vinegar should not be convenient at the time, or rather too expensive, paraffin would prove a good substitute. If all these means fail the head may have to be shaved.

HONOURABLE MENTION.

The following competitors receive honourable mention :—Miss Amy Phipps, Miss Linda M. Smith, Miss J. G. Gilchrist, Miss S. Simpson, Miss F. Sheppard, Miss M. Francis, Miss Dora Vine.

Miss J. G. Gilchrist writes :—The presence of animal parasites on the body and clothing is the natural concomitant of unhygienic conditions, both in person and surroundings. They originate on the body surface, where the impurities of the skin with perspiration, containing organic matter, have not been removed by washing and friction, and also on the clothing saturated with perspiration and surface dirt, which has not been changed and washed free of waste matter.

They feed, thrive, and multiply on the decomposing material, spreading over favourable material and infecting the bodies and clothing of normally clean persons, should they come in contact. Put in order of the severity of the discomfort and symptoms they produce they are :—(1) Scabies; (2) Pediculus corporis; (3) Pediculus capitis; (4) fleas.

Miss S. Simpson writes :—The female acarus after impregnation bores her way under the skin in an oblique direction. As she proceeds she lays her eggs, one or two daily, and she may thus burrow through the skin in an irregular line for a third or half an inch. Such a burrow or "run" may be recognized on the surface of the skin by the following points :—At one end, the epidermis is broken or frayed, and the free edges are dirty; at the other end is a minute white pointed elevation, in which the acarus lies; the burrow itself, between these points, is a sinuous black line. The whole burrow may be snipped off with a pair of scissors curved on the flat, or shaved off with a scalpel; and if it be then moistened with potash and examined, there will be seen the female acarus, and behind her, filling the burrow, her eggs in every stage of incubation, with minute black spots of excremental matter among them.

Miss Amy Phipps, who mentions the flea and bed bug, points out nevertheless that they are not true parasites, as, although they draw a droplet of blood each time they attack man, they do not depend upon him for nourishment.

QUESTION FOR NEXT WEEK.

Give nursing measures for the relief of vomiting.

ASPHYXIATING GASES IN WAR.

By R. Murray Leslie, M.D.

(*Summary of Lecture.*)

Dr. Murray Leslie, lecturing at the Institute of Hygiene, Devonshire Street, W., on June 22nd, said there had been considerable speculation as to the exact nature of the asphyxiating gases used by the enemy in the present war. Professor J. S. Haldane, our greatest scientific expert on the physiology of respiration in poisonous conditions, pronounces in favour of chlorine or bromine. It may be taken also as generally accepted that the greater part of the volume of the gas is chlorine, but that it sometimes contains bromine, sometimes anhydrous sulphur oxides and possibly impure nitrogen oxides, especially tetra-oxide of nitrogen, one or more of which may have specific poisonous properties.

The gas is evolved in some special apparatus and projected from a tube towards the trenches of the Allies when the wind is blowing in the right direction. It appears in the form of a yellowish-brown smoke, which floats slowly along close to the ground, and is readily visible for a considerable distance. Sir John French's report, dated May 25th, states that the gas cloud rose in places forty feet high, and that over a front of five miles it was emitted from cylinders throughout a period of four and a half hours.

All the men had respirators, but not all were effective, as the survivors explained in strained and broken voices in the hospital next day. In some cases the respirators had been carried in the men's caps or pockets for weeks, and were dry and useless when put to the test. It is noteworthy that some battalion commanders, warned by the gas surprise a month earlier, had initiated respirator drill, and had given their men the most stringent instructions about keeping the respirator pads moistened, and had shown them exactly how the respirators were to be worn. These battalions are stated to have escaped practically unscathed.

It might be well to refer briefly to the most characteristic symptoms and how they are produced. Asphyxia is the most prominent symptom. The cyanosis (blueness) is mainly due to want of oxygen, the result of choking of the lungs and bronchial tubes with fluid. This outpouring of fluid is so great that the bronchi seem quite full, and the patient is in danger of being drowned in his own secretions. Even when the blueness begins to disappear, and the patient's colour improves, the respiration continues to be hurried and panting, and it is believed by some authorities that an acid

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