised or lowered with the minimum of trouble. A further feature with this adjuster is that owing to its construction, the correct level having been obtained, the rope is automatically locked in that position immediately the weight of the stretcher is taken up by the slings.

The slings, as will be observed, are constructed to slip over the handle or legs of the stretcher, but an even more satisfactory method is for each stretcher to have hooks attached to the handles, by no means a costly matter.

The "whips" or haul ropes mentioned earlier in this article need only to be brought into use when owing to the state of the tide the gangway is on a more or less acute angle.

The rope from the foot of gangway onward is so "set" as to give a slight downward gradient to the shore anchorage, which reduces the energy required to propel the loaded stretcher to the absolute minimum.

The whole of the shore tackle is portable and can be moved from one door to another when necessary, without the least trouble; further, a boat coming alongside has only to throw out her wire line for anchorage ashore, and all is then ready to commence unloading.

A NOTE ON THE CITADEL HOSPITAL, CAIRO.

BY CAPTAIN L. B. CANE.

Royal Army Medical Corps.

The principal military hospital in Egypt occupies what was formerly a palace of Mohammed Ali, within the walls of Saladin's ancient fortress that dominates the capital. This, to-day, contains four hundred beds, most of which are occupied by Territorials from the East Lancashire Division, including some who were wounded during the defence of the Suez Canal against the Turks.

The hospital is unique both in its situation and structure, but very little of its history or former greatness seems to be known. Neither the
Arabic museum nor the famous Khedival Library in Cairo seem to contain any record of its building, nor have I found any but the barest details of its history prior to its conversion into a military hospital in 1882.

Since then constant improvements and renovations have done much to mar its former beauties. Every year sees some alterations, and the frescoes that formerly covered every wall and ceiling are gradually
being painted over or destroyed. Some description, with illustrations, of its present condition, with extracts from the official account of its conversion into a hospital, may therefore be of interest, at least to those members of the Corps who have been privileged to work there.

The Citadel fortress dominates the whole of Cairo, and contains within its walls three mosques, three hospitals, and barrack accommodation for about two thousand men. It was founded in 1179 by Saladin, and built with stones taken from the smaller pyramids at Gizeh. Since then it has undergone many changes and stood several sieges, of which the most noteworthy perhaps were those by Napoleon Bonaparte in 1799, and by Mohammed Ali in 1805.

Mohammed Ali caused four hundred of the Mamelukes, his former allies, to be treacherously massacred there in 1811. He afterwards built the palace and famous alabaster mosque that bears his name.

The palace, which is now the hospital, consists of a centre block and two large wings. There are two floors, connected by alabaster staircases, and the whole was at one time paved almost throughout with marble. The walls and ceilings were covered with paintings and frescoes by Greek artists, much of whose work is now gradually disappearing. The gilded mirrors and enormous chandeliers have long since gone, but are only just being replaced by electric light.

The three parts of the building are similar in form, and the whole is now used as a hospital. On the upper floor of the centre block is a spacious hall, with two transepts and a central aisle. Its lofty ceiling is still covered with painted carvings, but the enormous slabs of white marble with which it was paved have long since gone. This hall was reached by an alabaster staircase from the main entrance, and now, with two smaller chambers that open into it, is utilized as a surgical ward.

In other adjacent chambers are installed the dispensary, X-ray department, and the hospital reading room and library. Beneath this the centre base is similar in plan to that of the main hall. One of the small rooms here was formerly a bath, but the oval opening in the marble floor has been boarded over to fit it for use as a ward.

In the right wing, now the medical block, the same cruciform arrangement is found, with smaller rooms filling in the spaces between the arms of the cross. Two of these are now wards, and the others have been fitted up for ophthalmic work, and as lavatories and latrines.

From the balcony of the right division, which is now used for tubercular patients, one of the finest views over Cairo can be obtained. Between the centre and right wing is the operating theatre, the walls of which have long since been painted white, but the ceiling still retains its ancient decoration; also other small chambers, one used as an ophthalmic ward, and others for lectures and recreation.

Beyond the Central Hall are the quarters of the nursing staff, which
connect the left wing to the rest of the building. This wing also is cruciform and lavishly decorated, the paintings in some of the smaller rooms being particularly fine.

One of the side rooms in the base is set apart for patients suffering from diseases of the skin, another is fitted up as a mental ward, and a third as a hospital chapel. This last is one of the gems of the Palace, and was formerly the principal bath for the ladies of the Sultan’s harem.

The walls and ceiling are covered with frescoes and ornamentation, the floor is of white marble with a square basin, now boarded over, whilst behind the altar can still be seen the fountain basins over which the water formerly splashed down into the marbled bath beyond.

Connected by a bridge to this left wing is a modern isolation block, and in other parts of the Palace are found the various offices, stores, lavatories, mess rooms and quarters necessary for carrying on the work of a great hospital.

In front of the centre and left divisions are the remains of shady gardens, and from the windows and balconies extend fine views over the countless minarets of Cairo, the tomb mosques of the Khalifs and Mamelukes outside the walls, the Nile with its green belt of cultivation between
yellow deserts on either side, and in the distance the great Pyramids of Gizeh towards the setting sun.

Such briefly is the Hospital of to-day, with its 500 beds, and a dozen marquees pitched in a courtyard below, capable of accommodating nearly another hundred patients.

The photographs give a dim idea of its general appearance and of the ornamental decorations, which year by year become more and more hidden by fresh green paint, and are now being still further marred by the wiring for electric light. What its appearance was as a Royal Palace in the height of his glory can only be imagined. Probably few beyond the Sultan’s ladies and members of his household were privileged to see it.

Afterwards the place fell upon evil days, and at the British occupation in 1882 had been long disused save as an Army storehouse and sundry offices.

The story of its conversion into the fine Military Hospital that we know to-day may for the most part be found in the appendix to the Report of the Army Medical Department for 1881.

After the battle of Tel-el-Kebir on September 13, 1882, and the surrender next day of Arabi and Toulbi Pashas to General Drury-Lowe at Abbasiyeh, Deputy Surgeon-General Sir J. A. Hanbury went to Cairo, and on September 18 "drove round the city with an Egyptian official for the purpose of selecting a suitable building or buildings for hospitals." Eventually "the large structure in the Citadel, called the Mehemet Ali Palace, was chosen as the most suitable."
"Prior to the occupation of British troops it had not been used for any purpose for three years, and before this period had been for twelve years the Egyptian War Office. The whole interior of the building was elaborately painted and decorated, and in many of the rooms there were enormous chandeliers and gilded mirrors.

"When the building was first occupied only the upper story was used, which was capable of accommodating, without crowding, three hundred patients; the lower story was filled with an enormous accumulation of Egyptian stores, records, and rubbish of all sorts. The building itself and all its surroundings were indescribably filthy, and in every part of it there were heaps of refuse.

"The floors were covered with old carpets and matting, a mass of dirt and dust. The building having been covered with excrement, had to be washed three or four times in succession, and the grounds in the vicinity thoroughly cleaned; a very great labour."

"In addition to the ordinary Egyptian latrines, which are in themselves most objectionable, every recess seemed to have been used as a latrine, and on the floors there was a layer of dust, the accumulation of years.

"Day by day the scrubbing, washing, and disinfection of the rooms and passages was carried on; but no remedy save free exposure to the air was successful in removing the heavy fecal smell which at first prevailed throughout. This was at last got rid of by the plentiful use of soap, disinfectants, and above all, by free exposure to the air, when the building presented a very respectable appearance, and for hospital purposes afforded as good accommodation perhaps as any other in the City."

 Entirely new latrine accommodation had to be provided, and improved ventilation throughout. The water supply from the Egyptian waterworks was good, but the wells in the Citadel had to be closed as they were found to be contaminated.

The cooking arrangements "were carried out in an enclosed verandah in the garden at the entrance to the hospital," where the kitchens may still be seen to-day. For drainage there were only surface channels all round the building, and considerable alteration and improvement were required.

However, all was done in time, and Brigade-Surgeon Barnett was able to report that "notwithstanding all that has been said to the contrary, it may safely be affirmed that the Citadel Hospital answered admirably the purpose to which it was appropriated."

That statement remains true to this day. In spite of some inconveniences that are to be expected in every building diverted from its original purpose, and in spite of its position at some distance from the principal barracks and centres of administration, the Citadel Hospital, with its high situation, spacious rooms and ample cross-ventilation, is today not only one of the finest, but probably the most interesting of all the military hospitals in the Empire."