

I.—COMMUNICATION BETWEEN INFANTRY AND ARTILLERY,

A.—TELEPHONE COMMUNICATIONS.

- 1. A properly constructed and co-ordinated infantry telephone system, including underground lines, at least from the company commanders to the commander of the front line troops.
- 2. A properly constructed artillery telephone system, including, invariably, two lines (one underground) from the batteries to their own observation posts and *direct* communication between the artillery commander on duty and each control battery (as far as possible with a laddered circuit).
 - 3. Telephone lines between the exchanges of these two systems.
- 4. Direct underground lines from the commander of the front line troops to his control battery.

B.-VISUAL COMMUNICATIONS.

- 1. Communications by means of flare signals.—These must be provided between the front line and the control battery concerned, viâ the commander of the front line troops, and from this battery to the observation post which permits of the best observation in the infantry regiment's sector, and, if necessary, to the batteries dependent on the control battery. Intermediate alarm posts, several men strong, must be established and continually occupied. In case of fog, additional intermediate posts must be established at points fixed beforehand.
- 2. Communications by means of lamp signals.—These must be provided between the front line and the control battery concerned, viá the commander of the front line troops; from the artillery commander on duty to each control battery; from the control battery to the observation post which permits of the best observation in the sector; and between the batteries and their observation posts. The beams of light must be screened from observation from the side. Short code words must be arranged beforehand for ordering barrage fire.

C.—COMMUNICATIONS BY MEANS OF SOUND.

- 1. Alarm instruments.—The posts should be established in the same way as communications by flare signals. The following are the best arrangements:—
 - (a) Loud syrens, driven by compressed air, should be employed to give the signal for barrage fire.
 - (b) Large bells should be employed for gas alarms. In order that the sound may spread properly, alarm instruments should not be sited in trenches and holes in the ground. If the artillery cannot recognise the alarm signal with certainty, it must be taken to mean both a call for barrage and a gas alarm. Every man must put on his gas mask if he hears barrage fire opened during fog and has not previously heard the syrens.
- 2. Machine gun signals should be arranged beforehand in case of fog (5 rounds—pause—5 rounds) for ordering the opening of barrage fire. All machine guns sited in rear must take up the signal until barrage fire is opened.

D.-COMMUNICATIONS BY MEANS OF WIRELESS.

Communications by means of wireless, with the assistance of the apparatus of the trench wireless detachment, from the foremost line (infantry and artillery observers, company), viá the commander of the front line troops, to the observation post which permits of the best observation in the divisional sector (divisional observation post), or direct to the artillery commander on duty (brigade battle headquarters) and thence to the division (artillery commander). Power buzzer stations will also be employed, especially for communication between the foremost line and the commander of the front line troops.

E.—COMMUNICATIONS BY MEANS OF SIGNALS BETWEEN ARTILLERY AND INFANTRY AEROPLANES AND THE GROUND.

These are carried out by wireless, signal lamps, flare signals, and by dropping messages—and from the ground to the aeroplane by means of cloth signals, signal lamps and flares.

To enable wireless messages to be received from the aeroptane, a fighting wireless station will be established at every artillery group, and a receiving station with every division.

F.-PERSONAL LIAISON.