observers have recorded a mild form of the disease, which occurred not only when the epidemic was at its height, but which for several months (or years) before, and for several months (or years) after, spread amongst the community.

The importance of this ailment is that it may precede an outbreak of plague, and should be carefully watched and recorded. The symptoms are swelling of a groin gland, inflammatory effusion in the periglandular tissue, some initial fever and gradually increasing temperature, and a feeling of general *malaise*. The skin over the bubo reddens, suppuration develops, and the pus finds its way to the surface by two, three or more fistulus openings. The gland when excised is found surrounded by a thin purulent fluid, and when a section is made several small necrosed or purulent foci are seen to stud the gland tissue, which has become soft and diffluent. After removal of the gland the parts gradually heal, and by the end of a month, with the exception of a scar, all traces of the disease disappear.

SIGNS AND SYMPTOMS. Bubonic Plague.

The bubonic type is taken as the standard for descriptive purposes, as the number of persons suffering from plague, in whom this variety is met with, outnumber by a large proportion those attacked by all the other varieties. Three-fourths of plague patients develop buboes.

Incubation.—Three to five days is the usual period of incubation, but there is ample proof that a person exposed to plague infection may develop symptoms in thirty-six hours, or the period of incubation may extend to ten (or fourteen) days.

The prodromal symptoms are either nil, or of so indefinite a character that no specific importance can be attached to them.

Invasion.— The onset of plague is sudden : —A rigor or mere chill, a splitting headache, nausea and vomiting, backache, a quick pulse, quickened breathing, congested conjunctiva, a white-coated tongue with reddened edges and tip, a rise in temperature, sudden weakness or prostration, and a marked mental disturbance, with or without glandular pain or swelling, constitute the initial indications of an attack of plague. The majority of these symptoms are common to many forms of illness, and two or three only are special. In no other disease, not even excepting cholera, does the physical strength so suddenly decline, and in no other does mental aberration develope so quickly. The presence of glandular swellings, or a bubo in combination with these, is well-nigh diagnostic of the disease being plague.

As the illness proceeds the signs and symptoms present at the onset continue or increase in severity. Vomiting may persist for a day or two or throughout the illness. The pulse, at first full and rather tense, becomes weak and compressible, and towards the end in fatal cases intermittent, irregular, or running. The breathing increases in rate with the rise in temperature and the quickness of the pulse. The temperature may continue to rise, say, from 101° F. at the onset to $103^{\circ}-105^{\circ}-107^{\circ}$ F. during the first two days, or it may reach 105° F. within a few hours after invasion. After three to five days the temperature usually falls to near the normal, but after the fifth day it may rise again to fall on the seventh or eighth.

A clearer conception of plague will be gathered by a categorical study of the several organs and tissues of the body.

The Digestive System.—The white fur on the tongue, present from the beginning of the illness, speedily acquires a mahogany colour, and finally changes to a brownish-black hue. At first the tongue is swollen and the edges indented by the teeth, but after two or three days the dorsum is cracked and fissured, and the whole organ seems contracted in size.

. The *tonsils* are usually reddened, and may be swollen with mucous puncta on their surfaces; or they may be actually inflamed.

Vomiting and Nausea, frequently present from the onset, may continue for a day or two or occasionally, in unfavourable cases, persist to the end. The vomited matters appear of a bilious character at first, but later on consist merely of the food and drink that has been taken, combined with an inordinate amount of clear fluid. Occasionally the vomit presents a coffee-ground appearance, but this is not due to hæmatemesis.

Constipation obtains for the most part during the first day or two; it may persist or give place to a profuse intestinal flux. On the other hand diarrheea may be present from the onset • Blood occasionally appears in the stool.

The *abdomen* may be swollen or retracted. The *liver* is somewhat enlarged, and tender to percussion; the *spleen* is always swollen and tender, the enlargement may be such that the spleen occupies three or four times its normal size.

(To be continued.)



