

culosis almost constantly presenting, and more particularly the indication of a return to ideas held prior to the discovery of the tubercle bacillus.

Recently, Koch's positive opinion, the result of most careful experiments is, that the bacillus derived from tuberculosis disease in man will not produce the lesion in cattle, and that the coincidence of human tuberculosis with exposure to Bovine Tuberculosis has not as yet been thoroughly defined, except in a few cases of no actual importance. In "*The Veterinary Record*," March 15th, 1902, Arloing has made a communication to The Academy of Medicine, Paris, giving the results of three series of experiments, in which the bacillus from different human sources has determined tuberculosis in cattle, sheep, and goats, by intravenous injection. The animal lesions appeared as tubercle, confluent or distinct in lungs, liver, spleen, glands, and kidneys, and were marked by early caseation. Having produced the disease in 23 animals, he considers he has a fair answer to Koch and Schutz. He sums up as follows :

1st. That the virulence of the bacillus is modified by its host, and in some animals the human possesses less activity than the bovine.

2nd. A pure culture of the human bacillus produces the typical animal disease in bovines, sheep and goats, etc.

3rd. And this disease is indistinguishable from that produced from animal sources.

4th. That the unity of Koch's bacillus, in man or beast, remains undisputed.

5th. That Koch and Schutz have not produced sufficient evidence to substantiate their statement, that there is a distinct difference.

6th. The precautionary measures, in regard to milk and meat, should not be relaxed.

The Journal of Comparative Pathology and Therapeutics, London (September, 1901), contains an exceedingly able article by John McFadyean, of the Royal Veterinary College, London, in which he takes the same views as Arloing of Paris, and sums up as follows :—
"With regard to the view that the difference between human and bovine bacilli, in respect of virulence for cattle, is of such a fixed and constant character that it may be relied upon to distinguish the one from the other, it need only be said that that is very far from proved."

Twenty years have elapsed since the lung bacillus made its appearance, and now to-day the great problem of identity, in the human and bovine species, is a vexed question. Here is a fine point worthy of research, in the bacteriological laboratories of this continent, so liberally endowed by Rockefeller, Carnegie, Pierpont Morgan and Sir Wil-