

DR. WALKER SAYS EDUCATION HELPS IN NAT'L DEFENSE

Has Long Run Viewpoint On War Situation

"Get as much education as you can." According to Dr. E. T. Walker, assistant professor of education, in an interview last Friday, this is the best way a student can help national defense.

Dr. Walker said that a student who gives up a formal education is making a grave mistake. There will be people needed after the conflict is over who have been educated in the ways of democratic citizenship. Too many people think that the only way educational institutions are helping defense is by the E.D.T. programs. This is true in only a limited sense. Although the programs are furnishing the needed workers in defense industries, the major job of all educational institutions is to instill the love of freedom needed in a democracy.

College Enrollment Stable

As yet, he said the enrollment in colleges has not been seriously effected by national defense. According to the latest estimates about 1,450,000 students are enrolled in colleges this year. In total there are 30 million persons enrolled in educational institutions. Of this total only 106,629 are enrolled in the E.D.T. program.

Mr. Walker expressed the opinion that although liberal arts colleges have suffered a decline in enrollment, it is only temporary. After the war the fields of specialized study will be filled and the liberal arts colleges will regain their former enrollment. The need for a degree, he said, has been over-emphasized. Employment managers have laid too much stress on degrees until it has become almost a worship of college degrees. This is likely to decline after the war.

Research Foundation Designs New Camera

The Armour Research Foundation in the very near future will be the first laboratory in Chicago and the eleventh in the United States to possess an electron diffraction camera.

Drs. Frank Trimble and Carl Gamertsfelder, both graduates of the University of Missouri, who have been associated with the Research Foundation since last spring, started to design and construct the camera last August and expect to have it finished by the first of the coming year.

This camera will be used to study the surface structure of various substances by passing a beam of electrons through a thin sheet of the material and studying the diffraction pattern as recorded on an ordinary photographic plate. The entire apparatus is enclosed in a housing from which practically all of the air is exhausted by means of a pump designed to create extremely low pressures. If the substance is too thick for the beam of electrons to pass through, the camera can be used to obtain the diffraction pattern produced when the electron beam is reflected from the surface of the sample.

Electron diffraction studies made possible by this camera will give the same kind of information on the molecules in a surface that X-ray diffraction methods give on the molecular arrangement throughout the body. It will also be possible to study gases by means of the camera.

ELEVEN JUICERS PLEGGED TO HKN AT AIEE MEET

Eta Kappa Nu, honorary electrical fraternity, announced eleven new pledges at a meeting of the AIEE last Friday morning. The names of those electricals comprising the new members of the "cream of the juice" are Hobart Bunce, Ralph Gruetzmacher, Curtis Hepperle, Rudolph Koehler, Gunner Ohman, Howard Pendlebury, Roy Peterson, George Raymond, Ernest Schrot, Roy Wessel, and Herman Wuerffel.

Dr. Vagtborg Speaks

Mr. Harold Vagtborg, Director of the Armour Research Foundation, was introduced upon completion of the pledging ceremony. In his talk on "Electricity in Research," Mr. Vagtborg declared that all things which are conceivable to man lie hidden away somewhere in nature, and that it is the job of research to straighten out and arrange systematically these hidden secrets of nature. According to Mr. Vagtborg, research has passed through three stages of evolution: the accidental discovery, as in the case of glass and copper by ancient man, the cut and dried method of trying all possible means, as was done by Edison, and the present day method of planning the outcome of research beforehand.

Mr. Vagtborg also told of the opportunities ahead in research, stating that only a fraction of one per cent of all the companies in the U.S. engage in research of any kind whatsoever. Next he outlined the method under which research is conducted in the Armour Research Foundation.

Under this system all the men on the research staff meet periodically at a round table and discuss many problems to which no suitable answer is apparent.

New Recording Device

Mr. Vagtborg then told of some of the work undertaken by the foundation and demonstrated an ingenious recording device developed by Mr. Camras, who is a member of the research staff. With this device it will be possible for a business man to dictate his letters while he is traveling, and at some suitable place to mail the recording to a secretary. Following the demonstration in which the voices of Mr. Vagtborg and others present were recorded, the meeting was adjourned.

Chemists Analyze Latest Find, Name New Baby "Retort Rumpus"

Although tucked under the protecting wing of Alpha Chi Sigma, professional chemical fraternity, the chemical party and dance, "The Retort Rumpus," to be held Friday, November 28, will in all ways be an all-school affair. While plans are still in the liquid phase, this much has solidified and an analysis is as follows:

Time: 8:30 to 12:30, Friday, Nov. 28.

Place: Student Union.

Orchestra: Buddy Kreighton and his men.

Special Items: An opportunity to test your date's latent chemical ability.

Refreshments!

Informality!

SEVENTY CHEMS ATTEND SMOKER

Last Friday night, the chemists quit looking at test tubes and reactions, and enjoyed a Monte Carlo smoker. The gathering was sponsored by Alpha Chi Sigma, the chemical professional fraternity on the campus.

Seventy men came to multiply their original thousand dollars. A Minnesotan, in the person of "C. G. S." Schmitz, brought down a new way of shooting dice from the north-country and became a millionaire. In contrast to this graduate student's tricks, William Tell went two hundred bucks down the negative "Y" axis by playing the roulette wheel. (A perfectly honest game, too).

William Hadlock proved his ability to nose out famous men, such as: Taufen, who sang with Bing Crosby; Dick Larson, the famous tennis player; "Doc" Murray, the Hoosier, and Bob Kirk, the man with the Scotch tie.

Appetites were whetted with cider (not the Civils, either) and doughnuts. The old barrel was tapped many times, but everybody was able to walk a straight line to the door.

Movies were shown of the Shell Development plant. Pictures of the by-products of petroleum were featured in the film. A "Mousey" cartoon appeared after the feature.

Dr. Bruce Longtin, eminent quiz-master, continually stumped two of his students and two graduate students on chemical questions. (The men are still blushing with embarrassment).

U. Of Wis. Math Club To Hear Prof. Calkin

Professor Calkin, a member of the department of mathematics at IIT will be in Wisconsin, Thursday and Friday of this week. On Thursday at 4 p.m. he is scheduled to address the Mathematical club of the University of Wisconsin.

His lecture will deal with the operational theory of boundary value problems which he is now engaged in developing. This theory provides big use of the theory of linear functional operators, a unified quasi-algebraic analysis of the boundary and characteristic value problems of differential equations and mathematical physics.

Also active in the math dept. is W. C. Krathwohl, who will act as chairman of the Junior College Section of the Central Association of Science and Mathematics Teachers convention at the Stevens hotel Nov. 21-22.

X-RAY FILM SEEN BY MEDICAL ARTS MEMBERS FRIDAY

The Medical Arts Guild, the recently formed group of pre-professional students, will present a sound movie entitled "Moving X-Rays" at its first regular meeting this Friday, November 14, on the liberal arts campus (Room 307). Ted Wozniak, Ruth Steinman and Norma Cooper, club officers, have been collaborating with Dr. Leslie R. Hedrick, faculty sponsor, in the formulating of a permanent constitution. The club hopes to present lectures by prominent scientists and many field trips are being planned.

All future doctors, dentists, nurses, laboratory technicians, bacteriologists, dietitians, and biologists are invited to attend.

CIVILS REVEL AT ANNUAL SMOKER IN STUDENT UNION

It happened again last night. Yes sir-eee, it happened at the ASCE smoker last Friday night. And you remember what a dismal night it was. Approximately eighty students and innumerable engaged themselves in that most degrading form of recreation—gambling. For a full hour that vice permeated the student lounge as huge sums of bogus money passed from hand to hand over and over again. The roulette wheel whirred, and the dice of the chuck-a-luck clattered amid the moans of the unhappy and unlucky losers. Above it all could be heard the expressions of glee as the more fortunate winners scraped their winnings in from the number covered tables.

The professors, although not as noisy, did not let themselves be forgotten. Even they stooped and strained their seams as they rolled the infamous "galloping dominoes." From the way in which they disappeared so mysteriously, it might be concluded that they did not fare so well. All in all, it might be said that everyone had a gala time, since it provided all participants to lose or win to their heart's desire.

Immediately after the gaming, all gathered in the auditorium. Two pictures were shown, *Tobacco* and *Fred Waring and his Pennsylvanians*, much to the enjoyment of the viewers and listeners. Then a short talk followed. This was given by Dan Smith, rewrite editor on the newly proposed morning paper for Chicago. He related some of his experiences which proved to be very humorous.

To conclude the evening, the boys gathered again in the lounge to pay tribute to the pledges to Chi Epsilon. These men were Jack Jackimiec and Robert Sundstrom, both seniors. Among the juniors similarly honored were Raymond Sauer and Mario Silla.

After these men were duly honored, everyone indulged in that most pleasant of all pastimes, eating. All sorts of delicacies were provided to satiate almost any appetite and cider was also provided to add zest and volume to the singing which rang to the ceiling and shook the rafters.

Like all other days this one had to come to the same end with everyone in high spirits filled with memories of a most pleasant evening spent in good company. It should be added that the varmints responsible for the whole thing were none other than Peiler, Kriesberg, Sauer and Kasman.

IIT WILL SPONSOR AERO CONFERENCE ANNUALLY IN FALL

Airlines, CAA To Send Representatives

First of a proposed series of fall conclaves, the Airport conference was held October 30 and 31, under the sponsorship of the Institute. This conference has contemplated varying the subject from year to year, choosing any topic within the engineering field except "Power," which is discussed at the annual conference held in April.

The Airport conference was enthusiastically received. At the request of the air lines and the Civil Aeronautic Administration for representatives each year, the program for fall conferences has been changed. It is now the intention of the Institute to conduct an Aeronautical conference in late October of each year. Thus, a major engineering conference will be a regular part of our program each spring and fall.

This schedule does not preclude the organization of other meetings of engineers under the sponsorship of the Institute, of which at least two others are now being considered.

Infant Prodigy In-Law Of Prof. Oldenburger

Kenneth Wolf is now only ten years old, and he goes to college. This unique child prodigy is the brother-in-law of Dr. Rufus Oldenburger, an outstanding IIT mathematician.

As a baby Kenneth could read and write, and when he was one year old, his mother taught him how to play the piano. At the same age he could already talk in complete and coherent sentences.

Plays Concerto

When Kenneth was one-and-a-half years old he could read books and newspapers. By the time he was two years old he could identify notes by sound. One day Kenneth's mother heard the radio play a Mozart Concerto. Upon closer investigation she found that the music was not from a radio, but the little boy was playing it by ear. This remarkable incident started Kenneth on his musical career.

In 1933, at the age of two, he wrote a composition called "Mother's Day." Since then he has com-

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IN MEMORIAM

Mr. Wellington R. Townley, Secretary Emeritus of the Underwriters Salvage company, died last Tuesday, November 4, at his home in Chicago, at the age of eighty years.

For twenty-eight years Mr. Townley was closely associated with the Scholarship Plan in the Department of Fire Protection Engineering at the Institute. As President of the Underwriters' Association of the Northwest he was instrumental in establishing a system of scholarship awards of four years' duration, one award being made each year. This plan suggested the considerably larger scholarship system which was established through the Western Actuarial Bureau in 1920. Mr. Townley has been a member of the scholarship committees of the two organizations continually. He was one of the Institute's oldest and best friends.