

# THE PEOPLE'S WEEKLY PAGE OF ELECTRICAL NEWS

Published Each Tuesday

## Here is a Friend for Summer Days



Electricity working through the five articles shown above makes a very happy summer servant. A motor, a portable lamp, a toaster, a percolator and an iron will do a great deal towards family comfort in the course of a day.

The first public telegraph office was opened on Seventh street, Washington, D. C., April 1, 1844.

Nearly 10,000 incandescent lamps are required to illuminate the world's largest steamship, the Imperator.

## EXPLAINING THE LIGHT BILL

Cost of Electricity is Made Clear to Customer.

**CURRENT CAN BE SAVED**  
It is Just as Possible to Economize with It as It is with Any Other Commodity Used in the Household.

"Look at that, sir!" exclaimed the frate housewife as she threw the electric light bill on the cashier's desk. "You have charged me with sixteen kilowatts and there isn't a kilowatt in the house and never has been. We use only metal filament lamps, a toaster, a flatiron and an electric fan. The very idea—"

"My dear madam," smiled Mr. Crosby, cashier of the Omaha Electric Light & Power Co. "nineteen kilowatts is the total amount of electricity you have used during the month. We sell a portion of the current measured by your meter at 12 cents and the rest at 6 cents per kilowatt-hour, the kilowatt-hour being a unit of measure corresponding to the pound by which you buy your sugar and salt. Measured by the kilowatt-hour it costs six-tenths of a cent per hour for the first eighteen hours' use of each sixteen-candlepower lamp, after which time the cost is but one-half, or three-tenths of a cent per hour. In other words, we have charged 12 cents for nine of the nineteen units you have used, and 6 cents for the other ten units, making a total of \$1.08, plus 50 cents, or \$1.58, on which we allow a discount of 5 per cent if paid in ten days.

"Oh," interrupted madam, "I see—"

**Economy is Possible.**  
But she didn't really see. The kilowatt was just as much of a mystery as ever. It is really a surprise to most users of electricity to learn that they are buying the current in known quantities and that economy in its use will make it go twice as far at half the cost. All the work in the house can be done with the aid of electricity. It will cook, sweep, wash, iron and lighten the labor of the housekeeper, as well as give light and heat. All this is easily understood and it is just as easy to solve the puzzle of the electric light bill.

"In the case of electric service we use another unit, similar to the horse power in kind but not in quantity. This unit is called, just for want of a better name, a 'watt.' Thus, on an electric toaster, for instance, there may be seen a little plate on which is marked '200 watts,' which means that the toaster takes 200 watts of electricity to heat it properly. (There are 746 watts in a horse power.) But we do not pay for watts any more than we did for horse power in the above example. It is work or energy that costs money. Thus we establish another unit similar to the horse power-hour and call it a 'watt-hour,' which means the quantity of energy developed by a watt in one hour. Thus the 200-watt toaster would consume 200 watt-hours of electricity in one hour, or 1,000 watt-hours in two hours, 1,500 in three hours, and so on.

**Convenient Measure.**  
"When we consider large quantities of electric current, it is convenient to use a larger unit than the watt. The one chosen is called the 'kilowatt,' which is simply 1,000 watts. Similarly, the 'kilowatt-hour' is equal to 1,000 watt-hours. The electric light companies charge for their electrical energy by the kilowatt-hour, so this unit is very important. As all small lamps and apparatus are rated in watts, we will calculate their energy consumption first in watt-hours, and then divide by 1,000 to bring this to kilowatt-hours by the price in cents charged per kilowatt-hour, the answer being the amount of the bill in cents.

"The number of hours a day that these lamps are in use varies, of course, with the season of the year and with the family requirements. As an average case, suppose that the kitchen lamp is used three hours a day for thirty days a month. A sixteen-candle power carbon lamp takes fifty watts. In one hour it consumes fifty watt-hours of electrical energy. In three hours (that is, one day) it uses up fifty times three, or 150 watt-hours. In thirty days, or one month, the amount consumed is 150 times thirty, or 4,500 watt-hours. Dividing the watt-hours by 1,000, to obtain the number of kilowatt-hours, it is apparent that in one month the kitchen lamp uses four and one-fourth kilowatt-hours of electricity, which, at the rate of 10 cents a kilowatt-hour, would cost 45 cents.

"If Mazda lamps were used the total

cost of lighting would be very much smaller, because fewer units would be charged at 12 cents, and the total amount of electricity used would be about cut in half. This would more than offset the little expense for equipping the house with Mazda lamps.

"Assuming that the same amount of light were used—that is, the same total candle-power, for the same number of hours—the cost for current would be about one-third. A forty watt Mazda lamp will give a light of thirty-two candle-power, and one of these lamps can easily be identified by the '40w' which appears on a little printed tag pasted on the globe near the screw plug—and so for lamps of other wattages. As a rule, when these lamps are employed, more illumination is obtained than when carbon lamps are used. The light is also so much lighter and more pleasing, its intensity being softened in many cases by the use of frosted lamps or light-diffusing globes. The following table shows a worked-out example using Mazda lamps of somewhat higher total illumination than the carbon lamps. The saving in cost and the increase in illumination are obvious.

Room	Wattage	Hours a Day	Watt-Hours	Kilowatt-Hours	Total Cost per Month
Kitchen	16-c-p.	3	480	.48	.48
Dining rm.	16-c-p.	2	320	.32	.32
Living rm.	25-c-p.	2	500	.50	.50
Bathrm.	16-c-p.	2	320	.32	.32
Bedrm.	16-c-p.	1	160	.16	.16
Bedrm.	16-c-p.	1	160	.16	.16
Corridor	16-c-p.	1/2	80	.08	.08
Stairs	16-c-p.	1/2	80	.08	.08
Hall	16-c-p.	1/2	80	.08	.08
Porch	16-c-p.	1	160	.16	.16
<b>Totals</b>	<b>15 lamps</b>		<b>3,760</b>	<b>3.76</b>	<b>3.76</b>

For this installation we have fifteen lamps giving a total of 485 watts, which is equivalent to ten sixteen-candle power lamps. Sixty per cent of this number of sixteen-candle power lamps used thirty hours gives nine kilowatt hours of the total (nineteen) indicated by the meter to be charged at 12 cents, or nine kilowatt hours at 12 cents, \$1.08. The remaining ten kilowatt hours are then charged at 6 cents of ten kilowatt hours at 6 cents, \$0.60.

Total gross bill.....\$1.68  
Discount for prompt payment......42  
Net bill.....\$1.26

### ELECTRICAL NOTES.

Electric ovens are coming into use in the city bakeries. Huntington avenue, Boston, will be made a great white way. Dust on electric light globes robs them of their light-giving efficiency. The White House kitchen has every modern electrical convenience. Electric illumination is now a feature of nearly every celebration or exposition. It is proposed to harness the Ohio river near Louisville to generate electrical power. A wireless system between Great Britain and Canada will be in operation next September. Electro-magnets are being installed by treasure hunting ships to recover submerged metals. Experiments are being made now on a large British vessel that is under construction, with a gasoline electric plant that may be placed on the bridge deck. This set will not only supply the light, but the wireless telegraph apparatus as well, so that the occupants of the vessel may be supplied with light and the means of calling for assistance until the very moment of complete submergence of the vessel. This generating plant will be used only in emergencies. An electric attachment for a target such as is used on rifle ranges has been designed by an Australian. It keeps the target continually in motion, backward and forward on the track. The figures are constantly in action, and it is an entirely different proposition to hit once, especially in a vulnerable spot, than if they were stationary. Such a target is particularly good for use in the militia or the regular army, as in the case of war it is not likely that the enemy would stand still until somebody succeeded in shooting them. Two applications for electric heating are used in connection with drafting work. One is the use of a portable combination heater and fan, ordinarily employed by hairdressers to dry their customer's hair after washing, to dry the ink on tracings. This "wrecker" shortens the time required to complete the tracing, as the freshly inked lines must be dry before T-square or triangle can be moved over the tracing. The other idea is to dry blueprints by going over them with electric flatiron; and the flatiron is also useful to straighten out tracings and prints that have been rolled or folded.



# YOU CAN SAVE

Money and time by getting your lighting fixtures from us. Call us up and we will send a man out to figure with you, or come to our salesroom and make your own selection.

**The Electric Shop**  
WOLFE ELECTRIC COMPANY  
Est. 1874.  
1810 Farnam, Tyler 1414.

**BENNETT ELECTRIC CO**  
FOR SAFE AND RELIABLE WIRING  
It PAYS TO PLEASE  
201 Omaha Nat. Bank Bldg. D 3214

**Omaha Electrical Works**  
Electric Elevator Repairs  
and Westinghouse Motors  
109-112 N. 11th St. Phone Doug. 1141.

## Proper Use of the Telephone

Did it ever occur to you that you might not be using your telephone the right way? If you do not you cheat yourself and those to whom you are talking.

Do you speak sideways, speak above, speak below, speak six inches away from the mouthpiece of your telephone transmitter?

## Speak Slowly

You should talk directly into the telephone—not simply at it, with your lips about one inch from the mouthpiece, and speak in a slow, even tone—no louder than you would face to face.

Half the art of telephoning is in deliberate speech. Speak in an ordinary conversational tone, but slowly and distinctly, and you can be heard much more easily.

There's a right and a wrong way to telephone.

**NEBRASKA TELEPHONE COMPANY**

Electricity has become so useful in the household that no home is considered modern unless it is equipped with electric conveniences.

If you have any to sell you can rapidly sell them by using this page.



## Iron Out of Doors All Summer Long

Ironing in summer becomes enjoyable, healthful exercise, if you use an Electric Flat Iron. It can be used in any room or out on the porch, if you wish, if your home is wired for electric light. This is only one of the many conveniences and economies possible to those using electricity. Electricity in the home saves time and labor for you, enables you to do better work in less time and with far less effort.

## Consider these advantages in having your home wired now

Electricity in the home saves half the labor of housework by enabling you to use labor-saving devices. You can prepare tasty meals in cool comfort if you use Electrical Appliances. Electric Washing Machines and Flat Irons will enable you to dispose of the largest washing quickly and with little effort. Electric lighting is cool, safe and convenient, and best of all, it is the most economical illuminant. On July first the rate for electric lighting was reduced from 14c to 12c per kilowatt hour for the first 30 hours use. After the first 30 hours the rate is 6c per kilowatt hour. Ask for full particulars.

Write or telephone today  
**Omaha Electric Light & Power Co.**

# \$30--Vacuum Cleaners--\$30--Pergess-Granden Co.

## BRIEF CITY NEWS

**Scrophiagus.** Legging Pictures, Burgess-Granden Co. Live Root Fruit It—Now Heaton Press. Fidelity Storage & Van Co.—House 1814. Held for Keeping Gambling Devices—A. F. Barth and James Cunningham of South Omaha were arraigned in county court on a charge of keeping gambling devices and bound over to the district court.

**McVann Goes on Vacation.**—E. J. McVann, manager of the traffic bureau of the Commercial club, has started for his vacation of two weeks. He will spend most of his time in South Dakota in the Black Hills country.

**Must Support Family.**—O. K. Straum, 113 Vinton street, charged with non-support and abusing his family, was given ninety days suspended sentence by Judge Altstadt. The sentence was suspended with the proviso that Straum leave his family alone and give them \$10 a week for their support.

**A Break for Liberty.** From stomach, liver and kidney trouble is made when a 2c box of Dr. King's New Life Pills is bought. Why suffer? For sale by Beaton Drug Co.—Advertisement.

**The Persistent and Judicious Use of Newspaper Advertising is the Road to Business Success.**

## BUSINESS MEN TO CONFER

Will Unite in Effort to Increase the Crop Yield.

**WILL MEET HERE AUGUST 20**

Bankers Figure It Would Be an Easy Matter to Increase the Production of the State Many Millions.

Pursuant to a resolution adopted by the State Bankers' association last February, a conference of the representatives of the large business interests of the state is now being called to be held in Omaha at the Commercial club Wednesday, August 20. The purpose of the conference is to consider ways and means of increasing the grain and live stock production, especially along the lines of placing farm demonstrators in as many counties of the state as possible.

The Nebraska Bankers' association has had the matter under advisement for two years or more. The conference is to be net alone of bankers, but of railroad men, grain exchanges, live stock exchanges and similar associations.

"Knowing that the prosperity of the state and every branch of business in the state depends upon the volume of the state's agricultural production annually the bankers' association has evolved the idea of calling such a conference. C.

## Hildreth, chairman of the agricultural development committee of the bankers' association, says in part in his report:

"In developing the question of aiding the agricultural matters our association aims to the conclusion that it would be well to unite, if possible, all the business interests of the state in the plan and effort, believing that greater results could thus be attained.

"To this end the association passed its resolution last August, the committee met as stated in January and a conference in Nebraska each year. If by improved methods the yield be increased one bushel per acre you have added about \$2,000,000 to the profits of the state. If the yield could be increased, say three bushels per acre, the gain to the state would be \$6,000,000.

"While the methods were being improved so we could raise one or three bushels more of corn per acre the yield of wheat also and all other grains and products could and would be increased, our lives and happy by the same outlay of expense."

"It would be a comparatively easy matter to increase the annual profits to the farmers and to our state \$10,000,000 or \$20,000,000. These amounts can be multiplied without limit dependent upon the energy and funds that may be wisely used in improving farm methods.

"Again, a note of warning must be sounded about the depletion of our soil. Already many of our farms begin to show the decline in their productivity if we are not to jeopardize the future of

## our state this problem must have our attention now. Our neglect and are today making great efforts to recover what is lost.

## Rine Says Council Cannot Cut Main Tax

City Attorney John A. Rine, in an informal opinion to the city commission, says the council is without power to reduce an assessment in a water main district after the assessment is authorized. The opinion followed the protest of two women who declared the Water board had charged them \$25 a lot for the mains, when, under the ruling of the city council, they ought to have been charged only \$10 per lot. The council will discuss the matter at its meeting in committee of the whole Monday.

## HELD FOR FORGING NAME TO A P. O. MONEY ORDER

Saturday afternoon Leo Armstrong was walking through the federal building and he found a coat in a window. Leo picked up the coat, found a money order for \$15 in one of the pockets, and passed the jacket for 40 cents. He attempted to get the money order cashed after forging the name of the owner to it. He waived preliminary hearing before United States Commissioner Daniel on a charge of larceny from the postoffice building and forging a money order. He was bound

## over to await the federal grand jury under bonds of \$1,000.

## Dog Sentenced to Be Killed is Saved by Plea of Family

A poor little lonesome spaniel, caught without a collar or a tag, was sentenced to death and would have been executed but for city executive clemency. Following the order to shoot the raged little dog a whole family, father, mother and two boys, came into Mayor Dahlman's office and asked for a pardon for the dog.

"He's the best dog in this town," said one little boy, whose name is Plummer. "Why, King never done nothing to be shot for."

"Does he kill the neighbors' chickens?" the mayor asked.

"No, sir."

"Does he howl at night?"

"Say not."

"Well, well suspend sentence," the mayor said, "and I'll tell the judge at once."

When the mayor had finished his order suspending the execution of King the kids gave a great shout and the parents did not attempt to restrain them. The whole family was so pleased that it was evident King may live and wax fat in the Plummer family.

## After Maneuvers State Troops May Go to Mexican Border

While it has not been officially announced, there is some likelihood that after the ten-day maneuvers of the state troops, west of Omaha, are over, the participating companies may be ordered to the Mexican border to do patrol duty.

## PETERS AND TATE SAY THE CORN CROP IS ALL RIGHT

Herman B. Peters, proprietor of the Merchants hotel, who has farms in different parts of the state, and Robert Tate, extensive farm owner, have returned from a trip through the state as far west as Grand Island and as far north as Plainview and they report that the eastern part of the state is going to have a corn crop in spite of the lack of moisture.

## JOY RIDERS TURNED OVER TO JUVENILE AUTHORITIES

Paul Laidy and Dick Hultgren, two of the boys charged with taking an automobile belonging to C. F. Hallard, 2622 North Thirtieth street, from Sixteenth and Farnam streets Saturday night, were

## turned over to the juvenile authorities by Judge Altstadt. Earl Clark of Florence, who gave the boys a spark plug with which to enable them to start the machine and who went for a ride in the car, was given ninety days' suspended sentence and paroled to Probation Officer Bernstein on good behavior. The other lads were dismissed.

## Ak-Sar-Ben Hustlers Still After Members

A gain of twenty-seven members for Ak-Sar-Ben was reported at the meeting of the hustlers' committee at luncheon at the Paxton hotel. This makes a total of 2,075 members hustled since the campaign for membership has begun on the general feeling of the committee was optimistic for the work for the coming week as they expect the weather to be in better shape for talking business to men than it was with the temperature 125 in the shade. No changes were made in the standing of the various teams on membership hustling. The team of Bonford, Whitney and Miner is still in the lead with 210 members to its credit. The present standing of the teams is: Bonford, Whitney and Miner, 210; Mahaffey, Meyers and Porter, 120; O'Brien, Lord and Proffier, 119; Ercupford and Roscky, forty-six; Lemon, Sherwood and Dexton, fifteen; Gallagher, Byrne and Matters, Jr., twelve; Judson and Borsheim, seven.