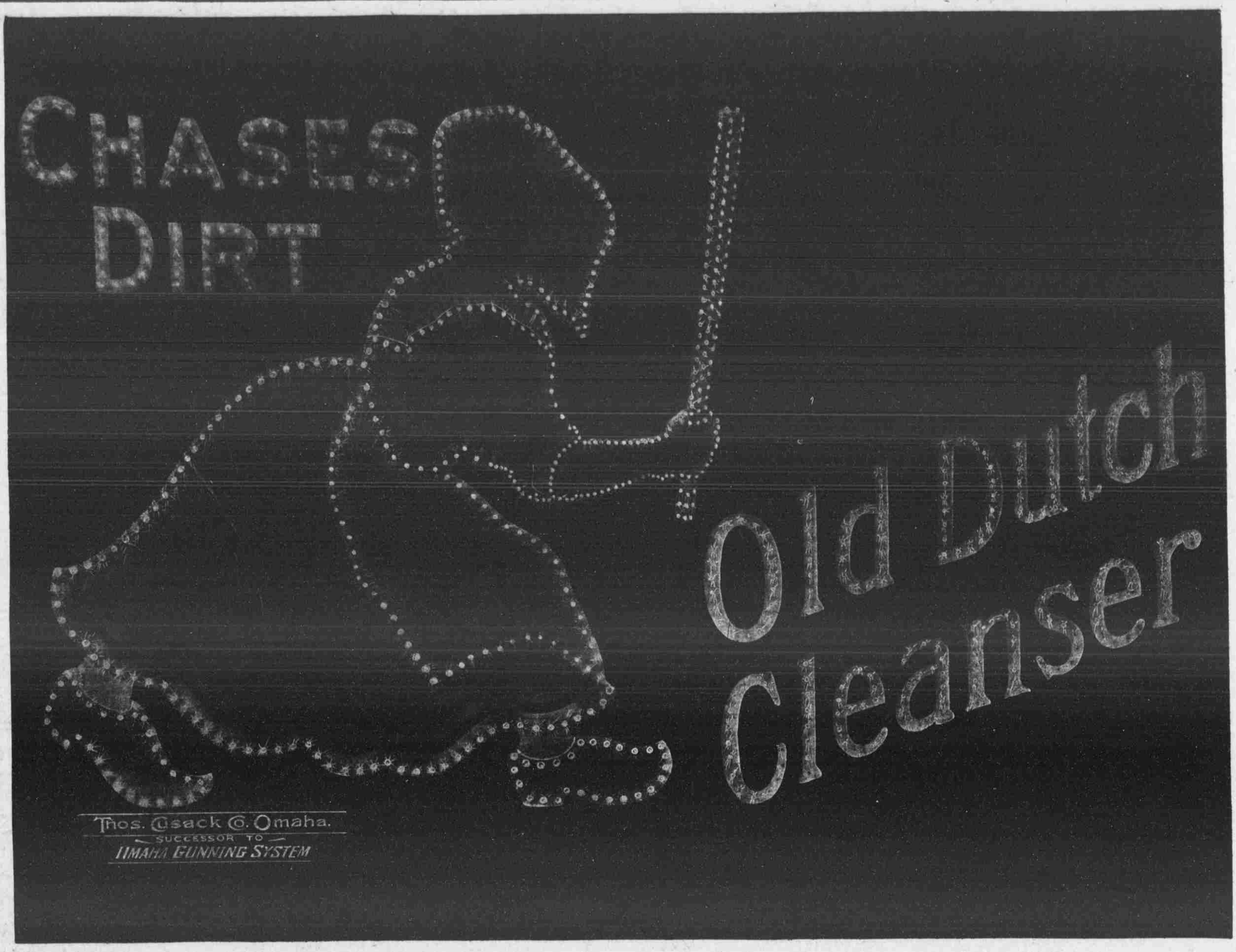

THE ABOVE REPRODUCTION OF THE "OLD DUTCH CLEANSER SIGN IS FROM A PHOTOGRAPH TAKEN FROM THE NORTHWEST CORNER OF SIXTEENTH AND FARNAM STREETS AT NIGHT TIME.

An Electrical Sign Unequaled in the West

The old saying, "Seeing the town by gaslight," hardly holds true in these modern days of electrical illumination. With the rapid development of the possibilities of electricity it has been put to wide and varied uses, and not the least important has been in street sign illumination. The progress along this particular line has indeed been little short of marvelous.

The extensive use of electrical signs has done its share toward making a "city beautiful." It has kept pace with the many other improvements and doubtless will continue to do so. That portion of the city looking north and south along Sixteenth street, and east and west along Farnam resembles in a great measure that of the famous "White Way" of New York city. With the immense signs but a few feet apart, extending nearly to the street's edge, their hundreds of electric light globes shedding their brilliancy, some dancing and flickering rapidly, a beautiful spectacle is presented. From a distance they appear as if one immense blaze of light, while from a height it would seem as if their number ran into the thousands.

As this system of street sign lighting has grown it has given employment to hundreds of workmen. Omaha has several firms that do practically nothing but make signs of this kind and keep them in repair.

The Old Dutch Cleanser sign has probably attracted more attention in the short time that it has been in place than any other sign in Omaha. It is impossible to pass within several blocks of that corner without seeing it.

In about the same manner that a mountain climber would misjudge the distance of a perspective view of the valleys and rolling prairie thousands of feet beneath him, so it is with this monster electrical sign. Without being familiar with the exact measurements of this huge sign, one would naturally hazard a guess that it was possibly 25 feet in height and about 20 feet in width, the club with which the "Old Dutch Cleanser Chases Dirt," to be about 10 feet in length, and the remainder of the sign far less by many feet than it actually is.

Just why it should be misjudged is inexplainable, except that there is practically no background on which to form an estimate. Here are the actual measurements:

Complete sign	48x54 feet over all.
Matron	30 feet high.
Shoes	6 feet long.
Club	30 feet long.
Head	9 feet wide.
Forearm	8 feet long.
Width of skirt	25 feet.
Top of sign from sidewalk	54 feet.
Letters	5½ to 6 feet long.

To get an idea of the height of the sign it is necessary only to run the eye along the top and compare it with the Henshaw hotel building just in the background. While the hotel building is about fifteen feet lower than the site of the sign, the latter towers as high as the fifth story.

The letters composing the words "Old Dutch Cleanser Chases Dirt" are higher than the average man. Each one of them is six feet in height and holds from fifteen to twenty-five electric lights. One thousand lamps of two and four candlepower are used in the illumination, while it requires one hundred wires to carry the current from the power house.

The sign is deceptive from another point of view. The thousands of pedestrians who have noticed it at night do so with the impression that there is some mechanical device connected with it that caused the arm of the matron to move upward and downward. This is not the case, however, as the arms are stationary and, instead of moving, as it appears, the lights are turned on in such a manner to cause this effect. The arm and club movement is accomplished by the use of what is known to electrical men, as a high-speed "flasher." These electrical devices are not unlike the hundreds of other contrivances used to throw the electric current on and off to produce the desired effect. The "flasher" is operated by a fifteenth or sixteenth horsepower motor, so arranged that the light in the upper arm is turned off and the lower light flashed on so quickly that it gives the effect of a movable arm.

The general construction of the sign was carried out with the object of making it absolutely safe from wind and storm. The skeleton frame is built of angle iron, 2¼x2¼x2¼ inches. The angle iron braces are 1¼x1¼x1¼ inches. The sign is set on the roof on steel I beams and so arranged that before it could tip the supporters would have to raise twelve feet. In addition, the sign is braced from all directions, insuring its perfect safety. Besides, there is not much wind resistance, it being practically all open work. The sign is constructed of galvanized iron, painted over.

In the Field of Electricity

Electricity of the Future.

ALL the well known scientists and business men of today agree that the city of the future will be an electrical city. With a very few exceptions all the manifold requirements for speed and economy will be met by electricity.

Even the food products consumed in the electric city of the future will be the results of electricity applied to agriculture. The country will have an abundance of electrical power for light, power and heat on the farms. The farming communities will flourish under the stimulus of an electrified topsoil, and an increased absorption of nitrogen, procured direct from the atmosphere by electricity. These processes are already successful as experiments on a small scale.

In the business of transportation, the electrically propelled aeroplane will doubtless develop to supremacy for high speed mail, and perhaps passenger service. The electric gyroscope will furnish stability for this device and also for monorail, high speed trains electrically driven. The locomotive as we now know it will be obsolete, but the electric locomotive will have come into its own for general freight and passenger service.

Wireless telegraphy has already ceased to be a toy and the city of the future will not be covered with a network of wires as it present. Wireless telegraphs will communicate wil all parts of the world and wireless telephones will be used for both local and long distance service. Even the transmission of the power currents will be effected through wireless, or the atmospheric electrical waves. The storage batteries of the future will be light and compact and very easily applied to vehicles and boats.

In the new electrical city man will do the thinking and electrical driven machinery will do the work. Time was, and that only a very few years ago, when nearly all the work in the world, from sweeping the floor to pounding out horseshoes and nails, was done by hand. Today the application of electricity in the workaday world passes all comprehension. The powerful motors have adapted themselves to all kinds of work in the shop, office or home, and the largest factories, from the watch-making shops to he giant steel mills, are driven by electricity. Motor applications are increasing every day and it is estimated that within the next fifty years every industry under the sun, and nearly all the work done by hand, will be electrified.

Telephones for Train Dispatching.

The Gould and Harriman interests handling the Wabash lines at Pittsburg, have decided to try the use of telephones for dispatching trains and transacting all their railroad work, with a view to doing away with the telegraph. To this end the West Side Belt railroad, one of the subsidiary lines, has been equipped with a new telephone service, and the experiment of running the line by telephone is now in progress. Orders are issued verbally by the train dispatcher to the several operators, instead of being sent by telegraph. This departure will be closely watched by railroad men all over the country, and there is no reason to doubt that it will be successful.

Sunshine and Electricity.

There have been many devices invented for the storing of the sun's energy and converting it into electricity, such as thermo-electric compositions, etc. The currents thus developed have been of but little practical value, says Popular Mechanics, but a Boston engineer has invented a machine that is claimed to convert the sun's rays into electrical energy direct, without the use of any intermediate apparatus.

The machine is composed of a large number of plugs of a peculiar metal composition, set in insulating material and connected in series, one end of each plug being in an airtight space exposed to the sun, and the other end in the open air. The difference in temperature of the two ends, usually about 60 degrees F., causes a flow of current. The voltage in each plug is, of course, low, but there are 976 connected in a series, and they store enough electricity in ordinary batteries to light his shop.

Like all new inventions, some of which never become practical, while others revolutionize existing conditions, there are many improvements that will have to be made, but during the last winter, in which there were many dark days, the apparatus proved sufficient for the inventor's needs.

The apparatus contains absolutely no moving parts, has no chemical action, is weather proof, and is claimed to need no attention from one year's end to another, with the exception of keeping the glass which covers it clean. The action is automatic, the circuit-breaker opening and closing the circuit when the voltage drops below that of the battery or rises above it.

Harlan County

(Continued from Page Two.)

preached here in 1872 by Rev. John E. Whiting, who held regular services in a tent. The first school was taught here in 1872 by Mr. Pound in his own house. The first postoffice was established in 1873 and F. A. Bieyon was appointed postmaster. The first flouring mill was built near the mouth of Sappa creek by Carl Boehl in 1872. At the time the town of Orleans was laid out there was a great rush of settlers to the county and much attention was attracted to the little town and it was but a short time before several buildings had been erected. But it was not until 1879 that the town began to assume any great proportions. In the spring of 1880 the railroad was completed and regular trains were put on. The first newspaper here, as well as the first one published in the county, was the Sentinel, established in April, 1873, by W. C. Holden. In 1880 Orleans was incorporated as a village. It has continued to flourish and is now a thriving business point.

During the last two years ninety-eight business buildings and dwellings have been erected in this city, at a net cost of $304,000. One of these buildings is one of the best and most modern high school buildings to be found anywhere in the valley. During the period of two years Orleans has constructed five miles of sidewalk, at a cost of $15,000. At this time seventy-seven firms are doing business in this city, with a capital of $541,000 invested, or an average per firm of $7,350, doing an annual business of $1,631,000. In eighteen months merchandise has been received at Orleans to the amount of 26,400,000 pounds, and during the same period of time the Burlington railroad has received from the merchants and shippers freight to the amount of 42,498,000 pounds. While this city has prospered beyond all expectation, the farming community tributary to it has made even greater advancement. Drive in almost any direction from Orleans and you will note great improvements on every side—farms, neatly cultivated; pastures, well fenced and stocked; large, modern dwellings having replaced the pioneer sod and a large, commodious barn having replaced the shack. The farmer in the vicinity of Orleans who does not write his check in payment of his purchases is the exception. Such is the remarkable progress made by these wealth producers in the last few years.

The reason for the bringing into existence of the Orleans Commercial club was not for the purpose of arbitrarily fixing the price of commodities or preying upon the industries of others, but for the purpose of uniting their forces for the common good and for the general upbuilding of the city and surrounding country. This commercial club has done and is doing much for Orleans, but it has the same story that you will find in most towns of its size. The truth about the growth of Orleans is so striking that no farther statements is needed to impress the reader. The city is forging ahead in all its activities as never before in its history. Next year will no doubt see a more rapid and substantial business growth for events of great importance are shaping themselves to Orleans advantage.

The crumbled remains of the old sod house of the early homesteaders and the fragments of an occasional dugout bear witness to the fact, that the new order of things has been worked and that the frontier is driven back all along the line. The valley of the Republican river marks the great grain belt where the pioneer has asserted his mastery over the prairie and exacted from it the tribute of golden grain which means sustenance for the hungry. Out here all things center on grain and for good reasons as the millions of the earth increase the cry for bread and meat is rising higher all the while. And those who can answer it will become rich. Far to the west a filmy blue rings of timber marks the course of the Republican, whose silent waters move ever onward to the mysterious ocean. Far as the eye can see to the east and the west stretches the level fields and unbroken view. The train goes rushing along at forty miles an hour, and yet there seems to be no end to the vast grain fields that meet the eye. One passes them in such quick succession that a glimpse only is possible for the eye has no time to appreciate the details so that the mind receives a general impression of a panorama of marked interest and variety. When a man begins to regard life as one continuous grind, the surest cure for his depressed state of mind is a little journey out in Harlan county. Out among new sights and sounds and where his horizon is broadened his mind stimulated, and his heart beats are quickened.

Gunnison Tunnel

(Continued from Page One.)

known, and a large part of the land which will be reclaimed is especially well adapted to raising fruit. The men who in the past held large tracts are now selling off the greater part of their land, keeping for themselves ten, fifteen or twenty acres. The grower who realizes only $100 an acre off his land thinks that he has had a poor year and as high as $1,200 has been obtained. Of course, instances like the last named are unusual, but they have occurred.

This government land in Delta county is equally good for producing all kinds of grains, potatoes, sugar beets, etc. In fact, the great fertility of the soil to be irrigated was one of the factors which helped in determining the government to build the tunnel.

In the neighborhood of 60,000 acres of this land is to be given away in forty-acre tracts. When the reclamation service started work the government withdrew from filing all unpatented lands and agreed to furnish to each land-holder under the tunnel ditches only enough water for forty acres. The land thus taken up is to be disposed of by the government under the lottery system.

It is probable that the crowd attending the drawing will be unprecedentedly big. The Delta County Business association has estimated that it will require at least 3,000 tents to house the visitors who go to Delta to register, and is making plans for the drawing on a large scale. The exact time for the allotment has not been set, although it probably will take place soon after the tunnel opening. Any person who draws one of these tracts will be able to readily dispose of his land for sums ranging up to $5,000 for the choicer tracts.

The Gunnison tunnel is the longest of its kind in the world, but it is hard to state in words the vast amount of good it will accomplish. Certainly it is a work of which every American may feel proud.

Delta Tau Delta Fraternity House

THE chapter of Delta Tau Delta fraternity at Lincoln has just bought for a chapter house the new residence of Dr. W. N. Ramey, completed last spring. The house is of cement block, contains twelve large rooms, and is ideal both in location and arrangement for the use of a college fraternity.

It is located at Fourteenth and R streets, two blocks from the university campus. It has three full stories and twelve rooms and will house eighteen men comfortably. The interior is finished oak on the first two floors and maple on the third.

The dining room, kitchen and water heating plant are in the basement. This will enable the large first floor rooms to be used for dancing purposes or as meeting rooms. The upper floors are conveniently divided off into bedrooms. Each floor has a bath room. The deal for the house has just been completed and the consideration was $12,500. The fraternity will occupy the house next month.

NEW HOME OF DELTA TAU DELTA AT LINCOLN.