

growth, stains best by Heim's method or with Giemsa's stain. The bacillus itself is stained by all the aniline dyes, and decolorizes rapidly by Gram's method. It grows easily on all the ordinary culture media, and white mice die of typical septicemia sixteen to forty-eight hours after subcutaneous injection.

**The Channels of Infection in Tuberculosis, and the Part Played by the Lymphatic Glands, etc.** DR. JOBSON HORNE (*Journal of Laryngology*, July, 1907.)

In a carefully studied and comprehensive paper upon this subject the writer, in speaking of the inter-relationship which should exist between the pathologist and the bacteriologist, quotes Welch as saying: "One misses only too often in purely bacteriological papers on this subject exact knowledge and descriptions of pathological conditions; and, on the other hand, pathologists often fail to utilize pertinent facts and ideas which are familiar to bacteriologists." On the same subject Sir Dyce Duckworth says: "Our modern pathologists reckon without their hosts." Jobson Horne's views are in accord with those of both of these writers. He thinks that a halt should be made in bacteriological and experimental research, and that the shrewd observations of the older pathologists and clinicians should be studied in the light of scientific medicine of to-day. Hence, in the research made for this article, he has combined the exact knowledge and descriptions of pathological conditions seen in post-mortem examinations with the corresponding clinical phenomena in the process of infection, as observed during life.

Although it is accepted that infection may take place *in utero* in cattle, with regard to the human subject it is considered so far as not proven. Infection through the skin is so unusual that he excludes it from consideration in a paper upon practical research.

The great portals of entrance of the tubercle bacillus are the respiratory tract and the mouth, leading to the infection of the lungs and alimentary canal, the bacilli, in the vast majority of instances, being first localized in the lungs. As a direct evidence of the method of infection it was found that when dogs were made to inhale tuberculous virus, and were examined a few hours afterwards, the bacilli were no longer present in the alveoli, but were found in the bronchial glands and the lymph channels leading from them, indicating that these glands act as filters, absorbing the bacilli as they would particles of