



Breakage of Cross Head Causes Piston To Smash Engine Head

**Out of Service Two Weeks;
Repairs Cost \$1,000**

(See Photo)

Last Wednesday, at 3:55 p.m. every one on the campus was stirred into action as a result of an accident in the engine room. The large steam engine located in the engine room, is coupled to a large 20 kilowatt generator which furnishes light and power for the school. The cross-head, made of cast iron, broke allowing the cylinder to go right through the head of the engine. Having a flywheel that weighs close to five tons and travelling at 200 revolutions per minute, the steam had sufficient force to send it out through the head.

Interview Engineer

An interview with Anthony Mollers, night engineer, gave the following story:

"I had just left the engine room and gone into the boiler room when I heard a bang! I happened to be talking with Professor Libby at the time and with the clanking noise every fraction of a second, I knew the cylinder on the large generator had burst. Well, the steam was blowing in our direction so that we couldn't get back into the engine room. About the time I had started to go outside and around from the other door, Claude Blankenship managed to come in from the north entrance of the engine room and close the throttle valve which gradually stopped the engine. Naturally all the lights went out and the room was clouded due to the escaping steam. I immediately told the fireman to keep the water pumps at full speed so that the boilers would not be damaged at the sudden decrease in load on the steam lines.

Steam at 120 Pounds Pressure

"We then looked at the damage making sure the small machine was not harmed due to the accident and then got it started so we could have some lights. The steam was at a pressure of about 120 pounds pressure and when that comes out of a ten inch main, it has plenty of force. Just for example, take John's cabinet; it was blown against a post; and the cabinet is fully thirty feet from the engine. That's why we couldn't get back into the room."

When the machine was being disassembled the following day, this reporter obtained additional facts from John Allen, the chief engineer. The cylinder head weighed about 300 pounds, was 1 1/2 inches thick and was bolted in place by 16-one inch bolts. The steam chest was damaged but can be welded. The cast iron cross head will be replaced by cast steel which will increase the strength of the moving parts. Damages are estimated at about \$1,000 causing the machine to be out of service for about two weeks. "We're all glad," said John Allen, "that no one was injured in the incident. A machine can always be replaced, but not a human body."

W.S.E. Smoker for Nov. 10 at Pi Kaps

The W. S. E. Smoker committee has announced that the fall smoker will be held next Thursday night, Nov. 10, at the Pi Kappa Phi fraternity house. Festivities are to start at 8:30 p.m. Members will take part in a Monte Carlo party and view some very excellent motion pictures.

There is one pre-requisite, however, before attendance will be allowed. Membership dues must be paid. Seniors, juniors, and particularly sophomores who have not paid their fee had better do so lest they miss an enjoyable evening. As a particularly pleasing innovation the committee has promised a very tasty repast for those who are able to attend.

The W. S. E. Smoker is an annual affair at Armour. It is invariably held in the fall of the year and is traditionally conducted by a committee selected from the junior class.

Seniors To Hold Dance In Union Bldg. Dec. 10

Meeting at noon last Friday, the senior social committee set December 10 as the tentative date for the senior dance. If the Union Building is completed and furnished by that date, the dance will be the first held in the remodeled student building.

As is the custom at Armour, the senior class will hold the first class dance. Bids will be on sale shortly after the Thanksgiving holidays as the committee is, at present, designing the style of bid. "If we can hold our dance in the Union Building," said Anderson, "we can guarantee everyone a good time. We'll have a real celebration, since it would be the first dance held in the new building," continued Anderson, "so we're hoping to have a good turn-out from the entire school."

New Steel Lockers Now On Way; Will Be Placed in Engine Room Temporarily

One hundred and five new lockers are soon to be added to those in the basement of the Main Building, according to an announcement made by Mr. George Allison, treasurer of the Institute. It is expected that the order will be delivered in about two weeks. The lockers of steel construction, will be of a type similar to those already installed.

Temporarily the lockers will be placed in the engine room. Present plans are to clear a space for them along the west wall in back of the machinery rather than to have them along the aisle where they would be in the way. The new lockers will be for the use of those juniors and seniors who do not at present have a locker.

Honor World War Heroes At Armistice Day Mass Meeting

J. Speyer Takes Sketching Prize

Chapter Edfou of Scarab fraternity held its annual sketch competition last week. James Speyer was the non-member to win the one year subscription to *Forum*, architectural magazine.

His winning sketch was a water color of a scene of the Chicago River. The jury was composed of Professors van der Rohe, Kreihbel, Rodgers, and Mell. A total of sixteen sketches were chosen, from the competition of 55, to represent Armour in the national competition sponsored by the chapters of Scarab. The competition will be held and judged in Cincinnati, Ohio, on November 21, 1938.

George E. Danforth, a third year man, was selected, according to A. M. Richardson, president of Scarab, as delegate to the Annual National Convention of Scarab fraternity to be held in Cincinnati, Nov. 21. Accompanying Danforth will be Ambrose Richardson, John Rea, and Fred H. Prather.

"Polaroid" Is A.S.M.E. Topic This Afternoon

Culminating 250 years of scientific research by the world's leading physicists to provide a directional control of light waves, Edwin H. Land, young Boston scientist, recently invented "Polaroid," a sheet of transparent material with an amazing power over light and promising "an industrial and scientific revolution with its more than 800 possible applications." This evening, at 7:30 p.m. George W. Wheelwright, III, partner in the Land-Wheelwright Laboratories, will demonstrate and lecture on Polaroid to a Chicago audience under the auspices of the American Society of Mechanical Engineers in the second floor auditorium of the Engineers Building, 205 West Wacker Drive. The same lecture and demonstration will be shown before the student A.S.M.E. in Science Hall this afternoon at 3 o'clock.

Three-dimensional Color Movies

Demonstrations of a few of Polaroid's many uses will include illumination, completely free from glaring reflections, three-dimensional motion pictures in full color, the creation of color in colorless materials, and the inspection of glass for annealing flaws and imperfections. Mr. Wheelwright, who will be introduced by John M. Magos of Crane & Company, and member of the Research Committee of the Chicago Chapter of the American Society of Mechanical Engineers, will explain how Polaroid "combs" the helter-skelter vibrations of ordinary light into a single plane and thus provides a harness for light that allows mankind to make much more extensive use of this vital form of energy.

Roesch in Charge

Daniel Roesch, Professor of Automotive Engineering, and member of the A.S.M.E., in charge of local arrangements for the lecture, advises that Polaroid has been considered by scientists and optical authorities as one of the great contributions to artificial illumination since Edison's incandescent lamp. Besides being helpful in conserving vision for the normal person, thousands of ocularily deficient people who have been handicapped in reading under glare conditions of illumination will have access to comfortable reading of newspapers and magazines with the advent of Polaroid.

Lecturer Wheelwright was a professor of physics at Harvard University. (Continued on page three)

Brass Band Leads Way To Ogden Field

Following the custom which has been established at Armour for twenty years, a student assembly will be held next Friday morning on Ogden field to commemorate Armistice Day. This year the plans for the ceremony have been changed from previous years, in that the assembly is to be an all Armour affair. No outside speakers are to be in attendance, since the address is to be given by President H. T. Heald.

Expect All To Attend

Plans for the assembly include a detailed explanation of how the various classes are to arrange themselves prior to entering field. The whole affair, while not intended as a stiff, formal occasion is to be a solemn dignified ceremony. All members of the student body, graduate students, co-ops, institute employees, faculty members, and members of the research foundation are required to attend.

Separate divisions of the entire group are to assemble at designated places, under the supervision of student marshals. At 10:35, after the second hour class, the band will start playing and the various groups will march onto the field through the south gate. From there the ranks, double file, will proceed along the west side of the field, turn east and arrange themselves in rows in the east and west direction. All will then turn and face to the north. When 11 o'clock comes the entire body will face to the east and remain at attention, in silence, for a period of one minute. This cessation of activity is the annual memorial which all Americans observe in honor of those men who bore arms overseas and those who gave their lives in the World War.

Heald To Give Address

At the north end of the field there will be a raised platform upon which the speakers will stand. A public address system is to be installed for the convenience of speakers and audience. President Heald will start his address at 10:55 and will continue until shortly after 11 o'clock. The intermission will occur during his address.

Last week the *News* carried the announcement that the assembly is to be held under any condition of weather which may prevail. If the (Continued on page four)

Foundation Officials Add New Equipment To Acoustics Dept.

Recently the Research Foundation added two new pieces of equipment to its ever increasing collection of unusual apparatus. The particular items are a sound level meter and a wave analyzer, both of which will be used by the acoustics and vibrations division of the Research Foundation, under the supervision of Dr. H. A. Leedy.

The sound level meter is a device to measure the magnitude of sounds. It is a very sensitive piece of apparatus covering a range of energies of 1 to 1000 billion. One of the most valuable features of the instrument is that it will cover sounds ranging from those on a quiet country road at night to those produced by a pneumatic hammer with about the same response as the human ear, making the sound level meter an ideal tool for problems in noise elimination. At present instruments similar to this are finding use as applause meters in the various radio stations and theaters.

The wave analyzer is a device that breaks up a sound into its component frequencies and the amount of each frequency present in the sound. One of its main uses is in the evaluation of tone qualities, such as the tone of a fine voice, radio, and violin.

Results of Boiler Room Incident

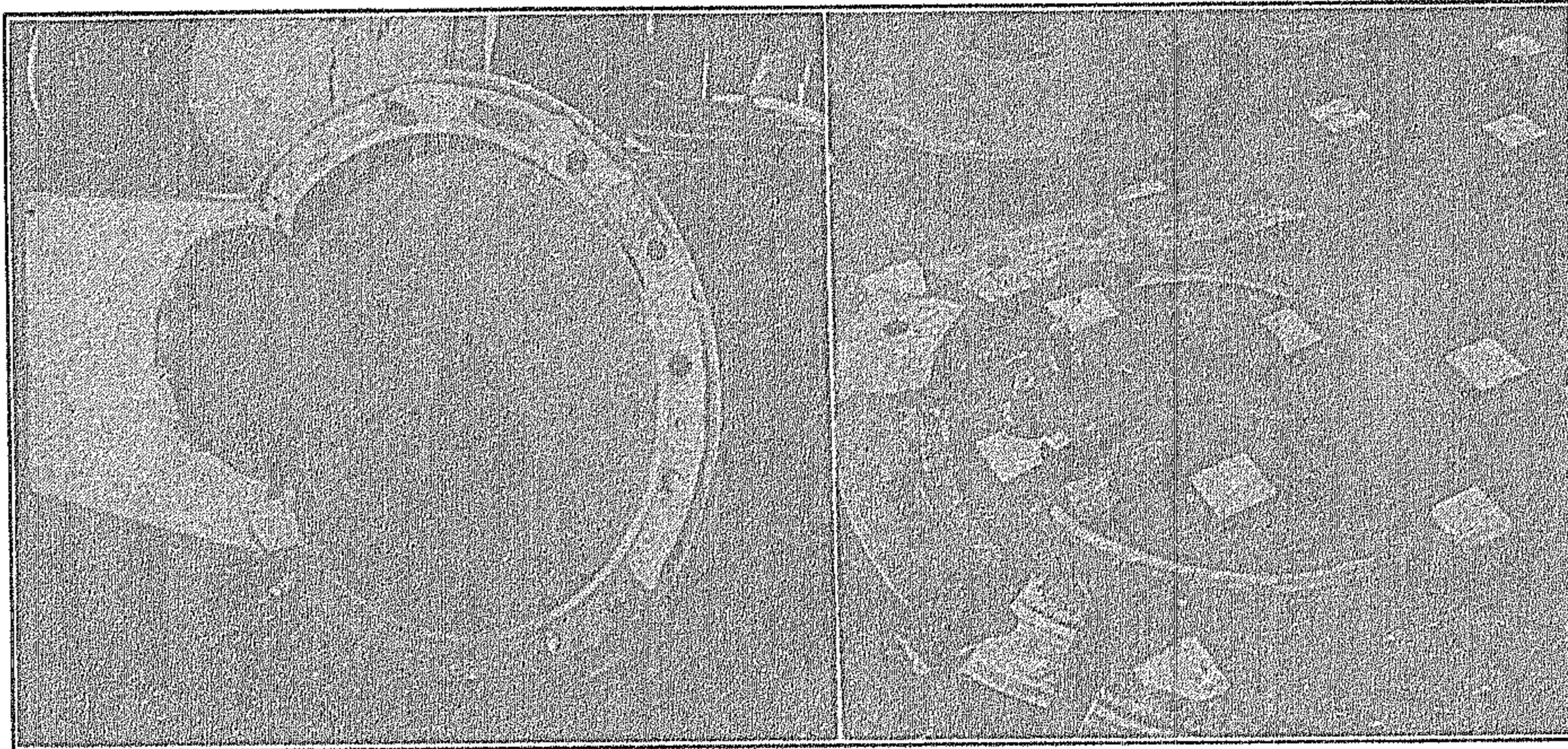


Photo by Barker

Appoint P. Harrington, Armour Alumnus, Commissioner of Chicago Subway Project

Philip Harrington, a graduate of Armour Tech, class of 1906, was appointed commissioner of subways and traction by Mayor Kelly last Thursday. Harrington has been traction engineer for the city of Chicago for the last three years.

"Since I was a boy I have visioned a subway for Chicago," Harrington said after his appointment as subway "Czar" had been unanimously approved by the Chicago council. "It is a great honor to be in charge, I will do everything possible to bring honor to the mayor and the council in this undertaking."

Work To Begin in December

Harrington's big and important task for the next two years will be the building of two rapid transit subways on which work is scheduled to begin December 15. The subways, which are expected to bring Chicago's antiquated transportation system up to date, will cost 40 million dollars and will be financed partly with an 18 million dollar grant from the Federal government.

Distinctively a Chicago citizen, Mr. Harrington received his primary education in Chicago public schools, spent four years on the Armour campus where he received the degree of Electrical Engineer, and completed a legal course at Kent College of Law. He was admitted to the Illinois Bar in 1916, is 52 years old. For 29 years he was employed in the engineering department of the Sanitary district, spending the last two years (1933 to 1935) as chief engineer. He was responsible for the preparation of design, drawing of contracts, construction and operation of more than 100 million dollars worth of plants and works.

Plan For Extension

Although Mr. Harrington will carry greatly increased responsibility in his new position, he will receive the same salary—\$20,000—which he drew as traction engineer. His new subway department will not only build the initial system of subways, but it will prepare plans for the extension of tubes. It will also maintain the subways after they are built and supervise the use of them by the

company operating them. An ordinance passed last week amends the powers of public works to place all of the authority for subway work in the hands of the new department.

The ordinance which creates the new position of commissioner of subways makes no statement as to the length of term in office, but authoritative sources have stated that a state statute governs in such cases, and limits the term to two years.

An article on the Chicago subway system, authored by Mr. Harrington, appears as a "nation wide scoop" in the issue of the *Armour Engineer and Alumnus* issued this week. The article was secured by the editors previous to last week's events and promises to be of foremost importance to the technical readers as well as laymen.

Election Committee Names Five Officers For Freshman Class

A release last week from the temporary freshman committee indicated that five offices will be filled by the coming elections. In addition to electing the customary president, vice president, and combined secretary-treasurer, a social chairman will be selected as well as a representative to the board of the Armour Tech Student Association.

Nomination procedure requires that the candidate (who can petition for only one office) must submit a petition to the election committee before noon, Friday, November 18, bearing the signatures of 35 members of the class of 1942.

A primary and a final election are planned, each to be conducted according to the rules of the Australian ballot. The three candidates receiving the most votes for each office in the primary election will compete in the final vote. A plurality will decide in the final election.

Petition forms and further information will be supplied by the temporary committee, composed of Earl Huxhold, Bob Tatge, Ted Krupnik, Warren Underlight, and Fred Klein.

Civils Submit Plan To Create Unified Engineering Group

Five Men Pledged to Chi Epsilon

Chi Epsilon, honorary civil engineering fraternity, pledged one chapter honorary member and four chapter actives to their membership at the regular meeting of the Western Society of Engineers last Friday. Dr. Linton E. Grinter, head of the department of civil engineering and dean of the graduate division was the chapter honorary member to be pledged. To the active chapter were pledged D. J. Saigh '39, D. M. Way '39, G. P. Hanna '40, and F. A. Opila '40. These men were pledged because of the high standard they set in scholarship, character, sociability and practicability.

In an attempt to solve their current problem, the officers of the W.S.E. selected Mr. A. Hammond to address them. The problem which is confronting the Armour chapter of the W.S.E. is that of the installation of an Armour chapter of the American Society of Civil Engineers. For some time there has been considerable discussion of the relative merits of both the A.S.C.E. and the W.S.E. To do away with the W.S.E. entirely is felt by the faculty and the officers to be foolhardy. In accordance with this, the plan has been submitted that the W.S.E., which is not a purely civil engineering society, became the parent society. In this organization all the students would be entitled to membership with the governing body composed of all the officers of the various departmental societies. Through this medium, the W.S.E. could obtain speakers and events which could not be had to address merely the small groups which are found in the departmental societies.

Mr. Hammond, being a past president of both societies, was deemed the logical man to advise the students. He advised the members to enter into (Continued on page two)