GAS AND ELECTRIC NEWS

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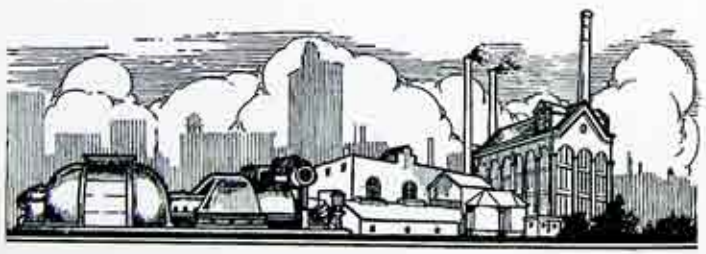
VOL. 5 AUGUST 1917 NO 2

Indian Trail at Maplewood Park

THERE is no success without loyalty. The man who is disloyal to his superior, to his profession, or to his country, is disloyal to himself and to all that is good in him.

—*Maj. Gen. George W. Goethals.*



The DuBois Press
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GAS AND ELECTRIC NEWS

Vol. 5 AUGUST, 1917 No. 2

The Gas and Electric Industry and the War

IVAR LUNDGAARD

IN no war previously waged have the resources of the fighting nations undergone such exhaustive tests as in the present stupendous struggle in which almost the entire civilized world is engaged. The necessity on the part of the nations involved, for complete organization for war is beginning to be clearly understood. All industrial and business organizations as well as all individuals appreciate that they have specific duties to perform. It is not sufficient to have great numbers of men at the front. A few men well equipped and drilled can annihilate vast hordes of unequipped and untrained humanity. The devastation inflicted upon the enemy speaks not only of the skill and bravery of the fighting forces, but of the efficiency and patriotism as well of those who are equipping the armies and the navies—the nations and their governments. Of all the nations of western civilization, the United States has undoubtedly been the one least prepared, and the work of organizing its tremendous resources for war is one of the most gigantic tasks ever undertaken. This task can be classified into two great divisions,—the creation of the military forces required for land, sea and air warfare, and the reorganization of the industries and food sources of the nation on a war basis.

In the beginning, haste is of course the essential requirement. Loss of time in getting organized means a serious loss of advantage at the front, but as soon as the necessity for haste will permit, thought must be given to the efficient utilization of the national resources in order that these may not be exhausted and the enemy made victorious by the lack of economic endurance of the nation.

It is interesting to recall the many ante-bellum reasons why a modern world war could not last more than a few weeks at most—the terror of the modern implements of war; financial exhaustion; the deeprooted aversion of modern civilization to war, etc., reasons long since exploded and now nearly forgotten. We know now that it can last for years. The only thing we do not know is how many years more it may last. A conservative prediction places the end of the war two years hence, and the prospects of a protracted struggle are indeed serious enough to make the need for national efficiency and endurance imperative.

The peacetime definition of the term "national efficiency" is vastly different from its war definition. Many industries developed to a high state of perfection and economic importance in ordinary times must be abandoned or reduced because they are either detrimental or useless in

making the nation efficient for war. Other industries must be encouraged and intensified because they directly or indirectly increase the nation's fitness for war. The necessities of life and of war must be produced, and the production of luxuries stopped if necessary. If necessary those methods that are least wasteful of the vital resources must be employed at the sacrifice of personal gain and comfort.

What function does the gas and electric industry serve in this industrial reorganization of the country?

In peace times we know the gas and electric industry as an important business enterprise in which large capital is invested, and which gives employment to thousands of men and women. We know that it renders an exceedingly valuable service to the community and that it has become such a common-place factor in every day life that it is called to attention only when the usual service is lacking or interrupted. Before answering finally the question as to the place of the gas and electric industry in the war situation of the nation, let us enumerate some of the purposes served by it.

One of the important items of national efficiency is conservation of the coal supply and its effective utilization. Coal is the principal raw material for the production of power. The average amount of coal consumed per unit of power in the small factory plant is more than twice that consumed in the large central station. The furnishing of power for industrial uses by the central station, therefore, means conservation of coal; this is of course particularly true where the central station derives its power wholly or in part from hydroelectric developments. Large amounts of power are required by the munition factories, and the central stations have met their demands more quickly and effectively than could have been done in any other way. It is so important that every available generator should be kept going during this crisis that some of the ordinary rules in regard to reserve generating equipment may be violated with a clear conscience. Should the central station through failure of equipment or through demands of munition factories or through inability to obtain coal and equipment, be unable to meet all requirements of its consumers, then the service to those consumers whose production is less vital must be discontinued, or they may be given the alternative of operating during the night hours.

As a fuel for cooking gas is five to ten times as efficient as coal, and approximately the same ratio holds good between gas and coal for industrial furnaces. At least 75% of the output of gas works is used for these purposes, and a tremendous quantity of coal is conserved through the use of gas. Gas is also supplanting crude oil as an industrial fuel, and thereby saving the oil supply for naval purposes.

Some of the by-products of the gas works form the principal raw materials for the manufacture of explosives, and every available ounce of such raw material is now needed by the government.

For these reasons the wide spread and intelligent use of gas and electricity is more important than ever, and no effort should be spared to further popularize the use of these commodities—and this as speedily as possible. It is a patriotic duty to make every generating unit, wire and pipe line perform without waste and unnecessary interruption.

Put America first. Love it. Stand by it. Work for it. Fight for it.

Company Men Who Have Joined the Colors

Name	Dept.	Occupation	Military Co.
Roger D. DeWolf	Elect. Gener.	Mech. Engineer	Lieut. Naval Mil.
H. Oscar Sommer	Engineering	Elec. Engineer	2nd Lieut. 3rd N. Y. Inf.
Claes Hallencreutz	Engineering	Clerk	2nd Lieut. U.S.A.
Elmer R. Armstrong	El. Constr.	Wireman	N. Y. Naval Militia
G. F. Bacchus	Construction	Helper	U. S. Navy
H. E. Bacon	Elect. Gen.	Mech. Engr.	U. S. Signal Res. Corps.
Lee J. Baird	Construction	Foreman	3rd N. Y. Inf.
Leslie A. Block	Engineering	Draftsman	N. Y. Naval Militia
Wm. Cromwell	Construction	Helper	U. S. Navy
Miles J. Dorsey	Station 3	Laborer	N. Y. Naval Militia
H. J. Eckerson	Elect. Const.	Electrician	N. Y. Naval Militia
G. E. Farese	Gas Shop	Inspector	Mosquito Fleet
B. T. Flannery	Drafting	Drafting	2nd N. Y. Amb. Co.
Wm. F. German	Meter	Inspector	3rd N. Y. Inf.
C. H. Hart	Station 3	Clerk	Marine Corps
Elmer P. Hutter	Office	Clerk	Base Hosp. No. 19
J. J. Keeler	Underground	Helper	2nd N. Y. Amb. Co.
Fred Keller	Station 3	Repairman	N. Y. Naval Militia
Leon C. Kimpal	Engineering	Draftsman	N. Y. Naval Militia
Linus G. Knapp	Accounting	Clerk	Q. M. R. C., U. S. A.
A. F. McDermott	Garage	Transportation	1st N. Y. Cav.
T. J. Mury	Billing	Meter Reader	U. S. Navy
Geo. B. Myers	Station 3	Repairman	8th U. S. Cav.
Wm. F. O'Brien	Billing	Office	Q. M. R. C., U. S. A.
Floyd H. Owen	Office	Clerk	Base Hosp. No. 19
Samuel J. Owens	Station 3	Laborer	U. S. Army
S. O. Peartree	Billing	Meter Reader	U. S. Navy
Wendell F. Pierce	Eng. Const.	Timekeeper	N. Y. Naval Militia
Thos. U. Reddy	Gas Shop	Inspector	N. Y. Naval Militia
C. M. Reid	Gas Dist.	Draftsman	Officers Training Camp
Howard U. Rettig	Laboratory	Chemist	Aviation Corps
W. Rocktaschel	Construction	Helper	Naval Militia
Edmund C. Schenk	Station 3	Clerk	N. Y. Naval Militia
W. B. Slobbe	Dom. Sales	Salesman	1st N. Y. Cav.
H. L. Smith	Billing	Meter Reading	U. S. Navy
A. V. Stephenson	Elec. Const.	Electrician	1st N. Y. Cav.
A. W. Sturrock	Meter Reader	Office	5th N. Y. Ammunition Supply Co.
Wm. K. Sullivan	El. Constr.	Wireman	U. S. Navy
Chas. F. Taillie	Eng. Draft	Drafting	1st N.Y. Cav.
Frank C. Turkey	Station 6	Operator	U. S. Navy
R. L. VandeVate	Drafting	Drafting	1st N. Y. Cav.
W. L. Weaver	Office	Clerk	1st N. Y. Cav.

Gas Again Displays Its Superiority

SAMUEL S. AMDURSKY

SEVERAL years ago the American Laundry Machinery Company installed a gas fired tube-end heater of standard make to compete with a coal fired heater. After several tests the consumer decided against the gas heater and it was taken out and stored away. Recently, however, the Railway and Light Company redesigned and tested the gas fired heater in its own shops and after feeling confident of the results, arrangements were made to install the furnace at the consumer's premises for test. The results proved so satisfactory that a second furnace was immediately ordered.

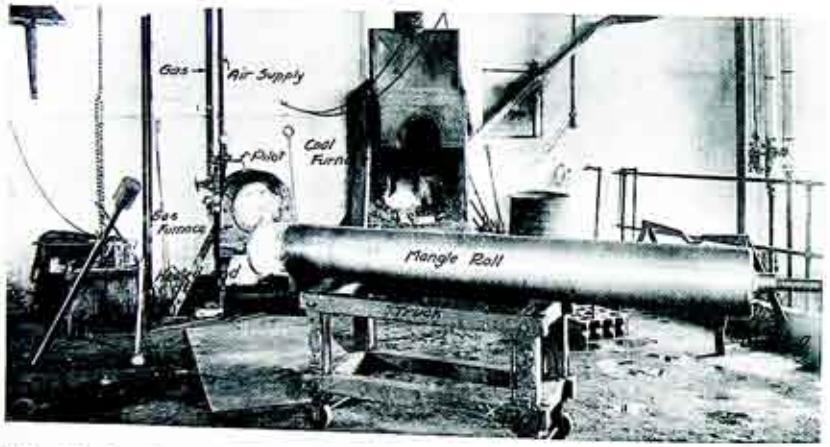

Fig. 1. View showing gas furnace which displaced coal furnace at the American Laundry Machine Company's Plant. Note heated end on the 10-inch completed roll. Table shown is temporary—has been displaced by one which simplifies the operation.

The furnace is used to heat the ends of wrought iron pipe to a temperature of about 1200° Fahrenheit over 8" of length at either end in order that a gudgeon which consists of cast iron plug having a bearing end, may be driven in while the pipe is hot. When the pipe cools it contracts on the gudgeon and makes a tight shrink—fit.

The pipe sizes vary from 2" up to and including 11" in diameter. The pipe to be heated is carried from the store yards on a truck and is transferred to a portable table (the table is set on rollers which are guided to the furnace by tracks) which is so constructed that the pipe may be revolved on its axis while it is being heated. After a gudgeon is driven into one end, the ends are interchanged and the second end is heated.

The construction of the furnace which is shown in the accompanying diagram consists of a cylindrically shaped lining of refractory material "A" made up of arch bricks. The lining is covered with sheet iron "B", and the ends of the furnace are protected by the iron plates "C". The front plate "C" is provided with an opening large enough to accommodate the largest size pipe to be heated. It is also provided with pins "D" to receive the reducing collars "E" which enable smaller sizes of pipe to be heated with equally good results.

The burner "G" is constructed of an ordinary piece of pipe drilled and tapped to receive the screened burner tips "H", which are arranged spirally to give an even distribution of the heat. As shown, a covering of asbestos cement "J" is placed between the burner tips and over the pipe. The heat is confined to the end of the pipe being heated by plugging the opposite end of the pipe. The direction of the heat travel is shown by the arrows. The furnace proper is supported on cast-iron legs.

The necessity and importance of the proper design is shown by the fact that after the furnace was redesigned the gas consumption was cut in half, while the time per heat was reduced to less than half of what it was with the original furnace design, thereby getting more than double the amount of work done with half the amount of gas consumed.

One of the disadvantages of a coal furnace for this work is that while the bottom side of the pipe is being heated the upper side cools down, with the result that a considerable amount of scaling and pitting appears on the outside surface of the heated end. Due to this non-uniform heat excessive internal strains are set up in the pipe ends. With the gas furnace three times the number of heats may be made in the same length of time. This means that production is thereby tripled and a considerable saving is effected due to the fact that it takes several men to handle the larger sized pipe. With the coal heater it was necessary for these men to wait a considerable length of time until the ends were heated, whereas the speed of the gas furnace is such that the heating process is continuous. The product is also of much better quality due to the uniform heat, and scaling, if any, is on the inside rather than on the outside of the pipe.

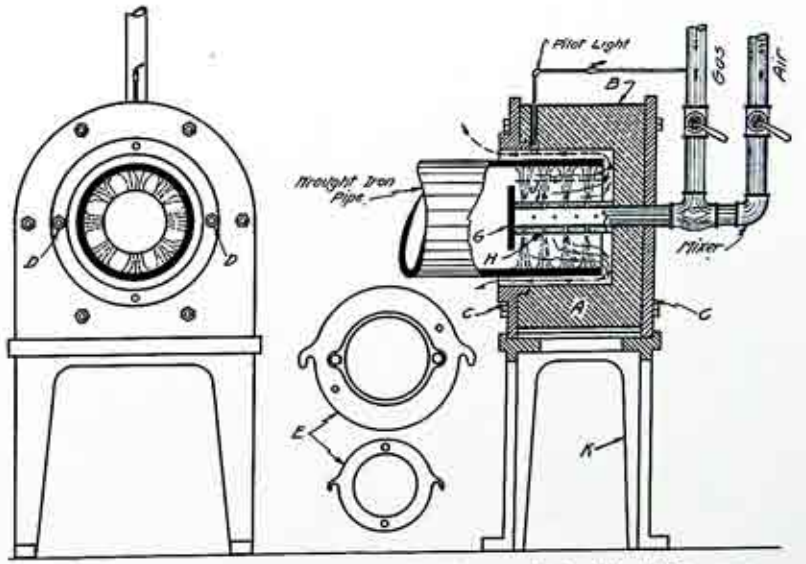

Fig. 2. Diagram of gas furnace, the burner of which was redesigned by this Company.

Large U-Bends Used in Underground Steam Mains

EDWARD L. WILDER

ABOUT two years ago the high pressure steam main which connects Station 3 with the Eastman Kodak Company's buildings on State Street, was tapped and a branch was extended north on the west side of State Street as far as the plant of the Rochester Candy Works, to supply steam to the Rochester Baking Company, and the Commercial Paper Box Company, as well as to the Candy Works.

Last fall this Company contracted to supply both steam and electric power to the Shinola plant which is located on Jay Street a short distance west of State, and in order to supply this new steam load it was planned to extend the steam main supplying the Rochester Candy Works. It was expected to install this extension last fall (1916) but due to the extraordinary conditions created by the war it was impossible to obtain all the material necessary before the very cold weather set in. The work was started in the early part of the spring, and after the

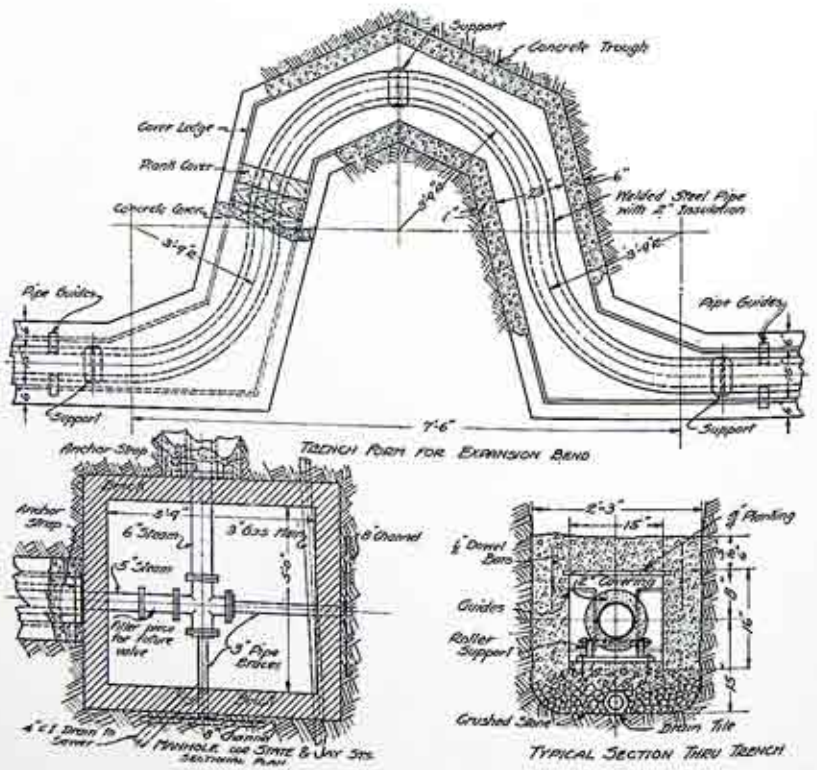

Fig. 1. Illustration showing (1) General construction method used at the U-bends, (2) Cross section view of pipe line, and (3) layout of manhole at the corner of State and Jay Streets

trench had been dug, the labor strike was suddenly called and the work had to be discontinued for over a month. In the meantime many people were pondering as to just why an excavation for a pipe line should have so many bends in it.

The main difference between this steam main and the others which the Company has installed in the use of U-bends instead of "expansion joints" to take care of the expansion and contraction in the pipe due to the large range in temperature difference. The use of U-bends for this purpose is by no means new, but this Company has never before used them in an *underground* steam main. In fact, the U-bends take up considerable space and it might not be possible to install them in a street where there are very many pipes or electric conduits.

The U-bends are spaced 136' 4" apart and each bend has to take care of 3 to 3½ inches of pipe movement. In order to reduce the stress on the bend to a minimum, each U-bend was pulled apart 1½" when the pipe line was installed so that when the steam is turned on the U-bends will be compressed about an equal amount.

The pipe rests upon rollers, is covered with 2" high pressure steam pipe covering and is enclosed in a concrete box with crushed stone and a drain tile in the bottom to take care of any water which might seep through the ground. All pipe joints were welded except at the manhole at the corner of State and Jay Streets, where a "cross" is installed to allow for future connections. This gives a continuous pipe line with but one joint, and it is expected that the cost of maintaining the line will be reduced to a minimum.

Unlooked for obstructions are often encountered in street work of this nature. While the trench was being dug for this particular line a large gas main was exposed, and as a result, the depth of the entire steam main had to be changed so that it would either be above or below the gas main in order to avoid a "water pocket" with its attending difficulties. The grade line of the pipe was raised,

Fig. 2. View of Company's new steam main which runs from the Rochester Candy Works north on State Street to Jay, and thence west to the Shinola Company's Building. Note the U-bends used to take care of the expansion and contraction of the pipe.

thus bringing the pipe about three feet below the street surface.

The line which was run as far as the Rochester Candy Works is five inches in diameter, and this was extended the same size along the west side of State Street to the corner of State and Jay. Going out Jay Street, the pipe was made six inches in diameter. It is the intention at some future time to extend a steam main west from the new Gas Works, connecting the present extension at the corner of Jay and State, and thus forming a loop. The six inch line on Jay Street will permit its being extended further west, if at some future time new business makes this necessary.

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Good Health

"You never miss the water 'till the well runs dry."

THIS phrase from the nursery rhyme book is typically symbolic of the average frame of mind of the average individual. How little we think of being "broke" when our money rattles in our pockets! How little we appreciate our friends until they have left us for new fields! So too, how little we think of or appreciate the one supreme blessing of humanity—good health,—until we feel it slipping from us. One notes with regret and occasional misgivings the illness of friends and relatives, but at the same time does not give up harmful habits of living which may be causing similar physical disability. One even notes incipient illness in himself, and allows such a condition to drift along from day to day without attention until health is lost, perhaps forever.

The trouble is not through lack of knowledge of the simple laws of health, but is due to failure to apply such knowledge to daily life. "The spirit is willing but the flesh is weak." The application of nature's rules so often interferes with cherished plans for work or play that humanity as a whole is guilty of neglect in caring for the body.

The vacation season is now with us, and as rational individuals it is up to us to use it wisely. Real rest is not hard to obtain, although its acquisition often means going without distraction and diversion which many erroneously think they need.

Let us endeavor to cherish health. It cannot be bought, and life is hardly liveable without it. Efficiency and success depend upon it. It is the cornerstone of the house of happiness.

⚜

About Investments

EVERY little while someone bobs up with a new scheme which is going to make those whom he offers to let on the ground floor, healthy, wealthy or wise over night. When somebody waxes enthusiastic over one of these discoveries, have your salt dish handy, and use your own intelligence, or that of your better posted friends to discount wild optimism down to horse sense reasoning. The fundamental principles of business still hold good. Success will come through hard work, intelligent application, careful investment, all based upon intrinsic honesty. "Get Rich Quick Wallingford" may be good reading for relaxation, but his methods won't work in business. So too the promises of the fundamentally honest but inexperienced will not stand high power analysis. Learn to save your money and put it in the bank where it will be safe until a real investment opportunity offers. Then unless you know about the opportunity get the best advice you can.

"How It Goes"

"Any accidents this morning?"

"Yes, another man was taken to the hospital?"

"Is he badly hurt?"

"Yes—pretty badly, will be laid-up quite a while, and may be a cripple all his life."

"Was he careless?"

"Well, you know, one hates to call a good man careless, but the accident could have been easily prevented. It was just another of those cases where he did not keep his mind on what he was doing. Did you ever think how strange it is that at times some of us just seem to run out of brains?"

⚜

Poverty and Riches

IF some work harder than others, if some are born more capable than others, if some are thriftier than others, then some will be richer than others. All else is a question of degree, not to be remedied by any general rule. There are two ways in which a man may make a living. He may work for it, or he may own for it. The worker receives an income because of some service that he renders. The owner's income is based on his ownership. Here is a man who manages a signal-tower for a railroad company. Each year he receives $1000 for his services. Yonder, a man owns $20,000 of the railroad company's 5% bonds. He receives $1000 for his ownership. The towerman is paid because he works. The bond man is paid because he owns. The bond owner owns because he has worked and saved, or because somebody has transferred to him the results of work and thrift. It is in that manner that the railway exists and is able to employ the switchman. If there were no bondholders, there would be no switchman and no railways, society would lose not only the bondholder and the switchman, but it would lose the use of machinery. Worse yet, it would lose a stimulus to initiative to work and to thrift, which has substituted industrialism for feudalism.—*Scott Nearing.*

⚜

How You Can Help Win the War

THE bugle call has sounded! Every man, woman and child is called to the colors. Not all are to bear arms, but each to do his or her part enthusiastically, sincerely and thoroughly. All must put the need of the nation above their own.

Because you are not of conscription age does not mean that you are exempt. There are hundreds of ways in which you can make your little mite deliver a mighty blow against brutal despotism.

The Red Cross needs thousands of men and women and millions of dollars. The Liberty Loan offered you a gilt edge investment. There are the Home Defense Leagues which will take as many men as they can get.

Then there is the obligation that rests upon all to live as near a normal life as possible. Don't be extravagant, but don't be hysterically economical. Save foodstuffs, cultivate your garden patches and learn to preserve and can. Watch your "garbage" pails. If the war teaches the American people the meaning of wasteful extravagance, it will, for that result alone, have almost been worth the cost.

And if you are inconvenienced, if you feel that the number of worthy causes that require your financial assistance will be a drain upon your purse, remember that no matter how much you subscribe or how much you do, it will be infinitesimal as compared with the sacrifices of the many men who are called upon to give their lives if necessary, and who are forced to give up their incomes to protect the nation—to protect you. —*The Vulcan.*

How Would You Interpret These Accidents?

While unloading superheater parts Mr. Thomas Bresnahan and another employee of the Construction Department were at the rear end of the truck. While a casting was being taken off the truck Mr. Bresnahan's helper dropped his end suddenly, causing Mr. Bresnahan to strain his back.

❖

Mr. Frank A. Weeks of the Electric Meter Department was riding a motorcycle on Norton Street and when turning into St. Paul Blvd. the wheel struck a stone, causing Mr. Weeks to be thrown from the motorcycle. The machine fell on Mr. Weeks and bruised his left leg and strained his foot.

❖

Mr. Ernest Young of Station 3 was working beside a pile of poorly stacked bricks. The bricks suddenly tipped over and struck Mr. Young on the right side, bruising his ribs quite badly.

❖

Mr. Frank Woock, of Station 5, was assisting Mr. Pendlebury to put a chain on a sprocket of the rheostat when a short circuit was suddenly made, causing both men to be burned about the face and shoulder.

❖

Mr. Gerald Streb, of the Construction Department, was unloading a large casting from a truck when his finger suddenly caught under a roller and was crushed.

❖

While Mr. Walter J. Riley, of the Meter Reading Department, was reading meters at 78 Clifton Street, a bull dog attacked him and bit his hand in two places.

❖

While Mr. Frederick Elder, of the Garage, was cleaning rust from wheels on an auto, a steel splinter from the brush flew into his eye.

Mr. Patrick Rudolph, of the Gas Distribution Department, was holding a chisel bar while three men were striking with sledges. Mr. Rudolph accidently got his hand over the chisel bar and was struck by a sledge which broke three fingers.

❖

Mr. Chas. Guerinot, of Station 3, was assisting in the work of setting I-beams which were to be bolted to each other. While moving one of the beams the end of one fell and fractured Mr. Guerinot's right foot.

❖

Company Men Make Good at Critical Time

MR. T. H. YAWGER,
Building.

Dear Mr. Yawger: In connection with the fire at No. 5 Station on Saturday night, I wish to congratulate you and the men in your Department for the excellent work done in getting this plant back into commission and in taking care of the consumers' service. I feel that this is simply another visible and concrete example of the loyalty of all of our men and, as No. 5 Station's generation saves coal in large amounts, is an absolute saving to the country at large. The getting of this plant into commission at once will save at the rate of over one hundred tons of coal per day.

I was particularly pleased with your report of the work of the men on the trick at the time of the accident and the efficient work of Mr. Miller and his men, together with the Line and Underground Departments.

Very truly yours,
JAS. T. HUTCHINGS,
Vice-President and Gen. Mgr.

❖

Double Time for Vacation Period

The Company has so much extra work this summer that the Management has decided to pay the employees double time for their vacation period should their health permit them to continue their work without a vacation. The following letter, dated July 17th, was sent to all departments:

"This is to advise you that if any of your employees in your department, entitled to a vacation, would rather accept in lieu of a vacation double time for their vacation period and continue on their work, it will be satisfactory to the Management.

You will, of course, have to use your judgment as to whether the employee's health will permit him to continue his work without his vacation. Very truly yours,

Signed, JAS. T. HUTCHINGS,
Vice-President."

❖

Empire State Gas and Electric Association

A meeting of the Electric Production Committee of the Empire State Gas and Electric Association was held at the Hotel Iroquois in Buffalo on Friday, July 13th.

The subjects discussed were: powerhouse organizations; hours and labor; and wages and bonus systems. The subject of bonus systems received particular attention. The merits of the wage and bonus system in vogue with the Railway and Light Company was explained by the delegates from this Company.

Following the afternoon session, the delegates were the guests of Messrs. Cushing and Dixon of the Buffalo General Electric Company, who took them on a tour of inspection of that Company's Riverside Power Station.

The Rochester Representatives at the meeting were: Messrs. Powell, Harding, Walker, O'Neill, Drumm and Taillie.

❖

Bureau of Standards Meeting

A meeting of the representatives of the U. S. Bureau of Standards, the utility commissions of the several states and from the American Gas Institute, was held in Washington, D. C., on July 31st, August 1st and 2nd. The purpose of this conference was to discuss the standards of illuminating gas.

Mr. Herman Russell, Assistant General Manager, was in attendance.

Confidential Advice

Roderick: "Great Scott! Has Bilkins lost his mind?"

Van Albert: "I don't think so. Why?"

Roderick: "Just look at the illumination in his house. He has had every electric light burning all day long."

Van Albert: "Oh, that's just a little scheme Bilkins has to increase his electric light bill this month. His wife is coming back to-morrow, and he told her he had been remaining at home and reading every night since she went away. If she looked at the electric light bill and found it to be only $3 he would be cornered for an explanation."

❖

Joy's Epitaph

An old-timer in the Dakotas and Montana, named Doctor Burleigh, among other things practiced law.

A young lawyer named Joy opposed Burleigh in a case. It was a criminal case and Joy said something in his address to the jury about wanting for his epitaph the fact that he had successfully prosecuted the criminals of that vicinity.

When he had finished Burleigh arose.

"Your honor," he said, "our young friend who has just sat down said something about his epitaph, the writing of which we all hope will be many years deferred; but when in the course of nature he does come to die, your honor and gentlemen of the jury, judging from his course in this case, his epitaph will be 'Peace on earth and joy in hell!' "

❖

The Appropriate Tipple

Colonel Hal Corbett, of Paducah, Kentucky, met a party of fellow Kentuckians at a hotel in New York, and invited them in to have something.

They sat down at a table and the Colonel called a waiter over. The first man ordered vichy and milk. The Colonel gave a start of surprise, but said nothing, of course. The second man took a seltzer lemonade, and the third thought he wanted a little mineral water. Finally the waiter reached Colonel Corbett.

"Waiter," he roared, "bring me a quart of bluing!"

❖

Some Job!

"No, lady, I wouldn't be beggin' if I could get employment at my trade."

"What is your trade?"

"I'm lineman for de wireless telegraph company."

❖

A Wise Hayseed

"Do you want gas?"

"Say, Mister Dentist, I've heard how dangerous that stuff is. I'll take electric light."

Gas and Electricity in the Home

BY THE GAS DEMONSTRATORS

Miss Frances E. Moore, Miss Mona A. Pratt and Miss Irene Walsh

In the September 1916 issue of this Magazine general instructions for pickling were given. To these may be added the important method of food preservation by fermentation. This is the method used for sauerkraut and dill pickles and for storing greens such as spinach, swiss chard, etc., and green and yellow beans. Greens by their very nature lose flavor quickly, so the results probably would not be so satisfactory as it is for beans. Many people with a garden have a surplus of green or butter beans at some period of the summer and it often is not practical to can the whole surplus; in this case they are best preserved by placing them in salt or brine.

In salting, a layer of salt is put on each layer of beans and the whole weighted down. In making the brine, use about one-half cup of salt to a quart of water, boil and skim, and when cool pour over the vegetables. The brine should be dense enough to float a fresh egg and usually one-half cup of salt to a quart of water is sufficient. A good plan is to put the beans in a bag and then drop them into the jar with the brine. One housekeeper has used small salt bags, putting just enough beans into each bag for a meal. The beans should be covered with a clean cloth and weighted so as to hold them below the brine; a clean stone is often used. If this fermentation process goes on in a cool place it is usually slow enough so as not to cause decomposition of the vegetable. However, if in case a heavy scum continues to rise to the surface, decomposition might take place and the vegetables become soft. This is only apt to occur in a warm place. In this case the fermentation is stopped by pouring melted paraffin over the surface of the brine.

Dill Pickles

Select cucumbers from six to eight inches long. Wash and wipe them carefully, then put a layer of them in a big stone jar—one that will hold at least four gallons. Then put in a layer of grape leaves and a bunch of dill seed on the stalk. Proceed in this way till the jar is full, then lay on plenty of cabbage leaves. On the top put a large stone. Fill up with brine made with two cups of salt to one gallon of water boiled and skimmed, and let it stand. Quick fermentation takes place. In about two or three weeks the cucumbers will have an amber transparently, and a subacid flavor which the grape leaves and stems give them; the cucumbers are then ready for use.

Green Tomato Pickles

1 peck green tomatoes
1 doz. large white onions
6 red pepper pods
1 cup sugar
1 quart vinegar
½ cup whole cloves
Cinnamon sticks

Cut the tomatoes in slices one fourth of an inch in thickness; discard the small slice at stem and blossom ends. Cut the onions (peeled) in similar slices. Pack the vegetables in a jar in layers with salt between. Allow them to stand over night. Drain off the brine, repack the vegetables and then cover with vinegar scalded with the peppers and spices. These will keep in an earthen jar, but may be stored in cans. The onions may be omitted.

Pepper and Onion Relish

Peel six white onions; cut six red and six green peppers in halves and remove the seeds; chop fine the onions and peppers with half a cup of parsley leaves, cover the whole with boiling water, set a plate above and let stand five minutes; drain, add one cup of sugar, two teaspoonfuls of salt, and two cups of vinegar; boil one half hour; seal in small cans.

Corn Relish

2 doz. ears sweet corn
1 head cabbage
4 large onions
4 green peppers
1 red pepper
1 quart vinegar
3 cups sugar
¾ cups flour
¼ cup salt
¼ cup dry mustard
1 teaspoonful turmeric
1 quart vinegar

Cut the corn from the cobs; chop the other vegetables fine, first discarding the seeds of the peppers; add one quart of the vinegar to the corn and chopped vegetables and boil; mix together the seasonings and flour, gradually add the other quart of vinegar (cold), and stir into the hot vegetables. Let boil one half hour. Store in cans.

Pickled Beans No. 2

Prepare the beans as for cooking, but keep them full length; sprinkle with salt, cover with water and allow to stand over night; drain, rinse in cold water, and drain again, pack in fruit jars, adding black and white mustard seed and bits of horseradish. Pour in vinegar, scalding hot, to fill the jars to overflow and close the jars as in canning.

Tomato Marmalade

4 quarts ripe tomatoes
6 lemons
1 cup raisins, seeded
4 lbs. granulated sugar

Peel the tomatoes and cut the pulp in thin slices. Cut the lemons in halves, lengthwise, then slice very thin. Put all the fruit into a saucepan in layers, alternating with the sugar. Cook one hour on the front of the stove, then move back and let simmer until the mixture is of the consistency of marmalade. Store while hot as jelly. The receipe gives about 2½ quarts of marmalade.

Sweet Pickled Peaches

7 pounds peaches
5 pounds sugar
1 pint vinegar
1 cup water
⅔ cup stick cinnamon
⅓ cup whole cloves

Remove the skins from the peaches by paring or by dipping in boiling water. Directions are given elsewhere. Have ready a syrup, made of the sugar, vinegar and water; add the spices, then add a few of the peaches with one or two cloves pressed into each; cook a moment, turning the peaches if necessary to soften all sides. Place the peaches in fruit jars. When all are cooked, reduce the syrup and with it fill the jars to overflow. Close the jars as in canning fruit.

Spiced, Pickled Crab Apples

7 pounds crab apples
3½ pounds sugar
3 cups vinegar
Whole Cloves
3 ounces stick cinnamon
1 to 3 cups water

The method of preparing this pickle depends somewhat on the variety of crab apple. With soft crab apples, press one or two cloves into each apple, make a syrup of the sugar, vinegar, and water, add the cinnamon and the crab apples a few at a time, and cook until tender but whole; remove the crab apples to jars as they are cooked; when all are done, reduce the syrup and fill the jars to overflow. With hard crab apples, cook till somewhat tender in water, and use this water in making the syrup; then return the apples to the syrup and finish as before. Before cooking, remove blossom end, wash and wipe. Retain part of the stems.

Pepper Relish I

12 green bell peppers
12 red bell peppers
3 onions
3 tablespoons salt
2 cups sugar
1 quart vinegar

Wipe peppers, cut in halves lengthwise and remove seeds. Pare onions, add peppers and force through a meat-chopper. Place in kettle, cover with boiling water and allow to stand ten minutes; drain, again cover with boiling water, bring to the boiling point and let stand ten minutes. Drain thoroughly, return to kettle, add remaining ingredients, bring to the boiling point and let simmer fifteen minutes.

Pepper Relish II

1 peck red peppers
2 cups cold water
1 cup salt
2 cups vinegar
1 cup brown sugar
½ cup white mustard seed

Wipe peppers, cut in halves, remove seeds and put through meat chopper. Put in kettle and add water and salt; cover and let stand over night. In the morning drain and pour over vinegar, sugar and mustard seed which have been brought to the boiling point and boiled two minutes. Fill jars to overflow and adjust covers.

Piccalilli

½ bu. green tomatoes
½ pk. green peppers
½ pk. onions
2 medium-sized cabbages
1½ cups salt
3 lbs. brown sugar
2 lbs. white mustard seed
6 ozs. stick cinnamon
3 ozs. cloves
2 ozs. allspice berries
Vinegar

Wash tomatoes and peppers, peel onions and cut cabbages in quarters. Put the vegetables, separately, through a meat-chopper, using a large knife. Sprinkle alternate layers of vegetables with salt, cover and let stand over night. In the morning drain, add sugar, mustard seed and the remaining spices, tied in a bag made of muslin or cheese-cloth. Pour over vinegar just to cover vegetables, bring to the boiling point and let simmer six hours. Remove spice bag, fill glass jars with mixture and adjust covers.

Spanish Pickles

1 peck green tomatoes, thinly sliced
4 onions, thinly sliced
1 cup salt
½ oz. cloves
½ oz. allspice berries
½ oz. peppercorns
½ cup brown mustard seed
1 lb. brown sugar
4 green peppers, finely chopped
Cider vinegar

Sprinkle alternate layers of tomatoes and onions with salt, and let stand over night. In the morning drain, and put in a preserving kettle, adding remaining ingredients, using enough vinegar to cover all. Heat gradually to boiling-point and boil one-half hour.

Pullman Porter—"Boss, yo' sho' am dusty!"
Passenger (Resignedly)—"Well, you may brush off about a nickel's worth."—*Judge.*

Sales

Large Refrigerating Machine Formerly Driven by Direct Connected Steam Engine Now Operated by Electric Motor

HAROLD O. STEWART

WHEN making a change from steam to electric drive, it often happens that a great many obstacles have to be overcome. It is relatively easy to make the change when the particular machine is connected to the engine by means of a belt. When, however, the machine is direct connected to the engine the change is not always so simple, the difficulty depending, of course, upon the design of the machine and the layout of the plant. The change of a 75 ton refrigerating machine of the Kondolf Brothers Ice Company from steam to electric drive represented a large amount of hard work.

The original fly wheel was much too small both in diameter and width of face. In order to install the larger fly wheel which was required, the slot in the base of the machine and the fly wheel pit both had to be enlarged considerably. The standard practice cannot always be followed in cases of this kind and it was finally decided to cut the compressor base into two parts as shown by the small dotted lines in figure 3. The base which is hollow, is made of cast iron about one inch thick. The cutting was done by means of a hack saw, twenty linear feet of metal being cut in this way. It was then necessary to chisel out the concrete wheel pit so that the radius was increased by fifteen inches, thus enabling a new fly wheel, which is ten feet in diameter, to be installed. It was desirable to install a 150 horsepower slip ring, alternating current motor close to the machine and it was therefore necessary to add an idler in order to get the maximum wrap of the belt on the motor pulley. When a motor with a small pulley is placed close to a very large fly wheel to which it is to be connected, it is necessary to provide some means of wrapping the belt around the motor pulley so

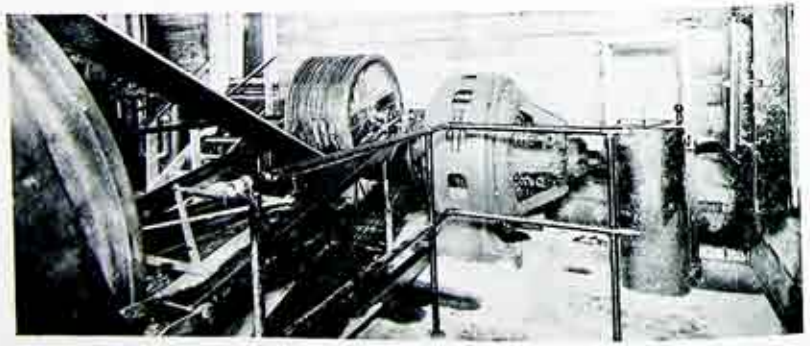

Fig. 1. 150 horsepower motor belted to a 75 ton refrigerating machine at the Kondolf Ice Company's plant. The operation is very smooth and efficient.

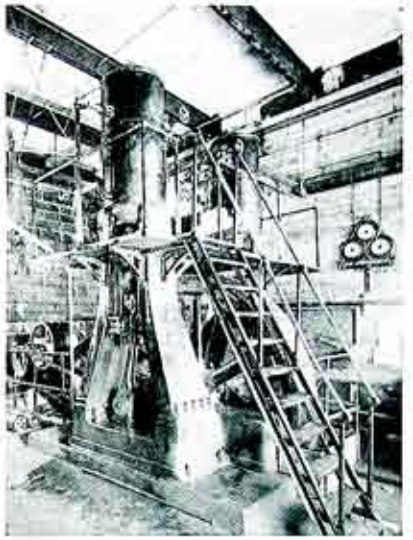

Fig. 2. 75-ton refrigerating machine formerly operated by a direct connected engine is now being operated by electric drive. Note the compactness of the arrangement.

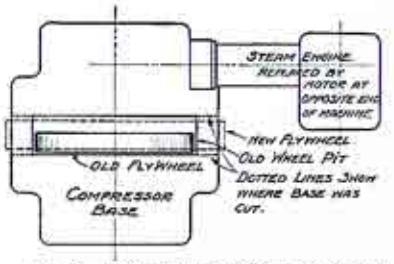

Fig. 3. Diagram showing how the original slot in the compressor base was extended across the base, and how pit was enlarged to enable larger flywheel to be placed on machine.

connecting rod and eccentric with its connecting rod were disconnected and removed.

The refrigerating machine has been operating continuously for several weeks with entire satisfaction and has been making approximately forty tons of ice per day. In addition to reducing the manufacturing cost, the steady pull of the electric drive has eliminated the pounding in the compressor which was due to the reciprocating motion of the engine.

This ideal drive for large refrigerating machines should find application in various plants in and near Rochester.

that the necessary contact is obtained between the pulley and the belt.

As shown in the accompanying illustrations, the engine was left in its original position. The main

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One of the largest and best arranged gun plants in this country is now being erected by the Symington-Anderson Company on University Avenue opposite Granger Place. The building will be approximately five hundred feet long and two hundred feet wide. The contract is for 3,000 75 millimeter guns; it is expected that this plant will be in operation by the first of January and that ten guns will be turned out per day.

The connected electrical load will consist of 1800 horsepower in direct current motors and 75 kilowatts in lights. A sub-station will be erected beside the gun plant, which will contain the transformers and rotary converter for the direct load as well as separate transformers for the alternating current power load and the lighting. Electricity will be supplied from Station 1 by an underground circuit.

The Symington Company has installed 2 25 HP motors in its Lyell Avenue plant for operating machine tools. Tools will be made at this plant for use in the University Avenue gun plant.

❖

The M. H. Ripton Company has secured the contract for building the remainder of the Barge Canal harbor wall on the east side of the River.

This wall will extend from the Lehigh Yards south to the Erie Railroad bridge. A concrete mixing plant will be installed at the north end of the work and concrete will be hauled in cars to the forms. When the wall has been completed up to Clarissa Street the concrete mixing plant will be driven by a thirty-five H.P. motor.

❖

The Eastman Kodak Company has contracted to take from this Company 2000 KW at Kodak Park and 600 KW at its pumping station at Round Pond on Lake Ontario, the delivery of this power to commence about January 1st. An 11,000-volt, 60-cycle underground line is being constructed from Station 5 to supply power to Kodak Park. The cable will cross the river in the new subway at the Lower Falls and will go north through Lake Avenue to the Ridge Road and west to the Kodak Park gate house. The underground line will loop into the transformer sub-station and out again, rising on a cable pole about 500 feet west of the gate house.

The overhead line which will supply the Round Pond pumping station, will run west on the Ridge Road to Dewey Avenue, then north to the B. R. & P. R. R. right-of-way. The line will follow the B.R.& P.R.R. to Latta Road, then west to Fleming Road and north to Rigney Bluff Road. From the Rigney Bluff Road north to the Round Pond pumping station, the line follows the private road of the Eastman Kodak Company. The overhead line will be carried on steel cross arms of the bo-arrow type and the line conductors will be steel cored aluminum cable, equivalent to No. 2 copper. An overhead ground wire of No. 6 galvanized steel wire is carried along with the line on steel bayonets attached to the tops of the poles.

❖

The Shongo Construction Company has installed a 10" centrifugal pump driven by a 40 HP motor at the north end of the cofferdam on its river deepening contract. This pump will be used to drain the cofferdam.

❖

Business is booming at Lacy Brothers Boat Shop at Summerville. They have just completed fifteen boats of the star class for members of the Rochester Yacht Club. They are at present building cutters for the Naval Reserve; recently they received a large contract so they will be busy for some time. In order to speed up the work they have installed a three H. P. and a five H. P. motor.

❖

A two KW electric heater has been designed by the Industrial Sales Department for E. Kirstein Sons & Company for the purpose of heating large sheets of celluloid to a temperature of 200 degrees Fahrenheit, thereby making it sufficiently soft so that it will not wear excessively on the punching dies. The reason for using electric heating in this case was for safety reasons as well as to employ the very close regulation which is easily secured with electric devices.

❖

The Kondolf Brothers Ice Company is now operating its 75-ton refrigerating machine on a 24 hour schedule. This machine as well as the various air compressors, pumps and hoists is operated from the Railway and Light Company's electric service.

❖

The Clinton Avenue Roller Skating Rink is rapidly being built. This new, modern and up-to-date rink will be located on Clinton Avenue North between Andrews and Cumberland Streets, An electric sign with the name "Stratford", the name of the rink, has been contracted for. Plans and specifications for wiring are being prepared by the Industrial Sales Department.

Electric Distribution

New Sub-Station at East Rochester

EAST ROCHESTER'S new out-door substation which is fed from a 11,000-volt, 60-cycle transmission line emanating from Station 1, was switched into service on April 22nd. This line runs underground as far as the Rochester, Syracuse and Eastern right of way at Rockwood Street where it rises and is carried on "bo-arrow" overhead construction along the railroad to East Rochester. The line is protected by electrolytic lightning arresters of the outdoor type at Rockwood Street and at the sub-station. There is also an overhead ground wire along the entire length of the line. The new sub-station has a capacity of 1500 KVA and also a spare 500 KVA transformer, and will serve East Rochester and vicinity through two mixed light and power 4100-volt circuits, and one straight power circuit.

These circuits are controlled by pole switches and are protected by oil fuse boxes. It is planned to later build a small fireproof building in which will be installed the metering equipment, oil switches and street lighting transformers.

The new station was designed by Mr. J. O. Montignani and installed under the supervision of Messrs. Sidney Alling and F. C. Alcott assisted by Mr. Sidney Swanson of the Despatch Heat, Light and Power Company.

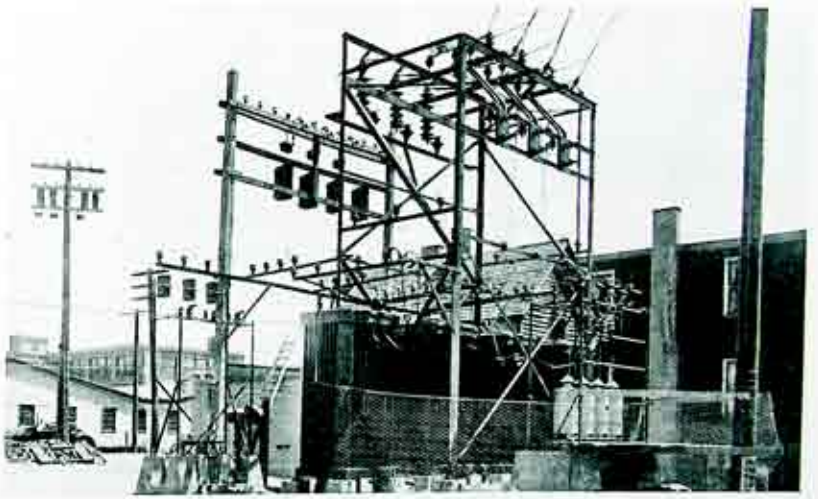


Fig. 1. New up-to-date outdoor substation recently installed at East Rochester. The wire netting was only temporary. The ground has been graded and an iron fence now surrounds the structure.

Fig. 2. 11,000-volt line rising from underground at Rockwood Street. From this point it is carried overhead to East Rochester

An extension of this Company's distribution system to the west is being constructed on the Buffalo Road. It consists of a 4150-volt, 3-phase line running west on the Buffalo Road about one mile from the B. R. & P. R. R. subway. The primary purpose of this line is to serve the Becker limestone quarry where 150 HP will be delivered, but several houses along the route will also be supplied with current for lights and small motors. Over part of the route for this line the soil is only eighteen inches deep and the underlying stratum is rock. To put in the pole holes with as little trouble as possible, the line will be built up to the point where the rock is encountered. The current will then be supplied over the line for an electric drill which will be used to drill the rocky section of the pole holes which must be blasted out. It is intended eventually to extend this line to Gates Center.

❖

Gardening

After an abundance of rain during the planting season, the recent high temperatures have been very beneficial to the gardens. The growth of the vegetables is prolific and the gardeners are looking forward to a rich harvest.

At this stage of plant growth many insects such as the potato-bug, aphids, plant lice, etc., give considerable trouble by eating large portions of the plants. A few suggestions for the extermination of the pests may be of interest.

Potato Bugs — Paris green thoroughly mixed with gypsum plaster, flour, air slacked lime, road dust or sifted wood ashes in the proportion of 1 to 100 is very effective. This mixture is placed in a loosely woven bag and shaken over the plants until they are well covered. Paris Green may be applied by mixing with water; 1 pound of poison and 1 pound of quick lime to 100 gallons of water. Stir mixture constantly while spraying. Spray plants only during cloudy weather or in the evening, otherwise they may be injured by the chemicals.

Aphids and plant lice attack the tender parts of lettuce, turnips, cabbage, etc. The plants should be dusted with white hellebore and flour, equal parts, or sprayed with a solution of 2 ounces hellebore to 1 gallon of water; a little flour paste may be added to make it adhere. As hellebore is poisonous, it should not be used on plants reaching maturity; instead, tobacco decoction should be used. Boil tobacco stems or dust thoroughly and strain; dilute with cold water until the proportion of the solution is ½ pound of tobacco to 1 gallon of water. Apply by spraying thoroughly.

Auditing

Monthly Report on New Business

Net Increase in Consumers in First Six Months of 1917

	Dec. 31, 1916	June 30, 1917	Increase
Gas	72,721	73,599	878
Electric	22,282	23,407	1,125
Steam	43	49	6
	95,046	97,055	2,009

Net Increase in Consumers in Twelve Months Ending June 30, 1917

	June 30, 1916	June 30, 1917	Increase
Gas	70,702	73,599	2,897
Electric	20,821	23,407	2,586
Steam	41	49	8
	91,564	97,055	5,491

Statement of Consumers by Departments for June 30th.

June 30	Gas	Elec.	Steam	Total	Increase
1908	38,566	5,473	....	44,039	.....
1909	42,422	5,957	....	48,379	4,340
1910	47,378	6,992	....	54,370	5,991
1911	52,602	8,310	16	60,928	6,558
1912	56,851	10,118	19	66,988	6,060
1913	62,021	12,838	21	74,880	7,892
1914	65,785	14,964	28	80,777	5,897
1915	68,435	18,081	35	86,551	5,774
1916	70,702	20,821	41	91,564	5,013
1917	73,599	23,407	49	97,055	5,491
Inc' in 9 Yrs.	35,033	17,934	49	53,016	53,016

Net Increase in Consumers by Months

	1915	1916	1917
Increase in January	364	252	124
Increase in February	144	219	(Dec.) 24
Increase in March	247	317	333
Increase in April	460	652	552
Increase in May	306	716	477
Increase in June	544	613	547
	2,065	2,769	2,009

Company's Savings Depositors

Statement to Aug. 1, 1917

No. of depositors, Aug. 1, 1917	60
Decrease during July 1917	16
Amount deposited during July, 1917	$451.76
Total deposits to Aug., 1917	$11,990.12

Miscellaneous Data

	June 30, 1916	June 30, 1917	Increase
Miles of Gas Main	436	444	8
Miles of Overhead Line	1,782	1,850	68
Miles of Underground Cable	1,043	1,069	26
Miles of Subway Duct	925	957	32
No. of Street Arc Lamps	4,141	1,590	(Dec.) 2,551
No. of Street Incandescent Lamps	4,625	7,938	3,313
Total No. of St. Lamps	8,766	9,528	762
No. of Employees	1,197	1,583	386
Amt. of Payroll (Mo.)	$97,206.77	$111,901.08	$14,694.31

E. B. A. for Month of July, 1917

Receipts		
Bal. on hand 1st of month		$5,048.64
Dues—Members	$489.55	
Dues—Company	489.55	
Fees—Members	11.00	
Fees—Company	11.00	
Assessment No. 5—Mem	.25	
Assessment No. 6—Mem	.75	
Assessment No. 7—Mem	153.25	
Assessment No. 8—Mem	26.50	
Assessment No. 5—Com	.25	
Assessment No. 6—Com	.75	
Assessment No. 7—Com	153.25	
Assessment No. 8—Com	26.50	
Int. on Bank Bals. and Investments	75.00	
Mem. Additional Life Ins.	141.09	$1,578.69
Total		$4,627.33
Disbursements		
Sick Benefits	$132.31	
Accidents off Duty Ben	35.00	
Accidents on Duty Ben	9.38	
Death Benefit No. 8	125.00	
Medical Examiner's Exp	31.50	$ 333.19
Bal. on hand Aug. 1, 1917		$4,294.14

Membership

Members in good standing June 30 1917	779
Unaffiliated during July	13
Affiliated during July	9
Members in good standing July 31, 1917	775

Gas Manufacture

Speaking about a breeze—that is one thing which East Station possesses in abundance. Sometimes it comes in from the northwest and brings relief. Sometimes it comes in from the southwest and brings nothing but odors. But whichever direction the air currents pursue, there is another type of breeze which always abounds. That is the fine, sharp, hard, gritty variety which clings to the hair, slides under the collar and down the back, and fills one's shoes. It might be termed a by-product, and these are the days when by-products are coming into their own. This particular "breeze" is the fine screening from coke and accumulates in large quantities. Some of it has been mixed with the regular fuel used satisfactorily in the boilers. At West Station it will form the chief, if not the exclusive, fuel for operating the producers which supply the heat for the batteries of the retorts.

When the hot coke is quenched, the "breeze" screened out will carry large quantities of water which make it unfit as a fuel. In that connection Mr. W. N. Whitney is experimenting extensively with a "breeze" drier. He has designed a device into which the "breeze" can be loaded at the top; the hot waste gases on their way to the chimney are drawn through the drier, evaporating the water in their passage, the dried "breeze" gradually sliding down into receiving hoppers and a fresh supply of wet "breeze" is fed in at the top. If successful in the experiments, a large machine of this type will be built for practical service at West Station. Its description will form an interesting story of the ingenuity and ability of the Company's Engineers, for it will be unique in its field.

❖

Incidental to the operation of a new gas scrubber, the Company's employees accomplished a rather difficult bit of work on a live gas main recently. Connections to the scrubber, in question, were to be made from the twenty-four inch main which serves as an inlet to No. 9 holder and the work had to be done while the gas was under ten inches water pressure; this necessitated placing a complement of bags and stoppers in the main before making the cut. Here occurred the principal delay on the entire job for much difficulty was experienced in making the stoppers secure. The work consisted of cutting out a section of the main and inserting a tee, cross, three valves and a sleeve. The tee, cross and intermediate valve had previously been made up as one unit and were inserted as such, the other two valves being bolted on afterwards. Two flange joints and three lead wool joints were involved. In a little more than three hours the change was made and the line again put into service.

❖

An overhead steel smoke flue is being built from No. 1 and No. 2 boilers to the chimney to eliminate a section of the old underground flue which is over-loaded at the present time. It is hoped that this change will greatly increase the efficiency of these boilers, and possibly that of the other boilers by indirect means. The John Siddons Company has the contract for this work.

Gas Mains in Fairport

FRANK HERRING

WHILE laying the gas distribution mains in Fairport the Gas Street Department encountered many unusual problems during the past month. The most notable of these were at the crossing of the New York Central Railroad tracks at Main Street and the Parker Street Bridge over the Barge Canal. The difficulties encountered at the railroad crossing were the excavation and backfilling of the 3½-foot trench under the tracks. It was necessary to timber under the tracks to keep them in position until the backfill was made and the ballast was again tamped under the ties. In backfilling great care was exercised to tamp the earth as firmly as possible so that no undue settlement would take place. The main laid here is a four inch black steel pipe with welded joints, and is used to supply the northwest section of Fairport. A representative of the engineering department of the railroad supervised this work.

At the Parker Street Bridge across the Barge Canal, the pipe is carried on the floor girders outside of the sidewalk. The line is four inch black steel pipe and the joints are extra heavy welded to withstand the stresses due to excessive temperatures and vibrations of the bridge. This main supplies the northeast section of the village.

At John Street where the main parallels the tracks of the Rochester, Syracuse and Eastern Railway for one thousand feet, the pipe was wrapped with burlap and heavily coated with tar to protect it from the electrolytic action of stray electric currents.

During July, one hundred seventy-five three-quarter inch gas services were installed. In the section of the village south of the Barge Canal 325 meters have been installed and service work has been begun on the north side.

The trench excavator has been removed to Midvale. Here two thousand feet of trench for mains are to be excavated and the trenches for the twenty-five services to be installed.

Four inch pipe crossing canal bridge on Church Street, Fairport. This pipe is black steel with welded joints and is fastened to girders under the side walk.

Athletics

On July 28th the Company's tennis team played the Kodak Park team on the latter's court. After the noise of the fray was over, Kodak Park was declared the winner with a score of 6—3. However, another game is scheduled for the near future, at which time our boys will "come back" strong, and hope to carry away the honors.

❖

On July 22nd the Kodak Park and the Railway and Light Company's baseball teams had a lively game that rounded out the ninth inning with a score of 3—2 in favor of the latter team. La Frois' delivery was splendid and he had Kodak Park worried much of the time. Friedman's hit to left in the third inning was responsible for the initial tally by bringing in Durbin, who had just doubled to the same side of the field. The strength of our team was again shown in the fifth, when Fiddler scored Durbin, who was on second, by a pretty double into right field. Habel, Fiddler and Welch distinguished themselves several times.

On July 29th a slump occurred in the Railway and Light's baseball success, when a lively game at National Park resulted in a victory for the Nationals with a score of 7—5.

On August 5th our team crossed bats with the Sphinx Club team and won from the latter by a score of 14 to 13. Friedman, Durbin, Fiddler, Habel, and Angevine played their usual strong game.

The manager of a gas company was making a popular address.

"Think of the good the gas company has done!" he cried. "If I were permitted a pun, I would say, in the words of the immortal poet, 'Honor the Light Brigade.'"

Voice of a consumer from the audience: "Oh, what a charge they made!"

Personals

Mr. H. G. Bates, Station 4, is enjoying his vacation at the Lakeside.

Mr. Leonard Beggy, Jr., is the youngest member in the E. B. A.

Mr. Jas. P. Doyle, of Station 6, has returned from two weeks vacation spent in the vicinity of Rochester.

Mr. Rollin Farnham has returned after a vacation spent at the "Odd Fellows Convention" Syracuse.

Mr. C. B. Lerkins, Station 15, is "vacationing" for a fortnight on the shores of Conesus Lake.

Mr. Irving Milo has been transferred from the Collection Department to the Information Counter.

Mr. Melvin D. Anderson, a recent graduate of the University of Michigan, has joined the Industrial Engineering Staff.

Mr. Sherwood O. Peartree has enlisted in his country's service in the capacity of Yeoman in the United States Navy.

Mr. Ernest Friday, of Station 3, is on two weeks vacation, and it's "some time" he's having.

Miss Kennedy has been called "to do her bit," owing to the illness of her father. She has left to return to her home in Watertown, New York.

Miss Whyley is about to take her vacation "somewhere in the United States of America"—location unknown.

Mr. A. H. Johnson, Station 15, has returned from his vacation spent at his former home in Holley, N. Y.

Mr. Charles Hawkins, formerly located at Station 33, is now assisting Mr. Howell at Station No. 5.

Mr. Frederick Raines, and family are spending their vacation at Canandaigua Lake. Wouldn't you like to be as popular as the lake?

Mr. Philip F. Stephens is again "on the job" smiling and happy, after an absence of about two months, due to an operation for appendicitis.

Mr. George A. Donie

Mr. George Adam Donie, of the Service Improvement Department, died after a brief illness, in the Hahnemann Hospital on July 17th. Mr. Donie was born in Rochester, June 4th, 1878. He was educated in Wadsworth School and the Rochester Business Institute. He entered the employ of the Railway and Light Company in 1903, and was successively advanced through the Electric Meter, Electric Order, Electric Accounting, Domestic Sales and Service Improvement Departments. While in charge of the Complaint Division of the Service Improvement Department for the past two years, his work was especially commendable.

Mr. Donie was prominent in church, civic and community work.

On January 25th, 1905 he married Miss Lulu Post of Rochester, who survives him. He is also survived by a daughter, Doris; two sisters, Mrs. Frank Kurtz and Mrs. Eugene Murphy; and three brothers, Albert Donie, William Cook and Henry Cook.

Mr. A. C. Rissberger, Assistant Editor of the Gas and Electric News, is now enjoying a two weeks' vacation. During his absence, former Assistant Editor Philip F. Stephens will take over his several duties.

Mr. A. H. Pendelbury, Station 5, who received a bad electric burn on July 18, has returned to duty.

Miss Ethel Harper, of the Auditing Department, is spending two weeks at Canandaigua Lake.

Mrs. Ethel F. MacVean, Electric Department, has returned from a delightful vacation at Dansville, N. Y.

Miss Florence Russell, of the Stenographic Department, has returned from a sojourn at Wilmington in the Adirondacks.

Miss Marjorie Daggs left Saturday to join her friend, Ethel Harper, at Canandaigua Lake.

Mr. Andrew W. Sturrock, special man in the order department, has enlisted with the ammunition train.

Mr. F. B. Odell, of Station 35, has again resumed his duties after several days spent at Conesus Lake.

Mr. Emmet Norton, of the Domestic Sales Dept., is enjoying his vacation "somewhere" in the U. S.

Mr. and Mrs. Howard Harding announce the birth of a son on August 4.

Miss Elizabeth G. Masters, Drafting Department, spent several days recently at "The Inwood" on Fourth Lake in the Adirondack Mountains.

Mr. William L. Weaver and Mr. Walter Slobbe, have left the employ of the company, having been ordered on duty with Troop "H," 1st. Cav.

Mr. Harry Donovan, was up at West Lake, Canada, recently. "Harry" reports that the fishing was great—five pound bass were common, but a 30 pound muskellunge was the star catch.

Miss Marie Skinner, of the Engineering Department, returned recently with a coat of tan which indicated a very successful outdoor vacation spent boating and canoeing among the islands in Georgian Bay, and on the Muskoka Lakes.

Mr. R. A. McMenimen, former Ass't Sup't of the Dock Contractor Company which is constructing the new Station 5 improvement is now with the Aviation Branch of the Federal Service at Mt. Clements, Mich.

Mr. Herbert Eaton, the "Isaac Walton of Station 4," is spending his vacation on an extended fishing trip.

Mr. W. F. Morris, Station 15, recently spent his vacation in Jersey City.

Miss Pearl Ludwig is spending her vacation at Cranberry Lake in the Adirondacks. How we envy her these hot days.

Mr. G. A. Dumford, Station 15, has returned from his vacation which he enjoyed by learning a little more about Rochester.

Miss Louise Haege of the Billing Department underwent an operation for appendicitis at St. Mary's Hospital on August 1st.

"Uncle John" Almstead of the Domestic Sales Department claims to have the finest truck garden in New York State. It is located in Fairport.

Mrs. Winifred Clements and Mrs. Elsie Evans have been employed in the Billing Department in the capacity of debit posters.

Mr. Stephany has been transferred from the Billing Department to the Cashier's Cage to act in the capacity of Assistant Cashier.

Mr. Paul J. Miller, of the Auditing Department, is the father of a six pound baby daughter, Eloine Ruth, who arrived July 30th.

Miss Mildred Berg, of the Billing Department, has returned from a very pleasant vacation spent at various nearby summer resorts.

Mr. and Mrs. A. C. Rissberger, announce the birth of a baby boy, Arthur Christian, Jr., on Tuesday July 17th.

Miss Charlotte Baker of the Collection Department has returned after a two weeks' vacation spent at her old home in Mt. Morris.

Miss Arline Koehler has been engaged as saleslady in the Domestic Sales Department.

Mr. Geo. Bailey is assisting Mr. Noyes at Station 6 during the time that Station 33 is not in operation.

Mr. Walter Tanner has returned from a very pleasant vacation spent at the Lake, having enjoyed swimming, boating and all the sports connected with such an outing.

Miss Clara J. Merritt, has the distinction of being the first lady to be employed in one of the Company's electric power houses. Miss Merritt is in the office at Station 3.

Mr. Frank Houlihan is spending his vacation fishing at Grand View Beach. The Grand View might be so good that Frank will forget all about the fish.

Mr. Angus McKay is spending his vacation at Morgantown, Canada, the town of his birth. Nothing like getting back to the old haunts of boyhood days.

Mr. H. O. Sommer, Rate Engineer, and Miss Alice Pittman of Pittsford, New York, were married on August 9th, 1917. After a western trip they will reside in Pittsford. Mr. Sommer was recently commissioned 2nd Lieutenant in the 3rd N. Y. Infantry.

Mr. Claes Hallencreutz, of the Engineering Department, has been commissioned 2nd Lieutenant of Cavalry in the United States Army and he will be soon assigned to duty.

Mr. Ray G. Ernst has returned to his duties at Station 4. He surely must have had a safe and sane vacation for he has added fifteen pounds to himself.

Mr. T. F. Vogt, of the Purchasing Department, has returned from his vacation. Perhaps he can tell us something about that big fish that got away.

When asking the Telephone Department for information of any kind you will save time by asking for the "Information Board."

Mr. M. B. Huntington, a recent graduate of Cornell, and Mr. F. G. Tappon, an instructor at the same school, have been employed at the Laboratory. Mr. Tappon will be with us during the summer.

REPORT OF ACCIDENTS—6 Months Ending June 30, 1917

Class Code No.	Dept. Code Nos.	1 Materials and Tools	2 Slips and Falls	3 Eye Injuries	4 Falling Materials	5 Dog Bites	6 Trench Cave-Ins	7 Removing Machinery	8 Machines in Motion	9 Nail Injuries	10 Moving Vehicles	11 Strains	12 Overcome by Gas	Burns: 13 Flashes	Burns: 14 Hot Solder	Burns: 15 Miscellaneous	16 Electrocution	25 Miscellaneous	Total Number Accidents	Average Number of Employees	Percentages
*Gas Works	A	1	2						1		1	1	1					1	16	139	11.51
Gas Street	B	6	2																2	99	2.02
Gas Shop	C	1																	1	76	1.32
Canandaigua	D			1															2	16	12.50
Total Gas	E	8	2	3	2				1		1	2	1					1	21	330	6.36
Elec. Stations	F	9	2	8	2					2		2		1		3		1	32	230	13.91
Elec. Repair	G	4	2	1	2					2									11	38	28.95
Elec. Construction	H	2		2										1				1	11	39	28.21
†Overhead Line	I	2		1										4					7	40	10.00
Underground	J	2	1	1	1		1											1	4	30	23.33
Subway	K		2								1	2							1	33	3.03
Elec. Meter and Lamp	L	1	2	1	1						1	1						2	10	68	14.71
Despatch	M																		2	7	28.57
Ontario Light and Traction	N																			14	
	O																				
Total Electric	P	22	9	14	8		1		1	4	2	5		5		3		5	78	499	15.63
Office—Inside	Q	1	2		1														4	355	2.25
Office—Outside	R	1				1												2	2		
Transportation	S	4										1			1				4	28	21.43
Total General		6	2		1	1						1			1				6	383	3.66
Total All Departments		36	13	17	11	1	1		1	4	3	8	1	5	1	3		2	14	1212	9.32
Public	T	1	1		1														3		
GRAND TOTAL		36	14	18	12	1	1		1	4	4	8	9	6	1	4		11	130		

*Gas Works Includes Gas Holder. †Overhead Line Includes Concrete Pole Department.

NOT HIS JOB

"I'm not supposed to do that," said he,
When an extra task he chanced to see;
"That's not my job, and it's not my care,
So I'll pass it by and leave it there."
And the boss who gave him his weekly pay
Lost more than his wages on him that day.

"I'm not supposed to do that," he said;
"That duty belongs to Jim or Fred."
So a little task that was in his way
That he could have handled without delay
Was left unfinished; the way was paved
For a heavy loss that he could have saved.

And time went on and he kept his place
But he never altered his easy pace,
And folks remarked on how well he knew
The line of the tasks he was hired to do;
For never once was he known to turn
His hand to things not of his concern.

But there in his foolish rut he stayed
And for all he did he was fairly paid,
But he never was worth a dollar more
Than he got for his toil when the week was o'er;
For he knew too well when his work was through
And he'd done all he was hired to do.

If you want to grow in this world, young man,
You must do every day all the work you can;
If you find a task, though it's not your bit,
And it should be done, take care of it!
And you'll never conquer or rise if you
Do only the things you're supposed to do.

By EDGAR A. GUEST in *Detroit Free Press*

AUGUST 1917

HEALTH BULLETIN

No. 36

INTESTINAL INDIGESTION

"SUMMER COMPLAINT"

Rochester Ry. & Light Co.

REPUBLISHED FROM
BULLETIN ISSUED BY

EASTMAN KODAK COMPANY

INTESTINAL INDIGESTION

"SUMMER COMPLAINT"

IT is common knowledge to all of us that diarrhœa is much more frequent in summer than in winter; in fact, few of us manage to get through a summer without at least one upset of this sort. The reason for this is easily explained. In summer, food spoils readily and unless precautions are taken flies feed upon it. When such contaminated food is eaten diarrhœa is apt to result. The importance of preventing summer diarrhœa is difficult to realize unless we compare it with some other better known disease. It is a fact that summer diarrhœa or "summer

1—This Feeding Bottle is Dangerous Because it Cannot be Kept Clean.

complaint" kills *6 times* more people every year than die from typhoid fever; think of it! Is it not worth a little trouble and precaution on our part to prevent this terrible waste of life? As five-sixths of the victims of summer diarrhœa are helpless infants under two years of age, it becomes necessary for the "grown-ups" to protect them, and fortunately it is possible to do this to a great extent.

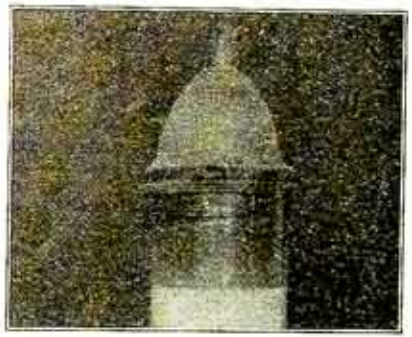
HOW TO PREVENT SUMMER DIARRHŒA.

1. *Keep flies away from food.* This is accomplished by screening all parts of the house, especially the kitchen, dining room and nursery.

An experiment was conducted in New York City a year or so ago by the Health Department in the homes of over a thousand infants. One of the results went to show that almost twice as many infants had diarrhœa when exposed to flies as was the case among the fly-protected infants.

2. Don't patronize any restaurant, grocery or market where flies are permitted to light on food.

3. When possible, natural feeding is very much better in every way than bottle feeding; this is especially true in the summer time. The New York City experiment referred to showed that about two and one-half times as many bottle fed babies were attacked by diarrhœa as was the case among the breast fed infants. When the baby is fed artificially



2—This Wide Mouth Bottle is Easy to Clean and is Therefore Safe.

and when the bottle is exposed to flies, the danger is especially great.

4. Should the use of a feeding bottle be necessary, do not by any means buy the old-fashioned kind with a small mouth and rubber tubing: it is *dangerous* because it is almost impossible to keep it sanitary. The wide mouth bottle is the best kind to use.

5. Maintain general cleanliness about the house. This means keeping things "picked up" and in their proper place, all rubbish disposed of, frequent house cleaning and the maintenance of sanitary conditions

in general. The New York City experiment also showed that almost twice as many infants had diarrhoea in dirty homes as in clean homes.

WHAT TO DO FOR AN ATTACK OF SUMMER DIARRHŒA.

A. Infants. Stop all feeding for a day or two, giving nothing at all but plain water. If this treatment fails, have a doctor see the baby.

B. Adults.

1. Medicine. Take 1 or 3 teaspoonfuls of Castor Oil. The idea is to assist Nature in ridding the body of the poisons formed in the bowels and which are the cause of the diarrhœa. It is foolish to attempt to check the diarrhœa until this cleaning out has been done.

2. One-half ounce (4 teaspoonfuls) of Blackberry Cordial taken 6 hours after the oil will help to check the diarrhœa. By that time the bowels should be rid of the fermented food causing the trouble.

3. Diet. Take nothing but water or a broth of some sort the first day. On the second day of the attack a little more substantial food may be eaten, such as toast, crackers, milk toast, sliced oranges or a poached egg. On the third day it will probably be safe to go on regular diet again.