



Armour Tech News

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Poulter Leads Snow Cruisers On Trip East

With its crew, consisting of Dr. Thomas C. Poulter, Commander; Dr. F. A. Wade, Chief Field Scientist; Charles Meyer, first class machinist's mate; F. Ferranto, radio operator; and T. A. Petras, airplane pilot, the Snow Cruiser has started on its way from Chicago to the South Pole. The sixth member will be "Navy," a Labrador huskie belonging to Dr. Wade. The limited Snow Cruiser crew had to be versatile. Their combined talents include airplane mechanic and pilot, radio engineer and operator, aerial photographer, navigator, geophysicist, surveyor, Diesel engineer, physicist, medical doctor, cook, meteorologist, astronomer, geologist, chemist, and mineralogist.

Hydraulic Controls

There is no steering wheel as the controls are hydraulic and consist of two levers which only move back and forth. One controls the front wheels and one the back. With this arrangement it is possible to turn the 55 foot cruiser in a circle having a 30 feet radius by turning the front wheels and rear wheels in opposite directions.

The rubber tires have a smooth surface, are ten feet in diameter, and are over a yard wide. There is 15 pounds pressure in these 12 ply tires and enough friction to go up a 37 per cent grade. In each wheel is a special pumping device to pump air in or let it out as the wheel turns. To change this tire weighing 1500 pounds, the wheel is raised off the ground with hydraulic controls and removed with the help of a small crane. The tube alone weighs 250 pounds.

Warm Tires

Frozen rubber is stiff and apt to crack. It freezes at minus 72 to 98 degrees Fahrenheit. Since the lowest temperature recorded in the Antarctic is 80 blow zero, the wheels are retracted leaving the cruiser resting on metallic skids, when it stops. The tires are warmed before proceeding by placing an apron over the tires and heating them with the exhaust. Internal heat will be generated when the cruiser is in motion which eliminates any further freezing danger. (Continued on page six)

Eye Presents Photos Friday

Armour Eye's first salon of the year will be held Friday night, November 10, 7:30 in the Student Union. This salon is open to all students of the Institute and to anyone else interested in photography. Entries are now being accepted at the Armour Eye club rooms, fourth floor, second entrance Chapin. All entries must be in by noon Nov. 9. Each entry is limited to four prints, 8 by 10 inch or larger, mounted on salon cardboard 16 by 20 inch in size, and may be on any subject the person chooses.

Among the participants in the salon have been students who have received awards at the A. S. M. E. salon, Marshall Field Exhibition and academic displays at the Art Institute. The club sponsors these salons not only for the purpose of exhibition but also for discovering the hidden photographic and artistic qualities that Armour students possess.

Classes Started

The club membership has not yet reached its capacity, and still has room for new blood. Classes are now being held for those students interested in learning photographic practice, and are open to all students of the Institute. Stress has been laid upon the possibilities of creating a continuous progressive course in photography that will go into the detailed theory of the chemistry and processes. Whether or not this course will develop depends upon the demand of the students.

Seniors Asked To Check on Records

According to announcements which have been appearing on the bulletin board for the past few weeks there are several items which are of importance to the graduating seniors, but which have not been given proper attention.

Most important is the point of checking the graduating records. The list of those who should pay a visit to the office has been up for several days, but Mr. Kelly states that there are still a good many men who have not complied with his request. Checking of the graduating record is a very important task, for there may be an unnoticed incomplete, or other deficiency on the order of gym credits which may cause difficulty if left for next semester. All of the records are on the file, requiring only a minute to get the whole process over with.

Four Day Vacation

In answer to numerous inquiries which have come in the last few days, Mr. Kelly wishes to announce that the Thanksgiving holiday will fall on November 23, in accordance with the proclamation issued by Governor Horner. As in former years the Friday and Saturday following the feast day will also be given over to vacations.

A steadily increasing pile of assorted objects have been accumulating in the registrar's office as a monument to the careless or forgetful student. Slip sticks, hats, books, gloves, scarfs, and so on, fill a good portion of a space in one of the cabinets. If you have lost any article, please call for it at the registrar's office.

Chem Lab Features Newest Colorimeter

New physical chemical equipment this semester includes many additions. A colorimeter, precision built, used for comparing color in different solutions and giving the percentage of a color in solution is one of the outstanding pieces of new equipment.

A cathetometer, which accurately measures distance readings in conjunction with the manometer, an oxygen torch, and a new De Khotinskai regulator for the constant temperature bath were also added this year according to Dr. Longtin, a new addition to the campus himself.

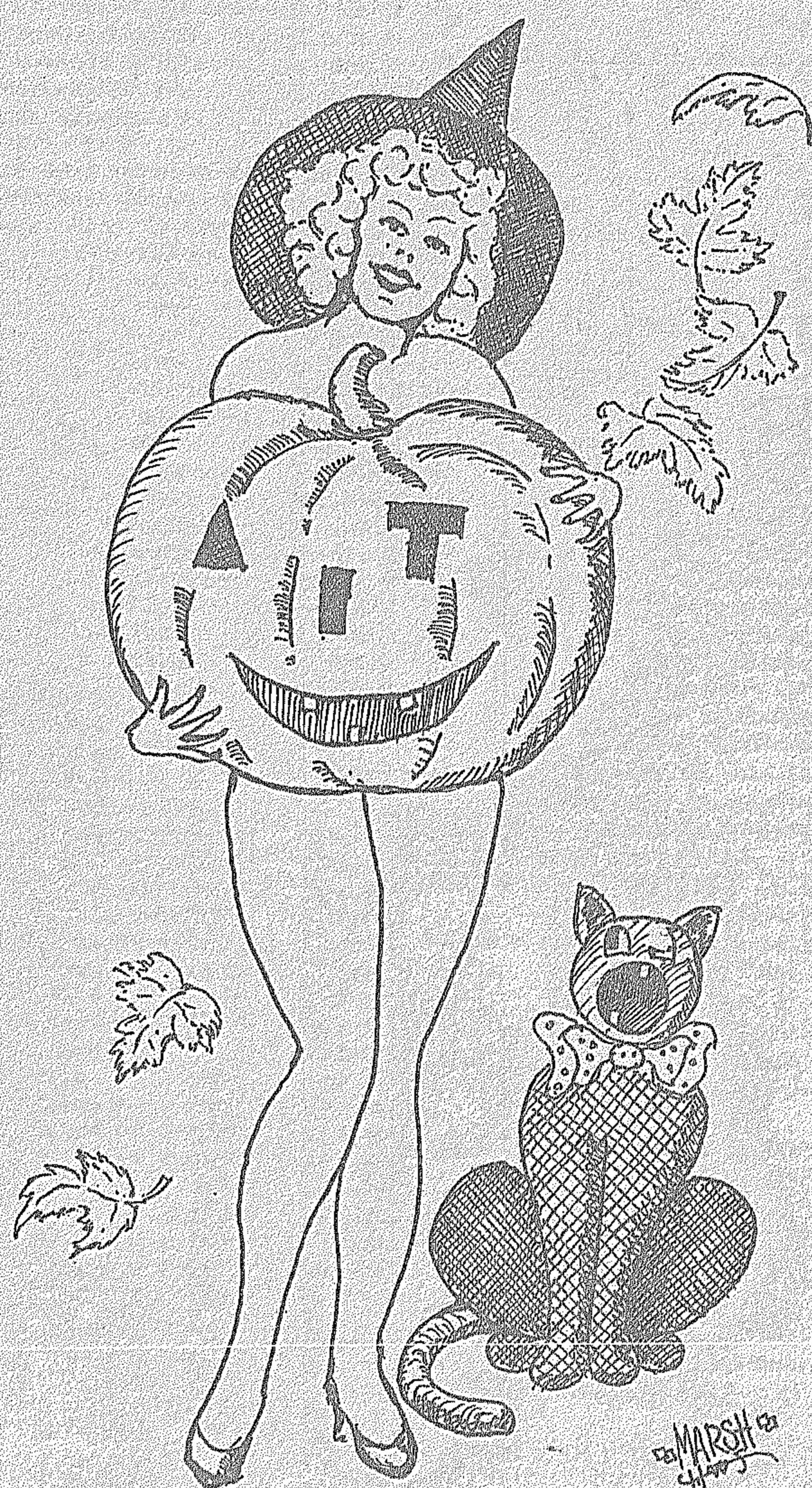
Papers Presented By Armour Profs At Metals Exhibit

During the week of October 23rd to 27th the American Society for Metal extended to America at large a cordial invitation to the twenty-first National Metal Exposition and National Metal Congress. The Exposition was held in the Palmer House where speakers from the companies and schools represented at the Metal Congress presented technical papers prepared especially for this great affair. The Metal Congress was held in the International Amphitheater. Also represented at the Metal Congress was the American Welding Society and the Wire Association. The former was housed in the Hotel Stevens, the latter in the Congress Hotel.

Many Participate

All in all, there were 265 companies and 2 schools, Armour Institute and Lewis Institute, represented. The companies presented the latest developments in their methods and equipment. All types of furnaces were displayed, dust collectors, welding methods were prominently shown.

Also on Monday Professor J. Marshall spoke on the "Failure of Aluminum Subjected to Combined Stresses" in front of the American Welding Society at the Stevens Hotel. On Friday, also at the Stevens, Professor Pearl spoke on a "Study of Heat Effects in Welding."



A Message From the President

The forthcoming combination of Armour and Lewis represents a most important forward step in the development of this institution into one of the outstanding colleges of engineering in America. Although the combined institution will be known as ILLINOIS INSTITUTE OF TECHNOLOGY, the name of Armour will continue to be applied to its engineering courses, thus retaining the reputation and good will which the school has accumulated through many years of significant service.

Building upon its past record of achievement in education and in research, it will be the object of the new ARMOUR COLLEGE OF ENGINEERING to develop higher standards of instruction, improved facilities, increased contributions to research, and greater service to youth and to industry.

The consolidation has been entered into only after a long period of careful study by members of the Boards of Trustees of both institutions. They are unanimous in their conviction that it will result in greatly improved educational opportunity for youth in this community.

I particularly ask the whole-hearted cooperation of every member of the student body and faculty of Armour Institute of Technology in bringing about the greatest possible benefits from the new program.

HENRY T. HEALD, President.

Placement Office Announces Abundance Of Part Time Jobs Available Immediately

Part time jobs are becoming more plentiful. The placement office has announced the addition of 50 such jobs, the majority being of a clerking nature in downtown department stores. The jobs are immediately available and may be obtained through application to Mrs. Carroll at the placement office.

It is expected that within the next month a group of 25 part time jobs requiring men for purposes of lecturing and demonstration will be made available through the efforts of the placement office. The requirements for these jobs will probably be a good vocabulary, good public speaking ability, pleasing personality, neatness of dress, and a good technical knowledge. At present this group of jobs

is in the forming stage. More definite information will be given later.

There are also a number of jobs available for unemployed night school men. Applications should be made before 4:30 P.M. on any day.

As announced last week, more than 250 part time jobs had already been secured with department stores and the post office department. The additional positions bring the total to more than 300, or a job for every fifth student.

Because the school calendar provides a full week of vacation prior to the Christmas holidays, all college men should take advantage of part time jobs as they offer an ideal solution for the problem of where to secure money for holiday activities and gifts.

Swing Out Cats, It's the Arx Dance Friday Eve at Shawnee

Exhausted By Non Trips, Scribe Goes To Halloween Orgy

By Art Hansen

Having fully recovered from our recent sojourn among the non-existent penguins and polar bears in the antarctic, and coming back from eternity in which we thought we saw angels licking popsicles, only to wake up and find that we were in a movie house watching the Dead End kids in "Angels With Dirty Faces" and that the popsicle effect was simply the cold air vent under our seat sending a stream of frigidity up our pants leg, we return to our haunts of always being on the spot that the news isn't.

Song Unused

Important events have happened during the week. Not that we care a darn about the important events, it is the little things in life that we try to champion, you know, the Lone Ranger of the scandal sheets. Items of unimportance that have happened the last week might include the Snow Cruiser taking its first airing. Or we might mention the merger of the two engineering schools, Armour and Lewis. However, all these things are carried away in the tide of indifference with the momentous announcement that the glee club positively will not sing the now famous Armour Snow Cruiser Song at its dedication, at least not now. The Cruiser is away and gone and will have to be dedicated when it comes back. So the boys can pack away their wolf howls and penguin barks in their filing cases for future reference.

Main Topic

Circling around the things that constantly sweep across our minds, we get back to the main topic of the day—Halloween. Halloween is a tradition dear to the hearts of all the kiddies in the land, and to many, many, many of the bigger kiddies. If it were not for the excuse of Halloween, many things would not happen. Little kiddies would not soap windows. Bigger kiddies would not throw stench bombs into street cars. Still bigger kiddies, and may we mention kiddlets (the feminine gender, of course) use this eve of all eves (Continued on page three)

Antarctic Mail To Be Marked By Expedition

Wahoo, gang, guess what? The Eskimos and penguins are to have a bright, new (and incidentally their first) post office by the grace of Uncle Sam and Armour Institute. Such a momentous occasion requires something more than just an ordinary post office. The new structure is to be a brilliant red edifice mounted on wheels to facilitate door to door delivery.

Of course the new post office (otherwise known as the Snow Cruiser) is not to be established for the sole benefit of the Antaretics. Besides investigating the lay of the icebergs and dropping notes in igloos and ice crevasses, the boys will find time officially to plaster a cachet upon numerous covers (specially addressed envelopes) commemorating the exact minute, hour, day, and year of the cruiser's arrival at the South Pole.

Historical Covers

If you are a member of the super avid philatelists (stamp collector in English) and want to obtain one of these historical covers, you should send your stamped, addressed covers to the Fidelity Stamp Company, 945 Pennsylvania Avenue N. W., Washington D. C., which has made arrangements for handling these covers. On the assumption that you will have included with your covers the sum of 50c per cover (or \$5.00 for 12 covers), and on the further assumption that the expedition is not lost and that the Snow Cruiser returns intact, you will be the proud possessor of a cover addressed to yourself with a cachet plastered on the cover.

Correy Lynn Wields The Baton

Friday night is the night. It's the night when Armour's Arx present their biggest and best dance, held this year at the beautiful and spacious Shawnee Country Club. Correy Lynn and his orchestra have been warming up for the dance and will be on deck to furnish the music for the boys and girls who attend.

An extra special feature will be offered at this year's affair, said surprise being the selection of a "Queen of the Arx Dance." Fred Prather, representing the Armour Architectural Society, which is sponsoring the dance, will act as chairman of the committee which will judge the respective merits of the young damsels and present an orchid corsage to the most charming.

Ideal Setting

The beautiful surroundings and facilities of the Shawnee Country Club make it an ideal setting for an occasion such as the Arx Dance. Simple directions for reaching the site are herewith set forth for the convenience of bewildered students. Traveling north, follow Sheridan Road to Lake Avenue and go one block east to the entrance of the club. Lake Avenue is the first stop light north of the Bahai Temple in Wilmette.

Bids On Sale

Bids may be obtained from any Armour architect for \$1.50. A booth will be set up on the first floor of the Student Union for the sale of bids, on Wednesday, Thursday, and Friday between 8 and 9:30 in the morning. Only four days remain and the bids are going fast.

Correy Lynn's orchestra is well known to patrons of Chicago's dancelands. Correy played throughout the summer at the Lions Ballroom and among his previous engagements number the Merry Gardens, O'Henry Park, Aragon, Trianon and the Congress Hotel. His music will (Continued on page six)

T. L. Condrón's A.S.C.E. Speech Tops Meeting

Last Friday, October 27, at the ASCE meeting Mr. T. L. Condrón, Structural Engineer, talked on the subject "Open Caissons For Bridge Foundations in Deep Water With Swift Currents."

Mr. Condrón began his speech by mentioning that there has been progress in the size of suspension bridges in the last few years. The longest one is the recently finished Golden Gate Bridge (4200 ft.). The second bridge is the Geo. Washington Bridge (3500 ft.). The third, the Tacoma Bay Bridge which is now under construction will be 2800 ft. long. Mr. Condrón used this bridge for his discussion. A blue-print and a diagram were exhibited to show the main parts of the bridge.

Built On Land

In order to explain the caisson foundation more clearly Mr. Condrón used some very interesting lantern slides. In working with open caissons as contrasted with closed or pneumatic caissons, almost all of the work to be done is dry. In the example of the Tacoma Bay Bridge two caissons were built on land. These caissons are 120 ft. by 66 ft. by 48 ft. A false bottom of timbers is inserted and the caisson is put on the water by means of a dry dock and one or two barges. The dry dock and barges are then slowly submerged until the caisson floats in the water like a boat.

Filled With Water

The caisson is towed to its destination where it is anchored to about 80 concrete blocks of 600 tons each. The position of these anchor blocks is determined by triangulation. By building up the caisson and filling the inside with water the caisson is slowly (Continued on page six)