

present to be the streptococcus pyogenes. The child's mother, who had been constantly nursing him, was attacked during his illness by a similar pseudo-membranous angina in which the sole pathogenic organism was the streptococcus pyogenes.—*Amer. Jour. Med. Sci.*

THE PARASITES OF MALARIA.—Professor Wm. Osler, of Johns Hopkins University, communicates some general conclusions on parasites observed in types of malarial fevers in and about Baltimore. The observations cover more than 600 cases, in all of which the blood has been carefully studied. Three varieties of the malarial parasite are distinguished, viz.: (1) the tertian parasite; (2) the quartan parasite; (3) the æstivo-autumnal parasite.

(1) The *Tertian Parasite* requires about forty-eight hours to accomplish its complete development, and is associated with relatively regular tertian paroxysms, lasting on an average between ten and twelve hours, associated almost always with the three classical stages—chill, fever and sweating. Infection with two groups of tertian organisms frequently gives rise to quotidian paroxysms; infection by multiple groups of organisms rarely give rise to more irregular subcontinuous fevers.

(2) The *Quartan Parasite* is an organism requiring about seventy-two hours for its complete development. It is rare in this climate, and is associated with a fever showing regular quartan paroxysms similar in nature to those associated with the tertian organisms. Infection by two groups of the parasite causes a double quartan fever (paroxysms on two days, intermission on the third). Infection with three groups of the parasite is associated with daily paroxysms.

(3) The *Æstivo-autumnal Parasite* passes through a cycle of development, the exact length of which has not yet been determined. It probably varies greatly from twenty-four hours or under to forty-eight hours or more. But few stages of development of the parasite are found ordinarily in the peripheral circulation, the main seat of infection being apparently in the spleen, bone marrow and other internal organs. Infection with this organism is associated with fevers varying greatly in nature. There may be a quotidian or tertian intermittent fever, or more commonly a more or less continuous fever with irregular remissions. The individual paroxysms last on an average about twenty hours. The irregularities in temperature depend probably upon variations in the length of the cycle of development of the parasite, or upon infection with multiple groups of organisms.—*Br. Med. Jour.*

LEUCORRŒA IN THE UNMARRIED.—In the treatment of leucorrhœa in young unmarried

women, instances frequently occur in which the usual practice of making an examination to ascertain the condition of the pelvic viscera is so obnoxious to the patient, or so firmly opposed, that the physician is forced to abandon it and have recourse to medicine.

In such cases, Dr. Slocum (*Cincinnati Lancet-Clinic*) depends upon the specific action which cantharides appears to exercise upon the cells constituting the genital as well as the urinary system. It is probable that by direct stimulation of the cells just to the point of successful resistance, the benefit is secured, as the dose is very small. Strangury or other unpleasant symptoms have not been produced. The action of the drug has been so uniformly satisfactory that when it fails such result forms a strong basis for suspecting the presence of something more than simply hyperæmia or mild inflammation. Lessening of the discharge is sometimes noted within five days, but in several cases of profuse discharge of four years' and longer duration the treatment was not successful until after a month's persistent use.

The formula which has seemed the best is:

Tincture of cantharides,	96 minims.
Tincture of ferric chloride,	160 "
Dilute phosphoric acid,	160 "
Syrup of lemon,	2 fluid ounces.
Water,	sufficient to make 4 ounces.

One teaspoonful, in water, after meals.—*Maryland Medical Journal.*

HEADACHE.—Dr. Lauder Brunton says that one great difficulty which is to be met with in treating nervous headaches, or so-called bilious headaches, is that once the headache has become severe both secretion and absorption from the stomach are generally arrested, and that any medicine which is taken by the mouth when the headache is fairly begun lies in the stomach unabsorbed and useless. Consequently it is sometimes almost imperative to treat such cases, when the headache is intense, by the subcutaneous injection of morphine. It may not infrequently be noticed that if the headache comes on shortly after food has been taken, for example an hour or half an hour after breakfast, the secretion will have occurred before the pain has commenced, and the gastric juices will dissolve the food. But the food will not be absorbed and will be brought up in full quantity, but well digested, many hours afterwards, say in the evening. Should the headache, however, have become well established before breakfast, and food be taken, notwithstanding the pain, the gastric secretion is often arrested, so that the food will be returned, unchanged, at night.

In consequence of this want of absorption, drugs administered by the mouth, after the pain has