

from which I obtained colonies having the characteristic culture appearances, and which killed a guinea-pig in the typical manner. In the other case (Case B 2), *staphylococcus aureus* and *citreus* were present in enormous number, together with a few streptococci, but no Loeffler bacilli were found.

In a fatal case (Case A 9), where an autopsy was performed by Dr. Finley, who kindly sent me the respiratory organs for examination, the larynx and trachea showed an extensive sheathing of diphtheritic membrane extending down to the main bronchi. Large numbers of the Loeffler bacilli were obtained from this membrane, and an area of pneumonia from the lung showed a small number of the bacilli associated with a large number of small diplococci. No streptococci were found.

In an anomalous case already cited, brought to my notice by Dr. H. S. Birkett (Case B 5), an extensive soft, yellowish membrane covered the posterior nares and extended over the epiglottis and into the larynx. This membrane could be readily removed without causing bleeding, but tended to recur. The general health of the child was unaffected. Cultures on agar yielded an abundant growth of a single bacillus form, forming prominent yellow white surface colonies. Inoculated into the conjunctiva of rabbits, no effect was produced, and I was inclined at the time to regard the bacteria as being possibly the pseudo-bacillus, but on re-investigating the cultures some three months later I found that they gave the typical Loeffler colonies on serum, with an abundant invisible growth on potatoes, and showed on both these media most characteristic involution forms. Inoculated into a guinea-pig, this organism showed a high degree of toxic virulence, killing the animal in thirty-six hours. The autopsy on this animal showed an opaque hæmorrhagic, reddish-gray indurated area at the spot of inoculation, surrounded by a zone of serous œdema. Cultures from the organs and from the serous exudation remained sterile, but typical Loeffler colonies were obtained from the circumscribed hæmorrhagic patch at the site of inoculation. These colonies, on being transplanted on agar, gave only the characteristic, flat, compact, concentric surface growth of the Loeffler organism, and not the abundant