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IN CHARGE THIS ISSUE

F. W. Adams A. J. Browning '22

TUESDAY, DECEMBER 30, 1919

PROFESSOR PICKERING '79 SEEKS SUPPOSED PLANET

Professor William H. Pickering '79 of the Harvard Astronomical Observatory, who is stationed at Mandeville, Jamaica, is now engaged in a search for the planet which is supposed by astronomers to exist outside Neptune, and estimates that this undiscovered member of the solar system is some fifty-five times as far from the sun as is the earth, according to a statement made by Professor Solon I. Bailey, acting director of the Harvard Observatory.

"Astronomers have suspected the existence of a planet outside Neptune for at least fifty years," said Professor Bailey, "and since 1877 many observers have tried to locate it. The usual method was to study the perturbations of Uranus and determine from these what must be the situation of the object which was deflecting Uranus from its course. In recent years Professor Pickering has studied the perturbations of Neptune, as well, and as a result he has ascertained what he believes to be the approximate position of the new planet.

"Professor Pickering has recently been engaged in a systematic study of photographic plates of the area of the sky in which he believes the planet to be situated at present. His method is to have telescopic photographs of a certain small section of the heavens taken at short intervals, sometimes taken only a day apart, and by placing the plates one on top of another to see if any of the minute points recorded on the plates seem to have moved. This is the surest method of conducting such a search. The photographs are being taken for him here at Cambridge and at other observatories.

DAUGHTER OF INSTITUTE PROFESSOR IS MARRIED

Miss Elizabeth W. Passano, daughter of Professor Passano of the department of Mathematics at the Institute and Mrs. L. M. Passano, was married last Saturday evening at 8.00 o'clock, to Leicester S. Raynor of Winchester. The ceremony was conducted by Rev. M. W. Dewart in the Church of the Epiphany, Winchester. Mrs. C. W. Shaw, of Baltimore, was matron of honor, and F. L. Mower of Swampscott was best man. The bridesmaids were Miss Katherine Starr and Miss Ruth Caldwell of Winchester, Miss Gertrude Peck of Scranton, Pa. and Miss Grace Dyer of St. Louis.

The bride was beautifully arrayed in a gown of ivory satin with a prin-

cess train and a rose point lace head-dress and tulle veil, with orange blossoms. She carried bride's roses with a shower of white sweet peas. The matron of honor wore cloth of silver, with blue tulle hat to match and carried pink roses. The bridesmaids wore pink Georgette, trimmed with blue and silver, with hats to match and they carried Ophelia roses.

Mrs. Raynor is a student at Vassar College, Class of 1921. Mr. Raynor is a graduate of the University of Pennsylvania in the Class of 1916. He served in the 101st Field Artillery with the Twenty-Sixth Division in France.

ICE RINK OPENS

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Club, the Dartmouth Hockey Club, and the Yankee Division team. Games outside of these leagues will be played among the various teams, whenever they will be able to get together.

The tentative schedule of the Technology games is as follows: January 9, Tufts; January 17, Massachusetts Aggies, January 21, Dartmouth, and January 31, Amherst, at the Pavilion; February 14, Williams, at Williams-town; February 23, Springfield Y. M. C. A. at Springfield; February 31, Cornell, at the Pavilion. On Friday evening of the opening week Toronto will play the Princeton varsity, and the following night will meet the Harvard Club, both of these games being at the Pavilion.

A big objection to former skating pavilions in this city has been that there was no regular time set aside for public skating, and parties coming to skate would be very liable to find the rink already in use for a game. This difficulty will be obviated in the present rink, as special evenings are set aside for the purpose of hockey. The actual ice surface measures 160 by 52 feet, along one side of which there is a heated promenade, separated from the skating space by a glass partition. A grandstand with a capacity of 1000 persons will accommodate the spectators, and several hundred more will probably be admitted to each game. For the benefit of the players there are special team rooms equipped with shower baths also there are club rooms for the use of the special organizations who use the rink. There is a ladies' reception room, attractively furnished, and also a ladies' dressing room. The management, of which George B. Woods is the head, will take especial pains to see that very particular service is afforded, and to this end have employed Institute men entirely. Paul J. Roche '22 has charge of this work generally, and can be seen by anyone who is interested in these particulars. Uniformed skating instructors will be prepared to teach both plain and fancy skating.

A difficult problem in the construction of the rink has been due to the

fact that it is on the second floor and the rooms and stores below must be kept heated. This difficulty was overcome by using layers of cork and special five course paper, laid in hot hydrolin. First the layers of paper were laid down and covered over with hot hydrolin. Next were two layers of cork, also laid in and covered with hot hydrolin. Following this came more cork, again soaked in the liquid. A layer of five course paper completes the insulation on top of which was laid four miles of inch and a quarter pipe. Through this entire length is run the brine solution, after it has come in contact with the ammonia in the refrigeration machines.

These machines are two in number and are of the fifty horsepower, Frick, duplex variety. Lenox drive motors are used. On the roof is located a condenser, in which the ammonia is reliquified for further use.

Mr. George A. Woods, president of the Ice Pavilion Incorporated, states that there has been no real delay in opening the Pavilion. The management finds itself swamped in such a mass of detail that it is very hard to say at any particular time what the general progress of construction is. Labor troubles have been instrumental in causing some of the delay, while a further cause is the difficulty of getting all the machinery together, as much of it comes from a distance.

DELEGATES LEAVE ON DES MOINES SPECIAL

(Continued from page 1)

not to attend the convention. He had been a member of the committee appointed to investigate the matter, and had interested himself in helping the undergraduate committees in their work. However, since to have attended the convention would have meant very much inconvenience to Professor Pearson, he delegated Mr. Hewitt of the English department who is very much interested in the Student Volunteer movement to take his place.

The special train which left yesterday with the delegation from Technology, carried also the representatives of most of the other New England colleges, and was arranged for by Mr. Ross. It consisted of three sleeping cars for women, four for men, and a dining car, to which will be added at Albany cars containing delegates from eastern New York and western Massachusetts. Because of the short time left before the reopening of the colleges, there will be, with the exception of a four hour stop in Chicago to enable the delegates to do some sight seeing, no breaks in the trip.

It is expected that the Technology delegates will stay at the same hotel during the convention, but final arrangements have not yet been made. The meetings of the convention will be held in the Coliseum, which has ample accommodations for the 7500 delegates who are expected. Seating arrangements have been made so that all delegates from the same state will sit together. It is hoped that one of the real results of the convention will be the creation of a more sympathetic understanding between the students of colleges situated near one another, where the proximity makes for rivalry, which is not always friendly. The meeting of the delegates of such colleges offers an excellent opportunity for the creation of such an understanding.

Technology will be represented by the following men; N. G. Abbott, Jr., '20, W. R. Barker '21, H. C. Button '21, W. L. Coffren '20, J. L. Dodson '21, E. C. Farrand '21, S. W. Freese '22, A. D. Harvey '21, F. L. Hewitt, I. D. Jakobson '21, A. L. Jonson '22, J. Kawai '22, H. R. Kepner '20, H. N. Landis '21, W. N. Lang '22, D. R. Lindley '22, W. R. McKenney '20, A. W. Norton '21, W. H. Noyes '22, M. H. Pai '20, J. A. Plimpton '22, W. B. Purinton '22, J. S. Rofferty '22, H. M. Ramsay '22, C. H. Reed '20, K. J. Roman '20, W. M. Ross General Secretary of the T. C. A., R. A. St. Laurent '21, R. H. Smithwick '21, F. C. Spooner '20, A. F. Taylor '22, S. H. Wells '20, W. L. West '23, W. K. White '22, M. M. Whitaker '20 and P. S. Wilder '23.

Of the 534 delegates from New England colleges, 371 are from Massachusetts, 18 from Rhode Island, 18 from Vermont, 32 from New Hampshire, 30 from Maine and 65 from Connecticut.

NOTICES

For Undergraduates

News Meeting of THE TECH—All newsmen working on THE TECH during the vacation period are required to report to the News Room at 2 o'clock, Friday, January 2. Several assignments have been posted, and must be called for immediately.

Alumni Notes

WHITNEY '17—READ

Mrs. Edwin Read of Lexington has announced the engagement of her daughter, Frances, to Harold Osgood Whitney '17, son of Mr. and Mrs. A. H. Whitney of Watertown. Whitney entered Course II at the Institute with the Class of 1917 where he stayed for two years. During the war he was a member of the United States naval reserve corps.

LIVERMORE '15—STONE

Mr. and Mrs. William A. Stone of Mineral street, Ipswich, have announced the engagement of their daughter, Marjorie Virginia, to Joseph Mason Livermore '15 of Boston. Livermore is a graduate of Course I and a member of Phi Beta Epsilon fraternity. He was a member of the tug-of-war team during his freshman and sophomore years and was assistant business manager of Technique 1915.

TECHNIQUE 1921 HAS MANY NEW FEATURES

(Continued from page 1)

means that the remaining members of the class will have to act quickly if they wish to be represented. The photographer is Notman's, 4 Park street, and about eighteen men can be accommodated in a day. The management asks that the proofs be turned in when received for about seventy-five men have their proofs but have not sent them to the office and this will force the men in charge to select the picture to be used. "No exceptions can be allowed and the quicker the appointments are made the better for all concerned," says R. H. Smithwick '21, editor-in-chief.

Technique 1921 will be longer and narrower than Technique 1920. The binding is heavier but more flexible and the color scheme chosen is black, white and gold. The volume will contain the same number of pages as that of last year's edition. Warner's White Coated Lustro, 119 pound stock, is the paper that will be used and with a novel arrangement of a black and white border, it will show up the printing in very fine style. This black and white border is a new idea which is expected to contrast the page and make it more pleasing to the eye. As the book lies open, it will run along the top and down the right and left sides. This year's management is not using any cardboard inserts for the sectional headings, but these will be printed on the same paper as the rest of the book in black and flat red. The price is \$3.50.

Signup week comes from January 9 to 16. Each year there is such a demand for books that the supply runs short unless students have signed up in advance. For this reason signup week is held so as to give everyone a chance to get their application in. Tables will be in the Main Lobby with men there all the time to take subscriptions. These signups will be redeemed right after the Technique Rush on April 15 in the Main Lobby. This year's rush will be held under different rules from those of previous years, but no definite announcement can be made at present.

One Sophomore editor and four assistants and one Freshman editor and four assistants are to be chosen immediately after signup week. Their competitions have been running since the beginning of the school year. The standing of the men is very close and the outcome of the race will depend much on the efforts put forth from now on. The lucky contestants are to be elected by the electoral committee which is chosen from the Sophomore class during the latter part of January. Ballots are mailed to every member of the class, who is allowed to vote for twenty-five men. The twenty-five highest compose the committee and they proceed to elect next year's board as fast as men can qualify.

This year's board which is putting out Technique 1921 is composed of the following men: R. H. Smithwick '21, editor-in-chief; W. R. Barker '21, business manager; W. Dean '21, treasurer; F. B. Kittredge '21, societies editor; I. D. Jakobson '21, portfolio editor; H. P. Junod '21, athletic editor; R. P. Windish '21, photographic editor; W. G. Loesch '21, associate photographic editor; Z. P. Giddens '21, grinds editor; H. F. MacMillin '21, statistics editor; W. Adams '21, faculty editor; Roger Hayward '21, art editor; M. F. Farren '21, associate art editor; C. C. Carven '21, associate art editor; H. C. Button '21, associate business manager; E. P. Clark '21, associate business manager.



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