

Lewis E. E. Students Share 'Talkie' Films At Armour Assembly

Last Thursday at a joint meeting of the Armour and Lewis Institute branches of the A. I. E. E., held here, a program of talking movies, furnished by the Bell Telephone Laboratories, was given.

Many of the Lewis students arrived some time previous to the assembly, enabling them to make an inspection of the school. A number of senior electricals under the leadership of J. M. MacDonald took groups of these guests on trips throughout the main building and to those laboratories as they might be interested in.

In preparation for the meeting, talking movie apparatus had been installed in the assembly hall. The principal parts of which were a projector, not greatly unlike the ordinary projector, and an amplifier with a loud speaking device.

The projector is the same as standard except that the speed is greater, twenty frames per second, and a sound reproducing device is built in it. Along side of the picture, on the film used, is to be found a strip of light, of varying value. As the picture passes in front of the lens, this strip also passes, at distance of 12.5 inches behind the picture, between a small lamp and a photo electric cell. The impulse generated by the photo electric cell is fed to the amplifier, and greatly increased in value is used to actuate a cone speaker of the conventional Western Electric design. This speaker was concealed behind a novel perforated screen, doing away with the effect of seeing the picture at one point and hearing the voice come from a different point, so noticeable in many talking movie installations.

Mr. L. S. O'Roark, information manager of the Bell Telephone Laboratories, addressed the meeting. He wished to dispel any belief, that in spite of all the marvelous things already done by science, room for research was exhausted. He cited the fact that such a seemingly commonplace thing as the resistance of a material to the flow of an electrical current, is hardly understood at all.

He predicted that in the future, professors would be relieved of much of the routine work of lecturing to classes, by means of the talking movie.

As an illustration of this, two reels of talking pictures were shown, in which the operation of various pieces of telephone equipment were explained. In presenting these Mr. O'Roark pointed out that they were also laboratory experiments in another field, but in common with any laboratory experiment they were not always completely satisfactory.

Before the program of pictures was completed, it became apparent that further operation of the projector would be impossible due to repeated burning of the film as it passed through the frame.

Discuss "Inhibition" At A. C. S. Meeting

Tomorrow evening at 7:30, the American Chemical Society will hold its February meeting in the City Club rooms. The speaker of the evening is to be Dr. H. N. Alyea of the University of Minnesota. His subject will be "Chain Reactions and the Mechanism of Inhibition." Dr. Alyea is one of the foremost authorities on inhibition, and he will present a suitable theory to explain this phenomena.

Science has recently discovered that negative catalysis of inhibition is just as interesting and fundamental as is catalysis; products that deteriorate or spoil can be preserved by adding traces of substances called "inhibitors."

It has been pointed out that inhibitors cannot be discovered by the trial and tribulation method. It must first be understood how inhibitors work. The research laboratories during the past few years have done much to answer the question, "By what mechanism can a tiny quantity of inhibitor exert so powerful an influence?"

This lecture should prove profitable to all those interested in chemistry.

FOR QUALITY AND LOW
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INDIANA and 31st STREET

DANCE CHAIRMAN



R. N. WILSON, '31

Soph Dance Turnout Poor, But Good Time Was Had By All, Etc.

The Sophomore Dance, held last Friday in the Grand Ballroom of the Hotel LaSalle, attracted about one hundred couples. This was the third of the school dances held during this school year. According to R. N. Wilson, sophomore social chairman, only eighty-five bids were sold and therefore the dance was not a financial success.

Lack of numbers, however, had nothing to do with the success of the dance in other respects. The music was furnished by Lew Diamond's Bal Tabarin Orchestra, a Benson organization, which was all that the committee claimed that it would be when it comes to playing good dance music. As a special attraction Byron Nevillier, the dancing architect, and a beautiful little Spanish girl gave those present an exhibition of how the Tango should be danced.

The chaperones for the dance were:

Dr. and Mrs. H. M. Raymond, Dean and Mrs. C. I. Palmer, Prof. C. A. Tibbals and daughter, Prof. and Mrs. J. F. Mangold.

The members of the Sophomore Social Committee were: R. N. Wilson, chairman, M. C. Larkin, F. M. Pfeiffer, F. M. James, J. M. McAlair.

LIBRARIANS THANK DONORS

Mrs. Sanders and Miss Rowls, librarians at the Burnham library, Art Institute, wish to thank their unknown admirers for the collection of valentines which they have received.

Sr. Fire Protectors See C.F.D.'s High Spots

On Friday, February 8, a group of Senior F. P. E.'s, about twenty-five in number, went to the City Hall to make an inspection of the central alarm station of the Chicago Fire Department. They witnessed several calls going through and turned in some alarms themselves, learning how the city is covered in times of conflagrations.

From the City Hall they went to the Franklin Street Bridge where the Fire Boat, Graeme Stewart, is located, proceeding to make an inspection of it from turret nozzles to boilers.

On the following Friday, February 15, the senior F. P. E.'s visited the Chicago Fire Patrol No. 5 at Hill and Orleans Streets, where the fire patrolmen's school is located. Their training school resembles the Underwriters' laboratory in miniature. The only thing the seniors didn't do there was go on a run with the patrolmen.

Both the "Iron Fireman" and "Combustioneer" displays showed models suitable for economical operation in the smallest of homes. There

ANNUAL POWER SHOW ATTRACTS MANY STUDENTS

The fourth annual Power Show and Midwest Engineering Conference was held at the Coliseum February 12 to 16 inclusive. There were over four hundred and sixty displays by manufacturers of mechanical products, ranging from a Deisel switch engine in the booth of the Fairbanks Morse Company, to an automatic saw sharpener, which may have improved the saw, but certainly was hard on one's ears.

All week long, groups of students took the opportunity to visit these interesting exhibits and converse with men already engaged in engineering work. Soon word was passed around as to where hydraulic handbooks, catalogues giving specifications of hoists, pipes, and key rings were to be had for the asking.

Much interest seemed to be shown in the several displays of automatic stoking equipment. The individual displays varied as to size and in certain other mechanical features. All, however, sought to enable soft coal to be burned smokelessly with the convenience of oil, yet at a cost lower than hand fired coal.

Both the "Iron Fireman" and "Combustioneer" displays showed models suitable for economical operation in the smallest of homes. There



was a "Combustioneer" stoker in actual operation in a full size furnace, showing exactly how the firing was accomplished.

The exhibit of the New Departure Mfg. Co. contained a very clever display. From an opening in a case, three quarter inch steel balls were dropped a distance of a foot and one-half to strike on a metal surface, rebounding through a bearing race to fall on a second metal plane and be so deflected as to re-enter the case several feet from where they issued. When in operation, one ball falling but a second after the previous one, a very amusing sight was presented, the balls seeming to follow one another as if fastened together by some invisible means.

THETA XI

The Armour Chapter of Theta Xi was host to several members of Eastern chapters on their way to the annual convention of the Fraternity, being held, in San Francisco, California, this week. E. R. Rowley, '30, is Armour Chapter's delegate.

A banquet was given last Monday evening at the Interfraternity Club of Chicago for delegates from the chapters of Theta Xi near Chicago and east of here, before they boarded a special train for San Francisco. Several members of the Armour chapter attended the banquet.

The Armour Chapter of Theta Xi wishes to announce the pledging of: A. W. Griesman, '31, J. E. Taylor, '32, and H. P. Richter, '32.



Protection of Freight

Transportation, to be efficient, must be not only rapid but safe. This applies to both passengers and freight.

In their freight business the railroads are intrusted with the safeguarding to destination of approximately 165,000 newly loaded freight cars every working day. Since most railway freight spends several days on the road, the value of the total amount of freight in the possession of the railroads at any one time must run into the billions of dollars. To protect this freight from damage, robbery and loss through misdirection is a task requiring the co-ordinated efforts of many thousands of railway employees.

Besides inspecting carefully the condition of cars and insisting upon certain standards of safety in the packing and stowing of freight, the railroads school their trainmen and engineers in the proper handling of their trains, even going so far as to check up, by means of impact registers, on the degree of roughness in the handling of individual cars. Every railroad of any size has its own police department to protect its shipments from robbery. Station and accounting forces are carefully trained in the billing, checking and tracing of freight. Special departments are maintained for the adjustment of freight claims.

With all this care, is it any wonder that railway payments for freight loss and damage have declined remarkably in recent years? Between 1920 and 1927, for example, the number of such claims presented declined from 4,721,497 to 2,527,055, payments of all freight claims declined from \$119,833,127 to \$37,146,813, and payments per car loaded declined from \$2.66 to 72 cents. Robbery losses per car in 1927, for example, averaged 2.2 cents—just a trifle more than the cost of a postage stamp for a letter.

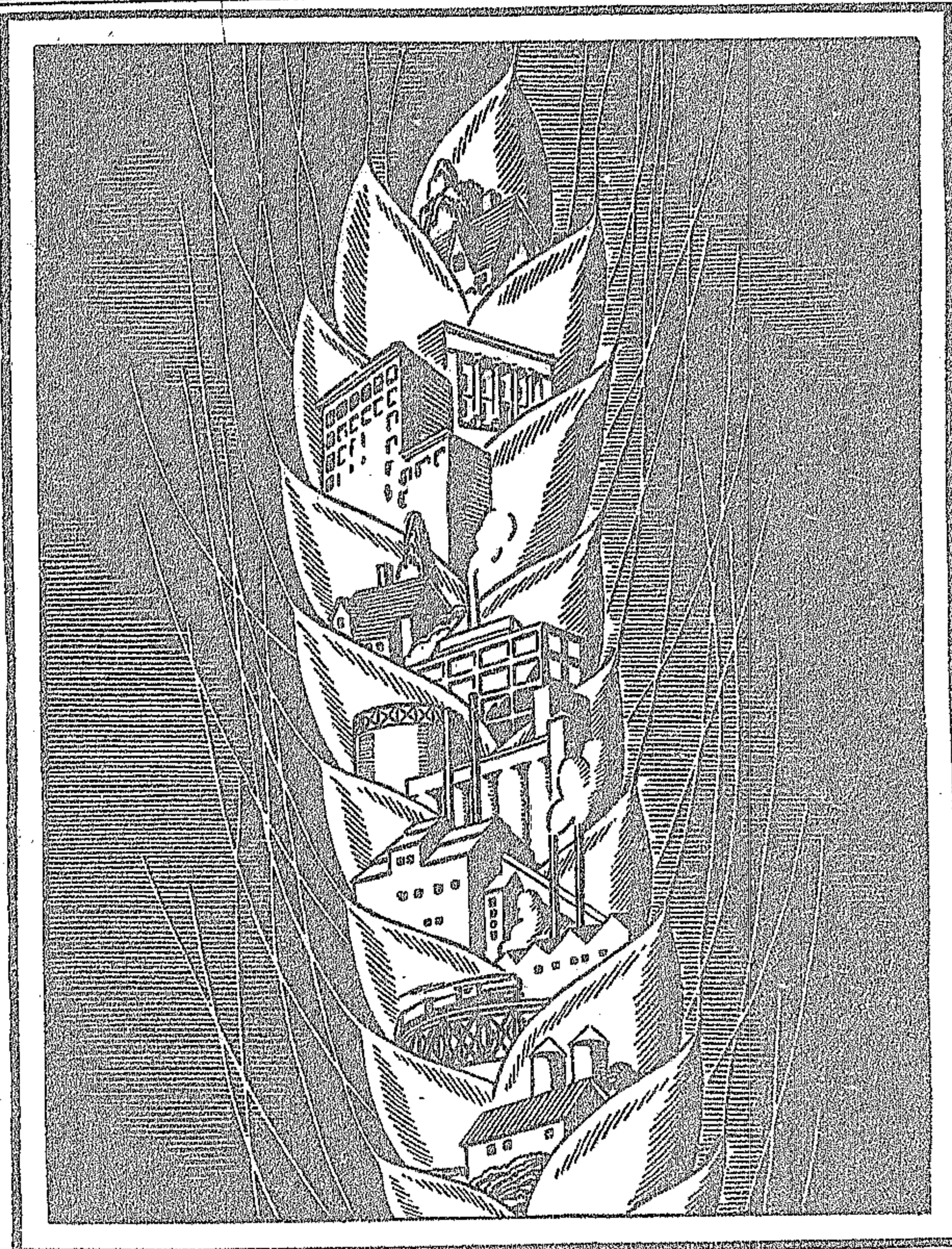
Because of the safety and financial responsibility which they present, the railroads feel well justified in soliciting the continued freight patronage of the American public.

Constructive criticism and suggestions are invited.

L. A. DOWNS,
President, Illinois Central System.

CHICAGO, February 15, 1929.

(An essay contest on "The Future of the Railroads," now in progress, will close February 28. For details address L. A. Downs, President, Illinois Central System, Chicago.)



Great states from wheat seeds

IT was unprofitable wilderness, most men thought. But James J. Hill had faith that it could grow wheat and so he built his railroad. Settlers turned the waste-land into wheat-land, the wheat into wealth, the wealth into great western states.

Faith in the economic future still points the way. Right now men in the Bell

System are planting the seeds of vast possibilities for even better communication.

Out of the belief that the public needs a broader use of the telephone is growing a constantly improved long distance telephone service. Like the railroads of an earlier day, this service is now tapping and helping to develop rich new territories of commerce.

BELL SYSTEM

A nation-wide system of inter-connecting telephones



"OUR PIONEERING WORK HAS JUST BEGUN"