

uted by Dr. Joseph Jones, the President of the State Board, to isolation of the sick and thorough cleansing and disinfection of the section surrounding the focus of infection for at least four blocks each way.

Dr. Chaille quotes approvingly from Dr. Kohnke's report, which recommends that, instead of quarantining in a house with the sick all of the inmates who are well, the bread-winners should be permitted to come and go under strict precautions as to disinfection, care of clothing, and place of sleeping. Not of the least importance is the dissemination of sanitary knowledge among the people, especially a knowledge of the infective nature of the disease, its disastrous results to the public, the preventive measures indispensable for its extinction, and the necessity for serious restrictions on the sick-room and for some restrictions on the well inmates of the house.

Meat Poisoning.—A new organism connected with the production of poisonous effects due to the ingestion of diseased meat has been discovered by DR. G. WESENBERG (*Zeitschrift für Hygiene und Infektionskrankheiten*, September 23, 1898, p. 484), who investigated an outbreak at Mansfeld, in which sixty-three persons became ill after eating the meat of a cow which had been killed in consequence of a diagnosis of traumatic pericarditis. Only those who ate of the minced meat in a raw state or of the partly cooked liver were affected; those who ate of the well-cooked meat escaped without exception. The symptoms were vomiting and diarrhoea, violent headache and abdominal pain, general muscular weakness, dizziness, and lassitude. The discharges were sometimes greenish, sometimes brownish, and always extremely offensive. With few exceptions the symptoms abated in from three to five days, and all recovered except one, and that a doubtful case in a child who was not known with certainty to have partaken, and whose symptoms might have been due to other causes.

The unconsumed meat when received for examination was already fairly well advanced in decomposition and partly maggoty. All except one piece, which was faintly acid to litmus paper, was alkaline in reaction. Cultures on agar and in bouillon were made from a piece taken from a part which was apparently not yet in process of decomposition. Inoculation of the bouillon cultures and of small bits of the meat into white mice produced fatal results, in some cases from eighteen to twenty-eight hours and in others within three days. A guinea-pig which received a subcutaneous injection of the bouillon culture of the crushed meat died in forty-eight hours, having shown marked lassitude and profuse diarrhoea. Section showed in all cases enlargement of the spleen, which was bluish-red in color, strong injection of the small intestine, and marked redness of the medullary substance of the kidneys. Cover-glass preparations from the spleen showed fairly long and broad bacilli, and the same organisms were developed on agar from the meat itself. The characteristics of the bacilli as to growth, development, staining, etc., are given in detail. The organism proves to be quite different from any hitherto described by Van Ermengem and others who have investigated similar outbreaks. No examinations of the vomitus or stools were made, because all the persons affected had recovered before the investigation was begun. That the outbreak was due to an infection rather than to an intoxication was shown by the facts, first, that those who ate of the meat in a well-

cooked condition escaped; and, second, that mice withstood injections of 1 cm of heated bouillon culture, but were killed by 0.2 c.cm. of the culture when it was not so treated.

PATHOLOGY AND BACTERIOLOGY.

UNDER THE CHARGE OF

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On the Hæmocytoza of Birds.—OPIE (*Journal of Experimental Medicine*, January, 1898) examined 125 birds. The majority of them were obtained from places notoriously malarial; 80 of these were English sparrows, and 12 red-winged blackbirds; the others belonged to a variety of species. Fifteen of these birds showed intra-corpuseular parasites in varying abundance.

He distinguishes two varieties which correspond to those described by Grassi and Felletti. The morphology of the full-grown organism is characteristic of each group. In one an irregularly shaped body containing pigment granules occupies one end of the red corpuscle, while the nucleus is displaced from its normal central position into the opposite end. The other group is characterized by the fact that the full-grown parasite is an elongated pigmented body lying along one side of the nucleus and curving more or less over its two extremities. This is the Halteridium of Labbe. Both develop from very small non-pigmented spherical bodies. In three birds these two varieties were present at the same time. The first or irregular parasite, the *Proteosoma* of Labbe, is represented in its earliest phase by a rounded clear body within the red corpuscle. As the parasite grows it acquires pigment, which is collected into a more or less loose clump situated near the periphery. This collection of pigment into a single clump is characteristic of the *proteosoma*. Amœboid movements were not seen, but they probably occur. Not infrequently two parasites were present in the same corpuscle. As the parasite increases in size the nucleus is deflected, and not infrequently lies at right angles to the long axis. This is not due to the pressure exerted on the nucleus by the organism.

Parasites may be seen surrounded by the rim of a red blood-corpuscle from which the nucleus has been extruded. The process of segmentation is very similar to that found in the malarial parasite in man. The parasite first forms a rosette, and the segments of this become free. In fresh specimens of blood slight clumps of pigment surrounded by groups of small spherical bodies may be seen free in the plasma. The segmenting bodies correspond in size with the larger full-grown organisms. They did not seem to undergo a cyclic development in groups as is the case in malaria, but in the same specimen of blood may be found representatives of all stages. Flagellate bodies resembling those seen in human malaria were met with a number of times. The flagella were similar in appearance to those which occur in the