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STATISTICAL INFERENCE¹

(1) It was two years ago almost to a day that I was last here at the Johns Hopkins University for a brief visit. It was a pleasure to come then and now to be here once more, only I miss that kind soul, Dr. Halsted, and so must you, very much.

We are both engaged in a new undertaking—the teaching in a large way of the sciences basal to the public health. In a preliminary, a small, but I think very useful way we at Harvard, in cooperation with the Massachusetts Institute of Technology, started systematic instruction, I think, before you did, but to you undoubtedly will be given the credit, and quite properly, of making the first large start under your perennial leader, Dr. Welch. We shall keep step with you as well as we can.

And may I say that it appears to me to be of very good omen that it is Hopkins and Harvard who are working together along this new line. These two institutions have been leaders in American university education, leaders in their insistence on the university point of view, on scientific investigation as the normal university life and as the necessary precursor and accompaniment of sound applications and effective teaching of knowledge, whether old or new. There is in the pursuit of the public health unlimited opportunity for the satisfaction of a natural emotional desire to aid our fellow man, but the aid will be most effective, most permanently effective only if it is forwarded on patient scientific study. The traditions of our respective institutions augur well for the proper grounding of our work.

(2) When I looked about to choose a subject for discussion with you to-day it seemed to me that we might do well to consider a while together the question of statistical inference. Advisedly I say consider the question of inference, for I doubt whether the matter is yet sufficiently settled so that it has passed beyond the stage of query. Moreover, it seemed as though I should be likely to find here an audience not unwonted to reflect on this problem. Forty years ago you had Charles S. Peirce, a leader in the study of logic and one who did not shun the difficulties of probability and of statistical inference. You also drew on Simon Newcomb, who pondered much on the intricacies of the reduction of observations and was so astute in his own reductions that despite the advances of physics and astronomy some of his determinations have not been bettered to this

¹ DeLamar Lecture, School of Hygiene and Public Health, Johns Hopkins University, February 25, 1924.

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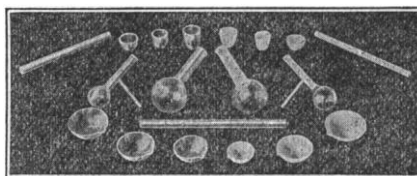
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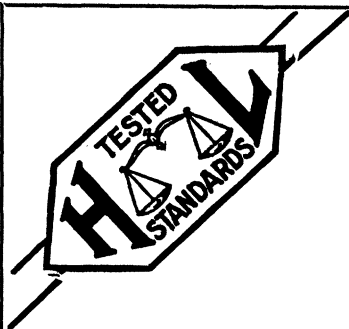
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