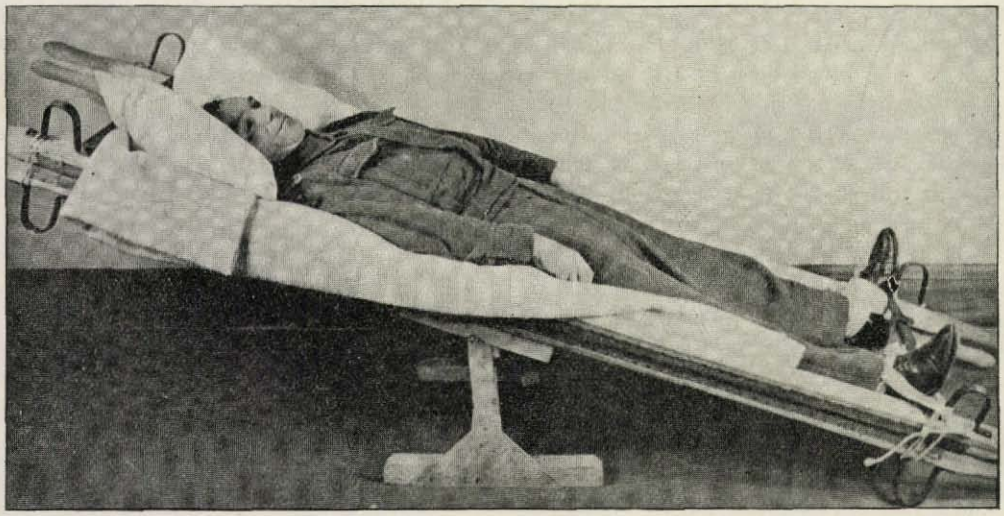
Correspondence.

A SIMPLE ARTIFICIAL RESPIRATOR.

TO THE EDITOR OF THE "JOURNAL OF THE ROYAL ARMY MEDICAL CORPS."

SIR,—Captain Nathan's article on the application of the Rocking Method of Resuscitation to military contingencies, in the January, 1944, number of the *Journal*, has evoked the interest which it deserves. Having examined his article in detail and applied his methods on conscious patients with paralysed limbs but normal respiration, I would like to report some comments of a practical nature.

Captain Nathan has found that when rocking a normal subject through an angle of 25° the tidal air compares favourably with the results obtained by Schafer's and Silvester's method on normal subjects. He admits that theoretically some of this ventilation may be due to voluntary respiratory efforts on the part of the subject, but states that he was able to influence the failure of the tidal air by altering the angle of rocking, and concludes that it is the rocking which produces most of the respiratory exchange. His figures,

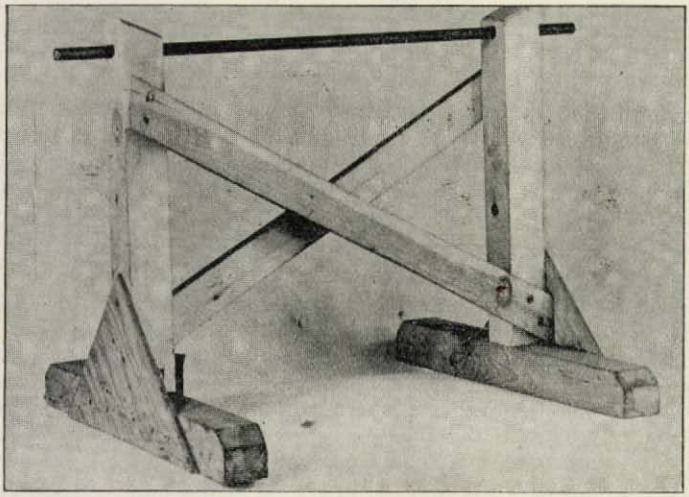


however, do not consistently support this conclusion and it would be necessary to submit his method of low angle tipping to a practical test on asphyxiated subjects before accepting his thesis. There seems to be little doubt that the Chinese sponsors of high angle rocking have found it effective in practice. Nevertheless Captain Nathan's method has many practical advantages in the field and opportunities should present themselves for its trial in cases of poliomyelitis, ascending polyneuritis and high cervical injuries.

The apparatus suggested by Captain Nathan has one disadvantage. It is necessary to fix the patient to the stretcher in such a way as to avoid friction, with its disastrous effects on the pressure points of a paralysed patient. The universal stretcher sheet may be effective but it is not a general issue and would not be available to ordinary field units. An alternative method which I have found effective in preventing friction in paralysed subjects is to use two stretchers. The first is fitted with two grooved wooden blocks to take the axle of the pivot, as described by Nathan. The second stretcher is placed upside down on the first to which

it is lashed at the four corners. The patient is placed on top of this inverted stretcher and his feet, in boots, are firmly secured to the metal cross-bar in the angles between the cross bar and the poles of the stretcher. With the feet secured in this position the patient does not slip on the stretcher during rocking. The head and shoulders are supported on folded blankets to protect them from the cross bar at the head end. This method obviates friction and secures easy access to the patient for regular evacuation of the bladder.

The wooden stand suggested by Nathan has been found effective but many alternatives may be improvised. For transporting the case by ambulance, rocking can be carried out



by placing the patient on his stretcher in the aisle of an ordinary 2-ton motor ambulance. A wooden or iron cross bar resting on the stretcher racks of the ambulance is a suitable pivot since it so happens that when the upper rack is lowered to its full extent in a standard ambulance it is the correct height from the floor for allowing the stretcher to be tilted at the required angle of 25°. It is important that whatever type of pivot is used it shall engage properly with the wooden sockets on the undersurface of the stretcher if smooth working is to be obtained.

I am, Sir,

Yours, etc.,

F. A. ELLIOTT,
Major R.A.M.C.,
Command Neurologist.

Military Hospital
(Head Injuries),
Oxford.
March 24, 1944.

EDITORIAL NOTICES.

The Editor will be glad to receive original communications upon professional subjects, travel, and personal experiences, etc. All such articles or papers, etc., intended for publication must be submitted **in duplicate** through the proper channels, i.e., Commanding Officer and A.D.M.S., or D.D.M.S., to the Under-Secretary of State, War Office P.R. (C. & P.), and not to A.M.D.2, otherwise such articles are liable to be returned to the authors and this may cause delay in publication.

Correspondence on matters of interest to the Corps, and articles of a non-scientific character, may be accepted for publication under a nom-de-plume.

All Communications or Articles accepted and published in the "Journal of the Royal Army Medical Corps" will (unless the Author notifies at the time of submission that he reserves the copyright of the Article to himself) become the property of the Library and Journal Committee, who will exercise full copyright powers concerning such Articles. Owing to the acute shortage of paper it is necessary to limit Articles submitted for publication to the least number of pages possible. It is also desirable that the number of illustrations should be reduced.

A free issue of twenty-five reprints, or any lesser number to the extent applied for, will be made to contributors of Original Communications and of twenty-five excerpts, or any lesser number as above, in the case of Lectures, Travels, Clinical and other Notes, and Echoes of the Past. Such free reprints or excerpts will, however, only be sent to those specifying their wish to have them and a request for same should accompany the article when submitted for publication, stating the number of reprints or excerpts required.

Reprints or excerpts, limited in number to twenty-five additional to the above, can be furnished on payment if specially ordered at the time of submission of the article for publication.

Except as in the first paragraph above, communications in regard to editorial business should be addressed—"The Editor, JOURNAL OF THE ROYAL ARMY MEDICAL CORPS, A.M.D.5, War Office, Whitehall, S.W."

MANAGER'S NOTICES.

The Annual Subscription for the JOURNAL OF THE ROYAL ARMY MEDICAL CORPS is £1 payable in advance. Single copies, 2s. 6d. per copy.

Cheques, etc., should be made payable to the "Journal R.A.M.C.," and crossed "Holt & Co."

Communications in regard to subscriptions, change of address, etc., should be addressed "THE MANAGER, JOURNAL OF THE ROYAL ARMY MEDICAL CORPS, A.M.D.2, War Office, Whitehall, S.W."

NOTICE.

Reprints.—These can only be supplied if asked for at the time of submitting an article—*see* " Editorial Notices."

Changes of Addresses.—It would be of great assistance if changes of addresses are promptly notified to The Manager, JOURNAL OF THE ROYAL ARMY MEDICAL CORPS, The War Office (A.M.D.2), London, S.W.1.