

# THE NEBRASKAN

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## THE ENGINEERS' EXHIBIT

### WILL TAKE TWO BUILDINGS

The Armory Will be Used to Provide More Room—Some Phenomena and Explanations of Them.

The second annual exhibit of the Electrical Engineering society will be given Friday night, February 14, in the armory and in the electrical engineering laboratories.

We found at our last exhibit that we did not have the necessary room in our laboratories for the immense crowds who came to see and learn what could be done with electricity.

The subdivisions of the exhibit: Plating, heating, lighting, and electro-chemistry will have their apparatus in the armory. The welding, furnace and Tesla experiments may be seen in the main laboratories, where all the machinery will be running.

The plating committee has received some gold ore from New Jersey and also from Milford, which they will separate by the electro-plating process. In this process the gold ore is dissolved in a solution of chemicals, the gold is there separated by passing a current of electricity through the solution causing the gold to collect on a lead plate.

The electrolysis of water pipes causes the city councils no little trouble, due to the leakage of current from its intended return path. Electricity always takes the easiest path in returning to the station, the path that offers the least resistance. If the circuit is through water pipes it causes them to deteriorate and small holes are formed due to electric action. This committee has samples of water piping, furnished by the Water Works company of Omaha.

The gold, silver, nickel, copper bars, platinum and wood plating will be in operation, and souvenirs of these will be given to the visitors on that night. The electro-typing committee expects to show the method of producing metallic impressions and electrotypes.

The heating and cooking committee has some apparatus furnished by "The Western Electric Heating Co.," and will distribute to the public some hot cakes and cocoa. Popcorn popped in an electric popper will be scattered broadcast.

Iron will be welded by an automatic welding machine, which is furnished by the Thomas-Houston company. The blow out process will be shown, whereby the electric arc of an arc lamp is blown by a magnet to one side, thus heating the iron.

The water pad forge will be in operation, in which an iron can be heated to a white heat, hammered to the proper shape, and then cooled in the same water.

If the plans of the committee appointed to work up the subject of electric furnaces are realized, even in a fair degree, one of the most interesting parts of the exhibition will be the production of calcium carbide. From this product, by simple addition of water, acetylene gas, the new illuminant is evolved in large quantities. The process of making the carbide of calcium is comparatively simple, by subjecting a mixture of powdered lime and coke dust to the intense heat of the electric furnace, the mixture melts down to a viscous mass of nearly pure calcium carbide. When cool, the carbide is a dense substance, having a dark brown color and a specific gravity of 2.26. When brought in contact with water acetylene gas is evolved at the rate of about five and five-tenths cubic feet per pound of the carbide, and if properly confined, will produce the enormous pressure of 900 or 1,000 pounds per square inch. The gas has a very offensive odor, resembling that of garlic. It can readily be condensed to a liquid and from that to a solid.

The value of coal gas as an illuminant is greatly dependant on the amount of acetylene present in it. Ordinarily coal gas contains acetylene to the extent of 0.05 per cent, while water gas contains about 1 per cent.

Acetylene burns with an intensely white flame, such that its illuminating power is more than ten times that of our city gas. This great illuminating power will be shown at the exhibition, but in order to give a clearer idea of it, the following data will aid considerably. Coal gas when burned at the rate of five cubic feet per hour will produce a light equal to twenty-two candles, while acetylene, burned under the same conditions and at the same rate will

give a light of 250 candle power.

The committee expects to make the carbide, generate the gas and to have it burning, so that the whole process will be shown. If successful in obtaining apparatus in time the liquid gas will also be made.

As one approaches the university from the south, they can see a large headlight on the front of the main building, which is only the beginning of the treat to follow.

Franklin's kite with his photograph brings back to the observer what he learned while at the public school, here he may experience what Franklin did many years ago by touching a key and receiving a shock. In the dynamo room incandescant lamps will be seen travelling around on the belts of the engines. The novelties presented by this lighting committee are an incandescant lamp lighted by induction which is floating in a cup of water, also the magic table where an incandescant lamp is lighted by the same process, and can be lighted or extinguished by simply moving the lamp to different parts of the table.

A few of the Tesla experiments will be shown if the apparatus at hand proves satisfactory.

Rotary motion of a light metal sphere produced by a rotating magnetic field. This illustrates the simplest form of three phase motors.

Alternating current experiments are in preparation, some of which show the use of transformers on incandescant lighting circuits.

In the line of electro-chemistry we expect to show on a small scale some of the applications of electro-chemistry in the chemical manufacturing industries. The manufacture of white lead from pig lead. The production of bleaching fluid from magnesium chloride. The manufacture of caustic soda and chlorine from common salt. The preparation of potassium chlorate from potassium chloride. The electrolytic separation of gold from refractory ores. Also we will make an exhibit of primary and storage batteries. E. E.

### MASTIN WILL LECTURE.

Any one who has been watching the progress of the electrical engineering department cannot help but notice the long strides this important branch has been taking in our midst. Already we lead our neighboring states in this branch of education. The students in this work have organized themselves into the Electrical Engineering society in order to investigate and discuss recent electrical inventions. That this society is made up of energetic young men, superintended by a competent, enthusiastic professor, is clearly shown by the exhibits which are given from time to time.

Besides arranging for the exhibit to be given this year, they have arranged to have one of the men considered as authority in electrical engineering matters to deliver a lecture.

T. C. Martin, editor of the Electrical Engineer of New York City, and past president of the American institute of electrical engineers, will deliver his lecture before the society on the "Development and Utilization of the Power of Niagara Falls." The lecture will be non-technical and fully illustrated with over a hundred lantern slides. All the features of hydraulic and electrical engineering involved will be fully explained and the many uses to which the enormous power thus developed is being put, such as long-distance lighting, heavy haulage by rail and on the Erie canal, electrical reduction works, calcic carbide works, etc., will be clearly shown. This lecture will be free to the public, but a certain number of seats will be reserved for those especially interested at a cost of 25 cents each, whereby they may avoid the crowd, and be certain of a good seat.

The lecture will be given February 13, beginning at a quarter to eight o'clock, in the Funke opera house. All students who have interest in this matter should get reserved seats. They may be had of H. E. Reagan or any of the members of the Electrical Engineering society.

The freshman class met Friday and elected officers for next semester. There was considerable enthusiasm displayed by the contestants for president. After some parliamentary wrangling a ballot was taken, the result being: Mr. Pierson 27, Mr. Thorpe 1. Those elected to the other offices were: Vice-president, Mr. Christie; secretary, Mr. Thorpe; assistant secretary, Miss Dauback; treasurer, Mr. Montgomery; sergeant-at-arms, Miss Cooke.

## COLLEGE SOCIETY EVENTS

### FOURTH STUDENTS' RECITAL

Excellent Program Rendered Before a Fair Sized Audience—Beta Theta Pi Gives a Dance.

The fourth recital for the present school year of the students of the university conservatory of music was given in the chapel last Saturday. Every number on the program was well under the mastery of the performer, so that in no instance was the audience subjected to that painful uncertainty which too often attends amateur performers in public. This certainly speaks well for the conservatory instruction and management. Another point of general note was the smoothness of their playing throughout. There was no drumming; no rent or shattered notes, which goes to show that "touch" is not a gift of God, but of technique—of the sort these performers are acquiring.

The first number was by a string quartet, all the members of which were well under their teens. The piece, "Op. 67," H. Mohr, was smoothly played, with but the faintest hint of a hitch here and there.

A soprano solo by Miss Nina Easton, with violin obligato by Miss Ensign, followed. Miss Easton has a remarkably sweet and firm voice, but it is not strong enough for a public performance. It sounds small.

Miss Maud Reed gave a selection from Bach next. Her playing is delicately expressive.

Ethel Galley's contralto solo was marked by superbly clear articulation. The song was "The River of Years," and unusually well adapted to the singer.

The "Etude in E flat" of Jaddasohn played by Miss Kettering was short and rippling. Like a peculiar sort of laughter.

The personal element which in the voices of most singers is a fault is an attraction in Miss Pollard's. "Where the Lindens Bloom" is a song containing some effective transitions, which Miss Pollard well brought out.

Edward Monck played "The Avalanche," by Heller, with an understanding expression seldom met with. A little more force at the summation of the selection would, however, have added to its effect. The avalanche wasn't mighty enough there.

The vocal waltz sung by Irene Davidson is airy, flute-like in its purity and abstraction, if one may so speak, from the friction of medium which so often deadens effect of solos of the class of "L'Arditia."

Edith Shaw played a nocturne, by Doehler, with a touch of melancholy in it, in a manner which made the melancholy effective. Miss Shaw seems very easy at the piano.

Miss Eugenia Getner has a very remarkable contralto voice. It is strong—startlingly so. The bigness of our-of-doors is more suitable to it than the shut-inness of a room. This almost obtrusive quality was fully manifest in her first selection, "Caller Herrin," an old Scotch ballad. In her second, an old Irish ballad, "When Love Is Kind," she used a lighter, though still powerful, tone quality.

The last number, a violin duo by May Belle Hagenow and Willie Mudra was unexpectedly pleasing. The selection being really impressive. Clearness and smoothness characterized the playing of both.

That there is so little to be said in the way of adverse criticism is certainly the highest praise that can be paid the instructors of these performers.

The program was as follows: String quartet—Op. 67, allegro movement. H. Mohr; May Belle Hagenow, Willie Mudra, James Jonas, George Kimball.

Soprano solo—"A Day Dream," Strelzki; Nina Easton. Violin obligato, Ina Ensign.

Piano solo—Passepied from 5th English suite, Bach; Maud Reed.

Contralto solo—"The River of Years," Margials; Ethel Galley.

Piano solo—Etude in E flat, Jaddasohn; Mary Kettering.

Soprano solo—"Where the Lindens Bloom," Buck; Marie Pollard.

Piano solo—"The Avalanche," Heller; Edward Mouck.

Soprano solo—Vocal waltz—"L'Arditia," Arditi; Irene Davidson.

Piano solo—Nocturne op. 24, Doehler; Edith Shaw.

Contralto solo—"Caller Herrin," old

Scotch ballad; "When Love Is Kind," old Irish ballad, Eugenia Getner.

Violin duo—Symphonie concertante, Dancla; May Belle Hagenow, Willie Mudra.

### DO TELL!

There are just a few things that we cannot understand. We do not care very much whether we find out the explanations or not, but we do want to let the public know that we do not understand them any better than any one else.

Among these are:

Why Frank Summers does not patronize some barber shop and invest a quarter?

Why Doc Everett does not start up his Phizooks reporter if it will be such a good thing?

Why McNeal does not attend Latin class any more?

Why some of our fair friends and their admirers do not take notice of the instructions in the hall of the library building?

Why the disturbance and noise in chapel always comes from one particular crowd?

Why Clint Norton ever shaved off his beard and left his head?

Why there was no scrap over the Oratorical association offices?

Why some people will admit to the instructor that a lesson is too short or the work too easy?

Why the students are not more greatly benefited by the new system of examinations?

Why some one is always using our office chair and desk when we want to do a little work, etc., etc.

### THE CHRONIC KICKER.

Here are a few things he objects to: The present method of "exams."

His landlady giving the name of "Purée of Split Peas aux Croton" to common bean soup.

The architect that designed the stairway in Nebraska hall. The interval between the steps is too much like that between railway ties.

Drill continuing through examination week.

Examinations in general.

English 3 not meeting more regularly.

His room-mate wearing a red tie with a blue shirt front.

The fact that there is no way of posting in Hygiene.

The discontinuance of the bowling alley.

The week at the "nigger heaven" entrance.

That brains is a scare article with a pretty girl.

That the assistant in a department gives the idea of being a bigger man than the professor.

Anything that is compulsory.

### WHY?

Why is it that in the lavatories of the library building the towels are not changed twice, or at least, once a day? Probably two hundred persons use each of these towels daily. The towels are on the rack, and figuratively speaking, so are those who use them, for two and even three days at a time. Many students who live or room out some distance spend the whole day at the university; to those better conveniences in this line ought to be extended. This may be economy, but is it in the right direction? It is due the janitor to say that he was allowed but six towels for five racks. Go over to the baths, and you are given two towels, one to use and one to stand upon. Cleanliness is next to godliness. Out in the state we have heard that the state university is an ungodly place; if matters keep on in present way, soon the people will have reason to say it is an unclean place. The authorities are asked why matters are such as they are.—The Kicker.

### THE UNATTAINABLE.

The walls of his room were right gaudily decked,

With trophies of many a hard-fought bout,

With relics of rushes, with pictures of girls

Who had snared him at ball, at revel,

at rout.

But mid the gay galaxy one fairly face

Caught my eye, and I asked, "Who's this?"

"Oh, that," he replied with a yawn

clearly feigned,

"Is the girl that I couldn't kiss."

—Ex.

## TO CHANGE CONSTITUTION

### A NEW AMENDMENT OFFERED

Faculty Wants the University Athletic Board Recognized by the Association—Will Alter the Wording.

An amendment to the athletic constitution is contemplated at the next meeting, which will be held soon. It is only designed to change the wording so as to conform to the plan adopted recently by the faculty. This changes the board of directors, which will still exist, by making it compose one-half of the "university athletic board." The amendment is simply to legalize in the minds of the students the recent action of the faculty. No formal amendment creating the "university athletic board" has been proposed, but the wording of the old constitution will be so changed that it will harmonize with the board composed of five members of the faculty. The proposed amendment reads as follows:

### ARTICLE V.

Section 1. The board of directors shall consist of five members, of which four are to be selected by this association, the president of this association being the fifth member, and these five shall constitute the student members of the university athletic board.

Sec. 2. The university athletic board shall have general supervision and control of all athletic affairs of this association, except such powers as are expressly delegated to others by this constitution.

Sec. 3. The university athletic board, together with the managers and captains of the respective teams, shall have power to secure coaches and trainers for the respective teams.

Sec. 4. The university athletic board shall elect, at its first meeting in January, a football manager, who shall have power to arrange games and shall have general management of the football team. At its first meeting in October it shall elect a baseball manager, who shall have power to arrange games, etc., as for football. Managers shall hold office until their successors are elected.

Sec. 5. The university athletic board shall elect, at the same time and in the same manner as they elect the managers, assistant managers for each team. The assistant managers shall be under the general direction of their respective superiors.

Sec. 6. The university athletic board shall elect at the same time and in the same manner captains for the second teams of the association; likewise managers for the same.

### ARTICLE VI.

Section 1. A standing committee of three on field sports shall be chosen by the university athletic board at their first meeting. The chairman of this committee shall be director of sports and manager of track team.

### ARTICLE IX.

Section 5. The captain of any team may be removed by a four-fifths vote of the university athletic board, cause being shown.

Beta Theta Pi gave a very enjoyable dancing party Saturday night at their chapter house. Profuse decorations in the fraternity and college colors were noticeable, and let a brightening aspect to their neatly furnished house.

In one of the lower rooms was a unique punch bowl. On a table with no decorations except a plain white cloth was a large eighteen-inch evaporating dish filled with punch. The glasses were small beakers. The members of the organization who are taking chemistry at the university had prepared the novel outfit. The program was of a good length and most highly enjoyable throughout. Those comprising the gay company were Misses Nance, Risser, Fechet, Slaughter, Lau, Cooley, Thorp, J. and D. Burks, Everett, Robinson, Hendy, Lansing. The party was chaperoned by Mr. and Mrs. Frank Woods and Mr. and Mrs. Fred Correll.

Karl Randall was initiated by the Alpha Epsilon chapter, Sigma Chi fraternity, at its rooms last Tuesday evening. The boys did not give Mr. Randall the merry time that they usually give to the other seekers of fraternity honors, but let him off with a solemn exposition of the rites.