



Van Pelt Discusses Requirements of a Graduate Engineer Ability to Speak Well Very Important

"What is expected of an engineer" was the subject of the talk delivered last Friday in the auditorium by Mr. J. R. Van Pelt of the Museum of Science and Industry in the first meeting of the Armour Branch of the Western Society of Engineers. Widely respected for his large engineering experience and prowess as a speaker in scientific circles, Mr. Van Pelt was enthusiastically received by a large audience of students.

Mr. Van Pelt announced immediately that he did not intend to attempt building up the engineering profession or encouraging students to specialize in any particular field. His purpose was rather to present the requirements which graduate engineers would find must be met by those who would attain the higher reaches of the profession. The speaker enumerated important considerations of employers in hiring engineers. Foremost among these is the knowledge of how to get along with people and intelligence in both writing and speech. Officials of corporations usually are non-technical men and cannot understand anything but plain English. It therefore becomes the task of the engineer to give reports on his research and professional activities entirely free from encumbering technical phrases.

Basic Work Important

Mr. Van Pelt spent considerable time stressing the importance of thorough schooling of the engineer in basic engineering laws and basic sciences, physics, chemistry and math. It is no longer true that engineers coming into companies must always know their specialized work as the tendency is now for the larger companies to give their own courses. Since the company laboratories are devoted to their specialized field it is necessary that basic engineering laws be firmly ground in during the engineer's formal education. Basic engineering laws do not change but industrial processes change every day.

Important to the engineer also is a general knowledge of economics. A large percentage of men in the engineering field eventually become executives where an understanding of economics is essential.

(Continued on page four)

A.I.E.E. Begins Busy Schedule

Activities of the Armour Branch of the American Institute of Electrical Engineers will start off briskly next Friday when the first meeting of the season takes place at 10 a.m. in Room 2 west in the Mission Building. Featured will be a talk on why an electrical engineer or student should become a member of the A.I.E.E.

Of great importance in A.I.E.E. circles was the Great Lakes District Convention held in Minneapolis September 27, 28 and 29. Representatives from the Armour Branch were Professor Freeman, Instructor Reed, and students Al Veras, George Frost, Daniel Shaver, Griffith Damm, and Robert Rehwaldt. A special meeting was held in which the only papers presented were by students from the various branches in the district. The Armour Branch contribution, concerning activities of the past semester and the coming season, was delivered by President Al Veras.

Increase Social Activity

According to Veras there will be a considerable increase in social activity this semester. At least two smokers will be held, at one of which Eta Kappa Nu will hold a pledging session. Four inspection trips are also being planned. Concerning the fourteen weekly meetings to be held, eight outside lecturers and six student speakers will have the floor. Several of the students talks will be based on personal experience in special technical industrial fields during the summer. The program committee is also angling for several new technical movies from various prominent industrial organizations.

'Hazing Is Out' Order of Dean

For the information of some over ambitious sophomores, hazing has been definitely outlawed by the dean. The dean's office said that enforced cooperation will not be tolerated in any form. This does not mean that there is a possibility of the return of the green hats. Dean Tibbals has suggested that some distinguishing articles such as a common cravat such as is worn by the freshmen at M.I.T.

Another plan has been forwarded by the dean, allowing the return of green hats on condition that there would be no hazing as an enforcement. The decision on this plan would be accomplished through a vote of the entire student body.

Abolished last March, the green hats were considered completely outmoded and not in accord with the spirit of Armour.

A.S.C.E. Hears A. J. Hammond

Alonzo John Hammond, nationally prominent civil engineer, will be principal speaker on the A.S.C.E. program for next Friday's meeting.

Mr. Hammond was graduated from Rose Polytechnic Institute in 1889 and went to Massachusetts Institute for post graduate work. After serving as city engineer in several Indiana cities, Mr. Hammond came to Chicago where he occupied various engineering positions, being in charge of engineering design and construction of the Chicago Union Station from 1914 to 1922.

Outside Work

After varied experience away from Chicago, including construction of Hydro-electric power plants and bridges, he returned to the city for the straightening of the Chicago river.

Of the various engineering societies of which he has been a member, Mr. Hammond was president of the A.S.C.E., the Construction League of U.S., and the Indiana Engineering Society, and is now vice-president of the American Engineering Council. Other affiliations include the American Institute of Construction Engineers, American Railway Engineering Association, and the Western Society of Engineers.

Record High On Rifle Club Men

Applications for entrance into the Rifle Club reached the all time high of 64 this semester. Of this total, 39 have already been accepted and it is expected that many more will officially be placed on the list by the end of this week. According to the re-elected president, Bill Mashinter, those wishing to be members must apply soon, as the membership will be closed in the near future.

Meets with Wheaton, Brookfield, and Brooklyn Polytech of New York have already been scheduled, in addition to the University of Chicago Midwest Invitational classic which will take place in the first week of April.

Plan Two Teams

Because of the keen competition contemplated, the rifle club this year will be composed of an A and B Team. This step will increase the possibilities of claiming high ranking positions in the Midwest Invitational meet, in which Armour placed 3rd last year.

Encouraged by the record of eight out of ten wins last year, and with most of the old men returning to bolster the array of new material, the club has every intention of capturing first ranking in the U. of C. meet toward the close of the season.

Bill Mashinter as president will be assisted by Henry Dryer, sec-treasurer, August Galandak, Manager; Jimmy Baker, Range Officer; Ed Dost, Team captain and R. Peterson and Joe Hartman composing the executive committee.

"Am I in the Way, Boys?"



Coal Movie Shown By Godwin, Heeren

Following their program of publicizing the new "liquid coal" developed by Drs. Godwin and Heeren of the Research Foundation, the Public Relations Department this last week has had prepared a motion picture depicting the preparation and rise of the new liquid coal. The picture gives more exact information on the present method of manufacture than has been available in the past.

Dr. Heeren is shown preparing the coal "fires" or dust by means of a "screening" machine. The process of mixing the coal and the oil is shown by Dr. Godwin. Essentially a mixture in correct proportion of a light oil, a volatile "starting fraction," and the 300 mesh coal is processed in a colloid mill for a period of 5 hours. At the end of this process the fuel is ready for use.

Three Distinct Types

To date three types of colloidal fuels have been used successfully in stock automobile engines. In all types the coal used is the same—a 300 mesh coal dust. The types vary in the oils used. The first type uses a mixture of gasoline, fuel oil, and lubricating oil. In the second the coal is suspended in what is commonly known as a Deisel oil. The third uses a form of range oil with the addition of a small amount of a volatile hydrocarbon or "standing fraction." The addition of the small amounts of volatile substances is to facilitate quick starting. In all cases the treatment of the mixture is the same. At the finish of the colloidal process the mixture is chemically stabilized to keep the coal, which is now reduced to about 500 mesh size, in permanent suspension.

One of the most remarkable properties of this "liquid coal" is its use (Continued on page four)

Bradley Sponsors College Meetings

Bradley Polytech has announced a convention of students of mid western universities and colleges to be held on Friday and Saturday, Oct. 13 and 14. Four students have been selected from the student body to attend. These men, a representative group of the entire school, are: Jack Clark, President of A.T.S.A.; Eugene Worcester, editor of the *Cycle*; Don Sande, president of Interfraternity Council; and Frank Lasker.

Organized for the purpose of discussing the pressing problems of students now attending institutions of higher learning, the convention is planned on a "round table" basis.

Von der Broek Developed Two New Theories

The first in a series of sixteen lectures on engineering mechanics was given September 27 by Professor Van der Broek of the University of Michigan, in the Engineering Building, 205 Wacker Drive, in the rooms of the Western Society of Engineers. These lectures are scheduled for each Wednesday night and, although they are being given at night, Dean Grinter of the graduate school said that interested day students may get cards to allow them to attend.

Professor Van der Broek came to this country from Holland at the age of fourteen and received his education at the University of Kansas. For the past twenty years, he has been with the University of Michigan where he is now Professor of Engineering Mechanics. It was here that he developed his two new structural theories.

The theory of elastic energy is the first theory he developed. It is used in making analyses of bending moments in any type of structure whatsoever. His book on this subject "Elastic Energy Theory" was published in 1931 by John Wiley and is a handy reference book for the practicing engineer.

Has Second Theory

While working for the Canadian Bridge Company, Professor Van der Broek worked out his second theory, the theory of limit design. Ordinarily, one designs for working stress; the maximum stress on the structure is determined, a factor of safety is applied, and the appropriate materials are then used. In using his theory of limit design, Professor Van der Broek designs his structure to resist failure, so that instead of a fault occurring when double the maximum stress occurs, the steel in the structure actually begins to float and thereby changes the stresses throughout the entire structure, and until the maximum stress is equalized throughout the entire structure there will be no faulting. When faulting does occur in structures thus designed it occurs in dozens of places at once. Designing according to this theory is quite effective in reducing the cost of construction. At present its main use is in designing the towers we see all over the nation for carrying high power transmission lines.

For the past two years, on the basis of his work in engineering mechanics, Professor Van der Broek has been employed as a consultant by the Elgin Watch Company of Elgin, Illinois.

Radio Club to Contact 'Cruiser'; Install 1000 Watt Transmitter

Larger Dance Club Launches Season With 75 Members

Under the leadership of Dan Stone, the Dance Club launched into its third year with 75 members present at a special meeting held Monday, October 2, in the Student Union.

At this meeting the club's constitution was revised to conform to the present semester's calendar. Membership is to be closed on October 25 and after this, admittance to the classes will be granted only to those possessing membership cards. All students interested in dancing, whether experienced or not, are urged to report Wednesday at 5 p.m. in the Student Union. The following officers were elected for this year. Roman Mankus, president; E. J. Colant, vice-president; Fred Holle, secretary and treasurer; and Charles Jones and L. J. Mays, sergeants-at-arms.

Have Dating Bureau

Soon after the Thanksgiving holiday the first social will be held. By this time the beginner will have acquired ability in the art of dancing and will look forward to dancing with the fairer sex. To assist the backward (those who don't know many girls) the club's dating bureau maintains an extensive file, which has descriptions of all the girls. A pamphlet of instruction in the social graces is being compiled and will be distributed as soon as it is ready.

Dan Stone, who has contributed his services to the club since its organization, will again be the instructor. Formerly a professional dance instructor at the Mildred Wall studios, Mr. Stone is now a pre-junior M.E. co-op. Assisting him will be Fred Tills and several other advanced and professional dancers. Straight ballroom dancing will be taught. Jitterbug dancing will not be included as the purpose of the club is to teach beginners the art of dancing and to acquaint them with the proper social etiquette.

Mrs. Orcutt, sponsor, said the club was organized because she recognized in many students an inferiority feeling caused by a lack of the important ability to dance. "Boys," Mrs. Orcutt said, "must know how to conduct themselves when in the presence of young ladies, and the ability to dance is quite an asset."

Co-ops Dance Saturday Eve

Opening the fall social season next Saturday, October 14th, the Co-op "B" group will hold their annual dance. The auditorium of the Student Union building will provide the setting, while Norman Forbes, with ten men and a girl, will provide the musical background.

The dance committee has completed the plans for the decorations for the occasion. Multicolored streamers and balloons will convert the familiar study room into a gaily festooned ball room.

While the orchestra is flooding the building with dance music, the lounge will provide a welcome retreat for those seeking relaxation. The fountain will be open for refreshments.

Bobco Is Chairman

Bill Bobco has led the committee concerned with the preparations for the occasion. The orchestra was selected after critical auditioning of several bands. The bids arrived at the beginning of last week, and their appearance has aroused favorable comment. They are assembled in book form, with a tan cover, a white inner page, all bound with a silk cord. Interested Armourites may see bids on display in the bulletin boards, and may purchase theirs at the bookstore, or from committeemen and officers of the Co-op Club. Bids are being offered at the price of \$.75 apiece.

The music will start at 8:30 and will continue until 1:00 a.m. and bids will be on sale at the door until 9:00.

Operate on Three Bands Use Code, Phones

When the Snow Cruiser reaches the Antarctic early next January, a group of amateur radio operators here in school will be tuning over the bands, straining their ears for first sounds from the 500 watt transmitter which will serve to keep the expedition in contact with the outside world.

Faint signals, travelling half way around the earth, will be spelling out *K4USC K4USC, go ahead, am listening, K*. Should conditions be favorable and the signals picked up here at W9YW, a 1000 watt transmitter will be ready to go on air to reply at the flip of a switch. And if past experience is a guide, there is good chance for direct communication between the Snow Cruiser and the base station at Armour. Transmissions from the last Byrd expedition in the Antarctic were heard clearly a few years ago, at the very receiving location that will now be used.

Plan New Antenna

No stone has been left unturned to insure dependable communication. The transmitter here will be the most powerful allowed on amateur frequencies. It can be set to operate in any part of the 40, 20, and 10 meter bands so that a different part of the high frequency spectrum can be resorted to, if one band proves unsatisfactory. Three or four new receivers are in the process of installation. These have the highest sensitivity and selectivity that it has been possible to obtain consistent with a low noise level. A \$250 rotary beam antenna will be erected, making it possible to concentrate the transmitted wave at a small angle, directed toward the receiving location.

Although code will be used for traffic handling, a good part of the operating will be done on phone. It should be possible for Dr. Poulter or Dr. Wade to converse with their associates here at the research foundation while they cruise about near the south pole.

Location Approved

Felix Ferranto, the radio operator who will take care of the cruiser station, was here, at W9YW, last week. He investigated all points concerning the base station at Armour and gave recommendations to the research department. He approves the present location of the apparatus in the Rho Epsilon Radio Fraternity rooms.

Amateur operators who attend Armour and are interested in doing some of the operating at this end are invited to give their names to O. Leonhardi, president, or J. D. Pierson, communications manager. Operating schedules with K4USC, official amateur station of the U. S. Antarctic Expedition, will be worked out as soon as possible.

'Eye' Plans Evening Meeting October 12

Announcement has been made by Jim Rummell, head of the program committee, that the camera club will hold its first evening meeting in the clubrooms on October 12, Columbus day. As now scheduled the affair is to begin at 7:30 promptly. No speaker has been announced, but this will be given out in the near future.

Don Crego is planning to give a course in darkroom technique to all of the club pledges, but all members are welcome to come if they like. The course will cover all modern phases of developing, fixing, printing, enlarging, and special processes. Instruction will be given in use of special developers which have come on the market for fine grain work.

General instruction in photography is always available. Lighting effects, focusing, new angles, and interesting subjects are all taken up in the regular session of the club and demonstrated by the salons and pictures displayed on the hall wall in the Union outside the lunchroom.

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The Chemical Department

One of the most universal sources of disgust among students, particularly those in the under classes, is the condition of the equipment handed out in the chemical laboratories and the unnecessary delays involved in obtaining it.

Every freshman is, or soon will be, familiar with the process of waiting fifteen or twenty minutes to get a couple of test tubes or some special reagent from the attendants, cutting a nice piece out of the period's working time. This can be particularly aggravating, not only to first year men, but to upper classmen who have a long, difficult experiment to perform in a three hour lab period and have to wait to sign out and sign in their equipment.

When a student has reached the upper years of the Chemical Engineering option, conditions are found to be even worse in some cases. Experiments are long and involved, requiring much equipment and careful manipulation. When the equipment is in poor repair and requires a great deal of time and chasing around to secure it, is it small wonder that the students get disgusted with the set-up as it is now. To cap the whole thing there is a \$15.00 lab fee thrown in.

In certain cases the instructor is not to be found when a question arises requiring expert attention. When the learned gentleman is supposed to be guiding the hand that feeds him, he may even be found doing research on his own hook. If, when found, he can be persuaded to lend his assistance, without the usual and predominant process of passing the buck to some one else, is it may be possible to get something done. All of which is an intolerable condition which should be remedied at once. Yes? No?

To this end may we suggest: Placing another man in the maintenance department to help the overburdened man who is now there. Definite scheduling of lab instructors and seeing that they stick to their duties. Enlargement of stock-room facilities to include a separate dispensary for special equipment. Acquainting the graduate assistants with the work required of the students so that they can be of greater help than at present, groping in the dark. Arrangement of graduate work so that it will not interfere with the regular day school operation. Allow the students to remain in the lab until 5 o'clock, as per the schedule from the registrar's office, in contrast to the present practice of closing from 15 minutes to one hour early.

Revision is needed in some of the lectures received by the men taking the required special methods course during the summer. At present the practice is for the instructor to dictate a series of notes and passages from books, having the students take them down word for word. This is, in our humble opinion, one of the greatest wastes of time to be found. Words go in the student's ear and come out through his pen, leaving no trace behind them. Fingers become cramped and brains get fatigued from taking this stuff in a steady stream for two hours at a stretch. It all achieves no purpose. A straight lecture with optional note taking would do a much better job.

For the benefit of the chemical students, let's see something done.

"The Slipstick"

Cleave to "The Slipstick"; let the Slapstick fly where it may.

We're getting tired of hearing all these brazen remarks about the material which has been printed in the SLIPSTICK in the last couple of weeks; and it has hurt us very deeply to think that that you should think what you do think. To show off our more intellectual inhibitions The Literary Staff has prepared for you the following little note on the Drama.

Hib: Never tell a secret around chairs.
She: Why?
Him: Because chairs are talebearers.

Dear Male Order House:
I ordered one of your men, but he didn't show up. Dejectedly,
I Wanda Mann.

The small town courtroom was packed. The tension was so thick you could lean against it, and the prosecution had the defendant on the stand and was on the verge of frightening a confession out of him. The pathetic defendant was being tried for murder and his case looked helpless. He shrunk into the witness chair and tried to shield his eyes from the gesticulating lawyer screaming at him.

Now the D.A. had the man where he wanted him. "We got the goods on you," he bellowed, shaking a fist. "Come on, now, talk turkey!"

Ah, he was right. The dependant leaped to his feet, his face contorted with agony—a cornered rat. He could stand it no longer. Raising his head he shrieked, "Gobble, gobble!"

He: I've been in a terrible state of consternation for the past three days.
Hi Yo: Did you ever try whole bran?

She looked at me with misty eyes,
That lass I love so well,
And with a voice of anguish cries,
"Say, ain't these grapefruits hell?"

Twenty or more Armourites were taking time off in a little beer joint on State Street when a bad hombre came thundering in, shooting his pistols right and left, and said to the boys, "Every one of you dirty skunks get out of here." When the dust, resulting from the mad exodus had settled, everybody had fled but a lone little frosh. The bad man turned to him and with his pistols still smoking said, "Well?"

"There sure were a helluva lot of 'em."

Prof. Hendricks: Give me an example of Greek tragedy.
Freshman: A closed hot-dog stand.

Sorority Sue: I told him I didn't want to see him anymore.
Sorority Sal: What did he do?
Sorority Sue: He turned off the lights.

And then there's the one about the old maid who took a tramp in the woods, and the tramp died.

"Young man, as you're a suitor for my daughter's hand, I'd like to know something about your family."
"Well, I know very little, sir, except that my father was drowned in the 'Titanic' disaster on his way over to marry mother."

It had been raining and storming around the little farm for a week. In the chicken coop, the hens were all huddled together. The rooster stood before them.

"Girls," he said, "production is falling way down below normal. I'd like to know if there is any reason for it."
"No particular reason," one hen replied, "except that we're laying low until the storm blows over."

Date: Don't you want to kiss me? Don't I appeal to you?
Armour Soph: It isn't that—I just haven't been able to spit out this gum yet.

Prof: Brown?
Voice: Here!
Prof: I don't see Brown. Who answered for him?
Voice: I did. I thought you called my name.
Prof: What is your name?
Voice: Stevenoplotski.

THREE WAYS TO END A DINNER CONVERSATION

1. Ask the lady on your right if she's married. Should she say "yes," ask if she has any children. If she says "no," ask her how she does it?

2. Ask the lady on your left if she's married. If she says "no," ask her if she has any children.

3. Ask the lady across from you if she has any children. If she says "yes," ask if she's married.

Rastus: Brutha president, we needs a cuspidor.
President of the Eight-Ball Club: I appoints Brother Brown as cuspidor.

Professor, do you think it's right for me to sit on your lap when you explain your theory of reincarnation?"
"Why not? We only live once."

We hope we have lived up to your expectations this week and in case we haven't just remember that when a man looks down at the heel there's usually a trim ankle above it.

HI YO SILVER.

NEWS

Best news of the year is our traditionally famous and colossal . . . ARX DANCE. . . This year it is going to be the most colossal dance of the year, (it always is) unquotes Dodge. Here are the fine points:

Date: November 3, 1939.
Time: 9:30 P.M.
Place: Shawnee Country Club.
Orch.: Corry Linn and boys.
What: THE ARX DANCE!!!

Start looking around now for that certain gal . . . she's gotta be good to go to the Arx Dance! . . . Siles hasn't got any trouble coming if that gal on his desk is in town. . . But Hutton has.

We saw Francis the other day; you know, the blonde with wow . . . it seems that Ossie is too young, and Mandel just can't play around anymore (that gal up north read the Arx News) . . . so she's looking around . . . in fact she saw Hutch the other day and thinks he's cute! (Take a look at him . . . now, I ask you, do you think he is?) . . . In that connection, we have "Eubbles" Biedermann. . . It seems that Salzman is a sorority house "glamour boy" . . . he's got his eye on the parlor maid . . . in the last judgment "Salz" got socked! . . . Oh yes, he . . . (censored).

Speaking of work: Mandel's starting to make models . . . "different angle" Sauermann. . . News of poster contest—Reinke and Kulieke agree that theirs was the best; Center received first; Sauermann, second; Howe, third.

Back to the dance, ah me, waltzes, fox trots, square dancing, two steps, three, and four . . . say what am I thinking of, there'll be sweet and smooth, and the solid stuff, you all hear me, SWING . . . so let's get going, get your date now . . . say, did you see that girl smile at you? . . . She wants to go to the Arx Dance. Boz-Arts.

CO-OPS

By E. P. Hanuska

Last Tuesday the third year men had the rare treat of seeing Mr. Charles Peterson, world famous three cushion billiard expert, perform a variety of difficult and trick shots on the billiard table in the faculty club. Mr. Peterson is definitely of the opinion that billiards is becoming more popular in the colleges of America and he is doing all he can to encourage the adoption of the game by college students. His demonstration drew many rounds of applause as he successively executed apparently impossible shots with little effort.

Mr. Peterson's appearance here was due to the efforts and influence of Carl Swanson B3, who, inspired by a recent lecture in mechanics by Mr. Harris, thought there was no better way of learning the principles of mechanics than by observing their application. And we all heartily agree.

The course in Advanced Calculus (Math. 303, 304) will start on Wednesday, October 18. The first class will be from 6 to 8 p.m. Dr. H. A. Giddings will teach the course. More information will be announced to the classes during the week.

Now that Prof. Lease has presented a plan whereby we may enlarge our general knowledge by more reading during the work terms, and now that Prof. Hendricks has agreed to supervise the project and give English credit as an incentive for such effort, then let us act quickly to take advantage of this opportunity. The class officers should find out how many fellows are interested and then arrange a meeting with Prof. Hendricks so that the plan can get under way. This meeting should take place this week as next week we shall be back at work.

Seems like the Co-ops are going to be pretty busy from now on, what with a new math course, extra reading, and the new civil aeronautics course. That's all the more reason why you should attend the Coop dance October 14 before plunging into this heavy schedule. Remember, "A bit of nonsense now and then is relished by the best of men."

STEAM SHOVEL

"Dig, dig, dig, well ALL RIGHT, well ALL RIGHT, dig, dig . . ." Yes, we dug all right, and while not striking oil, we gush forth with the latest news of the week, brought to you with the compliments of the staff. . . . After two whole weeks of begging the maintenance department to put in some lights in the news office, the NEWS still gropes (and gripes) in the dark! . . . Prof. Dutton left suddenly early last week for the East on a mysterious trip. (Ed. note—The World Series ALSO opened in the EAST last week) . . . "It's this New Deal chalk," was Prof. Nash's oft repeated comment as he frantically tried to make a legible impression on a Chapin blackboard. "See, it even takes the black right off the board," he continued as he held aloft the grade C variety chalk, put into use for economy purposes . . . An ingenious senior mechanical figured out that Jesse's den takes in \$1.50 per year per student on lab covers alone, not to mention the three cents a sheet on log paper, penny a sheet on graph and lab log sheets, and numerous fantastic sums on practically every other supply. How about it, Mr. Treasurer? . . .

Continuing our comments on the ties of various profs here and there, may we mention that Prof. Freud's would stop a clock. . . . Stamp Sternfeld was at angles in juice last week when he asked the instructor if the street car in a home work problem was in parallel with the tracks, or otherwise. Well, the best of us sometimes run off the track. . . .

4-11 Alarm:

We always knew Dr. Krathwohl was a man of fire and action, but when erupting showers of sparks from under his coat last Monday, his analyt class had to make him aware of his precarious situation. It seems his pipe objected to the rag-weed he was using and back-fired in his hip-pocket.

The rumor that Mr. Oldenburger will begin publication on "1001 Best Alibis for Use on Coming Late to Class" is unfounded, even though Mr. O. is long versed in their use.

Fifteen hair-pulling lassies are on the war path, so Bob D.t. De Hart, C.E. grad student, better watch his step when in the vicinity of Eagle River, Wisconsin. This pretty predicament was created by an act of war on Bob's part when he selected the wrong winner in a local beauty contest in Eagle River.

"At last, at last, it's come," was Senior Chem DIXIE DUNCAN'S ejaculation last week. "It" was a bid to Loretto Turner's house for dinner Sunday. Loretto was "Poppy" in the last success of the Armour Players, "Captain Applejack."

All model airplane builders will find a very informative article written by a present evening school student, Ed Lidgard, in this month's issue of Model Airplane News.

The Steam Shovel has been receiving quite a few missives lately denying and confirming various statements set forth in this column. For the enlightenment of youse future microbes, please confine your letters put under our microscope to two or three statements, since space will not permit more lengthy contribs.

A grievous wrong righted . . . Lloyd Norkus would like the student body to know that Billie's correct telephone number is Saginaw 8864, not 8844, as mentioned last Tuesday in this column.

The feud between Econ. Prof. DAVEY and "Suitease" HOWIE YOUNG is well worth watching. Further developments will be reported.

Gene Worcester's future bride (as of next June) had her picture and THE announcement in the Metropolitan section of the Tribune one Sunday recently.

As the last strains of Moon Love sung by the Glee Club re-echoed through the Student Union, MR. ERICKSON delicately placed two fingers on his nose emitting a soft P.U. "Boys," he began, "the harmony was awful. I don't believe you fellows could even harmonize on Sweet Adeline. . . . Now when I was a boy (loud guffaws) . . ."

(We all know what you mean, Mr. Erickson.)

"Gentlemen, it takes—" CLANK, BANG, "I say it takes—" BANG, CLANK, CLANK, "it takes a man with—" CLANK, CLUNK, "with a well rounded—" CLANK, CLUNK, CLANK, CLUNK, "background . . ." Yes, you too can picture the difficulties J. R. Van Pelt encountered and tried to overcome during his probably interesting lecture last Friday at the W.S.E. meeting. It's about time something is done to correct the situation of the ungodly noises emanating from the steam pipes in the auditorium. Efforts to shut the pipes off only intensified the noises. . . . Well, see you next week.

SHADES OF YESTERYEAR

We have also, Professors Libby and Nachman, of the class of 1902. These three are members of the Mechanical Engineering department, where Prof. Freeman, '02, is on the Electrical staff.

As long as there were girls attending this school, there had to be sororities. Armour then boasted of two sororities, one of which was Alpha Delta Sigma. In 1900 this organization boasted membership of eight girls.

If there were five more girls here now we could start a sorority. Wouldn't that be sumpin'?

The elevator, it goes up
And then comes down again.
When will it go both ways at once—
I wonder when!
Integral, 1900.

And here the Armour Tech News outlines for you a full social calendar—for 1900.

Fraternity informal dance.
Glee Club concert.
Fraternity and Sorority hop.
Jr. - Sr. Academy Hop.
Junior Hop.
Senior Academy Hop.
The boys and girls were kept pretty busy in their spare time, what?

Basketball Prospects Dependent On Spirit, Attitude of Players

Dismal Outlook if Past Conditions Prevail

By Jim Fahey

After perusing the basketball schedule released on this page last week, one is inclined to analyze the program and make some sort of a prediction for the ensuing. In this story we'll analyze but we'll withhold a prediction until such a time as we believe we have all the information we need. But before looking into the future, it is necessary to study the past.

Last year the Techhawk cagers won five and lost nine. George Williams, De Kalb, Arkansas State fell along with double killings of Chicago Teachers. Of these four teams only De Kalb and Arkansas State had any right on the same floor as the Institute men and Armour didn't beat Arkansas, the officials did.

Chicago, Detroit Too Good

On the other side of the record, the cagers bowed to Chicago, Detroit U., Detroit Tech, Elmhurst, North Central, and twice to De Sales and Lake Forest. Of these losses, the De Sales, Chicago, and Detroit U. games were excusable as the Federalists were definitely not in the same class as the university men. However the other games were games the Techhawks could have won and should have won.

Several factors enter into the poor showing. First, Paul Henriksen, co-captain and regular guard was unable to play a game due to injuries. This left the team without a scoring guard and this loss was felt more as the season progressed. Second, the team took little or no interest in the proceedings. Even some drastic measures used failed to bring response. Third, the team was terrifically handicapped by the fact that it didn't know, wasn't taught nor allowed to practice a zone defense or the methods of penetrating the same. This cost us the Detroit Tech game and was the cause of the despicable display in the Chicago, Detroit, and De Sales games. On top of that, the team had no organized defense nor offense and as one former player said, "They're the only team I've seen that can start working the ball in at the free throw line and end up in the center of the floor." Fourth, too many of the players were playing outside ball and their interest there was greater than their interest in the Techhawk's outcome.

Dirty Playing

From the foregoing, one may assume we're trying to alibi for the team. We're doing nothing of the kind. In our opinion the 38-39 squad was the most dissented, unspirited and unorganized group of individuals we've ever seen on one floor. It is an actual fact that the players were deliberately fouling each other with indications that no "accidents" were meant. This resulted in one sprained ankle as well as some very sore spots in various parts of the anatomy.

(Continued on page four)

Two Changes Made at Touchball Rules Meet

Intramural touchball officially got under way as new rules and old were discussed in a meeting of some of the managers of the teams last Friday.

After considerable discussion it was decided that there would be just two rule changes from those of last year. One important change states that on a kickoff there will be no forward passing. Last year the receiver could forward pass the ball, if he caught the ball and did not advance with it. It was decided that due to the many arguments about the play, it would be eliminated this year. The other important rule change stated that the team just scored upon had the choice of kicking or receiving. The 1939 Spaulding Football rule book will be the "Hoyle" of the tournament. All the rules will be posted on the bulletin boards before the first game, so it is hoped that there will be no arguments during the games.

Teams so far entered in the tournament are the Junior Fire Protects, Junior Civils, Junior Chemicals, Soph Fire Protects, Senior Fire Protects, Junior Juicers, Junior Chemicals, and Freshman Comets.

Intramural manager Frank Opila said that he hoped to have play started today.

Junior's Nine Has Easy Time Taking Baseball Tourney

By Fred De Money

By beating a mediocre senior team and a fighting frosh squad, the junior nine snatched their second straight interclass hardball championship. The champs trounced the seniors 11-6 on Wednesday, and won the playoff with the freshman team 3-1 last Thursday.

Reinforced by several members of the regular nine, the juniors proved to be the sluggers of the tournament. The junior-senior contest showed the eventual winners scoring seven runs on three hits and three errors in the first inning. For their turn of the inning, the seniors mustered two runs on three walks and an error. And so went the game, with the juniors picking up runs by the two's and three's, and the seniors making a futile rally of three runs in the fourth inning.

Frosh Score First

And so, filled with optimism from their previous game but forwarned of Silla's pitching skill, the defending champs entered the play-off game. Winning the toss, the juniors elected to field the first part of the inning. Brazelton, first man up for the class of '43, grounded out to Carrier. Krause then walked Guetzow, who immediately stole second. In Benz' blast to center for a single, Guetzow scored with the frosh's lone tally.

Combining a walk and three hits, the juniors moved two men across the plate during their half of the opening inning. With one gone, Bauch walked, sneaked to second, and scored when Pfeffer drilled one through the box. Pfeffer moved to third on "Moose" Krause's safety, and walked home when Yursis caught hold of Silla's groover.

Frosh Threaten

The only time the frosh threatened
(Continued on page four)

An Open Letter to the A.T.S.A.

Last spring, after a year of debating and discussion, a group of the leading students of the school gave to this paper their suggestions for changes in the A.T.S.A. Constitution. These suggestions were printed and by means of a petition, one suggestion—the elimination of the two-thirds rule—was realized.

Two of these suggestions are of special interest to this department, mainly due to their athletic nature. The first is the plan to give the power of purchasing intramural equipment and awards to the intramural manager. This plan should be of import to every Techhawk who participates in intramural or interclass activities.

The reason for the change is found in the particularly inefficient record of the present dispenser of awards. It has not been uncommon for recipients of awards to wait for from four to seven months for their medals. Was such delay necessary? Did appeal to the offender yield any type of action? No! Why? Simply because the items of the intramural, having small pecuniary consequence, are too minor to merit immediate consideration. Consequently it is essential that a new system be found as it is clear the present one is not serving the men who are paying the freight.

A second item of interest is the amendment which gives the purchasing power of the athletic equipment and awards to the athletic director or such persons as he may designate. To tell how the power ever migrated from the athletic department to the treasury department would be the narration of how one executive branch of the school pulled an "anschluss."

The present situation might have gone on pleasantly but for several circumstances. First—the exasperating delay in obtaining awards. Why should the basketball team, whose season ends in the middle of February, be forced to wait till the end of May before receiving sweaters? What good is a letter to a senior if he can only wear it around school for one week? After all, the reason we give letters is so that the students who have distinguished themselves athletically may be recognized by the wearing of the "A". If this delay was necessary we have no kick, but sweaters can be obtained in four days if necessary.

Second—the method used in purchasing. In this type of buying, our agent has seen fit to ask bids from a number of concerns. Well and good. But why should the bids of these companies be made known to the competitors? The reason—to cut the price—in simple language, to chisel. What's the result? A large nationally established firm has lost its respect for Armour, the other companies most likely have also. But striking home closer, the company that received the bid for major awards gave the athletes a reciprocal treatment. Few, if any, received sweaters that fitted, nametags were misspelled, and several other less important but irritating items were received. We got the raw deal, and we dealt the cards.

By the above it can be seen that the two items are in need of change, and may we suggest action be taken immediately. Things could, should, and must be different.

Announce New Practice Program For Matmen as Gym is Swarmed



By Jim Fahey

Wonder why the Senior Chems and Mechs failed to enter the touchball tournament. We know that there's dissent in the chemical ranks but we can't see why the Mechs weren't the first entered. They're prospective champs.

* * *

The chemicals just haven't the interest. A team composed of Puhl, Norkus, Grigas, Kazmierowicz, Sher, Meyer, and Natinchek could hold its own with anyone but only Grigas and Meyer have expressed any desire to uphold the honor of their department.

* * *

Because of this, Manager Opila has extended the entering deadline to Friday. Any late entries should be given to Jesse Kremer in the bookstore.

* * *

It is of the utmost importance that the playing times for your team be included with your entry. If it isn't you'll have to play at the time arranged or at some mutually agreed time during the week the game was scheduled, otherwise you'll be eliminated.

Touchball Schedule

Tues. 10:00
Jr. Chem vs. Sr. F.P.E.
Wed. 2:00
Jr. E.E. vs. Jr. F.P.E.
Thurs. 2:00
Comets vs. Jr. Mechs
Fri. 2:00
Jr. C.E. vs. Soph. F.P.E.

Turnout Increases to 106 as Earnest Work Starts

By Floyd Andersen

In keeping with Armour's rapidly expanding front, the boxing and wrestling teams are making great strides forward in increased manpower under the guidance of "Sonny" Weissman. A new record turnout of 106 men is reported for instruction in the art of self defense. Equipment has been issued to over 70 men and workouts have started while a schedule of matches is being rapidly drawn up. A new time schedule for practices has also been set up.

Men are standing six and seven deep for each weight division in wrestling, and the competition will be very keen. Some of the new comers have a fine build to back up a good past record, and every man will have to be on his toes. Not many men were lost by graduation last year, so a number of men are returning who have had intercollegiate wrestling experience. The returning lettermen are Balsewick, heavy; Captain Hanna, 145; Kazmierowicz, 165; Nigrelli, 155; Harrison, 135; and Till, 121.

Practices Four Days a Week

Coach Weissman calls attention to the new schedule of practices put into effect this year due to the large turnout of candidates. Practice will be held on Monday, Tuesday, Wednesday, and Friday nights of every week from 4 to 6. All those competing for team berths should attend at least two of these practice sessions. If some of the men have classes until 5, they can still come out and get a workout before the squad quits for the night.

Plan On Two Teams

With such a great display of interest in boxing and wrestling, the school should be able to put an even stronger team on the mat than in previous years. The squad will have sufficient time to find itself and get into shape since the opening meet is not until

(Continued on page four)

By burning 25% slower than the average of the 15 other of the largest-selling brands tested—slower than any of them—CAMELS give a smoking *plus* equal to

5 EXTRA SMOKES PER PACK

Cigarettes were compared recently... sixteen of the largest-selling brands... under the searching tests of impartial laboratory scientists. Findings were announced as follows:

- 1 CAMELS were found to contain *more tobacco by weight* than the average for the 15 other of the largest-selling brands.
- 2 Camels burned *slower* than any other brand tested—25% slower than the average time of the 15 other of the largest-selling brands! By burning 25% slower, on the average, Camels give smokers the equivalent of 5 extra smokes per pack!
- 3 In the same tests, Camels held their *ash far longer* than the average time for all the other brands.

*Penny for penny
your best cigarette buy*

"I know from years of experience that Camels give a longer smoke—milder, cooler, mellower"

SAYS JOE WILLIAMS
FAMOUS SPORTS EXPERT

Copyright, 1939
R. J. Reynolds
Tobacco Company
Winston-Salem, N. C.

LONG-BURNING SMOKES have a big appeal for Joe Williams, as well as for many another cigarette smoker. Joe, whose keen comments on sports are eagerly read by millions of fans, is equally "in the know" on cigarettes too. He says: "Every Camel gives me an *extra* period of cigarette enjoyment—a longer smoke, and a milder, cooler, mellower smoke! Naturally, such a cigarette has a more appealing taste. Yes, sir," Joe concludes, "it's a real thrill to smoke a Camel." You, too, will find that Camel's long-burning, costlier tobaccos *do* give more pleasure per puff—AND—more puffs per pack. That's pleasure *plus* economy—a shrewd buy. No wonder America's smokers have made Camels their cigarette choice No. 1.

CAMELS — Long-Burning Costlier Tobaccos

MORE PLEASURE PER PUFF—MORE PUFFS PER PACK

Saga of Perils of Travel in Antarctic Revealed by New Glee Club Song

Has anybody ever heard a penguin bark, or sigh, or even howl? Has anyone ever heard a polar bear grunt, groan or even growl? Do seals make as much noise as men who have just shelled out for wife's sealskin coat. Do whales make a whale of a lot of noise? Do the eskimoes, eskimoes, and anti-knocks go ugh-ugh-ugh, or is the latest oomph, oomph, oomph. And do the coyotes 'owl like the English 'owl? And will the Snow Cruiser go crunch, crunch, crunch as it glides across the icy wastes?

Well, all these facts may not be pertinent to the case at hand, but the point is—the Glee Club has a NEW song. And is it new! And what a song! So, if you have any tips on how the above animals commune with each other, and nature, send a telegram collect to O. G. Erickson, director of Armour's musical clubs. The mystery may be unravelled by saying that Chicago will be greeted at the dedication of the snow cruiser by a serenade from the glee club singing the aforementioned song "Onward to victory, over the arctic snows," etc. Of course, as all you men who have spent so much time in the colder regions (raiding the ice box each night) know, there are no polar bears, eskimoes and the like in Antarctica, according to north-bound explorers home to see the wife and kiddies. However there may be penguins here and there (they have to hang out someplace besides on the wrappers of cigarette packages), and to avoid loneliness and to make a lot of noise in general, besides filling in six or seven stanzas with something or the other, the arctic calls, groans, grunts, howls, yells and cat-calls are the result. The song should be a riot. Another added feature of the song is that phonograph records of it can be made and played by the hardy explorers as they cruise night after night over the lonely wastes of that vast and icy continent.

Pursuing further in this interesting line of thought, we may dim for a minute the sounds of the penguins, polar bears and seals, and bring you a brief, oh very brief, description of a typical antarctic day on the continent where the snow is like sand, and your breath can be broken off in pieces like icicles, melted over a cook-stove, and used over again.

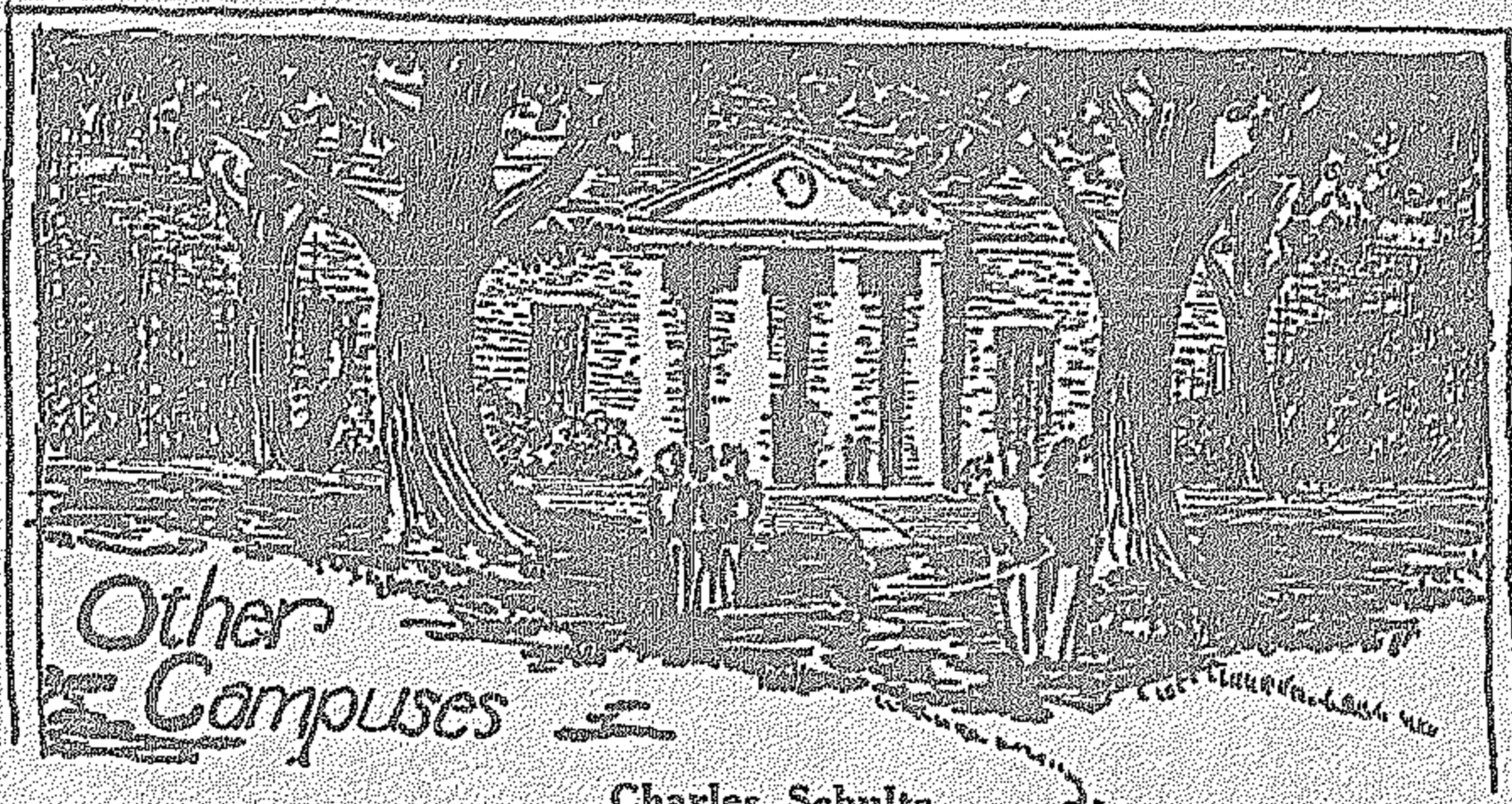
We shall arise at the early hour of seven o'clock (wait 'til those of

the expedition hear about these banker's hours). Pausing briefly to hack our way through the frozen blankets with our little hatchet, we shall jump into our clothes (which are so cold that they, too, are frozen stiff and standing up by themselves in the middle of the tent). Bustling over to the table, we shall pursue with eager anticipation our cakes and coffee, keeping the latter thawed out by constant application of a blow torch. Wung Lee, the Chinese cook, hurrying about with his duties, cheerily calls out: "Heap big warm spell this morning. Temperature gone up to 75 below." With this torrid announcement, we shudder and think of that warm radiator in the dining room back home in good old U.S.A., and the heat seeping into our bodies while auto radiators outside freeze solid at 15 above. Our thoughts drift back to realities as we observe that our shoes have firmly affixed themselves to the floor, because of our immobile stance, all through the freezing process.

Putting on our six suits of bearskin and our latest Stetson with the angora earmuffs, we open the tent cap and brave the icy elements (Gosh, feel that wind racing up and down your now numb spine!). Gad, we exclaim. If we could only see this far back home. Ice, ice, ice everywhere, enough to make old man frigidaire jealous. Another gad. If only that warm little wench back home were here for comfort! And man! The expedition brought along everything but—a snowshovel. Well, fate has willed it thus, so, so be it.

We trudge off over the wastes, tramp, tramp, 'till after hours of this we are blinded by the icy whiteness. Again, the picture forms in our mind of that sweet little thing back home. Tears well in our eyes and stream down our cheeks and drip off our nose 'till a solid block of ice has formed over our nose and mouth. We give a gasp as we realize that our breath is slowly being cut off by the tears which are slowly (due to their salt content) being frozen into ice. We try to raise our hands to brush it off. They, too, are numb.

We fall forward with a thud, our body making a soft crunch in the snow. Our mind goes black and we pass into oblivion. . . . There are musical sounds filling the air, there is a great glow, and we wake in our celestial resting place to be greeted by angels licking popsicles. . . .



Charles Schultz

Thought for the day. Thirty-one per cent of all college students obtain degrees, apparently the other sixty-nine per cent hire them when they graduate!

The Henry Clay chapter of Phi Alpha Delta, a legal fraternity, recently had their election, and by the shades of Goebbels, they elected a Minister of Propaganda!

A training school exclusively for male nurses has been organized at the Alexian Brothers Hospital in conjunction with De Paul University. Imagine coming out of a coma and grabbing a hand covered with hair and hang-nails.

A Wisconsin U. professor recently calculated that the heat generated at dances is enough to keep a two-story building warm two days and lift a five-ton elephant 32 miles in the air.

Pennsylvania State College is contemplating establishing a special training course for truck drivers. Can you imagine a B.S. in "bumpers"?

A trio of local gamblers secured the site for the first building of the University of Arizona.

There are fewer Hawaiian students at the University of Hawaii than any other racial group.

Last year a student proposed a device whereby, for a modest fee, he would guarantee to rout his customers out of bed in time for their 8:30 classes. No takers.

High scholarship is not beyond the reach of working students as illustrated by Princeton where eight out of thirteen Rhodes scholars in the last five years were working students.

The co-op system of a socialist existence, where the cost of board, room, and often entertainment are shared equally by groups of students, has sprung from meagre beginnings in '32-'33 to an organization of 100,000 students today.

Everett Saltonstall IV '39 was the eleventh offspring of his family to receive a degree from Harvard. The chain began with his predecessor, Henrius, who graduated in 1642, the first class of Harvard.

VAN PELT TALK—

(Continued from page one)

conomic laws plays a vital part in his managerial success. Lack of knowledge in such subjects as history, law and sociology is also considered a drawback. For these reasons the speaker urged an increase in the number of years of English courses and suggests that a liberal arts course be given after completion of engineering curriculum.

Graduate Not Practical

Mr. Van Pelt, from his extensive background in engineering, felt that students are not practical enough and are too often inclined to solve problems by a long highly involved, technical methods, when a short direct approach would save enormous time and bother. This does not mean to abandon technical training in solving problems but rather to not allow such training to blind one's eyes to the true aspects of often essentially simple problems.

The willingness to learn after commencement and the affiliation with other engineers through professional societies was advised by the speaker. The point of view of other engineers is something that should carefully be cultivated. Activity in professional societies provides among other things a social polish that adds much to the attractiveness of the personality.

Mr. Van Pelt accented the social importance of the engineer, considering the 200,000 engineers in America as ranking professionally with lawyers and doctors.

BASEBALL—

(Continued from page three)

was in the third inning. In that inning, the entering students waited out Krause and filled the bases with passes. With two out, James, the juniors' left fielder, made a nice running catch to snuff out the rally.

Bauch knocked a triple over the center fielder's head to open the third inning. However, he was promptly picked off by a quick throw by pitcher Silla. The last run of the winners came in the fourth inning.

SOPH	(3)	AB	R	H	FROSH	(1)	AB	R	H
Grosche, ss.	2	0	0	0	Brazelton, 2b.	2	0	1	0
Bauch, 3b.	1	1	1	1	Guetzow, cf.	2	1	0	0
Pfeffer, rf.	2	1	1	1	Benz, c.	2	0	1	0
Krause, p.	2	0	1	1	Jones, ss.	3	0	0	0
Yursis, cf.	2	1	2	2	Ray, 1b.	1	0	0	0
Jafes, lf.	2	0	0	0	Byrne, rf.	1	0	0	0
Carrier, 1b.	2	0	0	0	Malmquist, 3b.	2	0	0	0
Brierly, 2b.	3	0	1	1	Achimikian, lf.	1	0	0	0
Heidenreich, c.	2	0	0	0	Silla, p.	2	0	0	0
	18	3	6	6		16	1	2	2

WRESTLING—

(Continued from page three)

two months hence. The Techawks will open their mat season with Wheaton on Dec. 9. The Ministers take their wrestling seriously and always can be relied upon to give their opponents some stiff competition. This is the only meet definitely scheduled, but a full schedule is in sight needing only the dates of two meets to be decided. Plans are under way to divide the squad into an "A" and "B" team. The "B" team will meet the second teams of a number of Armour's opponents.

BASKETBALL

(Continued from page three)

However it isn't altogether the player's fault they lack spirit. It's higher up than them.

Well, that's last year. What about this year? We are withholding our prediction until we see just what sort of spirit the team shows this year. As for possibilities, they're unlimited. With the probable lineup showing Norkus at center, Sliwa and O'Connor at forwards, and Sher and Captain Scherer at guards, Armour presents a good team if one assumes each man does his best which applied only to the two forwards last year.

Reserves Have Possibilities

In reserve Johnny Brierly and Rupe Weber at guards, Johnny Rudakas at center, Frank Lurz, and Barrett-Smith are the only noteworthy members of the squad. Both Weber and Lurz possess the qualities of good ball players but both need the proper coaching to bring them out.

However, despite the capabilities of the players they'll get nowhere unless they pick up an offense and a defense. We believe if they do, then they may inherit a little spirit which might be worked on to bring out the real Armour spirit. Unless they do we can't see how they'll win more than five games on a schedule which should result in at least eleven victories.

In retrospect, we regret our inability to predict a good year for the Federalists, but we'd take a great deal of pleasure in having the team prove us all wet.

LIQUID COAL—

(Continued from page one)

in present day standard automobile engines without changes of any kind in the carburation or ignition systems save for the removal of a fine screen filter (this is necessary to prevent the removal of the colloidal coal).

That "liquid coal" will give engine performance that is comparable to that of gasoline is optically proven by the motion picture. The picture shows the introduction into an auxiliary tank above the engine of a quantity of liquid coal. (The car used for the experiment is a standard stock model 1940 Pontiac). The engine is started and heated to running temperature with standard gasoline. The fuel system is then switched from gasoline to "liquid coal." From this point on the car is operated on "liquid coal." It has been possible to accelerate a car of this type to a speed of 35 m.p.h. within the distance of a short block as easily as though gasoline were used.

Many Uses

That this new fuel is not limited to use as a motor fuel is shown by figures on its costs and relative heating values as compared with present day fuel oils and coals. The heat value per cubic foot of "liquid coal" is considerably greater than either coal or oil alone. Since the coal used is the waste coal dust, it is cheaper than oil alone both per unit of heat obtained and per unit volume purchased.

Time Out..

LIGHT UP WITH

Chesterfield

...that's always a signal for more smoking pleasure

All around you, you'll see that friendly white package... that means more and more smokers everywhere are agreed that Chesterfields are milder and better-tasting... for everything you want in a cigarette, CHESTERFIELD WINS

They Satisfy... MILLIONS