

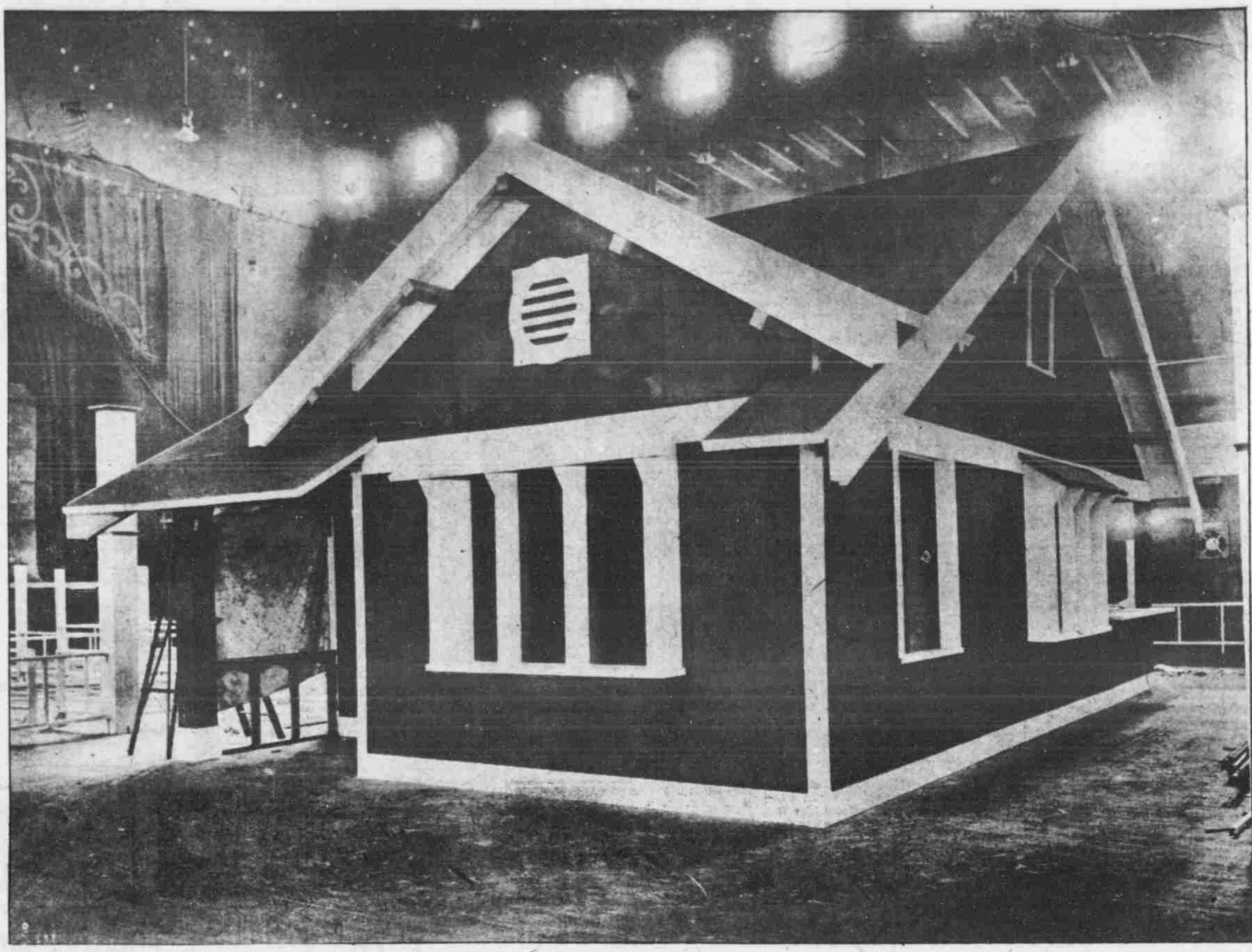
# The First Electrical Show

## THE PEOPLE OF OMAHA TO WITNESS THE MOST MODERN AND BEAUTIFUL EXPOSITION EVER SEEN IN THE WEST

Electricity is rapidly becoming the universal servant of the human race, performing more and more of the tasks that were formerly performed by other methods. Electricity was first employed to convey telegraph messages, then came the electric light and the telephone. In rapid succession came the motor, the phonograph, the automobile, and various kinds of mechanical devices which were formerly propelled by steam. It is safe to say that we are only in the A. B. C. of the electrical world as yet and fifty years from now we will be surrounded by electrical conveniences that are even at present not dreamed of.

The electrical show which opens in the Auditorium next Monday evening, May 4th, will vividly illustrate the wonderful strides that are being made by inventors of electrical appliances. The people of Omaha and vicinity are fortunate in having brought right to their home town the most modern and beautiful exposition ever given in the west. The lighting scheme alone will be worth going miles to see, while the booths will be filled with all sorts of electrical devices and machinery. Competent attendants will be in charge of each booth capable of demonstrating to the spectators the workings of the exhibits on display.

In the electrical cottage visitors to the show will see cooking, sewing, washing and ironing performed by electric power. The cottage will also have in operation every electrical device used in the home all the way from the bathroom to the parlor. Passing on around the show, spectators will behold the heavy machinery



exhibited in which electrical power performs the work of steam in drilling and hoisting. They will see many beautiful devices in decorative lighting for both exterior and interior; they will see the inside mechanism of the two great telephone systems now in operation in Omaha. They will see adding machines and cash registers, and renovating machines all manipulated by the wonderful current we call electricity. They will see the different styles and designs in burglar and fire alarm bells; office fixtures, electroliers, street lamps, pocket lamps, hair driers and massage instruments and the wonderful X-ray which has enabled surgeons to perform operations that were impossible before the discovery of this marvelous light. In short this electrical show will be a liberal education to the people who visit it, along the line of electrical improvements and inventions.

By the way of entertainment the Electrical Trades Association, under whose auspices the show is given, will furnish fine music—both instrumental and vocal—and vaudeville attractions. Dimick's Orchestra will play every afternoon and evening; in the evening the Elk's Quartette will sing and Professor Charles H. Keefer will render a few fine selections on the piano. The "Teddy Brothers" of Omaha will give an aerobic performance every evening and Onetta, the electrical dancer from Chicago, will give her famous fire dance every night at 9:30.

The show will open Monday evening at 7 o'clock and will be open thereafter from 2 to 5:30 and every evening from 7 to 10:30.

### AT THE AUDITORIUM. & DON'T FAIL TO ATTEND EARLY IN THE WEEK

#### ELECTRICITY IN BUSINESS

**Services Performed for Man Every Day Show Its Usefulness.**

#### BUSY WIRES AND MOTORS IN CITY

**All Manner of Things for Expediting Business of the World Are Achieved by the Application of the Current.**

Electricity guards \$15,000,000 in cash in Omaha banks; more than \$500,000 worth of silk in the department stores; \$1,000,000 worth of diamonds and jewelry, and while on this vast hoard of wealth, it is this invisible force that lifts enough people in the elevators of the city one floor daily to equal the entire population of Omaha; and not contented with that, its busy fingers fill teeth, cut hair, call 1,900 office boys into private offices and then for recreation keeps telephone bells ringing twenty-four hours a day over the entire city.

And the amount of actual power which it requires for electricity to do all these things is so small that with the elevators, a direct lift required of the invisible force, taken out, all the things electricity does in business life of Omaha would require only a few hundred horsepower. All the machinery of the factories, all the elevators, the lights on twenty-four-hour circuits and everything which electricity can now do for the people of Omaha, is done with a total of 10,000 horsepower, which includes the running of the street cars and electric lights. Reduced to electric light, the horsepower used by Omaha would run a large street car lamp in front of every home in Omaha, Council Bluffs, South Omaha, Benson, and then furnish a number of ordinary electric lights for each home.

#### Electric Alarms Come Early.

One of the first uses in business to which electricity was put after the Morse telegraph instruments were invented, was the electric burglar alarm, which is simply a telegraph instrument, the alarm always being given by breaking or connecting a circuit just as in telegraphy. From the simple burglar alarm used on windows, where the contact of two little pieces of copper when the sash was raised, set a bell ringing, the great and complex system of burglar alarms has been perfected until it is almost impossible for a business house to feel at all safe without the electrical protection, and the watchman report boxes.

Around the vaults of the banks there is such a net work of wires, arranged in such a way that they cannot be kept from performing their duty. The electricity in them is carefully "weighed" by a delicate instrument at "headquarters." The breaking of one of the wires will make the "load" lighter and the machine registers the trouble. A watchman is sent at once, and if he does not return, an emergency call is sent to the police station and a wagon load of officers will be quickly on the scene. The electrical protection is said to be perfect by the bankers. They are satisfied that no one dare tamper with their vaults, and if one of the officers is in the bank and should set off an alarm ac-

identally, he is immediately confronted by police officers, who have been furnished with a list of all who are entitled to enter the banking rooms after hours or on holidays.

#### Private Watchmen Watched.

More than 100 watchmen in Omaha wholesale houses, retail stores and factories are kept awake every night by the business like report system, and if anything happens to a watchman and he fails to report at the stations in the building, trouble ensues, and there will soon be an officer knocking at the door of the factory or entering with a pass key and waking the thoughtless watchman.

All over the big buildings, on each end of every floor, there are "stations." In some stores it is necessary for a watchman to ring up at a station every fifteen minutes. He must do this in rotation, requiring that he go from one station to another all night long, and giving notice when he ceases his rounds for half an hour in the middle of the night, to eat a lunch and drink a cup of coffee. In other houses a half hour "ring up" is required. Should burglars enter a store thus protected, it would be necessary for them to keep ringing up at the stations in all parts of the building while they were getting their "load" together or they would have the entire emergency force at the police station calling to awake or release a chloroformed watchman. Buildings patrolled by watchmen who report by electricity could not have very bad fires. Besides the automatic sprinklers, the watchman must pass the points in the building so often that fire could not get much headway.

The police report system is much the same as the watchman system, every patrolman ringing in at intervals of half an hour, the report going to the central office of the Nebraska telephone company, which has the contract for keeping electrical "tabs" on the police. The telephone company notifies the headquarters if an officer fails to report or if he reports from the wrong "box" at the wrong time.

#### Telephone as an Alarm Clock.

The telephone company has a system which threatens the manufacturers of alarm clocks. It is obliging to subscribers, and, if a patrolman comes home at an early hour and still wants to get out of bed in the morning, he may have a telephone girl call him. Ask information to put your number in the 6 o'clock column, where she probably has a score. Promptly at 5 o'clock by the regulator over her desk, she connects the 5 o'clock ringer with the switch board and at the touch of her finger to a button she starts a score of patrons to saying unkind things as they feel their whiskers grow and wish they had never given the order to be called so early. The calling of patrons at 5 o'clock in the morning is a thankless job which the telephone company has undertaken, but which is a great convenience. There is a record at one central office where a subscriber was called early at his request and he thanked the operator when he answered. All others grow out a "W-s-l."

Never has the telephone been put to so many uses in the business world as within the past three years. Some entire lines of railroad are now operated by electric power, but perhaps the greatest convenience is the "house telephone."

#### Uses of the Telephone.

Arriving in Omaha and going to one of the hotels, a guest is assigned to a room and

is in private within a few minutes after arrival. While taking a bath the guest may call up a friend in his room in Chicago; then, while dressing, he can order a dinner which will be on the table waiting or be sent to a room. Once in the dining room, the guest may have a small iron box looking arrangement set on the table and through it may reserve theater tickets, a berth or make appointments with friends in all parts of the city or in other hotels. The telephone at the modern hotels has simply made it impossible for anyone to be uncomfortable or to be inconvenienced.

In the big business houses and many of the smaller ones, the "private branch exchange" is a marvel of business economy. One of the first houses to install the private branch exchange was the Union Pacific railroad headquarters. Exactly eighty-four telephones in the different apartments of the Union Pacific company may be reached by calling the one number, Douglas 234. Anyone can remember one number. Remember "234" and access is gained to any department of the Union Pacific Railroad company in Omaha in two minutes. This same service is offered by all progressive business houses of Omaha. From her home a woman may call any department of a retail store. If she is acquainted with a clerk in the department, she may get the clerk of whom she desires to buy and give her order. Then she can be connected with another department and may give an entire order to those clerks with whom she trades every day.

Such a system of telephones has just been installed in the city hall. By remembering the single number, a subscriber may talk to Mayor Dahlgren or the chief of police, inquire whether there is hope of securing assistance and from the Associated Charities or whether the holes in the pavement will be patched in time for the Carr Show.

In most business houses there is also a system of private telephones which connect with any part of the building. The manager of a concern may talk with every foreman in the building, the shipping department and bookkeepers and direct the whole business almost without seeing one of the employees, and then ask the engineer, kindly to turn on more steam without personal danger.

#### As an Aid to Comfort.

One of the minor uses to which electricity is put and which assures comfort in the summer is the operation of the electric fan. Before the electric fan there was no artificial breeze which amounted to anything. It stands out in marked contrast to the old fans suspended from the ceilings and pulled backward and forward by a rope, which was operated by some sweating mortal in a rear room. The old fans were a highly unsatisfactory piece of furniture and served best when a room for flies, but the electric fan, operated by the same current required to keep a sixteen candlepower lamp burning, may be placed on the finest mahogany desk without injuring the furniture. It may be placed at a bedside or on a dining table. It keeps thousands of weary toilers comfortable and feeling fresh when formerly they were overcome by heat and had air.

With electric fans the "air washers" arrived and in more than one Omaha business house the air is pulled through a process which makes it pure and taken out of the building again when it becomes old with the whirling blades of a powerful

electric fan revolving something like 2,000 times every minute. No other power was ever adapted to these purposes. No belt from a steam engine would whirl a fan for an air washer; no steam nor water motor would ever permit of running an electric fan first in a hospital ward, then in an office and finally keeping the cook cool in the kitchen—and the whole thing carried about with less trouble than an old kerosene lamp.

#### Services of Many Motors.

Other motors which are operated with so little electricity that a score of horsepower would run all in the city are the drills and small machinery and tools about a dentist's workshop. Hanging down over a dentist's chair a small motor inside a bronze ball about the size of an ordinary base ball operates machinery and drills which were formerly propelled by a clumsy foot power. The dentist being required to move the footpower every time he changed position. But with the little motor he gets a steady power and shuts it off or turns it on at will by pressing a tiny button on the drill stock which he holds in his hand. From hoisting an elevator in the Union station, which will lift three tons of people, the electric current turns to running a massage machine in a barber shop or "beauty parlor" where wrinkles are ironed out, pores opened and blackheads removed, all by a vibrating rubber hand run with a current about as strong as that which whirrs an electric fan.

Nor is the barber who has an electric machine in advance of the modern groom at the stables who has an electric hair-clipping machine which will clip a horse's back in any style. From requiring half a day to a day to give a horse a "hair cut" it is now done in a few minutes, and the horses enjoy the vibrations of the electric machine as compared to the hair pull of the hand machine.

#### Builders Get Its Assistance.

Over the city where builders are putting steel in place a workman no longer turns a drill which makes holes where needed for rivets, but from the nearest line of the street railway company he takes a current from a feed wire or from the electric light company the little motor is carried to the top of the tenth story or to the basement and the drills quickly penetrate the hardened metal.

Now and then wells at the switches are too high and the cars are in danger of being thrown from the track. A little motor comes out in a work car, is attached to the track and trrolley wire. A complete machine shop grinders and emery wheels, quickly cut down the steel.

Then the concrete workers want to mix cement, sand and crushed rock for a sidewalk or retaining wall. No steam engine dirty smoke and coal wagon attachment is necessary. The concrete mixer is run by power from the wires in the nearest alley and a motor so small that it is necessary to look for it by the side of the great cement mixer. From the cement mixer the current fits through the wires, on and on with its invisible force, and stops in a kitchen long enough to "cook a meal, then splatters it on a sewing machine, while at the same time in a factory it is running 300 sewing machines and ironing clothes without the danger of burning. Once set the switch for the amount of current needed to bring the iron to a certain heat and they will become no hotter, nor do they ever get cool until the current is turned off.

#### MAN'S NEEDS WELL SERVED

### Electricity an Agent of Ever-Present Service in Life.

#### MANY USES FOR STRANGE FORCE

### Commerce and Industry, Arts and Sciences and Familiar Domestic Duties Bettered by Application of the Current.

"Electricity is the greatest agent of the period and is becoming more and more a household necessity in every-day life. The many services it performs are wonderful, an unthinking user of this invisible fluid have no idea how lost they would be if everything pertaining to electricity was suddenly snuffed out and removed from his life. Without a doubt electricity is today the most important factor in the life and industries of the whole world."

This emphatic statement is made by Waldemar Michaelson, city electrician, who has made a study of it and who has written a number of articles on the use to which the field has been put. He says that new uses are being found daily for electricity and is confident that the next few years will find the invisible agent in myriad places not dreamed of today.

In this he calls attention to the wireless telegraph. Had Marconi "sprung" his invention ten years ago, the electrician says, he probably would have been sent to the insane asylum, but the people had gradually become educated to the possibilities of the fluid, and when the wireless message was discovered, or invented, Marconi was decorated with honorary medals, instead of being sent to a hospital for the incurably insane.

#### In Man's Daily Life.

What new inventions will be made in the future, the city electrician does not forecast, but to bring out a few of the varied uses of electricity, today Mr. Michaelson follows an average business man through one day of his average life.

Mr. Man has been east and arrives in Omaha in the morning on a train propelled by electricity, and upon which his every want has been supplied by pushing the ever present electric button and summoning the porter, his safety during the journey having been guarded by the electric block system," says Michaelson. "Arriving at the Union Station he takes an electric elevator to the surface, buys the morning paper printed on an electric press, and rides in an electric street car to his home. Upon reaching there he presses an electric button and upon informing his wife through an electric speaking tube that he is the head of the manor, and not a burglar, is admitted.

"Mr. Man goes to his room and shaves with an electric shaving outfit with water heated on an electric stove, breakfasts and goes to his place of business in his electric automobile," continues the narrator. "Arriving at his office, Mr. Man finds accumulated correspondence, stamped with an electrical device showing the hour of receipt. The electrical telegraph, he called into play, and into it he dispatches his replies to the letters received from which the stenographer can transcribe them at her leisure.

#### MAN'S NEEDS WELL SERVED

"But one letter needs an immediate answer, and he sends a telegram to the correspondent in New York. A reply is received that the correspondent has called for Europe, and Mr. Man then reaches him in mid-ocean by wireless message.

"While attending to this correspondence, an electrical alarm is turned in, informing him that there is a fire in a portion of the factory. Rushing to the scene of the fire he finds that the flames have been quenched by means of the automatic fire alarm sprinkler system and when the city fire department arrives, summoned by the electrical call system, there is nothing to do. Also there is no work for the police summoned by the electric patrol system. In a few minutes the machines in the factory are in operation again, propelled by electric motors.

#### After His Day's Work.

"Glancing at the clock on the wall, which is accurately set every day by means of the correct time being telegraphed direct to the clock and the hands being placed in the right position by means of electricity, Mr. Man sees that it is time to go home to dinner. He talks to his wife over the electric telephone and apprises her that he is starting home, and when he arrives there in his electric cab, he finds dinner ready. The meal having been cooked over an electric stove with electric cooking utensils. Though it is Monday, and wash day, Mrs. Man is not tired, as she washed with an electric washing machine. Cooked dishes are kept warm on the table by electric appliances connected with baking dishes, and for dessert Mr. and Mrs. Man have ice cream frozen in an electric freezer.

"After dinner Mr. Man sits down under an electric light and, lighting his cigar from an electric cigar lighter, reads the evening paper while Mrs. Man curls her hair with an electric curling iron and prepares to go to the electric show at the Auditorium. The evening is chilly and Mr. Man warms his feet on an electric radiator, though in the heat of the day the electric fan kept his office cool. A messenger, summoned by the electric call service, procures seats for the family at the electrical show, and when they go to the show in an electrically propelled street car the premises are guarded by the electrical burglar alarm system."

#### Wonders of the Age.

In this narrative, Mr. Michaelson calls attention to many electrical appliances, all of which are used by some, some of which are used by all, but many of which, as he says, the average man does not value as he would if their use was suddenly denied. The wireless message, the electric ice cream freezer and the electric printing press are not as widely used as some, but in this day there are but few homes where the telephone is not used, fewer still where some member of the family has not felt the need of sending a telegram, and probably none in Omaha who has not ridden on the electric cars. In every-day life electricity has become a necessity, it is no longer a luxury, and many business enterprises would have to be suspended were it not for electricity.

In medicine, too, electricity is looked upon with more than ordinary favor. The Roentgen rays, the X-rays, have been known for several years, the rays not only being used for medicinal purposes, but for the discovery of hidden objects, the location of bullets in a man's body. But a new ray has now been discovered but recently, which is known as the violet ray, and

which is used principally for the treatment of skin diseases, cancers and the cauterizing of wounds.

#### Its Aid to Mankind.

Though discovered many hundreds of years ago, electricity has not been put to much every-day use until recently. In the early days the woman of the household was compelled to get up on frosty mornings, if "hubby" was too sleepy, and gather logs to build the kitchen fire and cook breakfast for the family. In the hot summer weather she has toiled and sweated over a steaming wash tub and by assiduous rubbing on an old-style wash board has cleansed the clothes and about used herself up. Her work was hard, while the labor of her husband was no lighter. He had to walk to his work, had to propel his machinery by hand or fire up a steam engine, could send no messages home for the want of a telephone or an electrical messenger call service. But today this is all changed.

By the simple pushing of a button the stove is lighted and the house warmed, and the meals cooked on an electric stove. In the summer the connecting of a switch starts an electric fan which cools the room, and the pushing of another button starts the washing machine. There is no red-hot and stirring of clothes over a red-hot range, there is no endless rubbing of garments on a wash board, there is no back-breaking turning of a wringer. All is done by electricity. There is no more necessity for walking two or three miles to work, for the trolley is ever present, and no fires have to be poked in many a factory, for the machines are run by electric motors.

Telephone wires form a veritable network in the city as well as the country, and the telegraph encircles the globe. Ships can be reached in mid-ocean by the wireless telegraph, and look where one may, the works of electricity are seen on every hand. A complete catalogue of all electrical appliances and uses would be impossible, but some of them, heretofore mentioned, are:

Telegraph, wireless telegraph, telephone, messenger call boxes and services, police call boxes, fire alarm boxes, sprinkler fire alarm system, automobiles, trolley cars, locomotives, printing presses, elevators, block system, clocks, lamps, stoves, cooking utensils, shaving sets, curling irons, massage apparatus, washing machines, ice cream freezers, refrigerators, cigar lighters, four blenders, milk cleaners, medicinal belts and soles, bed warmers, foot warmers, telegraphone, X-ray, fans and scores of others.

Electrician Michaelson well says that "Electricity is the greatest agent of the period," and in the opinion of this personal generation in the future will look back upon the century and call it the "age of electricity," as we today catalogue the prodigious ages of the past.

"It seems to me that it is but a question of time before the bathings will be sent through the seas by the unseen agency, electricity, and battles won, wars settled and the fate of nations decided," says Mr. Michaelson. "There is not a civilized nation on the face of the globe that does not use electricity, and in all countries are men working night and day inventing new uses for the wonderful fluid, but what other great uses it will be put to I hardly know."