before ours, and which to-day keeps alive the intense interest in athletics in all the prominent colleges of the country, is the presence of a rival, a "hated rival," if necessary; but primarily a rival who is constantly striving to excel us, and to contest on even grounds with whom we must strain every nerve. We have ability at present, exceptional ability in the Institute in athletic directions, and the present is a most auspicious time for entering into some dual or triangular league for a period of years which will excite the interest necessary to bring out to athletic work from each entering class the men who now prefer to put their energies elsewhere rather than work to no purpose. Luckily, officers of the Athletic Association appreciate this opportunity, and are about to exert influence to bring about the formation of such a league and put athletics on a firmer and surer basis.

**Thesis Work.**

CANDIDATES for graduation at the Institute are obliged to present as a thesis some original piece of investigation. Such a thesis is expected to relate to the professional work of the student, and is an important part of the last term of the Senior year. Many of these theses are of a very interesting character. Among those undertaken by the students of Civil and of Sanitary Engineering are the following: A design for a steel highway bridge across the Charles River between Cambridge and Brookline, with a drawspan similar to the "Scherzer Rolling Lift Drawspans"; experiments on the pipe line that the city of Cambridge has running from Stony Brook to Fresh Pond, including measurements of the flow through pipe, of the friction loss, and of the change in the carrying capacity of the pipe which has been in active use for about fifteen years (this case is especially interesting, as the line runs for part of the way above the hydraulic gradient); a two-hinge steel arch span of one hundred feet to carry a four track railroad with ballasted floor, similar to the Washington Bridge in New York (this will be better looking than the ordinary railroad bridge, and brings in interesting problems in undetermined structures); a series of experiments to determine the coefficient of friction of liquids under very low heads and in small pipes (this case occurs in the heating of a house by hot water, where the boiler, to raise the water to the necessary height, must maintain a corresponding pressure, while the coefficient of friction through the small bore of the pipe becomes quite considerable. This subject has not been investigated within recent years, and information would be of value); several designs for sewage disposal, some by water carriage and some by sewage forms.

The next number of THE TECH will be a special 1900 number.

The Mandaman Club held a dinner at Young's Hotel last Saturday evening.

The Summer School in Civil Engineering will be held this year at Passamaquoddy Bay, Me.

Last Friday evening the Banjo and Mandolin Clubs gave a concert at the Boston University, 12 Somerset Street.

At the Newton Winter Tennis Club Tournament on Wednesday E. G. Thatcher, '01, was defeated by P. W. Wrenn, 6-3, 6-3.

The Gun Club held a shoot last Saturday at Wellington. The members took the 1.46 and 2.45 P. M. trains from Union Station.