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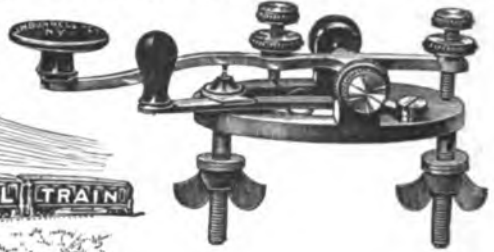
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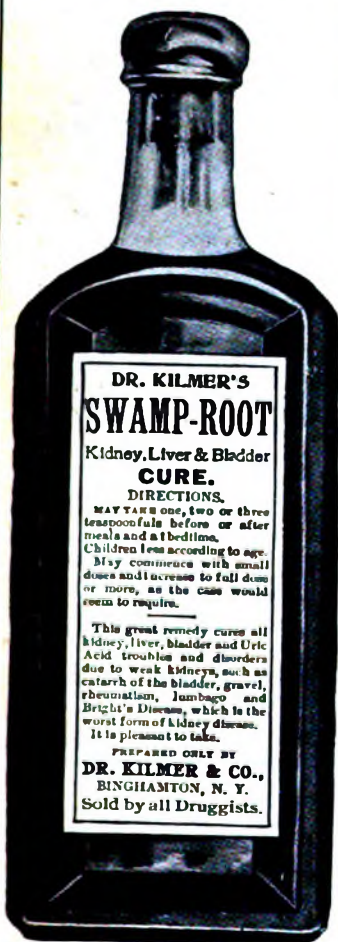
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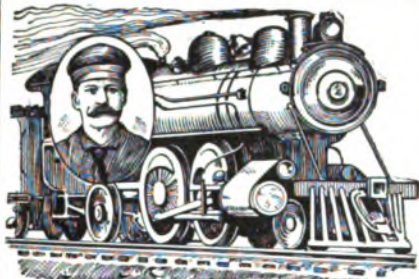
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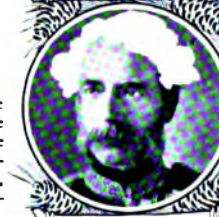
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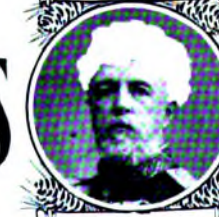
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No. 3.

NEW YORK, FEBRUARY 1, 1903

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SOME POINTS ON ELECTRICITY.

BY WILLIS H. JONES.

Branch Office Signaling Devices.

Branch and broker offices working on loops from the main office require a means of making their troubles known to the wire chief at headquarters whenever their respective circuits become interrupted or otherwise demand attention. On long single line circuits the method is very simple. A low resistance magnet, of say, about 4 ohms, to the armature of which is lightly hooked the metal tablet bearing the name of a broker firm, or the number of the wire, is inserted in the circuit at the main office in series with the relays and other instruments belonging to that wire. As the 4 ohm magnet requires about five times as much current to attract its armature as a 150 ohm relay does to actuate its lever, it is easily seen that so long as the comparatively weak current which normally traverses the circuit obtains, the retractile spring of the four ohm annunciator magnet will hold the tablet up. If, however, a very strong current should suddenly flow through the low resistance magnet the tension of the spring would be overpowered by the attractive pull of the magnet and cause the armature lever to release its hold on the tablet. The latter would immediately drop by force of gravity or other means devised for the purpose. In order to throw this necessary volume of cur-

rent through the coils of the annunciator the branch office, which, of course, is the first station, geographically speaking, beyond it, merely "grounds" the main wire momentarily, which operation crowds all the current that was previously flowing through many miles of the conductor into the short remnant of the circuit between the main battery and the ground wire, thereby dropping the tablet, lighting a lamp, or otherwise attracting the attention of those in charge of that circuit. Now, this is all very simple, as previously stated, for long circuits, but when the branch office desiring to signal is situated at the extreme, or distant end of the circuit, such as is the case on "city" or "pony" wires between two points in the same town or city, there is normally no means of shortening the circuit by the "ground wire" method because the wire ends there and possesses a permanent ground connection at that point.

Several methods have been devised to give such offices temporary signaling communication with headquarters, one of which, called the "Hancock-Carroll" method and used extensively by the Postal Telegraph-Cable Company, is illustrated in the accompanying diagram. As may be readily seen it is a modification of the first method described, inasmuch that the drop magnet consists of a low wound relay, usually 16 ohms, in circuit with the regular 150 ohm relays used on the line. The 16 ohm instrument, of course, requires a greater strength of current to operate it than is demanded by the 150 ohm relays, hence its armature lever stands in an open position when adjusted above the normal current, until the strength of the latter is increased, temporarily, for the purpose of attracting its armature. The increment of current is brought about by shortening the current by means of cutting out a resistance coil at the signaling station. This coil contains 300 ohms resistance, and as the actual resistance of the pony wire itself, together with that of the relays employed, does not amount to more than a few hundred ohms, the signaling station, as measured in ohms, is no longer at the end of the circuit. To all practical purposes it is situated at a point about half the distance (in ohms) from the battery at the main office. The operation of the device is as follows:

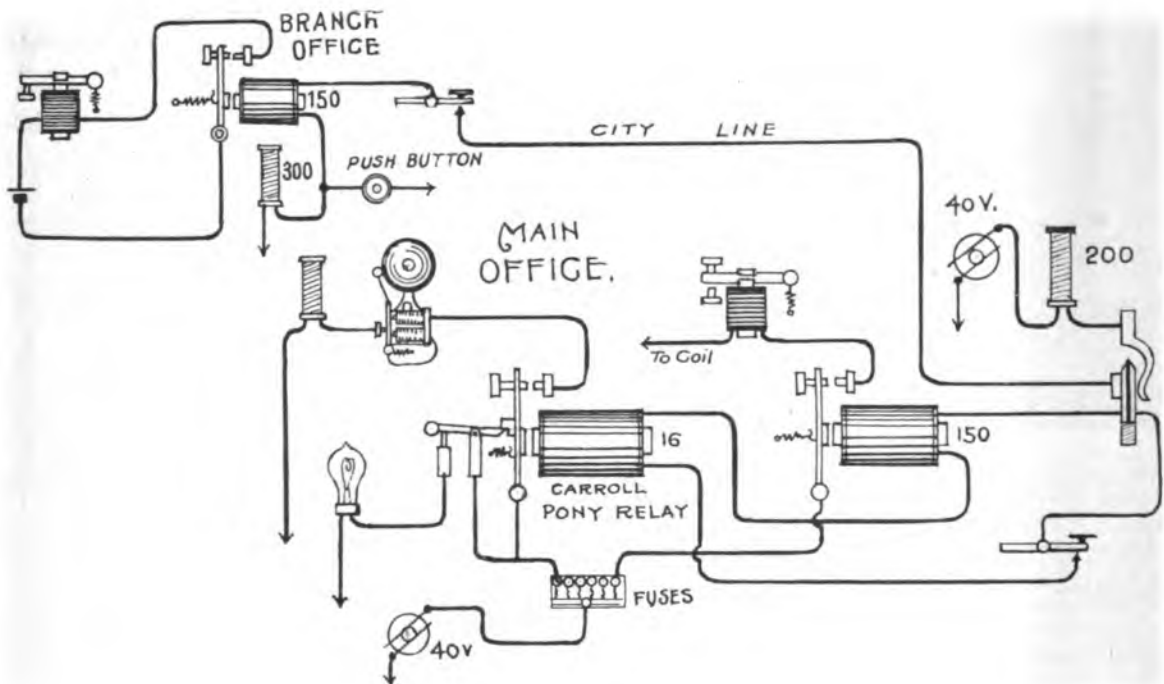
When the branch office desires to attract the attention of the attendant at the main office, the operator turns the lever of his three point switch which operation shunts the current direct to the earth, thereby cutting out a great portion of the total resistance previously contained

in the circuit. The battery at the main office thus having only one half or three quarters as much resistance to overcome as before, consequently causes a corresponding increment in the volume of current to flow through the conductor. At such times the armature of the 16 ohm relay is attracted towards the magnet and its lever closes a local circuit containing a bell or buzzer, as well as an electric light circuit containing a lamp. When the branch office cuts in the 300 ohm coil the small relay opens and the bell or buzzer ceases to operate, but owing to the mechanical construction of the small relay armature, as shown in the cut, the lamp continues to glow until released by the attendant who responds to the call, and resets the catch.

The Hancock-Carroll method, requiring the insertion of so much resistance, of course de-

tion of the current flowing through the conductor.

If a polarized relay is placed in a single line circuit and adjusted, by means of a slight bias to one side, the lever will remain closed regardless of the mere making and breaking of the current as the operators manipulate their keys during transmission of business, because the current in single line circuits always flows in the same direction. But should the terminal station touch the pony circuit with a wire carrying a higher electromotive force than the one feeding his own, the surplus pressure will cause a small current to flow back through the short conductor in an opposite direction to that which previously obtained. The polarized relay, or annunciator, at the main office will then respond to the altered conditions and release the "drop" as the lever is attracted and moves over to the other contact



mands an additional amount of battery power, over and above that which would be required to work the circuit without it, in proportion to the extent that conductor is thereby lengthened. In other words probably twice as much battery is required as would otherwise actually be necessary, but it is one of those things that cannot be helped, and the loss in one way is more than compensated for by gain in another direction.

THE W. H. JONES SIGNALING METHOD.

The only means that we know of by which terminal offices on pony circuits can operate an annunciator at the main office without the addition of resistance coils to the conductor, is one devised by the writer several years ago. It consists of a polarized relay which takes the place of the 4 ohm, or 16 ohm electro magnet just described and is opened by reversing the direc-

tion of the current flowing through the conductor. This method, of course, is only available where a terminal station possesses a common battery circuit employed for the purpose, or other leased circuits which carry a great electrical pressure. In large cities where several branch offices are situated near each other, a common battery conductor would be the proper thing. To prevent the current from the battery wire being shunted to the earth at the signaling station the latter should, of course, first open his key, for the purpose of disconnecting his ground connection and then strike or tap his own wire with the heavy battery lead at a point between his key and the main office.

If a man carries a mortgage it is usually because he can't lift it.

Business Notice.

The firm of W. R. Ostrander & Company has been incorporated, under the laws of New York State, and the new company has taken over the business of the firm, which will be continued at No. 22 Dey street, New York, and No. 1,433 and No. 1,435 DeKalb avenue, Brooklyn. There will be no changes, but on the contrary, the business will be conducted as heretofore, and entirely under the same control and management.

Attention is called to the advertisement on the front page of this paper, of the Electronic Battery, manufactured by the Swan Electric Manufacturing Company, 59 William street, New York. The device which is designed for purposes of securing electric treatment in the home is unique and attractive in form and positive in action, a toilet accessory that will recommend itself, for it acts as a distinct vitalizer when applied to any part of the human body. The company will gladly send an illustrated 16-page pamphlet descriptive of the battery and what it is capable of accomplishing to any one who may write for it.

Recent Telegraph Patents.

A patent, No. 718,544, for a telegraph system, has been obtained by E. R. Storm, of New York city.

A patent, No. 718,332, for a visible signal telegraph, has been issued to W. A. Farrell, of Wells-ville, N. Y.

A patent, No. 717,509-510, for relaying space telegraph signals, has been taken out by J. S. Stone, of Boston, Mass.

A patent, No. 717,966, for a telegraph transmitter, has been granted to C. T. Bourk, Lima, O. This is a device for beginners, consisting of a stylus to be moved over metallic segments in a tablet, representing the signals and in circuit with a sounder.

A patent, No. 717,776, for a quadruplex telegraph system, has been obtained by J. F. Skirrow, of East Orange, N. J. It is described as a differentially wound double acting relay having two separated cores, one pair of adjoining ends of which form the neutral relay and the other pair the polarized relay, whereby one instrument will serve the same purpose as the neutral relay and the independent polarized relay of the old form. A break key to enable the transmitting operator to hear the received signals when a "break" is made and means to prevent mutilation of the signals on the common side of the quadruplex; means for transmission by revolving rings instead of points.

Resignations and Appointments.

Mr. C. L. Pitcher, formerly manager at Newburg, New York, has been promoted to the managership of the Postal Telegraph-Cable Company, Syracuse, New York, vice W. A. Drake, resigned, to enter commercial business.

Mr. J. S. Calvert, of Richmond, Va., has been appointed assistant superintendent of the Western Union Telegraph Company at that point.

Mr. Harry Young has been appointed manager of the Western Union Telegraph Company at Wheeling, W. Va., vice C. R. Tracy, resigned.

Mr. J. L. White has been appointed manager of the Postal Telegraph-Cable Company, at Scranton, Miss., vice Miss L. Laurendine, resigned.

Mr. George Salloway has been appointed chief operator of the Western Union Telegraph Company, Buffalo, N. Y., vice Frank Kitton transferred to New York.

Mr. D. Skelton has been appointed superintendent of the American District Telegraph Company, New York, vice H. E. Roberts who becomes assistant superintendent of supplies of the Western Union.

Mr. C. L. Lewis has been appointed superintendent of the Postal Telegraph-Cable Company, with headquarters at Los Angeles, Cal., a new district established on January 1.

Mr. H. W. Withers, of the Postal Telegraph-Cable Company, Cleveland, O., has been appointed manager of the same interests at Canton, vice G. E. Hawkins transferred to Columbus.

Mr. A. A. Gargan, has been appointed assistant superintendent of the Western Union Telegraph Company, at Denver, Col., vice C. B. Horton, promoted to the superintendency of the district. Mr. Gargan has been identified with the Denver office for many years.

Mr. Wm. Lyle, manager of the Postal Telegraph-Cable Company, Natchez, Miss., who was transferred to Meridian, Miss., to take charge of the same interests, has, on account of illness in his family, been returned to Natchez.

Owing to the protracted illness of Mr. E. C. Cockey, superintendent of supplies and general purchasing agent of the Western Union Telegraph Company, New York, he has been given an assistant in the person of Mr. H. E. Roberts, the appointment to take effect February 1.

Recent New York Visitors.

Mr. Hosea M. Nichols, president Citizens' Banking Company, Oil City, Pa.

Mr. C. A. Darlton, superintendent of telegraph, Southern Railway, Washington, D. C.

Mr. E. B. Saylor, superintendent Western Union Telegraph Company, Pittsburg, Pa.

Mr. W. W. Splane, superintendent of telegraph, Standard Oil Company, Oil City, Pa.

Mr. Jesse Hargrave, electrician of the Southern Division of the Postal Telegraph-Cable Company, Atlanta, Ga.

Mr. P. V. De Graw, for the past twenty-five years a prominent figure in telegraph and newspaper circles and now representing the Cincinnati Inquirer at Washington, D. C.

General Mention.

The American Telephone and Telegraph Company has issued \$21,937,000 additional capital stock, bringing the total amount up to \$104,740,400.

Mr. L. K. Miller, formerly of Washington, D. C., has been appointed manager of the Pittsburg, Pa., office of the Yetman Transmitter, vice William M. Randall, deceased.

The Porto Rico Telegraph Company recently filed articles at Trenton, N. J., with the Secretary of State, increasing the capital stock of the company from \$100,000 to \$400,000.

Mr. Ray C. Allen, agent for TELEGRAPH AGE at Cedar Rapids, Iowa, writes: "I do not believe that a dumb agent could fail to sell copies of Jones' Pocket Edition of Diagrams. The book talks for itself."

Mr. E. C. Warren, formerly employed in the Cincinnati, O., Western Union office, is now associated with the Model Laundry Company, Zanesville, Ohio. He holds the position of secretary and treasurer.

Mr. W. N. Munro, who recently retired as manager of the Postal Telegraph-Cable Company, at Providence, R. I., was presented with a gold headed ebony cane as a mark of esteem in which he was held by the members of his staff, over whom he had presided for some twenty years.

Mr. L. S. Wild, manager of the Western Union Telegraph Company, Butte, Mont., in renewing his subscription, writes: "Your paper must be recognized as invaluable to the profession and I hope to get hold of some one who will stimulate interest in it and increase its circulation in this neck of the woods."

Mr. W. J. Camp, superintendent of the Canadian Pacific Railway Company's telegraph at Montreal, Que., in renewing his subscription says: "I find the articles, particularly those referring to office equipment, very interesting and instructive, and consider that every man engaged in the telegraph business should become a subscriber, which would result not only in benefit to the company, by which he is employed, but also in improving his own position."

Obituary.

John W. Cupps, aged fifty years, a well known telegrapher and electrician, of Pittsburg, Pa., died on January 22.

George A. Lowe, an old time telegrapher, died at Salt Lake City, on January 4, aged sixty-seven. For many years past he had been engaged in commercial pursuits.

John Currid, aged thirty-eight years, a telegraph operator, who lived at Dunellen, N. J., was killed in the railroad wreck on the Central Railroad of New Jersey, on January 27.

A. R. Pippitt, a wire chief of the Western Union Telegraph Company, at Kansas City, Mo., and at one time superintendent of telegraph of the Cotton Belt Railroad, died on January 26.

William Randall, aged thirty-seven years, a well known expert telegrapher, died of typhoid fever at his home in East Liberty, Pa., January 13, after an illness of two weeks. Mr. Randall for several years past had been assisting Mr Charles E. Yetman in the development of the Yetman Transmitter and did excellent work in this respect. He leaves a wife and one child.

The Railroad.

The Southern Pacific Railway Company contemplates the establishment of a telephone system as an auxiliary to the telegraph along its lines.

Mr. Edward P. Griffith, inspector of the Western Union Telegraph Company, New York, has been appointed superintendent of telegraph of the Erie Railway and of the Second District of the Western Union Telegraph Company, with headquarters at New York, vice F. L. Blendinger resigned. An engraving and biographic sketch of Mr. Griffith appeared in our issue of August 1, last.

Mr. L. B. Foley, superintendent of telegraph of the Delaware, Lackawanna and Western Railroad, New York; G. L. Lang, superintendent of telegraph of the Cincinnati, New Orleans and Texas Pacific Railroad, Chattanooga, Tenn., and C. P. Adams, superintendent of telegraph of the Chicago, Rock Island and Pacific Railroad, Chicago, Ill., constitute the committee on time and place for the next annual convention of the Association of Railway Telegraph Superintendents. It is generally understood that the next convention of the Association will be held at the St. Charles Hotel, New Orleans, on May 20, 21 and 22, although it has not been officially announced.

Organization.

St. Paul, Minn., Division No. 1, International Union of Commercial Telegraphers, held a smoke social at Central hall in that city which was attended by about 250 operators. Its purpose being purely social, the meeting was addressed by several union labor advocates.

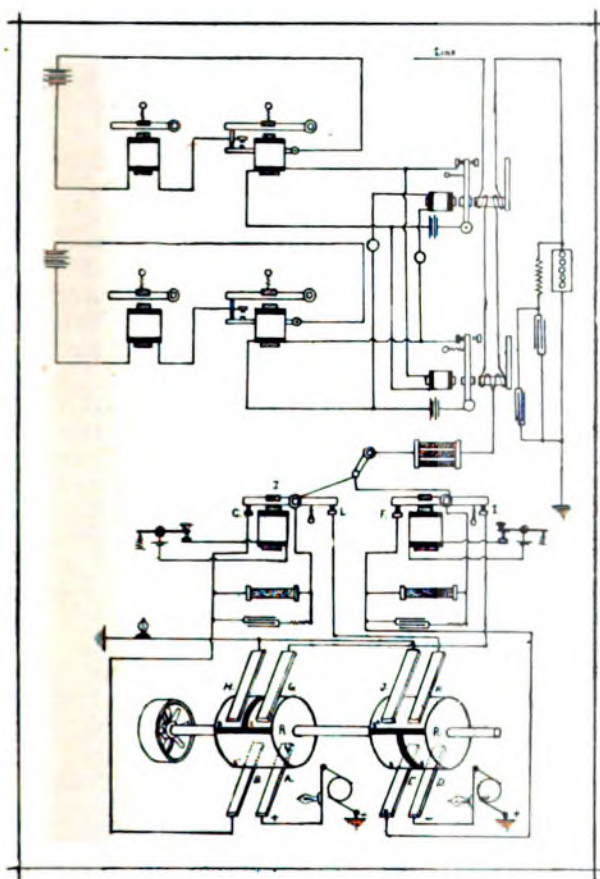
Five men, at New Orleans, La., were recently dropped by the Western Union Telegraph Company, for, it is alleged being members of the Brotherhood. The telegraph management, however, state the dismissals were made for good and sufficient reasons.

T. M. B. Association. Assessment No. 403 has been levied by the Telegraphers' Mutual Benefit Association to meet the claims arising from the deaths of Elizabeth F. Laney, at Washington, Ga.; F. C. Hill, at Albany, N. Y.; Frank H. Marsh, at Helena, Mont.; George L. Hawn, at Spencer, Iowa, and Anna E. Carter, at Chicago, Ill.

Improvements in the Roberson Quadruplex.

The present system of furnishing current for the Roberson or alternating quadruplex, is by means of a specially constructed dynamo, and it may be said that it requires a separate dynamo for each quadruplex to be operated.

The object of this article is to describe a new and simple device for which a patent has been applied for by Mr. J. C. Barclay, electrical engineer of the Western Union Telegraph Company, to take the place of the special dynamo. By means of this new device, the current to operate a quadruplex is taken from a direct current dynamo or other battery to a set of commutating rings, which distribute it to the transmitters of the quadruplex set as shown in the diagram.



A number of commutating rings may be placed on one shaft and rotated by means of belt or direct connection. It requires two rings and eight brushes for each quadruplex to be operated, and the current for any number of quadruplexes is distributed from the Western Union standard dynamos or batteries already installed. By this means the cost of operating the alternating quadruplex is reduced to a minimum, while with the old method it involved not only the expense of a separate dynamo for each quadruplex, but also the cost of power to run it, which is considerable.

The commutating rings and brushes are arranged on the shafts as shown in the diagram.

When a solid segment of a ring passes under a pair of brushes it places them in electrical connection. From this general condition the following operations are obtained, as soon as the shaft carrying the rings is revolved: If A and B are over S^1 and J and K are over S^2 , battery is thrown to the front post C of transmitter No. 1, and a ground is thrown to the back post L of that transmitter. If the distant end is sending while the home keys are open, the ground is reached through the back post of transmitter No. 1. If the home key is closed, a series of + vibrations are sent out taken from a dynamo or other battery whose - pole is grounded. This would operate No. 1 relay at the distant end. When the front and back posts of transmitter No. 1 are electrically connected to battery and ground respectively, the front and back of transmitter No. 2 are insulated, and vice versa.

The throwing of battery and ground from one transmitter to the other is done so rapidly (40 times per second) that the current taken from the leads in connection with the rings is as steady for all practical purposes as if taken from a direct current dynamo. The direct current transformer has been in use for some time and it has been demonstrated that the signals are received better than they were from the alternating current dynamo.

A full description of the Roberson or alternating quadruplex was published in TELEGRAPH AGE of March 16 and April 1, 1901.

The Autoplex.

Realizing the great necessity for a key which would relieve the operator from the immense strain imposed upon the mental and physical systems of those who are compelled to send for long intervals of time, or for those who are gifted or not gifted with the ability to manipulate the Morse key with ease and rapidity, Mr. Horace G. Martin, an electrical engineer and telegrapher, of New York City, has devised an instrument, known as the Autoplex, which, judging from the success with which it is meeting, fully accomplishes the desired result.

Mr. Martin says: "Having experimented for some time on automatic transmitters and having had occasion to observe the very interesting achievements of other workers in the automatic field, I decided that there was a demand for a small, simple and portable sending machine which, while being automatic or nearly so, would, as nearly as possible, retain the merits but not the demerits of the old Morse key. With these ideas in view and after four or five years of periodical experimenting with a score of different kinds of transmitters, the Autoplex has been placed upon the market. This instrument is not much larger than an ordinary relay. It has, besides an automatic dot mechanism with necessary contacts and speed adjustment, a key, the lever of which swings in a horizontal plane between two fixed contact posts, but touching neither contact in its normal position. The man-

operator rests his hand and arm on the table and when he desires to produce the letter P, he presses the lever to the right one time, which movement sets the automatic dot mechanism in motion and dots are sent into the wire as long as the lever is held to that side, the speed of the dots depending on the tension of a spring which can be varied at will. Therefore, to send the letter P the lever must be released at the end of five dots, the operator depending upon the ear for knowing when five dots have been produced. And I desire to say right here, for the benefit those who would ask if it is feasible for one to cut off the proper number of dots with ease, regularity and certainty without long practice, that the ease and certainty with which the proper number of dots are produced is really amazing. After ten minutes experience with the Autoplex any operator can make such letters as B I H S P R C D Z, etc., with precision and ease.

"To make a dash the key lever is swung to the left and held there for the proper interval of time. The dashes are not automatic and this is one of the most valuable fundamentalities of the Morse key as well as of the Autoplex—an emphasis and smoothness being imparted to Morse characters by lengthening and shortening the dashes without the necessity of varying the speed of the dots. To send the letter B the lever is moved to the left and held there for the desired interval of time and then moved to the right and held against the right-hand contact until three dots are automatically produced when the lever is released. To send the letter V the movement is the reverse of that for sending B, i.e., the lever is moved to the right one time and held there until three dots are produced and then moved to the left for the dash.

"In sending Mississippi on the Morse key, thirty-two depressions are required, whereas on the Autoplex for the same word, twelve movements suffice.

"The operator has perfect control of all spacing. For example in the spaced letters C O R and Z, emphasis can be given them by varying the space and this is quite important in sending a certain class of words.

"The Autoplex is manipulated with one hand, the operator at the same time indosing, handling, timing and filing with his free hand and of course is enabled at all times, to keep his eyes on the copy.

"The time required to become proficient in the use of the Autoplex varies with the operator—requiring from one to two months. Most any operator who is a judge of Morse, can commence using this instrument on the wire inside of a week, whether or not he has lost control of the Morse key and skill in manipulation increases right along from that time.

"Mr. J. H. Driscoll, of the New York World who is a beautiful and rapid sender on the Autoplex, became expert in its use in six weeks time.

"The Autoplex is now in use on press, brokerage and commercial circuits with entire success.

I have some users of this key, who have been for many years, unable to 'look' at a Morse key, so to speak, but now after a few brief weeks practice on the Autoplex, they are sending superb Morse."

New Postal Office at New Haven.

The Postal Telegraph-Cable company moved into its new main office at New Haven, Conn., January 4th, the transfer of the wires from the old switchboard to the new being accomplished in a few moments, and without a hitch, under the direction of Electrician F. F. d'Humy of Boston.

The office is finely located at 95 Orange street, and is handsomely fitted with new oak furniture, a 70-wire switchboard, modern dynamo plant and all the usual appurtenances of a large office. A handsome counter of Flenish oak with ornamental grille-work is the most conspicuous feature. In the front of the office there is ample room for six desks for the use of newspaper men, the desks and chairs being finished to match the counter. There is also a telephone booth, which is used as a pay station for the convenience of patrons. Back of the counter are commodious desks for the manager and clerks, and four quartette tables of oak, fitted with resonators of the latest type and lockers for typewriters. Coat and toilet rooms are roomy and well-arranged.

The switchboard in the rear is mounted in an openwork iron frame, all the wiring being exposed and readily traced. The dynamos are in the rear of the switchboard, and still further back is the store room for supplies and files. The basement is light and conveniently arranged for storage of necessary line material and tools. The call-box circuits throughout the city have been entirely rebuilt, and all the wires enter the new office through the underground cable. The office, which is finely illuminated by four chandeliers, now affords sufficient facilities for the handling of the large volume of business such as incident to the annual football games, etc., without resorting to temporary arrangements and crowding, which were inseparable from such events in the old office. Handsome new iron signs, specially designed, ornament the front of the office.

Manager J. D. McDonald is receiving many compliments on his new quarters, and the comfortable arrangements are much appreciated by the employees.

The operating staff is as follows: J. D. McDonald, manager; W. B. Campbell, chief operator, days; A. N. Wood and F. Wilcoxon, operators; Miss Mabel Breese, bookkeeper; Joseph Callegari, clerk, and Samuel Johnson, lineman. There are also thirteen messengers.

TELEGRAPH AGE should go regularly to every one interested in the telegraph. Write for a sample copy.

Telegraphic Bookkeeping.

Second Article.

BY W. H. DOHERTY.

In the further consideration of the subject of telegraph bookkeeping, as practised by the Western Union Telegraph Company, the importance, especially to all holding managerial positions, of obtaining a clear and correct understanding of the methods pursued, cannot be over-estimated. And after all there should be no real difficulty, even on the part of a novice, in acquiring a knowledge of the system employed, for there is nothing in it of a complex nature. On the contrary, the plan is simplicity itself, and is the worked out result of long experience in telegraph practice. A careful study of the ledger page itself, a section of which is shown herewith,

| Date | This Office Received | | This Office Checks | |
|------|----------------------|-------------|--------------------|-------------|
| | This Line | Other Lines | This Line | Other Lines |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |

with its specially prepared heading and rulings, will reveal in great measure the manifest intent of the scheme. At the top of the page on the left hand is the heading "This Office Receives," while immediately below appears the sub-heads, "This Line" and "Other Lines." At the right hand top of the page appears the heading, "This Office Checks," directly beneath which, as in the former instance, are the sub-headings, "This Line" and "Other Lines." At the left side of the page are the numbers, one under the other, of one to thirty-one, indicative of the days of the month, in line with which the business of corresponding dates should be entered.

For purposes of convenience all messages received each day are sorted in alphabetical order first as to States, and then as to cities and towns within the State. The messages should also be sorted in this manner in two sets, namely: "This Office Receives" and "This Office Checks." The heading "This Office Receives" indicates that all business which is paid for at the originating office should be entered immediately below it, either under the sub-head "This Line," or "Other Lines," as the case may be. This includes all messages which are sent paid, and all those incoming which are received "collect." The heading, "This Office Checks," means that beneath it should be entered, whether under "This Line" or "Other Lines," all messages sent collect, and all paid messages received.

An illustration will perhaps, make the system clearer to the reader. Suppose, for instance, we turn to Hillsboro, Wis., a point found in the tariff book. It is an inland town located off the railroad, the company has no wires there and consequently must depend on some other mode of getting messages to that point. The tariff book quotes a rate of "25 and 0" by the way of Union Centre, which from New York would mean a charge of "50 and 25," or 75 cents for ten words or less. Fifty cents is the regular toll to Union Centre, and comes under "This Line," because some other company, probably the telephone, will take the message at Union Centre and deliver it in Hillsboro for 25 cents, this 25 being "Other Lines." Hence it is that we simply enter regular tolls, fifty cents, under "This Line," and twenty-five cents for extra tolls under "Other Lines." The idea is carried out in exactly the same manner under the head of "This Office Checks." All other line business should be entered opposite the name where it is transferred to the "Other Line" company. As in the case mentioned Hillsboro would not be entered in the ledger, the record only being Union Centre 50 cents "This Line," and 25 cents "Other Lines."

"Other Lines" include any kind of charges that are made, after the message has reached the nearest regular office to the point of destination. The message may be telephoned, delivered by stage, by special messenger, or by some other telegraph company. No matter what the mode of delivery is, it all comes under "Other Lines," and if these charges are paid at the originating office, they come under the heading of "Other Lines" under "This Office Receives."

All business for the day coming under the head of "This Office Receives," should be entered first and in red ink; business under "This Office Checks," should be entered last and in black ink. This observance will tend to guard against mistakes.

As these articles proceed I may not at all times make myself sufficiently clear to my readers. If such be the case I invite questioning from any one who desires further elucidation on the subject, all correspondence to be addressed in care of TELEGRAPH AGE.

The Telegraph in China.

The Chinese government recently confiscated the telegraph lines in that country, but by an edict the owners are given the option of retaining their stock. The management of the lines will reside in the government.

The telegraph administration in Persia, reports an American Consul, is farmed by one family; i. e., they pay the Government, which owns the lines, a rent of about \$30,000 a year. From the excess, they pay the expenses of operation, and the ultimate balance is their own profit. The head of the family is the Mukhder-ed-Dowlah.

The Berliner Decision.

The decision rendered a few days ago in Boston in the Berliner case, says the *Electrical World and Engineer*, terminates in all probability a cause celebre which, within and without the Patent Office, has had a term of more than a quarter of a century. It is true that the case could be re-opened by the United States Supreme Court—either by accepting a certification to its jurisdiction or by ordering such certification—but as the Boston case just decided appears to have involved only a determination of facts and not a great principle in law, the probability of such an eventuality is very remote. Indeed, one might well believe that in view of the short remaining life of the patent, rather than having a desire to reopen the case, the Bell Company feels an immense relief at the removal of the burden of an issue which has entailed enormous expense with no return—at least in recent years—and has evoked intense hostility against the company. The history of the Berliner patent begins with an application filed June 4, 1877, the application having been preceded by three caveats dated respectively, April 4, April 30 and May 9, of the same year. It was not until more than fourteen years later, namely, November 17, 1891, that the patent was issued. During this long delay in the Patent Office, the application was constantly the subject of proceedings, which subsequently gave rise to direct charges of fraud that figured very largely in the course of the litigation just closed. The issue of the patent, controlling as it did the entire art of telephony for a period of seventeen years, naturally produced a sensation, and force of public opinion led the government to institute in February, 1893, a suit for its annulment, which has been carried to a successful issue.

Serial Building Loan and Savings Institution Election.

The Serial Building Loan and Savings Institution at the annual meeting held on January 20, elected the following ticket: D. B. Mitchell, president; John Brant, vice-president; E. S. Butterfield, treasurer; Edwin F. Howell, secretary; J. B. Sabine and A. A. Rich, attorneys. Directors: W. J. Quinn, F. W. Jones, E. S. Butterfield, A. E. Chandler, F. W. Gregory, W. C. Burton, T. A. Brooks, M. J. O'Leary, W. A. McAllister, W. H. Jackson, T. E. Fleming, G. H. Schnitgen, G. W. Blanchard, M. F. Gaffney, A. P. Stirling. Bankers: Mercantile Trust Company, New York.

The amendments proposed to the constitution and by-laws were adopted.

Gold and Stock Life Insurance Association.

The twenty-fifth annual meeting of the Gold and Stock Life Insurance Association was held in the Western Union Building, New York, January 21. A considerable number of representative members were present.

Mr. Charles P. Bruch, the president of the as-

sociation, was made chairman, and Mr. Thomas E. Fleming, secretary, of the meeting.

The president in his address to the members congratulated them upon the favorable results that had been attained during the year and attributed them to the earnest efforts of and interest shown by the agents as well as the members themselves, and called attention to the fact that the financial condition of the association is excellent, gains in assets having been made as compared with the previous year.

The secretary, treasurer and chairman of the Auditing Committee, respectively, submitted detailed reports which were ordered to be printed. These reports show that eighty members were admitted; that fifteen deaths occurred and that \$7,500 was paid to beneficiaries during the year; that the present membership in 1,132 and that the reserve fund is now \$17,773.93.

The following named officers and members of committees were elected: Chas. P. Bruch, president; Geo. W. E. Atkins, vice-president; Wm. J. Dealy, secretary, and Lewis Dresdner, treasurer.

Executive Committee: Michael Breslin, Chas. Shirley, David B. Mitchell, Herbert Smith and Albert J. Driver. Auditing Committee: Frank H. Nichols, Wm. Shone and Michael J. O'Leary.

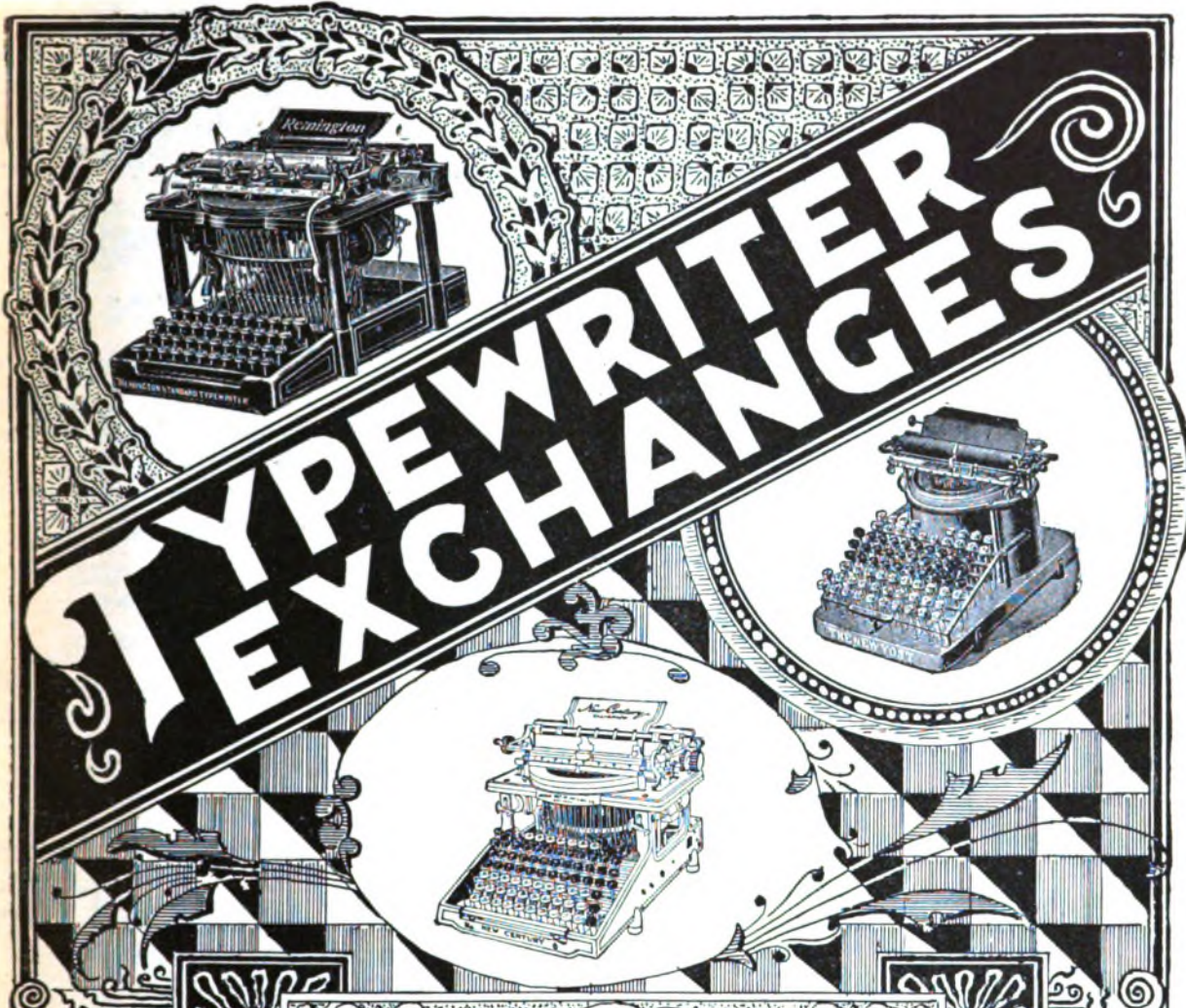
Operators Are Scarce.

The Cleveland, O., Plaindealer states that a serious problem now faces the railroads entering that city. They feel the scarcity of telegraph operators. The condition is generally prevalent and has been felt by the big and little companies alike. A local operating official said that the time will come when railroad operators will be very hard to get. At present the men are gradually working into other departments of railroad work and into other lines of business in order to draw more money than they receive as operators. The trouble seems to be that many operators are required to work from seventy-two to eighty-four hours per week for \$45 per month, while in other departments of the service they can obtain \$60 per month for 48 hours work per week.

News of Half a Century Ago.

While tearing down the old Twenty-first Street Lutheran Church, between Fifth and Sixth avenues, New York, recently, to make room for the erection of an office building, workmen discovered in one of the corner-stones a sealed lead box. In it was a copy of "The New York Sun," dated December 6, 1846, and one or two other newspapers.

Among other things the newspapers announced under the head of "Modern Scientific Wonders," that a Mr. Gourand would discuss in the Tabernacle "the daguerrotype, the electric telegraph and gun cotton, with the last making some interesting experiments;" also that the wires of the Boston and New York telegraph were not in working order, owing to the substitution of iron wire, which was then in progress.



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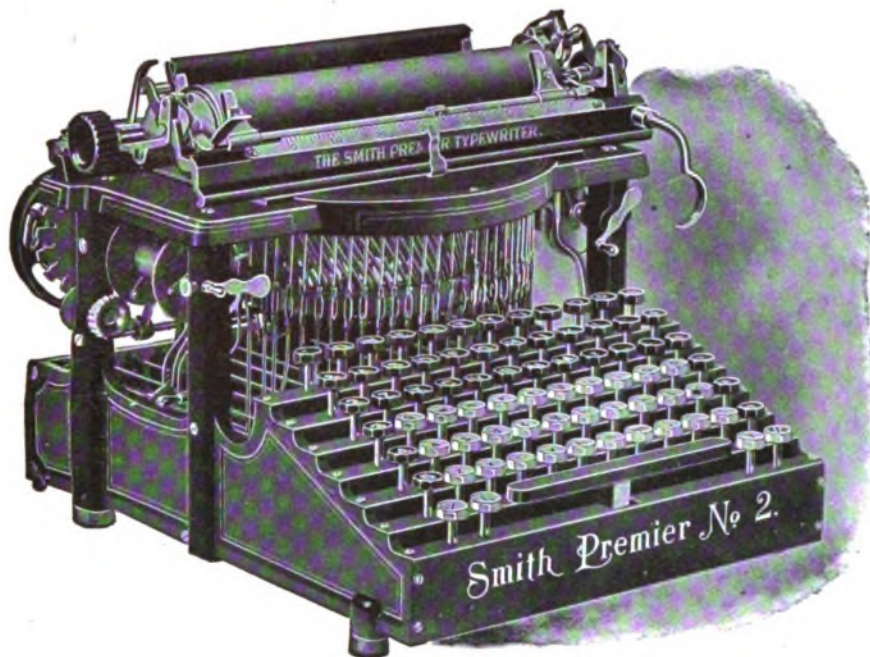
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NEW YORK, February 1, 1903.

The amount of information contained in each issue of TELEGRAPH AGE of the utmost practical value to the progressive operator who is ambitious to succeed, to acquire a more thorough knowledge of his profession, and not only to better qualify himself for the position he now occupies, and consequently for advancement, should, prompt many to send in their subscriptions to this journal without delay. The first article in each issue, contributed by Willis H. Jones, under the standing heading of "Some Points on Electricity," contains more positive instruction concerning the telegraph, than can be found anywhere else, and worth more to the operator than many times the cost of the paper itself. Subscriptions should be sent direct to this office, or to any of our agents who may be found with both the Western Union and Postal companies in nearly every large centre in the United States.

We are prepared to furnish a limited number of bound volumes of TELEGRAPH AGE, which embraces 536 reading pages, besides the index, for the year 1902, at the uniform rate of \$3 a volume. The binding is substantial and the lettering is done in gilt. The volume furnishes a complete record for the year named of the telegraph, the cable, wireless telegraphy and other allied interests, the whole constituting an interesting work of reference of the highest worth to all telegraphers, libraries, etc., to which the carefully prepared cross-index lends additional value. Single copies of the index for volume XIX, covering the year 1902, may be had at ten cents apiece. Our friends who require copies of the bound volume, or of the index alone, should send in their orders promptly so that they may be filled while the supply lasts.

Standardize the Telegraph.

An higher esprit de corps in the telegraph service is a condition much to be desired. The uncertainties so often felt by the average telegrapher, not only as to his present condition but as to his future advancement and consequent emolument, is responsible, in our judgment, for a large share of the spirit of discontent, of indifference, which unfortunately is so frequently manifest. For it cannot be denied that numbers of telegraphers view the future in their calling as holding out no special inducements for them to remain permanently identified with a service that gives promise of so little. Where such a feeling is permitted to exist the natural tendency is to check ambition and to lower the individual standard.

We believe that the telegraph companies could materially improve their service were they to hold out to employees positive inducements of promotion. Were this done a stimulus to a loftier pride and enthusiasm and to the bestowal of better thought and energy in their work would become aroused and the companies themselves would become the undoubted gainers thereby. The benefits accruing would be mutual. No better instances of comparison can be shown than are exemplified in the Army and Navy. Human nature is as strong in the telegraph service as in any other scope of endeavor, and the workings of a rule elsewhere that produces harmony of action and secures promotion along logical lines would not be likely to fail in its general application in the telegraphic field.

We are of opinion that a partial remedy, at least, in telegraph conditions, might be brought about by the classification of the telegraph service as far as it is possible to do so. At the present time in large offices all sorts of wages are paid for the same class of work. We believe that were a fixed standard of pay adopted, that is salaries were graded evenly, more satisfying results would be attained because of the enhanced self-respect of employees which would follow. Would it not be more equitable, for instance, if all traffic chiefs in an office were to receive a like compensation; wire chiefs to have their standard of pay, chief operators, assistant chief operators, managers, etc., theirs? Under the prevalence of such conditions an operator would know just what to expect and to look forward to. A traffic chief or a wire chief would know what his next promotion would be, provided of course, he was competent to go higher. The managers of offices in first, second, third and fourth class cities should have their salaries graded accordingly, and there should be no cutting of such salaries when vacancies occur merely because persons may be found willing to work for a less sum than their predecessor received. The office should carry a stated salary which should be applicable in its entirety to whomever was appointed to its managership. It is a mistake to cut the regular rate, as is so often done, and such action is the frequent cause of discouragement to the appointee. To put indignity

upon a man in this respect is to practice a false economy.

If on trial it is found that one who has received promotion does not measure up to the requirements of his office, he should, and no doubt voluntarily would, make room for another who was capable.

The Western Union and Pennsylvania Railroad.

The United States Court at Pittsburg Pa., on January 16, gave a decision that is considered practically a reversal of the United States Court in New Jersey in the suit of the Western Union Telegraph Company against the Pennsylvania Railroad Company.

Judge Joseph Buffington, sitting in the Circuit Court, handed down an opinion in which he decided two cases brought by the Western Union Telegraph Company against the Pennsylvania Railroad Company. One case was a petition to condemn a right of way for the telegraph company's lines along the railroad. The other, on the equity side of the court, was an application for an injunction to prevent dispossessing the telegraph company pending the final outcome of the petition to condemn.

Judge Buffington refused to grant the petition for condemnation proceedings and dismissed the motion for a preliminary injunction. In his opinion Judge Buffington said a railroad's right of way was the artery of its life and in taking any part of it due regard should be had to the railroad's future needs. The telegraph company sought adverse possession of many hundred miles of the railroad's property and as the United States Supreme Court had said of the occupation of a street by telegraph poles so it might be said of the occupation of a railroad property. In respect to the space occupied by the poles it was a permanent dispossession of the public. The railroad was entitled to unhampered control of its right of way so that it might perform its duties as common carriers. The case will no doubt be appealed.

Judge Buffington on January 20 consented to defer the entering of his recent order refusing the Western Union Telegraph Company's request for an injunction restraining the Pennsylvania Railroad Company from tearing down the company's lines along the road in the State of Pennsylvania. The order will not be entered until the appeal of the Pennsylvania Company from the New Jersey injunction comes before the Circuit Court of Appeals.

A new phase of the legal battle between the Western Union Telegraph Company and the Pennsylvania Railroad Company and the Pennsylvania Company developed January 15, when the Pennsylvania Company filed a cross bill in the United States Circuit Court against the Western Union Telegraph Company. The cross bill alleges that a partnership has existed be-

tween the plaintiff and defendant for years, and the court is asked to declare that all contracts and agreements between the defendant and plaintiff terminated and ended as of June 2, 1903; that an accounting be had and a decree made, fixing and determining the respective rights and standing of the plaintiff and defendant in and to the property constituting the lines of telegraph which are the subject matter of this litigation.

The court is further asked to declare that the Western Union Telegraph Company has no right or authority to occupy any portion of the property of the Pennsylvania Company under the acts of Congress. The court is asked to grant a perpetual injunction restraining the defendant company from in any manner using or occupying the property or any portion thereof of the plaintiff after June 2, 1903, and from interfering with the plaintiff in removing the property from all of the lines of the defendant company, if deemed necessary.

The Pennsylvania company also filed an answer and demurrer in the previous case, asking that the portion of the agreement that no other company or individual be permitted to build or operate a telegraph line along the right of way of the railroad company, be declared void and illegal, because it was intended to create a monopoly in the telegraph business.

Ohio Telegraphers in New York.

The State of Ohio has given to New York City as well as to the Nation many men who have become distinguished by reason of their usefulness in public service or ability in business, and it is not surprising that the Ohio Society of New York is one of the strongest organizations of its kind in the city. But it is remarkable that there is in New York a sufficient number of men, claiming one comparatively small Ohio city as their "old home," to form and carry on successfully the Canton Society of New York. This society was organized about two years ago and now has about seventy-five members, all of them having either been born or "raised" in the little city whose chief pride is that among its citizens was one who ranks with Washington and Lincoln in the history of his country, and whose memory will ever be cherished as the ideal American of his generation.

The Canton Society, like the Magnetic Club, has for its sole object the maintenance of old friendships. On its rolls are the names of men, who, though still young, are well known in business and professional circles. The recent election of a telegrapher to the presidency of the Canton Society calls attention to the fact that the telegraph also is indebted to Ohio for a very considerable number of men whose names are inseparable from telegraph history. Neither space nor available data permits a complete list of them, but a cursory glance through the pages of Reid's History of the Telegraph, and Taltavall's Telegraphers of To-day, shows that among notable

telegraph men who were born in the Buckeye State are Thomas T. Eckert, Thomas A. Edison, Elisha Gray, George H. Fearons, Jesse H. Bunnell, D. H. Bates, Dennis Doren, William Holmes, G. L. Lang, Charles Selden, J. D. Flynn, Willis H. Jones, J. E. Fenn, W. W. Umsted, I. N. Miller, John A. Townsend, C. Corbett, E. W. Collins, Charles F. Loomis, U. J. Fry, S. B. Gifford, S. S. Garwood, George A. Hamilton, W. P. S. Hawk, William R. Plum, H. D. Rogers, George M. Dugan, C. H. H. Cottrell, A. S. Ayres, L. C. Weir, Wager Swayne and S. P. Peabody, and among those who, though not natives, can justly be classed among Ohioans by reason of having gained their early training in the State are A. B. Chandler, John Van Horne, Anson Stager, J. H. Wade, Charles P. Bruch, William Hunter, F. H. Tubbs, J. F. Wallick, E. C. Bradley, J. D. Reid, Charles C. Hine, C. W. Hammond, E. T. Gilliland, Wm. W. Smith, J. B. Taltavall, Thomas R. Taltavall, James G. Smith and E. W. H. Cogley.

Ohio disputes with Virginia the title of "Mother of Presidents." Is she not also likely to claim with some show of justice to be the "Mother of Telegraphers?"

The Passing of the Old State House Telegraph Office, Boston.

EDITOR TELEGRAPH AGE:

The article on "The Passing of the Old State House Telegraph Office" at Boston, published in your January 16 issue, revives many memories of that historic building, and of its neighbor, the old "Traveller Building," in which was located the "CB" office, where I put in many a day exchanging literary gossip with Mrs. Gallup at "Dx" New York, and incidentally sandwiching in a couple of hundred messages daily during the pauses in conversation. We also had a wire to Fu (Fulton) and Wm (Washington) markets in New York, and I have a vivid recollection of a bill for \$60 damages which I paid on account of an error made by an operator at "Wm." It was this way: A Boston fruit buyer was in New York stopping at a hotel at 217 and 219 Greenwich street. For several days telegrams had been exchanged between him and his firm, until Saturday when they wired him at the usual address to buy no more peaches but return home. I had started the message to "Wm" when a customer threw in a batch of "rush" messages for "Dx." In order to expedite matters and get back to the "Dx" wire I shortened up the address, omitting one number, supposing they had delivered enough to the party to know where he was even if no address was given. But the receiving operator got it "317" or some other old number and the message was not delivered. On Monday we were notified of non-delivery. The buyer meanwhile had remained and shipped more peaches on a glutted market, resulting in considerable loss, for which the firm claimed damages.

In my "statement" I admitted, with the ingenuous truthfulness of unripened youth, that I

had sent but one of the numbers in order to save time. After considerable negotiation by Manager Milliken, the claim was reduced to \$60 and was presented to me for payment, with the endorsement by the superintendent that "The sending operator admits leaving out one of the street numbers in address. If he had sent both numbers, the receiving operator would probably have got them right. The sending operator will therefore be held responsible"—and I paid the bill, the receiving operator not being even asked to "whack up." It was the largest amount I ever heard of an operator paying on account of an error—even when made by himself.

When the Gold and Stock Telegraph Company opened in Boston in the early 70s., under the management of Seuel Smith, their transmitting instrument was placed in the window in "CB" office and Mr. Smith made his headquarters there, Thomas Callaghan being the Western Union manager. Around the corner on Congress street in an up-stairs room, the Gold Board held its sessions, quotations being furnished and business handled by the Bankers and Brokers Telegraph Company with Matt. Davin in charge. On days of excitement in the gold market, this wire was as hot a proposition as I ever tackled. Its reputation as a "roast" was so well established that most of the boys were afraid of it, and it used to be difficult for Matt. to get a "sub" when he wanted to lay off.

The night force of the Boston office at that time consisted of five men and the night manager. The personnel was, if I remember rightly, as follows: John E. Wright, night manager; E. F. Leighton, Associated Press; E. A. Beardslee, New York wire; W. H. Garland, Maine press; J. H. Blake, Washington special, and D. B. Grandy, New York specials. There were split trick men on duty up to 10.30 P. M., or longer if needed. "Extra" work was paid for at fifty cents per hour. Thomas Davin was day chief operator and Charles W. Henderson, assistant. Among others on the day force were C. B. Noyes and J. H. Barrett, New York "printers;" J. W. Duxbury, Dennis Harmon, Samuel Sherman, C. G. L. Pope, John Milliken, James McGee, Thomas Kelly, H. S. Hoyt, Paddy McMahon, Ned. Davin, George Leet, George Marcyes, John Whitacre, Frank Stevens and others whose names I do not now recall. Many of these are long since dead; others are scattered from ocean to ocean. They were good telegraphers all, and as jolly and companionable a lot as ever gathered in a telegraph office. The period of my association with them will always remain the happiest memory of my life.

G.

St. Louis, January 22, 1903.

"Pocket Edition of Diagrams," etc., by Willis H. Jones, electrical editor of TELEGRAPH AGE, embodies more practical information concerning the telegraph, than any book or series of books hitherto published. See advertisement.

The Promotion of W. E. Athearn.

Mr. Wm. E. Athearn, assistant electrical engineer of the Western Union Telegraph Company, New York, has resigned to accept a position on the engineer's staff of the American Telephone and Telegraph Company, with headquar-



W. E. ATHEARN OF NEW YORK.

The Electrical Engineer who has lately gone over to the telephone field.

ters in New York for the present. In the transfer of Mr. Athearn's services from the telegraph to the telephone field, the latter has secured from the former a man who has had a wide range of experience in telegraph engineering. Mr. Athearn was born November 15, 1856, at West Tisbury, Martha's Vineyard, Mass. While pursuing a classical course in Williams College in 1877 he became interested in the study of electricity and as a means of advancement in that field he learned the art of telegraphy. His first position was that of operator in Williamstown, Mass., in 1878, and he afterward held positions as chief operator, manager and electrician for various opposition telegraph companies. He joined the Western Union Telegraph Company, at 195 Broadway, New York, as a night chief in 1890, and was appointed electrician of the first district in 1894. Later he was transferred to the electrical engineers office where he has made many friends who extend to him their hearty congratulations on the important position to which he has been called.

New Incorporation.

The Delany Foreign Company has been organized under the laws of New Jersey to acquire and handle the foreign rights for the Delany System of Rapid Automatic Telegraphy. The local office of the company is at 20 Broad street, New York City.

Appointed Superintendent of Leased Wires.

The appointment of Mr. Henry F. Hawkins as superintendent of the Leased Wire Department of the Postal Telegraph-Cable Company, is merely a formal recognition by the company of the character of work which Mr. Hawkins has been doing for several years past, the leased wire service of this company having developed to such an extent that it has been deemed advisable to handle it through a separate department.

Mr. Hawkins is among the oldest employees of the company, having entered its service at the old 187 Broadway, New York office, in the spring of 1892. In the fall of that year he was transferred to the office of the vice-President, Mr. E. C. Bradley, as stenographer, a few years later being made chief clerk of the Eastern Division under Mr. E. G. Cochrane, general superintendent, and later returning to Mr. Bradley's office as his chief clerk.

Mr. Hawkins was born in Camden, N. J., in November, 1865. His first employment was as messenger for the American District Telegraph Company of Philadelphia, in 1879. He utilized his spare time to advantage and in 1882 was employed as operator, remaining in the service of the district company until 1886, when he entered the



HENRY F. HAWKINS.

Superintendent of Leased Wires, Postal Telegraph-Cable Company, New York.

service of the Pennsylvania Railroad Company as an operator in the office of the superintendent of the Philadelphia Division, where he maintained the reputation already gained of being one of the most expert operators in the service. Later he was transferred to the general offices of the company where he remained until 1892, then resigning from the railroad service to accept a position with the Postal Company.

The Western Union's Birthplace.

Howard L. Osgood spoke before the Historical society at Rochester, N. Y., recently, taking for his theme those industries started in Rochester which have been of world-wide influence. The first and greatest of these Mr. Osgood said was the Western Union Telegraph Company, an organization without which the commerce of the world could not now be carried on. Mr. Osgood said that when the telegraph was perfected by Professor Samuel F. B. Morse many small companies were formed for the purpose of transmitting messages and the work became very complicated and expensive. Hiram Sibley of Rochester, conceived the idea of uniting all of these companies and succeeded in interesting other men in his project with the result that the Western Union Company was formed. This, Mr. Osgood said, might be described as one of the first, if not the first of the trusts. The speaker described at great length the early history of the Western Union under the management of Mr. Sibley, who was for the first ten years of the company's existence its president. Under his administration the company's property grew in value from \$200,000, the amount with which the company started, to \$50,000,000.

Mr. Sibley believed, Mr. Osgood said, that there should be telegraphic communication between this country and Europe, and in pursuance of this idea the company began the laying of wires with an idea of carrying the lines across the Behring straits. This was prior to the laying of the first cable in 1866 and long before it was known that a cable was a possibility. At the time Cyrus Field sent his first message, the Western Union, under Mr. Sibley had laid 1,500 miles of telegraph wires in the Far North, and had surveyed many thousand more in the extreme north of the Northwest territory and in Siberia. More than \$3,000,000 was expended in this work, which was abandoned when the first cablegram was sent across the ocean.

The Operator, Migratory and Non-Progressive.

Editor TELEGRAPH AGE:

It is an undisputed fact that a large percentage of the craft are roamers and about ninety per cent. have never gotten beyond the sending and receiving stage of the business. There are very few operators who cannot describe the climate and characteristics of at least a dozen different States; indeed, those who mostly figure in the "arrivals and departures" column can tell you the peculiarities of telegraphing whether in Cuba, South Africa, China, or Australia, and he is surely a moss-covered member of the profession who has not been east and west, north and south in his own land.

Few of us have been denied the privilege of providing the price of a meal for some "Knight of the Key" while en-route; few are those who have not listened to the appeal of some tourist whose only present pressing need was passage

in a seatless coach to the next division point; and fewer still are those whose experience has been such that they cannot recognize and sympathize with the wanderer's solicitous appeal.

Your genuine, bona-fide rover is no mean judge of human nature; his long season of buffeting has sharpened his intuition; he knows whom to approach, and when to approach; neither is he unpolished, or of poor address; he is something of a student of conditions, and himself a donor of charity when the tide has turned. Truthfully speaking, these rovers are not what you would call a bad lot, continual change of location does not entail change of moral environment; conditions are everywhere the same, and it is the condition, not the climate which creates the type. Their employer's chief cause of complaint is that the roamer is non-progressive professionally. Of this there is, of course, no doubt, but the fact that the progressive telegraphers constitute comparatively but a small percentage of those daily engaged in handling the world's telegraphic traffic, would seem to include a reason unexplained, a cause unconsidered.

The story is told,
That the monks of old,
Acquired great knowledge secretly;
But the knowledge they gained,
In their heads remained,
For fear it would help society.

Of course, one could hardly expect the "chief operator," who is necessarily something of a genius, and who has tasted the reward of ambition, to expend time and energy from his own store, in the education of those who "send and receive," but from the standpoint of efficiency, and with a view of creating available timber, why does not the employer see to it that the rover is redeemed and inspired to better things?

I believe that the equipment of every main, central and general telegraph office, both railway and commercial, should include a small technical library to which those who send and receive could have access.

D. McNICOL.

St. Paul, Minn., January 12.

The latest application for a position received by a chief operator reads: "I am an experienced machine man. I use the Remington, the Fox, the Blickensdefer typewriters, the Yetman and Martin transmitters, the Mergenthaler typesetting machine and am studying the latest wireless telegraph system." The manager was just as funny as the applicant. He answered as follows: "Your class of operators \$13.50 per week. What we want is good, plain, simple Morse operators, wages \$17.50 per week."

In these days when technical knowledge is of such value to the telegrapher who would master his profession, its acquisition becomes of supreme importance. A subscription to TELEGRAPH AGE will supply the information every operator needs.

An Answer to James Gamble on Organization.

EDITOR TELEGRAPH AGE:

The quotations from the letter of ex-Supt. Gamble published in your issue of January 1, will hardly influence any operator who stops to think. Mr. Gamble says he has "only the interests of my old friends, the telegraphers, at heart." I question the friendly motive of the man who regrets to see me making an effort toward securing a slight share of the increased income I am helping the company to make by my use of the "code" and the typewriter, and when that man tells me that he caused a strike by reducing salaries and discharging men, I advise him to look for his friends among those that admire an official who could at any time cause a strike by the possession of the power to meddle with the salary of operators. Is Mr. Gamble's plea for struggling corporations—facing competition at last that they are too gorged to swallow—a plea for future "connection with the telegraph" on his part? This competition is not new; it has existed for years; yet the dividends do not decline—the salary does. Mr. Gamble says it is the aim of each company to get the most competent employes. When, if ever, has he, as an official, offered any inducement to a man to work for his company? He states that no employer will promote a Union man. This may be so in the future—it is too early yet to settle that point off-hand—but if the two telegraph companies were to discharge to-morrow every official from assistant chief up, who was a former striker, the service would be badly crippled. And, will Mr. Gamble, for the benefit of his "old friends," tell us what one must do, having secured that promotion, to hold it?

To paraphrase Mr. Gamble's argument: "There are greater reasons now why a Union should be formed than there were thirty years ago." Not for a strike, but a defensive Union is needed. The telegraph companies have gained much in ten years. Salaries have steadily fallen; the capacity of the operator has been increased by the typewriter and the code; and the typewriter he furnishes saves the company the cost of ink and pens.

The action of provoking the strike of 1869-70, proves that superintendents ought not to have the power to re-arrange the salary schedule. The strike of 1883 grew out of the tinkering of the salaries of the operators by H. McK. Twombly, son-in-law of Wm. H. Vanderbilt, who introduced the famous "sliding scale" and other methods tending to reduce the pay of operators.

I have not the ability to state the many reasons for a protective organization; I have merely tried to show that Mr. Gamble has given no good reason against it; and that on his self-stated record his advice cannot be read as that of a friend of the telegrapher.

Yours truly,

F. E. Deration.

New York, January 8.

Squibs.

BY JOHN A. DREAMS.

It was his daily wont to indulge at frequent intervals in unauthorized absence from the operating department and, arrayed in scanty office garb to avoid suspicion, wend his way to a neighboring institution, where were dispensed certain lotions to be applied internally. So long had this practice continued without detection or comment that he came to regard it a part of his regular duties. But upon his return from one of these personally conducted tours one wintry day he unexpectedly met with his chief on the street who, with upraised hand emphasis, sternly said: "Mr. ——— you will practice this once too often and I warn you that the result will be a sorrowful one."

Battling with an impending stroke of apoplexy, shivering from the cold, and thinking hot flash thinks of possible dismissal, with ill-feigned surprise he feebly gasped, "What do you mean?"

"Why," said the chief operator, "going outdoors this kind of weather without your overcoat."

A Chicago brokerage house opened a branch office in New York City and when the telegraph equipment had been fully installed and direct communication with the parent office established, the operator suggested to the house manager the advisability of requesting the telegraph company to name an office call.

"What's the call for our home office," he asked. "C.A.," he was told.

"Well," he said, with an air of native pride, "C.A." will be the call for this office too. What's good enough for Chicago is good enough for New York."

"Why didn't you repeat this cable," the chief asked. "Did you forget it?" "No sir," answered the original package. "But I didn't think it was necessary.—it contains only three words."

Telegraph Error Lost a Bride.

Judge Field, at Louisville, Ky., sustained the defendant's demurrer in the \$1,000 damage suit of Clarence Manuel against the Western Union Telegraph Company. The plaintiff sought to secure damages because of the breaking of his marriage engagement, alleging that the company's mistake in a telegram was responsible.

On Jan. 26, 1901, he telegraphed to a Miss Bryant to meet him in Louisville. The telegram as delivered, said: "Meet me in Nashville."

Miss Bryant went to Nashville. Manuel was not there and the affair was declared off, Miss Bryant refusing to accept any explanation.

Judge Field held that no recovery can be had, but added that while Manuel had no case in the civil court, he might file a petition for a rehearing in Cupid's court at the bar of the lady's heart.

You can't afford to be without TELEGRAPH AGE.

Manager Hawkins Promoted to Columbus, Ohio.

Mr. George Ellsworth Hawkins, who was recently transferred from Canton to Columbus, Ohio, to the managership of the Postal Telegraph-Cable Company, entered the telegraph service in 1881, at the age of eleven years, as a mes-



GEORGE E. HAWKINS.

New Postal Telegraph-Cable Manager at Columbus, O.

senger at Macomb, Ill. On February 5, 1883, he found employment with a Chicago commission house. After a period of two years with different brokerage firms in Chicago, he represented similar firms at various points in Ohio, until July, 1890, when he entered the employ of the Postal Telegraph-Cable Company at Cleveland.

Here his ability soon won recognition and on August 7, 1893, he was promoted to the managership of the Canton office. The famous political campaign of 1896, which caused many eminent men and delegations from all parts of the United States to visit Canton, was one to try to the utmost the facilities of a telegraph office and the efficiency of a manager. That the severe test thus imposed was well sustained is shown in the fact that Mr. Hawkins modestly, yet with becoming pleasure, exhibits to his friends personal letters of commendation from President McKinley. In these letters the efficient and highly satisfactory service given under such extraordinary conditions was warmly raised.

There hangs in a conspicuous position in the Canton office one of these autographic letters, which is not only a testimonial from the President of the United States, but also a substantial recognition by the company of services well rendered, for upon receipt of the Presidential letter, Mr. Hawkins sent it to the officials of his company, who returned it neatly framed, with an endorsement written across its face from General Manager William H. Baker in these words: "This needs little comment."

Mr. Hawkins handled the immense amount of press matter growing out of the death of President McKinley in September, 1901, in a very satisfactory manner, and his present promotion is a recognition of abilities which he has so frequently shown.

Sam. R. Parke.

Mr. Sam R. Parke, a former telegrapher, and now a prosperous young business man at Creston, Iowa, where he is manager for the Weare Commission Company of Chicago, presents an excellent type of the successful evolution from the key. Born in Canada in 1869, and orphaned at twelve years of age by the death of his father, Mr. Parke became a telegraph operator, and as such from 1887 to 1890 was employed by various western railroads, a part of the time as train dispatcher.

His first touch with the grain business was at Minneapolis in 1890. Subsequently he became an Associated Press operator and was engaged in that capacity for about five years on daily papers until poor health compelled him to abandon that profession. Turning again to his old occupation he found employment as an operator for private firms at Chicago and St. Louis, but his aptitude for the grain business was soon recognized, and from January, 1900, to August,



SAM R. PARKE, CRESTON, IOWA.

1902, he accomplished important work in the Illinois corn belt for a Chicago firm. Resigning this position he accepted the managership where he now is. Mr. Parke has been an extensive traveler both in this country and in Europe. He is soon to be married to an Illinois lady.

Opportunities in Railroad Business.

BY F. H. BARRETT, GENERAL SUPERINTENDENT CHICAGO AND ALTON RAILWAY.

The question, What are the opportunities for a young man in the railroad business? is especially apropos on account of the Chicago & Alton Railway Company having recently established an employment bureau. This employment bureau is to encourage the railroading ambitions of village and country young men.

To begin with, this establishment of an employment bureau is, in itself, an official announcement that the railway company constantly needs young men. There may be exceptional periods of business depression when the requirements for labor are comparatively small, but, upon the whole, the need for young blood is great and steady. Added to the stability of demand for young hands, and the consequent value of the supply, a railway company, with its many departments, each subdivided into special branches, offers a wide field for congenial employment. In this respect the Government of the United States alone surpasses a railway.

The young man who enters the service must not only have ability and character sufficient to satisfy the chief of the employment bureau, but he must also prove acceptable to the head of the department in which he has chosen to enlist, to the official examiner of the company, who examines the applicant for vision and hearing, and to the company's surgeon, who makes an exceedingly thorough physical examination. This detail is introduced to show that, after a young man successfully passes all examinations he enters the railway service with a sort of covenant between him and his employers to the effect that he is satisfactory material to fill the position which he is given, and that, after satisfactorily performing the duties to which he is at first assigned, he may reasonably expect promotion. There is thus created, to begin with, a feeling of assured position, and the young man also possesses the knowledge that full pay will be sure and regular, for the discharge of all obligations to their men is one of the great advantages in taking employment with a common carrier.

The care in selection of railway men does not end with employment. There is no better plan devised for the actual and intimate knowledge of an employee's merit than the continuous records which this railway company systematically keeps. The public at large has no conception of the perfection of the methods by which the officials of railways determine upon the advancement of their men. The order of promotion of employees, who are at all times protected by civil service rules, is practically the same as applied in the army and navy. Ability and merit are, of course, first consideration, but seniority is always considered, all other things being equal.

After a young man enters railway service there is no position, no matter how high, which he cannot hope to attain; but, omitting from consideration the exceptional cases, we will consider the average man of usual attainments. A young man of from 19 to 26 years of age wishing to become an engineer, is

placed on a locomotive in charge of a fireman, but under the general instructions of the engineer. During a period of from two weeks to a month the beginner works without pay, but at the expiration of this term he is given, by the engineer, a certificate that he is competent to fill the position of fireman. Holding this certificate of competence, the young man is soon found on a freight engine as fireman and upon full pay. As fireman on an engine he serves not less than three years, but after that period he is eligible for employment as an engineer of a freight or switch engine, and this position guarantees pay which is so liberal that among mechanics enginemen are considered in the highest paid class. It may take five years to rise from fireman to engineer, but the attainment of the higher position is so practically certain that it resolves itself into merely a question of time and ability. In due process he becomes a passenger train engineman, and as an earning capacity equaled by no other mechanic.

In the shops the start is sometimes made as low as errand or office boy, but during a series of promotions, which come in a four years apprenticeship the young man learns the complete detail of his trade, graduating to a full fledged mechanic on full mechanic's pay. During the four years' apprenticeship the young man receives free instruction in drafting, the idea being to fit him for promotion beyond even master craftsmanship.

Young men choosing the operating department for their field begin as "students" in telegraph offices, ticket offices, signal towers, freight yards, etc. In from six months to a year they graduate from "studenthood," which is simply learning the routine duty of the men in the lower grades of railroad work. After graduation the "student," who has received from \$15 to \$20 per month during the time necessary to fit him for responsibility, is appointed an agent at a minor station, a telegraph operator, towerman, or switchman. The pay of station agent and operators ranges from \$40 to \$50 per month, and switchmen get from \$50 to \$70 per month.

A young man, to become a trainman, serves an apprenticeship of short duration. Within a month he becomes brakeman on a freight train (\$50 to \$75 a month); in about two years he will be a freight conductor (\$90 to \$100 per month), in about six years, according to conditions, a passenger conductor (\$90 to \$120 per month); all promotions in matter of frequency, depending almost entirely upon individual merit and seniority. The president, general managers, and other executive officers of the principal railroads in the United States to-day have arisen from the humblest in the service.

In fact, the whole system of railway appointment and promotion gives the widest latitude for individual merit, which, if conspicuously shown, receives conspicuous reward. The old day of personal relationship and politics has passed; the railway field lies invitingly open to the young man with ambition and energy.

Speaking generally, if a young man is physically strong, morally clean, as average capability to work and think, and, above all, firmly believes that railway work will prove congenial, my advice to him is to enter the employ of a railway company. If, upon

the other hand, a young man realizes that he does not possess the foregoing essentials, he had better keep out.—Chicago Tribune.

LETTERS FROM OUR AGENTS.

[Advertising will be accepted to appear in this department at the rate of five cents a word, announcements to be enclosed with a border and printed under the name of the place of the advertiser. The special local value attached to advertising of this character will be apparent. Our agents are authorized to solicit advertisements for these columns, and further information on this subject may be obtained on application.

The current information of any office will, if carefully chronicled, furnish a welcome digest of news that will be read with pleasure and satisfaction by thousands, and this limit should constitute the legitimate contents of all letters. And we wish that our correspondents would avoid the too frequent habit, at all times a bad one, of abbreviating words in writing. This is a peculiarity among telegraphers, we know, but what may be plain to the writer, and for local interpretation, is usually a mystery to the editor, and is apt to lead to error in the printed statement.]

MONTREAL, QUE., GREAT NORTH WESTERN.

Thomas De Witt, operator of the Montreal Star, is visiting in the maritime provinces.

Clifford Swinburne has been promoted from head checker to be an operator and is succeeded by Charles Martin.

Miss M. L. De Bellefeuille is absent on a month's leave, and her position is being filled by Miss Agnes Brunet, of Ogdensburg, N. Y.

James Ross has resigned.

COLUMBUS, O., POSTAL.

This office has recently assumed metropolitan proportions and a dynamo plant and quadruplex and duplex apparatus have been installed. Mr. G. E. Hawkins, manager at Canton, Ohio, has been appointed manager here, and Mr. E. W. Blakeley is our efficient chief operator. As Mr. Blakeley installed recently the dynamo plant and the multiplex telegraph apparatus he is well qualified to fill the position. Mr. Hawkins comes to Columbus from Canton with an excellent reputation and the good will of all his friends, who congratulate him on his promotion.

ST. PAUL, MINN., WESTERN UNION.

One of the delightful social events that are looked forward to with pleasure is that of the monthly hop given by the Morse Social Club of this city, whose membership is composed entirely of those engaged in the telegraph profession.

The officers of the club, Mr. Busch, president; Mr. Demarais, secretary, and Miss Hunt, treasurer, are to be congratulated on their successful management of the two hops already given, and the club may be assured of a good attendance at

the ones to come. The next hop of this club will be given February 12.

Mr. Daniel Purtell is the happy father of a daughter.

Mr. Budd has gone to Pierre, S. D., to remain during the session of the Legislature at that point.

Business has been good at this office all winter, not a man being laid off; in the event of a resignation the vacancy is promptly filled.

Mr. Kroll has gone to Stevens Point, Wis., for the Coe Commission Co.

PHILADELPHIA, PA.

My motto—Honorable Dealing—D. A. Mahoney, special representative, operating department Western Union Telegraph Company, Philadelphia.

Have You Seen the "Fox"?—Send for catalogue, special price and easy terms. "Club" now forming. All makes rented three dollars per month. Specialties: Remodeled Remington's and Smith's. \$45 and \$50.

WESTERN UNION.

The 15th annual meeting of the Philadelphia Electrical Aid Society which was held in Odd Fellows Temple, January 12, notwithstanding the extremely cold weather, was very largely attended. President Maize delivered an able and instructive address in which he commended the various officials and committees for their loyalty and painstaking efforts put forth for the welfare of the society. He also said that, while the society was to be congratulated upon the acquisition of 64 new members, no society ever gets so large that its membership may not be still further increased and urged the members to make 1903 the banner year. He also spoke feelingly of the death of three members in 1902. After the other order of business had been gone through with, a delightful entertainment was given by professional and amateur talent which was greatly appreciated. This was followed by a bountiful luncheon. The following will show the membership and financial condition up to December 31, 1902: Members, January 1, 1902, 378; members admitted during the year 64; reinstated 4; a total of 446; suspended 25; resigned 1; deaths 3; a total of 29; showing a net membership of 417.

Sick benefits paid during the year amounted to \$1,154; death benefits \$150; executive committee for expenses \$266.40, showing a total for disbursements of \$1,570.40. The reserve fund amounts to nearly \$4,000. The following officers were elected for 1903: President, Frank E. Maize; vice-president, Jas. H. Wilson; recording secretary, W. E. Vanarsdale; financial secretary, J. E. Janney; treasurer, H. W. Hetzel.

Executive committee: Clara J. Grimley, Ella Hellings and A. P. Sell.

Trustees: H. C. Leahy, J. W. Fitzpatrick and Clara J. Grimley.

Auditing committee: C. M. Christine, H. Wobensmith and Mary A. Golden.

PHILADELPHIA, PA., POSTAL.

The messenger boys in the American District Telegraph service were made happy by a change from regular monthly salaries to payment for piece-work. This arrangement has made it possible for the most energetic to practically double their former earnings, while the sluggards are quickly discovered and dropped. It is needless to say that the service is vastly improved and fewer boys are required to do it.

An extended leave of absence has been granted Traffic Chief Geo. W. Dunn, to enable him to attend to his duties as a Legislator in the State Capitol at Harrisburg. The responsibility for the proper handling of the traffic now rests upon Mr. Harry Thompson, who is ably assisted by Mr. C. A. Currier.

Numerous changes have recently been effected both in the personnel and location of many branch offices. The office in the West Philadelphia stock yards has been moved to the site formerly occupied by the Western Union. Mr. J. H. Pinter is the manager, under whose care business is being well looked after.

The office in the Mill District at Fourth street and Lehigh avenue has been removed from the basement at the southeast corner to a more agreeable location, both from the standpoint of the public as well as the employees, at the northeast corner on the ground floor. With added new fixtures and general equipment for convenience and comfort Manager Edward Morgan is more than ever desirous of increasing his business.

Since the removal of the Stock Exchange to its new building, our office, formerly on the second floor of the Drexel Building, has been removed to a site on the ground floor of the same where it will be within more convenient access of the general public.

Mr. Geo. F. McIntyre, for a number of years manager of the office in the Spreckels Building has been appointed manager of the more important office at Third and Chestnut streets. He is succeeded by Mr. Fred. Fix, who has been promoted to fill the place vacated by Mr. McIntyre.

Miss Dorothy Robinson has been transferred from the Broad street Station office to that in the Real Estate Trust Building, with increased responsibilities but more convenient hours. Miss Hattie J. Hopple, formerly of Lewistown, Pa., succeeds Miss Robinson.

Although not unlooked for, the announcement of the death of Miss Lou R. Koch caused a general feeling of sadness to pervade the office. Miss Koch was one of the oldest operators in point of service, connected with the Postal Company in this city. Previous to her death, which occurred January 17, she had been absent for about ten months, stopping at the home of her sister in Stowe, Pa.

BUFFALO, N. Y.

The fifteenth annual meeting of the Buffalo Electrical Aid Association was held in Ellicott Square Building, January 12.

The reports of the officers for the past year proved very gratifying to the members, showing the largest net profit of any year since its inauguration, notwithstanding the great amount of sick and death benefits paid out. The total membership is four hundred and fifty eight.

The receipts for the year were \$2,540.78; disbursements \$1,762.51; leaving a net gain of \$778.67, and a total credit on deposit of \$3,881.94.

President John G. McNerny was presented with a beautiful diamond ring as a testimonial in appreciation of the valuable services rendered the Association during the past year. The presentation was made by Mr. W. A. Sawyer, manager of the Western Union office.

Officers elected for 1903 were: President, John G. McNerny; vice-president, William A. Sawyer; secretary, George W. McCoppen; treasurer, Robert B. Ferguson. Executive Committee: Dr. B. W. Readshaw, George Sallaway, J. F. Burgdorf, H. W. Drake, C. J. Sheridan, Miss Grace Smith, Miss Winifred A. Farrell. Auditing Committee: William J. Savage, Frank E. Krettner, Jos. P. McGowan. Trustees: John A. Pferd, George A. Burnett, Joseph Drexelius.

CHICAGO, ILL.

Telegraphers Typewriter Co.—For the convenience of our many Western Union and Postal customers, we have decided to keep our offices open until 7 P. M. on the 3rd and 18th of the month, 122 La Salle street, Chicago.

WESTERN UNION.

John Savoy died at Mercy Hospital, this city, on January 15, of cirrhosis of the liver. The remains were taken to Sarnia, Ont., for burial. Mr. Savoy is well remembered by all old timers, and was at one time a division chief in this office.

Ohm Court, 673 C. O. F., gave their annual ball on January 23.

Miss Alice McAvoy, private stenographer to A. C. Murphy, superintendent of city lines, died January 20 of acute pneumonia. Her death came as a shock as Miss McAvoy was widely known, having been in the company's employ for years. Mrs. Eugenie Pollock has been quite ill recently.

Miss Dot McCracken is back on the Cedar Rapids local.

O. T. Rullman has resigned.

J. G. Nugent, a late arrival from Evanston, Ill., shows appreciation of THE AGE by sending in his subscription.

POSTAL.

Mr. W. F. McDonald, formerly of the "Record Herald," is now with the Yetman Transmitter, in the National Life Building.

Mr. Konefsky, of the Postal Auditorium office, has resigned and accepted a position with the Western Union.

Mr. C. W. Ott, of the Metropolitan Division has resigned and accepted a position as second trick operator for the Wabash Railroad at Danville, Ill., where he is making a record for himself.

E. A. Leekley has been transferred to the

Palmer House office, days, vice Benjamin Moline to the main office. A. R. Bohaskey has been appointed manager of UX office, vice H. E. Withereil, who goes to the Palmer House office. J. J. Ahern has secured a position at the Rookery office, vice E. A. Leekley transferred to Palmer House.

C. E. Cragin, manager of the Virginia Hotel telegraph office of the Western Union and Postal joint office, has resigned to go into other business at Phillips, Maine.

Mr. O. T. Anderson who has been seriously ill for the past four months with anæmia, is now on the road to rapid recovery. He has given up the telegraph profession and will devote his entire time to his typewriter business which is growing at a rapid rate.

CINCINNATI, O., WESTERN UNION.

The promotion of J. P. McCabe from the position of night chief operator to that of chief operator as mentioned in these columns January 1, caused by the transfer of Wm. Fellowes to the position of chief operator at Boston, Mass., brought about the following changes in the operating department here: W. J. Connelly, assistant chief operator, promoted to night chief operator; L. E. Moores, wire chief to assistant chief operator; L. S. Miller, all night chief to wire chief. A. J. Doyle becomes all night chief and George Derfus assistant wire chief.

The ball given at Gos Hall, New Year's eve, was a grand success socially and financially. There was a jolly throng in attendance including many from neighboring cities.

The annual banquet and meeting of the Morse Mutual Benefit Association was held at the Palace Hotel, Saturday evening, January 10, and was well attended, the ladies being fairly well represented. Following the supper, the regular routine business was disposed of, including the election of officers which resulted as follows: R. H. Welch, president; Wm. Kehr, vice-president; J. F. Colligan, secretary; Frank Minning, treasurer, and an executive committee in whose hands the welfare of the association will be ably guarded. The association is in fine shape financially, the sick and death benefits paid out being much less than the preceeding year. Each annual meeting finds this association growing stronger and the good work improving.

MONTREAL, QUE., CANADIAN PACIFIC RAILROAD.

Quite a number of the ladies and gentlemen of this office participated in a vacation during the Holidays. Among those who visited their homes were the Misses Duncan and Farr, and Mr. Fred. J. Lee, the latter extending his absence three weeks, during which time he visited Detroit and Buffalo. Mr. Lee, who is musical, is always in demand socially.

J. W. Dunn, C. E. McWha and W. D. Fraser, accompanied the Montreal Hockey contingent to the Capitol on January 18th. On the same date the Telegraphers' Hockey team defeated the Montreal Light, Heat and Power Company's

team by a score of 4 to 2. President W. Currie was much pleased at the result. There are a number of games to be played this season.

Owing to the scarcity of fuel this winter, the Canadian Pacific Railroad has been supplying its employes with coal at cost price. This is certainly a thoughtful move on the part of the officials of the company and is highly commended upon as it is probably the only company in Canada which has not forgotten to assist their employes during the coal famine.

Recent visitors: Mr. J. Wilson, superintendent, Vancouver, B. C.; Mr. B. S. Jenkins, superintendent, Winnipeg, Man., and Mr. J. P. Phelan, of the Government telegraph, Yukon.

Mr. M. McDonald of the receiving department, has the sympathy of the staff in the recent death of his infant son, which occurred on January 18. BOSTON, MASS., WESTERN UNION.

Mr. Frank T. Viles, inspector of branch offices for many years past, has been promoted to be cashier in the district presided over by Mr. C. E. Page.

Mr. A. B. Clark, formerly of Cincinnati, is cashier of the Boston office, vice J. H. Wentworth, who recently accepted a similar position with the Postal Company, to take the place of cashier G. H. Patterson, who was made a solicitor for his company.

Mr. S. R. Crowder, electrician of the Southern Division, is in Boston on work connected with the new office.

NEW YORK CITY.

"My Old Virginia Home Upon the Farm," "Utopian Waltzes," and all popular music, 18c. each. Pianos sold \$1 per week. B. L. Brannan, 195 B'way, N. Y.

WESTERN UNION.

Mr. Thomas Brennan, assistant manager, has received from the chief telegraph office staff at Brisbane, Queensland, a specially printed card expressive of the season's greetings to the Western Union operating staff in New York.

Mr. D. Brown, of this office, has been added to the telegraph department of the Standard Oil Company, 26 Broadway.

Mr. H. W. Sauer, well known in this office, is now located at El Paso, Tex., and he reports that his health is much improved by the change.

This being the dull season there are practically no changes made in the operating force.

The appearance of the operating room has been much improved by the painters who have now about finished their work.

One of the old timers in this office is authority for the statement that the excessive noise of some of the sounders causes him to experience a sensation akin to seasickness.

The jigger switches are being abolished. In their place will be installed a call box system, which it is thought, will greatly simplify the use to which the jiggers were put.

The quadruplex department is about ready to be moved from the seventh to the eighth floor,

where new apparatus, up-to-date, tables, etc., will be found, when completed.

The new city line department on the seventh floor is nearing completion and will be ready very shortly for the transfer preparatory to the handling of city business in the new quarters.

Twelve one-hundred wire cables have been recently installed connecting the basement with the operating department. These twelve hundred wires are needed to meet the requirements of the growth of the office.

The new terminal room in the basement of the building, which will be finished next month, is fifty feet long. Eighty thousand wire connections will have been made in this room when this work is finished. These vast improvements in the different departments which have been undertaken of late will be treated more in detail in these columns in a later issue.

The Western Union Telegraph Company has acquired the building No. 14 Dey street, which adjoins its main building. The new acquisition is a six-story structure on a plot 25x77.3.

POSTAL.

Mr. Minor M. Davis, traffic manager, is making a business trip through the South.

Mr. G. W. Garland, for the past ten years a member of our force, and one of the best operators in the service, has resigned to accept a position with the Yetman Transmitter at Pittsburg, Pa. Mr. Garland served in the Third Company, United States Volunteer Signal Corps at Santiago during the Spanish-American War, and is a member of the Signal Corps Veteran Association.

The American Tin Plate Company and the American Sheet Steel Company, whose telegraph system is under the superintendency of Mr. C. C. Duvall, at one time an operator in this office, has an extensive leased wire system. Among the apparatus in use are quadruplex, duplex and simultaneous telegraphy and telephony systems. Yetman transmitters are also used in the larger offices of this private concern.

Thos. H. Tierney, who has been with the Marconi Wireless Telegraph Company, on the Nantucket Lightship, has resigned and returned to service in this office.

Evidently the dull season is over as business is steadily on the increase and those on the "extra list" are correspondingly happy.

Harold Rhodes has returned after an illness of several days.

F. C. Yule has returned from a thirty-day vacation spent in the West.

Arrivals: F. W. Iden, W. W. Ward and P. W. De Baun.

An interesting event which was looked forward to for over a month by the New Jersey contingent of the fraternity was settled in Jersey City on Saturday morning, January, 24. A 100 yard dash was run between T. Q. Monaghan, of this office, and night chief Stauffer, of the cable office, Mr. Stauffer winning handily.

THE ASSOCIATED PRESS.

Mr. J. Uncles, of the New York bureau, has resigned and Mr. J. A. Bates has been appointed to the vacancy.

Mr. G. A. Green has been appointed at South Norwalk, Conn., to fill the place vacated by W. H. McCormack.

Mr. G. Gilbert, of Binghamton, N. Y., has returned after an absence of several weeks caused by illness.

Jacob Levin Comes to New York.

Jacob Levin, assistant superintendent, Minneapolis, Minn., of the Western Union Telegraph Company has been appointed inspector of the Eastern and Southern Divisions of the same caused by the resignation of Mr. E. P. Griffith, who accepts the superintendency of telegraph of the Erie Railroad. Mr. Levin is a very efficient



JACOB LEVIN. NOW OF NEW YORK.

Inspector of the Western Union Telegraph Company.

official and is well adapted to fill the requirements of his new place. He was born in South Carolina, January 11, 1851, and began his telegraph career in 1869. Going west to Atchison, Kansas, in 1872, he filled the position of press operator for seven years at that point and for nine years was manager of the same office. During his sojourn in the west, Mr. Levin has been manager of the following offices: Atchison, Kansas; Denison, Texas; Sedalia and St. Joseph, Mo., and Omaha, Neb. Mr. Levin was made assistant superintendent at Minneapolis in July, 1890. His record and capacity for work during the twelve years he has occupied this position is an enviable one, and General Superintendent Brooks is to be congratulated in securing Mr. Levin's services in his division.

Frank Kitton Becomes Assistant Electrical Engineer of the Western Union at New York.

Frank Kitton, the newly appointed assistant electrical engineer of the Western Union Telegraph Company, New York, was born at St. Clair, Mich., July 16, 1850. He acquired the art



FRANK KITTON.

The new assistant electrical engineer of the Western Union Telegraph Company, New York.

of telegraphy while engaged in the drug business at that place. In the spring of 1868 he entered the service of the Western Union Telegraph Company at Detroit, Mich., as operator, and was transferred to Buffalo for the same company in October, 1869. In 1874 he was made night chief of the main office in Buffalo, and in 1878 was transferred to the day force as assistant chief operator. He received his appointment as chief operator in charge of the entire operating force in 1881. Mr. Kitton was actively engaged in the experimental work connected with the introduction of the duplex and quadruplex systems in the earlier days of multiple telegraphy, with the progress of which he has ever since been closely associated, and is considered one of the most expert electricians in that direction in the country. He was four times elected president of the Buffalo Electrical Society, and has been an active member of that Society since its organization in 1882. Mr. Kitton has not confined his electrical researches to that branch pertaining to telegraphy, but is well known in electric lighting and power transmitting circles, and has written several papers for the electrical society on these subjects. Mr. Kitton was identified with the Buffalo Association of Fire Underwriters for twelve years in the capacity of electrical expert.

In this selection of an assistant, Mr. J. C. Barclay, the electrical engineer, has secured the services not only of an expert to fill an important position, naturally exacting in its requirements

and demanding talents of a high order, but of a gentleman as well with whom it will be a pleasure to associate.

Wireless Telegraphy.

Had the steamer St. Louis been equipped with the Marconi wireless telegraph apparatus, the cause of its being a week overdue recently could have readily been learned by any of a dozen or more passing steamers which were equipped with the proper apparatus.

A game of chess by means of wireless telegraphy was recently played at sea between an American team on the steamer Philadelphia and an English team on the steamer Lucania, as the vessels passed each other in mid ocean, which resulted in a victory for the Americans.

The Marconi Wireless Telegraph Company, of Canada, has given notice of an application to Parliament for an act of incorporation to do business all over British North America, the British Isles, Europe and on the Atlantic and Pacific Oceans, and on the islands and places near the same.

The following is the text of the messages transmitted on January 19 by the Marconi system of wireless telegraphy between Cape Cod, Mass., and Cornwall, England, between President Roosevelt and King Edward:

His Majesty, Edward VII, London, England:

In taking advantage of the wonderful triumph of scientific research and ingenuity which has been achieved in perfecting a system of wireless telegraphy, I extend on behalf of the American people most cordial greetings and good wishes to you and to all the people of the British Empire.

THEODORE ROOSEVELT.

Sandringham, January 19.

The President, White House, Washington, America.

I thank you most sincerely for the kind message which I have just received from you, through Marconi's transatlantic wireless telegraphy. I sincerely reciprocate in the name of the people of the British Empire the cordial greetings and friendly sentiment expressed by you on behalf of the American nation, and I heartily wish you and your country every possible prosperity.

EDWARD R. and I.

According to Marconi, English capitalists owning stock in cable and telegraph companies are manifesting great concern over the success of his wireless system and are opposing him in many ways.

"On account of the opposition on the part of English telegraph and cable companies to wireless telegraphy, I shall not be in a position to open the South Wellfleet, Mass., office to the public before my return from abroad, perhaps two months, at the earliest," he said. "It does not matter how well I succeed with the experiments which I am making. Even when I am able to establish complete and easy communica-

tion with the other side, it will be of no immediate public benefit. I must first show the cable companies what can be done in wireless telegraphy before I can get them to come to reasonable terms. Ever since I began laying down the plans for the Cornwall Station I have felt the opposition of English capitalists interested in cable and telegraph stock. Most of the cable stock is held in England, and the owners have shown themselves to be particularly antagonistic to wireless telegraphy. I suppose that they feared it would prove a serious competitor to the cables."

The Cable.

Mr. J. H. Smart, superintendent of the Commercial Cable Company, New York, has returned from Europe where he has been sojourning since last October.

Mr. Joseph Rippon, of London, Eng., general manager of the Halifax and Bermuda Cable Company, was a recent New York visitor, the object of whose coming was to look into cable business of his company.

Mr. S. S. Dickenson, superintendent of the Commercial Cable Company, Canso, N. S., who for several months past has been attending to the selection of the landing places for the Commercial Pacific Cable at Honolulu and elsewhere, returned to New York on January 27, where he will remain for some days.

The new British Pacific Cable, which was opened for traffic in December, does not appear to carry much of the English traffic to Australia. Of course practically all of the American business for Australia is routed via Vancouver, B. C. This is due to the fact that the rates are lower than via the London route, the tariff from London to Australia by both the Eastern and Atlantic cables being the same, but the Eastern Company secures the lions share of the traffic.

The capital stock of the Commercial Cable Company will be increased to the full amount authorized, \$15,000,000, with rights to shareholders to subscribe to 12½ per cent. of their holdings. The amount of capital outstanding now is \$13,333,000. It is understood that the stock will be offered to shareholders at par, which will make the rights valuable, as the price of the shares is now ranging near 175. The company pays 7 per cent. regular dividends, and 1 per cent. extra yearly. The new capital will be used, it is believed, to pay for the new Pacific cables of the company.

BAMFIELD CABLE STATION.

Following is a list of those employed at this

station, which is the landing place of the new British cable between Canada and Australia: R. G. McLachlan, superintendent; R. Bain, assistant superintendent; J. G. Godwin, supervisor; D. Osborn, G. Scott, F. Noad, L. Waugh, cable operators; Mr. Godson, bookkeeper; Mr. Barnet, engineer electrical light plant; H. G. Davy and W. J. Chisholm, land line operators, and Theo. Marshall, repairer.

Bamfield is on Barclay Sound, about 100 miles north of Victoria, B. C., on the west coast of Vancouver Island, and the same distance west of Vancouver.

Municipal Electricians.

Mr. George Glassner, superintendent of Fire Alarm Telegraphs, at Milwaukee, Wis., after thirty-four years of service, has been retired on a pension. Mr. Oscar Kleinstaubler, the assistant superintendent, has been appointed to fill the vacancy until a successor can be selected.

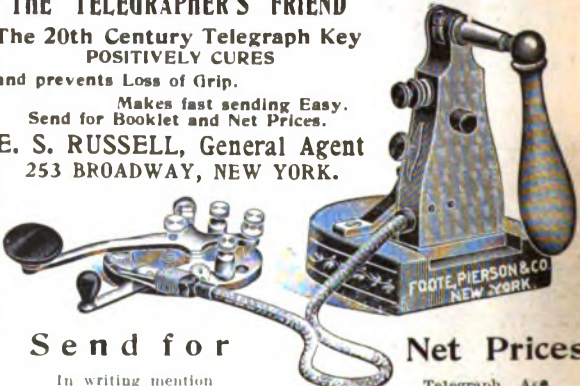
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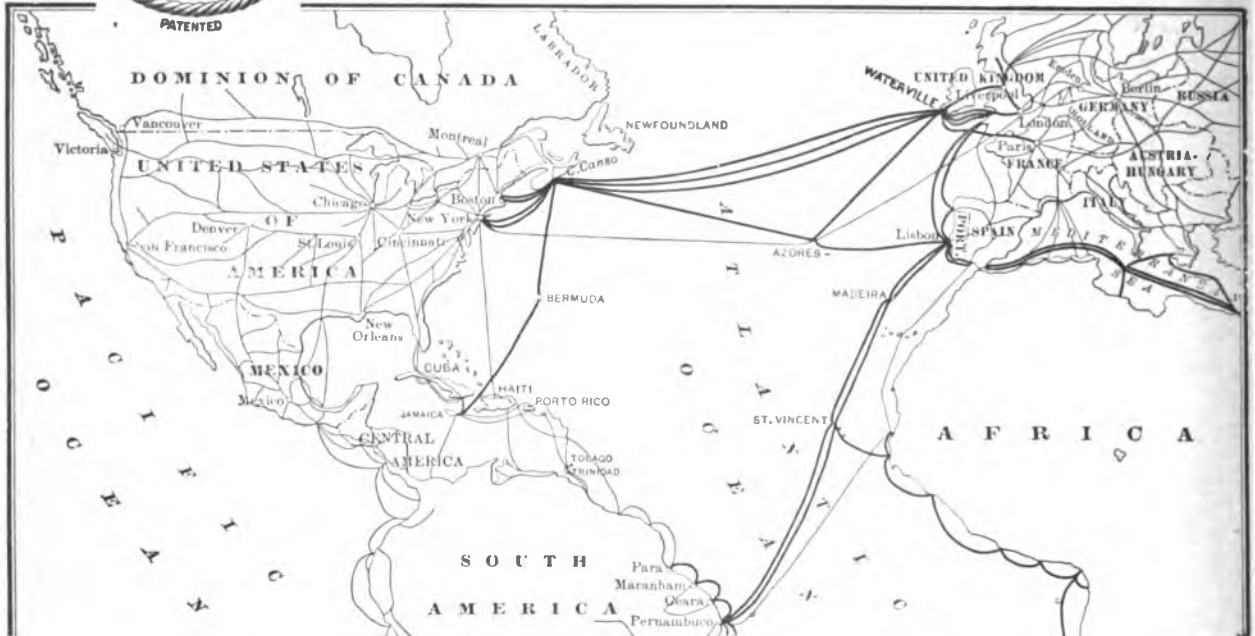
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CHICAGO, ILL., December 24, 1903.

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I subscribed for 5,000 shares of your stock. Since then I have been upon your properties at Stein's Pass, New Mexico, and as a result of my personal investigation you may double my subscription, as I found the mines in every respect as represented in your prospectus.

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THE TELEGRAPH AGE

No. 4.

NEW YORK, FEBRUARY 16, 1903.

Vol. XX.

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SOME POINTS ON ELECTRICITY.

By Willis H. Jones.

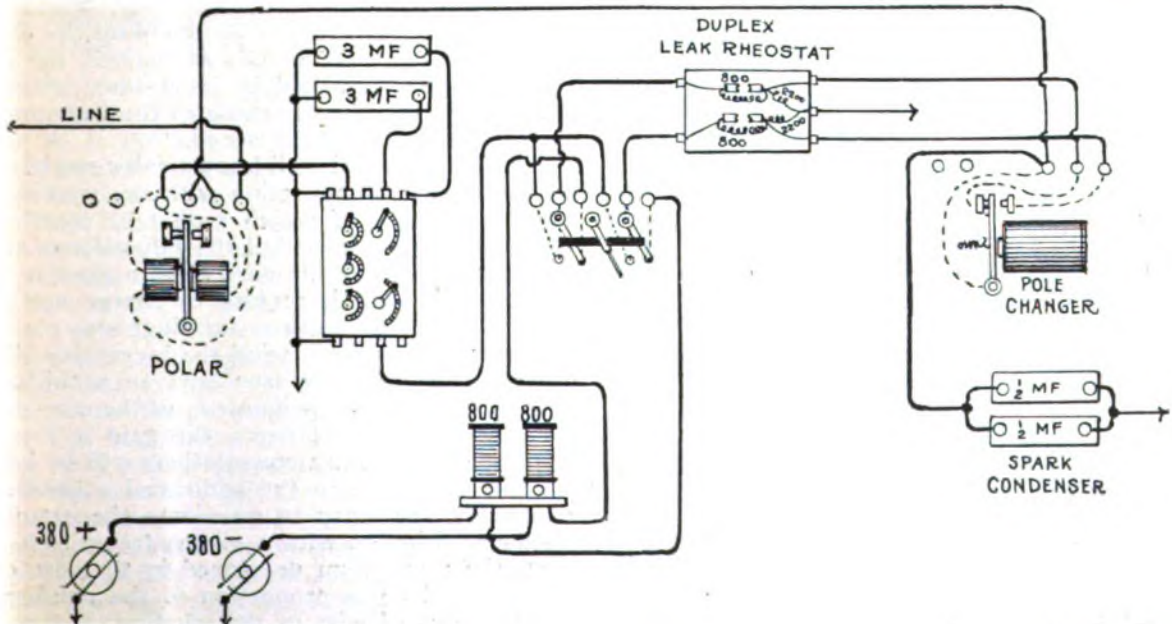
The High Potential Leak Duplex.

In many large telegraph offices the highest value of electrical pressure required is obtained

by connecting several dynamos of low electro- motive force together in series. Thus six ma- chines of 60 volts each would give 360 volts at the brush of the last one in the row, while a tap at each machine would give values of 60, 120, 180, 240, and 360 volts, respectively.

This method is obviously an ideal one where many circuits require different values of electrical pressure, but would be expensive were the lower values not actually required. One machine of high electromotive force would obviously be much cheaper to buy and maintain than several small ones, hence at some repeating stations where there is little or no call for lower pressures than that used on very long quadruplex circuits, telegraph companies often install but one pair of dynamos of the required electromotive force for the multiplex apparatus.

In some cases it has been found desirable, later on, owing to the necessity for increased office facilities, to install a duplex on a shorter circuit, but this is hardly important enough to warrant the expense of adding extra machines of lower pressure to the dynamo plant. To meet this emergency, Minor M. Davis, traffic manager and assistant electrical engineer, of the Postal Telegraph-Cable Company, has devised a method called "The High Potential Leak Duplex," by means of which a dynamo of any given pressure may be made to feed an extra circuit at any lower voltage desired. The required value of electro-

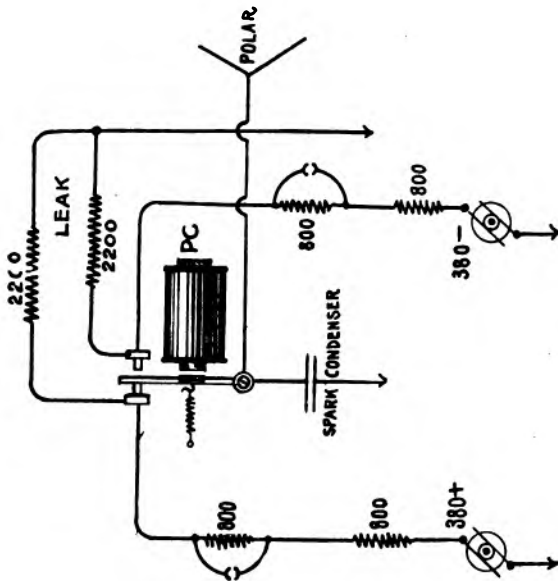


by connecting several dynamos of low electro- motive force necessary to operate a given duplex

circuit is obtained from the high potential dynamo by taking advantage of the fact that the electrical pressure of the machine decreases from a maximum value at the brushes to zero at the nearest ground (in ohms) in direct proportion to the ratio of resistance at any given point to that of the total resistance in the circuit.

Thus, a 300 volt machine feeding a 100 ohm circuit would show 300 volts at the brushes, 150 volts at 50 ohms distance, 25 volts at 75 ohms distance, and zero at the ground terminal. From this it will be seen that to decrease the initial pressure of a machine suitably at a given point it is merely necessary to insert a proper value of artificial resistance in circuit between the brushes of the dynamo and the point where the line is fed.

This is the method followed by the Postal Telegraph-Cable Company in the "High Potential Leak Duplex," the arrangement of coils and connections of which are shown in the first accompanying diagram.



It will be seen that they first construct a grounded artificial circuit containing in all $800 + 800 + 2200$ or 3800 ohms resistance, and feed it from the high potential 380 volts machine. The lever of the polechanger is caused to make contact with this artificial line at a point, either $\frac{1600}{3800}$ or $\frac{800}{3800}$ parts of the entire ohmic distance, according to whether the 800 ohm coil shown is cut in or shunted out, hence at that point the 380 volts will have fallen in value to correspond with the figures in the above fractions. Figured out it shows that 278 volts will represent the pressure at the polechanger when there is but 800 ohms inserted between it and the battery and 220 volts with 1600 ohms intervening.

In order to provide for both polarities of current, a duplicate artificial circuit is required for the companion machine as shown in the second illustration. The polechanger lever playing between the front and back contact points, there-

fore draws alternately positive and negative current from the dynamo in the usual manner.

In case it should be desired to use the full pressure, or 380 volts, on a longer circuit, the removal of the "ground" at the opening of the 2200 ohm coil and insertion of plugs in the second 800 ohm coil connection is all that is required to make a duplex set thus arranged available for the purpose.

ANSWER TO A CORRESPONDENT.

A correspondent asks the following question:

"In view of the fact that resistance in itself is always an objectionable factor in electric conductors, and that in many circuits the greater portion of it is to be found in the coils of the apparatus, why would it not be beneficial to decrease the total ohmic resistance of telegraph relays by enlarging the iron cores and rewinding with wire possessing, say, twice the original diameter?"

"According to the rule laid down this would quarter the resistance of each instrument so constructed, and considering the great advantage thus gained in the conductivity of a long way circuit it would seem that the question of a slightly increased cost of such instruments could hardly be raised against the plan, provided, of course, my suggestion is feasible.

"I would be pleased to have you answer through *Telegraph Age* as the point has been discussed between several of us laymen and we have agreed to ask your decision."

We are sorry to have to depreciate the plan suggested by the writer of this communication, but the fact is that experiments have shown conclusively that increased efficiency of telegraph apparatus lies in the construction of relays in a manner directly opposite in principle to that which he proposes.

While the resistance of the circuit would certainly be greatly reduced by doubling the diameter of the wire in the coils as claimed, the gain in that direction would be more than offset by a loss in the electrical inertia of the instrument; in other words a loss in speed.

There are several well known rules established and followed in connection with the winding of magnets, details of which cannot be mentioned here for want of space, but the substance of them is, that the longer the core of a magnet is, the greater time will it require to charge and discharge, hence long cores act sluggishly.

Again, we must not wind the layers one above the other around the iron core to a thickness much greater than the diameter of the core itself, because beyond that depth the gain in magnetism due to the extra convolutions will be insignificant compared to the additional expenditure of energy necessary to overcome the extra resistance. Finally, with a given strength of current, the magnetism developed in the core of a magnet will be in proportion to the number of convolutions of wire in the winding, and as we must not build the latter thicker than stated, it

follows that should we rewind the core with wire twice the diameter of the original, the length of the core must also be doubled.

If our correspondent will observe closely the construction of highly wound magnets, such as the polarized and neutral relays of quadruplex apparatus, he will find that the cores are invariably short and thick—purposely made so to insure quick action—and wound with very fine wire in order to get the greatest number of convolutions possible around the iron within the limited space allowed.

Business Notices.

The continued demand among telegraphers for the 20th Century Telegraph Key, which long since conclusively demonstrated its ability to cure and to prevent loss of grip, and consequently to bid defiance to loss of time formerly incident to this ill, has established a reputation for this famous device that simply grows stronger with the lapse of time. Mr. E. S. Russell, 253 Broadway, New York, is the agent for this key, and invites correspondence relating thereto.

The Rogers Manifold and Carbon Paper Company, the well-known manufacturing stationers of 75 Maiden Lane, New York, under the name of the Rogers Publishing Company, has brought out a calendar covering a period of two hundred years, embracing the dates from 1800 to 2000. Three separate editions are published, one for the vest pocket, one for the desk and another arranged on a single large sheet. This long time calendar offers a novel feature in such work inasmuch as it affords a ready means for locating the exact day as well as date for time past and to come, the correct finding of which is so often a source of perplexity.

The calendar will find a welcome place as a pocket companion as well as on both business and literary desks.

A new and novel digging spade, embodying many commendable features, the patented invention of W. E. Phillips, of England, is being offered on this market by Patterson Brothers, the well known hardware firm, and tool manufacturers, of 27 Park Row, New York. The implement is shown in illustration in an advertisement in another column. By reference thereto it will readily be seen that the spade possesses decided advantages over the prevailing styles. This is evident not only in the lighter, open construction of the blade, but impressively so in the sharp edges and the arrow-like projections on each side of the same. The importance of these features is clear for the workman is enabled thereby to cut into the ground speedily, and to crack effectually the surrounding earth preliminary to removal, thus rendering his labor far more easy of performance. As a digger of pole holes the spade will doubtless find favor in the telegraph construction service. This is because of its effectiveness and labor-saving qualities, for it is claimed that the earth re-

sistance to operation is reduced to one-sixteenth of that of the old patterns, so that in the hands of an expert workman from two to three times as much work may be accomplished in a single day and with a corresponding reduction in physical strain, a highly important saving every way considered. The implement will also recommend itself equally to contractors, gardeners, agriculturists and others, for its many excellent combined qualities will give it a welcome place in the service of each. Patterson Brothers will be glad to furnish all information regarding this new spade that may be required, and correspondence is invited.

Personal Mention.

Mr. Chas. P. Bruch, assistant general manager of the Postal Telegraph-Cable Company, New York, has been elected president of the Canton, Ohio, society.

Mr. Wm. H. Baker, general manager of the Postal Telegraph-Cable Company, New York, has returned from Hot Springs, N. C., where he has been recently for some days and where his family is at present located.

Mr. P. V. DeGraw, formerly general southern manager of The United Press, and more recently with the Cincinnati Enquirer, who has been sojourning in Salt Lake City, Utah, since June last, has returned to Washington as the press representative of the Louisiana Purchase Exposition.

Resignations and Appointments.

Mr. John Gaul, Western wire chief of the Western Union Telegraph Company, Pittsburg, Pa., has been appointed manager at Butler, Pa., of the same interests.

Mr. W. M. Patton, of Washington, D. C., has been appointed manager of the Western Union Telegraph Company at Knoxville, Tenn., vice J. J. Broderick, resigned.

Mr. P. M. Fulton of Columbus, Ohio, has been appointed manager of the Western Union Telegraph Company at Worcester, Mass., vice William A. Dunn, resigned.

Miss V. A. Mallery, manager of the Postal Telegraph-Cable Company, at Amherst, Mass., has resigned and has been succeeded by Miss A. H. Devere of Woonsocket, R. I.

Mr. J. H. Hastings, formerly manager of the Postal Company at Northampton, Mass., and who resigned owing to ill health, has been re-appointed manager at the same point.

Mr. W. C. Swain, formerly chief operator of the Postal Telegraph-Cable Company, at San Francisco, has been appointed electrician of the Pacific division, with headquarters at that city.

Mr. Lloyd B. Beazley, private operator for the American Locomotive Company, at Richmond, Va., has been appointed manager of the Postal

Telegraph-Cable Company, at Winston-Salem, N. C., vice N. Schaum, resigned to enter the Western Union service at the same place.

Mr. E. C. Denaple, of the Western Union Telegraph Company, Cleveland, O., has been appointed manager of the same interests at Detroit, Mich., vice C. A. Elster, resigned. See Detroit, Mich., items for details.

Mr. N. C. Pangburn has been appointed district foreman with supervision over the lines and wires in the Sixth District, Eastern Division, of the Postal Telegraph-Cable Company, with headquarters at Albany, N. Y.

Mr. Wm. D. West, formerly chief operator of the Western Union Telegraph Company at New Orleans, La., has been appointed to a similar position at Mobile, Ala., vice J. A. Hughes, resigned, to accept service elsewhere.

Miss Stella Daily, formerly manager of the Western Union Telegraph Company at Leavenworth, Kan., and the past year an operator in the Denver office, has been appointed chief clerk to assistant superintendent A. A. Gargan, at the latter place.

Mr. S. A. D. Forristall has been appointed joint superintendent of telegraph of the Western Union Telegraph Company and the Boston and Maine Railroad Company, having jurisdiction over all telegraph lines on the Boston and Maine System, with headquarters at Union Station, Boston, Mass.

Mr. E. J. McDonald, manager of the Postal Telegraph-Cable Company, at Schenectady, N. Y., has resigned and has been succeeded by Mr. K. G. Starr, formerly with the Chicago and Grand Trunk Railroad Freight Department at Chicago. Mr. Starr has had a number of years' experience in the commercial business.

Mr. D. H. Gage, Jr., formerly assistant chief operator at Albany, has been appointed to a position in the office of Electrician John F. Skirrow, at New York, and has been succeeded by Mr. W. A. Crawford, formerly night chief operator, who is succeeded by L. R. Thompson, formerly repeater chief at Albany, Mr. P. H. Nolan assuming the duties of repeater chief.

Mr. F. C. Hackett, chief operator of the Western Union Telegraph Company, Cleveland, O., has resigned and L. G. Seibel, the wire chief and assistant chief operator, has been promoted to the vacancy; W. C. Wood, assistant wire chief, promoted to wire chief, days; J. E. Wertmen, promoted to assistant wire chief, days; M. D. Combs, traffic chief, appointed also to the position of assistant chief operator; G. E. Koplín, division chief way department, to assistant wire chief, days; A. F. Wilcox, promoted from operator to division chief way department; F. L. Hertzner, division chief, quad department, days, to night chief operator; J. T. Hanford, night chief operator to division chief quad department, days.

General Mention.

Mr. W. Y. Stafford, a prominent telegrapher in Western Union circles at Syracuse, New York, some fifteen years ago, is now a member of the firm of Fred. J. Drake & Co., publishers of Chicago, Ill.

Mr. P. V. DeGraw, a well known old timer, in remitting for his renewal of subscription to TELEGRAPH AGE, writes: "Perusal of its always interesting pages keeps one young from the fact of being constantly in touch with the friends of yore."

Doctor A. D. Campbell, now a practising physician of Cleveland, Ohio, who was for many years a member of the telegraph profession, is a subscriber to TELEGRAPH AGE, which he reads in order to keep posted on the happenings in his old field in which he does not lose interest.

The Lehigh Valley Railroad Company, of which Mr. J. H. Jacoby is superintendent of telegraph, has been educating its telegraph operators in the matter of handling switchboards and other minor matters with extremely beneficial results and it is felt that work along these lines must surely bring about a better telegraph service.

Mr. James P. Bradt, an old time operator who, for several years preceding the merging of The United Press with The Associated Press, was manager of the former's office in Baltimore, is going abroad to remain permanently. For several years past Mr. Bradt has been manager for the Columbia Phonograph Company, with headquarters at Baltimore, and with territory extending south to New Orleans. He has been a most successful manager and he now goes to Germany to be manager of the company's office in Berlin. Mr. E. D. Easton, president of the Columbia Phonograph Company, tendered Mr. Bradt a complimentary dinner at the Waldorf-Astoria Hotel on January 30. Among the guests were Walter P. Phillips, now with the Columbia Phonograph Company, at Bridgeport, Conn., and Victor H. Emerson, of the New York office, of the same company, and formerly an old time telegrapher.

Recent New York Visitors.

Mr. Chas. C. Adams, general superintendent of the Postal Telegraph-Cable Company, Atlanta, Ga.

Mr. Stephen D. Field, an old time telegrapher, for the past twenty years an electrical engineer and inventor.

Mr. W. A. Sawyer, manager of the Western Union Telegraph Company, Buffalo, New York.

Mr. Walter P. Phillips, now of the Columbia Phonograph Company, Bridgeport, Conn.

Mr. C. G. Kinsman, superintendent of telegraph of the Wabash Railroad, Decatur, Ill. Mr. Kinsman was accompanied by his wife and was en route to Porto Rico on a brief vacation.

Telegraphic Bookkeeping.

Third Article.

BY W. H. DOHERTY.

In the course of ordinary telegraphic book-keeping we find messages that require special treatment. These messages are put in three different classes, viz: Guaranteed messages, uncollectible messages, and paid "other line" messages. Let us consider these separately.

A guaranteed message is one that has been sent collect from the originating office, and on arrival at destination, it is found the charges cannot be collected, for reasons such as addressee refuses to pay, addressee cannot be found, etc. It then becomes the duty of the receiving office to report by service message to the originating office, that tolls cannot be collected, giving the reason why.

As all messages sent collect are taken with an understanding, or guarantee, from the sender that he will pay charges, if for any reason they cannot be collected from the addressee, it rests upon the originating office to account for the tolls. This is done by entering messages of this nature on a special report or list provided for the purpose, known as "statement of guarantee messages" and which are debited against the originating office. It should not be forgotten, however, to also enter the message against the destination office for the amount of tolls, under the heading "This Office Checks," the same as would have been done if the message was not reported uncollectible.

Uncollectible messages are in a sense similar to guaranteed messages, yet as a matter of fact are exactly opposite. What a guaranteed message is to the originating office, an uncollect message is to the office at destination, hence it is that any message received collect, on which tolls cannot be collected, becomes an uncollect message when reported for collection to the originating office. A message of this nature is debited against the destination office under "This Office Receives" and credit is taken, by turning in the message, with all service messages attached, with the monthly report. If there be one or several during the month, they should be put on the form provided for that purpose, known as "statement of uncollected messages."

A paid other line message is more difficult to understand, and by citing an illustration, one may be better able to get a correct idea. New York, we will say, receives a collect message from Chicago, on which the tolls are 40 cents. The addressee is found to be not in New York, but in Buffalo. New York notifies Chicago of the fact, and Chicago replies to forward the message to Buffalo, charges following. New York forwards the message to Buffalo, with the extra words in the check, necessary to cover the point of origin and date, (but to simplify matters in this case we will say that with the added extra words the message does not exceed ten words) and also inserts

in the check the amount of tolls to be collected at Buffalo, which in this case is 25 and 40. New York to Buffalo is 25, and Chicago to New York is 40, the latter being the other line tolls. Now, while this message has reached New York collect, and that office must debit itself with 40 cents, no money has been received on it. New York relieves itself of this 40 cent charge by taking credit with the forwarded message, on the monthly report. For some reason a form has never been provided on which to list this class of messages, but as it is, they should be listed on a bill-head and titled, similar to the uncollects, and marked "paid other line vouchers."

Matters are sometimes further complicated with these paid other line messages. For instance: If Buffalo fails to find the addressee, or payment is refused, the message is reported back to New York. In this case New York would have a guaranteed message of 65 cents in its possession, on which some kind of credit must be established. The method of getting it is to report by service message to Chicago to "Collect There" 25 and 40, giving the proper references of the message, and preserving this service message as a "paid other line" voucher, which is good for 65 cents. Chicago must account cash for the 65 cents, as it started from there as a guaranteed message, and Buffalo would take credit with an uncollect for 65 cents to offset the entry New York must make against that office for that amount.

Therefore, in summing up we have Chicago checking New York 40 cents on the original message and New York getting credit with a paid other line message, the one forwarded to Buffalo of 40 cents. Buffalo also checks New York with a 65 cent guaranteed message, and New York gets credit, with a paid other line service message 65 cents, the one sent to Chicago being reported non-delivery of message at Buffalo, and Chicago being the originating office, has a 65 cent guarantee on its hands, for which settlement is made in cash.

Newspaper Tributes to the Memory of John W. Mackay.

Mr. Frank A. Burrelle, of New York, has just delivered to the Postal Telegraph-Cable Company the twenty albums containing the published obituaries of the late John W. Mackay. The labor of gathering and placing in album form was begun last July. There are 5,480 clippings to each set covering 1,536 pages of Irish linen leaves, 10x12 inches in size. This is said to be the largest collection of material ever gathered concerning the death of a private individual and the kindly expression of the press of the country was unanimous. Four sets of books were ordered by the Postal Company one set being designed for Mrs. Mackay, one for Mr. Clarence Mackay, one for the Postal Telegraph-Cable Company and one for the Commercial Cable Company.

Important Decision.

An important decision was rendered by the Fourth Court of Civil Appeals at San Antonio, Texas, on January 21, deciding on the liability of a telegraph company for loss occasioned by their wires being tapped and false messages sent, the decision being against the company. The case on trial was the Western Union Telegraph Company vs. Uvalde National Bank, on appeal. The suit was the result of a sensational robbery by telegraph August 16, 1900, in which the principals secured \$1,200 cash from the Uvalde bank, by getting knowledge of the telegraph calls of the stations at San Antonio and Uvalde. This being done, the wires were tapped between the two stations and a telegraph office set up in the brush, by which a message was sent to the Uvalde bank purporting to have been sent by John Wood & Son, San Antonio bankers, requesting that the draft of C. W. Fisher, who had been in Uvalde some days be honored for \$4,500.

The bank telegraphed San Antonio for confirmation, the message was intercepted at the office in the brush, and the confirmation purporting to be from the Woods wired back.

Fisher was paid \$1,200 cash and given a letter of credit for the balance, and he and his confederate escaped.

In the lower court the bank recovered for the \$1,200, and the telegraph company appealed, and in deciding the case for the bank the court held that it was the duty of the company to have satisfied itself of the genuineness of the message before delivering it, knowing from its face its importance; that the party to whom the message was addressed received it on the faith that it was what it purported to be when it was delivered to him by the company's agent.

The Life of Creosoted Telegraph Poles.

At a meeting of the Dublin section of the British Institution of Electrical Engineers, held last December, Mr. A. T. Kinsey gave some interesting figures regarding the life of creosoted telegraph poles. Timber is preferred to iron in pole line construction on account of its lower cost, but, when used some means of rendering it capable of resisting the attacks of dry and wet rot are necessary. Various methods have been tried, but all have been abandoned except creosoting. All timber must be thoroughly seasoned and dried before treatment.

The quantity of preservative used is eight pounds per cubic foot. It does not penetrate to the heart of the pole, reaching only to a depth of one or two inches when the timber is very dense. This leaves an unprotected portion—the heart and the interior margin of the zone. This unprotected zone is where dry rot usually sets in, but dry rot is comparatively rare. It is found that in course of time the creosote sinks to the base of the pole, forming a thick crust on the surface of the latter where it is most needed as a protection against wet rot, as this latter attacks from without and proceeds inward. In 1880 the

life of treated poles was found to be thirty years. Poles taken down in that year which had been planted in 1849 and 1850, were found to be sound as when erected. Since then creosote has deteriorated in quality owing to the increased value of some of its constituents, so that it seemed desirable to investigate the matter again. The author has traced the erection of creosoted poles in Ireland as early as 1858, and again in 1861, but as a systematic branding of the date of creosoting was not begun until 1873, it is impossible to identify with certainty the poles creosoted before that time. The result of an examination by percussion showed that the poles thus branded are apparently quite as sound as when first erected. Poles dated 1877 were being taken down, but were apparently as good as new, and would pay for re-erection.

How Standard Time is Made.

Strange as it may seem, Uncle Sam does not make use of the sun for reckoning time, but, says St. Nicholas, he turns his attention to some of the regular steadygoing stars, or "fixed stars," as they are called. Every clear night an astronomer with a telescope looks at certain of these stars and makes his calculations, from which he can tell just when the sun would cross the seventy-fifth meridian. One of the great clocks in the observatory is called the transmitter, because it transmits or sends out the signal that keeps standard time. This clock is set and regulated by the star-time, and then every day at three minutes and fifteen seconds before twelve a switch is turned on and the beats of the pendulum of this clock are sent by electricity over the wires to the telegraph offices throughout the country.

Martha's Vineyard Telegraph Company Election.

The postponed annual meeting of the Martha's Vineyard Telegraph Company was held in Boston, January 22. The following officers were elected for the coming year: President and general manager, H. G. Haddon, re-elected. Directors: E. B. Pillsbury, re-elected; C. E. Page vice Thos. Roche, resigned, and H. G. Haddon. Treasurer and clerk, J. H. Wentworth, vice C. C. Bedlow, resigned.

The president's report showed a large increase in the receipts over the preceding year.

Novel Use for the Telegraph.

A man hopelessly lost in the bush of South Australia, after wandering about for days, came upon the telegraph line between Adelaide and Port Darwin. He hadn't strength to go farther, but he managed to climb a pole and cut the wire. Then he made himself as comfortable as possible and waited. The telegraph repairers were sent along the line, and they came to the wanderer in time to save his life.

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The Wire Tapping Game in a New Role.

The practice of the bunco game in one form or another, does not appear to be on the wane. Instead, a wider diversity of expedient is resorted to, and the favorite trick of yesterday is displaced by the newer one of to-day, and the unsuspecting are as cleverly taken in and as utterly fleeced as ever. For years past the officers of the Race Bureau, of the Western Union Telegraph Company, have been much annoyed at the machinations of confidence men who have sought to use the bureau in different ways in furtherance of their schemes. Much vigilance has been exercised in consequence to thwart the cunning of the sharpers who sometimes go so far as to actually impersonate, through a confederate, Superintendent Dealy, Manager Mitchell, or Chief Operator Burton, in order to carry out the deception. It is quite a frequent occurrence for some one who has been duped by this class of confidence men, to make his appearance before Manager Mitchell, or one of the other officials named, and relate a direful story of how he had been induced to part with his money on a "sure thing" in the shape of racing tips, or what is known as the wire tapping game.

A favorite plan worked by the scoundrels has been to bring their victim to the Western Union Building at 195 Broadway in order to verify an alleged tip by confirmation from the Racing Bureau itself in the person of one of its officers. An introduction is made to a person who appears upon the scene hatless, and sometimes coatless, and who carries a pen in his hand, as Manager Mitchell or Chief Operator Burton, who in response to inquiries, assures his visitors of the correctness of their information and enlarges upon the opportunity afforded for fleecing the pool rooms out of large sums of money. Of course all of the circumstances of place and person are such as to impress the victim favorably. A few days ago a confidence man brought a victim into the building and took him up to the sixth floor, where the general offices of the telegraph company are located. Just about the time the two came up another man walked out of the toilet room into the hall. He was in his shirt sleeves, had a pen back of his ear and wore a little black cap. As the confidence man and the dupe walked through the hall the other man walked over to the door of one of the offices. He had just put his hand on the door knob when the confidence man hailed him.

"Oh, Bill," said he, "here's a friend of mine who wants to talk business with you."

"I can't talk business here," replied the other, "but I'll meet you around the corner in ten minutes when I get my hat and coat on."

The confidence man then led the dupe away. The other man, instead of going into the office, as might have been expected, waited until the victim was out of sight and then went back to the toilet room, from which he emerged a minute later with hat, coat and overcoat all on.

Bill Ludding, the janitor, saw just enough of this little game to be satisfied that it wasn't quite

right. A conference with Superintendent Roberts of the building convinced him of the correctness of his conjecture.

Three days later the two confidence men reappeared with another victim, and the previous scene was again enacted.

On this occasion the minute one of the men left the toilet room where, as before, he had left his coats and hat, in order the better to impersonate a Western Union official, Bill Ludding went in and grabbed the hat, coat and overcoat. All of these he put in a safe place and then he awaited developments. When the dupe was led away the man went back for his clothes, but he didn't get them. He met Mr. Ludding near the door.

"Somebody's stolen my hat and my coat and my overcoat," said the man, with a tug at his Vandyke beard.

"I'm the janitor of this building," said Mr. Ludding sweetly. "Guess you don't belong here."

The man with the Vandyke made a dash for the elevator and was last seen running down Broadway hatless and coatless.

"We don't want his coats and hat," said Mr. Roberts. "They are right here in my office and the owner can have them whenever he is inclined to call for them. I found 73 cents in his pocket, but no cards. Let me tell you, though, that if either of those fellows ever come here again Mr. Ludding will kick him down all the six flights and into the street. It is no use to arrest these fellows, for they can squirm out too easily. We are just going to kick them."

Via Eastern Telegraphic Social Code.

We are in receipt of a copy of the "Via Eastern Telegraphic Social Code," which has just been issued by the Eastern Telegraph Company, of London, Eng., and associated companies.

The Eastern and the associated companies now have this book on file in every one of their stations throughout the world, and they also have it on sale. The Indo-European Telegraph and also the Great Northern Company have adopted the code for use over their respective lines. As there is really no other telegraphic social code on the market, this book is of great service to the traveling public. The book may be consulted by the public free of charge at any station of the Eastern and associated companies, the Indo-European Telegraph Company, and the Great Northern Company.

The book was compiled by Robert T. Atkinson, Salisbury House, London, E. C., England, who is the selling agent of the book, the price being \$2.00.

In these days when technical knowledge is of such value to the telegrapher who would master his profession, its acquisition becomes of supreme importance. A subscription to TELEGRAPH AGE will supply the information every operator needs.

The Language of the Wire.

BY EDGAR LEGGETT KEEN.

[From the Philadelphia Evening Post.]

Ld 3—Kevy ws saik tsp by an unkn ank wo, ixr, im afw ckk. Gx.

This is not Russian nor "pidgin" English. Neither is it printers' pie nor a doctor's prescription. It doesn't look very easy to the average citizen, but it is perfectly intelligible to any telegraph operator familiar with the handling of press copy. The operator in a newspaper office who, receiving such an item over the press association wire, should fail to sing it out or demolish three or four chairs getting it to the telegraph editor's desk, would surely lose his job. Assuming that he has heard this message ticking its way over the wire from New York, he has already taken it down on his "machine" in understandable English—and by this time he is probably listening to the bawling of the newsmongers in the street below: "Wux tre-e-e! All about the horrible assassination of King Edward!"—while the startled public is reading from the still damp sheet:

London.—3—King Edward VII was shot and instantly killed this afternoon by an unknown anarchist who, it is reported immediately afterward committed suicide. Great excitement.

This is an exact translation of the alphabetical jumble recorded above. The message was sent in what is known in telegraph circles as the Phillips Code. As transmitted it contained forty-two letters; as translated, one hundred and forty-four letters. It was sent over the wire, therefore, in less than one-third the time that would have been required to tick it off in plain language.

Another example:

T Scotus tdy dedd 5 pw f Potus dz n xtd to t Pips, ogt all pst Cgsl xgn q sj is uxl.

This also would be startling if true, and doubtless would create a sensation or two in the editorial and composing rooms, for it conveys the heart-rending information that:

The Supreme Court of the United States to-day decided that the power of the President of the United States does not extend to the Philippines, on the ground that all past Congressional legislation on the subject is unconstitutional.

The code was compiled some twenty years ago by Walter P. Phillips. Since then it has been enlarged and improved until it now contains more than two thousand expressions. These expressions vary in length from one letter, or figure, to groups of five letters. They stand for one word or for phrases composed of as many as eight or ten words. The system was devised for the purpose of both saving time and increasing the capacity of the wire. Its utility for press work became evident upon the introduction of the typewriter. An average operator sending unquoted matter can crowd the very best receiving operator taking it in manuscript; but most any typewriter operator

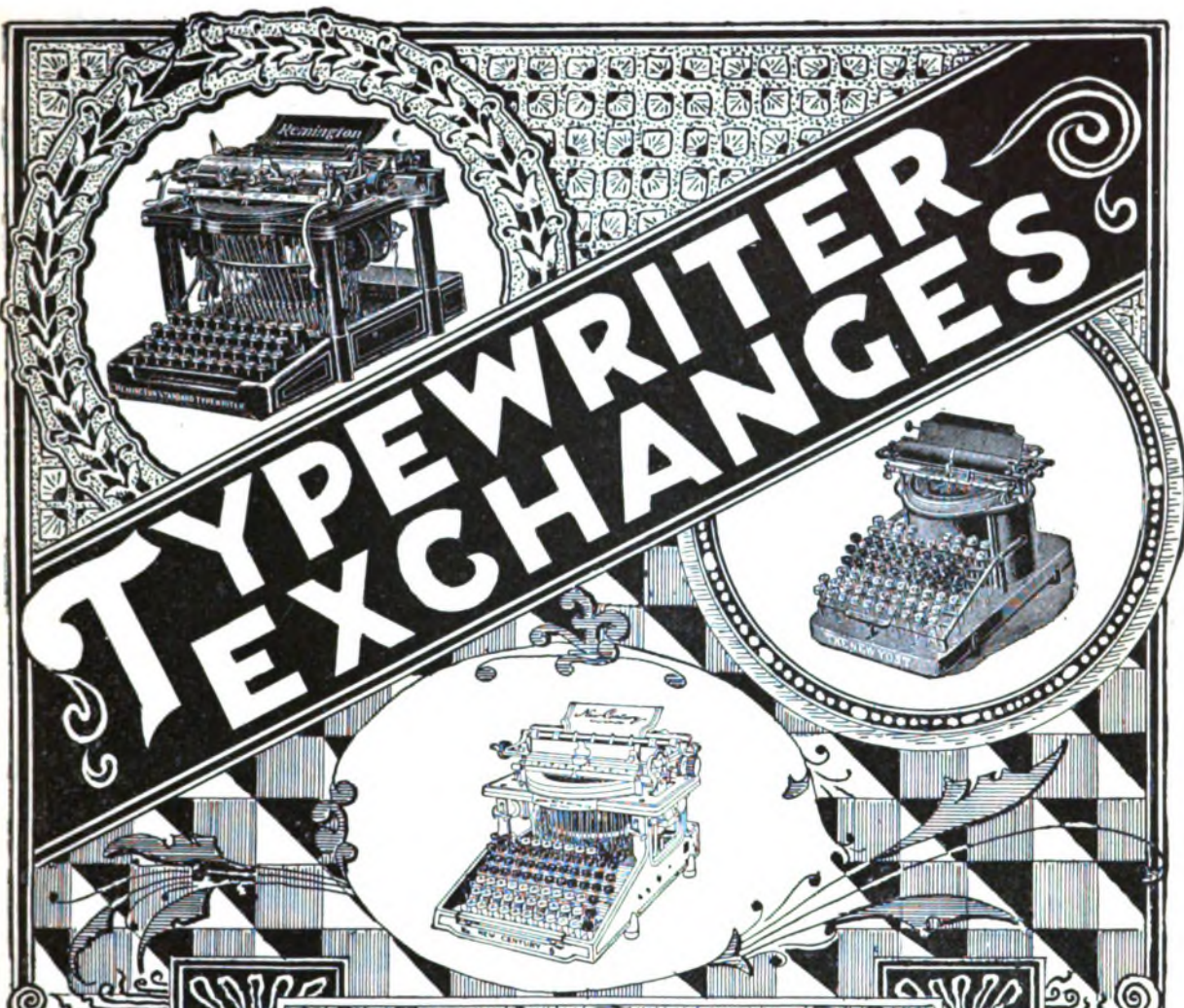
can take that kind of "stuff" with ease and have time to read his morning paper between words. The use of the code brings the speed of the sender more nearly up to that of the receiver, now that press work is almost universally taken on the typewriter. The examples given above are coded more closely than the ordinary press message. The time actually saved in practical work is about one-third over that consumed in sending the same matter in an unabbreviated language.

For almost all the code expressions employed there is an apparent reason for existence, orthographic or phonetic—or otherwise. Thus, "ofs" is easily understood to mean "office." The phrases, "shot and instantly killed," "it is reported," "Supreme Court of the United States" and "President of the United States," are coded by using the first letter of each word; but just why "ckx" should indicate "committed suicide" does not appear. There are some other arbitrary signs in the code, such as "hag" for "in consequence of" and "kaw" for "adjourned sine die," but these are quite limited in number. The code is arranged generally with a view to burdening the memory as little as possible. Expressions for words having the same root vary only as to termination. For instance, "receive" is coded "rc." Naturally, then, "receiving" is "reg;" "received" is "rcd" and "reception" is "ren." Thus also, starting with "oj" for "object," we have "ojd, ojn, ojn, ojl" for "object-ed,-ing, -ion, -ive, -ionable."

Nearly every letter in the alphabet is employed singly as a code expression; thus, "f" for "of the," "g" for "from the," "j" for "by which," etc. The figure "4" means "where," "5," "that the," "7," "that is."

The doctrine of expansion is observed in the code. As a system it keeps pace with the times, and new expressions are added as they become necessary. When Dewey discovered the Philippines, and thus a new word was incorporated into current geographical nomenclature, a contraction therefore had to be invented. What could be more euphonious than "Pips"? "Porto Rico" became "Pxo" and "Porto Ricans," "Pxons." Upon the accession of King Edward VII the operators were able to save nine letters by nicknaming His Majesty "Kevy." This can scarcely be considered quite so irreverent, however, as "Sow" for "Secretary of War."

"Wireless Telegraphy" is the title of a new and popular exposition on this interesting subject by G. W. Tunzelmann, B. Sc., the author of "Electricity in Modern Life." The volume has 104 pages, is fully illustrated, and includes chapters on ether and ether waves, the discovery and development of the coherer, the systems of Marconi, Popoff and others. It is a capital book, and affords just the line of information now in such demand regarding the topic treated. It will be sent on receipt of price, 75 cents, to any point in the United States or Canada, express charges prepaid. Address J. B. Taltavall, Telegraph Age, 253 Broadway, New York.



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NEW YORK, February 16, 1903.

The amount of information contained in each issue of TELEGRAPH AGE of the utmost practical value to the progressive operator who is ambitious to succeed, to acquire a more thorough knowledge of his profession, and not only to better qualify himself for the position he now occupies, and consequently for advancement, should, prompt many to send in their subscriptions to this journal without delay. The first article in each issue, contributed by Willis H. Jones, under the standing heading of "Some Points on Electricity," contains more positive instruction concerning the telegraph, than can be found anywhere else, and worth more to the operator than many times the cost of the paper itself. Subscriptions should be sent direct to this office, or to any of our agents who may be found with both the Western Union and Postal companies in nearly every large centre in the United States.

We are prepared to furnish a limited number of bound volumes of TELEGRAPH AGE, which embraces 536 reading pages, besides the index, for the year 1902, at the uniform rate of \$3 a volume. The binding is substantial and the lettering is done in gilt. The volume furnishes a complete record for the year named of the telegraph, the cable, wireless telegraphy and other allied interests, the whole constituting an interesting work of reference of the highest worth to all telegraphers, libraries, etc., to which the carefully prepared cross-index lends additional value. Single copies of the index for volume XIX, covering the year 1902, may be had at ten cents apiece. Our friends who require copies of the bound volume, or of the index alone, should send in their orders promptly so that they may be filled while the supply lasts.

Standardize the Telegraph.

The editorial in the February 1 issue in which the question of classifying telegraph employees and of fixing a standard of pay to be determined and governed by proper gradations in the service, particularly in all large offices, appears to have had a wide reading and to have touched a responsive chord especially among the class of lesser officials who would be more directly affected by the measure.

A point of criticism made against the companies on the part of many, on which particular stress is laid, relates to the too frequent, if not the prevailing, practice of filling vacant positions at a lower rate of pay than the place had previously commanded. It is urged in this respect, and we believe very justly so, that the promotion from a lower to a higher place should carry with it a corresponding advance of compensation. It is to be assumed that a promotion is made because the person so advanced is deemed competent to perform the duties of the preferred post. If this be so it is a mistaken policy to withhold from the appointee the salary due the position, to the full payment of which he is justly entitled. The honor of promotion, no matter how fully appreciated, is not alone sufficient to compensate for any injustice in the transaction. The sense of unfair treatment, even if accepted by the individual with discretionary reserve, lingers in the mind, exercises an adverse influence, and is not calculated to win the full confidence and command the best service of the employe. Human nature is as strong within the ranks of the telegraph as without.

We counsel the rendering unto Cæsar the things that are Cæsar's, but at the same time we have the Divine authority that the laborer is worthy of his hire.

The British Pacific Cable.

The proposition to lay an all British Pacific Cable that should be distinctly a Government undertaking, originally aroused a good deal of enthusiasm in Canada, Australia and New Zealand, countries which it directly connects. Its recent completion was hailed with satisfaction in the possessions named as well as in England, which is, of course, financially interested in the line, although its completion was not essential to Great Britain, which is not lacking in cable connections. Yet the idea of a Government controlled cable, as opposed to private ownership, was thought to so appeal to the patriotic heart that great expectations were found regarding the anticipated diversion of traffic to this cable from other and older existing lines. But these expectations are not being realized. It is not because there is any lack of business between England and her distant colonies that business of the new cable languishes, for cable dispatches continue to reach the Antipodes in full volume as heretofore from the Mother country. The trouble, however, appears to be that instead of patronizing the Gov-

ernment cable, as was expected, whose rates to Australia are the same as charged by the Eastern and Eastern Extension Cable companies, by far the greater portion of the business continues to go forward by the old route, business men evidently preferring to support the old familiar and tried means of communication rather than the new, which offers no advantages. This is a utilitarian age and patriotism cuts but a sorry figure where business is the first consideration.

The advantages offered, however, to the North American continent by the British Pacific cable are considerable, and it has practically secured all of the American business for Australia because it affords a more direct route and a cheaper rate than by the Eastern Extension lines. While the cable was laid at an expense of about \$10,000,000, and ostensibly for the welfare of the British Empire, the United States and Canada are deriving about all the benefit this cable confers. If another lesson were needed to prove that the Governments' should not construct cables in opposition to private enterprise, the needless extravagance of this undertaking presents the best possible illustration of such a case.

Life Insurance Among Operators.

A few days ago a New York telegraph operator met his death by accident, being run over and instantly killed by a suburban railroad train running out of Brooklyn. He was in the prime of life, but forty-three years of age, in vigorous health, and in the natural course of events had many years of life before him. He probably so regarded his future and became correspondingly careless, like many another man, of the financial responsibilities attaching to his position as a man of family. Confident in his manhood strength he permitted his policy of insurance in the Telegraphers' Mutual Benefit Association, that safeguard of the fraternity, to lapse six years ago. In this instance, as in many other similar cases, the wife and mother of his six children, because of some occult reasoning, rested under the impression that at least her own and family's protection was somehow kept up in the association. The untimely end of the husband and father has brought suffering upon wife and children for whom he was bound to make provision to the best of his ability; and thus because of neglect, no matter what the actuating cause, they are thrust upon the charity of a world, too often cold in its acceptance of such responsibilities.

When insurance may be obtained at so cheap a rate it is deplorable that a man with a family should so far forget his duty towards those dependent upon him as to be negligent in this form of protection. For life insurance offers at once the easiest and most direct method of providing financially against the future of those to whom we owe accountability. A majority among the members of the telegraph profession, at death, usually leave, if anything, but their insurance as the only heritage of money to their

families. Yet how few, comparatively speaking, are even thus guarding against the uncertainties of the future.

The underlying principle of life insurance, as being especially applicable to operators, has long been recognized by both commercial telegraph companies, who have contributed material aid and other forms of assistance, not alone to the Telegraphers' Mutual Benefit Association, but to other insurance and aid societies as well, to the end that employes might be attracted thereto and so be led to take advantage of the liberal terms such organizations were prepared to offer them. It is remarkable notwithstanding all the efforts of the various societies to interest the craft in the great principle of protection of the family, and of dependents, that so few avail themselves of the advantages of membership. The situation points its own moral.

Magnetic Club to Honor Edison.

It is reliably stated that Mr. Thomas Aiva Edison has accepted an invitation of the Magnetic Club to attend a dinner to be given in his honor sometime during the last part of April next in New York city. Up to the present time the telegraphers in and around New York have not paid Mr. Edison this compliment which is so richly deserved by him and which is an honor that is customary to bestow on a fellow craftsman who rises to an eminence of distinction. Mr. Edison has not gone outside the domain of electricity to gain a world wide and enduring fame as an inventor. In telegraphy alone his legacy of the quadruplex is sufficiently great to place the unfading laurel upon his brow, but when added to this are his numberless inventions, connected with the telephone, phonograph, electric light, vitascope, and last but not least, his new storage battery, the professional pride of telegraphers will surely permit no others to outdo them in a suitable expression of their admiration. Why it has not been done sooner is undoubtedly due to a lack of organized effort in this direction, but now the Magnetic Club, embracing as it does such men as Robert C. Clowry, Clarence H. Mackay, Albert B. Chandler, Thomas F. Clark, Frank J. Sprague, Charles A. Tinker, William H. Baker, George G. Ward, Edward H. Johnson, J. C. Barclay and Theo. L. Cuyler, Jr., is well fitted to carry out the proposed compliment to Mr. Edison in a suitable manner. The Governing Committee of the Club will shortly arrange the details, of which due notice will be given.

In twenty years, the number of establishments in the United States making electrical machinery and supplies has increased from twenty-six to five hundred and eighty. The annual output has increased from two million, six hundred thousand dollars to ninety-one million, three hundred thousand dollars. The capital invested in the business is eighty-three million dollars.

Mr. Carnegie Guest of Electrical Engineers.

The American Institute of Electrical Engineers celebrated its annual dinner on the evening of the 10th inst., at Sherry's, New York. The dinner was in honor of Andrew Carnegie, and will be known in the annals of the institute as the library dinner. It was devoted to the subject of the institute library, created last year through the liberality of Dr. S. S. Wheeler, Andrew Carnegie, Edward D. Adams, C. O. Mailloux and other members. The gift of Dr. Wheeler made possible the purchase of the Latimer Clark library, and an equal sum from Mr. Carnegie made possible the tabulating and indexing.

At the guests' table, with President Charles F. Scott and Mr. and Mrs. Andrew Carnegie, were E. D. Adams, R. R. Bowker, J. C. Bayles, Dr. Billings, F. B. Crocker, John Fritz, T. C. Martin, C. O. Mailloux, R. G. Monroe, Professor Pupin, Samuel Sheldon, Elihu Thompson and Dr. S. S. Wheeler, and at a nearby table sat Mr. and Mrs. Thomas A. Edison.

The toasts of the evening were "Libraries," responded to by Mr. Carnegie; "The Clark Collection," by Dr. S. S. Wheeler; "The Technical Library," by Dr. J. S. Billings; "The Unity of Science," by R. R. Bowker; "The Debt of Mechanics to Science," Theodore L. De Vinne; "Electricity and the Daily Press," Dr. J. C. Bayles.

President Charles F. Scott called the assembly to order, and, after speaking of the former dinners and their distinguished guests, said that electrical engineering was a profession only twenty years old.

To-day more than four thousand million dollars are invested in electrical appliances. Electricity has supplanted the horse and is fast supplanting steam. To predict its future is impossible.

"The American Institute of Electrical Engineering is a definite force in this new era," he continued. "Electricity enables man to do more work than formerly, at less cost. Its membership is now 1,874, with 300 applicants for admission.

"We are looking forward to a building for all engineering societies, each with its own accommodations, but with one grand library for all. This dinner is to celebrate the founding of one of our libraries. I announce, also, a medal to be awarded in honor of the venerable John Fritz."

T. C. Martin acted as toastmaster, and he introduced Mr. Carnegie as the Rector of St. Andrews.

Every word Mr. Carnegie uttered could be heard in the most distant part of the large dining room. His pride in American democracy made itself felt on several occasions during his remarks. His address was evidently extemporaneous and was larded with an amplitude of personal references to his former associates in the telegraph business—to Edison, Thompson, Barclay and the venerable John Fritz.

After addressing Toastmaster Martin first, "because he is an editor, and, of course, takes precedence on that account," Mr. Carnegie said:

"The American Institute of Electrical Engineers set many new and good examples, but the best one is having ladies at their banquets. This gives to their feasts an air of refinement that nothing else equals. I feel I have a right to be here. Before you were electrical engineers, Edison and I were messenger boys. (Cheers). The greatest moment of all my life was when I was transferred from a damp cellar, where I was firing a steam engine to a telegraph office. That little room with its key, paper and pencils was to me paradise. When I was able to touch that key and call up New Orleans and say: 'N. O., P., G. M.' I said to myself this is what Swedenborg meant by heaven.

"Of course I am a Scotchman, because my mother was a Scotch woman (cheers), and I don't want you to forget there is a little country washed by the North Sea that has produced as great scientists as any of us. But the American man, especially the electrical engineer—(cheers)—is the most co-operative man in this world. He is not prone to overreach, or irritate his associates. He is the consolidation of many kinds of talent. Occasions like this accomplish so much in consolidating men of similar tastes or avocations. The cheers I have heard here for your officers, and especially the young men, like Scott, Sprague and Martin, do more good to those men than the plaudits of millions of people in Russia, China or Japan.

"I recently said to a distinguished Englishman: 'You will never equal America. There the man who does the work, gets recognition.' Our republican institutions are the real explanation. Here, is the equality of brains. We stand not for the royalty of this or that family, but for the royalty of man! (Great cheering.) That's why I back America against all the nations of the world—because she favors no man on account of special privilege."

The menu was a work of art, reproducing the covers of the oldest book in the institute library, the works of Albertus Magnus, 1404, including two pages of its text in Latin. The wooden cover, with vellum back and brass clasps, were admirably reproduced.

The two telegraph companies were represented in the presence of Mr. J. C. Barclay and Mr. F. W. Jones the electrical engineers of the Western Union Telegraph Company and of the Postal Telegraph-Cable Company, respectively.

"Pocket Edition of Diagrams," etc., 260 pages and 126 illustrations, published by TELEGRAPH AGE, contains just the information that every telegrapher requires, irrespective of his position.

It is with narrow-souled people as it is with narrow-necked bottles,—the less they have in them the more noise they make in pouring it out.

The Superintendent of the New Postal District, Los Angeles, Cal.

Another instance of the advancement of younger men in the telegraph service to positions of high responsibility, is that of the promotion of Charles L. Lewis, assistant manager of the Postal



CHARLES L. LEWIS,

The Newly Appointed Postal Telegraph-Cable Company Superintendent, at Los Angeles, Cal.

Telegraph-Cable Company, at Los Angeles, Cal., to the post of superintendent of the newly created district, embracing southern California, Arizona and New Mexico, with headquarters at Los Angeles.

Mr. Lewis is but thirty years of age, yet has worked steadily at the key since he was a lad of fourteen. He is a native of Georgia and made his start as a telegraph operator with the Savannah, Florida and Western Railroad and the Florida Railroad and Navigation Company while working his way through college in Florida. He next entered the employ of the Western Union Telegraph Company at Memphis, Tenn., and worked successively for the Illinois Central Railroad at Paducah, Ky., the Union Pacific at Salt Lake City, the Santa Fe at Redondo and the Southern Pacific at Indio, going to California in 1890. After quitting the Southern Pacific he worked several years for the Western Union in Los Angeles. In 1893 he entered the employ of the Postal at the same point and has risen rapidly to his present position. In 1895 he was made chief night operator of the Postal, and on January 1, 1902, was appointed assistant manager. He has also at various times acted as agent and operator for The Associated Press in that city, in addition to his regular work for the Postal Telegraph-Cable Company. His last promotion took him much higher up the ladder than is usual at one jump.

Subscribe for TELEGRAPH AGE, \$1.50 a year.

United States Military Telegraph Corps.

In our issue of January 16, we requested members of the profession throughout the country to write their Congressmen and Senators urging them to vote for the bill providing for pensions for worthy members of the United States Military Telegraph Corps. The text of the measure now pending before Congress was published in our January 16 issue on page fifty.

Mr. F. A. Stumm, the well known old timer of New York, who has shown much interest in the matter of such pensions and who has written many public men on the subject, has received in reply to his letter to Senator Hanna, of Ohio, asking that gentleman to vote for the bill to allow members of the United States Military Telegraph Corps to enjoy the same pension privileges as members of the Grand Army, received the following autograph letter: "Dear Sir: Referring to your note of the 21 instant will say that I am not familiar with the subject presented, but, if it should come up for action in the Senate, will be very glad to give it careful consideration.

"Truly Yours,

"M. A. HANNA."

Apropos of this subject we have received the following letter:

EDITOR TELEGRAPH AGE:

I beg space to say that the present appears to me to be the most propitious moment that has ever occurred in our forty years struggle for only decently fair recognition in the matter of pensions at the hands of the Government, and I ask that every United States Military Telegraph Corps man who received the certificate, or who earned it, put his shoulder to the wheel, at once and in earnest. If no one else cares to do it, or if no one has been chosen to do it, the undersigned will cheerfully gather together and put in as good shape as he can, such information on the subject as ought to help the cause if the members will send it to him; and if the Committee at Washington will see him he will be glad to go before it and make as good a plea as he can, and entirely at his own expense.

FRANK A. STUMM

147 East 21st street, Gramercy Park,
New York, February 9, 1903.

"Wireless Telegraphy," by Richard Kerr, F. G. S., with a preface by Sir W. H. Preece, is a book just off the press, which is meeting a very wide sale, the subject treated being uppermost in the minds of the public at the present moment. This work, which comprises 116 pages, contains a good account of the discoveries in telegraphy without wires. The subject matter is arranged in readable form, the illustrations are excellent, and the descriptions of the experiments are accurate. Copies may be had at 75 cents each by addressing J. B. Taltavall, Telegraph Age, 253 Broadway, New York.

A. A. Gargan Becomes Assistant Superintendent of the Western Union Telegraph Co. at Denver, Col.

Mr. A. A. Gargan, who has become assistant superintendent of the Western Union Telegraph Company at Denver, Col., is a product of that



A. A. GARGAN,

Assistant Superintendent of the Western Union Telegraph Company, at Denver, Col.

Rocky Mountain state having been born at Georgetown, and affords another instance of the young man coming into prominence in the Western Union telegraph service. He commenced as a Western Union messenger August 16, 1892, less than eleven years ago, and has since served as clerk and operator; manager at Glenwood Springs, Col.; manager of the Equitable Building office, Denver; cashier at the main office and clerk to Mr. C. B. Horton, assistant superintendent, who has gone to Omaha as superintendent, and whom he now succeeds at Denver. It will thus be seen that Mr. Gargan has come up the ladder rapidly. He has an intelligent grasp of his business due largely to an excellent training received under General Superintendent Brooks, of New York, when that gentleman was at Denver. With a sunny disposition Mr. Gargan is popular with his associates and with his official superiors.

Telegraphers' Mutual Benefit Association.

The annual report of the Telegraphers' Mutual Benefit Association for the year ended December 31, 1902, which has just been filed with the Insurance Department of the State of New York, shows the great stability and security of this, the oldest company operative insurance organization in this country.

During the year it collected from its members \$77,707.40, and disbursed for death claims \$81,795.10, the difference of upwards of \$4,000

as well as all expenses being met by interest from the reserve fund, which now amount to \$198,000. The only direct obligation of the Association as reported consists of \$470 advance payment made by members for assessments not yet due. Every claim has been promptly met at maturity and the books show a balance of assessments to be collected of \$8,375 to meet claims not due at date of \$7,000. Five thousand two hundred and four members in both grades are reported carrying insurance amounting to \$4,936,000, while the combined assets are shown to be \$204,524, or upwards of 4 per cent. of the total insurance.

The total expenses of the organization in ing medical examinations amounted to \$5,929, being a little more than \$1 per capita, for which no dues nor other tax is levied on the membership, the entire expense being defrayed by revenue from the Reserve Fund.

Notwithstanding the liberal terms of the Association it is to be regretted that during the year 279 members should have allowed their insurance to lapse and also that the total membership should bear such small proportion to the great number of telegraph operators who are eligible for membership.

New Superintendent of the American District Telegraph Company, New York.

Mr. Daniel Skelton, the newly appointed superintendent of the American District Telegraph Company, New York, was born December 29, 1860. He entered the service of the American District Company December 4, 1876, as messenger. Since



DANIEL SKELTON,

The New Superintendent of the American District Telegraph Company, New York.

then he has been in that employ continually, and has filled the positions of office clerk, manager, division inspector and manager of the messenger department, from which latter place he was, on February 1, promoted to the superintendency as above stated.

Retrogression of Telegraphers.

[From the New London (Conn.) Day.]

Speaking of the good old times—good, perhaps in some ways—it is well to note some of the deficiencies of the present hustling, bustling day. We have trolley cars and automobiles; wireless telegraphy and automatic piano players; but we have also an element of the population which should be eliminated; that is, the telegrapher who bulls one's despatches in an abominable way. In these progressive days it would seem possible for the management of the large companies to find men and women to do the work demanded by the public in at least an intelligent manner. Everyone has some peculiarity of chirography to which the operators are not wise; but when a message is plainly and legibly inscribed on one of the prescribed blanks of the telegraph company it is more than maddening to hear from the recipient thereof that it has been mangled in transmission. This is especially so when the telegram is of a financial character and means much to the sender and receiver.

There is not a class of individuals in this country more deserving of the emolument they earn than the telegraphers; but so many of them are of that peculiarly illiterate or mechanical class that errors are constantly made of what would prove to be plain legibility to a thinking man. There is no excuse for bulled messages. A telegrapher should be thoroughly conversant with the topics of the day and well up on every subject upon which he is called to pass judgment, and this means more than what the ordinary man keeps in touch with; still, when it is considered that the telegrapher must handle stocks, grain quotations, horse races, news matter and comment of every sort it should devolve upon him to become proficient as much from an intelligent standpoint as from a mechanical. He may claim that his hours are too arduous; but that is begging the question. His work should, in a measure keep him in touch with current events, and when he uses his memory it should be altogether to the good.

No man on this terrestrial sphere has as much chance as a telegrapher to keep up with everything that happens. The trouble with them as a class is that they do not think—do not look into matters as they should. They work hard for small pay; but when it is considered that the best thoughts of the brainiest people are passed through their hands it seems strange that they do not profit thereby. If a man sits and listens for an hour to a good sermon surely he uses this time for profit. If a telegrapher handling news matter sends or receives either a lecture or a speech, a sermon or a controversy between bright minds, surely some of the thoughts expressed should be retained; but it does not seem so.

It was said in days gone by that a printing office was a good school and a boy was fortunate to get into one. This old saying can be applied to the telegraph office of to-day. If a boy enter-

ing the telegraph business to-day will avail himself of the opportunities offered, keep his whole mind concentrated upon what he is doing, refrain from bad habits and be observant of everything that he does and sees, cultivate a retentive memory and be willing to learn from the experience of everybody who patronizes the office he has a far greater chance than any boy who enters upon any other career. Many men at present occupying position of great responsibility, both of a public and private nature, yet retain that innate knowledge of the mechanical part of the craft which gave them the opportunity to grasp the greater things. It is surprising that so few telegraphers have reached the topmost round of the ladder of fame. They are so few, indeed, that they stand out conspicuously. Other trades have so prominently advanced some of their exponents that comment is not thought of in the matter of their early environment. The telegrapher has a chance and it is time he availed himself of it.

The Messenger Boys of New York.

The managers of the telegraph and messenger companies in New York refuse to believe that messengers are a degraded lot of little scamps, as Miss Helen Marot, chief investigator of the child labor committee, would seem to indicate in her report recently made public.

Prominent telegraph officials commenting on Miss Marot's report, say it is untrue, and that the messenger companies are not bringing up a lot of crooks, but on the contrary every boy is laying a substantial foundation for his future usefulness. A general manager of one of the companies said:

"I was a messenger boy myself, during the war. I delivered messages at saloons, gambling houses and other places, where Miss Marot would be shocked to go, and I admit that people in those places gave me tips. I even had a bank account. I expect Andrew Carnegie saved up a few dimes in this way, and some of the big merchants of New York who used to be messengers may have got their start by living off their salary and saving up their tips. Never was I offered a drink, or misled in any way, and I did not go wrong. I never knew of any messengers who did. Messenger boys have to be honest and truthful to hold their jobs. It is a healthful occupation, and one affording a good chance to get a start in life."

"Small Accumulators" is the title of an illustrated volume of eighty-one pages, by Percival Marshall, M. E. The book covers the subject of storage batteries, as indicated by its name, as fully as is possible, and it will be found a practical and trustworthy guide of the matter treated, readily understood by non-technical readers. The price of the book is fifty cents, an amount which covers the prepayment of express charges. Address J. B. Taltavall, Telegraph Age, 253 Broadway, New York.

The Retirement of the Postal Manager at Syracuse.

Mr. William A. Drake, who resigned his position as manager of the Postal Telegraph-Cable



WILLIAM A. DRAKE,

Who Has Lately Retired as Manager of the Postal, at Syracuse, New York.

Company at Syracuse on January 31 to enter commercial business, has become a member of the firm of Page & Drake, that city. While the retirement of Mr. Drake is a distinct loss to the telegraph service, yet at middle age he should have many prosperous years before him, and he carries the well wishes of hosts of friends into his new field of endeavor. Mr. Drake was born at Shippenville, Pa., in 1858, and entered the telegraph service at Oil City that state, in 1874. He speedily developed managerial timber and in that capacity served successively the Atlantic and Pacific, the American, and the Western Union Telegraph Companies at Oil City; the Bankers' and Merchants', the American Rapid and Postal Telegraph-Cable companies at Titusville, Pa., and for four years has been in charge of the Postal interests at Syracuse.

"A History of Wireless Telegraphy," third edition, revised, by J. J. Fahie, the eminent English author, constitutes one of the most popular accounts yet published of the origin and progress of wireless telegraphy, showing fully what has been attempted and what accomplished in that fascinating field of operations and research up to the present time. All systems are reviewed, as well as many guesses considered. Marconi's method is treated with great thoroughness and this inventor's particular development of the science is brought down to the present time. For convenience of the general reader the contents of the volume are divided under three distinctive heads, or periods, so called, namely: First per-

iod—The Possible. Second period—The Practicable. Third period—The Practical. The revised work will prove a welcome addition to the literature of the matter discussed. Under the respective headings the classification observed will be of especial aid in tracing with logical sequence the development of wireless telegraphy. The price of the book is \$2.50, express charges prepaid to any address in the world. Address J. B. Taltavall, TELEGRAPH AGE, 253 Broadway, New York.

Assistant Superintendent of the American District Telegraph Company at Cleveland.

Mr. Charles H. Cadwallader who has lately been promoted to be assistant superintendent of the American District Telegraph Company, at Cleveland, O., is a young man to occupy so important a position. He was born at Fort Wayne, Ind., on March 28, 1871, and entered the telegraph service in the employ of the Pennsylvania Railroad Company, in 1885, where he remained until 1892. He then became manager of the Fort Wayne District Telegraph Company, a position he held for two years, abandoning it to engage, in 1895, with the Western Union Telegraph Company at the same point. In 1902 he was advanced to the position of manager of the office at South Bend, and on December 27 of the same year he was called to the place he now



CHARLES H. CADWALLADER

Assistant Superintendent of the American District Telegraph Company, at Cleveland.

occupies. During this brief career, the advancement of Mr. Cadwallader has been rapid. It has not been due to any eventful incident but rather to his conscientious, methodical and painstaking care in thoroughly familiarizing himself with the duties of all departments of telegraph and district work to which he has been assigned.

LETTERS FROM OUR AGENTS.

[Advertising will be accepted to appear in this department at the rate of five cents a word, announcements to be enclosed with a border and printed under the name of the place of the advertiser. The special local value attached to advertising of this character will be apparent. Our agents are authorized to solicit advertisements for these columns, and further information on this subject may be obtained on application.

The current information of any office will, if carefully chronicled, furnish a welcome digest of news that will be read with pleasure and satisfaction by thousands, and this limit should constitute the legitimate contents of all letters. And we wish that our correspondents would avoid the too frequent habit, at all times a bad one, of abbreviating words in writing. This is a peculiarity among telegraphers, we know, but what may be plain to the writer, and for local interpretation, is usually a mystery to the editor, and is apt to lead to error in the printed statement.]

CITY OF MEXICO, MEXICO.

The Mexican Central Railway has recently enlarged and rebuilt its main offices at Aguascalientes and Mexico City. At Aguascalientes, which is the largest repeater station on the system, the equipment consists of two quadruplex sets, two repeater half sets, one full set and eleven single sets. Current is supplied from a storage battery of German make.

In the Mexico office, an Edison primary battery is used. The equipment consists of three quadruplex sets, two repeater half sets, one full set and nine single sets.

The device for sending time on both sides of quadruplexes, on the single wires and on the clock wires in the general offices, from one key is, so far as the writer knows, unique, and may be worthy of description. The time key is inserted in series with the 3 volt local circuit which supplies all pole changers and transmitters. The clock wires are cut into the same circuit in multiple at the switchboard. When time is to be sent, the main batteries are grounded through the Guardiola pony wire which is connected to one of the quadruplexes through a half set. When the time key is manipulated it works all pole changers and transmitters, thus sending time on both sides of the quadruplexes, and it also works the transmitter of the half set above mentioned, opening and closing all single wires through the pony wire which acts as a ground. Time is repeated from the Guardiola pony to the Patoni pony through the test sets, which are so arranged that by removing a plug in the switchboard, either wire repeated into the other.

MONTREAL, QUE., CANADIAN PACIFIC.

Mr. John I. McCaffrey, of this office has been appointed organist and leader of the choir at St. Michael's Church.

Miss E. Currie, has returned from an extended visit to her home at Grandpre.

At a progressive euchre party recently, our all night chief Mr. William Atchison, carried off the first prize, a beautiful silver-plated shaving mirror.

Mr. P. J. McManus, has returned from Quebec, where he spent a vacation at his home.

The Telegraphers' Hockey team played the Light, Heat & Power to a draw on Friday evening the 6th inst.

Messrs. James Barclay, manager of the Great North Western Telegraph, Quebec; F. J. Mahon, manager Canadian Pacific Railroad Telegraph, Quebec, and James A. Macmanomy and J. Murphy also of that city, were recent visitors.

Miss J. Mabel Tippet, of the Canadian Pacific Railroad Telegraph, North Bay, Ont., who is on a short vacation, was through the courtesy of Mr. A. E. McLearn, shown through the operating room lately.

Mr. William Campbell, a member of our force for the past thirteen years who has accepted a position with the Ogilvie Flour Mills Company, was lately made the recipient of a handsome leather bag and other traveling requisites by his late associates.

MONTREAL, QUE., GREAT NORTH WESTERN.

Thomas Dewitt, operator at the "Star" was absent for two weeks on business in the maritime provinces, and during his absence his place was filled by R. J. Ross.

John MacKenna, operator for the Metropolitan Stock Exchange, has left for Kingston, where he becomes manager for the Metropolitan.

OKLAHOMA CITY, OKLA., WESTERN UNION.

Superintendent G. J. Frankel, of St. Louis, and General Electrician L. McKissick, of Chicago, came here from Dalles, Tex., on January 4, on their tour of inspection and, accompanied by Manager O. N. Dailey, a thorough canvass was made by them of all lines entering this city. Many changes will be made and some new wires will be added which will materially expedite the handling of business through this point as well as greatly increase the amount of relay business. A pony wire is being strung which will connect all the city offices and a gang of linemen is here now reconstructing and building new lines.

While this office is not in Superintendent Frankel's district he was much interested and greatly pleased with the growth and development of the office and town since he was here last, a year ago. Both Mr. Frankel and Mr. McKissick expressed satisfaction of conditions and prospects.

Robert Shannon is our bookkeeper and is assisted by the Misses Dailey and Hall.

W. W. Glaze, night chief operator, is absent on account of sickness.

R. N. Long, who has been away on a sixty-day vacation returned to work on the 6th inst.

DETROIT, MICH., WESTERN UNION.

Resignations have occurred with such frequency of late, that the regular salutation of the day is: "Good Morning; when are you going to resign?" The most important resignation is that of Manager Charles A. Elster, which took effect on February 1. This came as a great surprise to his many friends, not only those connected with the company, but those connected with him in a business way and many expressions of regret are heard.

Mr. Elster's plans for the future have not been definitely decided upon, but he will take a much-needed rest of two or three months. He has been connected with this company for nearly twenty-five years, beginning in this office, where, in time, he became night chief operator, afterwards being transferred to Grand Rapids, Mich., as manager of that office. That position he held for six years, and upon the death of M. S. Corbett of this office, four years ago, was promoted to the managership here.



CHARLES A. ELSTER,

The Western Union Manager at Detroit, Mich., Who Has Just Resigned.

Mr. Elster leaves the service with the knowledge that every employe here will consider his resignation a personal loss. The unanimous opinion, not only from the employes in Detroit, but also those throughout the State, where he is well known, is that the company has lost their most popular employe. The best wishes of us all go with him.

E. C. Denaple, formerly cashier of the Cleveland office succeeds Mr. Elster.

The office of cashier has been abolished, and Mr. John Henry, who has occupied that position for several years, becomes chief clerk.

Miss Nellie Corbett, stenographer in the manager's office, resigned on February 1 to accept a more lucrative position.

Resignations which have recently occurred in the operating room are: Frank Howe, who goes to the Postal, at Chicago; Miss Cassidy, Elmer Martell, to the State circuit of The Associated Press, city; Edward Hayhurst, to a broker's office.

Recent arrivals: James Currier from Ft. Wayne; Miss Winifred Kennedy, Elkhart, Ind.; Miss Mayme Mack, Cleveland; J. Moxam, city.

In her anxiety to keep up her good record in not being tardy, Miss Nellie Heffernan, (Rives Junction), took a header through a large frosted glass in the hall door recently, but was fortunate in getting only one pretty bad cut on a finger, and a slight one on her temple.

Messrs. Jarvis and Broderick, and Miss Nan Heffernan, have been assigned to Lansing during the legislative session.

Night Chief Operator Dayman is doing all his telegraphing with his left hand; if he has too much, however, he assigns someone else to the task. He also has ten or fifteen yards of linen bandage around his right hand, all on account of the explosion of his celluloid hat-band. Mr. Dayman crawled under his kitchen to thaw out a frozen pipe a few days ago and a piece of burning tallow from his candle fell off and ignited some straw. As he had no insurance on either the straw or the kitchen his first thought, naturally, was to put out the fire. He knew his feet were not large enough to smother it, and so decided he would use his hat. Mr. Dayman is a living picture of what happened. He says that after the flash-light had cleared away and he had finally extinguished the flame, nothing of the hat, not even the maker's name, could be found. His one cause of congratulation is that he was not wearing a celluloid collar. He also got a bad burn on the lip, enough hair singed off to stuff a pillow, but by spring will doubtless assume his natural look.

SAN FRANCISCO, CAL., WESTERN UNION

Charles Thayer late of The Associated Press, Washington, who has been with this company the past six months, has accepted a position with The Associated Press, at Santa Ana, Cal.

Roy Swanson has accepted a position with the Postal Telegraph-Cable Company, Vancouver, B. C.,

S. P. Runyon has resigned and gone into other business in this city.

Charles F. Patterson, general superintendent of the American District Telegraph Company, has been on this coast lately on business connected with the system.

ST. JOSEPH, MO.

The telegraph personnel of the Burlington route at this point, is as follows: I. T. Dyer, chief despatcher; T. M. A. Haston, chief operator; C. E. Villars, the Chicago-Kansas City quadruplex; C. S. Eastman, the St. Louis-Hannibal quadruplex; W. J. McEwan, the Omaha-Kansas City local and city wires; Med. Rossi, the Lincoln local and Brookfield local and Burlington & Missouri River Railroad; C. G. Boyer, split

trick; H. H. Moss, night operator. C. S. Eastman formerly worked the Burlington & Missouri wires but relieved Henry Koch, who resigned lately to accept a position with R. K. Smith, former assistant superintendent of this division, but now superintendent of the Iron Mountain and Southern at Desoto, Mo.

The train despatchers are: Wm. Brown, branch despatcher; W. K. Robinson, first trick, north end; Geo. Foy, first trick, south end; H. H. Miller, second trick, north end; C. J. Steinel, second trick, south end; Wm. Lowe, third trick, north end; S. F. McEwan, third trick, south end.

The entire force received a raise from \$5.00 to \$10.00 which took effect with their November time.

EVANSVILLE, IND., WESTERN UNION.

The personnel of this office embraces the following: W. V. Duke, manager; C. H. Wise, chief operator; operators, George W. Newman, Richard Grear, W. E. Kellen, Joseph T. Madden, Harry Kilburn, William Deusner, Charles Reiley; Clarence Bell, check clerk; N. B. Burnite, chief clerk; Warren Duke, night clerk; Fred Meyer and Lewis Stock, day clerks; George Augustine, lineman; janitor, J. Van Crabtree.

BOSTON, MASS.

It took the biggest hall in Boston to house the friends of the Telegraphers' Mutual Aid Association at the organization's 18th benefit ball on January 30. The floor of Grand Hall, in Mechanics' building, was filled to the point of comfortable dancing, while, during the early evening the immense galleries were well filled. The fraternity of dots and dashes laid aside the key and forgot the monotonous staccato click in the strains of an orchestra of thirty pieces.

The hall was elaborately decorated with flags and bunting. Across the front of the stage were strung from miniature telegraph poles lines of wires in symbol of the spanning of the country by the electric current. Over the centre of the stage hung the banner of the association, bearing the salutation "73," and this was the watchword of the evening.

Both financially and socially the ball was a marked success. The grand march was led by Floor Director James J. Benelisha and Mrs. Maymie E. Richman. In the direction of the floor Mr. Benelisha was assisted by Arthur E. Mason and John J. Flaherty and a corps of aids.

The success of the ball is due to the work of the following committees:

Arrangements, M. F. Hart, chairman; W. J. Ryan, secretary; W. H. Sullivan, treasurer; J. A. Molloy, J. J. Flaherty, P. J. Farrell, A. E. Mason, J. H. Shannon, J. O. Roorbach, D. Bailey, J. F. Biggane, E. Smullen, L. J. Gordon, W. J. Mangan, T. F. Higgins, C. A. Morrey, L. Solomon, P. J. Donovan, I. T. Hart, D. J. Connell, C. M. Callahan, F. J. Flynn, M. C. Harrington, T. C. Devine, A. V. Mann, A. E. Duclos, C. A. McManus, J. J. Benelisha, J. F. Carter, E. H. Goodwin, J. J. Hannon, W. T. Sheridan, E. Gordon, L. J. Reynolds, R. E. Tobin, E. J. Ryan, F. F. McVey, H. L.

Flynn, H. H. Cooper, A. V. Losea, F. T. Viles, P. J. Molloy, P. J. Beasty, P. T. Cronin. Reception committee, M. F. Hart, chairman; W. T. Sheridan, F. T. Viles, A. V. Losea, J. P. O'Donahue, J. O. Roorbach, H. H. Cooper, J. A. Molloy. Press committee, F. J. Flynn, M. C. Harrington, T. C. Devine, A. V. Mann, A. E. Duclos.

CLEVELAND, O., WESTERN UNION.

Messrs. A. L. Dagens, W. C. Lieth, Samuel Schrauf and Harry Eaton were sent to Canton, O., to handle the press matter during the McKinley banquet held there January 27.

Chief Operator F. C. Hackett has been away three or four days supervising the remodeling of the Akron, O., office.

Division Chief W. C. Lieth of the third division, has resigned. Mr. Lieth is succeeded by G. E. Koplín.

BUFFALO, N. Y. POSTAL.

Mr. Ralph A. Roberts who has been employed at this point for a number of years has been appointed manager at Lockport to succeed Mr. W. J. Madden. Mr. Roberts is very popular, and his many friends here believe he has all the necessary qualifications to make a success of his new position.

Mr. A. H. Lockwood who succeeded Mr. Roberts at the Board of Trade, has returned to this office.

Samuel Berg now fills the position recently held by Mr. Lockwood at the Board.

A daughter to Mr. Steuernagle and a son to J. F. Harrington may be mentioned among the latest arrivals.

Arthur Guyett, who works Boston, days, has the misfortune to lose his valuable ring. He has given up hopes of its recovery not having got the least trace of it.

A very enjoyable time was had at bowling on Saturday evening, January 31, by a party of Postal operators and their friends.

Mr. Geo. Henningham, captain of one side and Mrs. F. D. Hyer, carried the honors of the evening. Both tallied a fair average for three games. The side captained by Mrs. Hyer, however, seemed to hold luck and succeeded in winning all three games. It is proposed to make bowling a monthly affair. The party consisted of Messrs H. Mason, Samuel Berg, M. Donahue, D. E. Higgins, D. Evans, Geo. Henningham, Misses M. McLean, Berg, McMillan, M. Schram, Tiltous and Turner, Mr. and Mrs. B. F. Snyder, Mr. and Mrs. F. D. Hyer.

Superintendent H. D. Reynolds, observed the anniversary of the date of the late President William McKinley's birth, January 29, by sending a magnificent bunch of carnations to the ladies of the bookkeeping department.

PHILADELPHIA, PA., POSTAL.

Mr. Thomas R. Poppert is the proud father of a bright little girl who arrived January 25.

The appearance of the operating department presents a more crowded aspect consequent to the narrowing of the aisles to accommodate more tables, due to the natural increase of business and preparations to meet the coming summer's rush.

The announcement of the sudden death of Mr. J. F. Mitchell, who worked the Buffalo circuit, caused a great shock to all. A practical form of "remembrance" was extended to the bereaved.

An additional desk has been supplied for the accommodation of Chief Operator C. A. Stimpson, and further improvements are contemplated.

Mr. Emil Michel has been appointed manager of the Fifth and Market streets branch office vice Mr. J. A. Quinn, transferred to the main office.

The acceptable addition of a new delivery table has been welcomed at the Seventh and Market streets branch office.

A beautiful new call-circuit equipment has been installed in the Bourse branch office.

Our old friend, Wm. J. Burt, is now located with the Baltimore & Ohio Railroad at Wayland station, Ohio.

The following transfers have recently been affected: Edward Burt from the main office to Seventh and Market streets; Christian Troeller from Tenth and Chestnut streets to the main office; J. Chapman from Third and Chestnut streets to Tenth and Chestnut streets.

Messrs. T. P. MacElroy and A. K. Hunsberger from the Western Union are new arrivals.

My Motto—Honorable Dealing—D. A. Mahoney, special representative, Western Union Telegraph Company, Philadelphia. Specialties: Remington's and Smith's fitted with reversible rolls and guaranteed \$40 to \$50. All makes rented three dollars monthly. Operators do not think of applying for work in Philadelphia unless you use the "mill." See me for easy terms to right people.

PHILADELPHIA, PA., WESTERN UNION.

Apropos to the recent annual meeting of the Electrical Aid Society an unusual honor was accorded Mr. John Wintrup, a gentleman well known to the fraternity here and elsewhere, by being elected to honorary membership, the first in the history of the organization. Mr. Wintrup was deeply affected by the tribute and acknowledged the same in a few well chosen words of thanks.

The AGE and many friends are pleased to note the appearance among us of Mr. J. T. Wilde, who is again enrolled under the Western Union banner, after some months of absence with the Postal Company. Mr. Wilde received a warm welcome.

As a reward of merit and esteem in which he is held by the Artisans Order of Mutual Protection, Most Excellent M. A., C. B. Wood of this office was presented with a gold watch and chain and a medal of honor. The presentation speech was made by W. W. Donnelly.

Departures: F. P. McElroy and C. F. Happersett.

During the absence of Manager Finan of the Bullett Building office, Mr. Harry Hehl is in temporary charge.

Much sympathy is expressed and shown to Messrs. Hiestand and McBride, the wives of each being critically ill.

Chief Operator T. A. McCammon was initiated into the mysteries of the Aid Society at the recent meeting.

George McCammon, son of our chief operator, and W. Ebert, both from Denver, Col., are recent arrivals.

BUFFALO, N. Y., WESTERN UNION.

The promotion of Frank Kitton from the position of chief operator of this office to that of assistant electrical engineer of the company at New York, as stated in these columns in issue February 1, has brought about the following promotions: George Salloway, assistant chief operator, promoted to chief operator; William J. Higgins, chief of Buckingham Department, to assistant chief operator; George W. McCoppen of repeater department to chief of Buckingham Department; Louis Leipman from nights to days in repeater department.

Charles Northrup of the main office has been appointed manager of the branch office at the foot of Main street, Herman Manzel having resigned to go into other business.

Mr. James Corcoran, night chief operator, is slowly recovering from his serious illness which has caused his absence for the past six months, during which time P. J. Haley has been acting chief.

Mr. George Salloway was elected secretary of Revere Council, Royal Arcanum, succeeding Frank Kitton, who held the office during the past twenty-three years, resigning on account of leaving the city.

Mr. Daniel Roth, general foreman of construction, has our sincere sympathy in the sudden death of his brother, John.

The branch office at 184 Main street has been closed and former Manager Chas. C. Osterhout and Operator John L. Coffey have resigned and accepted like positions in a newly created fast freight railroad office, where also is employed Frank Dayton.

No. 35, Board of Trade branch office, is now taking good care of business formerly handled at the Main street branch, under the management of Robert B. Ferguson, and operators Wm. J. Savage, E. A. Sawken, Harry Leipman, Oscar Everingham, M. J. Keefe and Clerk John Dumphy.

The branch office at 211 Vermont street has been closed and the circuits extended to the branch office, 413 Niagara street, which is managed by Miss M. M. Searles and Operator George Weyer.

Joseph Ducett was transferred from the managership at Vermont street to a like charge at 488 William street, the former manager of which, E. C. Sutor, was promoted to succeed E. F. Cullen as solicitor, Mr. Cullen having been promoted to succeed Mr. Joseph Maxwell, who is now assistant superintendent of the American District Telegraph Company.

NEW YORK CITY.

"My Old Virginia Home Upon the Farm," "Utopian Waltzes," and all popular music, 18c. each. Pianos sold \$1 per week. B. L. Brannan, 195 B'way, N. Y.

WESTERN UNION.

Mr. Thomas A. Edison, the wizard of Llewelyn Park, was among our recent distinguished visitors. He was shown around the operating room by Manager Sink, who is an old friend of this foremost of old-time telegraphers. Mr. Edison appeared to be much interested in all he saw. One of the old timers in the office thought that Mr. Sink ought to have given Mr. Edison a chance on one of the "hot" wires to see if he could readily catch on to the Morse of to-day. Mr. Edison exchanged greetings with many of his former acquaintances and friends with whom he spent a pleasant hour in talking old time "shop."

Mr. B. Brooks, general superintendent; G. H. Fearons, general counsel; C. H. Bristol, general superintendent of construction, and J. Levin, inspector of the Eastern and Southern Divisions, have returned from a two weeks' Southern trip in the interest of the service.

The supply department of this company which has occupied considerable space in the building known as 8 Dey street, which is the rear portion of 195 Broadway, will be removed to larger quarters in Franklin street, where ample space for the prompt filling of requisitions has been arranged.

Messrs. Swift & Company, the provision dealers of Chicago, Ill., have quite a telegraph office

in their New York branch, located at 13th street and 10th avenue. The long distance telegraph facilities consists of a duplexed wire to Chicago and wires to Boston and Philadelphia Mr. A. H. Hickenson is the manager of the telegraph department and the operators are E. A. Connelly, J. A. Talton, H. E. Stokes and H. M. Freeman, all ex-members of the Western Union force.

Messrs. C. F. Mountler and Henry Robinson of the Chicago office, experts in their own line, are here to assist, respectively, in the work of running the new wires to provide for the increased facilities in the operating department, and to remove the dynamo plant.

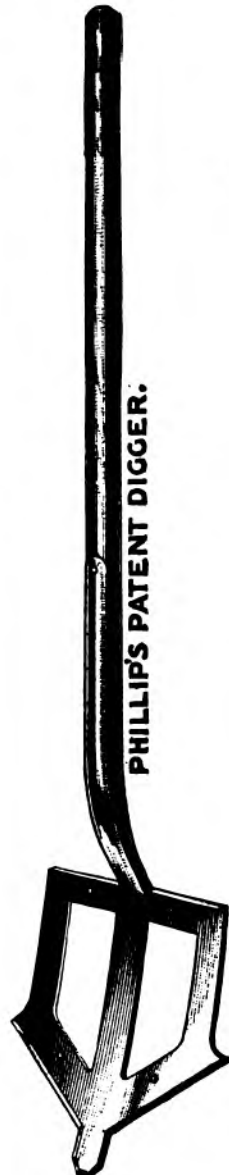
There are an unusual number of absentees

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IT POSSESSES ENORMOUS ADVANTAGES as a digging Spade.

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IT LESSONS LABOR, the earth resistance reduced to 1-16 of that of common patterns.

THE SHARP ARROWLIKE projecting edges cut readily into the soil, cracking the ground and making the removal of the second spadeful of earth much easier than the first.

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TELEGRAPH AGE, 253 Broadway, N. Y.



J. B. TALTAVALL,

among the operating force, owing to sickness, due, no doubt, to the very changeable climatic conditions recently experienced.

POSTAL.

An extraordinary record of receiving messages with pen and ink was accomplished February 4th by Messrs. Wheeler and Wendover, of the Cotton Exchange office, this city, and Messrs. Garland and Wilson, of the New Orleans Cotton Exchange. From 10 A. M. to 3.30 P. M., 701 messages were received at the New York end, Mr. Wheeler receiving 363, Mr. Wendover 338. This is certainly a great record over so long a circuit, the distance being about 1,600 miles; and the participants deserve credit for the same. During the time of transmission the wire was out of service 45 minutes owing to trouble.

Assistant Manager F. F. Norton, is confined to his home with a very severe cold.

Mr. E. J. Liston has been seriously ill with a heavy cold.

Mr. John Paul is again on duty having nearly recovered from a broken shoulder caused by a fall into the rapid transit subway over two months ago.

E. Myers, of the city department, has resigned to enter the United States Signal Service in the Philippines.

Mr. J. P. Gallagher has resigned from the service of the Yetman Transmitter, and resumed bonus work on the first Philadelphia quadruplex.

Thomas J. Easop, forty-three years of age, an operator employed by this company in the Produce Exchange was killed by a rapid transit suburban train, in Brooklyn, near his home, on January 31. Mr. Easop having allowed his insurance to lapse some time since, he leaves a wife and six children unprovided for.

Mr. M. M. Davis, traffic manager of this company, has returned from a southern business trip.

Mr. F. C. Yule has returned from a vacation of thirty days spent in the West.

Mr. G. W. Barrett, formerly of this office, but more recently with this company at Norfolk, is again on duty here.

The Twentieth Century Key is being used in the New York main office of the Postal Company in connection with the Yetman Transmitter to bridge over the interval of numbering and timing sent messages. Timing stamps have been tried but found unsatisfactory and abandoned. The use of the key enables the sending operator to keep his messages properly numbered and timed and he can usually do this while sending the number, check and originating point, returning to the Yetman machine for the rest of the message.

Heretofore these machines have not been looked upon with favor by the piece-work operators on account of the necessary stoppage of the circuit for the purpose of timing each message.

It has been estimated that the capacity of the circuit was reduced about fifteen messages an hour while the circuit was stopped for timing.

Mr. M. J. Higgins, manager of the marine

service, at Sandy Hook, N. J., visited many of his old friends when in the city a few days ago. Mr. Higgins has spent his entire life in the marine service and what he does not know about the movement of vessels is not worth learning. THE ASSOCIATED PRESS.

Mr. J. S. Strachan, night chief operator of the New York bureau, has resigned and the vacancy has been filled by the appointment of Mr. Geo. R. Allen of the Denver, Colorado, bureau.

The telegraph operators of The Associated Press have petitioned the general manager and the Board of Directors for an increase of 20 per cent. in their pay.

James Morgan Perkins.

James Morgan Perkins who has become the grand secretary and treasurer of The Order of Commercial Telegraphers, lately organized, with headquarters at St. Louis, Mo., is still a young man, having been born at Eutaw, Ala., on May 12, 1873. He entered the telegraph profession in March, 1890, in the railroad service with the Alabama Great Southern Railroad Company at Woodstock, Ala., shortly thereafter being transferred to his home town. In January, 1901 he became the manager of the Postal Telegraph-



JAMES MORGAN PERKINS.

Cable office at the same point, a position he continued to hold for eighteen months, when he returned to railroad work on the Southern Pacific at Tracey, Cal. From thence he went back to the Postal employ at Birmingham, Ala., afterwards working in the same interests at Memphis and Chicago. Two years were spent in the Western Union office at Los Angeles, Cal., and brief periods again at Memphis and at Dallas, Galveston and San Francisco. Mr. Perkins became engaged in the work of organizing the telegraphers in California last spring.

The Cable Station.

BAMFIELD CABLE STATION.

The following presents a more complete list of those employed at this station than has hitherto been published in our columns:

R. G. McLachlan, superintendent, from the Commercial Cable Company, Canso, N. S.; R. Bain, assistant superintendent, from the French Cable Company, New York; A. I. Godwin, supervisor, from London, Eng.; D. Osborn, senior operator, from Canso, N. S.; and operators K. C. Cox, from London; S. C. Scott, from the Cape Government Telegraph and Cable Company, So. Africa; W. G. Adames, from the Bermuda Company, Halifax, N. S.; G. Hutchinson, from the Anglo-American Telegraph Company, Valencia, Ireland; F. E. Noad and L. Waugh, from Halifax, N. S.

Canadian Pacific Railroad Staff; W. J. Chisholm, from the central cable office, New York, and H. Davy, from Victoria, B. C.; J. Godson, from Vancouver, B. C., and J. B. Holland, from Victoria, B. C., are the abstract clerks, and L. Marshall is the lineman.

J. Millward, the electrician of the Pacific Cable board, who for the past month has been at Bamfield Creek, left here a few days ago for Fiji.

We have about ten Chinese servants here, also have an electric plant which will be running in a few days.

Obituary.

Frank J. Anthony, aged fifty-five years an old time operator of Louisville, Ky., died of paresis at Oakland, Cal., on January 2.

William Gray, inventor of the Gray telephone pay station, died at his home in Hartford, Conn., on January 24. Mr. Gray was an inventor of considerable note.

Lavanion McEwing, sixty-two years of age, of Baltimore, Md., a well-known Western Union lineman, and during the Civil War identified with the United States Military Telegraph Corps, in the construction department, died in that city on February 3.

Fred E. Hamlin, aged thirty-two, manager of The Associated Press at Indianapolis, Ind., died of paralysis in that city on January 28. Mr. Hamlin was born in South Bend, Ind., and had passed almost his entire life at Indianapolis. He was beloved by almost every one with whom he came in contact.

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IMPORTANT TO YOU

J. B. TOWNSEND--The Telegraphers' Jeweler, 1554 Wabash Ave., Chicago, offers any article in his elegant stock at net wholesale prices. A rare opportunity. Any watches or jewelry advertised can be bought at a lower price from this well known firm. J. B. TOWNSEND, 1554 Wabash Ave., Chicago. Our 400-page catalogue sent on application. Agents wanted. Established 1877.

LINEMEN

F. J. SHEEHAN, New Britain Conn., Grand Treasurer of The International Brotherhood of Electrical Workers, writes: "I have used Donnelly Climbers, and can recommend them as second to none." I pay all express charges and send a pair of my climbers and 2 extra plugs to any address in the United States or Canada for \$2 in advance; or I will send a pair of Climbers for \$1.50, C. O. D. If they don't please you, don't pay for them. Address J. DONNELLY, Box 379, Branford, Conn., U. S. A.

Our Book Table.

It is announced that Maver's "Wireless Telegraphy" which has been in preparation for over a year, is now on the press. The subject is treated by Mr. Maver in a manner corresponding to the style of his well known work—American Telegraphy. Particulars of the scope of the work will be given in a subsequent issue. It is stated that the work will be ready about the middle of April. The price of the volume will probably be \$1.50.

[Advertising will be accepted to appear in this column at the rate of three cents a word.]

A young man, fair operator, who understands how to make up diagrams of quad, duplex and other circuits and instruments, and who is good at figures, and wishes to become an electrician, can hear of an opening on 1st March next, by applying by letter giving references and particulars of past experience, to Editor of TELEGRAPH AGE.

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Mr. Tassell made \$1,500 the first five months.
Mr. Wise, of S. D., \$12, 1st day. Mr. Clay,
of Va., \$9 first day. Mr. Doerge, of Mo.,
\$10 one afternoon. Mr. Elliott, of Pa.,
\$17 first two days. Mrs. Howard, of Ia.,
\$69.50 in one week. Hundreds of others
making big money selling and appointing
agents for **Quaker Vapor Bath**
Cabinets. Prices reduced. Let us start
you. We furnish everything. Anyone
willing to work can make \$20 to \$40 a
week easy. Greatest money-maker known. Just
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OF GOLD IN CALIFORNIA

Owners of California gold mines di-
vide \$16,000,000.00 annually, but you
can not buy an interest in those mines.
The stock is not for sale.

The men—and women—who own it
bought it cheap when the mines were
new. It is now making them rich.

You have the same opportunity
The **WIZARD MINE** is now being opened
just as those mines were.

You can buy the stock cheap now; it
will soon be worth too much to sell.

The **WIZARD** is in El Dorado county,
California, right in the midst of these
paying mines

It is on the **GREAT MOTHER LODE**,
which means rich quartz and lots of it.

Its owners have spent \$35,000.00 in
perfecting title, and now offer you the
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property and convert it at once into a
dividend paying mine.

It is a plain, simple business proposi-
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owner in a dividend paying gold mine
for life, and help divide the \$16,000,000
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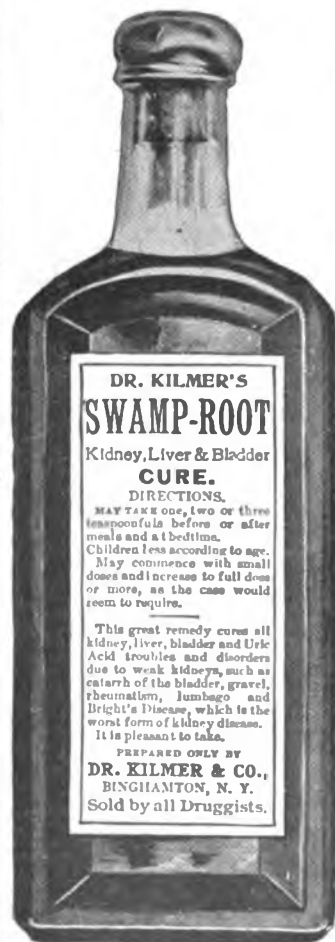


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It used to be considered that only urinary and bladder troubles were to be traced to the kidneys, but now modern science proves that nearly all diseases have their beginning in the disorder of these most important organs. Therefore, when your kidneys are weak or out of order, you can understand how quickly your entire body is affected, and how every organ seems to fail to do its duty.

If you are sick or "feel badly," begin taking the famous new discovery, Dr. Kilmer's Swamp-Root, because as soon as your kidneys are well they will help all the other organs to health. A trial will convince anyone.



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Kidney, Liver & Bladder

CURE.

DIRECTIONS.

MAY TAKE ONE, TWO OR THREE
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meals and at bedtime.

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May commence with small
doses and increase to full dose
or more, as the case would
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kidney, liver, bladder and Uric
Acid troubles and disorders
due to weak kidneys, such as
catarrh of the bladder, gravel,
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worst form of kidney disease.

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(Swamp-Root is pleasant to take.)

EDITORIAL NOTE--If you have the slightest symptoms of kidney or bladder troubles, or if there is a trace of it in your family history, send at once to Dr. Kilmer & Co., Binghamton, N. Y., who will gladly send you by mail, immediately, without cost to you, a sample bottle of Swamp-Root, and a book containing many of the thousands upon thousands of testimonial letters received from men and women cured. In writing, be sure to say you read this generous offer in "Telegraph Age."

A Railroad Man's Cure.

Engineer Van Scoyoc in writing to Dr. Kilmer & Co., says: "I have been thinking that worst from me would benefit those who may be suffering as I was before I began taking your Swamp-Root, the great kidney, liver and bladder remedy."

I am a locomotive engineer, employed on the Tyrone and Clearfield Branch of the Pennsylvania Railroad.



ENGINEER T. J. VAN SCOYOC.

Member of Brotherhood Locomotive Engineers, Lodge 467, Tyrone, Pa., P. R. R.

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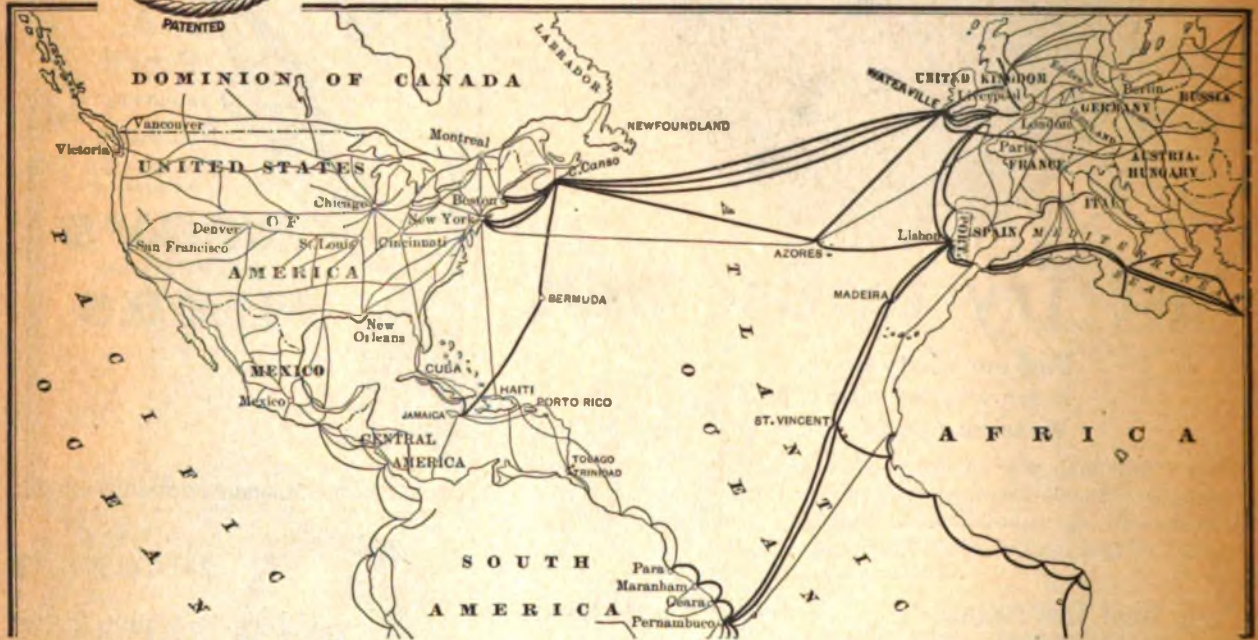
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