

vidual still seeks dalliance with, with the inevitable recurring evil results. So long as this dalliance continues, so long the evil is incurable. Nor is any external agency able to break this up unless aided by resolute determination within. To this enemy the citadel always yields so long as an effectual friend remains within. Destroy those within and the external foes soon vanish."

# BACTERIOLOGY.

Bayard Holmes, M.D., read a paper at a recent meeting of the Chicago Medical Society, entitled: "The Bacillus Pyocyaneus, with a consideration of the importance of clinically recognizing the various forms of suppuration and a suggestion of some new tests for the Chromogenic Bacteria." There are very few surgeons who do not distinguish at least two forms of suppuration, the tubercular and the non-tubercular. Some have added a third form, which seems to be easily recognized when unmixed, the streptococcus of suppuration. This is a form of suppuration which occurs especially in the young after the acute exanthemata, and is prone to assume a subacute course *in loco*, and to be easily excited to metastasis. Another peculiarity of this infection is its power of intercellular infiltration, producing extensive dissections of tissues. In the neck, after scarlet fever, such dissections have extended nearly around the neck and up and down to the origin and attachment of the cervical muscles. When we observe such terrible local destruction we should scarcely think it necessary, before calling attention to this form of infection, to point to the frequent cases in which the streptococcus, doing little damage in the neck, is suddenly carried to the kidneys, where embolism in the glomeruli results with all the sad consequences of post-scarlatinal nephritis. The Streptococcus pyogenes is found in about half of all abscesses in man (?). It appears mixed with other microbes as a rule. One of its biological peculiarities is its dependence upon other forms of infection or severe traumatism to determine a point of least resistance through which invasion takes place. I have a case to report in which it occurred in company with the bacillus of green pus.

Many studies of this microbe have been made by the French school, notably by Charrin. His experiments on animals have been of the greatest

value in determining the pathogenic properties of this bacillus in particular, and of all pyogenic bacteria in general.

Ernst noticed in the blue pus from four cases at Heidelberg a variety of the *B. pyocyaneus* which did not show the characteristic fluorescence which had been noticed by all authors up to that time. He thought the difference was of enough account to entitle the bacillus to a place as a distinct variety; he therefore proposed, after the manner of the botanists, to call it *Bacillus Pyocyaneus*, B, and to designate the iridescent variety as *B. Pyocyaneus*, A.

Ledderhose has investigated anew both varieties, and concludes that whether or not there is sufficient difference between the two forms to separate them into two species, it would be well to apply to the iridescent variety the term *Bacillus Fluorescens*, and to the B of Ernst the old name *Bacillus Pyocyaneus*.

Both because Ledderhose has given the most complete study of the subject, and because his names are descriptive, I believe that they ought to prevail.

Clinically we may say that the color of the pus is not significant. The appearance of the *bacillus pyocyaneus* in a woman does not portend any graver evil than the appearance of any other common pus microbe. It was especially common in the age of the wet dressings, and before the antiseptic times; then it often appeared as an epidemic and followed a particular surgeon even into distant towns. The sweat of patients affected often stains the bedding green. It appears in the dressings of those who have no open wounds, in places where they are kept moist for a long time with the secretions of the skin. Even in antiseptic dressings it appears after the antiseptics are diluted by the secretions of the wound beyond the point at which they restrain bacterial multiplication. It is most frequently noticed in such cases a little way from the edge of the wound, and close to the healthy skin. The glands of the skin furnish the germs a hiding place, and, at the same time, secrete a pabulum, which at the proper time furnishes the most favorable condition for their growth.

Under these circumstances the multiplication of the *B. pyocyaneus* is attended by the production of a most characteristic odor. After becoming familiar with it it is more striking and significant