

GAS AND ELECTRIC NEWS

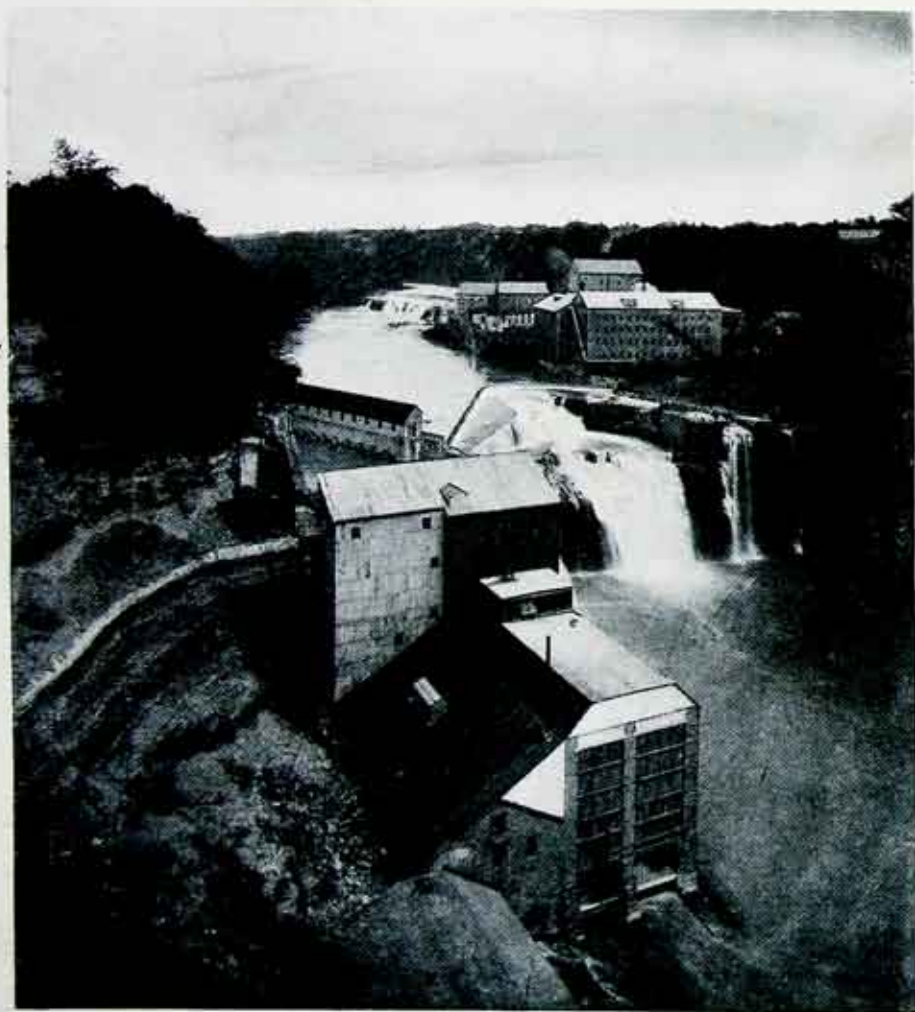
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THE ROCHESTER RAILWAY AND LIGHT CO.

Vol. 3

NOVEMBER, 1915

No. 5



Station 5 At Lower Falls

The New Accounting System for the Consumers Ledger Department

BY F. H. PATTERSON

The Consumers' Ledger Department, under the supervision of Mr. W. T. Nolan, Chief Clerk, and Mr. E. F. Gosnell, Assistant Chief Clerk, is at present undergoing a revision of its office methods according to a plan designed largely upon the methods used by the Consolidated Gas and

performing the work, and increasing the efficiency of the staff engaged in this work. It is expected that considerable duplication of work will be obviated, inasmuch as our gas, electric, commercial, steam and appliance bookkeeping activities will be treated in combination rather than in sepa-



Consumers' Ledger Department—Group Supervisors

Top row, left to right—A. D. Whitley, E. Augenstein, Jas. I. Lewis, F. S. Raines, L. Newman, J. Kohl, Jno. M. Nichols. Bottom row, left to right—L. G. Knapp, F. Houlihan, O. C. Augenstein, W. T. Nolan, (Chief Clerk) L. E. Sanderson, E. F. Gosnell, (Assistant Chief Clerk) J. H. Stokes, J. B. Switzer, H. J. Culliton.

Electric Company of Baltimore, Maryland. It has as its objects, a more logical and consistent adaptation of the accounting in its different branches to our large and growing business, the necessity of ascertaining for the management the unit costs of

rate form, and will permit of specialization.

Under the old plan of conducting the work under separate branches, many duplications were entailed, such as in reading meters, delivering bills, collecting and other matters,

due to the fact that the corps of employees in the separate branches traversed a territory in their work which might be covered more economically for all purposes by but one. This condition also obtained to some degree in the conduct of the book-keeping work. Furthermore, to relieve the Chief Clerk of many onerous duties and to develop employees for larger responsibilities by thrusting responsibility upon them, the idea was conceived of classifying the work into groups under the direction of supervisors, who would be charged with the duty of conducting the operations under their authority.

On account of the size of our business, involving as it does the records in connection with upwards of 85,000 accounts, distributed throughout 170 ledgers of approximately 500 accounts each, the labor involved in making this revision is no light undertaking. These accounts, which have been carried in separate groups of ledgers in the gas, electric and appliance branches, must necessarily be sorted and combined in one group of combination ledgers. Similarly, the gas and electric read-slips have already been re-sorted and combined. Combination forms will supersede separate forms. The various groups of employees will be established, and those comprising them schooled in the execution of the work. An elaborate reporting scheme will be inaugurated to keep the Chief Clerk thoroughly informed of the progress of the work, and much miscellaneous work is involved in preparing new indexes of the accounts, and other relative information. The co-operation of the entire force, however, is being given to the matter, and although some time must necessarily elapse before the system will be finally established, there is no doubt as to the ultimate result of much improved conditions.

The groups that have been established, and the supervisors that

have been placed in charge, together with the activities of each, briefly stated, are as follows:

Application and Information Group—F. F. Houlahan, Supervisor: Applications of consumers for gas and electric service, rate information and duplicate bills.

Credit Group—H. J. Culliton, Supervisor: Approval of the credit of the Company's gas, electric, steam and appliance customers, and the granting of extensions of time in connection with payments due on bills of this nature.

Order Department Group—O. C. Augenstein, Supervisor: The issuance and execution of all orders pertaining to gas and electric turn-ons and shut-offs, and to the issuance of all orders pertaining to gas and electric meter-sets and meter-removals, systematic changes and appliance orders.

Entering Orders on Consumers' Ledgers—J. I. Lewis, Supervisor: Entering of gas and electric turn-ons and shut-offs, sets and removals, systematic changes on the consumers' ledgers, and the issuance of final gas and electric bills.

Addressograph and Printing Group—J. Kohl, Supervisor: The operation of the Montague Machine in connection with the printing of addresses on gas and electric bills, the Typographic Machine in connection with punching plates for use in the Montague Machine; the Hand Addressograph in connection with preparing lists of consumers; the Multigraph in connection with Linotype printing, and the Mimeograph Machine in connection with stencil printing.

Prepaid Meter Reading Group—J. H. Stokes, Supervisor: The reading of gas prepaid meters, and collections in connection therewith.

Regular Meter Reading Group—L. Newman, Supervisor: The reading of regular gas and electric meters.

Billing Group—J. B. Switzer, Supervisor: The compiling and issuing of the municipal gas and electric bills for service in schools, fire houses and other public institutions, street lighting and regular gas and electric bills; data and bills in connection with the two and three rate schedule consumers, other large power consumers and commercial steam consumers under the supervision of Mr. A. D. Whitley; the assembling of appliance orders and the issuance of bills in connection therewith under the supervision of Mr. E. Augenstein.

Bill Delivery Group—L. Newman, Supervisor: The delivery of gas, electric and appliance bills, and the collection of accounts incident thereto.

Regular Ledger Keepers Group—Mrs. A. C. Denio, Supervisor: The posting of debits to the consumers' ledgers; the listing and sorting of coupons; the posting of cash and allowances; the listing of sales; the listing of delinquents and the balancing of the ledgers, and all other matters having to do with the bookkeeping proper except the matter of gas prepaid ledger keeping.

Gas Prepaid Ledger Keepers Group—J. H. Stokes, Supervisor: The debit and credit posting and balancing in connection with prepaid ledger keeping proper.

Collection Group—J. M. Nichols, Supervisor: The collection of gas, electric, steam, appliance and sundry sales accounts, including the issuing of first, second and money or meter notices.

Delayed, Estimated and Mailed Bills—L. E. Sanderson, Supervisor: Delayed and estimated gas, electric and appliance bills and the mailing of bills.

To facilitate the work and to relieve congestion in the office, a night

corps has been organized with hours from 12 P. M. to 8 A. M., to post cash receipts in the ledgers; and, one man sorts these cash coupons from 4:30 P. M. until midnight, the work of this department is relayed throughout the twenty-four hours of the day.

By providing adequate racks for the ledgers in the vault where they are put when not in use, and by rearranging the desks, there is considerably less confusion, more healthful surroundings and an orderliness already apparent which is most gratifying.

The complaint department has been reorganized under the supervision of Mr. L. W. Layman, to deal with all complaints from consumers. This department, however, is responsible directly to the management.

The cashiers and tellers are under the authority of the Assistant Treasurer, Mr. C. A. Tucker.

Under the proposed plan, it will be possible to ascertain the extent of our efficiency in this branch of our Company's activities by comparisons of our monthly and yearly performances and those of other companies in this connection. The plan permits of unlimited expansion, and it is hoped, in fact it is the earnest prayer of everyone in the department that such a general revision will never again be necessary.

The above is submitted as a general explanation of the changes being effected. It is our intention to publish from time to time an article by each of the supervisors explaining in greater detail the functions of their respective branches. By commencing with the Application Group, and passing in logical order through the various operations, a word picture will be drawn of the activities of this busy department. The supplemental articles will be written by the men engaged on the work, and will therefore convey the truest information in each case.

East Rochester Illumination

BY ROYAL PARKINSON

Rochester, situated about five miles east of Rochester on the New York Central Railroad and Rochester, Syracuse and Eastern electric line, had its origin some twenty years ago in an industrial community. It can now conscientiously boast of being

and Main Street, well paved from the New York Central depot south to the state highway. Amid these surroundings dwell some 3500 people. The population, in unusually large proportion, is composed of young people who are wide awake to



Main Street, East Rochester

a most attractive village of industry and homes. Harwood Farms Avenue, with its group of fine residences and park surroundings, marks one's approach to the Village. A little farther eastward are the several beautiful buildings which constitute the largest piano factory in the world. Only a glimpse of the extensive freight car shops of the Merchants Despatch Transportation Company can be had from the electric railway. An exceedingly attractive and modernly equipped department store marks the business district and the intersection of the two main streets—Commercial Street, which the electric railway traverses east and west,—

modern improvements and community growth.

Mr. John G. Ellendt, of the Board of Trustees of East Rochester, last spring suggested ornamental street lighting for consideration by the Board of Trade. A favorable interest developed, and in order to promote public discussion, an informal petition was then circulated. A very general desire for the new type of lighting was discovered by means of this petition. The Board of Trade, at a special meeting, endorsed the plan. Shortly afterwards the Board of Trustees of the Village, Mr. Howard Worden, President, contracted for eighty bronze capped concrete lamp posts,

with eighty candle power lamps, as a substitute for the former type of lighting along Main and Commercial Streets. Fifty-seven of these lamp posts have already been installed by Mr. Christie. The balance will be installed next spring, upon the completion of the paving of Commercial Street. The work of Mr. Christie's department and the crew under Foreman Dimanti attracted considerable attention in East Rochester, and brought favorable comment for its promptness and neatness. Immediately upon the setting of the posts, Mr. Swarthout's men completed preparations for turning on the current, which was done on Friday, October 8th.

Thirty-First Annual Convention of Association of Edison Illuminating Companies

Spring Lake Beach, New Jersey
September 13, 14, 15 and 16

BY R. D. DE WOLF

One of the most valuable reports presented at the Convention was the report of the Committee on Steam Plant, made up of J. W. Parker of Detroit, Chairman, J. D. Andrew, Boston; H. P. Liversidge, Philadelphia; John C. Parker, Rochester; and J. P. Sparrow, New York.

The most valuable matter presented in this report was contributed by the central station companies themselves. Operating results were presented from seven of the large companies, giving the pounds of coal per kilowatt-hour delivered, and what is really more important, the B. T. U.'s per kilowatt-hour delivered. The latter value ranges from 19,280 to 32,284 B. T. U. per net kilowatt-hour. The 19,280 B. T. U. was obtained in the case of a large station built in 1914, containing one 20,000 and one 25,000-kilowatt turbines, surface condensers and large boilers with econo-

mizers. The load factor of the station was most excellent, being 66 per cent for the month. The higher value obtained from a much older station containing six units ranging from 5,000 to 22,500 kilowatts, medium sized boilers without economizers, and a considerably lower degree of superheat.

The report indicates the growing tendency toward an increased use of economizers. Of forty-one companies, only ten are at present provided with economizers. Of these ten, three have installed individual economizers for each boiler, and other companies indicate that they expect to adopt this arrangement. It is thought in our own case that the individual layout is very much superior to the method in which one economizer receives the gases from several boilers, and it is gratifying to note the concurrence of other companies in this opinion.

The Commonwealth Edison Company reports that, under favorable load conditions, the economizer effects a saving of 9.4 per cent. in fuel.

There was quite a little discussion in regard to the materials of construction used in economizers, and it was the general feeling that the present cast iron type of economizer forms the weakest part of our steam generating apparatus. While this does not necessarily indicate a dangerous condition under our present operating pressures, it is very probable that a new type will be developed in the near future to meet higher pressure operating conditions. The boiler manufacturers have indicated their readiness to furnish boilers for an operating pressure of 400 to 500 pounds gauge, and it would certainly seem more than likely that the economizer manufacturers will have to resort to cast steel if asked to furnish economizers for these pressures.

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The report presented data giving

the average overload carried on boilers during the peak period. These range from 150 to 275 per cent., depending upon the type of stoker employed, the Murphy and Taylor giving the highest average. Of twelve plants equipped with Taylor stokers, the average was 240 per cent. of rating for peak loads and 159 per cent. of rating under normal operating conditions.

Two companies, the Detroit Edison Company and our own, presented data in regard to proposed clinker grinders for Taylor stokers. The proposed methods are somewhat similar, and it is interesting to note that both companies contemplate the use of the water cooled bridge wall.

The manufacturers presented some interesting data covering the 30,000 and 35,000-kilowatt turbines installed and being built, and large sized condensers. A few years ago a 28-inch vacuum was considered as being very satisfactory; to-day several plants are getting 29 inches or better, resulting in a considerable economy.

The data on water treating plants presented by this Company and by the Brooklyn Edison were discussed at length, particularly with reference to the corrosive action of soda ash and other chemicals used in the water purifying process. There was no conclusive evidence presented that such corrosive action has resulted from the use of a properly installed and operated water treating plant.

The Committee on Electric Plant, R. F. Schuchardt, Chairman, dealt principally with the relay situation. Several companies have found the bellows type of relay unsatisfactory and have been experimenting with the induction and dynamometer types, both of which give promise of improved service. One company has obtained very satisfactory service through the use of the split conductor method.

Empire State Gas and Electric Association Meeting

BY H. C. DEFFENBAUGH

At the Eleventh Annual Convention of the Empire State Gas & Electric Association, held in New York City on October 7th and 8th, the Rochester Railway & Light Company was represented by Messrs. R. M. Searle, J. T. Hutchings, T. H. Yawger, I. Lundgaard, E. C. Scobell, H. C. Marquardt and H. C. Deffenbaugh. In addition to the Committee reports, two papers of unusual interest were given, one on "Insurance under New York Workmen's Compensation Law" by Mr. Hutchings, and another on "Method of Analyzing Cost of Service" by Mr. C. A. Graves.

The Thursday afternoon session was taken up by the discussion of "Co-operation between State and National Associations." Addresses advocating affiliation by the Empire State Association with the other Associations were given by Mr. E. W. Lloyd, President of the National Electric Light Association, and Mr. H. B. McLean of the National Commercial Gas Association. By having joint committees made up of representatives from these different organizations it would enable these Associations to work together on such matters of common interest as uniform methods of accounting, standard rules for wiring, safety work, standards for gas, etc.; and by this joint co-operation avoid a duplication of work by the several associations.

On Saturday Messrs. Scobell, Yawger, Lundgaard and Deffenbaugh attended the auto races at Sheepshead Bay. Mr. Yawger reported that 102.6 miles per hour was entirely too slow to thrill him; the other members of the party had never travelled that fast so the races proved very exciting to them.

The Employees Benevolent Association

BY W. C. GOSNELL

This Association was first organized in September, 1913, to meet the needs of the employees of the Rochester Railway & Light Company. It paid a benefit of \$2.50 for the first week of disability and \$5.00 per week for the following nine weeks. Benefits were paid only for full weeks; for instance, if a member was disabled for thirteen days he or she would receive only \$2.50.

In case of the death of a member the Association would assess each member 25 cents and whatever amount was raised was increased by \$50.00 from the treasury, the total usually amounting to about \$200.00. This often proved to be a great help to the family of the deceased. After about a year the members became dissatisfied, some believing that the dues should be raised so that larger benefits could be paid.

A committee was appointed by the President to confer with the management for advice in regard to E. B. A. matters, and to ascertain if the Company could assist the Association in some manner. The outcome was that the Company volunteered to pay the expense of administration and clerical work, and pay to the Association a sum equal to the initiation fees, dues and death assessments collected from the members.

The efforts of a committee appointed to draw a new Constitution and By-Laws, met the approval of both the Company and the Association.

The new Constitution and By-Laws were adopted and became effective June 1, 1915. Under the provision of this new Constitution, when an employee applies for membership and after passing the required medical examination, is accepted, he or she is entitled to benefits immediately. Under the old Constitution to be

eligible to membership it was necessary to be in the employ of the Company for a period of three months, and a member was not entitled to benefits until after the expiration of three months from his enrollment and then only for period of disability.

Under the new Constitution, the initiation fee is One Dollar, and the monthly dues are one-half of one per cent of the monthly wage of each member, with a minimum rate based upon a wage of \$10.00 per week and a maximum rate based upon a wage of \$30.00 per week. A member receiving less than \$10.00 per week would pay on a \$10.00 basis and any member receiving more than \$30.00 per week would pay on a \$30.00 week basis and receive benefits accordingly.

For example:

| Wages per Week | Dues per Month | Benefits \$ per Week |
|-----------------|----------------|----------------------|
| \$10.00 or less | \$0.22 | \$ 5.00 |
| 15.00 | 0.33 | 7.50 |
| 18.00 | 0.39 | 9.00 |
| 20.00 | 0.43 | 10.00 |
| 30.00 or more | 0.65 | 15.00 |

The above will give an idea of the cost to the members and the benefits they receive. In the event of a death, \$50.00 is taken from the Association's Treasury, and each member is assessed 25 cents. An amount equal to the total amount collected is contributed by the Company. With the present membership this benefit exceeds \$350.00. The Rochester Railway & Light Company contributed on June 1, 1915, \$602.00 which was equal to the amount paid into the Association as initiation fees by the members.

The membership on June 1st, 1915, was about 600. At the present time the membership is almost 700.

The Association has in its Treasury, October 1st, something over \$2000.00 in cash and \$1000.00 in Bonds, and when we consider the benefits that have been paid and the present substantial financial condition of the Association's Treasury, it gives one cause for rejoicing.

The New Air Washer at Station No. 3

BY R. D. DE WOLF

Last spring the Company decided to install an air washer for the 100-KW turbo-generators at Station 3. It had been found on cleaning these machines that a large amount of dust and dirt was taken from them by the air and deposited in the ventilating ducts of the generators. This dust not only tended to reduce the effective cooling of the machines by the circulating air through a partial stoppage of the ventilating ducts, but when mixed with oil or moisture, to very greatly lower the breakdown voltage of the insulating material used on the coils.

After a careful investigation of the whole subject and correspondence with other central station companies using air cooling apparatus, an order was placed with the B. F. Sturtevant Company for a washer capable of handling 90,000 cubic feet of air per minute. In placing the contract for this apparatus, particularly stringent guarantees were required from the manufacturers covering the cleaning and cooling of the air, and the maximum resistance offered to the passage of air through the air washer.

The air washer accomplishes two purposes: First, it removes practically all of the dirt and dust from the air, cleaning it thoroughly; and secondly, it cools the air below room temperature.

The washer consists of a large galvanized iron box 12 feet wide, 15 feet high, and 9 feet long. Air enters the washer through a series of horizontal diffuser vanes, designed to prevent eddy currents in the air and distribute the air uniformly over the cross section of the washer. It then passes into the spray chamber of the washer, which is filled with a fine spray from spray nozzles. There are 600 of these nozzles, arranged in two banks set 29 inches apart.

The water for these nozzles is furnished by a 5-inch centrifugal pump handling 900 gallons of water a minute, and consumes about 20 horsepower. These spray nozzles consist of a conical chamber into which is fitted a conical plug with spiral grooves on its surface, and a semi-spherical cap which screws down over the plug. The water is given a whirling motion through the grooves in the plug, and striking the inner surface of the conical cap is thrown out through a 5/32-inch hole in the center of the cap, in the form of a very fine mist.

The air being supersaturated with this fine mist, the dirt and dust is collected by the mist and thrown down to the bottom of the spray chamber or caught on what are known as eliminator plates, through which the air passes before leaving the washer. These eliminator plates are so arranged as to cause the air to flow along a zigzag path, sharp edges being provided at two points in the path which practically scrape out the excess free moisture in the air and return it to the bottom of the air washer.

The washer is guaranteed to remove 98 per cent. of all dust and dirt in the air. This means that it will take fifty times as long for the generators to become plugged up with dirt as would be the case without the washer. As the generators had operated for a year before the washer was installed without plugging up the air ducts to a very great extent, it is evident that the life of the generators with the air washer is practically unlimited.

Temperature guarantees on air washers are based upon what is known as the "wet bulb" temperature. If two thermometers are placed

side by side and the bulb of one of these is covered with wicking which is kept moist, it will be found that the temperature shown by the latter, or wet bulb thermometer, will be lower than the temperature shown by the thermometer which is open to the air, or as it is generally known, the "dry bulb" thermometer. This lower temperature is due to the evaporation of moisture from the wicking by the air, and the more rapidly the moisture is evaporated, the lower will be the temperature of the wet bulb thermometer. Any one can observe this phenomenon by placing some highly volatile liquid, such as ether, on the hand. The rapid evaporation of the ether will result in cooling the surface very noticeably. The thermometer is cooled in the same way. Evidently the rate at which the thermometer is cooled depends upon the capacity which the air has for evaporating the water in the wicking, and hence depends upon the humidity of the air. The lower the humidity, that is, the smaller the quantity of water already held in suspension in the air, the more rapid will be the evaporation of moisture from the wet bulb thermometer and the lower will be the temperature of the thermometer.

The temperature guarantee made on the air washer is that the temperature of the air leaving the washer, when measured by an ordinary thermometer, will be as low as the temperature of the entering air, as shown by the wet bulb thermometer. Under ordinary conditions this will mean a lowering in the air temperature of from 8 to 12 degrees.

This lowering of the temperature of the air going to the turbo-generators means that under given load conditions the generators will run cooler, or, for the same temperature rise, the capacity of the machines may be increased anywhere from 10 to 15 per cent. As the turbines on the generators at Station 3 have

ample capacity to take care of an increased load, it practically means an increased generating capacity of from 10 to 15 per cent. at the station without any additional expense except the cost of the air washer.

The Meter Versus the Clock

BY L. W. LAYMAN

A customer came into the Company's Office to make a complaint about her gas bill, stating that she wanted her meter tested, as it must be wrong. It could not be right, for her bill was much higher than usual, and since she had not done any more cooking than usual, she knew that she had not used the amount of gas specified on her bill. She wanted the bill corrected and then she would pay it.

The man who waited on her knew that gas meters are more reliable than clocks, will run for longer periods of time with practically no attention, and then upon test will prove to be within 1 or 2% accurate. He asked the customer if she ever started her daily duties in the usual way and then found that when they were completed it was later than she expected.

He said to her, "Did you send your clock away for repairs and regulation, or did you assume that it was right? Of course you did the latter because you have checked that clock a great many times and usually found it doing its duty. Now if you will do the same thing with your gas meter, you will have the same confidence in its accuracy that you have in your clock. Give it a trial, read it every day, and see if it does not always tell you the truth."

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Because a man gets hurt it is no sign he was careless. His injury may have been caused by the carelessness of someone else.

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| Engineering and Construction | |
| H. C. DEFFENBAUGH | |

Vol. III NOVEMBER, 1915 No. 5

With this issue "Gas and Electric News" resumes publication. From May 1912 until August 1914 it recorded the activities of the Rochester Railway and Light Company. With the August 1914 number it suspended publication, and we have become acquainted with the Company's activities since that time through our various departmental and other meetings, our correspondence and our daily intercourse.

It will be the purpose of the magazine henceforth to amplify and extend these means of communication, and a method as outlined in our statement of correspondents above has been adopted for this purpose. The Department correspondent is expected to provide the Editor with the news of the department or departments which he represents, and to do this effectively he must have the co-operation of the other department members. As we have all experienced in the past a fine spirit of co-operation on the part of our associates, we feel justified in relying on its continuance.

We do this not in the spirit of expecting favors, but rather in the spirit of offering opportunity. Every individual owes it to himself to make the most of life. This duty is generally understood, but there are, however, many who neglect to improve the opportunities which exist, for the reason that their hopes are centered on some "big chance" which they expect to materialize in the future. To such this magazine offers an opportunity to broaden by the enlargement of acquaintance, by the acquisition of knowledge, and by the development of expression. When we as individuals profit, the Company profits and vice versa. While the correspondents expect your assistance, you are not thereby confined to this manner of expressing your individuality, for your individual communications to the magazine will be welcomed and gladly printed.

The new editors take this opportunity of renewing their acquaintance with their friends throughout the Company. In the course of time we hope to know all our fellow employees, and we trust that our relations with our new acquaintances will be as profitable and harmonious as they have been with our old friends.

The Handbooks on Rules and Regulations have been revised by the General Safety Committee and are now in the hands of the printer. The book known as "Rules and Regulations for Employees of the Electric Department", which was prepared by Superintendent Yawger several years ago, has been divided into four separate sections, printed separately, and issued for the Electric Generating, Meter, Line and Underground, and Subway Departments respectively. The subject matter of these books is practically unchanged, except as improvements in the art have required minor changes in

methods of operation. The book is still by far the most satisfactory compilation of rules for Electrical Generation and Distribution that has come to the attention of the Committee.

Superintendents Haftenkamp and Hellen have prepared new books for the Gas Generating and Distribution Departments respectively. These are based upon various general orders which have been issued from time to time, and contain some features from Mr. Yawger's book. They also incorporate the ripe experience of the authors, and are in the judgment of the Committee the most satisfactory books on these subjects yet published.

The book on the "Use of Dynamite", was written by the Editors of this magazine in collaboration with Messrs. Hellen, Montignani, French, Rich and Mattice, and is believed to be as satisfactory as those mentioned above.

These books have had the approval of the management, and will be issued to the employees concerned for the purpose of securing the greatest possible efficiency and safety in the operation of the Company's business. They will repay careful study, not only for the purpose of assisting in the work in which we may be severally engaged, but for the purpose of fitting us for work of greater responsibility.

We note in the news from the Engineering and Construction Correspondent, that our old friend John C. Parker, head of the Engineering Department since its inception, has resigned to accept the Chair of Electrical Engineering in the University of Michigan, his Alma Mater. It is impossible for us to express our sense of personal loss. Much of Mr. Parker's work shows in the tangible form of steel and stone and of business on the Company's books. Much of it shows in the intangible form of good will and kindly spirit toward

the Company throughout the City. Those of us who are his personal friends and who have worked under his direction, remember with warm hearts his beneficent supervision together with his solicitous for both the Company's and own personal welfare. We all unite in wishing him success in his work at the University which honors him, and which is honored by him.

From time to time we have been reminded of the number of accidents which are constantly occurring, with their consequent suffering and economic loss. We shall have occasion in future issues to print statistics on this subject, together with reminders and suggestions toward the reduction in the number of accidents, and the care of those which do happen. Our expression "Safety First" is the slogan of an organized effort toward the actual elimination of all accidents. All are familiar with the suffering and financial loss incurred by accidents; likewise we are familiar with the large degree of success which has crowned our organized effort toward their elimination. Are we all, however, familiar with the fact that the success of the organized effort is due to individual action? Does this remind us that we may be the careless ones, not the other fellows? Our honest answers to these questions may mean that we will take a much keener interest in Accident Prevention.

We note with pleasure that many representatives of the various departments are spending part of their leisure evenings in study at Mechanics Institute, the Evening High, Commercial and Correspondence Schools.

We are gratified to learn that our Assistant General Manager, Mr. Herman Russell, has been appointed Vice-President of the American Gas Institute.

Electric Power at the Foster-Armstrong Piano Co.

BY ROYAL PARKINSON

When the Despatch Heat, Light & Power Company introduced its new rate schedule for electric service last spring, a great majority of its customers enjoyed a reduction in their costs. A few, however, were to have their costs increased, and the Company devoted much effort to studying conditions of these few. One of the largest consumers to be thus affected was the Foster-Armstrong Piano Company. This consumer has been paying the Company a considerable sum yearly for service used to supplement the supply from its own power plant. This service operated the cupola blower a short time each day throughout the year, and the factory lighting in the winter months. This was "peak load," and under the proposed prices would have cost the piano factory about one-third more under the new rate. It was therefore evident that this service would not be worth the higher cost to the piano works.

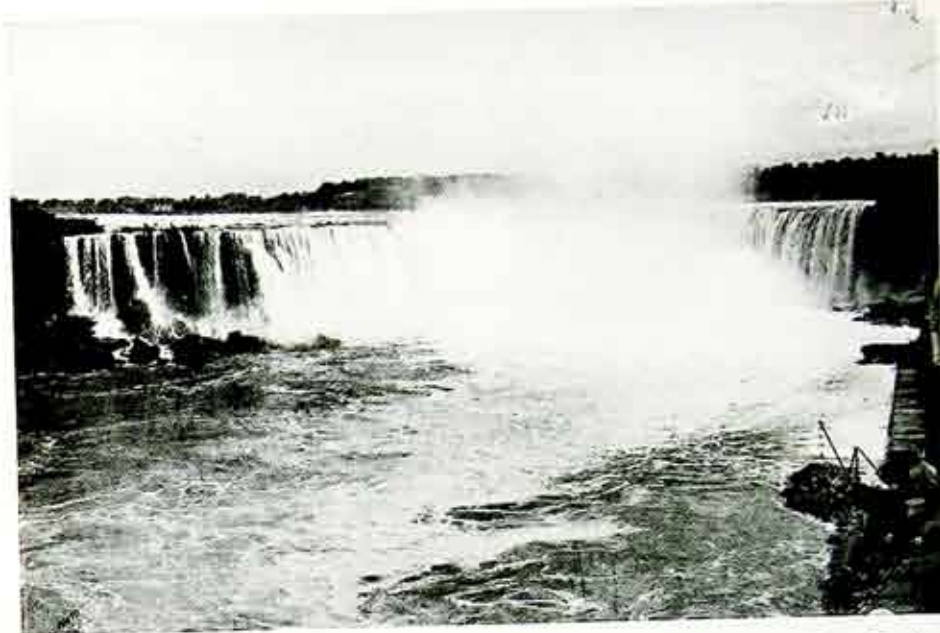
There were only two alternatives to generation at the factory of the power hitherto purchased; a change in the conditions of use in order to avoid merely peak use if possible, or the purchase of all of their power. The piano works could not decide, nor could the Company recommend which alternative, if either, should be adopted, without thorough knowledge of the conditions of production and use of both steam and electricity at this particular factory. Mr. A. A. Packard, Superintendent for the Foster-Armstrong Company consented to a test; both he and Engineer Brooks heartily co-operating with Mr. Ward and Mr. Keller of the Engineering Department in their steps to determine the real facts. A complete series of tests was made by the Engineering

Department and Mr. Keller's very thorough report was submitted to Mr. Packard in September. It was shown in the report that the piano works could not for several reasons advantageously adopt the Company's power for all purposes. The factory power plant is very efficiently operated. Much steam is used for process and space heating, and the investment costs for the generating equipment had already been incurred, and of course could not be avoided by changing the source of power. The report showed, however, that the piano works could use more economically about seventy-five kilowatts of the Company's power continuously throughout the day than it could buy coal and operate an extra generator. This is due to the fact that the factory had no use for the steam exhausted for this amount of power. This solution of the problem, which has been adopted, is expected to save the piano company several hundred dollars annually under its former total expense for power and heat, and will also increase the lighting company's revenue from this customer by \$2700 per year.

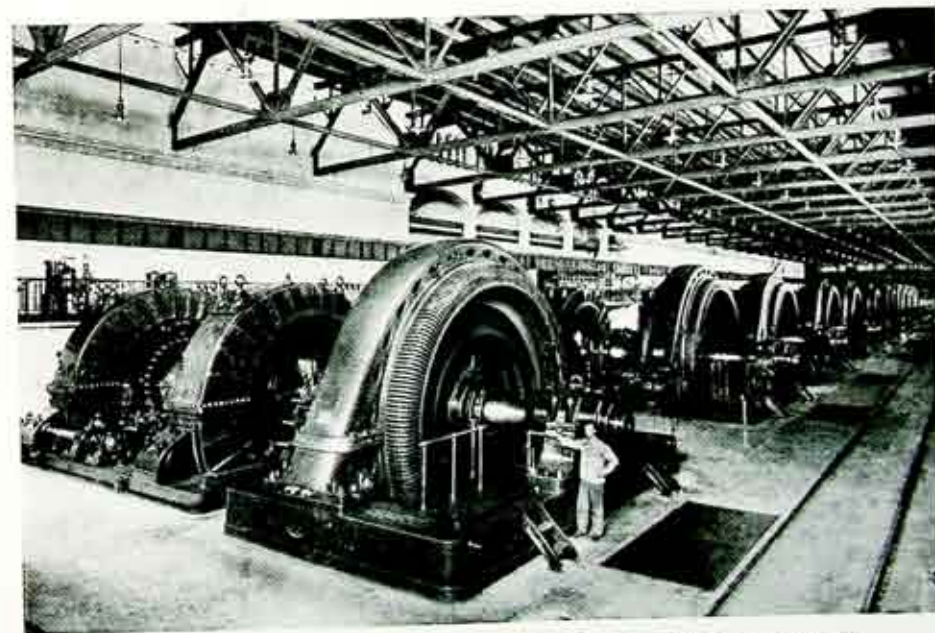
The success of the engineers in applying electric power to piano making, thus results in a marked economy to the largest piano factory in the world, and at the same time creates additional business for the Despatch Heat, Light & Power Company.

Safety First

A workman owes it to himself and his family to take care of himself. His labor is his only asset in business. When injured he is for the time being a bankrupt. If killed, his family may be left destitute, and his children deprived of an education and forced to seek employment before their maturity. Such a condition reacts most unfavorably upon the common good of the community.



View of Niagara Falls, the source of the 60,000-volt energy which is supplied to Rochester through Station 33. The power plant of the Niagara, Lockport & Ontario Power Company is located at the foot of the Falls at the right hand side of the picture.



View of the generator room of the Niagara, Lockport and Ontario Power Co.

Water for this plant is diverted from the Niagara River over a mile above the Falls and is conveyed through two 18-foot penstocks to the wheels on the level of the river below the Falls. It is interesting to know that in one two-thousandth (1-2000) of a second after the water has imparted its impulse to the wheels in the plant, the electricity thereby generated is turning the wheels of the street cars in Rochester.

Auditing



Monthly Report on New Business

Net Gain in Consumers in Nine Months to September 30th, 1915

| | Dec. 31, 1914 | Sept. 30, 1915 | Gain in 9 mos. 1915 |
|--------------------|---------------|----------------|---------------------|
| Gas..... | 67,763 | 68,461 | 698 |
| Electric..... | 16,687 | 19,098 | 2,411 |
| Steam..... | 36 | 41 | 5 |
| Totals..... | 84,486 | 87,600 | 3,114 |

Net Gain in Consumers in Twelve Months to September 30th, 1915

| | Sept. 30, 1914 | Sept. 30, 1915 | Gain in 12 mos. |
|--------------------|----------------|----------------|-----------------|
| Gas..... | 66,914 | 68,461 | 1,547 |
| Electric..... | 15,531 | 19,098 | 3,567 |
| Steam..... | 30 | 41 | 11 |
| Totals..... | 82,475 | 87,600 | 5,125 |

Statement of Consumers by Departments as of September 30th

| Sept. 30th | Gas Dept. | Elec. Dept. | Steam Dept. | Totals | Increase Each Year |
|-----------------|-----------|-------------|-------------|--------|--------------------|
| 1908 | 39,565 | 5,546 | | 45,111 | |
| 1909 | 43,267 | 6,180 | | 49,447 | 4,336 |
| 1910 | 48,925 | 7,294 | | 56,219 | 6,772 |
| 1911 | 53,927 | 8,818 | 19 | 62,764 | 6,545 |
| 1912 | 58,354 | 10,633 | 19 | 69,006 | 6,242 |
| 1913 | 63,490 | 13,430 | 22 | 76,942 | 7,936 |
| 1914 | 66,914 | 15,531 | 30 | 82,475 | 5,533 |
| 1915 | 68,461 | 19,098 | 41 | 87,600 | 5,125 |
| Gain in 7 years | 28,896 | 13,552 | 41 | 42,489 | |

Increase in Consumers by Months

| Gain in | 1914 | 1915 |
|-------------------------------------|--------------|--------------|
| January..... | 227 | 42 |
| February..... | 231 | 311 |
| March..... | 281 | 241 |
| April..... | 469 | 470 |
| May..... | 566 | 314 |
| June..... | 451 | 508 |
| July..... | 426 | 366 |
| August..... | 617 | 426 |
| September..... | 653 | 436 |
| Net gain in nine months..... | 3,921 | 3,114 |

Miscellaneous Data

| | Sept. 30, 1914 | Sept. 30, 1915 | Gain in 12 mos. |
|------------------------------------|----------------|----------------|-----------------|
| Miles of gas mains..... | 419 | 430 | 11 |
| Miles of underground cable..... | 939 | 1,013 | 74 |
| Miles of overhead lines..... | 1,600 | 1,687 | 87 |
| Miles of subway..... | 193 | 225 | 32 |
| No. incandescent street lamps..... | 3,336 | 4,006 | 670 |
| No. arc street lamps..... | 4,325 | 4,292 | 33 (Dec.) |
| Total no. street lamps..... | 7,661 | 8,298 | 637 |
| No. of employees..... | 983 | 1,096 | 113 |
| Amount of pay roll (for mo.).. | \$74,906.35 | \$84,996.37 | \$10,090.02 |

There are filed in a bookcase in the Stenographic Department twelve months' issues of the following magazines:

- Gas Age
- Waterways
- Aera
- Heating and Ventilating Bulletin—Gas Association
- N. E. L. A. Bulletins
- Opinions—Public Service Commission
- Decisions of California Railroad Commission
- The Motor Truck
- Electrical Review
- Electrical World
- Report of Joint Committee on Calorimetry of the Public Service Commission and Gas Corporations
- American Gas Light Journal
- Gas Institute News
- Gas and Electric News
- The Rotarian

These are for reference and must not be taken from the Department. Miss Amelia Harold has charge of them, and will open the case for anyone desiring to consult them.

Mr. Asa Morse has completed forty consecutive years of employment with this Company, having been employed by the Rochester Gas Company, October 1, 1875, and serving the succeeding companies up to the present time. He was born in Rochester, July 20, 1843. He served in the Civil War from his enlistment in the 13th New York Vol. Infantry on April 13, 1861, until honorably discharged September 8, 1861. He re-enlisted in Battery L, First New York Light Artillery, December 27, 1861, and was honorably discharged as Sergeant June 17, 1865. Mr. Morse was in many prominent battles. In the Battle of Gettysburg his regiment was one of the first to open fire on the Confederates, and his battery was the only one in the regiment to survive the day. Mr. Morse was married at Phelps, N. Y., on August 30, 1865, and celebrated his 50th wedding anniversary on August 30, 1915, at which time a great many of his friends, including some of the people in this office, enjoyed a very pleasant evening.

Mr. Louis Schweikart, one of the special men of the Order Department, was quietly married while on his vacation. Mr. Schweikart intended keeping this happy event a secret to his friends but it was impossible. They have forgiven him for not informing them of it, and presented to him a wedding gift and wish him and his bride many years of happiness.

The Commercial Department welcomes several new employees: Miss M. M. Hoffman, Miss Mamie Freedman, Mr. Albert Hauser, Mr. Adolph Becker, Mr. M. Thistle, Mr. J. S. Wall, Mr. William Weaver and Mr. Urban Leckinger. Messrs. Becker and Hauser have just completed a course of study at the Rochester Business Institute.

Misses Charlotte Baker, Eva Whyley and Elsie Faulstich have recently returned from a vacation trip to New York City. They are entertaining their friends with some interesting stories of their experiences, including a visit to the Hippodrome.

We are pleased to hear that our Popular Purchasing Agent, J. B. Eaton, has been elected to the office of Statesman of the Jovian Order for New York State. Mr. Eaton attended a Convention of the Association of Edison Purchasing Agents in Chicago, on October 22nd and 23rd.

Mrs. K. Sullivan has returned from a trip to Buffalo and Toronto, where she made an investigation of the tabulating systems used by Companies in those cities.


While W. S. Wallace was in Chicago last week he met our genial friend H. C. Willison, formerly with the General Electric Company. "Steve" wished to be remembered to his many friends.

Miss Margaret Belknap was recently operated upon at St. Mary's Hospital. Her many friends will be glad to learn that her condition is no longer dangerous.


Miss Mary McCleery, Assistant Cashier, is spending a two weeks' vacation in Pennsylvania. In her absence George D. Henderson is acting Assistant Cashier.

Miss Angeline Place of the Purchasing Department is spending her vacation in Elmira, Newton Falls and Watkins Glen.

Mr. C. G. Durfee addressed a special meeting of the men in the Order Department on October 19th.



Gas Manufacture



One of the most important individuals at the works is performed by a man who, during the winter months, makes a daily inspection of the gas holder heating systems. On the thoroughness of his work largely depends the reliability of the heat supply. Steam is carried in pipe risers up the guide frame columns, and distributed through flexible hose to the nozzles in the holder cups. It may be added that two factors enter into the prevention of freezing in these cups; one is the heat contributed by the steam, the other is the circulation of the water induced by the velocity of steam at the nozzles. On the two million cubic foot holder, Number 9, the risers carry the steam to a total elevation of approximately eighty feet above the ground, and connect with the hose lines at three different elevations. Heretofore these connections have been practically inaccessible, and if they demanded any attention, it was given at considerable risk. This holder is now equipped with an iron ladder permanently anchored to the guide frame, and with guarded landing platforms located at convenient working levels for each hose connection. The other holder at the works will shortly be equipped with a similar arrangement. This represents one of the best pieces of "Safety" work ever accomplished at the plant.

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Mr. William H. White, our "Big Chief" Engineer, spent his vacation, as usual, close to the Board Walk at Atlantic City. If you have never been there, save your money. You can have more fun, by getting William H. to tell you about it.

Another name was added to the roster of benedicts on June 22nd last when Mr. Jay A. Noble was married to Miss Clara Hein of Manistee, Mich., which, by the way, is the groom's home city. Mr. and Mrs. Noble are residing at 19 Eckhardt St.

+

The construction siding which was laid to the Company's property on Blossom Road during the erection of No. 10 gas holder, has been moved to the west side of the property, parallel with the boiler house. It will now be used as a general service siding, and will greatly facilitate coal deliveries at the holder.

+

General works foreman, Mr. Harry Sugden and his wife were recently visited by their daughter, Mrs. P. A. Stokes, now of Windsor, Ont. In 1914 Mr. and Mrs. Sugden visited Mrs. Stokes and Mrs. C. C. Gillis in Calgary, Canada. Mrs. Gillis was formerly Miss Eunice Sugden, and was an employee at the main office.

+

Mr. W. H. Jefferson, Eastern representative for the Cutler-Hammer Company, of Milwaukee, is at the Works for two weeks, supervising the final details of installation and testing of the new Thomas meter.

+

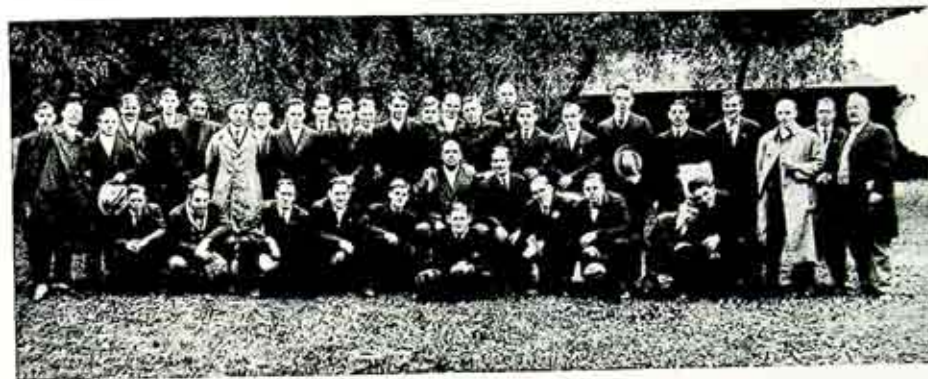
Mr. William Hummel, of 51 Broadway, who has been in ill health during the past seven months, is reported in very much improved condition.

+

Mr. J. A. Noble recently made a trip to Penn Yan in consulting service to the Penn Yan Gas Company.



Gas Distribution

Gas Shop Picnic

On Saturday afternoon, October 2nd, the employees of the Gas Shop held an enjoyable clambake at Point Pleasant. The game of baseball between the married and single men was won by the former by a score of 12 to 5. To the committee composed of Joe Matthews, N. Westfall and C. Schlenker is due much credit for providing the excellent dinner that was served.

+

The Front Street Yard has been greatly improved by paving the roadway with waterbound macadam. As a dust preventative, coal tar was sprayed over the completed work. The Transportation Department greatly appreciates this improvement.

+

Foreman Vincent Hoddick and Jos. Hohman have been spending their vacation camping on the shore of Irondequoit Bay. Messrs. Dowd, Brown and Asart visited the camp and helped dispose of their fine catches of bull heads and pickerel.

+

A ten pound son recently arrived at the home of Mr. and Mrs. William Spears.

Foreman Frank Rich has just completed an extension of over 3000 feet of 6-inch main in the Browncroft Tract on the following streets: Newcastle, Corwin, Windemere Roads and Gramercy Park.

+

Foreman Frank Hubbard and Stanley Burne spent two weeks recently at Lake Caroga and Canada Lake in the Adirondacks.

+

Foreman James Fahy has been getting phenomenal mileage on gasoline. He will be pleased to advise anyone interested.

+


During the summer Mr. Frank Herring agreeably surprised his many friends by entering into the state of matrimonial felicity.

+


Mr. Charles Reid recently became a member of the staff of the Gas Street Department as a Draftsman.

+

Miss Mae Hoffner recently joined the office force of the Gas Street Department.



Electric Generation



Since the 25th of September Station No. 4 has been deprived of water, due to the operations of the Shongo Construction Company in deepening the river channel. In view of the fact that this station has considerable direct Edison generation, it became necessary to carry this amount on conversion apparatus at the various stations. The Edison service is the most important to maintain, due to the difficulty of picking up a load which has been dropped. This load is now carried on 25 cycle rotaries with all 60 cycle motor generators running lightly loaded in parallel on the Edison bus, but with sufficient generating capacity back of them to pick up the load in the event of trouble on the 25 cycle system due to Niagara, or other 25 cycle disturbances. This means the sacrifice of a slight efficiency to insure continuity of service, as the losses of motor generator sets, particularly at light loads, are considerably lower than rotary converters. This disadvantage has been offset somewhat by the large amount of 60 cycle water generation we have been able to carry, due to high water in the river. This increased load is carried without additional expense at the water power stations, and peaks, which must be carried by steam, are considerably reduced.

A doorway in the south wall of the new boiler room, and a stairway leading from the roof of the old boiler house to the new coal bunkers, have recently been constructed at Station No. 3. These will be used instead of the old ladders which often became icy during the winter.

During the past months the lightning has been of unusual severity, and it is gratifying to know that little trouble was experienced, compared with former years, due to the increased lightning protection on lines and in stations. Toward the end of the season one of the three 2500 K. W. transformers at Station No. 33, used for lowering the Niagara voltage, was wrecked, necessitating the installation of a new set of coils. It is a fortunate circumstance that the coils were shipped from the General Electric factory a day or two before the strike, or repairs might have been delayed indefinitely. Since the occurrence of the trouble, the load has been carried on six 1000 K. W. transformers which are carrying a full load on our present Niagara demand.

This is "house cleaning" time at the several stations. The dismantling of Station No. 2 is still going on, and over \$12,000.00 has already been realized from the salvage. This, however, is exceedingly small when compared with the amount which must be written off the books, representing the original valuation of the apparatus. Over \$1,000 worth of old copper and iron has been disposed of at Station No. 3, and about \$600.00 worth of old iron at the Paper Mill ruins, adjacent to Station No. 15, is now being taken out. In connection with this work all spare switchboard apparatus, at the various stations, is being stored at the Bee Hive Building, where it may be conveniently looked over and used where possible when new installations are made.

The work of cleaning the Intake at Station No. 4 has been stopped several times by high water. The high water, however, has enabled the station to generate considerable current for the Edison System, which means much at this time of the year.

These unusual conditions result from the river deepening work being done by the City to prevent dangerous floods. An ordinary amount of water in the river is diverted past the stations by coffer dams. During high water, some water flows over the coffer dams into the raceway. Mr. Begy has been of assistance to the river contractor by draining the leakage from the coffer dam through one of the smaller turbines.

A new system of station reports has recently been inaugurated which will separate the various losses in detail, and enable the operators to study more intelligently the conditions with a view toward keeping losses at a minimum. It was necessary to install about 100 meters to accomplish this result, but the cost of these will be offset in a very short time by the economies effected.

The water meter and piping on the line between the Gas Works and Station No. 34 have been changed to prevent bursting of the meter by water hammer and to provide a line for sprinkling and fire protection at Station No. 34.

Assistant Superintendent P. J. O'Neill is removing all scrap iron and debris from the lot in the rear of Station No. 3, and has constructed a much needed storehouse from refuse lumber and structural steel.

On October 21st, Station No. 6 had the highest Edison peak load in its history, 3,243 K. W.

While testing the fire valve at Station No. 4 recently the valve could not be closed tightly enough to prevent leaking. Upon taking the valve apart, a large crab was found wedged in the valve seat.

It seems certain that there is a race suicide in the families of the men at Station No. 4. Late arrivals are a 10 lb. son to H. Pasley, and 12 lb. sons to L. V. Begy and J. Coyle.

Quoit pitching is being developed into a fine art by the steam fitters and the men from the blacksmith shop at Station No. 3.

Mains for Steam Heating are being laid from Station No. 35 to the Brewster, Gordon & Co.'s and Cunningham Co.'s buildings.

Mr. P. J. Drumm, Chief Steam Engineer at Station No. 3 is on a two weeks' hunting trip in the mountains.

The stork also visited the home of Foreman B. E. Noyes about two months ago. Mr. and Mrs. Noyes call him "George Franklin."

Mr. Robert J. Lennon of Station No. 3 is the father of a husky boy born October 9th.

Miss Bessie Oberst and Mr. Fred B. Odell of Station No. 35 were married October 28th.

At a negro wedding, when the clergyman read the words "Love, honor and obey," the bridegroom interrupted and said "Read that again, Sahl! Read it onct mo', so's de lady kin ketch de full solemnity ob de meanin'. I'se been married befo!"—Argonaut.

"Who gabe ye th' black eye, Jim?"
"Nobody give it t' me. I had to fight for it."
—Life.



Electric Distribution



J. O. Montignani, who for the last fifteen months has been Inspecting Engineer for the Utilities Mutual Insurance Company, is again associated with the Rochester Railway and Light Company as Engineer of Electrical Distribution, attached to the Engineering Department. Mr. Montignani was first employed in Rochester with the New York State Railways as Assistant Engineer of Maintenance of Way in 1904. He came to the Rochester Railway and Light Company in 1908 as Electrical Engineer in the Operating Department, which position he held until July, 1914, when the Utilities Mutual Insurance Company was organized.

We present below a letter from Mr. Montignani to his friends in the organization.

To my fellow employees of the Rochester Railway & Light Co.

On my return to the employ of the Rochester Railway & Light Company after fifteen months of wandering throughout the length and breadth of the State on behalf of the Utilities Mutual Insurance Company, I am glad to have the opportunity through the medium of the Gas and Electric News of expressing my pleasure in being back again with my old associates. Those of you who have followed the fortunes of the Utilities Mutual Insurance Company since its inception know how successful the venture has been, and I consider myself exceedingly fortunate in having been identified with the launching of so important an enterprise. The uniform courtesy with which I was treated in visiting and inspecting the forty odd plants of Gas and Electric Companies in my territory amply confirmed an impression formed long ago that there is no better class of men anywhere than in the Public Utilities business.—J. O. Montignani.

The final chapter on a very satisfactory contract is being written, in the sale of the aluminum wire of the transmission line along the Barge


Canal from Fairport to Macedon. About four years ago the line was erected to supply power for excavating a section of the Barge Canal. It was a steel tower, aluminum line, twenty miles in length and its cost was about \$28,000. The scrap aluminum was recently sold for about \$25,000, and the steel towers will be kept for future work. The high price for the wire is an indication of the demand for such metal, created by the European War.

On Avenue D near Hudson Avenue a small boy wearing a pair of linemen's spurs was found climbing one of the Company's poles. This pole carries 3 phase, 4150-volt distribution lines, and the boy had climbed to within 25 feet of the wires. On a stepped pole an occurrence of this kind may be expected, but a lad climbing a pole with spurs is somewhat extraordinary.

The Distribution Department will soon connect the Genesee Brewing Company's line with the tie line between Stations No. 3 and No. 34. Some of the 1,000,000 C. M. cable which was taken from old Station No. 2 will be used on this work.

G. W. Tracy, of the Underground Department, is confined at St. Mary's Hospital, following a very serious operation on October 5th. All wish him a very speedy recovery.

J. McNeil of the Line Department is seriously ill at his home, 42 Cameron Street. Reports as to his condition are very favorable.



Engineering and Construction



Mr. John C. Parker has resigned as Mechanical and Electrical Engineer of the Company, to become Professor of Electrical Engineering at the University of Michigan, Ann Arbor. Mr. Parker was graduated from Michigan in 1901 and since 1910 has been non-resident lecturer there on the subjects of electric power transmission and distribution. He was formerly assistant to the engineer-in-charge at the plant of the Ontario Power Company, Niagara Falls, Ont., and while in this connection had much to do with the construction of the transmission line of the Niagara, Lockport & Ontario Power Company, also designing and installing the systems of receiving stations and substations for delivering 60,000-volt Niagara energy to the plant of the Lackawanna Steel Company. Afterward he designed the transmission line and system for bringing Niagara energy to Rochester. In recent years Mr. Parker has devoted much of his time with the Company to the study of the general economics of power generation, distribution and sale.

A few weeks ago it was decided to temporarily install, at the Luitwieler Pumping Engine Company's plant, a 5 and a 10-horsepower motor for the purpose of replacing a 14-horsepower gasoline engine which they had been using for the past five years. After rendering their first bill for electric power, we received a letter from the Luitwieler Company stating that they were well pleased with our electric service, and having shown a material reduction in the cost of power, they had ordered motors to make a permanent installation.

Mr. Franklin J. Howes, who was Assistant Hydraulic Engineer, has been promoted by the management to the position made vacant by the resignation of Mr. John C. Parker. Mr. Howes is a graduate of the University of Michigan and prior to his connection with this Company was engaged in Colorado and Utah in the exploitation of gold, silver and copper mines, and in the construction of shafts, tunnels and water power development for use in mining operations. He came to the Engineering department in 1908 and has since been making investigations, designs and reports for the improvement of the Company's hydraulic properties, and with these activities he has been carrying on an extensive consulting practice in hydraulic engineering.

Mr. Howes is well qualified to assume the responsible duties which devolve upon the head of the Engineering department, and it will be our pleasure to co-operate with him to the fullest extent possible.

Miss Marion Wheelock, formerly of the Auditing Department, and Mr. Sydney Alling were married at St. Paul's Church, on October 5th.

Mr. and Mrs. Alling will live at 57 Morningside Park.

On Saturday, Oct. 16, the Rochester Engineering Society took an automobile excursion to Hemlock and Canadice Lakes to study the Rochester Water Supply.

Wilmot E. Hall, a student of the University of Rochester, is assisting the statistical division of the Engineering Department.

Athletics



The Office Base Ball Team

Top row, left to right—G. Butler (Coach) H. Stape, J. McCarthy, J. Stokes (Manager)
Middle Row—R. Guppy, R. Connell, J. Mogge, J. Culligan, J. Mury, J. D. Rockefeller
and R. Davis, (Capt.) Bottom Row—J. Harrison, H. Dougherty.

During the past season the office team has been very successful, winning eight out of the ten games played. Five league games were played of which four were won, giving a percentage of 0.800. The All Star Team was defeated by a score of four to one at the Company Picnic at Manitou Beach. The Brighton Team was defeated by a score of twelve to one, and the 16th Ward All Star Team lost two games. The Office Team lost to the Seneca Camera Works team in a contest for the championship of the Industrial Teams of the City. A return game has not yet been played.

The battery, Guppy and Connell, did much to strengthen the team. This battery is considered one of the best in the City.

A stronger team is promised for next season by Manager Stokes. The boys have formed a bowling club, and are keeping in condition by bowling on Tuesday and Friday evenings at the Elm Alleys.

The interest in tennis among Company employees seemed to be just as keen this year as last, and the Company courts at Searle Park and at Station 33 were kept pretty busy.

The courts were very much in demand on Saturday afternoons—and sometimes on Sundays, too! Having the court at Station 33 illuminated is a big convenience, of which full advantage was taken, and more use was made of this court evenings than at any other time.

The game seemed to be equally as popular with the girls as with the boys, and under the tutelage of Miss Atkinson quite a number of them showed good progress. A few found the sport pretty strenuous the first time out, and as soon as they could hobble around the next day, swore "never again," but when the next opportunity presented itself, all forgot the recent lame muscles and creaking joints and went back for another lesson. Neither the girls nor the boys held a tournament this year. John Devlin says it is a big job to keep those tennis cups polished, so it is to be hoped that tournaments can be held next year and the cups awarded.

Late in the summer the boys organized a tennis team for the purpose of playing matches with teams from other city organizations. Only one match was played, however, the team composed of Wagner, Kiefer and Bailey playing five sets with the Hubbell Class, and winning by a score of four to one.

Through the efforts of a group of local enthusiasts, most of whom are Britishers, Soccer Football is winning a place on the sporting page. John Martin, oiler at the Works, is one of the liveliest boosters. He played professional Soccer for ten years in England, chiefly on the Preston North End, and Saint Helen's teams, the latter being his home town. Coming to Rochester three years ago, he associated himself with the Rochester City Team of the Rochester and Vicinity League, and captained his team to victory last season. This

season the league is playing benefit of the Prince of Wales Club. The league awards a challenge cup to the winning team, and trophy medals to the individual players.

Nearly twenty men from the office bowled on Friday evening, October 8, 1915, at the Elm Alleys, preparatory to forming a club, and the following were selected to represent the office: R. Connell, R. Guppy, J. Mury, J. Mogge and C. Harmor. This team is now waiting to hear from some of the other Departments. The remaining members will form teams to bowl every Friday evening. Everyone will be welcome to join in these games. Send your name to J. Stokes not later than Wednesday preceding the Friday of each week.

During the past month nine members of the office force participated in a golf tournament. Messrs. Keller, Taylor, Layman and Springstead turned in the best scores. In the play off for the prizes Mr. Keller was first and Mr. Layman second. Messrs. Taylor and Springstead have not yet been able to get together in a match to decide who will have third place.

"My, where do you suppose that man became such an expert swimmer?" remarked the lady in the beach chair.

"Why, madam," said the young man at her right, "he used to be a traffic policeman in Venice."

"Married only a few days and downcast? How's that?"

"You should have heard my wife's inaugural address, stating what she proposes to do."

"We want the doctor, quick!"

"Who's sick at your house?"

"Everybody except me. I'd been naughty, so they wouldn't give me any of the nice mushrooms papa picked in the woods."—*Current Opinion.*

Courtesy

Courtesy is the intangible element which gives value to service from any public utility corporation, be it electric railway, telephone, gas or electric company. It is a faculty which every employee and official should cultivate, particularly those who come in contact with the public. Courtesy has been defined as a combination of good manners, cheerfulness, patience and self-control. It is likewise the combination which unlocks the door to public confidence.

Courtesy is civilized civility, politeness originating in kindness and expressed habitually. Common civility is expected, uncommon courtesy is unexpected, and the lasting impression is always made by the uncommon and the unexpected. Politeness, literally polished, implies a high regard for the opinions and feelings of others. The great majority of complaints about service are founded on misunderstandings and their satisfactory correction depends more upon the manner in which the explanation is made than upon the explanation itself.

Courtesy is the chief ingredient in tact, that indefinable sense of touch with regard to human character. It lubricates the little frictions of business so that the machinery runs smoothly and efficiently. Like a muscle, it is strengthened by use, and, conversely, is weakened by non-use. It should always be exercised in the thought that "a soft answer turneth away wrath." Courtesy is pre-eminently a characteristic which can be acquired. Even the individual who is not naturally courteous can learn to be considerate of others. Acquired courtesy, unlike many other acquired qualities, becomes the owner admirably. If used in the proper spirit it always appears natural—a sort of second nature of the individual.

The whole of ancient heraldry and chivalry is summed up in modern courtesy. Whereas, 200 years ago a knowledge of heraldry, the science that treats of armorial bearings, formed an important part of the education of every gentleman, to-day the successful servant of the public knows that it is only with courtesy as his coat of arms that he can gain the friendship and esteem of those in the democratic court of public opinion.

These suggestions apply as well to the salesman and the engineer in every part of the electrical business. It is a lesson that all should learn and apply at every opportunity for intercourse with our fellow beings, if for no other reason than that courtesy begets good will and good will begets business. "Don't be curt—be courteous."—*Journal of Electricity.*

Applicant—"What is the first thing to do before you get a marriage license?"

Elderly Clerk—"Think it over, young man, think it over."

"IT COULDN'T BE DONE"

Somebody said that it couldn't be done,
But he with a chuckle, replied,
That "maybe it couldn't, but he would be the one
Who wouldn't say so 'til he'd tried.
So he buckled right in, with the trace of a grin on his
Face. If he worried he hid it.
He started to sing as he tackled the thing
That couldn't be done, and he did it.

Somebody scoffed: "Oh, you'll never do that;
At least no one ever has done it."
But he took off his coat and he took off his hat,
And the first thing we knew he'd begun it;
With the lift of his chin and a bit of a grin,
Without any doubting or quibbling;
He started to sing as he tackled the thing
That couldn't be done and he did it.

There are thousands to tell you it cannot be done.

There are thousands to prophesy failure;
There are thousands to point out to you, one by one,

The dangers that wait to assail you;
But just buckle in with a bit of a grin,
Then take off your coat and go to it;
Just start in to sing as you tackle the thing
That "Cannot be done", and you'll do it.

—*Railway Employees Magazine*

Gasoline

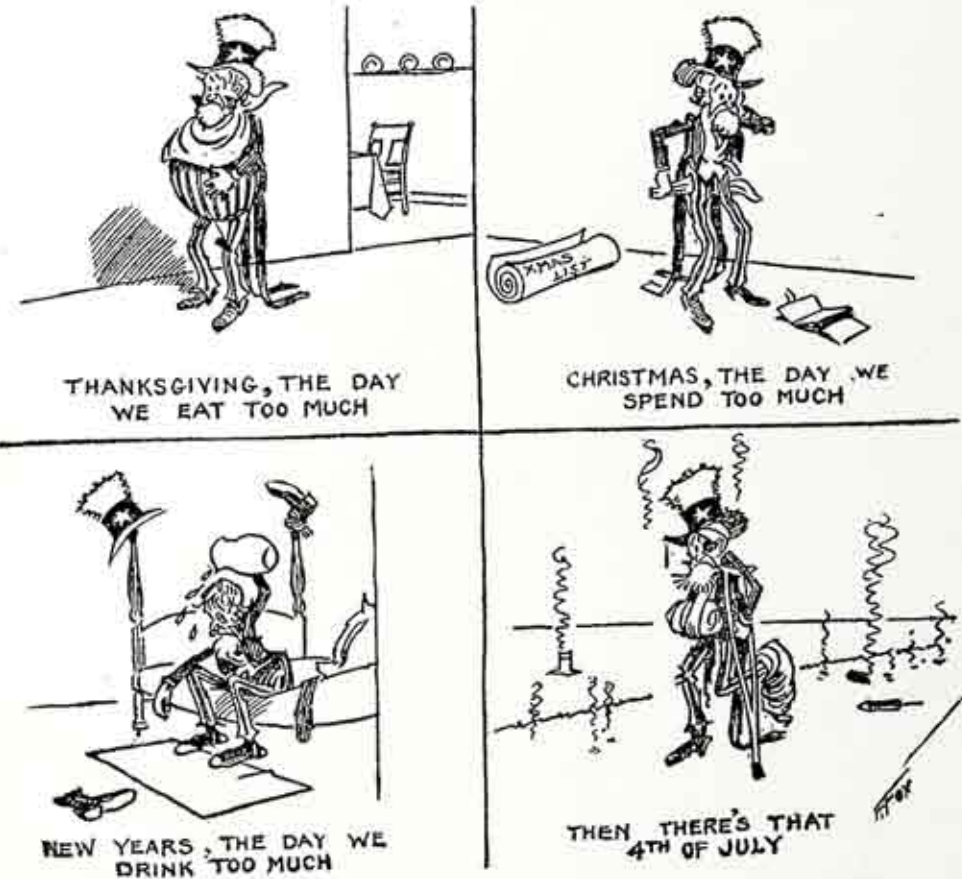
Gasoline, George Fitch tells us, was originally used only for cleaning gloves and ejecting hired girls through the kitchen roof, but has now been taught a great variety of interesting tricks, such as running automobiles, aeroplanes, motorboats, windmills, street cars, hearses, corn shellers and bicycles.

By the aid of gasoline we can travel 60 miles per hour through the air, 150 miles an hour over the land and six feet into the ground with the greatest ease.

A gallon of gasoline can do as much work in an hour as a horse can do in a day, and it doesn't have to be fed and bedded down at night. It can drive an automobile 20 miles, and while doing this can cause three runaways, a collision, a \$20.00 fine for speeding, a divorce suit and an inquest.

A gallon of whiskey at a Saturday night dance can cause a great deal of trouble, but it is tame and kittenish beside a gallon of whiz-water which is conducting a joy ride.

Gasoline is a clear, nervous liquid which is composed of speed, noise and trouble in equal parts. It is made of kerosene reduced to a more violent stage, and is kindly supplied to the restless portion of mankind by the fragments of the late Standard Oil Company.—*From Graphite.*



Courtesy of New York Evening Sun.

"All Our Best Holidays Seem to Be Devoted to Acting Foolish."