



BY EUGENE WORCESTER

Los Angeles, Cal. (Special) Feb. 28—A China Clipper en route to Hawaii reported at 11:00 a. m. Pacific time, that for an area of at least ten square miles, and about 500 miles east of Honolulu, the sea was experiencing an unusually vigorous agitation, although no wind was blowing. Evidently some influence of a subterranean nature was effecting it. Shoals and reefs were in evidence in the sector which is charted as 2000 leagues deep.

Seattle, Wash. (A.T.N.S.) Feb. 29—The tanker "Ramona" sailing for Burma was grounded early this morning on reefs reported at 500 miles due east of Hawaii. The reefs were rapidly rising, and the ships hull was already high and dry. Sounded in 1921, this area of the ocean is recorded as 11,800 feet deep, so that evidently some new land is rising due to a volcanic movement. The seismograph here recorded a violent east Pacific shock two days ago, this probably being indicative of the unusual occurrence.

Washington, D. C. (P. A.) Feb. 29—The U. S. government dispatched two destroyers to the area of eruption to investigate and if possible substantiate the reports of a newly rising island.

Toyko (P. U.) Mar. 1—The Japanese imperial navy withdrew five cruisers from Hong Kong area last evening, and under full steam they sailed east. It is rumored they are heading for the new island, named Falkland, after Capt. Falk of the Clipper ship who first saw the land.

The ships flying between Hawaii and mainland report that a full island, muddy, but firm is now fully risen from the ocean.

Berlin (Special) Mar. 1—The German government sent a fleet of ten warships to the Pacific ocean to complete a study of Pacific marine life, it was reported from the foreign office this evening.

Rome (Special) Mar. 2—Mussolini announced tonight in a speech to his cabinet that Italy would assume ownership of the newly created Falkland, in as much as Italy was not represented in the Pacific. Mussolini renamed the island "Benito" after himself.

London (P. N. S.) Mar. 2—Mr. Chamberlain, convinced that there is an island in the Pacific, has announced that Britain will take over its ownership for the present until it is necessary to give it away.

Wash, D. C. (P. A.) Mar. 3—Pres. Roosevelt predicted a crisis in the Pacific unless a conference might be called to settle the question of the ownership of Falkland. Belonging to the United States, as it was discovered by an American, Roosevelt suggested an immediate withdrawal of all other powers. Secretary Hull stated that Falkland falls within the jurisdiction of the Monroe doctrine, and would make a forty ninth state.

Falkland, Pacific Ocean, Mar. 4—H. M. S. Chester reported that a Japanese cruiser fired on it tonight as it passed it on the port bow. The Japanese captain explained it was a pure accident, as his gunners were shooting whales and had mistaken the British man o' war for a sperm whale. No further explanation has been made.

Washington, D. C., Mar. 5—Pres. Roosevelt succeeded in calling a meeting of the powers at the White House

Washington, D. C. (Very Special) Mar. 12—The Washington conference came to a dramatic close today when it was unanimously decided to destroy Falkland, as no agreement to its ownership could be reached. Britain proposed giving it to Hitler, and the Philippines to Italy, to maintain a balance of power. U. S. objected, and by some very astute manipulation, Hull succeeded in passing the Destruction Treaty whereby the island will be dug up and dumped back into the sea. The cost of destroying it will be borne by each government.

The conference was considered highly successful in that it procrastinated the crisis schedule in Europe, the next one now not due until May, due to the extensive dredging operations necessary.

Tibbals Attends Aurora Banquet

Sponsoring the first banquet of its kind in this area, the Aurora-Armour Co-op club held a dinner on Monday, Feb. 21, at the Silver Tea Pot in Aurora. The purpose of the banquet was to bring industrial executives, educators, and co-op students together and present to these men a complete picture of the operation of the co-op course at Armour Institute.

Bob Schmidt, co-op student and co-president of the club, acted as chairman and introduced the toastmaster, Ben Kallevik, another student. The toastmaster then introduced the first speaker, Mr. L. J. Lease, co-ordinator of the co-op course at Armour. Mr. Lease began his speech by presenting the history of the co-op movement and its introduction at Armour. He then explained how students are chosen and enrolled in the course, how the students compare with the regular day-school students in grades, and the general attitude of the co-op students in regard to this type of instruction.

Prof. P. C. Huntly, head of the Mechanical Engineering department, explained the purpose of each group of subjects given in the co-op course and also the similarity of this course and the four-year mechanical engineering course. Following this, Dean C. A. Tibbals elaborated on the school in general, comparing various departments of the institution in size, grade average, etc. He pointed out that the co-ops are somewhat isolated from the regular students because of the change in work and school schedule, but he also urged these students to participate in extracurricular activities during their school periods.

Presenting the industrial view, General Thomas Hammond, president of The Whiting Corporation, related some of the difficulties encountered in placing co-op students. The poor conditions in industry in the past few years, he said, made it extremely difficult to find jobs for prospective students, but in spite of these unfavorable conditions, the co-op course has grown steadily since its inauguration at Armour.

Following his address, a general discussion was led by Mr. C. I. Carlson, head of the Industrial Arts department at East Aurora High School. The executives were requested to ask the speakers any questions they wished regarding the course, and responded with many questions.

ENGINEER—

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photos are taken of every page of the material to be filed. A projection machine is used to focus pictures on a screen when they are to be read. The chief advantages are the tremendous number of publications which may be stored in relatively small space and their long life. This system, however, is quite expensive. Store-rooms must be made of completely fireproof material as required by law because of the highly inflammable nature of the film. Efficient projection machines are an additional, and not inconsiderable expense. For these reasons, the use of "Photo-records", has been largely confined to the larger and more richly endowed libraries.

Explain Cheese Pasteurization

James Lewis Kraft of the Kraft Phenix Corporation will present an educational study of the manufacture of cheese. Special emphasis will be placed on the bacteriology and engineering of cheese making. Mr. Kraft is the inventor of a pasteurizing process as applied to the cheese industry. Bacteria play an indispensable part in the making of cheeses. Their secretion of enzymes serves to change the chemical structure of the cheese and give it its characteristic flavor. The bacteria are cultivated very carefully, different bacteria being used to instill the various flavors. Bacterial cultures are carefully protected by the manufacturers as they are extremely valuable. Engineering plays an important part in the design and construction of vats, machines, instruments to regulate temperature of cheeses, and methods of acidifying to aid curdling. Mr. Kraft will describe all this in detail.

Armour Alumnus a Contributor

Of interest to architects will be an article by David Baker entitled "New Architecture of Palestine." David Baker is an Armour grad, Arch '38, and the distinguished possessor of two coveted Beaux Arts prizes. Because of the greatly increased emigration of Jews to Palestine, a great deal

Harrington Speaks to Members of Theta Xi

Philip Harrington, E.E.-'07, now city commissioner of subways, was the guest speaker at the dinner and smoker held by Theta Xi in the Student Union, Wednesday, February 22. The subject of the talk was the new State Street subway. Mr. Harrington in his talk discussed the cost involved and the problems to be solved in the construction of 6.4 miles of tunnel through the blue Chicago clay. The contracts for the construction of one section of the tube at a time.

The Alpha Gamma chapter of Theta Xi was the host for the evening. Theta Xi was the only social fraternity organized during the Civil War. The fraternity originally limited its membership to those majoring in the sciences. This restriction was made because the early chapters were started in technical schools. A vote taken in 1932 caused the limitation to be removed. The Armour chapter was started in 1932.

Other guests included President Henry Townley Heald, Col. Henry Waite, and Henry Brinkerhoff of the P.W.A. subway commission.

Battalion Chief Addresses FPES

Battalion Chief John Redmond of the Chicago Fire Department presented a stimulating talk on the "Functions of a Fire Department," to the F.P.E.S. last Friday.

A fire department's activity is not at all confined to fighting fires. Much of the time spent at the fire house is taken up by drills and cleaning of equipment. The routine of the week usually runs as follows: Wednesdays are brass days, that is, the metal-ware in the firehouse and trucks is polished; Saturday, scrub day; and every other day except Sunday and holidays is drill day. The drill days are taken up in practice in the use of the pieces of apparatus of the department. Speed is the main factor in these drills.

Chicago has the reputation of possessing the fastest fire alarm system in the world. The principal reason for this is the highly perfected telephone and telegraph system that is installed in the stations.

Each station has 16 wires leading to it, the network connecting the entire city and the fireboxes in each district into one unit. A two-way radio system is now being installed.

Before entering the service a man must go through a training period of one month. During this time the essentials of the telegraph and the workings of the various pieces of apparatus are explained.

It was pointed out by Chief Redmond that ventilation is a necessity for the successful fighting of a fire. This ventilation is accomplished by "back drafting" or opening holes into the building to force out the heated air and provide working conditions for the firemen in the building.

In reply to a question by Professor Joseph B. Finnegan, Chief Redmond gave a vivid description of the Stock Yards fire of May 19, 1934. At the climax of the fire, 120 engines and 2,700 men were in action. At one time the engines were pumping a total of 100,000 gallons of water per minute on the fire.

The land forces are now augmented by the modern fire boat, Fred Busse. This boat, replacing the steam powered Grahme-Stewart, is diesel powered and has a pumping capacity of 12,000 gallons per minute. Equipment includes sleeping quarters for an emergency crew, which is on board at all times.

of building construction has been required. Most of the buildings are of entirely new and modern design. This article will deal with the architecture and construction of these new projects.

Last but not least will be "The Story of Maple Sugar" by E. M. Root, a lecturer at the State University of Vermont and county agent of the farm bureau. The complete process, from tapping of the trees and boiling of the sap to the completion of the finished product, will be described.

Professor Walter Hendricks has been assisted on this issue by several new staff members. They are Stephen P. Finnegan and John J. Ratto, class of 1939; Sidney A. Heenan and Eugene J. Kalnin, class of 1940; Edwin L. Hass, Lionel Naum, and Henry E. Wessel, class of 1941.

Student Speaker Series Begun by Bernard Oswald

"Modern Boilers" was the subject of Bernard F. Oswald, the student speaker, who appeared before the A.S.M.E. meeting last Friday morning in Science Hall.

The rapid strides that have been made in boiler construction, manufacture, and performance during the period between 1880 and 1930 were taken into account. Because of the decline in industrial expansion, no major developments were made from 1930 to this date. Slides were shown that pictorially and graphically illustrated the details of each boiler model produced by the Combustion Engineering Company.

Particular attention was directed to the engineering features incorporated into a large unit manufactured for the Consolidated Edison Company of New York, this unit being capable of producing 1,270,000 lbs of steam per hour. Two machines, a giant forming mill, capable of rolling three inch steel plate into cylindrical form without any difficulty, and an X-ray machine revealing the condition of the grain structure of the metal about welded seams, were shown in pictures and discussed by the speaker.

At the conclusion of Oswald's address Harry Soukop, vice president, announced that five members had expressed a desire to speak before the society at some future date on subjects of interest to the entire group. Student speakers are introduced instead of having eminent engineers address the society in order to aid in developing student public speaking ability. This is in anticipation of the forth-coming convention of student branches to be held in Chicago at Lewis Institute on April 17th and 18th, where prizes are awarded for the best paper presented.

"During the past two years, Armour has won second place each time," said Prof. Nachman, "and adequate preparation is necessary to acquaint students with the difficulties encountered when speaking before a large group."

The symposium on "Steam Power" proposed by Prof. Nachman will be postponed until April, in order that upper classmen may devote their time to preparation for the convention.

Max Ephraim suggested that the graduating members of the society use the facilities of the Chicago section of the A.S.M.E. employment service, through which many desirable positions are available.

A. I. Ch. E. To Hold Smoker In Union on March 15th

March 15th has been set as the date for the annual smoker of the A. I. Ch. E. This year the genial event will be held in the pleasing atmosphere of the Student Union, with the all popular Bernard "Sonny" Weissman as the guest speaker.

The United States Government, in the furtherance of the "See America First" campaign, will provide a travelogue movie which vividly portrays the natural beauty of American National Parks and Monuments. Other highlights of the program planned by a competent committee in charge of arrangements include amusements that are capable of wringing chuckles from even the most hardened bunch of "Chemicals"; and last, but not least, Mrs. Thompson has promised the most delicious of refreshments.

The price of admission has not been decided, but officers are confident that it will not exceed forty cents.

CONCERT—

(Continued from page one) bert Hansen who dued in several Russian selections on a banjo and an accordion. A double octette composed of members of the glee club sang Sweet and Low and it was both sweet, and low.

The program was brought to a close with the orchestra's presentation of Spanish Serenade by Herbert, and the glee club and orchestra singing and playing The Ranger's Song from Rio Rita.

As in the past pictures of the musical clubs were taken at the close of the program and while waiting for the photographers to get set up, both glee club and orchestra swung into an impromptu jam session, thereby giving those members of the audience who remained two concerts for the price of one.

Registrar Asks To See Seniors

Armour Institute's scholastic wave advances. Statistics just released from the registrar's office show that at present there are 1065 students registered in the various departments. Mechanical engineers lead with a total of 351. Of these 150 are freshmen and four are graduate students. The Chemical engineering department is next with a total of 291 students. This department leads in graduate students, having a total of sixteen. Electrical, Civil, Architectural and Fire Protection engineers follow in the above order. There are 25 sophomores in the Civil department and only 24 freshmen. This is the only department in which there are more sophomores than freshmen.

Next June, according to statistics, 143 students will graduate. Forty two graduate students will also be awarded degrees.

Many seniors have not as yet checked their records. To avoid confusion at a later date, Mr. Kelly suggests that they see him immediately and check their credits.

S.A.M. Committees Selected; Meet in Science Hall Friday

Footlik and Bill Mackey Are Appointed

Armour's newly formed chapter of the Society for the Advancement of Management will hold its next meeting on Friday, March 3, at 10:30 a. m. in Science Hall. Members and prospective members alike are cordially invited to attend.

At the society's meeting last Wednesday the program and inspection-trip committees were elected. The program committee consists of Irving Footlik, chairman; Norman Rice, Joseph Aberer, and Delano Wessels. Members of the inspection-trip committee are William Mackey, chairman; Warren Groundwater, William Dres, Geo. Bauman, and Harry Dryer.

The steering committee reported its decision to make the vice-president the chairman of the program committee. The chairmanship of the other committees is to be limited to juniors and seniors, although committee membership is not to be otherwise restricted. A request was given for additional volunteers for committee members.

The Armour branch of the Society for Advancement of Management consists of student members of the parent organization which was formed under the direction of Mr. H. P. Dutton in 1936. Members of the society are entitled to its services, which include the Society Journal and all other publications, admission to the technical library, the employment service, admission to all meetings and conferences which are held at frequent intervals, and inspection trips. On these trips the student not only views the plant operations, but is also given a discussion of the management problems with which the plant has been confronted. Several of these

A.S.C.E. To Be Formally Adopted by Tech Civils

According to present plans, the Armour student branch of the American Institute of Civil Engineers will be formally instituted some time in March. This will make possible the reorganization of the W.S.E. into a general engineering society.

At the present time opinion is divided on the exact form which the future W.S.E. should have. Almost all those interested agree that it should furnish a parent society which could coordinate the activities of the individual groups. On the question of having freshmen and sophomores as members of the society, opinion is divided. In an effort to iron out these difficulties a committee of one junior and one senior from each departmental society has been appointed. These men will meet soon and consider arrangements for the future W.S.E. at Armour.

A. I. Ch. E.—

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In regard to training of engineers, Fried submitted the following data: Of 5,000 practicing engineers, 14 per cent have taken graduate work, 75 per cent have their bachelor's degrees, 6 per cent have not completed their college training, 4.3 per cent have incomplete college work, 0.6 per cent have no college technical work, and 0.1 per cent have no technical training.

Of the graduating engineers, 47.5 per cent go into operational works, 35.4 per cent become connected with designing and research problems, 5.8 per cent enter the teaching profession, 4.1 per cent receive general administrative or personnel management positions, 3.1 per cent become employed by the sales department, and 3.1 per cent are engaged in construction work.

The upper 10 per cent of the wage groups showed compensation above 8,000 dollars per year for chemical and ceramic engineers, these remunerations ranging down to the civils, whose upper 10 per cent received a wage in excess of 6,100 dollars. The average engineer begins at 1,500 dollars a year, at an age of 22. Ten years later his industrial training has been completed and he is earning about 2,400 dollars a year. From then on his rise is very rapid until he hits his peak at 60 years of age.


During the period of 1929 to 1934, only 33 per cent of the engineers were not continuously employed. About 16 per cent were unemployed for the period of one year. However, the wage cuts ranged from 28 to 64 per cent. These cuts were for the most part restored in 1934.

trips will be planned by the student chapter, and the first of these will soon be announced.

All members of the society are invited to the meetings of the Chicago chapter which occur on the third Tuesday of each month. This summer the Chicago group is sponsoring a national conference on personnel management problems.

Included as national members of the society are manufacturing and merchandising executives, industrial engineers, investigators, and teachers of management.

WITHOUT ANY PREVIOUS SCHOOLING,
HERBERT SULLIVAN,
14-YEAR OLD CHILD GENIUS,
IS PREPARING TO BE A MATHEMATICAL PHYSICIST BY TAKING PHYSICS, CHEMISTRY, MECHANICS AND TRIGONOMETRY AT SANTA ANA JR. COLLEGE!
ALTHOUGH HE ALREADY HAS PASSED THE ENTRANCE EXAM TO THE CALIF INSTITUTE OF TECHNOLOGY, SULLIVAN PLANS TO ENTER OXFORD UNIVERSITY IN ENGLAND.



THE UNIVERSITY OF VERMONT HAS A CAT ON ITS PAYROLL!
THE BLACK FELINE RECEIVES \$16 PER YEAR (FOR FOOD) FOR CATCHING MICE IN THE GREENHOUSE

NEW ACCORDS TO EINSTEIN...

ARMOUR INSTITUTE IS STILL USING SEVERAL OF THE LIGHT BULBS THAT WERE PLACED IN SERVICE WHEN THE COLLEGE WAS OPENED IN 1912!

YOUNG SULLIVAN NUMBERS AMONG HIS FRIENDS, EIGHT OF THE WORLD'S OUTSTANDING MATHEMATICIANS!