expedient to employ this special method of transport. By this means units would always, at least theoretically, have their full original issue on hand.

The canvas "bottom," it will be noticed from figs. 1, 2, and 3, carries two sets of eyelet-holes—the outer giving the regulation width, whilst the inner rows are intended for use when the stretcher is being permanently employed in confined spaces, or in the event of the canvas sagging appreciably in wear.

In spite of its manifest advantages and its apparently (from illustrations) complicated nature, this stretcher is but little more costly than the regulation pattern, whilst in actual practice it is a perfectly simple and efficient contrivance.

APPARATUS FOR THE UNLOADING OF SICK FROM HOSPITAL SHIPS, ETC.

By LIEUTENANT C. HAMILTON WITHERS.

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The apparatus described below has been designed with the idea of facilitating the landing of sick from shipboard, and of reducing to a minimum the suffering to which the wounded are liable under the present antiquated method, owing to the shaking and jolting which is meanwhile more or less unavoidable. It is further pointed out that the adoption of this system would render it possible to unload a ship expeditiously with a considerably less number of bearers than is at present essential, and, in addition to the economy effected in this direction, the men employed would be obviously working under far less strenuous conditions.

The smooth running of wire ropeways is, of course, universally acknowledged, and it is therefore unnecessary to argue this fact in support of the system described herein.

The first two illustrations given are reproductions of the original drawings submitted to the authorities, whilst the remainder depict the plant as actually supplied. Fig. 1 shows the proposed method of working on a vessel of sixty-two feet beam at top of tide, whilst fig. 2 indicates the method it was suggested should be employed in the case of a vessel of forty-five feet beam at low tide.

The apparatus as actually installed consists primarily of wire ropes, which, supported on trestles fitted with rocking saddles, etc., run from the ship to the shore, extending right up to the train side, or such point of discharge as may be considered expedient.

As will be observed from fig. 3, the ship's portion of the plant consists of the necessary wire rope, the live tension winches (fig. 4) which take up any strain or slackness of the rope caused by the vessel rising and falling with the tide, etc.; also two trestles, one of the latter being fitted with small hand winches for controlling "whips."

The amount of tension required on the rope, which extends from the tension winch to anchorage on the shore beyond trestle "A," is
APPARATUS FOR THE UNLOADING OF SICK FROM HOSPITAL SHIPS, ETC. (ORIGINAL DESIGN)

Fig. 1.—Side view showing method at top of ship. Scale 2 in. = 1 foot.
APPARATUS FOR THE UNLOADING OF SICK FROM HOSPITAL SHIPS, ETC. (ORIGINAL DESIGN).

Follow Fig. 1.

Fig. 2.—Sketch showing method at low tide. Scale \(\frac{1}{6}\) inch = 1 foot.
APPARATUS FOR THE UNLOADING OF SICK FROM HOSPITAL SHIPS, ETC. (AS ACTUALLY INSTALLED).

TRESTLE 'A'

TENSION GEAR WITH REVERSIBLE JIB, ARRANGED TO WORK ON EITHER SIDE OF SHIP.

RUNNING HEAD & MOWING ROPE ON BEAM C.

FOLLOW Fig. 2.

Fig. 3.—Arrangement of apparatus for landing Wounded at high tides. Scale 1¼ inch = 1 foot.
APPARATUS FOR THE UNLOADING OF SICK FROM HOSPITAL SHIPS, ETC.

FIG. 4.-Live Tension Winch.

All Gusset Plates 9s.
All Bolts x Rivets 9s. each except where otherwise stated.
Rivets shown 15s. each
Bolts 5s.

For details of Winch see Dog. No. 7177.
Runners 7179.

2. Frames required per set

2. Sets.

Follow Fig. 3.

Scale 1 inch = 1 foot.
APPARATUS FOR THE UNLOADING OF SICK FROM HOSPITAL SHIPS, ETC.

Follow Fig. 4.

Fig. 5.—Arrangement of Ropeway at Bottom of Gangway. Scale ¼ inch = 1 foot.
APPARATUS FOR THE UNLOADING OF SICK FROM HOSPITAL SHIPS, ETC.

Fig. 5.-Arrangement of Ropeway at Bottom of Gangway. Scale \( \frac{1}{2} \) inch = 1 foot.

Follow Fig. 5.
Clinical and other Notes

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