

# THE TECH

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PRICE THREE CENTS

## ELECTION REFORM OF MARSHALLS

**Three Chief Marshalls to be  
Elected on Second  
Ballot**

### ORDER PORTFOLIO NOW

**Class Must Support Committee to  
Make the Portfolio a  
Financial Success**

1909 held a class meeting yesterday afternoon to consider the advisability of changing the manner of electing the chief marshalls for Class Day. According to the first plans, the twenty-five men receiving the highest number of votes were to be marshalls, and the three highest men were to be marshalls, ranking in order of the votes they received. This made it possible for a popular man, who was, perhaps, unfitted for the position, to be elected to the very important place of first marshal. To prevent this the marshalls are to be chosen from the marshalls in a second ballot.

H. E. Whitaker 1909, made a report on the condition of the Senior Portfolios. Out of 324 men having their picture in the Portfolio, only 145 have deposited their three dollars and signed up for the book. It is of the utmost importance that this be done as soon as possible. On April 15, the final orders for books go to the printers, and after that date no orders can be received. The books are to be sold at cost, from five to six dollars depending on the number ordered, and no extra ones are to be ordered because, if unredeemed, the class will have to pay for them.

Committees from each course have been appointed to canvass their respective departments for these portfolios, and it is hoped that at least two hundred and fifty men will sign up for them, otherwise the Portfolio will not be a financial success.

### JUNIOR PROM PLANS

On Wednesday, April 21st, the annual Junior Prom will be held at the Hotel Somerset. The committee has completed all arrangements toward making this year's prom the most successful ever given. One of the best orchestras in the country has been engaged to play. The committee has departed from the usual custom in regard to programs, and will present something unique and attractive which will be a neat souvenir of the evening to take away, and it is hoped that it will serve as a reminder of a very pleasant occasion.

The committee has decided that no flowers shall be worn on the floor. This step has been taken at other college proms, and has proved to be a fine thing. The dancers will no longer slip on leaves and flowers, and the young ladies will be relieved of the burden of an armful of long-stemmed posies. It is hoped that everyone will co-operate with the committee and carry this plan out.

Arrangements have been made providing a definite seat for everyone. The names of fellows desiring to sit together should be left for the committee at the Cage immediately. In this way the worry and hunting all through a large dance hall for a partner will be eliminated.

Anyone who has not completed his dance order at this time and desires any dances, will be put in touch with others in a similar position if he will leave his name at the Cage for the prom committee.

Edgar B. Thompson 1882, has been appointed superintendent of motive power and machinery of the Chicago, St. Paul, Minneapolis & Omaha R. R.

## TRANSPORTATION PROBLEMS IN N. E.

**J. A. Drogee Speaks at Civil  
Engineering Meeting  
Wednesday**

### TALKS ON FREIGHT

**Conditions in England Similar to  
Those of New England  
States**

At a meeting of the Civil Engineering Society Wednesday, J. A. Drogee, superintendent of Providence Division N. Y., N. H. & H. R. R., spoke on the problems of freight transportation in the New England States.

There are three essential features of importance to the shippers, he said, first, the cost; second, the despatch of service, and third, the regularity and reliability of the service. The present system of giving four days in which to load or unload a car, reduces four dollars from its producing power. What ought to be done is to put the freight cars on a day rather than a mile basis. Much is to be said in favor of combining steam and electric railroads, for this would enable much handling of small freight.

There has been a vast increase of industries and shipping without a corresponding increase in the number of side tracks. What is needed is a special placing of cars for special freight.

As an illustration of rapid and economic handling of freight, Mr. Drogee cited the English railroads. In England the average freight load is 12,000 pounds; the large cars used here on the trunk systems are not economic. The English idea is to keep everything moving, by breaking up the loads and running smaller trains. The English railroads carry freight directly from the shipper's door to the receiver's, and this they accomplish by handling freight on drays.

This service has stood the test for the last 30 years, and will likely stand it for a long time yet. The speed of the fastest freight trains is 35 to 40 miles an hour, and freight shipped at night within a 400 miles radius is delivered the next morning. The paying part of the load differs also from the American roads. In England 70 to 74 per cent. is paying, while here only 30 to 35 per cent. of the load of the train is paid for. The freight to be handled in the New England States is much like that of England owing to existing conditions in industry and commerce, and much different from the traffic in other parts of the United States.

The transportation facilities used in other parts of the United States are therefore not applicable to New England, and it is up to the engineers of the future to solve this problem.

After the speech, a vote of thanks was made, and the date of the annual banquet was fixed for May 6. At the next meeting, Friday, April 16, Dean Burton is to speak.

### BANKING HISTORY

Professor Davis R. Dewey will prepare a Study of Banking History in America for the National Monetary Commission, which is preparing, at the direction of Congress, concrete propositions looking to the establishment of a central bank, recommending other important changes in our currency system, and providing new methods for the supervision of national banks. Dr. Dewey's History of Banking begins before the Civil War, giving special attention to the first and second U. S. Banks, and the Safety fund, and free banking systems of New York.

## EMMONDS SPEAKS ABOUT BOILERS

**Explains Construction in  
Detail Before M. E.  
Society**

### LECTURE ILLUSTRATED

**Program Committee Appointed  
Several Men Admitted  
To Membership**

Wednesday night, Mr. Emmonds of the Heine Boiler Company spoke to the Mechanical Engineering Society on the Heine boiler. The lecture was of especial interest to the juniors, who have recently been studying boilers.

The Heine boiler was invented by H. Heine and perfected by Col. Meyer. The boiler consists of the large drum, two water legs and a number of circulation tubes. These tubes are substituted for the single larger tube employed in other boiler systems. The water legs, which connect the tubes with the main drum consist of two plates joined by a continuous belt strap. They are built to stand five hundred pounds pressure. The drum resembles the usual drum. The man-hole plate opens toward the inside, so that the internal pressure will hold it in place. There is also but one opening in the drum for both outlet and safety valve, unnecessary weakening of the drum being thus prevented. An internal "mud drum" is arranged to catch most of the impurities of the water. The contents of this drum can be blown out at intervals of three or four hours without perceptible loss of heat in the main boiler.

The boiler in position is inclined at an angle of twelve to one, with the front end held stationary and the rear water leg resting upon a brick wall, and movable to allow for expansion of the boiler. The entire boiler is enclosed by a double wall of brick. The inner wall consists of four and one-half inch fire brick, and the outer, of eight inch red brick. An air space of two inches is left between the two walls. This serves as insulation and allows for the expansion of the inner wall. The bottom rows of tubes are covered with fire-brick tile for their entire length and for three-quarters of their length from the front. The top row of tubes is similarly covered for three quarters of its length from the rear. These tiles direct the circulation of the heated gases.

A new contrivance, the superheater, may be supplemented to the regular boiler equipment. This device consists of a box corresponding to the water leg, and a number of U-tubes. The additional heated surface considerably increases the efficiency of the boiler. In fact, the size of the boiler determines the efficiency rather than the capacity. The capacity depends more upon the size of the grate and the strength of the draft.

The boilers are erected in batteries of two or three to prevent unnecessary heat radiation. At present, the boilers are built to stand 180 pounds pressure, but one is being designed for use in Cambridge, to stand four hundred pounds.

Mr. Emmonds illustrated his talk with a number of excellent slides showing the boiler in detail and various parts of the immense plants at Phoenixville, Pa.

The program committee of the M. E. Society was appointed as follows: Professor Lanza, Professor Hayward, H. A. Hale, Jr. 1910, and F. A. Dewey 1910.

The following men were admitted to the society: From 1910—C. A. Dunkel and R. S. Haley; from 1911—D. P. Allen, G. B. Wilkes, Frank Russel, S. B. Copeland, Kester Barr, P. D. White, R. G. Adams, C. H. Hobson, C. T. Morey, J. A. Herlihy, R. G. MacPherson, H. S. Lord, W. K. Hodgman, G. L. Metcalf and M. Mackenzie.

## BASEBALL SEASON BEGINS TODAY

**Sophomores Line up Against  
Volkman School in  
First Game**

### 1912 PLAYS SATURDAY

**Will Meet the Roslindales From  
Roxbury in a Practise  
Game**

Volkman School are to be the sophomores' first opponents in baseball. The two teams will line up against each other at 3:30 this afternoon on the Volkman school grounds at Allston. Volkman has the advantage of playing on their own grounds and of having already played two games this spring. The sophomore team has had but little practise and only comparatively few men have been out for the team, so that prospects for a victory are not of the brightest.

Of the last year's men Capt. L. G. Odell can be counted upon to put up a good game on the initial bag, and C. L. Hufsmith the former Austin College captain has been showing good form at second. Behind the bat H. D. Williams is playing the same game as he did last season. For short stop there are two candidates, T. B. Parker who held the place last year and H. L. Robinson a new man who has shown up well.

At third base there seems to be a weak spot on the team, A. W. Yearance and D. R. Stevens are the only candidates. The former was a substitute last year and the latter is a new man. In the outfield there is Manager T. MacLaughlin who can be counted upon to fill his position in good style and who is besides a very strong man at the bat. F. W. Covill, L. G. Metcalf and C. Harrington are the only candidates and all three are likely looking men. Covill played last year.

By far the weakest place on the team is in the pitcher's box and it is unsettled who will fill the position. Deflorez has only been out one day, and MacLaughlin's arm is in poor condition. P. H. Pearson is another candidate, and although he is inexperienced, he will probably start the game.

Freshman base ball starts tomorrow with a game at the Field with Roslindale. The game will be only a practise one and most of the candidates for the team will be given a try-out. So far the team has made a good showing, but it will take a try-out while working together, to tell how good the men are.

The men who will line up as the first squad on Saturday will probably be: catcher, Whittlesey; pitcher, Allen; first base, Cherry; second base, MacAvoy; third base, Foster; short stop, Eicher; left field, Coulson; center field, Sage; right field, Horgan.

The infield is especially fast this year and the outfield should hold their own at least. Whittlesey and Horgan

(Continued on page 3.)

## CALENDAR

FRIDAY, APRIL 9.

3:30 P. M.—Volkman vs. 1911.  
4:15 P. M.—Union Committee meeting.  
6:30 P. M.—N. Y. Club dinner at Union.  
8:00 P. M.—Class of 1885 Reunion at Union.  
8:00 P. M.—Union Night.

SATURDAY, APRIL 10.

2:30 P. M.—Roslindale vs. 1912 at Field.  
3:00 P. M.—Winchester vs. 1911.  
3:00 P. M.—Rifle Club at Wakefield.

SUNDAY, APRIL 11.

6:45 P. M.—Y. M. C. A. at Union.

MONDAY, APRIL 12.

3:00 P. M.—Track work at Field.