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GENERAL PATRICK EMPHASIZES NEED OF AIR SUPREMACY

Hailed By President Stratton As Man to Whom We Owe Superiority

PREDICTS MOVING OF ARMIES THROUGH AIR

Introduced by President S. W. Stratton as the man chiefly responsible for the superiority of American aircraft over that of other countries, Major-General M. S. Patrick, Chief of the Air Service, spoke before an audience of 500 at the Aeronautical Society meeting yesterday afternoon in room 5-330. Many of the large audience came from outside the Institute. The talk was illustrated with movies and many slides of all kinds of aeronautical subjects.

Dr. Stratton stated that on his trip through Europe this summer, the superiority of the American air forces was manifested in all countries and he attributes this fact largely to General Patrick's work in the Air Service.

Speed Records Contrasted

Major-General Patrick opened his speech by speaking of the early developments in aeronautics, showing slides of the first Wright flights in the United States and France. He contrasted, with the aid of motion pictures, the early flights of the Wright brothers when their planes were only able to attain a maximum speed of 35 miles per hour with the present speed record of 266 miles per hour.

The new high-pressure wind tunnel was shown and its operation explained and discussed. This laboratory has been attached to the Engineering Division of the Air Service and the Institute personnel is collaborating with the Service in carrying on tests.

In his talk, General Patrick did not adhere strictly to American planes and ships, and some of the foreign planes came in for a share in the discussion. Movies of parachute jumping and testing at McCook Field were flashed on showing both the foreign and domestic planes in test flights.

Pictures of the Barling Bomber,

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BETHLEHEM STEEL TO TRAIN MEN BY CIRCUIT

The Bethlehem Steel Company has just published an offer to 100 men who will graduate from college this June, to establish a "Probationary Circuit" in which applicants for positions with the company may have an opportunity to learn all branches of the business in order that they may choose the branch they prefer, while at the same time the Company officials may observe their work.

The circuit commences on June 25 and will be finished by September 20. Men will be paid $100 a month, and will pay their own living expenses. There will be plenty of manual labor, in order that men may become familiar with all sides of their work.

At the end of the circuit men who have been accepted will start in at manual labor, with an opportunity to become assistants to department heads if their work is satisfactory.

PHYSICS DEPARTMENT CONSIDERING NEW LAB

The physics department has recently been considering the addition of a new research laboratory of Theoretical Physics. The staff of the laboratory, if it is finally established, will include J. T. Norton '18, Professor Paul Heymans, Dr. D. L. Dehlinger, and M. S. Vallarta. Atomic structure and X-ray phenomena will be taken up.

The present research laboratories are crowded now. Research is going on on the rotation of the plane of polarization in a rotating medium, and in connection with this, a one inch steel tube 15 feet long has been made to rotate at the speed of 150,000 R. P. M. Other work now going on includes the experimental determination of Maxwell's law of distribution of thermal velocity, and photoelastic research for the United States Navy and the General Electric Company.

If the new laboratory is established, it will probably lead to the establishment of a number of new courses next year, in Atomic Theories, Theory of Relativity, Theory of Radiation, and Radiology.

FORD OVERTURNS WITH NO INJURY TO RIDERS

Two Sophomores and a member of the Faculty had a narrow escape Wednesday when the Ford roadster in which they were riding suddenly overturned in back of the Institute. None of the three were hurt, although the car was badly damaged.

As L. M. Lucas '26, the driver of the ill-fated car, turned it around at the corner of the parking space near the entrance to building 3, the rear wheels skidded, and caught suddenly on a ridge of ice, upsetting the car. The windshield was completely wrecked, and the top badly damaged in the spill.

The car, which belongs to J. Y. Houghton '26, had been driven in the Massachusetts Avenue entrance, having just come across the river for a 2 o'clock class. The two other occupants were Roger Cutting, of the Mechanical Engineering department, and D. K. Taylor '26. Immediately after the car overturned a number of students appeared on the scene from the buildings, and helped to right it.

T. C. A. TO HAVE NEW MANAGEMENT

Nominating Committee for Next Year's Officers Picked Wednesday

At a Cabinet meeting held Wednesday the T. C. A. reorganization committee recommended that the Association be consolidated and that a more centralized control be adopted. The new arrangement will substitute eight departments for the present 17, and the cabinet will be composed of 12 to 13 men instead of 21 as at present, and will meet bi-monthly instead of monthly.

A three quarters vote of the Cabinet and the approval of the Advisory Board are necessary for the change, but thus far there has been only one dissenting vote from the Cabinet members who have voted.

Nominating Committee Named

The nominating committee for next year's officers was also appointed at the meeting, and consists of C. M. Phelps '24, chairman; Rockwell Hereford '24, and A. W. Rhodes '24. The nominees will be announced about a week before the election which will be held in the latter part of March.

In connection with the Student Friendship work the T. C. A. will make a shipment of books and clothing on a ship which leaves New York March 6. In order that the goods reach New York in time the T. C. A. wants all clothing in the front office by 12 o'clock Monday.

G. L. Bateman '25 and C. L. Petze '25 will represent Technology at the Intercollegiate Conference on the American Student to be held at Yale, February 29, March 1, and March 2. The Conference will discuss the attitude of the college student, the meaning of student activities, and the new spirit on the campus.

REDUCED PRICE T. E. N. GOES ON SALE MONDAY

Contains an Article by Basset Jones Discussing Luck

T. E. N. for March goes on sale Monday and Tuesday at the reduced rate of 15 cents, containing engineering and general subjects in addition to the usual editorial and departmental sections.

"The Engineering Salesman" by E. H. Sniffin of the Westinghouse Corporation discusses the problems of graduate engineers who take up selling as a profession and gives their requirements. This is the second of a series of four articles contributed by the Westinghouse Company to "help engineering undergraduates in analyzing themselves."

Professor L. M. Passano is the author of an article on the "Relation of Student to Instructor' and G. J. Fertig G, has written an article, the first of a series, on "Copper in Modern Steels."

Basset Jones '99, who is a consulting engineer for Mayer, Strong, and Jones of New York, is the author of "The Most Probable World" in which he discusses in a scientific way, "luck" and "chance." The Aldred Lectures of J. W. Powell and Ralph Budd are also printed.

TODAY'S ALDRED LECTURE BY HEAD OF MINES BUREAU

Speaker Noted as Chemist and Metallurgist As Well As Philanthropist

FIXATION OF NITROGEN WILL BE HIS SUBJECT

Dr. F. G. Cottrell, who will give the Aldred Lecture today, is noted as a philanthropist as well as a chemist and metallurgist. While an instructor at the University of California he invented a valuable process for abating fume nuisance. Instead of retaining his extensive patent rights, which would have yielded him a worthwhile income, in the interest of science, he gave these rights to a non-dividend paying corporation which is to use the net income for the advancement of science. The lecture will be in room 10-250 at 3 o'clock on "The Fixation of Nitrogen."

Studied With Van't Hoff

Dr. Cottrell is well known for his work with the Bureau of Mines and through the "Cottrell Patents." The Cottrell Process is a means of precipitating fumes from blast furnaces and smelters electrically, and has resulted in the saving of many valuable products from the fumes as well as abating a costly nuisance. The most recent installation is at a large smelter in Japan while the largest is at the Anaconda Smelter, Anaconda, Montana.

The lecturer received the degree of Bachelor of Science from the University of California. He completed his education abroad, working in the laboratory of J. H. Van't Hoff at the University of Berlin, and also with William Ostwald at the University of Leipzig, from which he obtained the degree of Doctor of Philosophy. He studied at Harvard and also at Technology before returning to the University of California as Le Conte Fellow. He has been an Instructor and Professor at the University of California and was later connected with the Bureau of Mines, becoming Director in 1920. In 1921 he was appointed chairman of the Division of Chemistry and Chemical Technology of the National Research Council, a position which he at present retains.

PHYSICISTS MEET FOR THE WEEKLY SEMINAR

The second physics Seminar of the term was held yesterday. Mr. E. L. Bowles presented a paper on the subject "Radio Waves." After the presentation of the paper it was discussed by Professor N. C. Page '02 and Doctor W. H. Dehlinger.

These Seminars have again become a regular part of the work of the Physics department. All third, fourth year, and graduate students are required to attend them. At present the meetings are devoted to discussions of wave action, a series of eight talks having been arranged on the subject. The meetings consist of the presentation of a paper, a prepared discussion of the paper, and an informal discussion of it by those in attendance.

LECTURES TODAY

Dr. F. G. Cottrell

"FUJI-YAMA WILL ERUPT" — JAGGER

Seismographic Work In Hawaii Is Described at Talk On Wednesday

At his second talk on volcanic action Wednesday, Professor T. A. Jagger, Jr., prophesied that in three or four years Fuji-Yama, Japan's greatest mountain, would erupt with disastrous effect on parts of Japan.

In his talk Professor Jagger dwelt mainly on the daily, seasonal, and long-time cycles of lava rise and fall. He showed a large number of graphs to illustrate his points, and many beautifully colored slides of various types of volcanic action were shown. A short history and description of the Kilauea station was also given. The station was founded by Technology and taken over by the United State Weather Bureau in 1919. It is now operated by the bureau in conjunction with the Institute.

Camp on Crater Edge

The greatest work which the station can do consists in "getting the link between the active volcanoes and the earthquakes." It is based on work of this type that Professor Jagger makes his prophesy as to Fuji-Yama's eruption. The last time that it broke into action was early in the eighteenth century. Four years before the eruption there was an earthquake similar to the 1923 one. If this is a true cycle then there should be an eruption around 1927 or 1928.

Professor Jagger described many interesting phases of the work at Kilauea. At one time a party camped for 24 hours on the edge of the crater and took transit shots at the lava surface every 20 minutes. From this a graph of the regular lava tides could be made. At another time it was desired to drill into a hardened lava bed for specimens.

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Miss Ethel Barrymore Makes Tour of Institute—Amazed at Its Size

Few people are aware that the well-known stage star, Miss Ethel Barrymore, who is now playing at the Wilbur in "The Laughing Lady," visited the Institute yesterday afternoon. She was escorted on her trip by L. B. C. Colt '26, who is related to her. After her journey she was entertained at a tea by the Theta Chi fraternity.

When asked her impression of the Institute she said that she had had no idea that the buildings were so immense or that the equipment was so complete. She was quite amazed to find out that there were a few co-eds attending the Institute. In some of the Chemical laboratories she noticed them working and was struck with the fact that they should choose an engineering career. She was delighted to be given the chance to go the rounds and once or twice held conversations with the professors.

ProfessorW. T. Hall of the Chemistry try department, was one of the men who had a chat with the noted actress. Afterwards he told of the first time, when Miss Barrymore was only sixteen, that he had seen her on the stage. She was fascinating to talk to and in most of the places where she stopped, many of the students gathered around to listen. She seemed pleased to find that the Tech students were not so cold blooded and practical as they are supposed to be. For certainly enough interest was shown when she stopped for short periods around the Institute buildings.

She confessed that she had never seen a Tech Show, but said she had often heard of its performances and that some day she hoped to be able to see one herself. She leaves this week for her western tour and expects to return to New York some time next season where she will appear in some new play. She expressed herself as rather dissatisfied with the general type of play that is being written now and even thought that playwrights had forgotten how to write good plays.

PROM COMMITTEE PLANS TO STAGE MUSICAL BATTLE

Morey Pearl's Brunswick Record Orchestra To Oppose Bert Lowe's Aggregation

MANY DISTINGUISHED PATRONS FOR AFFAIR

Decorations of Floral Nature To Adorn Hall—Favors Are Imported

As a novel feature of this year's Junior Prom, the music for dancing, which will be continuous from 10 to 4 o'clock, will be in the form of a battle of music between Bert Lowe's Feature Orchestra and Morey Pearl's Brunswick Orchestra. This species of contest is not a new departure for the orchestras concerned for they have already fought each other for supremacy and the high feeling between them is only strengthened by age.

Bert Lowe's aggregation has graced such affairs as the Harvard Junior Prom, the Dartmouth Carnival, our own Fete Charette, and the Southern Club dances. It has played for such notable personages as Vincent Astor of Newport, W. K. Vanderbilt of New York, and Payne Whitney of New York; and has performed at Keith's Theatre here. Among the well-known musicians in his organization are: Lew Calabrese, banjo; Will Paige and Frank Kilduff, saxaphones; Heinie Feltcorn, trumpet, and Bob Barny, trombone. Bert Lowe has a standing offer from the Victor Company to make records for that concern, and although he has not as yet taken advantage of this opportunity he stated in a recent interview that when he did, his productions would far outclass those of his rival.

Morey Pearl's orchestra has just finished making a new Brunswick record which will be put on sale about April 1. Featured on this record are "Since Ma Played Mah Jong" and "Cover Me Up With the Sunshine of Virginia." His organization has played at the Wellesley Senior Proms, and the Harvard Freshman Jubilee as well as the Dartmouth

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PHILADELPHIA ALUMNI HONOR DR. STRATTON

President S. W. Stratton was the guest of honor at a dinner given by the Alumni at Philadelphia, Wednesday evening. Several noted educators paid tribute to him in their speeches. Vice-President Elisha Lee '92, of the Pennsylvania Railroad acted as toastmaster.

Included in the list of speakers were Dr. Josiah H. Penniman, president and provost of the University of Pennsylvania, Professor Frank Aydelotte, president of Swarthmore College, and Dr. William L. Fernald, president of the Engineers' Club.

ORCHESTRA OF FIFTEEN PIECES AT TEA DANCE

A 15-piece orchestra, Johnson's Syncopaters, is to furnish the music for the Walker Memorial Committee tea dance, to be held in Walker tomorrow afternoon. This is one of the largest orchestras ever to play in Walker for a student affair.

The dance is for the benefit of athletics in general. It will last from three to six o'clock. Tickets are obtainable from any member of the Walker Memorial Committee or of any of the athletic teams, at $1.50 a couple, but the price will be raised to $2 at the door.

The patronnesses will be Mrs. H. S. Ford, Mrs. W. M. Ross, Mrs. L. M. Passano, and Mrs. King.

CALENDAR

Friday, February 29

3:00—Aldred Lecturer, room 10-250.
5:00—Bible Study Group, 490 Beacon St.
6:30—Class of '05 dinner, Faculty dining room, Walker.
8:00—Masonic Club dance, main hall, Walker.

Saturday, March 1

3:00—Walker Memorial Committee tea dance, main hall, Walker.

Wednesday, March 5

7:45—Combined Professional Societies Smoker, main hall, Walker.

Tuesday, March 11

6:30—Class of 1908 Dinner, Faculty Dining Room, Walker.