

going special training for the same on the chance of being turned out of office three or four years hence. In other words, demand a diploma of public health for and from the present possessors of these posts and there will be none to oust them. The creation of a special service will ensure stability of office.

In conclusion, I trust that nothing that I have said will have seemed to throw cold water upon the advance recently made in the establishment of the public health and marine hospital service. That was a great advance, and as an outsider I regard as its first feature the clause in the Act empowering yearly conferences between the Federal and State health officials provided always that those conferences be so conducted as to permit the freest interchange of opinion. The good spirit that has thus developed between the two bodies has already in Louisiana and elsewhere borne rich fruit. It is this advance, indeed, wise and timely, which permits that you in this country look forward to still greater progress, and, as I have said, that in my opinion is to be looked for along the lines here indicated of still further unification of Federal and State health authorities, and yet fuller recognition of the public health service as a distinct profession through the establishment of a diploma of public health.

RECENT WORK UPON TETANUS.

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Notes of a case following vaccination; intraneural and high cord injection of antitoxin; death.

The history of experimental work with the toxine of tetanus is an extremely interesting one. Only within the last three or four years, however, have we come to very definite ideas concerning the exact action of tetano-toxine. This more exact knowledge we owe chiefly to the investigations of Marie and Morax in the Pasteur Institute in Paris, and of Meyer and Ransom in Marburg. Before going into detail in this direction it may prove of interest to review very briefly the history connected with our knowledge of the toxine of tetanus.

The bacillus itself was discovered by Nicolaier in 1884, but it was not until several years later (1890) that Kitasato was able to grow it in pure culture. It was found that the bacillus remained entirely at the seat of infection, where it manufactured the toxine, which, through its absorption, was the immediate cause of the various phen-