# Electrical wizardry makes EE exhibition outstanding

"Step right up, ladies and gentlemen, and try out our shooting gallery! It's free, it's fun, it's new." No, it's not a carnival, it's part of the electrical engineers' exhibit which opens this evening.

This shooting gallery is not ordinary, for it employs a photo-electric cell, so that when the bulls' eye is aimed at and the trigger pulled ,the photo-electric cell located in the bulls' eye is acted upon in such a way that a bell is rung.

**Artificial lightining.**

Those of you who fear lighting will have no reason to be afraid once you visit the E. E.'s display, for they have produced articial, but vicious, lightning. It will be used to demonstrate the efficiency of lightning rods, and if the lightning rods are efficient, you have nothing to worry about.

A popular exhibit last year was the bubble fountain. It has been reproduced this year, but "has new clothes on." There is another fountain added to the display, one having water spurting from the top, the other, with soap bubbles rolling forth. A beautiful array of colored lights playing upon these millions of tiny bubbles as they slide down the sides of a glass cloth pyramid will present an interesting picture.

**Dial exhibit.**

An instrument with which we are all familiar and yet know nothing about is the dial telephone. Deciding to rectify this situation of our ignorance, the engineers have put one on display and will have a telephone expert on hand to describe it.

To add a pleasing background to these engineering masterpieces, will be music played on a Hammond Organ, an instrument noted for its amplifier. When the organ itself is not being played, recordings will be played, using the organ as an amplifier.

Yogi's rope trick will be in operation also. These ingenious engine men have advised the trick after the fashion of the old Indian rope magician, and will mystify on-lookers by showing a rope twisting itself around a rod, then untwisting, then twisting, and so on.

For you unbelievers in the theory of perpetual motion, the engineers have devised a perpetual motion machine. They also have a light beam transmitter, and will play music and speak over a light beam.

The Strobotac, invented by Harry Edgerton, Nebraska alum, now a professor at M. I. T., allows you to see a wheel turning as it would appear if it were standing still.

## Chem E's plan to run minature oil refinery

Chemical engineers have invited spectators to bring any crude oil they might have to their exhibit in Avery building tonight, for they will have a minature oil refinery in operation.

Magic, too will be present in the chemistry building. The engineers will astonish you when they pour one liquid with another exactly like it, with the resulting liquid an entirely different color. They will show you sawdust burning spontaneously, too. All this and more in their exhibit called Chemical Curiosities.

For homemakers who dislike the color of their wallpaper, the chemists will show how to change the color of it by flourescent paint. They have issued warnings to the effect that a volcano will be part of their display. The volcano, will be a chemical one, however, and is guaranteed against erupting.

Last year the thermite display was striking and attracted much attention. This display has been have an opportunity to watch a liquid cut a half-inch metal plate in two almost instantaneously.

The formation of crystals, an unknown process to most of us, will be explained and demonstrated by polarized light. The effect produced is colorful and unusual.

Other interesting displays include an arc furnace which welds metals together instantaneously, a filter press which clarifies any liquid to a pure solution, and plastics and the products made from them. There will be a photography display to show how the films you expose are finished, and a water-softening display which will let housewifes in on a way to save money.

## CE exhibition stars minature masterpieces

Masterpieces in minature will be featured by the civil engineers this evening in mechanic arts building. The hydraulic jump "in action" will be one of the feature exhibits, and is as interesting and unusual to the average person as it is practical to the engineer.

Among its practical applications, probably the most interesting is the dissipation of large amounts of energy from flood waters as they flow over the spillway of a dam. Because of its speed and mass, the water possesses a tremendous amount of energy which would erode the river below the spillway and eventually cause the failure of the dam. A hydraulic jump is often used to dissipate the energy of the water, thereby reducing its speed and increasing its depth to such an extent that erosion will not take place.

**Electric trains.**

Although electric trains seem like children's toys, the engineers have erected a model train which the full-grown common man would be unable to operate. Complete with tunnels, switches, curves, and bridges, the train is operated in a manner quite comparable to a real train.

Also on display will be an arch bridge spanning the beautiful Grand Canyon. This model is a masterpiece in design, structure, and technical skill, illustrating the ingenuity and practical worth of these "builders-of-tomorrow."

If you have ever wondered how a dam is constructed, the engineers will show you. To be exhibited is a section model of a dam, built in exact proportion to the real thing, and which will show the anatomy of the structure. There will also be a section model of a dam with a small power plant operating, presenting the inside of this power-producing factory.

# Engineers close festivities with dance at Cornhusker

Tomorrow night student engineers will forget their formulas, toss aside their books and slide-rules, and bring Engineers' Week to a rhythmatic conclusion at their annual ball to be held in the Cornhusker hotel, featuring Nat Towle with his orchestra of 14 Southern Gentlemen.

The ball will be the fifth the engineers have had. Although there is little tradition or ceremony attached to it, it is planned to be an annual event and a part of Engineers' Week. One of the engineers explained that they want a ball, but they do not intend to make it elaborate. There has been some thought, he said, of perhaps having a Queen of Engineers' Week presented in future years.

Open to the public, this year's ball is just an informal dance. Tickets sell for $1 a couple and may be bought from engineer students or at the door. Tickets are also available at the Union office.

**Tickets on sale in Union.**

Advance tickets could be bought only from engineers until yesterday when it was deemed advisable to place them on sale in the Union. Ball ticket sales was formerly intended to be a sort of point activity for the engineers. The department of the college which gets the most points for activities during the Week receives a placque to hang in their building for the following year. Ticket sales count 20 percent.

Nat Towles and his orchestra have had previous engagements at such places as the Texas Centennial, Dallas; Plaza Hotel, Dallas; Lavida Club, Miami, Fla.; and five weeks at Krug Park and on Station WOW, Omaha. They have just had a long run at Denver's largest ballroom, the Rainbow.

Sponsor of the dance is the Engineering Executive Board. Chairman in charge is Bob Schluckebier.

Dancing at the ball is from 9 to 12 p. m.

## Visitors to see massive steel tester in action

Visitors to the engineering mechanics display this evening will have an opportunity to see a steel testing machine in action.

The tester, feature exhibit of the array of engineering projects, is capable of testing steel up to 440,000 pounds, and is still accurate enough to weigh a lead pencil. The machine wil be located in the Highway testing laboratory.

Steel bars wil be tested to failure point by applying a load to pull them apart, similar to the way a string would be pulled apart if a heavy weight was suspended at one end. By running an autographic curve as the bar is being pulled, it will be shown how the bar stretches as the load increases.

Determining the strength of steel is important because the strength must be known before it is used as a building material. Samples of steel are always tested in tension to insure its being capable of withstanding the pressure when used in bridges, pavements, and buildings.

## Seven chemists accept positions with concerns

Seven chemistry students have recently accepted positions with major companies. W. P. Utermohlen of Kansas City, Kas., who is a candidate for his doctor of philosophy degree in June, will work for the Tennessee Eastman corporation at Kingsport.

G. B. Arnold, Hot Spring, S. D., who is a candidate for his Ph. D. degree in August, has accepted a position with the Texas corporation, Beacon, N. Y., Ralph Miegel, Kansas City, Mo., who is to receive his master's degree in August, has been given a graduate assistantship at Cornell university, Ithica, N. Y., next year; Robert McGeachin, Lincoln, who is a candidate for his master's degree in August, has received a graduate research fellowship at Washington university, St. Louis next year; Ormond Schroeder, Lincoln, who graduates this June, will report for duty with the DuPont company, Waynesboro, Va.; Gerald Griess, Kearney, a candidate for his master's degree in August, will be a research chemist with the Dow Chemical company, Midland, Mich.; and W. A. Schroeder of Omaha, who is to receive his master's degree in August, has accepted a graduate assistantship at the California Institute of Tech-in the university next fall.

## Nebraska grad receives ACS chemistry award

The American Chemical society's $1,000 prize in pure chemistry has been awarded this year to Dr. Lawrence O. Brockaway, a university graduate, according to announcement by Dr. Cliff S. Hamilton, chairman of the department of chemistry and chemical engineering.

Brockaway, who is now assistant professor of chemistry at the University of Michigan, was awarded the prize for his work on the determination of molecular structure by electron diffraction methods. He received his bachelor's degree from Nebraska in 1929, and his master's degree in 1930. He was a graduate assistant in chemistry during the 1929-30 school year.

From Nebraska, Brockaway went to the California Institute of Technology where he received his doctor of philosophy degree. He has been at Michigan since the completion of his work in California.

## Music students present recital

Twelve music students presented the weekly recital at 4 p. m., Wednesday in the Temple. The recital featured piano, clarinet, and violin solos. The complete program was as follows:

Sonata in Eb, Allegro moderato, Brahms, Elaine Weiand, clarinetist.

Red Light-Green Light, Josten, Jean Stutt, pianist.

Caro Nome—Rigoletto, Verdi, Antonette Skoda, soprano.

Spinning Song, Mendelssohn, Elizabeth May, pianist.

Mother O' Mine, Tours, Val Zetterman, baritone.

Nigun from Baal Shem Suite, Bloch, Henry Brahinsky, violinist.

**Those who sang—best**

**Fraternities.**

| | Total |
|---|---|
| Alpha Theta Chi | 1 |
| Beta Theta Pi | 5 |
| Delta Tau Delta | 5 |
| Delta Upsilon | 2 |
| Sigma Phi Epsilon | 3 |

**Sororities.**

| | |
|---|---|
| Alpha Chi Omega | 1 |
| Delta Delta Delta | 1 |
| Delta Gamma | 1 |
| Delta Zeta | 2 |
| Gamma Phi Beta | 2 |
| Kappa Alpha Theta | 8 |
| Phi Mu | 1 |

## History--

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the program consisted of handing down the trowel, Ivy Day poem, oration, speaker, and the May Pole dance.

On May 25, 1906, rain fell on Ivy Day. However, the program went on as scheduled, the two biggest features being the donation of a circular cement seat, which still surrounds a tree just north of the library; and the announcement of Innocents for the first time on Ivy Day.

The stone sun dial, now located between the library and administration building (the sun dial is gone but the post still remains) was given by the class of 1907 at the ninth annual Ivy Day ceremonies.

**All classes dismissed.**

In 1908, there was an innovation as it was decided that all classes would be dismissed May 13, the day of the planting of the ivy. Tickets were sold for the program, which began at 9:30 in the morning, and after the usual celebration in the morning, students adjourned to the State farm where an inter-class track meet and a ball game between the "Sphinxes" and "Spikes" completed the ceremony.

The class of 1909 made a lasting donation, as they dedicated the stone drinking fountain which still stands between the administration building and the library. Ross W. Bates, who gave the class memorial, stated that his class "wished to contemplate the fountain as a 'Fountain of Youth.'"

Freshmen received the honor, at the Ivy Day celebration of 1910, when it was decreed that they should be allowed to wear their hats at the holiday festivities. They had been refused permission to wear them earlier because of their defeat in "the pull."

**Comes a Daisy chain.**

On either side of the library are two large electric lamps, dedicated on May 2, 1910, Ivy Day, by the class of '10. Another new feature was introduced at this event, for the Daisy chain was formed and led the planting of the ivy.

The 1911 event was postponed on account of rain. However, the day arrived, and with it a tradition which has not yet faltered. The DAILY NEBRASKAN was distributed among the crowd in the afternoon. The Innocents were again announced.

"Queen of the May" made her debut at the festivities May 21, 1912. Due to the efforts of the Innocents, the program was greatly enlarged, and continued to grow under the influence of this honorary group for many years.

**Lead story for DAILY.**

In 1913, members of the Black Masque were announced on Ivy Day, which was rapidly gaining prestige. The DAILY NEBRASKAN, which, ten short years before had recognized the event with a half column on the back page, was now devoting the entire front page to the proceedings.

Friction over Ivy Day arose in the spring of 1915, and it was finally decided that students should vote on this issue: "Shall Ivy Day be eliminated?" Students proved their school spirit and Ivy Day continued. Electric Park was the site of the afternoon procedure in these pre-war days.

Keeping the class poet a secret was another addition to the surprises, and for the first time students were compelled to wait until May 1, 1917 before they could learn the poet's identity. Rain again fell in 1917, but nevertheless, the Innocents were tapped, the Black Masques were masked, the May queen was crowned, and the other events occurred. This Ivy Day the afternoon ceremony was held at Casino Beach.

**A tie for May Queen.**

For the first and thus far the last time, there was a tie for May Queen in 1919. Ivy Day opened the University semi-centennial exercises in 1919, and was combined with Class day. The morning ceremonies were on the city campus, but in the afternoon students completed their ceremonies at Capitol Beach, where the Innocents and Black Masques were announced. Introduced for the first time on Ivy Day was a play, "The Pageant of Freedom."

In 1920, tickets were again sold as usual, and the festivities were held at Antelope Park in the afternoon. Another tradition was established when a platform for the festivities was erected north of the administration building. This was the most colorful Ivy Day yet witnessed, and was complete with the Daisy chain and a new feature, flower girls.

**Coed makes address.**

The address of Carolyn Reed, made on this 1920 Ivy Day, is not being disregarded: "University tradition is a vital thing in college spirit and the great wish for Nebraska is that she may develop more lasting and worthwhile customs. Let us hope that the spirit of Ivy Day will go down through the years to help make a greater University of Nebraska."

In 1922 the Black Masques became part of the national organization of Mortar Board, and in the 1922 Ivy Day event, were masked as Mortar Boards.

Weather was unsettled, a professional photographer was on hand to take pictures, the queen was coronated, but the big event of the 1921 Ivy Day ceremony was none of these—the overcrowded bleachers collapsed.

In '22 Ivy Day lost some of its individuality, and became part of the "Cornhusker Round-up," an event used as bait to get the old "grads" back to the campus.

**First interfrat sing.**

Kosmet Klub sponsored for the first time in 1924 the interfraternity sing, which was won by Delta Tau Delta. For the next five years Delta Tau Delta led the pack.

In 1930 Ivy Day was decided to be held the first Thursday in May, several weeks earlier than it had been, because the Mortar Board, who requested it, wished their new members to have a chance to orient themselves to the society before the end of the year. Criticism and biting satire about the "queen will have to wear overshoes" followed the decision, but to no avail.

Also at this time College Days became incorporated, with Engineers Week and Farmers Fair participating." The orator speaking at this 1930 celebration, advocated a new student union, a wish which did come true.

In 1936 a valiant, but futile, attempt was made to find an ivy that would live. The Mortar Boards donated a trailing ivy which was well along, and was "sure to grow."

"Way back in 1939 A.D." another "first" appeared. For the first time in Ivy Day history, the Ivy Day poet was a freshman, Virginia Nolte.

## Sponsor--

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mal season, and would be held on March 7, 1941.

**Harmony goal.**

Cunningham feels that the Innocents will be able to work in harmony with the student-elected Prom committee, and that sponsorship by the honorary will be advantageous over the old system. He said, "The greatest advantage of the new scheme will be that the committee elected by the students would probably work harder and better since they will be responsible to both the entire student body and to the Innocents. The Innocents," he continued, "will be in a position to check more closely on developments in the planning and work of the Prom committee in preparing for the dance than has been the case in the past. More care will be taken to make the finale of the formal season a bigger and better affair."

**Innocent Englund suggests.**

It was revealed by Innocent Englund that the Student Council had appointed a special committee to meet with the faculty sub-committee for the purpose of working out a suitable financial plan for the Prom. Englund suggested that a possible plan under consideration was to set up a Prom fund with Mr. Selleck's office. Up to now profits from the dance have gone into the Student Council fund, while deficits have been paid from the committee members' pockets. A more suitable plan, such as the one suggested above, is needed, he concluded.