

# THE TECH

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PRICE THREE CENTS

## ADDITIONS FOR MECHANICAL LABS

**Expensive Sets of Drills Presented by Various Companies**

### COURSE II EXCURSIONS

**Mechanicals to Visit Several Manufacturing Plants in Neighborhoods**

Through the kindness of Geo. H. Sampson and Son, representatives of the Ingersoll Rand Company, the Institute has recently secured a Temple Air Drill to be used for illustrative purposes in the Mining Laboratory. This drill represents a new departure in the line of rock drills. For years the standard rock drill when used underground has been a compressed air machine, acknowledged by all to be very wasteful in the use of power. This has held its place through its simplicity and through its ability to stand up and do its work under all the unfavorable conditions that exist underground. Efforts to introduce electric drills which would make use of direct current electricity and therefore be more efficient in the use of power, have not met with success. The Temple drill seems to have solved the problem of the use of the efficient electricity with the simple and powerful air. Mounted upon a little truck is an electric motor which drives two single acting air pistons. Each of these pistons moves in a cylinder, which is connected through two short lengths of air hose to the two ends of the drill cylinder. Air in the hose is automatically kept at a pressure of 30 pounds per square inch above the atmosphere. Since the air pistons are 180 degrees apart it follows that a vibratory reciprocating motion is transmitted from the two cylinders to the two ends of the drill cylinder, thereby causing the drill piston to vibrate back and forth.

The drill has been the subject of experiments by the Ingersoll Rand people for several years, and has been thoroughly tested out under actual working conditions, and it is only after these tests that they have been put upon the market. Owing to the fact that the hose cannot be of very long length, it follows that this drill is not adapted to all conditions, but for tunnel and level work it certainly appears to have a big field.

The Institute has recently secured from the Sullivan Machine Company, through the kindness of Mr. Copeland, President, and Mr. Fry, Secretary, both old Tech men, the following apparatus:

One diamond drill outfit mounted for hand running; one Sullivan plug drill complete; one Sullivan air hammer drill complete, mounted upon tripod. These air hammer drills and plug drills represent a modern advance in drilling. They represent the application of the pneumatic hammer principle to drill work. They are not aimed to supplant the standard rock drill in its work of tunnel driving and shaft sinking in hard rock, but they are designed for lighter work, for example, in drilling shallow holes in boulders, and in doing regular work in soft rock.

On Tuesday and Friday of this week the M. E. Society has arranged for excursions to the works of the General Electric Company at Lynn. The parties will leave the Revere Beach and Lynn Wharf on Atlantic Avenue on the 1.45 boat both days. Electricals who were unable to make the trip with their own society will be welcome.

On Saturday afternoon, April 3, the Society has arranged for a trip to the Hood Rubber Company Works in Watertown. It is very difficult to arrange to visit a rubber factory, and this is the first such trip in many years. Owing to the large number who have signified their intention of going, the excursion will be limited to members of the M. E. Society.

## MAJOR F. H. BRIGGS TO PRESENT CUP

**Trophy to be Awarded Best All-Round Track Athlete at Institute**

### KANALY ALSO SPEAKS

**Fernstrom Presents Banner Won Last Fall From Harvard in Cross Country**

At the cross-country dinner last Saturday night in the Union, Dr. J. A. Rockwell 1896, made the announcement that a fourth cup was to be given for competition this spring. Major Frank J. Briggs 1881, is the donor of this cup, and it is to be given to the best all-round athlete at the Institute. This cup, like the other three, is to be renewed each year by the donor, so that the cup will become the permanent possession each year of the winner.

Dr. Rockwell in his interesting manner, gave a few hints on what he thought was the proper way for men to train. He said that all those who thought about running at all should do long distance running, for only in this way will their legs and muscles become sufficiently strong so that they will be enabled to do good work on the track. He said that this was not only true of milers, but also of half-milers and printers.

Ex-Capt. Ellis 1909, who led the team to victory last year, spoke of the freshman-sophomore race, and of the encouraging way in which the men were showing up for practice. Coach Kanaly spoke in detail of his methods of training and what he thought each man should do. He told about his many plans for spring work, and requested that all men, whether they made the team or not, would report for practice regularly at the Field, as he would be able to use them in developing the varsity men.

A. R. Hunter 1908, spoke of methods for getting men out for the Hare and Hounds, and in this way of getting more men interested in cross-country work. K. D. Fernstrom 1910, the manager of the team, spoke about the new plan of the season tickets. In closing, he presented the banner won by the Technology cross-country team against Harvard last fall.

### BENSON 1912 WINS RUN

**Thirty-Seven Men Enjoy Hare and Hound Run at Waban**

Thirty-seven enjoyed the six-mile run over the Waban course last Saturday. In order that everyone would get the best advantage from this run, Coach Canaly divided the large squad into two sections—the fast and the slow. In the fast section were the men who have the best chance of making the class teams, and the upper class men who are already preparing for next fall's work. The slow squad was composed of those men who were out for the fun of the thing.

The hares, W. C. West 1911, G. C. George 1911, and G. H. Magee 1910, laid a short but hard trail through swamps, bushes and one brook in which the fellows had to take an unexpected swim. At the end of the trail E. W. DeWitt 1911, had the enjoyment of finding the hares. The sprint for home, about a half mile, was won by H. S. Benson, captain of the freshman team. P. D. White 1911, the crack half-miler, was second, with Watkins 1912, pushing him hard. The next twelve men to finish were as follows: H. H. Howland 1909, K. Cartwright 1912, E. Jacobs 1910, E. W. DeWitt 1911, C. H. Morrill 1912, B. C. Huber 1910, C. R. Johnson 1911, G. H. Rhodes 1912, Foster Russell 1911, E. M. Potter 1910, and C. L. Tuller 1912.

## TENNIS OUTLOOK GOOD THIS YEAR

**Captain Parker Institutes New Rating System of First Ten**

### THIRTY-FIVE MEN OUT

**Meets With Wesleyan and Brown—Spring Tournament Entry Blanks Now Ready**

Thirty-five men have signified their intention of playing tennis this spring, in answer to call from Captain T. B. Parker for candidates, and indication-point to an excellent season for the Institute team. Entry blanks for the annual spring tournament are now at hand, and a long list of entries is expected. The fee for single and double entries is \$0.75 and \$1.50 respectively, and the play will be put under way as soon as the courts will permit. This will probably be about April 10.

A novel system of rating the men will be introduced this year. The ten men who, in the opinion of Captain Parker, are the best players will be given a rating from 1 to 10, and the list posted on the bulletin boards. Each man on the list then has the privilege of challenging the man above him for the latter's position, and any candidate can challenge the tenth man. These matches must be played off within a week of the challenge, and the corresponding changes in the rating list made each week. In this manner Captain Parker expects to have the four best men at the top of the list by the middle of the season, and these four will compose the team that will represent Technology at the intercollegiate at Longwood on May 24. Among the first five men will probably be: Captain T. B. Parker 1911, P. M. Wentworth 1909, F. W. Coville 1911, M. K. Sweet 1910, and J. Scheuer 1910, who won the fall tournament.

Two dual meets have been definitely arranged, and several others are pending. The team will play Brown this year at Providence, on May 15, and will tackle Wesleyan at home on May 22. Both of these colleges have a well established reputation on the courts, and close, interesting matches are expected.

### MESSAGE TO TECH MEN

**Mrs. Maclaurin Sends Letter With Personal Message for All**

The Tech has received the following self-explanatory letter from Mrs. Richard C. Maclaurin, wife of the President-elect of the Institute, in which she expresses clearly her feeling towards Tech men, and conveys to each fellow a personal message. The letter is the result of an interview with Mrs. Maclaurin during her recent visit to Boston.

The letter follows:—  
I should be very glad if you would give a simple message from me to the students, expressing my sincere hope that I may be of some real use to them and that they will help to make it clear to me how I can serve them best. I should highly prize the confidence of individual students, and my special sympathy is with the men who are away from home and friends.

Most sincerely yours,  
ALICE MACLAURIN.

### CHEMICAL SOCIETY

The next meeting of the Chemical Society will be held at the Union Wednesday evening, March 24, at 8 o'clock. The talk will be given by Dr. Karl Langenbeck on the subject "Ceramics." Professor W. H. Walker says that Dr. Langenbeck is a most interesting speaker, and his subject of glass and pottery making should give everyone something to think about.

## RABBI FLEISCHER SPEAKS AT UNION

**Gives Interesting Discourse on Principles of Democracy**

### FAVORS EQUAL RIGHTS

**Declares That No Institution Can Exist Without Principles of Democracy**

"No institution can possibly exist that is not founded upon the principles of democracy," was the startling statement made by Rabbi Fleischer at the Union Friday night. Born in Germany and coming to this country while young, Dr. Fleischer has made democracy a matter of a great deal of study, and it is now his pet subject for addresses.

One of the many startling statements made was that Americans themselves do not know what real democracy is. Most of them think democracy came into the world about a hundred and twenty-five years ago when the American Republic was founded, and that it is a form of politics, when in reality it is a great social ideal. Dr. Fleischer defined democracy as the organization of society founded on the basis of respect for the human individual.

He said that democracy forms a very good religion for anyone not already affiliated with any so-called religion, and that it should form the basis of the principles of every practical religious person. For a democratic creed he gave the following: Democracy depends on (1) belief in man, (2) respect for the individual human unit, (3) faith in human progress, and (4) society's recognition of the individual's right to expand to his best self-realization.

After giving his creed Rabbi Fleischer proceeded to elaborate it into a sketch of the philosophy of democracy. He said that everyone should be able to say that he believed in man, in his changeable nature, and that good society can not be built up without this faith in the changeable nature of mankind; that we, as individuals, must cut out this mass of antagonism and that until we do give up these prejudices we are not on the democratic plane. In elaborating the third principle of his creed he said that it was impossible for anyone to live with any enjoyment at all without believing unconsciously that there was progress in human nature, and that not until everyone really believes consciously and has faith in human progress will we be a step nearer the plane of democracy. In speaking of the fourth principle of his creed Dr. Fleischer said that one must not think only of himself but of others, and that only in this way will any progress be made toward the desired goal of democracy. He said that in this respect Technology approaches the ideal institution in that it helps not only to develop the individual to his own highest self-realization but also to enable the men to give out gifts to others when he graduates.

In closing he said: "There is no social organization so cherished but what will have to face democracy, prove that it is already based on some of its principles and able to stand on all of them, and only those organizations that can do this will last forever."

### CALENDAR

MONDAY, MARCH 22.  
1.00 P. M. 1909 Class Meeting in Huntington Hall.  
4.00 P. M. Show Rehearsal.  
4.00 P. M. Track Men at the Field.  
TUESDAY, MARCH 23.  
3.00 P. M. 1911 Baseball Practise at the Field.  
4.00 P. M. Show Rehearsal.  
4.00 P. M. Track Men Run at the Gym.  
WEDNESDAY, MARCH 24.  
1.00 P. M. Show Rehearsal.  
8.00 P. M. Chemical Society Meeting at the Union.