SOME GENERAL PRINCIPLES.

(a) As a general rule military necessity demands that no wounded be re-embarked during the initial stages of the landing operation if such course will to an appreciable degree retard the landing of combatants. Consequently, every endeavour must be made to arrange provision of aid posts on the beaches. Casualties will, however, be dealt with as the situation permits; speedy evacuation to hospital ships is to be desired and will be effected when possible, though the situation may be such that retention in a favourable location on shore offers better chances.

(b) Wounded should be segregated from the fighting forces.

(c) As far as possible, boats used for landing troops should not be used for embarkation of wounded.

(d) Consideration should be given to air transport of sick and wounded in the later stages of the operation.

(e) Re-embarkation: In the event of re-embarkation, such wounded as cannot be cleared will be left with medical personnel and supplies under the protection of the Geneva Convention. The position must be clearly indicated.

This article was prepared in conjunction with Surgeon Commander A. W. North, R.N., Medical Department of the Admiralty.

THE TRANSPORT, CARE AND MEDICAL TREATMENT OF GAS CASUALTIES.

By Colonel Muntsch.

SUMMARY.

The gas casualty evacuation service, that is to say the transport, care and medical treatment of gas casualties, must be organized on the same general principles as those which are applied in the case of other sick and wounded. The rapid evacuation of gas casualties to medical care behind the line is also a matter of the utmost importance. The organization of this evacuation and first-aid must take second place to the needs of the military situation and must conform thereto.

The gas service should be organized within the general framework of the medical service; not only should its personnel be specially trained personnel of the medical service, but it should also come under the higher medical directorate. An estimate of the probable number of gas casualties will assist in arriving at a proper evaluation of the numbers necessary in the gas service. A review of all available statistics based on the experience obtained from chemical warfare in the World War will lead us to expect gas casualties averaging from 20 to 25 per cent in any future war.

This high proportion of losses, together with the special character of gassed cases, which present a pathological picture quite different from that of other casualties, calls for special measures for dealing with gassed cases.
In casualties from gases of the phosgene type, the transport of such cases
can, as a rule, only be carried out within the latent period, that is, within
the first hour or two after gassing. The necessarily rapid and smooth
rearward transportation of these cases can only be assured by an increase
in the amount of transport, particularly that of the motor vehicle park.

For yperite and mustard casualties the question of decontamination is
the matter which is most pressing. There can be no doubt that the
decontamination of soldiers, who are at the same time wounded and in
need of wound treatment, will be undertaken by a medical formation
because these two treatments must go together.

But it appears questionable and open to argument whether an otherwise
healthy and unwounded soldier, who has been sprinkled with yperite, should
be directed to a medical formation. It would be quite a reasonable view to
take that the decontamination of an otherwise unwounded soldier is not the
task of the medical service which is organized only for the care of the sick
and wounded. Here also arises the further problem, whether a decontami-
nation unit, be it composed of medical personnel or of other troops, may
make use of the protection of the Red Cross of the Geneva Convention.
An exchange of opinion regarding this question would seem to be a
desirable subject of discussion for the Congress.

Besides an increase in medical equipment and medical stores for the
treatment of gas cases a careful study of the organization of the hospital
system is necessary for dealing with gas cases. In the World War it was
found necessary to establish special gas wards in hospitals, and even whole
hospitals for gas cases in some instances.

Finally, it is possible to take the view that the basis of the whole gas
service should be established by the training of specialists and assigning
these to the Medical Staff at the headquarters of the Army, as the French
Army has done by instituting the Z Army Medical Service. These would
form the link between the battle line and the home front in connecting and
co-ordinating all research in the subject which was being carried out in the
country.

As the excellent and copious literature of various countries shows, the
special medical handling of gas cases is in general the same and is more or
less confined to the treatment of symptoms. Treatment of the cause
with specific remedies is, with the exception of the possibility of early
decontamination in the case of those affected by mustard gas, up to the
present not known anywhere. As yet the methods of treatment may suffice
if the transport organization can be so far improved that medical treatment
can be instituted a short time after the gassing.

The aim of scientific research should be to obtain an understanding of
the mechanism by which the chemical weapon acts and to find the treatment
of the cause.