

Microscope, Circular Dividing Engine, Among Unusual Physics Instruments

A rare circular dividing engine. An equally rare electron microscope.

More than \$2000 worth of electrical meters.

These are among the many pieces of equipment, usual and unusual, to be found in IIT's physics department. Some are used for the sophomore and freshman laboratories, some for demonstration purposes, and others for research.

The dividing engine mentioned above has a story behind it. During the first World War, it was the only one in the Chicago area, and was constantly being loaned to various war plants. The instrument is used for accurately dividing a circular scale. It was made in 1895 by the Geneva Society, a Swiss company which manufactures scientific equipment.

Other instruments which date from the 19th century are a lantern polariscope, a Kater pendulum, a standard meter bar, and a photometer bench with related equipment.

The Kater pendulum is an experimental method of accurately measuring the gravitational constant, g . This apparatus was also made by the Geneva Society.

The standard meter bar is a copy of the bar in France which is the standard for all length measurements. The photometer bench, which has a Lummer-Brodhun photometer cube, is used by sophomore students for a light experiment.

The electron microscope, one of the few in this area, together with its various accessories, cost some \$11,000. The microscope is housed in

a special lab on the third floor of the physics building. The plastic-walls of the room, grey and white to harmonize with the color of the instrument, make this one of the showplaces of the Institute.

Another large and expensive piece of apparatus is the Van de Graf high voltage generator and the pressure tank and auxiliary equipment, valued at \$8,741, designed for research in nuclear physics.

But small equipment is also necessary, as evidenced by the fact that the department has some 16 balances, 39 calorimeters (more than 18 different types), and 71 ammeters, voltmeters, etc. All told, the meters are worth \$2,187.35. Most expensive one is a \$170 kilovoltmeter.

Further proof of the fact that expensive things often come in quite small packages is the prism used in Dr. Forest F. Cleveland's spectroscopy laboratory. Made of potassium bromide it cost \$110. The department also has some 59 other prisms, worth \$718.25.

Likewise, the department is well supplied with spectrometers and spectrographs—\$9,041.55 worth, to be exact. Contributing heavily to this amount is a \$2,000 Hilger's Spectrograph, and an Infra-red spectrograph, which was built at the Institute, and is valued at \$4,000.

Of historical interest is one item which has been given to the Rosenwald Museum of Science and Industry. It is the induction coil which was used by Lee De Forest, inventor of the triode vacuum tube, in his early work in radio broadcasting. (The triode, which is basic for radio and electronic devices, was developed by De Forest while working at the Institute.) He used the coil to broadcast to the nearby LeCoda Hotel on 31st street, since converted to a hospital. This is believed to be the first radio broadcasting in Chicago.

Pharmacists Mate to Leave for Fleet Duty

A change in the navy medical staff was announced this week by Lt. Comdr. James W. Sours, unit medical officer. George Wise, Ph. M. 1/c, has received his orders for fleet duty and will leave the latter part of this month. Wise is to be replaced by Jack Margolis, Ph. M. 2/c, who reported here from Great Lakes. He is a graduate of the pharmacy college at Ohio Northern University.

Anderson Leaves IIT

Le Roy T. Anderson, electrical engineering instructor, has been given a one year leave of absence from IIT to work for the Bell Telephone Company.

Anderson will be replaced by George Levy, who formerly was a radio engineer for United Airlines, according to the electrical office.

Senior Stag to Be Held Feb. 16

The Senior Stag, traditional graduates' get-together, will be held February 16 at Gross's Hall, 2123 W. Roscoe, Mike Coccia A/S, class social chairman, reported today. The event will be a formal dinner. Caterers will be hired to provide the meal.

The affair will feature speeches by class officers. An evening of fun, including games, will follow. Refreshments will be served.

Only graduates will be invited. It is expected that the sole charge will be one-half the price of the dinner. Tickets will be on sale shortly, said Coccia. Seniors are urged to watch for further announcements.

Dean's Office Must Approve All Notices For Bulletin Boards

Starting this week, all notices to be posted on the bulletin boards will have to be approved by the dean's office. This is the latest rule on west campus bulletin boards issued from the dean's office.

Oak headings are being made by the maintenance department for the bulletin boards. The registrar's office, business office, dean's office, employment, social events, scholarships *Technology News*, and the ITSA will each have a bulletin board of its own. These boards will be located in the lobby according to their importance. Two boards are immediately adjacent to the business office and the other six will be found on the two pillars in the lobby.

Bailey to Speak at Power Conference

The keynote of the annual meeting of the Midwest Power Conference will be an address by Alex D. Bailey, vice-chairman of the IIT Board of Trustees. His subject will be "Post War Planning of the Nation's Power Supply."

The meeting will be held at the Palmer House on Thursday and Friday, April 13 and 14, revealed Professor Stanton E. Winston, chairman of the conference.

Seegrist on Leave of Absence Due to Illness

Professor Walter H. Seegrist of the mechanical engineering department is on a leave of absence due to illness. "He will probably resume teaching after the end of next semester," said Professor Stanton E. Winston, who is in charge of the department.

In addition to the regular daytime instruction, Professor Seegrist was also a supervisor of several ESMWT courses at Lewis. Professors Winston, Nachman, and Sogin will take over his classes.

Engineer's Co-op to Decide Important Questions At Mass Meeting Today

The Engineer's Co-op Bookstore may:

Establish a branch at the University of Michigan.

Buy out the Institute bookstore.

Establish a branch on the West campus.

These items are all on the agenda of the semi-annual meeting of the Co-op's stockholders to be held at 5:30 p.m. today in the Auditorium of the Student Union.

Other business at the meeting will include an election of officers and new board members and approval of the annual financial statement. The meeting will be adjourned at 6 p.m. said Don Arenson, president of the Co-op.

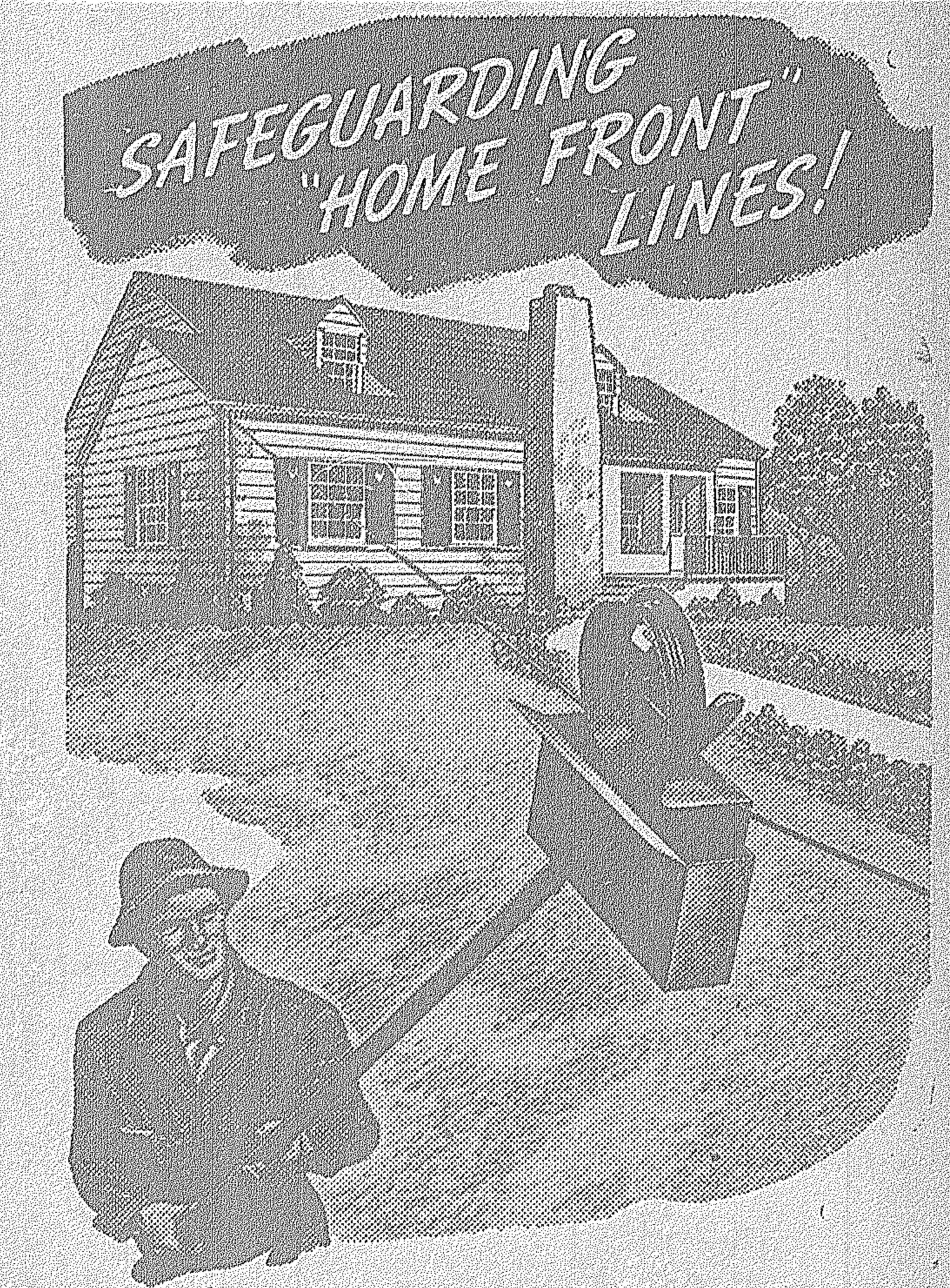
The idea of buying out the Institute store would have to be supported by 100% of the stockholders, according to Arenson, who invited all stockholders and interested non-stockholders to attend and participate in the discussion today.

In regard to the possible branch at Ann Arbor, Arenson refused to give any details.

The plans for the Lewis store have been approved by Dean Ernest Walker, but although suitable space has been found, Institute Business Manager R. J. Spaeth denied the Co-op's request to rent it to them, said Arenson. He added that "A mass appeal for a Co-op at Lewis presented by Lewis students might force Mr. Spaeth to change his decision."

Four new directors will be elected from nominations made by the present board of directors, and will take office on March 1. Also to be decided is whether or not Arenson will continue as president. He is at present filling the unexpired term of Earl Mills, who resigned several months ago. The stockholders may elect a new president or vote to have Arenson continue in office until the end of the spring semester.

"Every stockholder, that is, anyone who has purchased a \$2 share of stock in the Co-op, will be eligible to vote at the meeting. In order to increase his dividends, every stockholder should take advantage of his voting privilege", stated Arenson.



Final Examinations Set for Feb. 22-26

Final examinations for the current term will be held during the week of Feb. 22-26 according to a newly prepared calendar issued by the Registrar's Office.

It was also revealed that the baccalaureate and commencement for the February graduates will occur on Feb. 20 and 21 respectively. The calendar is as follows:

Feb. 20	Baccalaureate
Feb. 21	Commencement
Feb. 22-26	Final Examinations
Feb. 24 & 25	Evening School Registration
Feb. 26	Last Day of Second Term
Mar. 1	Navy Registration
Mar. 1	Orientation Tests
Mar. 2	Orientation Tests
Mar. 2	Senior and Junior Registration
Mar. 3	Soph. and Frosh Registration
Mar. 4	New Students Registration
Mar. 6	Day & Evening School Begins

News of Fraternities and Sororities

Pi Kappa Phi Pledges 2; To Elect Officers

Pi Kappa Phi recently pledged Lawrence Sinion and Lee Strate.

Election of officers will take place Wednesday evening at 5:30 p.m. in 202 Main. Final plans for a senior farewell will be made at that time.

New House Obtained By Delta Tau Delta

The Delta Tau Delta fraternity has now moved into a new location at 3542 Princeton Avenue.

The pledge class elected its officers last Wednesday. Herbert Corten was elected president, Walter Linzing recording secretary and Arthur Strong treasurer.

After the election, the pledges held their first meeting and became fully organized.

Alpha Sigma Phi to Meet Wednesday

Alpha Sigma Phi brothers, Robert Oldenburger, Robert French, Mark Dunnell and Edward Allen, all men from Armour who are now in the ASTP, were here on furlough last week.

The next meeting of Alpha Sigma Phi will be held Wednesday to plan for a Senior Farewell, said Ronald Lind, president.

Alpha Sigs Aim For 26th Tournament Win

The Alpha Sigs have never lost an interfraternity basketball tournament during the past 25 years. Ronald Lind, president of the Alpha Sigma Phi social fraternity, has said

that the fraternity expects to be champions again this year.

Sigma Alpha Mu Has New Year's Party

In a New Year's Eve celebration held at Allen Raff's home, 20 men of Sigma Alpha Mu and their dates greeted the New Year in an enthusiastic manner, they claim.

The party was entertained by the efforts of several talented musicians, but gastric desires were not left to chance either. A roast turkey dinner with all the fixings and an abundance of non-intoxicating drinks filled the bill.

The most popular pastime of the evening was dancing to the smooth music of Glenn Miller's and Kay Kyser's orchestras, all on recording.

TELEPHONE lines from poles to homes take a terrific beating from old man weather. And with wire for replacements drafted for military use, existing lines must be kept in good condition.

Asphalt coating applied in time keeps out moisture, chief trouble maker on telephone lines. Without lowering the wires, this trolley painter speeds the coating—helps recondition 50 lines a day.

This simple "stitch in time" helps keep communications open to the homes of America—and saves critical materials for vital war weapons.



War calls keep Long Distance lines busy... That's why your call may be delayed.