

## Correspondence.

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

### ASPHYXIATING GASES.

SIR,—On April 23, 1915, the French and British positions were attacked by the enemy and asphyxiating gases were used by them.

These gases appear to be of two kinds—(1) a heavy gas which is of a yellow-brownish colour, which is discharged by means of pipes supplied from cylinders where the gas is contained at high pressure; these pipes are passed out over the parapet of the enemy trench and are attached to the cylinder; any number of lengths of piping can be used. When the wind is favourable the cylinder tap is turned on and the heavy gas is driven towards our trenches, into which it sinks.

The effects of this gas, which is believed to be chlorine, are those of asphyxiation; the men affected show a peculiar discoloration of the skin of the face and hands, they suffer greatly from "air hunger," the breathing is short and the respiratory movement of the thorax is much accentuated; they remain in a semi-conscious condition, which varies according to the severity of the gas poisoning.

Post-mortem examination shows marked damage to the lung tissues, small hæmorrhages and breaking up of the pulmonary alveoli are seen. A viscid secretion is invariably found in the bronchi and bronchioles; this accounts for the severe "air hunger" from which all cases suffer, as the oxygen-absorbing surface of the lungs is so severely impaired. This gas does not appear to affect the red blood cells.

(2) The other poisonous gas is produced by shell explosions; the effects of this are of a different nature and apparently it has not the same asphyxiating power. It causes severe dyspnoea and great irritation of the conjunctivæ and temporary blindness, in some cases vomiting after a paroxysm of coughing. The effects of this shell gas do not appear to be of as lasting a nature as those of the heavier gas.

The above notes have been made from personal observation of the cases affected, and also from information received from German wounded.

I am, etc.,

H. Q., II Army, B.E.F.,  
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