



By H. M. Ross

OMINOUS STILLNESS lies over all Europe. A new phase of the great Rhineland crisis which has been convulsing Europe for the past three weeks has been reached; Germany has made her proposals and it is up to the Locarno powers to consider them. The world will watch with apprehension the decisions which must now be made in London, Paris, and Geneva. War or Peace? It would be difficult to find in the pages of modern history an instance where men have had to coldly decide an issue of such momentous and far-reaching consequences. The decision had to be made in 1914, but, as they saw it then, they had no choice. Today, the difficulty lies in the fact that there is a choice.

THE CHOICE involves great risks whichever way it may be decided. Should France and her allies seek to meet the challenge of Germany and enforce the public law of Europe, the danger to peace is obvious. Germany is formidable, more formidable than Italy, and Hitler is more violent than Mussolini. Thus it is plain that there can be no resort to bluff. If they decide to uphold the Locarno Treaty their only hope of avoiding a clash of arms is to proceed untriedly and leave no doubt whatever that they mean business. Only a successful outcome of such a plan will keep Europe from plunging into the mire of international lawlessness. The risk is great. But it is impossible to retain any hope of respect for future treaties if the violation of those already existing is calmly assented to.

IF ON the other hand, they accept Hitler's offer the risks are no less great. He offers them, in return for the dissolution of their defensive alliances, his promise of non-aggression. In other words, he says that if France will give up her alliances for collective security, he will promise not to attack any one. The countries in the path of German advancement are asked to rely not on their combined strength but on the promise of Hitler not to attack them. They are to do this as a consequence of the fact that he has just violated, without notice and by a sheer assertion of military power, a pact of non-aggression, not dictated at Versailles, but negotiated freely, at Locarno, and endorsed by his country. They are to believe the promise because Hitler made it; just as they must accept the breach of the past promise because Hitler broke it.

THERE IS a third way, neither to act now nor to submit now, but to form a genuine military defensive alliance, with Britain a full member. It would, however, have to be more than an agreement of generalities; it

Metallurgy Topic At Jr. W.S.E. Meeting

Speaking to the junior W. S. E. last Thursday, Mr. H. B. Knowlton, chief metallurgist of the International Harvester Company Tractor Works, presented an interesting talk on "Metallurgical Specification, Service, and Performance". The presentation was technical in nature and brought out many points of prime importance to those who are engaged in industries using steel. One of the points brought out was that the policy of engineers selecting steels from handbooks is outmoded.

An open forum meeting will be the next joint meeting to be held on April 9, 1936. A "surprise" guest may be presented by the committee. On April 16, 1936, Captain E. D. Washburn, Jr., professor of naval science and tactics at Northwestern University, will speak on "Types of Naval Vessels and Their Function in the Fleet".

Honor 'A' Advocates Solid Color in Letter

At a meeting of the Honor 'A' last Friday, plans for the changing of the school letters were discussed. The members of the club have started an extensive drive to change the letters from a black letter, with a yellow border, to one with a solid color. The club has had petitions circulated which were signed by most of the lettermen and which they plan to present to Mr. Allison. After this, they plan to present their ideas to the A. T. S. A. for a vote. The club hopes for immediate action, in order that the letters which will be presented in the near future will be of a new type.

At the meeting the plans for pledging were also discussed and the announcement of the new men will be made shortly.

A.I.E.E. Will Meet With Lewis Soon

Final arrangements for a joint meeting with the Lewis Institute branch of the A.I.E.E. have been made. After some discussion, E. J. Kirsch of Armour and H. H. Holubow of Lewis selected the evening of April 13, at 7:30 o'clock, at the latter's school, as the meeting place.

At this meeting, Mr. A. J. Kruppy of the Commonwealth Edison Company will present a discussion on "The Chicago Network". It is hoped that this will inaugurate a series of similar meetings in the future.

At the last meeting of the A.I.E.E., Mr. H. L. Olesen, of the Weston Electrical Corporation, presented a talk on electrical instruments, including the moving coil, the iron vane, and the dynamometer. During his discussion, Mr. Olesen displayed various types of voltmeters and ammeters.

Mechanicals Receive Air Cooling Machine

As a special gift, the Trane Company of LaCrosse, Wisconsin, has presented to Armour an air cooling machine. This machine, a very expensive one, consists of numerous coils, through which air is passed and cooled by refrigeration. The senior mechanicals, under the supervision of Professor Nachman, are now engaged in connecting this apparatus to the present air conditioning units which are located in the mechanical engineering laboratory. It is planned in the near future to present the new apparatus as a regular part of the air conditioning program.

Miss Steele Hurt in Automobile Accident

Miss Ellen Steele, librarian, was cut about the head and face on Monday, March 23 in an automobile accident which occurred when she was driving home from school.

The accident occurred in Winnetka just a few blocks from her home. Miss Steele had been at home with a cold the previous week and had returned to work in the library on the day the accident occurred.

Two Talks Planned for W.S.E. Meetings

Two talks have been arranged for meetings of the W.S.E. following the spring vacation. On April 17, Mr. Wenger of the Portland Cement Company will talk on "Highways and Construction" and on May 1 Mr. Herring of the American Association of Municipal Engineers will speak on "The Engineer in Public Works."

The splash party and entertainment at the Lawson Y.M.C.A. will follow on Saturday evening, May 9. Present plans for the early part of the evening include moving pictures on engineering projects and construction methods. This will be followed by a swim and refreshments.

ARMOUR WILL ACT AS HOST TO NEXT S. P. E. E. MEETING

Armour is to be host to the Illinois Indiana Section of the Society for Promotion of Engineering Education at a meeting to be held April 18 at the Lawson Y. M. C. A. Professor J. B. Finnegan, president of the section, will call the meeting to order.

The principal speakers at the session are Professor Hardy Cross of the University of Illinois, who will talk on "The Importance of Teaching School"; Mr. Lawrence A. Downs, president of the Illinois Central System, will speak on "Engineering Education as a Preparation for Business Responsibilities"; and Dean Henry T. Heald of Armour Institute who will discuss "Part Time Courses for the Graduate Engineer."

The afternoon session will be devoted to group conferences on various subjects. Three of these groups will have Armour professors as chairmen: Professor J. S. Thompson is chairman of the physics group, which is holding a joint meeting with the Chicago section of the American Association of Physics teachers. The mathematics group has Professor C. E. Paul for its chairman. Professor W. Hendricks is in charge of the group meeting in English.

Mrs. Willard E. Hotchkiss, president of the Armour Faculty Women's Club, is arranging for entertainment of ladies attending the meeting. General arrangements are being made by a committee under Mr. C. O. Harris of the mechanics department.

Oldenburger to Talk on Multilinear Forms

"Rational Equivalence of a Form to a Sum of P-th Powers" is the title of a paper which Dr. Rufus Oldenburger will present to the American Mathematical Society at its annual April meeting. The meeting will take place on April 10 at Eckhart Hall of the University of Chicago and is open to the public.

Dr. Oldenburger has found a solution for certain equations of the fifth degree and higher which does not pretend to solve all equations of these higher degrees, but does solve all equations of the n-th degree where the solutions can be expressed in terms of the n-th roots of a number.

The solution was made possible through a theorem which Dr. Oldenburger proved concerning multilinear forms in a memoir to be published in the next issue of the *Transactions of the American Mathematical Society*. This memoir is a collection of three papers presented to the society in 1934. It was found that the theorem on multilinear forms also holds for ordinary polynomials.

Professor D. Moreton Making Eastern Tour

Professor D. P. Moreton left last Saturday on a trip through the eastern states on a study of graduate cooperative work in electrical engineering. He will go to Boston first, where he is to meet with M. M. Borj of General Electric Company and Professor Timbie of Massachusetts Institute of Technology to discuss the cooperative plan as used by M. I. T. in alliance with the General Electric Company.

From Boston he planned to go to Lynn, Massachusetts, where General Electric has the plant in which some graduate electrical engineering students of M. I. T. work. Professor Moreton said that he planned to visit Columbia, New York University, and Brooklyn Polytech while in New York; the Schenectady General Electric plant, Pittsburgh University, Carnegie Tech, and Cincinnati.

Professor Moreton's plans were not definite, but he expected to be gone for about ten days. He is intending to visit Armour alumni in the various cities through which his trip takes him.

Because of the spring recess, there will be no issue of the News next Tuesday, April 14.

Plans Completed for Research Foundation

Final plans for incorporating a research foundation of Armour Institute were made at the board of trustees meeting last Friday. The foundation will be formed to promote, encourage, maintain, and aid scientific investigation by the staff, faculty, alumni and students affiliated with Armour Institute.

Mr. Homer Cooper, counsel for the Institute, is preparing incorporation papers to be presented to the Secretary of State. It is expected that the research projects to be investigated will be announced within two weeks. The Institute hopes to obtain added resources and to stimulate the students and faculty to undertake problems of research.

Release Statistics on Physical Exams

Period of Twelve Years Is Covered

A study of the physical characteristics of incoming men at Armour, for the greatest part freshmen, was released last week by Dr. J. F. McNamara of the physician's office. These vital statistics which cover a period of twelve years, 1925 inclusive, incorporate the results of 3,055 individual examinations given to each new man upon entrance into the Institute. These results were tabulated by M. Shewchuk, junior electrical.

Form Composite Freshman
The composite freshman over the span of years is quite an interesting fellow. He is as follows:

Age	.....18.73 years
Weight	.....143 pounds
Height	.....68.55 inches
Chest in repose	.....35 inches
Chest full expansion	.....37.5 inches
Chest full retraction	.....33.7 inches
Average chest expansion	.....3.8 inches

Dr. McNamara's report further shows an increase of approximately two inches in chest expansion of the average entering freshman now as compared to twelve years back. The doctor attributes this increase to a greater participation in athletics.

Physical Defects Listed
During the past twelve years 507 men, 16.6 per cent, were limited in their athletic activities, while 107 or 3.51 per cent were excused from participation in athletics. Many physical defects were noted. Excluding the acute diseases, the list is as follows:

Organic disturbances of the heart	.....437—14.3%
Deformities due to rickets	.....271—8.88%
Functional disturbances of the heart	.....144—4.72%
Flat feet	.....131—4.29%
Hernia	.....79—2.59%
Defects of hereditary nature	.....51—1.67%
Serious skin diseases	.....5—0.16%

In addition to examining each new man, the physician's office sends a postal card to each freshman and sophomore student afflicted with a serious ailment warning him not to participate in the class rush.

Price of Senior Bids Depends on Canvass

Uppermost in the spring social program of the seniors is their private dance at the Knickerbocker Hotel April 24. Approximately a hundred couples will attend, according to the estimate of social chairman, R. M. Paulsen.

His committee has formulated plans which, when executed, will ensure the dancers a most enjoyable evening among Armour men in an atmosphere delightfully different from the classroom.

As soon as the results of a canvass of the class are known, the price of bids will be fixed and placed on sale.

Penthouse Dance Follows Vacation

Plans for the freshman Penthouse Party are complete. Bids are being sold by the social committee and several other men who hope to get a free bid by selling ten tickets. If present indications mean anything, all the two hundred bids will be sold by the night of the dance.

It is to be an informal affair at 666 Lake Shore Drive on the evening of April 18. Dancing from 9 p. m. to 1 a. m. will be to the tunes of Herm Crone's South Shore Country Club orchestra. His catching melodies are well-suited to the temperament of the Frosh, and his entertainment crew, which can keep any crowd jolly, is working on special acts.

The social committee, consisting of B. G. Anderson, chairman; J. R. Bunce, I. M. Footlik, H. D. Rice, and R. W. Starman, appreciates the entries in the poster contest which closed yesterday, and their decision has not yet been reached as to the two men who will get the prizes of one bid each. The posters have given the dance much publicity and are well worth the time spent in making them.

The arrangement of the Penthouse will blend in very well with the evening's hilarity. A large lounge furnished with the finest modern furniture adjoins the dance floor, which will have tables surrounding it. Orders will be served to the tables at very nominal prices, and if a group wishes to be together, reservations should be made with B. G. Anderson. The floor is especially suited to dancing and has a beautiful inlaid design.

Invitations Obtained for '36 Graduation

As reported by J. E. Linden, chairman of the invitations and announcements committee of the class of '36, the bid for graduation announcements has been obtained by the L. G. Balfour Company. Sample copies are now being made up so that orders for one of three types of announcements can be taken.

The most elaborate of these consists of a black leather cover engraved with gold. Its contents include the class roll, program of the commencement exercises, and other information of interest to close friends and relatives. The second type is similar to the first with the exception of the cover, which will be of cardboard instead of leather, but still gold engraved. The third announcement is merely sheet paper folded once, printed with gold lettering. However, it has not the detailed information that is found on the other programs. The costs of these announcements will be approximately thirty seven, twenty six, and eleven cents respectively.

Since a hall has not yet been obtained for the graduation exercises, nothing has been accomplished concerning the distribution of invitations.

Players Plan to Use Curtain Type Scenery

Curtains suggesting the original settings of Shakespeare, only minor articles of furniture, and words will be used instead of realistic settings in the production of "Prince Hal and Falstaff," the play to be given by the Players during the last week in April. No definite date has been set as yet, and the price of admission is also undecided. Tickets will probably be sold at a nominal price of ten or fifteen cents.

This one act play is centered around the character of Falstaff, a well known creation appearing in Shakespeare, portraying a drunkard who revels in his misdeeds. This production is entirely comedy, but a comedy of character as distinguished from the ordinary kind.

At present members of the cast are rehearsing on Monday and Wednesday evenings under the capable direction of Mr. W. B. Fulghum in an effort to bring another good production before Armour students.

AWARD TAU BETA PI FELLOWSHIP TO H. MILLEVILLE, '36

Second Armour Student to Receive Award

HIGHEST CHEMICAL

Howard P. Milleville, a senior chemical, was recently awarded a Tau Beta Pi Fellowship, one of the highest honors an undergraduate engineer can receive. Milleville, the first chemical engineer, and the second Armour man to be so honored, will make use of the fellowship to attend one of the following universities: Columbia, Wisconsin, or Michigan.

Annual Award

Tau Beta Pi, honorary engineering fraternity, annually awards five or six fellowships which consist of \$650 for living expenses, and a year's tuition at any American institution in which the recipient may select. The winners are selected by a committee of the national council of the fraternity, considering individual qualifications of scholarship and individual personality of the applicants. The applicants must be members of Tau Beta Pi.



H. P. Milleville

Heads A.I.Ch.E.

Milleville is the highest ranking chemical in scholarship and rates fourth highest in the senior class. He holds the position of student director of publicity for Armour, and last year was comptroller of the *Armour Engineer and Alumnus*, serving on the managing board which last year reorganized this publication to include alumni interests. As a chemical engineer he is the chairman of the A.I. Ch.E., besides belonging to Phi Lambda Upsilon, honorary chemical engineering fraternity, and Alpha Chi Sigma, professional chemical fraternity.

"Trick Mathematics" Presented by Dannis

"Trick Mathematics" was the title of the talk presented by Mark L. Dannis, a junior science student, at the regular Math Club meeting last Friday morning before one of the largest groups attending the club meetings this year. The talk consisted of a series of puzzles, tricks, jokes, and mathematical short-cuts which M. L. Dannis has collected over a period of years. Included were a magic square, "proof" that sixty-four equals sixty-five, several problems involving time relationships, and other puzzles of a similar nature.

A portion of the talk consisted of properties of numbers and how these properties can be of much value as a check on ordinary addition and multiplication operations. The "magic" property of nine known as "casting out nines" was demonstrated. The last part of the hour was devoted to discussion.

Melody Masters to Play for Honoraries

On Friday, May 1, the annual interhonorary dance will be held. Members of six scholastic honoraries and three honorary societies will dance to the music of Ed Kraft and his Melody Masters, audition orchestra for CBS. Members who have heard this well known orchestra play at dances after the Glee Club concerts have been well pleased with the choice. Although a place to hold this affair has not yet been chosen, it has been decided that unnecessary extra expenses such as favors, bids, and programs will be eliminated in order to obtain a suitable hall as well as a good orchestra with the limited funds available.