



Healthy Cows

Scrupulous care in milking—hygienic methods in handling—freedom from adulteration—cool temperature—a richness in cream—a fineness in flavor—these are your safeguards and the means by which HOOD'S MILK brings health and happiness into 70,000 homes.

H. P. HOOD & SONS
494 Rutherford Ave. 'Phone Ch's'n 600

The Technology Review

A QUARTERLY MAGAZINE
DEVOTED TO THE INTERESTS OF
THE MASSACHUSETTS INSTITUTE
OF TECHNOLOGY

AND
PUBLISHED BY THE ASSOCIATION
OF CLASS SECRETARIES

83 NEWBURY STREET, BOSTON

The Review aims to develop closer relations among Institute men and to stimulate their interest in the work of the College. It is in no sense an engineering magazine, but deals broadly with the problems of technological education and the responsibilities of the professional man.

THE REVIEW is published during January, April, July, and October. Communications should be addressed to The TECHNOLOGY REVIEW, 83 Newbury St., Boston.

SUBSCRIPTION, ONE DOLLAR A YEAR
SINGLE COPIES, THIRTY-FIVE CENTS

Volumes I., III., IV., and V. finely bound in half morocco, are ready for delivery at \$2.00 each, or will be exchanged for unbound sets, provided they are in good condition, at \$1.00 each. (If sent by mail, 30 cents extra.) Vols. VI. and VII. at \$2.25 each, or they will be exchanged for unbound sets at \$1.25 each.

WM. READ & SONS



ATHLETIC OUTFITTERS

81 Years of Square Dealing

Wm. Read & Sons. Blue trade mark on your athletic goods is insurance against substitutions, means the finest quality at a fair price, means an absolute Guarantee on all you buy.

OUR BASKET BALL

Absolutely guaranteed to last the season, without ripping or getting out of shape.
ENGLISH LEATHER, ENGLISH MAKE.

LIBERAL DISCOUNT TO TECH MEN

WM. READ & SONS

MAKER TO WEARER



\$200 HAT

412 WASHINGTON ST. BOSTON
FALL STYLES

DINING ROOM

23

ST. BOTOLPH STREET

Popular Prices. Special Attention to "Tech Men." Try our Course Lunch 25c.

W. H. PRIDHAM

Try the

MEADOWBROOK

LUNCH COUNTER

24-26 Huntington Avenue

Floral Designs a Specialty
Flowers and Plants at Reasonable Prices

FINE, The Florist

202 Dartmouth St., Boston, Mass.

Telephone, 1521-3 Back Bay

Fresh Violets Three Times a Day

ASK ANY COLLEGE MAN ABOUT

COES & YOUNG'S SHOES

20 SCHOOL STREET, - BOSTON

TECH'S HOPES.

(Continued from page 1.)

file as to make a run-away out of it. With six men scoring instead of four men complications are liable to ensue: for a college which has four crackajack men may not have two more of even mediocre calibre to back up their stars.

It seems, in fact, that the well-balanced team ought to win this year and this makes Cornell's victory even more likely than under the old system. At Ithaca everyone not playing football in the fall runs across country and Moakley could make up a second team able to beat almost any other college. This wholesale training is what makes the Ithacans strong in this branch of sport.

The stars do not make the team; rather, the stars are a result of the training system, or in other words the team makes the stars. In team racing, it is the last man to score who determines the team's position and it is the realization of this fact that has enabled the Cornell coach to produce the teams he has.

The individual championship is not so easy to decide. Last year Jones came home by inches only, and with seventy men running this year there are all kinds of possibilities. A great deal depends on how each man feels the day of the race, the pace plays a prominent part, and a dozen other considerations enter into the sum total of a big race. One thing is certain: there ought to be a grand race down in Jersey on Wednesday and the winner will know he has been running, whoever he may be.

The Technology team is, as already stated, a good deal of a puzzle. If Howland runs the race he is capable of, he ought to be in the first five without question. MacCreadie, unless he gets rattled by his first big race, should come close behind his captain, while Gimson, Ellis, McCarthy, Stephenson, Batchelder, White, and Callaway should finish close together as there is little to choose among these men. It is in this even balance that Tech's hopes of a good place at the finish lie.

FACULTY NOTICES.

GENERAL BULLETIN. — Subject schedule for the last eight weeks will begin according to the tabular view this week.

NOTICES.

IOWA CLUB.—All those interested in the formation of an Iowa Club are requested to meet in Room 523, Tech Chambers on Wednesday evening, at 8 P. M.

The men who took subscription books for THE TECH, to sell, will please turn them in and settle with G. A. Haynes, Circulation Mgr., as soon as possible.

TECH RESEARCHES.

(Continued from page 1.)

water, using a calorimeter developed by Mr. R. S. Gifford during the past year.

Mr. R. D. Gale, graduate of the Institute in 1907, is now working with Dr. Bray on a new scheme of qualitative analysis which Dr. Noyes and Dr. Bray are developing for the detection of the acids.

Many scientific investigations more directly applied to practical uses have been recently completed by Technology men. Significant for industrial chemistry is a paper in the September Journal of the American Chemical Society by Prof. H. P. Talbot and Mr. A. G. Woodman on the fluorine content in malt liquors, suggesting a maximum limit of permissible fluoride in such liquors.

In the same Journal Prof. Fay reports experiments on tin-tellurium alloys, and in the Technology Quarterly a determination of sulphur in pyrite.

Upon the subject of sanitation Prof. C. E. A. Winslow prints two papers in a form to be widely circulated and influential, one as bulletin of the New York State Library, reviewing the year's legislation throughout the country in the direction of public health and safety; the other the September bulletin of the Vermont State Board of Health, discussing in general the problem of the disposal of sewage.

Prof. G. Shadd reports in the June Electrical Journal experience with leading stationary induction apparatus for heat tests.

In the Journal of the Western Society of Engineers Prof. Jackson reports in full his extended investigations into the electrical lighting of railway trains. Electric power is obtained from a steam turbine generating apparatus in the baggage car; or from a small generator on the truck of each car, driven by the axle; or from storage batteries.

The last plan is simplest, but proves expensive and inapplicable on long runs; the first requires constant attention and is applicable chiefly on long overland runs when the connection between the car units composing the whole train will be infrequently disturbed; the second, though possessing the great advantage of lighting each car as an independent unit, is complicated because the energy supplied from the axle is interrupted when the train stops, and the rather elaborate machinery consequently requires the greatest care in installing.

One of the most triumphant results of many years' experimenting at the Institute is the table for the separation of ores perfected by Prof. R. H. Richards of the Mining Department. His device proves superior in economy of space, in speed, in capacity, and in quality of product, to any of the tables with which it would compete.

VISIT THE NEW STORE

222 CLARENDON ST.

BUILT ESPECIALLY FOR YOU

Drafting Instruments, Papers, Tracing Cloth, Triangles, T Squares, Slide Rules, Pencils, Etc., Paints, Varnishes, Hardware

AT LOWEST PRICES

ALSO AT

82 and 84 Washington Street

CATALOGUES FREE

Wadsworth, Howland & Co.

INCORPORATED

GENTLEMEN
WHO DRESS FOR STYLE
NEATNESS, AND COMFORT
WEAR THE IMPROVED
BOSTON GARTER

THE RECOGNIZED STANDARD
The Name is
stamped on every
loop—
The *Velvet Grip*
**CUSHION
BUTTON
CLASP**

LIES FLAT TO THE LEG—NEVER
SLIPS, TEARS NOR UNFASTENS

Sample pair, Silk 60c., Cotton 25c.
Mailed on receipt of price.

GEO. FROST CO., Makers
Boston, Mass., U. S. A.

ALWAYS EASY

DAVID J. FOX

Hatter and Haberdasher

LAUNDRY RETURNED IN TEN HOURS

Up-to-date Novelties in Men's Furnishings

Corner CHANDLER & DARTMOUTH STS.

Special attention to Tech Men

CANTAB A
AN ARROW

CLUPECO SHIRTS
Quarter sizes, 15c each, 2 for 25c.
CLUETT, PEABODY & CO.
Makers of Cluett and Monarch Shirts

LANDER'S

LUNCH AND COFFEE HOUSE
25 YEARS EXPERIENCE

20 Huntington Avenue, near Copley Square

ALSO AT 46 HIGH STREET

TELEPHONE 5319-1 BACK BAY BOSTON

W. M. ROWAN

"THE TECH BARBER"

Westminster Hotel . . St. James Ave.

SPECIAL TO STUDENTS
HAIR CUT 25 CENTS SHAVE 15 CENTS

J. MAKLAUSKY

Tailor

Opposite Victoria and Vendome Hotels

Nothing too small for my strict attention
and nothing too high for my capability

145 Newbury St.

Tel. 3059-4 B. B.

DAVID W. EDWARDS, Jr.

Tailor

Removed to 420 Boylston Street
BOSTON

Telephone, Back Bay 3535-3

MEN'S SHIRTS MEN'S SCARFS

MEN'S COLLARS

Until Thanksgiving, CAPE GLOVES \$1.15 pair

PLAZA OUTFITTERS

431 Columbus Ave. next door to Hotel Plaza

THE SEVEN BARBERS

Everyone an Artist

987 BOYLSTON ST., near MASS. AVE.

Special attention given to Tech Students

HERRICK TICKETS

ALL THEATRES

Copley Square

Telephone

2329, 2330 and 2331 Back Bay

BOOK BINDING

IN EVERY STYLE

ALEXANDER MOORE

11 Hamilton Place

EST'D. 1850 opp. Park St. Church

THE STUDENT'S DRUG STORE

UNDER COPELY SQUARE HOTEL

We make a special effort to merit
the patronage of our student
friends

Don't forget the address — under Copley Square Hotel