

THE TECH

VOL. XXXIV. NO. 13.

BOSTON, MASS., WEDNESDAY, APRIL 15, 1914.

PRICE TWO CENTS

TECH SHOW 1914 GREAT SUCCESS

Enthusiastic Reception Given At Northampton—Fine Dancing A Feature.

The initial performance of Tech Show 1914 was given last night in the Academy of Music, at Northampton, before an enthusiastic audience composed of Smith College girls and men



F. HASTINGS SMYTHE,
Leading Lady Tech Show.

from Amherst. The men arrived at Northampton shortly after six o'clock, and after a half mile walk to the buildings, deposited their luggage and had time for a stroll over the college grounds before going to the dressing rooms for their make-ups.

All were feeling good after the lunch served on the train and the Show went off with lots of pep and singer. All credit is due to Mrs. Fannie B. Adams who coached the dancing, for it was the hit of the show. The dances of Harold O. Whitney and J. Paul Gardner were encored again and again, and the work of the ballet

(Continued to Page 3.)

THE TECHNIQUE PARADE STARTS JUNIOR WEEK FESTIVITIES

Sousa Brooks' Band Will Lead It In Its Devious Path To The Scene of the Technique Rush.

Today at one o'clock, the strains of music from "Sousa" Brooks' band will officially usher in Junior Week of 1914. Every man, as he comes from his classes at one o'clock, is expected to go directly to Rogers' Steps, and there form in line behind the band. At one ten the parade will start, and wend its sinuous way around the corner of Clarendon Street to Newbury, up Newbury to Exeter, across Exeter to Blagden, down Blagden to Copley Sq., and after passing through Copley Sq. it will march down Trinity Place and break up in the field of battle. There will be ample space reserved for every man in the parade, so that no one will have to sacrifice his point of vantage to march with the band, but on the contrary, every one in the parade will have a better place from which to view the rush than those who did not march.

The contestants will be lined up shortly before one thirty. At one thirty-four there will be a preparatory

gun, and one minute later, at one thirty-five the starting gun will be fired. The space within which the rush proper will take place will be roped off from the space reserved for the spectators, and at no time either during or after the rush will anyone who is not a contestant be allowed within the lines.

Immediately after the last book has been handed out, those who have signed in full for Technique, and also those who have signed up only the first part of their check, will be able to obtain their books at one of the several tables that will be placed near the house. Those who have not signed up at all, and who desire a book will have to hustle in order to sign up before they are all gone. Opportunity will be afforded to these delinquents to sign up immediately after the rush is over.

In order to avoid misunderstandings and consequent disappointment, every one should be sure that he has in his hand (or in his mouth), before the rush starts, the slip that entitles him to a book. He should make sure that it is the slip representing two dollars and seventy-five cents, and not merely the first sign-up slip, as only those holding the large ticket in their hand when they reach the window will receive books.

MONTHLY'S SECOND ISSUE VERY WELL RECEIVED

Increased Size And Attractive Appearance Make For Quick Sales.

At exactly 11.30 o'clock yesterday morning, one thousand copies of the second issue of the Technology Monthly were received by the expectant board and at once the waiting staff began a systematized and speedy tour through the most important departments of the Institute. An impending delay in the arrival of the copies was narrowly averted by the quick decision of the staff to rush through the binding operation at any cost, and although this meant an all-night session for the binders, the plan was put into operation, with the result specified above.

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WEATHER

Rain today; increasing southerly breezes.

CALENDAR

Wednesday, April 15, 1914.

8.00 a. m.—Banjo Club Rehearsal. 6 Lowell.

1.10 p. m.—Technique Parade.

1.35—Technique Rush.

4.00—Crew Practice.

8.00—Spring Concert. Copley Hall.

Thursday, April 16, 1914.

9.00 a. m.—TECH-Technique Baseball Game. Tech Field.

9.00 a. m.—Rifle Club Leaves North Station.

10.00 a. m.—1916-1917 Baseball Game. Tech Field.

2.00 p. m.—Tech Show. Boston Opera House.

8.00—Tech Show. Boston Opera House.

Friday, April 17, 1914.

8.30—Junior Prom. Copley Plaza Hotel.

8.30—Freshman Glee. Tuileries Hotel.

Saturday, April 18, 1914.

9.00 a. m.—Rifle Club Leaves North Station.

JUNIORS EXPECTANT

Prom Only Two Days Away and Big Week Already Begun.

Juniors are living in anticipation of Friday evening, when the Copley Plaza will see the opening of the biggest and best Junior Prom ever. The Trinity Place entrance of the hotel will be used, and the committee has secured three ballrooms for the accommodation of the dancers. Music is to be furnished by Urquidi's orchestra, and dancing will start promptly at 8.30.

It is still possible to sign up for the Prom by seeing some member of the Committee personally, in case any have been negligent so far.

TECHNIQUE 1916

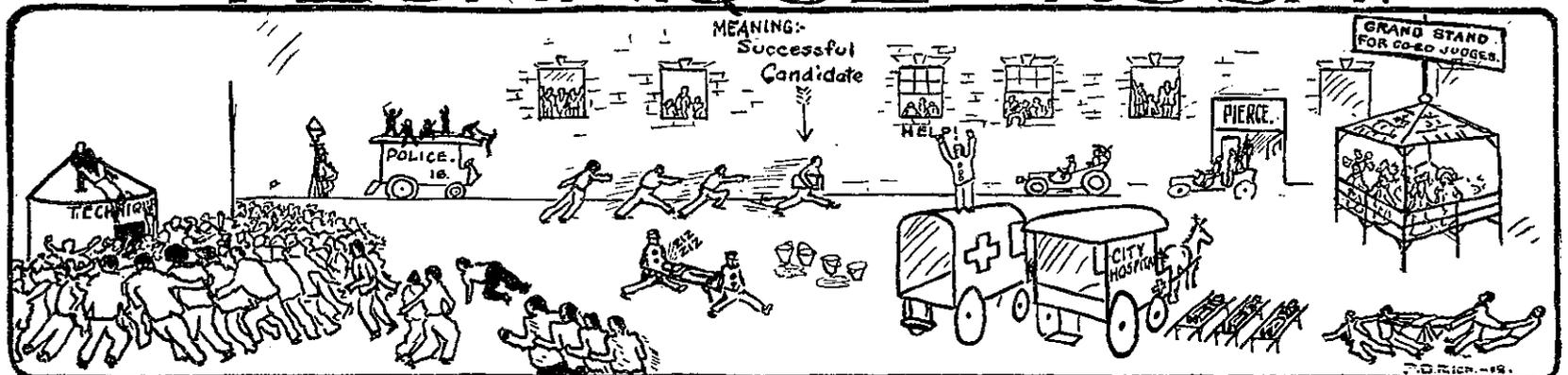
Three More Positions On The Staff Filled.

Three more important positions on Technique 1916 were filled today by the Technique Electoral Committee at its meeting this afternoon. The men chosen for the places are Levering Laurason for Athletic Editor, J. B. Carr for History Editor, and Olen C. Norris for Faculty Editor.

Laurason was a member of his class track team and of the relay team, and is a member of Sigma Alpha Epsilon. Carr was formerly Athletic Editor and Chief News Editor of THE TECH, and is Vice President

(Continued on Page 2.)

TECHNIQUE RUSH.



THE TECH

Entered as second-class matter, Sept. 15, 1911, at the postoffice at Boston, Mass., under the act of Congress of March 3, 1879.

Published daily, except Sunday, during the college year by students of the Massachusetts Institute of Technology.

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Subscriptions, \$2.00 per year, in advance. Single copies, 2 cents.
Subscriptions within the Boston Postal District, and outside of the United States, must be accompanied by postage at the rate of one cent a copy.

WEDNESDAY, APRIL, 15, 1914.

IN CHARGE OF THIS ISSUE.

R. B. Stringfield '15; H. S. McQuaid '17.

While the recent convocation for learning the Tech songs accomplished its purpose as well as could possibly be expected, it will take more than that to make the singing between the acts of Tech Show this year a real success,—it will take the co-operation of every Tech man present.

The tendency is for each man to leave it to someone else, particularly when his attention is absorbed by a fair companion. Why not all get together and overcome this tendency? She will think all the more of you and of your school if you join in the songs in a way that will show what you think of your Alma Mater.

Our friends and guests, and the outsiders who come to the Show, cannot realize the hold which Tech Spirit has on our hearts. They can only judge by what they hear, and because we are not used to expressing our loyalty they put us down as a school without patriotism. Let us therefore unite in making the singing an honor to our Institute instead of a disgrace as last year.

TECHNIQUE 1916

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of the Tennis Club and a member of Phi Beta Epsilon fraternity. Norris has been on several class committees, and is a member of Delta Kappa Epsilon. All are members of the Technique Electoral Committee.

ENGINEERING AND SCIENTIFIC NOTES

Resins in Coal.

To the head of the family who has shoveled coal during the long winter it matters little what his coal is made from so long as it gives a reasonable amount of heat and is paid for. Yet it is true that the heating value of the coal that he uses, as well as the kind, depends in part on the ingredient matter, and also on the geologic processes to which the peat from which the coal was formed has been subjected. The relation of certain types of ingredient materials to certain qualities of coal has received considerable attention from the geologists of the United States Geological Survey, and the Survey has just published a short report, Professional Paper 85, Part E, discussing the occurrence and effects of resins in coals.

"Resins," under which are included the "rosin" of commerce, the copal from which varnish is made, the amber used in jewelry, and a host of other similar materials, are secretions generated in some of the cells or vessels in plants of many different kinds. One of the most familiar of the resin-producing trees is the pitch pine, in which the "pitch" is a resin.

Resins contain very much more hydrogen and carbon compared to the amount of oxygen than ordinary wood, so that, other things being equal, the resinous woods make much hotter fires than those not containing resins, the hydrogen and carbon being the sources of the heat. The larger the amount of resin the hotter the fire. Many a Mississippi River steamboat was blown up in the old days when, in order to win a race the barrels of resin in the cargo were broached to feed the fires. Resins add heat value, not only to the woods that contain them but also to the coals.

Being more resistant to decay under water than the wood cells and other tissues of the plants and trees from which the peats of bogs and coal-forming swamps are produced, the resin lumps and particles are generally left to be buried in the peat deposits, even when most of the surrounding wood has rotted away and disappeared. In this way they are sometimes concentrated in quantity so that, together with waxes, likewise of high heat value, they form considerable portions of the vegetable debris in the peat. Peat is the mother substance which, after deep burial in the crust of the earth, has been converted into coal. The kind of the peat largely determines the type of the coal.

In the paper above mentioned, David White reports the almost invariable presence of resins in the brown lignites and in the subbituminous ranks of coal and emphasizes the part played by the resin, which in some coals is very abundant, in contributing to the heating power of these fuels. A careful examination of most of these coals will generally reveal lumps of resin that are visible to the naked eye. The coals mined in some localities contain abundant large lumps of resin, some as large as walnuts. In places the glistening

(Continued on Page 4.)

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VILLARNY PERPETRATED ON UNSUSPECTING DOOR

Attack In the Dead of Night By Desperate And Sticky Assaulters.

With the aid of vegetable glue and the night janitor the vallant proprietors of today's roughhouse caused the following to adhere to portal of the lower office of THE TECH. (Editor's Note: An exception to unsigned communication rule is made because the author or authors of said gauntlet do not dare affix their signatures.)

WHEREAS: A certain daily handbill called THE TECH, is afraid to play technique they are trying to find an excuse to quit. (Here the narrative is broken off presumably for meditation)—afraid even of the freshmen—that they can play better ball than they and so should have the field. **KNOW YE!** Technique will beat THE TECH up on Thursday morning and will accept no stories of theirs as an excuse for said TECH to hack out.

This is the nearest transcription of the manuscript obtainable as it evidently scrawled in a disguised hand. Refutation may be unnecessary but we are going to attempt one anyhow just for practice. Firstly, this publication is not a handbill, because it costs two cents and up per issue, and handbills are given away for nothing free of all charge. Secondly, in regard to baseball stars in the Class of 1917, if there are any we got 'em and anyhow technique hasn't anything but art editors. The absurdity of the final malediction needs explanation and this we are unable to furnish since it is unexplainable by anyone with a fair amount of sediment in the aerial regions.

THE TECH will not "back out" we are determined to lead you to the very dregs of the amusement.

TECH SHOW

(Continued from Page 1.)

was exceptionally fine. The acting of F. Hastings Smythe, '13, as Alice the chorus lady, received much praise, and the ease and grace with which Roswell Rennie carried his corpulency and a spear was remarked upon by all present. And so it went, for the audience which completely filled the hall had nothing but praise for the whole performance. Last but not least should be mentioned the work of the orchestra, which although working harder and getting less thanks than any other part of the show, is perhaps the single part most essential to its successful production.

As THE TECH goes to press this morning at four o'clock, weary specimens from the Tech special are making themselves as comfortable as possible on the benches in the Union preparatory to getting a few hours sleep before nine o'clock classes in the morning, and the first performance of Tech Show 1914 is a thing of history.

NOTICE

The TECHNOLOGY MONTHLY Board wishes to state that George Roper, Jr., is Circulation Manager. Through error his name appeared as Assistant Circulation Manager.

SPRING CONCERT AT COPLEY HALL TONIGHT

Everything in Readiness for Gala Occasion—Starts at Eight Sharp.

Tonight at 8.00 o'clock one of the major events of Junior week will be carried out in the Spring Concert to be held in Copley Hall. The dance orders were on distribution in the Union yesterday. A very fine program has been selected and in order to carry it out as planned the concert will start promptly at eight o'clock. The dance order is arranged as follows:

- 1—One Step Good Bye Summer
- 2—One Step
..... Get Out and Get Under
- 3—Waltz Isle D'Amour
- 4—One Step Pepper Pot
- 5—One Step Too Much Ginger
- 6—Waltz Little Highness
- 7—One Step Le Gitot
- 8—One Step Some Smoke
- 9—One Step Scrambled Eggs
- 10—Waltz Marriage Market
Extra.
- 11—One Step Puppchen
- 12—One Step
..... Your'e Here and I'm Here
- 13—One Step Ringle-ingleing
- 14—Waltz Little Cafe
- 15—One Step All for the Girlies
- 16—One Step Tres Chic
- 17—Waltz Nights of Gladness
- 18—One Step Never Too Much
- 19—Waltz
While They Were Dancing Around
- 20—Waltz Adele
Extra.

TECH MONTHLY

(Continued from Page 1.)

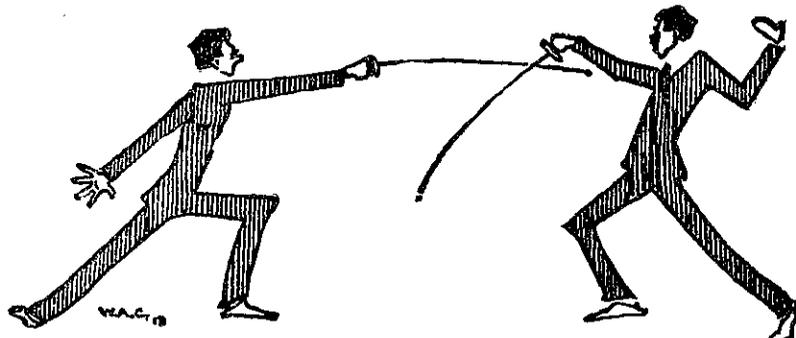
The increased size of the magazine and its attractive appearance resulted in quick sales and very favorable comments, so that by five o'clock the greater part of the first assignment had been disposed of and the board was ready for the last delivery, which will arrive early this morning.

The number of cuts in this issue, as well as the excellence of the arrangement of the articles has excited no little interest, and the doubts of those who feared that the magazine would be unable to maintain the excellent standard set last month were quickly dissipated. In all, sixteen cuts, three of them full-page and representing an outlay of nearly fifty dollars, find their place in the make-up of the Monthly. To this is added a very attractive cover design, a conventionalized Rogers Building, appropriate indeed at this time of proposed change.

The article on the Show of course needs no comment; the unique position of the magazine in being able to secure such a thorough review of the details of the Panama-Pacific Exposition provides for Tech men an article of more than ordinary interest and value, the remaining material likewise is of such character as to represent an investment of material worth.

For the benefit of those who have not as yet secured copies, the staff purposes to place the Monthly on sale in the various buildings during the morning, and at the Rush this noon.

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PRICES \$35.00 up.

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ENGINEERING AND SCIENTIFIC NOTES
(Continued from Page 2.)

amber-like resin forms a large part of the coal. Beautiful samples of this sort are found in some of the coal beds in the Philippine Islands. The amount of resin in microscopic particles is vastly greater than that in lumps visible to the naked eye.

However, all these coals of lignitic and subbituminous ranks, some of which are not far removed or transformed from the original peat stage, are found in rocks that are geologically comparatively young. On the other hand, resins, especially lump resins, have not definitely been known in the coals buried in the very much older rocks, such as high-grade bituminous, semibituminous, and anthracite coals, and therefore it has been argued that resins were never present in these coals and that they owe their marked difference in quality to correspondingly marked differences in the ingredient vegetable matter from which they were formed, resin-producing types having presumably been absent. This rather common belief is totally without basis. Mr. White has not only found lumps of amber-like resin in the bituminous coal of Paleozoic age in Indiana, Illinois, and Iowa, but he also shows that many of the singular and long ago extinct types of vegetation that grew in the ancient peat swamps of the Paleozoic era had trunks or frond petioles containing great quantities of resinous substances. He also points out, with citations of petrified wood, stems, etc., in which the wood cells are beautifully preserved in the fossil state, that some at least of the secretory cells and vessels, which are found in the roots, stems, bark, or seeds of many of these early forms, were most probably resin-producing. In fact, many of them contain dark residues of what probably were once resins. On the whole, therefore, it is certain that resinous material, generally in very small or microscopic particles, was present in the coals buried in the ancient "Coal Measures," as well as in the low-rank coals found in the comparatively recent geologic formations, and that the same types of resin-bearing trees entered into the composition of anthracites as into the contemporaneously deposited coals of low bituminous or lower ranks. In fact, the transformation of the resin lumps, which are probably chemically altered to a slight extent soon after deposition and burial in the peats, appears to have been fully accomplished about the time the coal in the process of alteration reached a good coking condition.

The above-mentioned report, which is technical and rather dry reading to the layman, may be obtained free on application to the Director of the United States Geological Survey.

GYM EXAMINATIONS

Mr. Kanaly wishes to announce that all men who had a physical examination in the fall and who wish another examination this spring must report at the Gym with their examination books at any of the following times:
Today—9 to 1.
Tuesday, April 21—9 to 1.
Wednesday, April 22—9 to 1.

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ALL DAY PRACTICES AT WALNUT HILL

Rifle Club Will Shoot Both Next Thursday and Saturday.

On Thursday next and also on Saturday, the Rifle Club will hold practice all day at the Walnut Hill Range. As these opportunities to practice all day are rare, all of the club members who can spare the time are asked to take advantage of them.

Orders for rifles may be obtained from Haslam, Casselman, Dunn, and Parsons. Trains leave the North Station at 9.02 A. M. for Montvale, the first station this side of Walnut Hill, and at 2.00 P. M. for Walnut Hill. Men are requested to be at the station ten minutes ahead of train time in order that the person in charge may purchase a sufficient number of tickets. The round trip is twenty-five cents.

Any men expecting to try for the team to shoot in the Inter-collegiate outdoor match are expected to be on hand at least one of these days.

CREW PRACTICE

Class Fours Will Be Picked This Afternoon.

Today a most important practice of the crew will be held. Every man is urged to be out as a line must be taken on the men so that a first and second crew can be picked from each class. This, however, does not mean that anyone will be cut but that only ten men will be picked from each class as the first and second crews so that they may get practice in rowing together. The rest of the men will be sent out regularly as previously and if the improvement of any one warrants his displacing one of the men on either the first or second fours he will be given a chance. As

the freshmen have no drill today it is especially important that they should all come out as there is such a number of them it will take considerable time to weigh them all and send them out on the river.

Practice will be held every day during vacation at 10 o'clock in the morning.

PROF. McADIE PRAISES THREE TECH MEN

In His Talk on "Forecasting The Weather" He Gives Them Special Mention.

Yesterday evening at 7.45 Professor Alexander G. McAdie, Director of Blue Hill Observatory, gave an illustrated talk on "Forecasting the Weather" to the members of the Boston Scientific Society. He is one of the most interesting speakers in the scientific field. He was formerly forecaster of the West coast and was stationed at San Francisco, and is now director of the Blue Hill Observatory taking the place of Mr. Roach, the founder of the Observatory.

This is his first appearance as speaker before the society for twenty-five years. He took up in his talk the part the various elements play in forecasting, and showed how the weather could be told by the winds, clouds, and even by volcanic ashes. He gave a few examples of how forecasting the weather is of advantage in the business world. The orange growers in California saved twenty-five million dollars as a result of a warning issued to them by the weather bureau there. A railway concern in the west did not have an accident in a whole year by paying attention to the weather forecast and doubling its force in stormy weather. He also had great praise for the late Mr. Roach, a Tech man of '84. He said that his work in this line has made a

HARVARD DOMITORIES

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foundation for future discovery. In connection with Mr. Roach's work Professor McAdie spoke very highly of two other Tech men who have done an enormous amount of research work, Mr. C. C. Abbott of the Smithsonian Physical Laboratory and G. E. Hale, the director of the Mount Wilson Solar Observatory.

MILITARY SCIENCE
There will be no drill or Military Science lectures this afternoon.