Rouna-worms.-These worms vary in size between four and twelve inches long, and resemble common earth worms. They chiefly infest the small intestines, and there they cause a catarrh, and, consequently, symptoms of dyspepsia, and sometimes also colicky pains, diarrhœa, and vomiting. Now and then they cause symptoms of irritation of the nervous system, which may be mistaken for meningitis. Their presence is often unsuspected till one or more have been passed per anum. They are usually treated by a sharp purge, and the administration of special vermicide drugs. The nurse must always remember that powerful and depressing drugs, such as these are, require to be given to children with much caution; and, as the doctor will probably always direct, their results must be most carefully watched. For example, if they are followed by sickness or any faintness, no further doses must be given, until the fact has been reported to the doctor, and his further instructions received: and a little brandy or other stimulant is generally ordered.

Tape-worms.—The symptoms to which this worm gives rise are usually abdominal pain, dyspepsia, and, perhaps, vomiting and loss of flesh and strength. The motions from time to time contain segments of the worm, each of which are about half an inch long and a third of an inch broad. These may be separate, or two or three or more joined together. They are flattened like a piece of tape, hence their name. As soon as these are seen in the stools a doctor should be consulted at once, and proper treatment vigorously carried out. He will probably order a dose of castor oil to be given at night, and a breakfast in the morning consisting solely of beef tea, before which the dose of medicine intended to kill the worm has to be given, and later on in the day another dose of oil to expel it. The fæces during the treatment should be mixed with water, and broken up with a stick, and all fragments of worm reserved for the doctor to examine. If the head be not evacuated a return of the symptoms is certain, and, as this is only of the size of a pin's head, great care should be taken by the nurse to save even the least possible remnant of the worm in order that the physician may know whether the treatment has been effectual or not-that is to say, whether the head of the worm from which all the other segments grow has been expelled.

## (To be continued.)

## Medical Matters.

LIVERPOOL SCHOOL OF TROPICAL MEDICINE; YELLOW FEVER EXPEDITION.

By HERBERT E. DURHAM, F.R.C.S., and (the late) WALTER MYERS, M.B., B.C.Camb.

The following instructive abstract of the interim report of the Yellow Fever Expedition appears in last week's *British Medical Journal*:

1. Sufficient search reveals the presence of a fine small bacillus in the organs of all fatal cases of yellow fever. We have found it in each of the fourteen

cadavers examined for the purpose. In diameter the bacillus somewhat recalls that of the influenza bacillus; seen in the tissues it is about 4 u in length.

2. This bacillus has been found in kidney, in spleen, in mesenteric portal and axillary lymphatic glands, etc., taken from yellow fever cadavers directly after death. In the contents of the lower intestine apparently the same bacillus is often found in extraordinary preponderance over other micro-organisms. Preparations of the pieces of "mucus," which are usually, if not always, present in yellow fever stools, at times may almost present the appearance of "pure culture."

3. Preparations of the organs usually fail to show the presence of any other bacteria, whose absence is confirmed by the usual sterility of cultivation experiments.

4. It is probable that this same bacillus has been met with but not recognised by three other observers. Dr. Sternberg has menit; and he has also recorded the finding of similar organisms in material derived from Drs. Domingos Freire and Carmona y Valle; but he did not recognise its presence frequently, probably on account of the employment of insufficiently stringent staining technique.

5. It is probable that recognition has not been previously accorded to this bacillus by reason of the difficulty with which it takes up stains (especially methylene blue), and by reason of the difficulty of establishing growths on artificial media.

6. The most successful staining reagent is carbolic fuchsin solution (Ziehl), diluted with 5 per cent. phenol solution (to prevent accidental contamination during the long staining period)



