do so, and that in this way the services of a nurse may be obtained without delay. Any proposals of this nature will require the approval of the Board, and it is not intended that such arrangements should be adopted, except in cases where it is not practicable to provide for the regular employment of a fully trained nurse." It is scarcely necessary to point out that such an arrangement would not provide for continuous nursing.

The hopeful note occurs in the Circular which states that "The Board may add that the subject of nursing in the Poor Law Service generally is engaging their attention." We hope that the first thing to occupy them will be the formation of a Nursing Department at the Local Government Board Office, supervised by a Matronin-Chief. This is the first essential to adequate organization.

## OUR PRIZE COMPETITION.

DESCRIBE BRIEFLY HOW FOOD AND WATER MAY ACT AS CARRIERS OF INFECTION. GIVE EXAMPLES OF DISEASES SO PRODUCED.

We have pleasure in awarding the prize this week to Miss J. G. Gilchrist, Gilmore Place, Edinburgh.

## PRIZE PAPER

Food and water may act as carriers of infection through being drawn from a contaminating source; from being kept too long, whereby the bacterial activities of putrefaction and fermentation are allowed to proceed; from the entrance into the food or water of a specific pathogenic organism, favoured by exposure to such in transit, by warmth and unsuitable storage.

Animals are subject to a great many diseases, and meat may be dangerous (1) through the development of putrefaction from exposure to the air; (2) disease of a more or less virulent character; (3) presence of parasites which may not be killed in cooking; this last is specially detected in pork.

Putrefying meat has an intensely irritating effect on the alimentary canal, as the result of the action of the bacteria, which produce an accumulation of poisons or ptomaines, giving rise to a very severe attack of illness. Sausage poisoning is common, due to the utilization of odds and ends of meat refuse. Tinned meats and other tinned foods are dangerous if food is diseased, if putrefaction changes from imperfect preservation set in, and from poisonous metals absorbed from the can or solder. Tuber-

cular meat is condemned in this country, but in Sweden and Germany it may be sterilized and sold cheap to the poor.

Shellfish, stewed mussels, and oysters may be dangerous from a contaminated stream or river containing organic refuse; the latter have been said to convey typhoid fever. The commoner fish, such as salmon, trout, haddocks, if unsound give rise to symptoms of poisoning; also certain fish in season of spawning are unfit for food.

Vegetables and fruit may be infected from moulds or bacteria; signs of decay and fermentation are usually evident to prevent their consumption, which would give rise to severe diarrhœa.

Flour and various grains may include poisonous fungi in their substance. Dry goods, such as sugar or butter, jam preserves, and articles of food in common use should be protected from fly-borne infection, as the exposure to this pest is a common source of carrying infection, especially of the commoner infectious diseases. It is essential, too, that all vessels for containing food must be perfectly clean, and kept covered up and stored outside the living room.

Milk may convey infection from an animal suffering from tuberculosis, inflamed udder, or other disease; dirty utensils and infected hands of milker; exposure in the dairy to germs and dust. It may be kept in unsuitable places in the home, such as a warm living room or sick room, near the kitchen sink, or uncovered in a close cupboard. Milk may have been diluted with infected water, polluted by flies and dust, or may become unwholesome from an unclean jug or basin in which it is kept.

Milk, forming as it does a most favourable medium for germ development, requires as a universal food the greatest precautions to guard against its infection by disease-producing oganisms.

Foods of all kinds are frequently adulterated in varying degrees, but unless the adulterant is harmful in itself or used excessively, such do not act as carriers of disease in the terms of the above query.

Germs of disease may be carried to food exposed for sale in shops by street dust containing germs; sweets and suchlike being handled by infected persons, such, for instance, as a person suffering from a mild case of scarlet fever. School children may infect each other in this way by handling and sharing buns and sweets; diphtheria, scarlet fever, and measles have been conveyed in this way.



