## Appendix II.

SOME UNSOLVED PROBLEMS CONNECTED WITH TRENCH WARFARE.

 Destruction of enemy's obstacle in the shortest possible time, generally:—

Including-

- (a) a suitable type of chain shot or projectile especially effective against wire.
  - (b) a method of crossing over barbed wire or other obstacle.
  - 2. Protection of our own obstacles against the enemy's fire.
  - 3. Simultaneous suppression of fire during assault, generally:-
  - (a) an accurate short range mortar, or,
  - (b) an accurate short range mechanical bomb thrower.
  - (c) an accurate rifle grenade.
  - (d) adaptation of the standard hand grenade to fire from the rifle.
  - (e) percussion type of trench mortar bomb.
- (f) a suitable method for transporting hand grenades into the trenches after fusing.
- (g) a suitable method for carrying fused hand grenades on the person.
- Location of the enemy's strong points, keeps, and machine gun emplacements.
- 5. Maintenance of message communications under heavy bombardment, generally:—

Including-

- (a) a good system of daylight visual signalling which can be concealed from the enemy, suitable for flat country.
- (b) improvement of rockets or similar appliances, possibly elecitrically fired from a short distance, for signalling.
  - 6. Method of sapping rapidly.
  - 7. Method of mining rapidly.
  - 8. A good pattern of portable obstacle.
- A good trench stretcher for evacuation of wounded round narrow traverses, etc.
  - 10. Protection from gas attacks generally:—
  - Including-
  - (a) portable air or oxygen container.
  - (b) a system of piped oxygen and air supply in the trenches.
- Protection of machine guns and their detachments from shell fire.