RESEARCH WORK IN FOREST PRODUCTS LABORATORY
Joint Enterprise of the Government and the University of Wisconsin

PRACTICAL RESEARCH WORK

Government has installed Complete Equipment for Paper-making Machinery.

Since June, 1910, the paper-making world has been following with intense interest the work of the Forest Products Laboratory at Madison, Wisconsin. The work is the joint enterprise of the Government and the University of Wisconsin. A laboratory building costing $44,000 was erected by the University of Wisconsin and presented to the Federal Government. In accordance with the modern industrial policy of centralization, and in order to conduct the tests on a large scale, the Government has installed, at a cost of approximately $100,000, its entire equipment of paper-making and paper testing machinery. The Forest Products Laboratory is equipped with chemists and chemical engineers who are laboring over many of the problems of the paper industry. In return for the use of the laboratory, the Government agrees to give courses of lectures at the University, Advanced or great salaries to the University. Chemical Engineering is allowed to use the laboratory and its equipment for demonstrations.

The equipment of the laboratory is unique. Every process of the manufacture of paper can be reproduced. There are grinders, beaters, washers, jordans, stock digesters for the sludge process and the pickling rooms and a 15-inch Fourdriner paper-making machine. (i.e. capable of producing a continuous sheet 15 inches wide.)

With an annual consumption of four million tons of paper and the available supplies of raw material there seems to be a chance of solving the problem of how to make more paper with the same amount of raw material. In most economical manner becomes a very important problem. The manufacture of wood pulp, weighing about 4,500 pounds, yields on the average, by present means of production, 39.53 pounds of finished paper. The cost of paper pulp varies from 10 to 30 per cent. The weight of a sheet of paper measuring 20 by 23 inches is 20 pounds. A 250-pound board, 16 times weighing a total of 4,000 pounds, yields in sulphite process, 39.53 pounds of finished paper. It is found that there is a limit to their generosities. They are taught by men of science and the competition of the sciences and their application to industry as to come to a competition as to enable them to do work in the great problems of transportation, of manufacture, of sanitation, on which the prosperity of the whole state depends.

President Lowell of Harvard also, spoke in favor of the appropriation, saying that the Institute among educational institutions is the venture of the sciences and their application to industry as to enable them to find means of transportation, manufacture, sanitation, on which the prosperity of the whole state depends.

President MacLaurin adds his influence in favor of the appropriation. President Sedwick of Institute will speak before the Society of Arts on Science and Public Welfare. The lecture promises to be an exceptionally interesting and instructive one, and much to be desired.

PRESIDENT MACLAURIN URGES INCREASED APPROPRIATIONS FROM STATE IN MEETING OF STATE COMMITTEE

An annual grant of $100,000 from the state necessary in order that the Institute shall continue in front rank among technological institutions.

QUESTION BEFORE COMMITTEE ON EDUCATION

President Lowell of Harvard adds his influence in favor of the appropriation. President MacLaurin urges increased appropriations from the state necessary in order that the Institute shall continue in front rank among technological institutions.

COMPETITIONS OPEN IN TECH SHOW MANAGEMENT

Candidates for Assistant Publicity Manager: Meet in Show Office Tomorrow.

All Underclassmen Eligible
Call for Candidates for east and chorus to be Made this Saturday.

COMPLETIONS FOR THE TECH SHOW MANAGEMENT

President MacLaurin urges increased appropriations from state in meeting of state committee.

The Forest Products Laboratory has been a semi-state institution, never being entirely in the hands of either of the two parties. The State Appropriation for the last year was as follows:

15,000 subsidized; 15,000 voted; 15,000 given by state legislature; 15,000 given by state legislature.

The last re-examination of this amount was made 10 years ago, and we ask that during the next decade the appropriation be increased to $100,000. The ground for this increase, though the size of the forces that we cannot control, the cost of materials, and the necessity of maintaining the Institute in the front rank has greatly increased, and is likely to increase. President MacLaurin then went into the cause for increased salaries necessary of professors and the competition of the sciences and their application to industry as to enable them to deal successfully with the great problems of transportation, of manufacture, of sanitation, on which the prosperity of the whole state depends.

President Sedwick of Institute also, spoke in favor of the appropriation, saying that the Institute among educational institutions is the venture of the sciences and their application to industry as to enable them to deal successfully with the great problems of transportation, of manufacture, of sanitation, on which the prosperity of the whole state depends.

President Sedwick of Institute also, spoke in favor of the appropriation, saying that the Institute among educational institutions is the venture of the sciences and their application to industry as to enable them to deal successfully with the great problems of transportation, of manufacture, of sanitation, on which the prosperity of the whole state depends.

President Sedwick of Institute also, spoke in favor of the appropriation, saying that the Institute among educational institutions is the venture of the sciences and their application to industry as to enable them to deal successfully with the great problems of transportation, of manufacture, of sanitation, on which the prosperity of the whole state depends.

President Sedwick of Institute also, spoke in favor of the appropriation, saying that the Institute among educational institutions is the venture of the sciences and their application to industry as to enable them to deal successfully with the great problems of transportation, of manufacture, of sanitation, on which the prosperity of the whole state depends.

President Sedwick of Institute also, spoke in favor of the appropriation, saying that the Institute among educational institutions is the venture of the sciences and their application to industry as to enable them to deal successfully with the great problems of transportation, of manufacture, of sanitation, on which the prosperity of the whole state depends.

President Sedwick of Institute also, spoke in favor of the appropriation, saying that the Institute among educational institutions is the venture of the sciences and their application to industry as to enable them to deal successfully with the great problems of transportation, of manufacture, of sanitation, on which the prosperity of the whole state depends.

President Sedwick of Institute also, spoke in favor of the appropriation, saying that the Institute among educational institutions is the venture of the sciences and their application to industry as to enable them to deal successfully with the great problems of transportation, of manufacture, of sanitation, on which the prosperity of the whole state depends.

President Sedwick of Institute also, spoke in favor of the appropriation, saying that the Institute among educational institutions is the venture of the sciences and their application to industry as to enable them to deal successfully with the great problems of transportation, of manufacture, of sanitation, on which the prosperity of the whole state depends.

President Sedwick of Institute also, spoke in favor of the appropriation, saying that the Institute among educational institutions is the venture of the sciences and their application to industry as to enable them to deal successfully with the great problems of transportation, of manufacture, of sanitation, on which the prosperity of the whole state depends.

President Sedwick of Institute also, spoke in favor of the appropriation, saying that the Institute among educational institutions is the venture of the sciences and their application to industry as to enable them to deal successfully with the great problems of transportation, of manufacture, of sanitation, on which the prosperity of the whole state depends.

President Sedwick of Institute also, spoke in favor of the appropriation, saying that the Institute among educational institutions is the venture of the sciences and their application to industry as to enable them to deal successfully with the great problems of transportation, of manufacture, of sanitation, on which the prosperity of the whole state depends.
THE TECH

THE TECH

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

Entered as second-class matter, Sept. 29, 1919, at the post office at Boston, Mass., under Act of March 3, 1879.

S. B. Bates, 1911 .... General Mgr.
G. M. Keith, 1912 .... Editor-in-Chief
A. L. Myers, 1911 .... Institute Editor

Business Board.
W. M. Hall, 1912 .... Business Manager
A. T. Gibson, 1912 .... Circulation Mgr.

Associate Editors.
K. C. McKenney, 1912 .... Athletics
C. F. Cairns, 1911 .... General Ad
A. H. Watt, C. F. Cairns, 1911 .... M. Paris, 1914 .... Institute
W. T. A. 1914 .... Calendar

A. B. Lawler, 1912 .... Business

News Staff.
D. A. Tomlinson, 1912
A. J. Pastene, 1912
W. S. Crost, 1911
L. S. Hall, 1914
Business Staff.
D. E. Straight, 1914
K. S. Johnson, 1914
J. C. Morse, 1914.

Art Staff.
W. S. Cross, 1912 .... Cuts
H. H. Hornsby, 1911
Cartoons
E. Taylor, 1911 .... Photographs

Office, 42 Trinity Place.
Telephone, Back Bay 2184.

All communications should be addressed to the proper departments.

Subscriptions $1.00 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 FEBRUARY 8, 1911

The Tech regrets to announce the resignations of J. Nealey, F. L. Flandberg, and T. E. Segler from the Board of Editors, E. W. Taas and R. S. Rankin have been granted leave of absence.

The following men have been elected Associate Editors in the news department: K. C. McKenney, athletics; C. F. Cairns, general news; A. H. Watt, society; M. Paris, institute; T. B. Lawler has been elected Associate in the business department.

The Tech has had a little trouble in getting publication started again and in working out a new setting, and some delays will be experienced. The Tech yesterday was due to the cutting off of power during the storm, both causes beyond the control of the board. We realize that publication will not be so interrupted during the remainder of the term.

HOTEL LENOX Boston

Exceptional Cuisine
Attractive Rooms
Popular Prices

UNION COMMITTEE MEETING YESTERDAY

Consideration of the Purchase of Part of Commonwealth Club Furniture

At the meeting of the Union Committee yesterday it was announced that the Union Committee had been appointed by the Board of Supe- rintendent of the Commonwealth Club to assist in the purchase of part of the Commonwealth Club Furniture. The Union Committee is considering buying some of the furniture of the Commonwealth Club to aid in getting the Union started again and in improving the appearance of the Union. The Union Committee is working on plans to improve the Union and make the Union a more pleasant place to work.

The average age of Tech Gods is 34 years.

The C. E. P. Profs. are practicing for the story-telling contest.

The Technology Review will be issued monthly.

In forty-nine years the Institute received from the Commonwealth $552,191, 76, which is $11,000.00 yearly.

The Union was not in good working order during the vacation, the Union being dirty and dusty during the entire time. The Union was directly traceable to the great storm. During the vacation, the Union was thoroughly cleaned, the floors being oiled and the rugs being cleaned with a vacuum cleaner. The trophy banners have been rearranged to improve the appearance of the Union. It is the intention of the House Committee to keep the chairs and benches clear of coats and hats in the noon hour, as these will be room enough for these in the cage or on the shelves.

The average age of Tech Gods is 34 years.

FOWNES GLOVES

The way they're made has a good deal to do with the way they wear.

STONE & WEBSTER

MERCHANT TAILORS, 18 BOYLSTON STREET, BOSTON, MASS.
Telephone 99 Oxford Rooms 14 and 15

Suits $35 and Upwards Overcoats $35 and Upwards

General Managers of Public Service Corporations

Boston, Mass.

For Thirty Days from Date any Suit in our Shop for

$35 Former Price $40, $45, $48

STONE & WEBSTER

In Patronizing our Advertisers Please Mention The Tech.
SWIMMING TEAM HAS A SUCCESSFUL TRY-OUT

Election of oce will be held at im-
portant meeting this Friday.

Last Saturday the swimming team held
its first try-out. The swimming made
by the men was good considering the con-
flict with the indoor track meet. Twenty
men responded and the times made in
the four events, 25, 50, 100 and 200 yd.
dashes were fair. The fancy dive and
the four events, 25, 50, 100 and 200 yd.

AVOID COUNCIL AWARDS
LETTER TO RELAY TEAM

Contest for New Tech Cheer Dis-
cussed by the Athletic Association.

A short meeting of the Athletic Asso-
ciations was held yesterday afternoon,
at 4:15 in the Union. M. L.Wateman
1913 was appointed as delegate to the
meeting of the I. C. A. A. A. to be
held the twenty-fifth of this month
in New York. Manager Benson was
chosen to represent the A. A. in a sim-
ilar meeting to be held at the B. A. A.
house to-night to make final arrange-
ments for the meet Saturday night.
President Salabury's suggestion of get-
ing a substitute for "Colt" if we are happy"
was again discussed. The plan is to
run a "New Cheer Contest" very soon
and thus get material for the suggested
substitute.

With the fine showing made by the
Relay Team, at Providence, week
before last, the Advisory Council has
seen fit to award the "T" to each member
of the team. As Captain Salisbury
already has his letter, the new awards
were to Cummings 1911, Thompson,
1913 and Guething, 1914. The race
was a 300 yard run against Harvard
from which the Institute team brought
home a well earned victory. This is
a Special award for exceptionally good
work and not for the regular "T" to
which members of the Relay Team are
credited at the end of the season.

M. E. SOCIETY TO HEAR
ABOUT GEAR CUTTING

Mr. R. E. Flanders, Associate
Editor of "Machinery"

Next Friday the M. E. Society will hear
Mr. R. E. Flanders, Associate
Editor of "Machinery"

Two double rooms with board. Apply
To 16 St. James Ave., Boston. (76-67)

MUSICAL CLUBS.

All pictures to be taken at Nassau's
Park Street, Saturday, February 11, at
1:30. Come in full dress. (76-67)

WINCHESTER
Repeating Shotguns

USED IN THE U. S. ARMY.

The U. S. Army authorities know a gun; that
is why, when they decided to equip some troops
with repeating shotguns, they selected the Win-
chester in preference to all other makes. The
expert of the U. S. Ordnance Board also know a
gun; that's why, after submitting a Winche-
tester Repeating Shotgun to all sorts of tests, they
pronounced it safe, sure, strong and simple. If
you want a shotgun—buy the one whose
strength and reliability led the U. S. Army
authorities to select it and the U. S. Ordnance
Board to endorse it—that's the Winchester.

RELIABLE REPEATERS

W. S. McMORROW

College Shoes for College Men

238 Washington Street, Boston, Mass.
OPPOSITE YOUNG'S HOTEL

In Patronizing our Advertisers Please Mention The Tech.
MAJESTIC

Greatest Drama in 20 Years

MADE AME

7th BIG WEEK

SHUBERT THEATRE
Trenton & Hollis St.

Castle Sq.

Daily 2 and 3
Tel. Tremont 5

Mr. John Craig announces

The Merriest Fantastic Comedy

The Road to Yesterday

TRINITY COURT PETIT LUNCH

Lunch 12 to 2

Table deli 5 to 7

$5.50 Meal ticket

$5.00

E. A. LONG, Prop.

MASTERS

CARNIVAL

Lunch 12 to 2

Table deli 5 to 7

$5.50 Meal ticket

$5.00

E. A. LONG, Prop.

THE ROAD TO YESTERDAY

383 Washington Street, Boston
CATALOG 45 MAILED UPON REQUEST

NOTICES AND CLASSIFIED ADS.

FACULTY NOTICES FREE

ACTIVITIES, 4¢ PER LINE

INDIVIDUALS, 8¢ PER LINE

SIX WORDS TO A LINE

FREEHAND DRAWING.
1ST YEAR.

The exercise in Freehand Drawing for

the section, begins on February 11th

at 11 to Wednesday at 11

Walter Humphreys,

Registrar.

Feb. 6, 1911.

THE ELECTRICAL DISCHARGE IN

GASES AND RADIOACTIVITY.

The course will be given on Tuesday

afternoons beginning February 7th in

Room 22, Walter Hall, at 4:10 o'clock.

It is open to all students of 3d, 4d, 5d

years without registration. No examina-

tion will be required or given.

Chas. R. Cross

FACULTY STORY TELLING

CONTEST

at the Civil Eng. Soc. Dinner Friday

evening, February 10th, at the Union,

6:30 P. M. Get tickets from off-

cers before Thursday.

WELLESLEY CONCERT

Those desiring tickets for the concert

and dance at Wellesley Hills, must leave

$1.00-Swimming Meeting-Union.

Associate Editors,

Mr. John Craig announces

The Merriest Fantastic Comedy

The Road to Yesterday

All THEATRES

February 6, 1911.

Mr. John Craig announces

The Merriest Fantastic Comedy

The Road to Yesterday

TRINITY COURT PETIT LUNCH

Lunch 12 to 2

Table deli 5 to 7

$5.50 Meal ticket

$5.00

E. A. LONG, Prop.

MASTERS

CARNIVAL

Lunch 12 to 2

Table deli 5 to 7

$5.50 Meal ticket

$5.00

E. A. LONG, Prop.

THE ROAD TO YESTERDAY

383 Washington Street, Boston
CATALOG 45 MAILED UPON REQUEST

NOTICES AND CLASSIFIED ADS.

FACULTY NOTICES FREE

ACTIVITIES, 4¢ PER LINE

INDIVIDUALS, 8¢ PER LINE

SIX WORDS TO A LINE

FREEHAND DRAWING.
1ST YEAR.

The exercise in Freehand Drawing for

the section, begins on February 11th

at 11 to Wednesday at 11

Walter Humphreys,

Registrar.

Feb. 6, 1911.

THE ELECTRICAL DISCHARGE IN

GASES AND RADIOACTIVITY.

The course will be given on Tuesday

afternoons beginning February 7th in

Room 22, Walter Hall, at 4:10 o'clock.

It is open to all students of 3d, 4d, 5d

years without registration. No examina-

tion will be required or given.

Chas. R. Cross

FACULTY STORY TELLING

CONTEST

at the Civil Eng. Soc. Dinner Friday

evening, February 10th, at the Union,

6:30 P. M. Get tickets from off-

icers before Thursday.

WELLESLEY CONCERT

Those desiring tickets for the concert

and dance at Wellesley Hills, must leave

$1.00-Swimming Meeting-Union.

Associate Editors,

Mr. John Craig announces

The Merriest Fantastic Comedy

The Road to Yesterday

TRINITY COURT PETIT LUNCH

Lunch 12 to 2

Table deli 5 to 7

$5.50 Meal ticket

$5.00

E. A. LONG, Prop.

MASTERS

CARNIVAL

Lunch 12 to 2

Table deli 5 to 7

$5.50 Meal ticket

$5.00

E. A. LONG, Prop.

THE ROAD TO YESTERDAY

383 Washington Street, Boston
CATALOG 45 MAILED UPON REQUEST

NOTICES AND CLASSIFIED ADS.

FACULTY NOTICES FREE

ACTIVITIES, 4¢ PER LINE

INDIVIDUALS, 8¢ PER LINE

SIX WORDS TO A LINE

FREEHAND DRAWING.
1ST YEAR.

The exercise in Freehand Drawing for

the section, begins on February 11th

at 11 to Wednesday at 11

Walter Humphreys,

Registrar.

Feb. 6, 1911.

THE ELECTRICAL DISCHARGE IN

GASES AND RADIOACTIVITY.

The course will be given on Tuesday

afternoons beginning February 7th in

Room 22, Walter Hall, at 4:10 o'clock.

It is open to all students of 3d, 4d, 5d

years without registration. No examina-

tion will be required or given.

Chas. R. Cross

FACULTY STORY TELLING

CONTEST

at the Civil Eng. Soc. Dinner Friday

evening, February 10th, at the Union,

6:30 P. M. Get tickets from off-

icers before Thursday.

WELLESLEY CONCERT

Those desiring tickets for the concert

and dance at Wellesley Hills, must leave

$1.00-Swimming Meeting-Union.

Associate Editors,

Mr. John Craig announces

The Merriest Fantastic Comedy

The Road to Yesterday

TRINITY COURT PETIT LUNCH

Lunch 12 to 2

Table deli 5 to 7

$5.50 Meal ticket

$5.00

E. A. LONG, Prop.