

POPULAR SCIENCE LECTURES BEGIN ON DECEMBER 16

Professor H. Monmouth Smith to
Speak on "Gases, Useful
and Harmful"

FOUR TALKS IN SERIES

Addresses Will be Illustrated
by Experiments, Slides,
and Models

Popular Science Lectures have been arranged by the Society of Arts at the Institute and a series of four are to be given, one each month, in Room 10-250 by members of the instructing staff at Technology. The first talk will be by Professor H. Monmouth Smith of the Chemistry Department on the subject of "Gases, Useful and Harmful." This lecture will be given on Sunday, December 16, at 4 o'clock and will be illustrated by experiments showing the physical, chemical, and physiological properties and some of the uses of oxygen, hydrogen, chlorine, hydrogen sulphide, sulphur dioxide and carbon monoxide.

The three other talks to be given in 1929 will be "Artificial Cold and Its Applications" by Professor Gordon B. Wilkes of the Physics Department, "Why an Airplane Flies" by Professor Charles H. Chatfield of the Aeronautical Department, and "Color, Its Nature and Measurement" by Professor Arthur C. Hardy of the Physics Department. Each lecture will be illustrated by slides, motion pictures, models, and experiments. The talks will all be given on Sundays and on the previous Friday and Saturday the same addresses will be given for high school and preparatory school students.

Tickets may be obtained free of charge by application one week before each lecture by sending a self-addressed envelope to the Society of Arts, Room 3-115 at the Institute. Seats will be reserved for ticket holders until 3:55 o'clock the day of the lecture at which time the public will be admitted.

Colonel C. R. Gow Selected As New City Postmaster

Professor of Humanics at the
Institute Will Take
Place of Baker

Colonel Charles R. Gow, Professor of Humanics at the Institute, will probably be the next postmaster of the city of Boston, according to Louis K. Liggett, Republican National Committeeman. He will succeed Roland M. Baker whose term expired eight weeks ago.

The method of formally announcing his appointment to this position is by an order of the president or by a Civil Service examination. Louis K. Liggett who just returned from Washington after staying at the White House stated that in forty-eight hours the group of post office officials and representatives from Massachusetts decided upon Colonel Gow.

Two Washington visitors who are well acquainted with Colonel Gow and who have something to say about the postmastership are W. W. Lufkin, Collector of the Port of Boston, and William J. Keville, United States Marshal at Boston. The nature of their errand to the capital was not disclosed when they left.

Colonel Gow will probably accept the appointment and may be forced to give up his work at Technology to fulfill his new position. The formal notification will be made by President Calvin Coolidge in the near future.

MATHEMATICS CLUB MEETS WEDNESDAY

Professor Philip Franklin of the Mathematics Department of the Institute will speak at the regular weekly meeting of the Mathematics Club to be held in the Faculty Dining Room at 8 o'clock this evening. The subject of the talk will be "Groups." Everyone is invited to attend.

Fraternities in Favor of Revival of Circus

At the last meeting of the Interfraternity Conference a vote was taken to determine how many of the fraternities were in favor of having the Circus again this year. Twelve fraternities were in favor of a return of the Circus while eight opposed it. Of the twelve who were in favor of the Circus several imposed the condition that the Circus if revived should not become the same sort of affair that took place two years ago. Many of those who opposed it said that, should the Circus be revived, they would give it their support.

"The Show-Off" By George Kelly To Be Presented

Dramashop Play Will be Given
Thursday and Saturday
at Rogers

"The Show-Off," a comedy by George Kelly, will be presented by the Dramashop Thursday and Saturday nights at 8:15 o'clock in the Commons Room at Rogers. The play is a comedy of American family life in the city of Philadelphia. It was first played in New York in 1924 and won the Pulitzer prize as the best play of the year. The drama was so popular that it was filmed a short time ago and was a tremendous success.

The play is satirical and describes the tribulations of a care-worn American mother whose family is greatly disturbed by Aubrey Piper, the show-off, an egotist who marries her daughter, Amy Fisher. The caustic wit and the sharp tongue of Mrs. Fisher cause Aubrey a great deal of trouble, but the sympathy of the audience is not with him. The conclusion of the play is very surprising.

The Dramashop is directed by Professor Dean Fuller of the English Department whose enthusiasm brought the Dramashop into existence and has maintained its activities at their present level. Professor Fuller has had extended experience in amateur dramatics, taking part in every production during his college career given by the Dramatic Association of Hamilton College. Since then he has directed many amateur productions and is at present applying the best of his accumulated knowledge to make the Dramashop and its performances a success.

Tickets are on sale in the main lobby from 12 to 2 o'clock or in Room 2-178. If possible a few tickets will be withheld for sale at the door. The admission price is \$1.00.

LIBERAL CLUB HEARS BISHOP PAUL JONES

Militarism and Kellogg's Peace
Pact is Subject of Talk

Bishop Paul Jones, a well-known liberal religious and political leader and former bishop of Utah spoke yesterday before about fifty students in Room 10-275. A hot discussion followed his speech and the discussion brought out many interesting and important points on the important subject of world peace.

Bishop Jones spoke on the Kellogg Peace Pact and Militarism. In his speech he stressed especially the duty of the student in furthering the cause of world peace. He also devoted much of his talk to a discussion of the Kellogg Peace Pact from many angles of opinion.

This speech is merely a continuation of the Liberal Club's thus far successful program of bringing before the students speakers on important national and international problems. Many new members joined this latest acquisition to Technology's activities at this meeting.

NEW SCHEDULE OF AERIAL TRAINING WILL BE STARTED

Students to Receive Nine Months
Course in Naval Flying
from Government

ONLY SENIORS ELIGIBLE

Inaugurating a new schedule of aerial training for the U. S. Naval Reserve Corps, hereafter the course will consist of one month of primary training and eight months of advanced training according to a communication received by Lieutenant Reginald D. Thomas from the Navy Department, Bureau of Navigation, Washington. Ground school will be held at the Institute starting in February after the Mid-year recess.

There will be a 30 day elimination course at the U. S. Naval Aviation base, Squantum, Mass. which will include a schedule of primary training and 10 to 15 hours of flying. Upon successful completion of the elimination course, the students will go to Pensacola, Florida for advanced flight training for eight months. This advanced course will consist of 200 hours of flying in all types of land and sea planes.

The new course will be the equivalent of the training now given to naval officers and aviation pilots in regular naval service. As it will take about nine months to complete the course, the government desires that a certain number of the men will go with the fleet for one year as commissioned officers. There will be 54 students in the course. Of these, 15 will be attached to the Marine Corps, and 39 to the Navy.

This training is not limited to members of Course 10 only. Any seniors who are interested in joining the new course may interview Lt. Thomas in his office, Room 33-103 on any Monday, Wednesday, or Friday at any time from now to February, when the ground school will be opened. The ground school at the Institute will include three hours work each week from 4 to 5 o'clock.

BIOLOGICAL SOCIETY MEETS AGAIN TODAY

Review of "Heredity and Human
Affairs" to be Given

At the meeting of the Sedgwick Biological Society to be held in the Emma Rogers Room this evening at 7 o'clock, Professor Murray P. Horwood '16, of the Department of Biology and Public Health at the Institute, will give a review of the book "Heredity and Human Affairs." The book was written by Professor Edward M. East of Harvard University. He is also the author of a very popular book "Mankind at the Crossroads."

The address will be given after the regular business meeting and will probably start about 8 o'clock. Following the lecture there will be a social hour with refreshments. Students who are taking Biology and Public Health or who have taken any courses in that department are invited to attend the meeting.

Pi Delta Epsilon Elects President at Annual Convention in Atlanta, Ga.

National Honorary Journalistic
Fraternity Elects Former
T.E.N. Manager

In its annual convention held in Atlanta, Georgia last week, Pi Delta Epsilon, national honorary journalistic fraternity, elected Joseph C. Patty '22 to the position of Grand President. Technology was represented at the convention by Assistant Dean Harold E. Lobdell '17 Grand Secretary, and Lawrence C. Hamlin, '29, president of the undergraduate chapter.

Representatives from approximately forty colleges located in nearly every section of the United States attended the three day conference which closed Saturday evening with a banquet at which Senator George of Georgia was the main speaker.

Important items of business conducted at the convention included the

Aldred Lecture is Scheduled Tomorrow

W. D. Hines Speaking
On Cotton Industry



W. D. Hines

Xmas Concert of Musical Clubs at Longwood Towers

Tectonians to Furnish Music
for Dancing Following
the Concert

One of Technology's leading social events of the year, the annual Christmas Concert of the Musical Clubs, is to be held at Longwood Towers, Brookline, Friday evening. The concert is to start at 8 o'clock, and will be followed by dancing until 2, music being furnished by the Tectonians.

Longwood Towers is expected to furnish an ideal location for the dance. In previous years the event has been held at Whitney Hall, but it is felt that the change will afford a greater degree of enjoyment for all those in attendance.

Each of the Musical Clubs will contribute toward the evening's entertainment. The Glee Club will feature their James A. Yates who will sing the solo in the Club's new number "Jerusalem."

A specialty act, which has for some time been kept secret, is to be the feature of the evening. This act is to be in the nature of a surprise, and the management promises that it will be well worth seeing.

Tickets for the affair may be secured in the Main Lobby between 12 and 2 o'clock. Tickets are \$4 a couple, and \$2.50 stag.

FIRST LECTURER OF YEAR WILL BE WALTER D. HINES

President of the Cotton Textile
Institute Will Speak
on Its Work

OTHERS ANNOUNCED LATER

Mr. Walter D. Hines will be the speaker at the first of the Aldred lectures to be held this year. His subject will be the "Work of the Cotton Textile Institute of New York," in Room 10-250 at 3 o'clock, Thursday. All Seniors, graduate students, and members of the instructing staff are invited to attend and classes which would conflict with lecture will be excused in order that these students may be present.

In his address Mr. Hines will explain the actual work of the Cotton Textile Institute, involving efforts to encourage the keeping of adequate statistics on production, sales, etc., efforts to obtain all practical light on the trend of supply and demand, the accurate predetermination of costs of production, and in general to encourage the cotton mills to keep each other posted about matters of common interest.

Mr. Hines is a Commander of the Legion of Honor of France and was awarded the Order of White Eagle, first class, of the Kingdom of Serbs, Croats, and Slovenes. He is the author of numerous pamphlets and articles on government and railroad problems, especially those connected with government operation of railroads, and, since the World War international affairs.

Prominent Men for Speakers
The series of lectures was founded by Mr. John E. Aldred to give stu-

(Continued on Page 4)

Polo Is Refused All Recognition

Team Forced Move of Advisory
Council by Running
Into Debt

Provisional recognition of the Polo team as an official Technology team was withdrawn by the Advisory Council on Athletics at its meeting on Tuesday. This means that although the team may no longer use the Technology name, it may still continue to play as a club team granted that it is recognized by the Institute Committee.

This action was forced on the Council by the fact that the team had without permission run into debt to the extent of \$250 even though the players were assuming most of the expense of the games. Since it is contrary to the constitution of the M. I. T. A. A. for any team member or manager to assume personal liability for expenses of the team, the Council decided to defray the debt already incurred and to notify the team that no more funds were available.

One of the reasons for the refusal to provide more funds for the Polo team, outside of the fact that the expense per man is higher than that of any other sport at Technology was that there has been a considerable increase in the total sport budget this year, leaving the Budget Committee with very little surplus. The exact amount of this surplus cannot as yet be determined, due to the fact that the tennis and fencing budgets have not as yet been turned in by the managers of those sports who are Joseph T. Wight '31 and Roy W. Ide '30 respectively. Consequently, these teams will be unable to secure any funds at all from the Budget Committee until an approved budget is submitted.

A Record of
Continuous
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for 47 years.



Official News
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of M. I. T.

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In charge of this issue:

M. F. Burr '31

SIGNS OF LIFE

AGAIN comes to the foreground that matter which occupied the thoughts of many of us last spring, which caused so much editorial comment, and because of which many minds worked overtime around conference tables. Official action on the Student Inquiry has been taken in the form of a report presenting the views on the subject of a Faculty Committee, and these conclusions read at Faculty Meeting.

The questionnaire which was distributed last spring came in answer to a popular demand at the Institute for changes, minor or major, in the presentation of courses or the methods of teaching. The students' grievances were of course very likely to be prejudiced merely by an inability to comprehend, an innate laziness, or a plain dislike for the professor. That the Student Inquiry Committee has sifted these biased ideas and found the real problems is evidenced by the above-mentioned report, which states: "At the outset we wish to express our appreciation of the careful and thorough manner in which the Student Committee conducted its investigations, and of the well-balanced, clear and concise expression of its conclusions. We believe the Student Committee has done an important service in thus considering the problems of improving methods of instruction and is deserving of the thanks of the Faculty."

Indubitably the idea responsible for these actions was a good one, and the work along this line is bound to go on. Without doubt some courses are presented in such a way as to prohibit the student's acquiring full value from them—the whole-hearted cooperation of the faculty and students indicates their realization of the existence of these problems, and their keen desire to eliminate them. Perhaps we may not be gaining from the men under whom we are privileged to work all that they might give us. Whether the fault is ours or theirs is being investigated in a non-partisan manner which is bound to bring results.

The matter is not closed—decidedly not. The Inquiry and its results were but a successful beginning; its purpose was to determine something tangible to work on. What line of action the work will take this year has not yet been definitely decided upon, but with the faculty and student body showing such a keen appreciation of the situation, much may happen. It is planned to continue that particular phase of the problem which the Inquiry covered—courses, hours, teaching methods. But we hope that the good work extends its scope beyond these.

SCOTCH

HIS academic training is the one thing for which a college man pays and pays, and for which his efforts to get full value received are on the whole negligible. He is overjoyed if he makes a nickel work for two telephone calls; he raises a terrible fuss when his bill at a night club is a dollar too much. But he thinks nothing at all of sleeping through a nine o'clock, or of cutting Wednesday, Friday and Saturday classes to make a long Thanksgiving vacation.

Why this false appreciation of values? Every term we pay out two hundred dollars for tuition, to say nothing of lab fees, books, and supplies. Such expenditure privileges us to work with equipment whose value would make our contribution seem a "drop in the bucket", to study under men of international repute and experience. We graduate, if we work reasonably hard, with a prestige which will prove invaluable in our life after we leave the Institute.

Business men have figured that our education is worth to us, in actual money expended and future earning capacity, about nine dollars a day. Such a proposition should appeal to the Scotch instinct inherent in all of us. Instead of regarding it in that light, we attempt merely to get through on as little effort as we possibly can. We do not heed suggestion—we resent compulsion. As a business proposition, what we gain is entirely up to us—we get no money back if not satisfied.

How are you regarding your education—as the right to acquire training, or as a painful operation during which you submit yourself, inert, to a compulsory forcing-in of knowledge?

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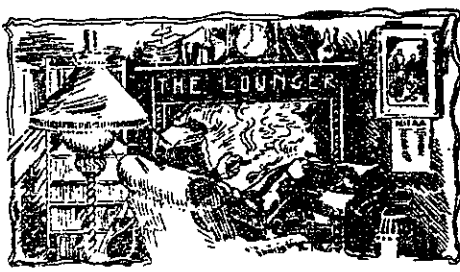
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The only reason that the Lounger hasn't filled some space with drool on Voo Doo since Phosphorus' last little job (that cat should be housebroken by this time) is that the editor happened to have more important business to occupy the page. But the ad dummy is damn small today, and the important matter is being given a breathing spell till next time.

Perhaps the Lounger should divulge a choice little story about the small-comedy bunch upstairs in Walker before his readers take Voo Doo's remarks about cheap humor too seriously. Just before the football game between the two minor publications Voo Doo decided to rebut the TEN burial ad of the issue before. So they sent to the TECH business office one of their last year's cuts, together with some fancy printing, to form the picture of two chorus girls saluting the engineering journal in a none too flattering pose. The General Manager of the comic supplement was quoted the same ad rates as TEN had paid, but when he found that an ad was going to cost him something, he called his chorus girls home again and cancelled the advertisement; talk about your cheap humor!

Speaking of Tillie being an illegitimate issue, remember the Voo Doo editorials (gross flattery) that appeared in the opening number of the present volume, beginning "There, Phosphorus has done it again, and another litter of kittens scampers around on the top floor of Walker" or something like that; if the Lounger has made one mistake, it has gotten to be a necessary habit with that cat.

As for the typical attitude of the Voo Doo editor on the Circus, the Lounger's boss says he will say a word or so on the subject as soon as he finishes with the more important matters.

Don't wait till next April in hopes that the Filter Paper will chastise your pet professor; help the Curriculum Committee and do it yourself by writing to the Lounger or the Open Forum column. You needn't worry about his discovering the identity of the author; they never do. The best retaliation a prof can try is to flunk the whole class, and that will furnish you with a host of boon companions during the warm days in summer school. And you can write the folks that nobody else passed that blank-blank course either, so why reduce a fellow's allowance for that?

And there is no reason why an instructor shouldn't inform the school, through these columns, of some of the dumb assinities his students perpetrate. This he-gives-me-a-big-laugh stuff isn't as one-sided as you might think, and God only knows what they do at Faculty meetings besides run down this and that activity hound who "thinks he can bluff me—the big sap!"

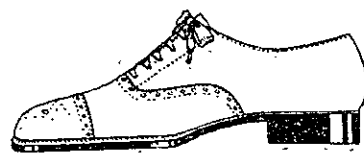
As We Like It

REPERTORY

Audiences at the Repertory in the past week have shown themselves to be very human in their sympathies and feelings. We don't know of any farce that is so thoroughly enjoyable as "Charley's Aunt" which is now on the second week of its seventh revival at the Repertory. The popularity of the comedy is world wide and since its first success in London has been given continuously by one to three companies.

Milton Owen, who has been playing the part of Charley's aunt for the past two years, shows his real ability in this play, and were it not for a poor supporting company, would lead

FRANK BROTHERS
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Cambridge Shop
252 Abbott Bldg., Harvard Square

Professor Tells of Country Covered By Recent Central Asia Expedition

Accompanied Andrews on Three Trips—Hopes Students Will Hear Him

"The most outstanding discovery was not the colossal fossils nor the dinosaur eggs," said Professor F. K. Morris, of the Geology Department, in speaking about the Roy C. Andrews Central Asia Expedition. "Older fossils had been discovered, and since the existence of dinosaurs had been proved, it was obvious that they must have had eggs. But truly startling was the finding of the small mammal skulls."

"These skeletons were proved without question to have belonged to a placental mammal. As such they are the oldest existing evidence of the type of creature of which 'homo sapiens' is one branch. Their discovery, then, proves without doubt that the human species originated in this region, and that our forefathers existed at the same time as the dinosaurs."

Urges Students Hear Andrews

Professor Morris was with the earlier expeditions in 1922, '23 and '25, and had previous to that time been in the region since 1920, studying the geology of the country. He says of Mr. Andrews, with whom he has come in close contact during their work together, "He typifies good sporting instinct and high adventure. His listeners will find him a remarkably good speaker, not only because of the facts and anecdotes he presents, but because of his winning personality. He is a fine appearing chap, over six feet tall and an all-round athlete. The pictures with which he illustrates his address are beyond all praise for beauty."

Old Fossils Significant

Until the recent expedition, the largest animal of which remains had been found was one discovered by the 1922 expedition. This was the monstrous rhinoceros, whose skull measured four feet across. These animals were all living in the Oligocene Age. Their fossils were first discovered by Russians, at a place north of the Caspian Sea, and just east of the southern end of the Ural Mountains. Later an independent discovery was made by an English explorer, Foster-Cooper, in Baluchistan. His finding then gave to the animals the name "Baluchitherium."

These best specimens were found by the Andrews party in widely separated parts of the Gobi Desert. The four great legs and skull showed the animal to be much larger than an elephant, and rather like a rhinoceros, though he had no horn. He lived on tree foliage and shrubs like an elephant, and was proved to have roamed all over central and southern Asia. At the time this group was existent, no large elephants had evolved; the animal from which they developed was then about the size of a pony. The importance of the Baluchitherium was that this formidable, far-ranging, browsing animal filled the place in the economic plan of Nature which was thereafter held by the pachyderm which we know today.

This example is but one of many. These conclusions merely go to show the function of such expeditions in coordinating the seemingly unrelated phases of the great evolutionary plan.

a brilliant production to a brilliant success. As it is, we are only slightly enthusiastic about this year's presentation, a less sparkling one than that of last year. But if you haven't seen "Charley's Aunt from Brazil" where the nuts come from," by all means do so.

Piece by piece the knowledge has been fitted together until we now have a fairly accurate picture of the development of the earth's structure and of the life on it.

Ore Deposits Discovered

Geologically the region covered by these expeditions is divided into two parts: the "oldrock floor" of folded crystallines (igneous rocks, of which our granites are a common example) and the younger sedimentary rocks, which lie in almost horizontal beds on the oldrock floor.

It is in the oldrock exclusively that valuable deposits are to be found. (This is a general situation, and not peculiar to the Mongolian area.) In the more recently deposited sediments are found all the fossils.

Around the mammoth masses of granite which have been injected into the igneous rocks the expedition found valuable gold, copper, silver and lead deposits, and also a little tungsten. However, in carrying out investigations of the economic importance of these minerals (which exploration is one of the important functions of such a scientific project) the party found that none of the deposits either in the floor or in the sediments could carry oil, and that only a little poor grade coal was evidenced.

In thus eliminating Mongolia as a great economic factor at the outset, the expedition has saved future investigators considerable expenditure of time and money in prospecting. The main importance of the exploration of course was the immense fund of scientific knowledge contributed.

Student Health Decreases With Years In School

Dr. Smiley, of Cornell, Blames Loss of Home Influence and Late Hours

That the health of college students gets progressively worse from the freshman to the Senior year is the observation made by Dr. Dean F. Smiley, Head of the Department of Hygiene and Preventive Medicine at Cornell University. Dr. Smiley's conclusions are based on personal examination of the records of the thousands of Cornell students passing through his department yearly. Cornell students are required to take a physical examination each year.

According to Dr. Smiley, the reasons for this condition are probably as follows:

"The influence of home and mother is usually strong for good health habits and good health maintenance. The longer the student is away from that influence the less he feels its effect."

"Student life has for generations been notable for its neglect of the ordinary hygienic laws. Many a graduate glories in telling stories of all night sessions and bouts of drinking, just to prove what a 'tough egg' he was in his college days."

"A number of students are attempting the physical impossibility of doing the work of two men; living the life of a day laborer to earn a living, and the life of a student."

"With all these tendencies to fight it seems evident enough that a pretty strenuous effort along health lines must be made if results are accomplished that are measurably successful. Any institution that can prove that the health upkeep of its Senior class is even as good as that of its freshman class should be congratulated upon its health work."

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1436 MASS. AVE. CAMBRIDGE

ENGINEER SEXTET PLAYS HARVARD TONIGHT

SPRING SCHEDULE FOR FIRST YEAR CREW COMPLETED

Season Opens on May 4 With Opening Race Against Harvard Freshmen

RACE COLUMBIA MAY 18

Final plans have been made for the freshman crew and the schedule for spring races is now completed. The opening race will be on May 4 when the freshmen will row against the Harvard first year crew. A victory in this race has always been the goal toward which the freshmen have worked and a win in the first race of the season always goes a long way toward making the season a success.

Last year the freshmen won their initial race but were defeated by Harvard and Cornell a week later. The second race of the spring season will be with Kent School on May 11 at Kent, Connecticut. Kent, which has always had one of the strongest preparatory school crews in the country, is expected to provide a hard race for the freshmen.

Race Columbia on May 18

On May 18 the crew will race Columbia on the Harlem. For the past few years Columbia has been noted for its freshman crews and in the last Columbia-Technology crew

(Continued on Page 4)

Varsity Riflers Have Busy Week

Open Season With Four Matches on Program—Will Meet Univ. of West Va.

Beginning this week the rifle season opens in earnest. With two shoulder-to-shoulder matches and two telegraphic matches scheduled to be shot before Saturday, the Varsity rifle team will be the busiest of the athletic teams around the Institute.

The team will meet the First Corps of Cadets team in its opening shoulder-to-shoulder match. Friday night the riflemen will shoot against a picked team from the 101st Infantry. Sometime during the week telegraphic matches with the University of West Virginia and Kemper Military Institute will be fired.

Ever since practice started the members of the Varsity squad have been showing steady progress. During the past week particular attention has been given to the standing position by every man. The result is that several very good scores for this position have been turned in. All in all, the team seems to be well fortified in every position.

Lieutenant Moore, team coach, has picked a team which he considers very capable of firing winning targets. The Coach's combination includes Aros, Clark, Gawlowicz, Hamilton, Kohler, Loomis, Orleman, Plugge, Reddig, and Twarogowski. These ten men will shoot in all of the matches, and the five highest scores will count. Practically all of the men mentioned are good shots in both the prone and standing positions, and good results may be expected of them.

Varsity Swimming Schedule

Jan. 12—Amherst away.
Feb. 9—Rensselaer away.
Feb. 15—Columbia away.
Feb. 16—West Point away.
Feb. 22—B. U. home.
Feb. 23—Worcester Tech away.
Mar. 2—Bowdoin away.
Mar. 6—Brown away.
Mar. 9—Wesleyan away.
Mar. 16—New England Championships at Boston.

Class Swimming Meet Is Tonight

Keen Competition Expected as Several Veterans Will Compete

Some close races are expected to take place in the University Club's pool tonight when the annual Inter-class Swimming meet gets under way. The meet will begin at 5:30 o'clock, and admission will be free to all students of the Institute. This meet will give the coaches an opportunity to get a real line on the swimmers against competition.

The team this year has a nucleus of five veterans to build on. Breaststrokers Ralph Appleton and Emanuel Birnbaum are back and Helge Holst, on the last year's freshman team is giving them plenty of opposition. Appleton won the breast stroke at Columbia last year while Birnbaum took first in the meet with B. U. and Wesleyan. Jack Jarosh last year Technology's best 440-yard man, is back. Jack took first in the 440 against B. U., Amherst, Worcester Tech, and Columbia. He is also a point winner in the 150-yard back stroke.

Captain "Larry" Luey has been working hard and bids fair to break his own record in the back stroke. Larry won the back stroke event against Amherst, B. U. Worcester Tech, Columbia, Wesleyan, and at the New England Championships last March he won the 150-yard back stroke championship in 1:45 5/10. He is also on the relay team and will probably enter either the 50-yard or the 300-yard 3 man medley.

Phil Torchio, veteran dash man, is also back. Phil was on the relay team and was a consistent point scorer in the dashes. Tyson Lykes, from last year's freshman team is showing excellent form in the dives. Bob McMinn is also working hard on the board. Ed MacKay, captain of last year's freshmen is showing good form in the individual medley. Carl Baker and Art Lutz, dash men on the freshman team of last year, are doing very well, both showing great improvement over last year. Altogether the team prospects are very good and a successful season is predicted by Coaches Russell Dean and Sherwood Brown.

After 100 years of use and a half century of travel, a leather fire bucket labeled "Rutgers College, No. 19, 1828" came back to its original owners. The sender, a member of the Class of 1892, said it had been used as a waste basket and antique in many homes throughout the country.

MEET TRADITIONAL RIVAL AT GARDEN IN ANNUAL BATTLE

Hockey Team in Fine Shape for Big Game and Hopes for a Victory

M.I.T. FACES VETERAN TEAM

Crosby and White Expected to Shine for Cardinal and Gray

Technology's Hockey team plays its big game tonight, meeting Harvard at the new Boston Garden at 8 o'clock. Little is known of Harvard's strength as they have not as yet played a game this season. However as most of their last year's Varsity is back they are sure of putting a formidable outfit on the ice. Although the Engineers suffered a setback in their first game of the season last Saturday night losing to B. U. they are certain of giving their old rivals a great fight every second of the game.

Technology has material this year as good if not better than in any previous year in the past. However due to a late start this year they were severely handicapped in their game last Saturday because of lack

POLOISTS PREPARE FOR FIRST MATCH

Four Players Will Make Journey to Norwich in Opening Game of Season

With their first match only three days away, the Varsity Polo Team is rapidly rounding into shape. Ten men have been practicing three times a week for several weeks past. Once a week these men take indoor instruction on the wooden horse in Hangar Gym, also acting as instructors for the others members of the Polo Club who are taking advantage of this instruction. Twice a week the ten work out at the Brookline Riding School, where they hold practice matches under the watchful eyes of their coach, Sam Hopkins of Battery "A". Hopkins is one of the best known poloists in Boston, and was Captain of Yale's Varsity Polo Team in 1923.

Squad of Seven Men Picked
From among the ten men taking his instruction, Coach Hopkins has picked seven players who comprise the first squad. They are: Longfellow, Turnbull, McCaskey, Sykes, Stott, Wilder, and Kononoff. It is from these seven that the four men will be chosen to take the trip to Norwich University as the M. I. T. Polo Team.

The squad has shown excellent form during the last few workouts, and should put up a very creditable showing at Norwich on Saturday. Last year the team had a very successful season, and it is with great interest that the outcome of Saturday's match will be noted.

of practice. With that game showing up their weaknesses and also with an added three days to profit by that game, the Varsity should show a vast improvement in the contest tonight. Coach Bill Stewart will be able to put two forward lines on the ice during the game having Captain White, Crosby, and Peene on the first and Ford, Hall, and Mead on the second. The defence will consist of Cullinan, Lucy, and Riley with Hazel-tine, Donahue, and a few others in reserve.

Harvard Has Veteran Team
On the Harvard sextet are many experienced players from the powerful team that dealt defeat to the Technology skaters last year. Captain Tudor, Giddens, r. w.; Holbrook, c.; Kakin, r. w.; Stanley, d.; A. S. Bigelow; and H. W. Bigelow, d.; are back on the ice this year for the Crimson. All of these men will probably play in the game, but the starting lineup is still unknown. Harvard has experienced some inconvenience in the loss of their goalie from last year, and at present the man who will play at this position is unknown. The candidates who will probably be given a chance to show their wares during the game are Elkins, Jackson, and Newell.

On the ice for Tech will be Crosby, r. w.; Peene, l. w.; Captain White, c.; Cullinan, r. d.; Lucy, l. d.; Riley, goal. Crosby, who was star of the last game, and threatened the B. U. goal many times, will undoubtedly be a deciding factor in the game tonight. He is a spectacular player, being one of the best forwards around Boston. Lucy also was an outstanding player in the last game, and should keep the Crimson well in tow in tonight's game, along with Riley who played a stellar game against B. U., keeping the score very low considering most of the game was played on Tech ice.

ENGINEER QUINTET BATTLES NEWPORT SAILORS SATURDAY

Yearlings Encounter Wentworth Institute in Second Game of Season

BOTH TEAMS SCRIMMAGE

Shooting free throws has occupied considerable of the Varsity basketball team's time during the past few days. Saturday's game was marked by a lack of precision in the shooting and Coach McCarthy is trying to remedy this defect before the game with Newport Naval Training Station this Saturday evening.

George Lawson was kept out of practice Monday evening due to an injured hip. However, his injury is not serious as he worked out with the team in the scrimmage held last

(Continued on Page 4)

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OFFICIAL BULLETIN

BIOLOGY AND PUBLIC HEALTH

The meeting of the Sedgwick Biological Society will be held in the Emma Rogers Room at 8:00 o'clock, Wednesday, December 12.

ALDRED LECTURE

"The Work of the Cotton-Textile Institute"

by
Mr. Walker D. Hines
President of the Cotton-Textile Institute
New York City

December 13, 3 P.M.

Room 10-250

For Seniors, Graduates and Members of Instructing Staff

CALENDAR

Wednesday, December 12

- 5:30—Finals in Swimming Trials.
- 6:00—Walker Club Dinner Meeting, North Hall, Walker Memorial.
- 7:00—Tech Show Chorus Trials, East Lounge, Walker Memorial.
- 7:00—Sedgwick Biological Society, Emma Rogers Room.
- 7:30—Mathematics Club Meeting, Faculty Dining Room, Walker Memorial.
- 8:00—Hockey, Varsity vs Harvard, Boston Gardens.

Thursday, December 13

- 3:00—Aldred Lecture, Room 10-250.
- 6:00—Massachusetts Safety Council Dinner Meeting, North Hall, Walker Memorial.

Saturday, December 15

- 7:00—Basketball, Freshmen vs Wentworth Institute, Hangar Gym.
- 8:00—Basketball, Varsity vs Newport Naval Training School, Hangar Gym.

Sunday, December 16

- 4:00—Popular Science Lecture, Room 10-250.

ENGINEER TO SPEAK
AT S. A. E. MEETING

Henry Crane to Speak to Faculty
and Students Friday

Henry M. Crane '95, consulting engineer of General Motors Corporation and a leading figure in the automobile industry, will speak under the auspices of the Society of Automotive Engineers at a Faculty Luncheon at noon Friday and also to all members of the Institute who are interested in this branch of engineering at 3 o'clock. The exact place of the meeting will be announced in the Friday issue of THE TECH.

Mr. Crane was head of the Crane automobile company, and was builder of the motors of the famous Dixie racing boats which defended the Harmsworth Trophy against England in international motorboat races. He was also chief engineer of the Crane-Simplex company, and during the war he was connected with the Wright-Martin Aircraft company, builders of aerial motors, which is now the Wright Aeronautical Corporation.

In 1924 Mr. Crane was president of the S. A. E. He is a member of the advisory committee for Course 16 and is also the donor of several automotive scholarships at the Institute.

MR. WALTER D. HINES
IS ALDRED LECTURER

Work of Cotton Textile Institute
Will be Described

(Continued from Page 1)

dents of Technology, particularly Seniors and graduate students, an opportunity to hear men who have achieved eminent success discuss their experiences. The second speaker will be Mr. V. M. Cutter, president of the United Fruit Company, who will speak on "Pioneering and Engineering in the American Tropics." Later in the season Mr. M. H. Aylesworth, president of the National Broadcasting Company; Dr. Owen D. Young, chairman of the Board of Directors of the General Electric Company; and Dr. F. B. Jewett, president of the Bell telephone Laboratories, will lecture on dates to be announced later.

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Winter Schedule
For Track Squad
Begins Saturday

First Handicap Meet is Expected
to Attract a Long List
of Competitors

Regardless of snow and cold weather the track house continues to be a scene of ever-increasing activity. This is the second week of practice on the board track, and everyone is beginning to feel the pep that comes with snappy weather and good physical condition. Realizing this, Coach Hedlund has found it advisable to run a handicap meet, the first one of the winter season, and also the last one before the Christmas holidays.

This meet will be held on Saturday afternoon at exactly 2 o'clock. There has been posted a list of events that should prove interesting to everyone who wishes to sign up. The 45-yard high hurdles will give the stars in this line a chance to show their merits for the first time this season. The sprinters will have their innings in the 35-yard dash, and possibly the two-lap race. In the latter event the relay candidates will shine.

Long List of Events

For all others there will be a four-lap race, a six-lap, or half-mile, and an eight-lap, which is approximately two-thirds of a mile. In addition to these events on the track, there will be a high jump and shot put in the Hangar.

As a result of the handicap meets on the cinders and the work of two weeks on the boards, Coach Hedlund has been able to judge his men very well, so that the better allotment of handicaps should promote closer competition than has occurred previously.

VARSITY PRACTICE
ON SHOOTING FOULS

(Continued from Page 3)

night. Coach McCarthy is confident that Lawson will be in tip top shape for the game Saturday night.

Freshmen Work Hard

Scrimmage during the past few days has been fast with the team showing considerable improvement. Last night the Varsity held a fast workout with the second team and Coach McCarthy interrupted the play several times in order to bring out minor defects in the Varsity's playing.

Newport Naval Training Station is reputed to be one of the strongest teams in the East. It is the opinion of the team members that this game is to be the hardest one of the schedule and they are going to do their best to come out of the struggle with a victory.

Varsity Scrimmages With Seconds
Meanwhile the freshmen have been kept busy trying to iron out the defects that were evident in the Terrier game. Yesterday they held one of the fastest scrimmages of the season, and looked considerable better than they did against Boston University Saturday night.

Rickard, a center, who was kept out of the opening game because of

Distinguished Chemist
To Speak At Rogers

Dr. E. M. Chamot

A. C. S. WILL HEAR
DR. E. M. CHAMOT

Pioneer in Chemical Microscopy
to Lecture Friday at
Rogers Building

Dr. Emile M. Chamot of Cornell University will be the speaker at the December meeting of the North-eastern Section of the American Chemical Society to be held in Huntington Hall, Rogers Building, Friday, December 14, at 8 o'clock. There is no admission charge and everyone is invited to hear this pioneer microscopist talk on a topic of absorbing interest: "Advantages of Microscopy to the Chemist."

By this advancement of the means of accomplishing accurate results with small quantities of materials Dr. Chamot has achieved world wide fame. He successfully makes qualitative analyses from a few drops of a substance by means of a microscope, whereas the ordinary chemist requires a few cubic centimeters at the least for similar results. Dr. Chamot is the author of two books on water analysis and Chemical microscopy and many papers on sanitary chemistry.

FIRST YEAR CREW
SCHEDULE FILLED

Freshmen Now Working Indoors
On Rowing Machines

(Continued on Page 3)

race which was held in 1926 the freshmen lost to a crew which later in the season won the Poughkeepsie race for freshman crews. The Columbia race will be the last one in the season and will serve as a climax to end the year's schedule.

For the past two years the first year crew has raced Princeton but the contest was not scheduled for this year. However on April 17, Princeton is bringing its Varsity, Junior Varsity, and 150-pound crew to Cambridge to row the corresponding M. I. T. crews at that time. It is due to the fact that the Princeton faculty restrict the freshman crew to one trip each year that the race has been dropped.

During the fall months of school the freshmen out for crew worked in the barge and later were transferred to the shells. As their experience increased the men went out on the river in shells. This year's freshman crew was one of the best crews ever developed as was well demonstrated on Field Day when the 1932 Field Day Crew defeated the more experienced Sophomore crew by a decisive margin.

Due to the cold weather the men are now working indoors on the machines and will do so all winter until the ice is out of the basin. Practice will start in earnest as soon as the weather is warm enough in the spring and by the time the first race comes off the crew men will be in the best possible condition. The coaches are very optimistic about this year's freshman crew and have high hopes that it will come through the season with a clean slate.

illness will probably play in this week's contest. He has been doing very good work and is considered better than either of the men who played against the Terriers.

Wentworth Institute is the next opponent that the Cardinal and Gray year'ags will face. The Beavers are confident that they will make up for last week's defeat by trouncing the Wentworth team.

Girls Entertained
By Musical Clubs
At Third Concert

Glee Club Renders New Numbers;
Tecthonians Furnish
Dance Music

Members of the Girls' City Club of Boston were entertained by the Combined Musical Clubs at a concert given at the Women's Republican Club Hall at 8 o'clock Saturday evening. The concert was very well attended and was conceded to be the most successful that the Clubs have given this year.

An excellent variety of vocal and instrumental selections made up a well-balanced program. The Glee Club appeared three times, presenting among other numbers their two newest selections, "Song of the Lumbermen" and "Jerusalem," on which the Club has been practicing for some time. Two vocal selections were rendered by James A. Yates G, the new baritone soloist of the Club. The Instrumental and Banjo Clubs and the Tecthonians also contributed toward the entertainment.

Dance Follows Concert

The concert was followed by dancing until 12 o'clock, music being furnished as usual by the Tecthonians. The Women's Republican Club with its attractive lounges and library, afforded an unusually appropriate location for the concert. The palatial building was once the home of Jordan Marsh, of the Jordan Marsh Co. of Boston.

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TECH SHOW CONDUCTS
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Fifty Men Are Needed at Final
Try-outs in Walker

Final try-outs for the chorus of the 1929 Tech Show will be held in the East Lounge of Walker Memorial tonight at 7:30 o'clock. From those who report at this time, Coach Langdon Matthews will pick the men who will participate in the coming production.

Thus far only 19 men have reported for the work in the chorus, less than half of whom were in "Half a Man," last year's show. In order that Coach Matthews may have a well-rounded chorus, it is necessary that 50 men appear at these trials from among whom the most promising-looking may be chosen. With Christmas vacation less than two weeks away, Mr. Matthews must take his selected candidates and put them through preliminary steps and exercises so that the serious preparation way as soon as the Institute reopens in 1929.

There will also be rehearsals for all members of the cast in the West Lounge of Walker both tonight and Thursday at 7:30 o'clock.

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