The plant is one of three thousand one at Haverhill and the other at Waltham. An arrangements for the seventy-two hour plant tests. In the seniors, there start today two two crews, which the tests are divided.

The Haverhill test is being conducted by William Tyce, Frank, Pease, and Keeling, all '07. The plant is one of three thousand kilowatt capacity. The generators are of two kinds. There are two five-hundred kilowatt, direct current, belt-connected to compound engines, and two Westinghouse-Parnon turbines, each direct-connected to a sixty cycle, one thousand kilowatt generator. The tests are being conducted alternating current at a tension of twenty-three hundred volts. The exciter set is composed of induction motor-generators, with steam power in the reserve. The plant furnishes current for private and municipal lighting in the city of Haverhill, and arrangements are now being made to use it for traction purposes also. The test also includes examination of every phase of operation of the working load from the fundamental to the current produced.

The test on the Waltham plant is of the same order and duration. It will be conducted by Macomber and McChesney of the Electrical Department and Packard and Nichols of the Mechanical Department. The plant which is of one thousand kilowatt, single phase, is new one, having been constructed only last summer. It is built of reinforced concrete, with the newest type of machinery. The generating units are Westinghouse direct-connected to twenty-three hundred horse power when the requirements are of 300 kilowatt capacity. The plant primarily furnishes power for lighting, but a considerable portion of the current is used for traction purposes. When so utilized it is changed to direct current at five hundred volts potential, by means of rotary converters.

On both of the tests described there will be a test on the turbo-units operating under one and one half load, to onequarter load. Both saturated and superheated steam will be made to ascertain their performance under varied conditions.

Columbia and Yale Universities have concluded an arrangement to carry on tests in co-ordinated plants on courses in preparation for the senior year. The agreement is for the use of the two plants by the universities jointly, and higher degrees will be awarded by both universities and scientific degrees by the senior year of the course respectively.

PLANT TESTS.

Seniors Testing Plants at Haverhill and Waltham.

CROSS COUNTRY INSIGNIA.

Freshman-Sophomore Run to Be Held April 13.

It was unanimously voted at the Cross Country Association meeting Tuesday afternoon, with the constitutional provision regarding the election of the captain. The election of the captain is decided by the cross country team. The cross country team is composed of members of the university.

It was voted that the Freshman-Sophomore team should be held on Saturday, April 13, and should run over the course at Hyde Park. The run will only be about four miles long.

The run arranged for tomorrow will be a very preparatory jog over a course at Hyde Park. The run will only be about four miles and a half, making it a hard one in any respect.

The train leaves Back Bay station at 7.15 Saturday afternoon. It is desired by the cross country team that all prospective candidates be present.

The prospects of a good team of last fall's cross country work, several new awards of insignia have been made. The revised list of those entitled to wear the letters is as follows:


SOPOHMORE BASEBALL PROSPECTS.

At a meeting of the 1909 baseball administration, Tuesday afternoon, a new captain for the ensuing manager Appiah has selected a schedule, beginning on April 2 and extending to the end of the season.

The prospects of a good team are much brighter than before. Several experienced pitchers being a weak point last year.

The candidates out for the infield are practically those who made the team last year. Landis who played third base has left the Institute. Landis was one of the best on the team last year. Appiah has selected a schedule, beginning on April 2 and extending to the end of the season.

The election of the captain is decided by the cross country team. The cross country team is composed of members of the university.

Cross Country Club.

Robert H. Noyes, '08, has resigned as captain of the 1909 Yale crew. He has found it necessary to resign because of the account of physical condition and consequently to resign the captaincy. The Association is of particular interest when it is remembered that so Yale captain has ever had to resign before.

WOOD DISTILLATION PROCESS.

Address by Mr. W. E. Lummus to the Chemical Society Smoker.

"Wood alcohol is essential to the manufacture of a great many finished products," said W. B. Lummus of the Commonwealth Manufacturing Company, talk to the Chemical Society Wednesday night at the Union. After showing its importance in commerce, he explained how the distillation of wood is carried on in great steel retorts built in many furnaces. At 300 degrees Fahrenheit the distillation begins, and at 400 degrees the gases forming the distillate are drawn off through pipes and condensed. A dark, heavy liquid is obtained, from which tar, acetic acid, and wood alcohol are distilled. Acetic acid is used in the white lead and textile industries. Charcoal is finally left in the retort, being used in the metallurgy of iron.

Large plants have recently been established in Wisconsin and Michigan which can compete successfully with the older works in Pennsylvania and Europe. Refinements of a process can easily be distributed. It is a costly and complicated process and the demand for wood alcohol is much bigger than all grades in Cuyahoga, Ohio and varied. There is a splendid chance for the development of the industry. Vast improvements have been made during the past few years especially in the process of refining.

PROF. SEDGWICK AT Y. M. C. A.

Prof. W. T. Sedgwick of the Biological Department addressed the Columbia and McChesney of the Electrical Department and Packard and Nichols of the Mechanical Department. The plant which is of one thousand kilowatt, single phase, is new one, having been constructed only last summer. It is built of reinforced concrete, with the newest type of machinery. The generating units are Westinghouse direct-connected to twenty-three hundred horse power when the requirements are of 300 kilowatt capacity. The plant primarily furnishes power for lighting, but a considerable proportion of the current is used for traction purposes. When so utilized it is changed to direct current at five hundred volts potential, by means of rotary converters.