

acute articular rheumatism, chorea and malignant endocarditis, and it would seem as if these organisms do maintain an intimate relationship to the processes usually spoken of as acute articular rheumatism.

BEHRING'S VIEWS ON TUBERCULOSIS.

Behring, who is a good authority on such questions and whose opinion, therefore, carries weight, accepts the view that everyone is slightly tuberculous, but this by no means implies that everyone is or will be affected with pulmonary phthisis. He thinks two things are necessary to produce phthisis: a tuberculous focus and bodily conditions favoring the development of the disorder. He regards the contagion of consumption in adults with grave doubt, holding that it has not yet been demonstrated. Therefore, the predisposition to pulmonary infection is not in exposure to infection which is shared by all more or less, but in the conditions of life. The more probable cause is the awakening of a latent focus into activity on account of defects of nutrition or from impairment of health.

Leaving out of consideration for the present his opinions as to the early infantile origin of pulmonary phthisis, his views are in a measure somewhat comforting. These views should not encourage us to neglect reasonable precautions for self-protection, but they do oppose the pessimistic views held by some modern alarmists. Behring's opinions also have this in their favor; they harmonize with the great decrease of tuberculosis under better modern conditions of living which implies that the bodily resistance, given a fair chance, will throw off the disease. As we have often said, it seems probable that in time consumption may be a comparatively negligible affair and that tuberculous infection of itself is not so much to be feared under ordinary hygienic conditions of life. It is only when reinforced by other pathologic infections that it develops into the disease so much dreaded. The possible, if not even probable, hope of an immunizing serum against tuberculosis is also to be considered. The results of Behring's experiments on the lower animals, as well as the earlier ones of Trudeau and De Schweinitz, are certainly encouraging, and give us good reason to be hopeful for the future.

While the profession is in a receptive mood for anything scientific and new in regard to tuberculosis, it is not yet prepared to swear by the words of any master, however high he may be in science or in medicine. The result of Behring's utterances, therefore, will be to increase our caution as regards the infant acquirement of tuberculosis and probably not to diminish it as regards its communicability to adults. One thing is certain, however, and that is that bodily resistance to the germ is an important thing. We must build up our defense, while not neglecting active measures to prevent the attacks from the outside. In any case it is well to remember, considering the discrepancies of views held

by some authorities whose opinions we can not but respect, that extreme radical opinions in regard to either the dangers or comparative harmlessness of the tubercle germ are out of place. We have to be somewhat selective as regards our views, and it must be with judgment. Another thing is that the evidence shows that the problems of tuberculosis are not to be worked out at once. We are yet in the transition period, and there is much uncertainty before as well as behind us in regard to this particular subject. The report of the British Tuberculosis Commission will be anticipated with interest as probably giving a judicial statement of our present acquisitions, if not more positive data, especially as regards the varying views held as to the dangers of bovine tuberculosis and the liabilities of the human species to its infection.

CHRISTIAN FENGER AS A PATHOLOGIST.

In an address before the Chicago Pathological Society¹ Dr. E. R. Le Count gave an excellent and thorough review of the pathologic work of the late Christian Fenger. It was indeed a happy thought that guided the author in the preparation of this address along the lines indicated in its title; for it was the persistent, laborious study of the fundamental pathologic conditions that gave to Fenger's work as a surgeon and as a teacher of surgery its lasting influence on the development of scientific medicine in this part of the country.

This is hardly the place to review in detail Fenger's remarkable work as pathologist and surgeon. Those who knew him in his lifetime and perchance were fortunate enough to come under his personal influence will find that Dr. Le Count's address in every way gives an adequate and sympathetic presentation of his painstaking methods of work and of the scope of his investigations. To the younger generation of medical men just entering on the scene of professional activity the address is recommended for careful study in order that they may receive stimulus and inspiration from this noble example of untiring work and love of truth that after all were the chief lessons of Fenger's life, for the master-word in medicine is "work." "It is directly responsible for all advances in medicine during the past twenty-five centuries. Laying hold on it, Hippocrates made observation and science the warp and woof of our art. Galen so read its meaning that fifteen centuries stopped thinking and slept until awakened by the *De Fabrica* of Vesalius, which is the very incarnation of the master-word. With its inspiration Harvey gave an impulse to a larger circulation than he wot of, an impulse which we feel to-day. Hunter sounded all its heights and depths, and stands out in our history as one of the great exemplars of its virtues. With it Virchow smote the rock, and the waters of progress gushed out; while in the hands of Pasteur it proved a very talisman to open to

1. Trans. Chicago Path. Society, 1903, vi, 1-20.

us a new heaven in medicine and a new earth in surgery. Not only has it been the touchstone of progress, but it is the measure of success in everyday life."

So writes Osler in one of his helpful and charming addresses. And it was work that made Fenger, at first practically unaided, the leader of scientific medicine in the Northwest for twenty odd years, a period which he himself characterized as a period of uninterrupted progress. It was work that made it possible for him, coming here from a strange country, to say at the close of his career: "It is a satisfaction to me to have done my life-work here, witnessing and taking as best I could a small part in the growth of the West."

GRANTS FOR SCIENTIFIC WORK.

A further result of the small grants given by the American Medical Association to promote scientific research is embodied in the article by Otis and Evans on "The Morphology and Biology of the Parasite from a Case of Systemic Blastomycosis" in *THE JOURNAL*, October 31. Through an unfortunate oversight it was not stated in connection with the title of the article that the work had been promoted by an Association grant. We have referred in the issue of July 4, 1903, to the significance of the case of accidental infection with oidiomycosis from which was recovered the same organism as that described in the exhaustive study of Otis and Evans. It may be recalled that this case, being one of accidental infection from a known source, is to be regarded as an important landmark in the series of observations that have established blastomycosis or oidiomycosis on a firm basis. It was, therefore, doubly desirable that a thorough study of the organism concerned should be made. So far, the small grants offered by the Association have been the means of promoting interesting researches into the nature of streptococcal¹ and in the field of mold-fungus infections of man. We believe that not the least important result of these grants is the encouragement thus given to young men to develop the spirit of investigation.

OUR PHILIPPINE QUARANTINE SERVICE.

Since we have acquired eastern possessions, with certain responsibilities and risks, it is satisfactory to know that our agents in the Orient are attending to sanitary matters. Plague and cholera have existed in the Philippine Islands for the past year and the latter especially has been a scourge in a large portion of the group. Notwithstanding the fact that we are in almost weekly communication with the islands and that travel back and forth by army transports and otherwise has become very extensive, we do not dread the introduction of cholera into this country because of our confidence that the quarantine authorities in the Philippines are wide-awake. The annual report of the chief quarantine officer for the Philippine Islands for the year ending July 31, 1903, contains some interesting particulars. With the possible exception of the work done at Tor, Egypt, near the southern entrance of the Suez canal, there is

probably more disinfection accomplished at Mariveles station, near Manila, than at any other similar one in the world and this, moreover, with labor that speaks a foreign tongue and which has to be educated in every particular. This outlying fortress for public health is certainly doing very creditable work. There have been, it is estimated, about 300,000 cases of cholera in the Philippine Islands during the year covered by the report, and the extent of the disease is attributed largely to the possibilities of easy communication by small native crafts and boats which are hard to oversee throughout so extended a region and under such unfavorable circumstances as exist. A history of some of the epidemics that have entered the island prior to American occupation gives rise to the belief that some of them have entered from the south; therefore, an additional quarantine station has been established at Jolo, in the southern end of the archipelago, which is an important point in the commerce with adjoining Malaysian islands. It is a notable fact that plague has not extended during the year away from the City of Manila; it may be said to be firmly bridled and controlled. There seems to be a cordial co-operation between the public health service and the local boards of health in this matter. Taken altogether, and considering the possibilities of an inefficient or negligent administration of health matters there, we have many reasons to congratulate ourselves. Our commerce with our Oriental possessions is constantly growing, and with more intimate relations the greater will be the need of eternal vigilance as a safeguard for our own communities.

THE IMPORTANCE OF HEMATOLOGIC INVESTIGATIONS.

The number of those who decry the importance of blood examinations as a diagnostic measure is progressively diminishing, while the number of physicians who include a hematologic investigation among their clinical assets is as progressively increasing. It is not only the enumeration of the erythrocytes and the leukocytes and the estimation of the hemoglobin percentage that are of importance, but also a knowledge of the morphologic characteristics of the dried and stained films is frequently necessary for a satisfactory diagnosis. In some instances, although the blood may show no absolute leukocytosis, stained specimens show a relative leukocytosis of the first importance. In the case recently reported by Kelly¹ of a man who complained of weakness and who presented, on physical examination, slight jaundice, great enlargement of the spleen, moderate enlargement of the liver and leukoderma, a blood examination showed only 9,000 leukocytes. A differential count, however, showed that 98 per cent. of the white cells belonged to the lymphocyte class. Under observation, the leukocytes at different times numbered 6,000, 5,200, 18,200 and 37,600, and always with an increase of lymphocytes (96.5 and 98 per cent.). The patient died in coma. At the necropsy marked enlargement of the lymph nodes, except those of the axillary and the inguinal regions; enlargement of the spleen; gumma and syphilitic cirrhosis of the liver, and lymphadenoid bone marrow were demonstrated. There seems to be a ten-

1. *THE JOURNAL*, Oct. 17, 1903.

1. *Univ. Pa. Med. Bull.*, October, 1903. See abst., p. 1230.