In spite of these objections my proposal is as follows:—

(1) To make use of the College Entrance Examinations as Standards in Science Teaching.

(2) To economize time by concentration of effort on fundamentals so that two to three months of each year may be spent in a many-sided review.

(3) To require answers to questions on the fundamentals repeatedly written in clear, concise, accurate English.

(4) To make the introductory lessons, in physics especially, very easy. To cultivate power by gradually increasing their difficulty. This amounts to a sliding standard, low but thorough at the beginning of the year and severe and high at the end—the ability to give satisfactory answers to such questions as are asked at the college examinations.

A COURSE IN ELECTRICAL ENGINEERING FOR TEACHERS OF PHYSICS IN SECONDARY SCHOOLS.

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There has been in progress during the current year at the Massachusetts Institute of Technology a course in Electrical Engineering and Testing provided by the trustees of the Lowell Institute in connection with its Teachers' School of Science.

The desire and plans for the course originated in the Eastern Association of Physics Teachers. It was designed to meet the needs of the members of that association although it was thrown open to all other teachers qualified to do the work. Until this time there had been almost no opportunity for teachers in secondary schools to do any advanced work in physics under expert supervision. Courses were open with the regular students at some of the near by educational institutions, but the lectures came on other days than Saturday so that the work be undertaken only by a favored few living within a short radius.

There were fifteen lectures, five upon the construction, use and calibration of electrical measuring instruments and ten devoted to a discussion of dynamo electric machinery. The lectures were followed by fifteen laboratory exercises, five in the standardizing and ten in the engineering department. The laboratory was open for three hours on each Saturday afternoon.

Five out of the following list were done by each in the standardizing laboratory: Wheatstone bridge, conductivity, Poggendorf method, voltmeter calibration, ammeter calibration, potentiometer, direct current wattmeter, insulation resistance, capacity, cable test.

In the engineering department the list of exercises was as follows:

Shunt motor, its efficiency and the ordinary motor curves; series motor, efficiency and curves; differential motor; Stray power method; characteristics of a series generator; shunt and compound motor; methods of speed variations of a shunt motor; shunt generators in parallel; incandescent light photometry; dynamotor.

Prof. H. E. Clifford, the head of the engineering department, was in charge of the course and delivered two of the lectures. The remainder of the work was done by assistant Professors T. A. Laws, H. W. Smith, and R. R. Lawrence.

Forty-nine registered in the course. Of these seven attended the lectures only. The average attendance at the lectures was about forty. In the laboratory section there were six who dropped out before the work was completed. Seven of those completing the work were young women. A fair idea of the interest taken in the course may be obtained by noticing the distances many of the teachers traveled in order to be present. Seventeen lived in Boston; nineteen came from a distance of about ten miles; six came twenty-five miles, and seven came forty miles.

The course was absolutely free, the expense having been provided by the trustees of the Lowell Institute. Had it not been free the cost per member would have been not far from \$25.00. Teachers in this part of the country are not overpaid, so it is possible that a fee of \$25.00 even would have prevented those living at a distance from taking the course.

Forty-four have already signified their desire to supplement this work by a course on alternating currents next year. The demand shows the success of the present undertaking.

This bringing together weekly the most progressive teachers of Physics in Eastern Massachusetts must of necessity unify, enrich, and raise the standard of the work in this department of science.

It seems to be a plan capable of being followed in any center having a college or technical school.