OUR PRIZE COMPETITION.

STATE WHAT YOU KNOW ABOUT THE CONVEYANCE OF INFECTION BY INSECT CARRIERS. NAME THE DISEASES WHICH MAY BE CAUSED IN THIS WAY, AND THE INSECTS RESPONSIBLE IN EACH CASE.

We have pleasure in awarding the prize this week, to Miss Catharine Wright, Dryden Road, Bush Hill Park, Enfield.

PRIZE PAPER.

The conveyance of infection by "insect carriers" has been proved by scientific research to be a very serious menace to the national health of populations in all parts of the world, more especially when countries and people are living under abnormal conditions, such as exist in times of war, or famine, when hygienic conditions are difficult to maintain for all classes. All insects breed prolifically, but insects which are disease carriers infect, by direct contact, human beings, food, water and clothing, the heat of summer and warm humid atmosphere of autumn being very conducive to their persistent activities.

Armies on active service may be most adversely affected by these minute creatures, disease and epidemics spreading with rapidity, often resulting in a high mortality.

In civilian life, also, epidemic disease may spread with fatal results to communities, especially in crowded and over-populated areas, or under insanitary conditions of housing, drainage, or water supply.

The most common insect disease carriers are the mosquito, gnats, midges, flies, lice, fleas and bugs, and the parasitic insect of scabies acarus.

Mosquitoes, gnats, midges.—This family, present in tropical areas, in swampy districts, with profuse vegetation, attack directly, biting any exposed surface of skin, leaving an open wound, flying to the next victim, and, if infected, conveying infection, which may develop into trench fever, bubonic plague, malaria, typhus, or enteric fever, setting up a condition of sepsis or tuberculosis.

These diseases may occur in the same way in England, through infected insects, with very fatal results.

Flies choose for their environment any filth or impurity, swarming persistently around putrefying matter or excreta, conveying poisonous germs, and leaving their larvæ on every conceivable spot, contaminating food, water, clothing. These pests are responsible for a high mortality in infant life, causing "summer diarrhœa" of an epidemic form, which may be fatal in a few hours. Trench fever, plague, typhoid, diphtheria, phthisis and tuberculosis, and septic conditions invariably originate from this source.

Lice attack directly, move in large numbers, and burrow their way under dressings of wounds. They are of three varieties—Lice capitas, Lice corporis, Lice pubis.

They hatch their eggs, known as "nits," causing extreme discomfort, as they feed on the vitality of "man." The scratching induced by this irritation produces a skin disease of impetigo, especially amongst children, which is highly infectious, the scalp often being most infected. They also produce the disease of anæmia, and where armies are congregated, typhus in its virulent form may take an epidemic form, resulting in a high mortality. They can similarly affect civilian life. Trench fever and septic conditions may supervene.

Fleas and bugs, wingless insects, may produce impetigo, eczema, and sepsis or anæmia. Bugs inhabit furniture and wooden frames of beds, and may induce septic conditions in patients who are bedridden.

Scabies.—Infection conveyed by the acarus, producing itch, a highly infectious disease amongst all classes of all ages. Incessant irritation is set up, especially at night. Pustules may form and become septic. The diseases of impetigo, eczema, and anæmia may result, causing a lowered power of resistance to secondary diseases.

HONOURABLE MENTION.

The following competitors receive honourable mention :---Miss W. M. Appleton, Miss M. James, Miss P. Thomson, Miss J. Findlay.

QUESTION FOR NEXT WEEK.

State what you know of intravenous infusions and transfusions, their purpose, the blood substitutes utilised, and the manner of their application, and the dangers to be guarded against.

THE PASSING BELL.

We much regret to report the death of Sister Eveline M. Hodgson, of York, whose death from malaria in a military hospital at Salonika is notified. She volunteered for active service soon after the outbreak of war, and for four years and four months was engaged in looking after our wounded so'diers in various theatres of war, and a'so at home. After serving for some time in hospital ships which brought back to this country men wounded at Gallipoli, she was attached to a military hospital at Cosham, near Portsmouth, until the spring of last year, when she went out as a volunteer to Sa'onika. Sister Hodgson is deeply mourned by colleagues, patients and friends.



