

THE TECH

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CHEMISTRY THESES ARE ANNOUNCED

C. S. Robinson Continuing an Investigation on Broken Rails

MANY ARE OF INTEREST

J. N. Stephenson Working on Scheme for Illustrating Course of Lectures

Prof. Henry P. Talbot has announced the complete test of the subjects of the theses in Courses V and X, by this year's seniors.

There are many of these theses worthy of attention. J. N. Stephenson has for a subject "Experiments for the Illustration of a Course of Lectures on the Principles of Organic Chemistry." His idea is put in shape the many principles known and worked on in investigations but which have not been put in shape for demonstration.

L. B. Beers is attempting to work out a scheme which will show whether the coloring used in food products is one of the six of those now sanctioned by the government.

C. S. Robinson is continuing the investigation begun last year by Rufus Wint, an assistant in the Qualitative Analysis laboratory, that is the effect of manganese sulphide on steel rails. The work is being carried on under the direction of Dr. F. H. Fay who is an eminent authority on broken rails and steel in general. Dr. Fay was called into consultation at the time of the wreck on the newly electrified part of the New York Central and Hudson River railroad.

L. R. Forrest is working on the decomposition of woolgrease and its constituents. If those products are determined it may be possible to find a new commercial use for the products from the distillation of woolgrease.

THESIS SUBJECTS.

COURSE X.—Adams, E. Q., "The Equilibrium of Silver Nitrate with Silver Nitrate, Metallic Silver and Nitric Oxide;" Beers, L. G., "The Identification of Artificial Coloring Matters in Foods;" Blankenbuehler, R. E., "The Separation and Identification of Mordant Colors on Textiles;" Bradley Dewey, "A New Apparatus for the Determination of Carbon Dioxide in Flue Gas;" Byron, W. H., "A Comparison of Methods for the Determination of Soluble Solids in Tannins;" Campbell, C. L., "A New Method for Determining the Quality of Galvanized Iron;" Elbert, J. J., "A New Method for Preparation of Caustic Soda from Sodium Sulphate;" Fay, T., Jr., "The upon the Corrosion of Steam Boilers;" Forrest, L. R., "Investigation of the Hydrocarbons from the Distillation of Wool Grease;" Gram, C. W., "Free Energy Expressed in the Reaction $\text{CaO} + 3\text{C} = \text{CaC}_2 + \text{CO}$ "; Paine, H. W., "A Study of the Efficiency of the Howard Dust Chamber at the Merrimac Chemical Works;" Robinson, C. S., "Microscopic Investigation of Broken Steel Rails;" Pritchard, C. M., "The Influence of the Content of Calcium and Magnesium upon the Physical Properties of Glass;" Soule, L. R., "A Comparison of Various Methods of Rubber Analysis and the Analysis of Some Rubber Articles used in Chemical Processes;" Stephenson, J. N., "Experiments for the Illustration of a Course of Lectures on the Principles of Organic Chemistry;" Wells, E. E., "Electrolytic Determination of Zinc."

TECH MAN SELECTED

The Paris prize committee of the American Society of Beaux Arts architects have announced that Louis Svarz 1909 of the Institute architectural department, is one of the five selected in the recent twelve-hour preliminary competition for the Paris prize. Mr. Svarz will take the twenty-four hour final problem on Saturday. The Paris prize (Continued on page 3.)

DEATH OF A WORLD IS INEVITABLE

May Come through Accident, Paralysis, Old Age, or Loss of Sun

VENUS IS PARALYZED

Sunward Hemisphere Baked, Starward Frozen—Life on Each is Extinct

"Death of a world is inevitable." Professor Percival Lowell made this startling statement in the last of his lectures on Cosmic Physics yesterday afternoon. Professor Lowell asserts that every world must sometime meet its end, due to one of many causes, of which he mentioned four in particular.

Death may be due to accident. Dark stars are ever roaming about the heavens unrestricted by the laws that govern the planets. Should the sun be struck by one of these, the immense heat generated by the contact would be sufficient to burn up and de-orbit the planet. Should the planet itself be struck, it would be destroyed bodily.

Another possible death to a planet is through paralysis, brought about by frictional action of planets upon each other. Mercury and Venus are thus faced in perpetuity to the sun. The sunward hemisphere is thus baked, and the starward hemisphere frozen. Life ceases upon the planet, and the water is evaporated in the heated hemisphere and deposited upon the other hemisphere.

Death may be due to "heart failure" or old age. Due to kinetic energy, particles are constantly flying off into space from the earth's atmosphere. The lighter gases will be the first to go, and in time all heated particles will leave and will ultimately be depleted into space, and the planet will be left a desiccated mummy.

The last death to occur in order of time will be due to the sun's going out. Ultimately the sun must inevitably contract to solid form, and will radiate away its heat. With the last flicks of the sun's splendor, the heart of the solar system will again become a dark and extinct body. Ghostlike the heavenly bodies will rove until another collision causes the heat necessary to create another celestial system.

NO ENTERTAINMENT

Committee Unable to Secure a Speaker for This Evening

There will be no Friday evening entertainment in the Union tonight. The entertainment committee regrets to announce that they have been unable to secure a speaker for the evening.

Several evenings have been arranged for the future, however. On April 9 Mr. F. B. Sears will speak on "Banking." On the following Friday the committee have been fortunate in securing the services of Mr. Lyman Underwood, the eminent lecturer. The subject of Mr. Underwood's talk will be "Hunting Big Game with Canoe and Camera." Mr. Underwood is already known to Tech men from his several talks to the Biological Society and he is sure to be well received.

April 23, the next Friday, comes in Prom Week and accordingly there will be no entertainment. On April 30, District-Attorney Hill is scheduled to speak on "The Young Man in Public Office." This may be the last evening of the year except for a grand smoker which is to be held in the Union on the night of the Intercollegiate meet.

CIVILS FAVORITES IN RUN TOMORROW

Mechanical and Electrical Section is Picked for Second

FINISH TO BE AT FIELD

Stars are to Run and Close Race is Expected—Howland is Out for Record

Tomorrow the much discussed inter-course will be held over the regular Technology cross country course. The race promises to far exceed all the previous runs of the Cross-country club this spring. The finish will be at the Field at about 3:45 o'clock, and an exciting time is expected. The first six men to finish will get ribbons bearing the number of the place in which they finished. The men are to take the 2:31 train from the Back Bay station to the Highland station.

The courses, as have been announced, have been divided into four sections. Capt. Jacobs has charge of the civil and sanitary engineers; C. P. Eldred 1911, chase-captain of the Hare and Hounds, leads the mechanicals and electricians; former chase-captain Stephenson heads all the chemists, while the rest are under ex-captain Ellis. All men who intend to run should report at once to their respective captains.

The civil and sanitary engineers, who won the race last year, are considered to be the favorites. This section comprises many men who have made names as excellent cross-country men. In addition to Captain Jacobs, there is self to be the best man at the Institute in long distance runs, also, McCarthy, of last fall's cross-country team, Batchelder 1909, Van Alostine 1911, and Watkins 1912, can be figured upon to finish well up among the leaders.

The mechanicals and electricals under C. P. Eldred 1911 are fully expected to give Capt. Jacobs' men a good race. This section is mostly made up of men comparatively new to the game, but who have shown up well in the recent Hare and Hound's runs. The best men of the freshman class are in this section, and a chance is offered to see what they are capable of doing in actual racing. Captain Eldred reports the following men who are to run with him: Magee 1910, Cartwright 1912, Jenks 1911, Preston 1911, White 1911, West 1911, McCreadie 1911, DeWitt 1911, Tulser 1912, Hersey 1909, Rhodes 1912, Benson 1912, Huber 1910, Porter 1910, Herreshoff 1912, and Russell 1912. With such a strong and well balanced team, the Mechanicals and Electricals will surely prove strong factors at the finish.

The chemistry courses under Stephenson 1909, and remaining courses under Ellis 1909, while containing not so many men as the above mentioned two sections, will surely not be found far behind at the finish. The chemistry courses are to be represented by such men as Campbell 1909, Cooley 1911 and Hyde 1912. Ex-captain Ellis' section is composed of such men as MacKenzie 1911, McAllen 1911, Smith 1911, and Whipple 1912.

The Hare and Hounds run a week from Saturday will undoubtedly be held at Waltham. There is a splendid course out there and Assistant Chase Captain West promises a good run. Notices will be posted later.

CONCERT AT NATICK

The musical clubs will sing their spring concert songs for the first time tonight at Natick. The Mandolin Club is as usual the best of the three clubs, and will present two or three unique features at Natick. The Glee Club will sing some catchy songs, and the Banjo Club has improved wonderfully. The train leaves Trinity Place at 6:20 p. m., and a large number of men are expected to go out with the clubs.

SOPHOMORES AND FRESHMEN CLASH

Class Teams Tomorrow Line Up in First Practice Game

SQUADS SHOW UP WILL

Nearly All of Last Years Crack 1911 Team Will Play This Year

Baseball work at the Field is progressing rapidly. On Saturday at 3:30 the freshmen and sophomores will line up for a scrub game and most all the candidates for both teams will be given a trying out.

Both squads are working hard in preparation for the first game which comes in a few weeks. Chances so far seem to favor the upper classmen on account of their longer experience and the fact that nearly all of last year's star team has returned, with the addition of several new men of promise. The services of Johnson, the star third baseman, and of Hopkins, fielder, will be missed.

The freshmen team has shown considerable promise, but are under the disadvantage of having a late start and not knowing each other. Last year's freshmen squad, however, developed a uprise party for their rivals and the freshmen have strong hopes.

The sophomores hold practice on Mondays, Wednesdays and Fridays at 4 o'clock, and the freshmen on Tuesdays, Thursdays and Saturdays.

Capt. L. G. Odell, Manager T. F. McLaughlin, A. W. Yearance, L. DeFlorez, L. G. Metcalf, D. R. Stevens, H. C. Robinson and P. H. Pearson are among those who have reported for the 1911 team to date, and many others have signified their intention of coming out next week.

BIOLOGICAL SOCIETY

"Engineering Work of the Massachusetts State Board of Health" was the subject of an interesting talk last evening to the members of the Biological Society by Charles A. Saville 1906.

The great advance in sanitary work during the last few years was taken up in considerable detail, and the intimate connection of Technology's graduates and professors was commented on.

M. E. SOCIETY TRIP

The Mechanical Engineering Society will go to the works of the Hood Rubber Company in Waterbury tomorrow afternoon. It is very difficult to obtain the right to visit a place where rubber products are manufactured, and a large crowd is expected to go. Course H men desirous of taking the trip should sign the paper in Eng. A.

On Wednesday evening, April 7, the Society will hold its regular April meeting, and is particularly fortunate in having two able men to speak. Mr. Bailey, of the Arthur D. Little Company, will speak on coal and its uses, while Mr. Emmons, connected with the Heine Boiler Company, will speak on Heine boilers, and the methods used in their construction. The talk will be illustrated with lantern slides.

The first speaker will start his talk about 7:45.

CALENDAR

FRIDAY, APRIL 2.
4.15 P. M.—Mandolin Club Rehearsal.
FRIDAY, APRIL 2.
6.00 P. M.—Y. M. C. A. Dinner at Union.
SATURDAY, APRIL 3.
3.00 P. M.—Inter-class cross-country run.
3.30 P. M.—Baseball, 1911-1912.
3.00 P. M.—Track work at Field.