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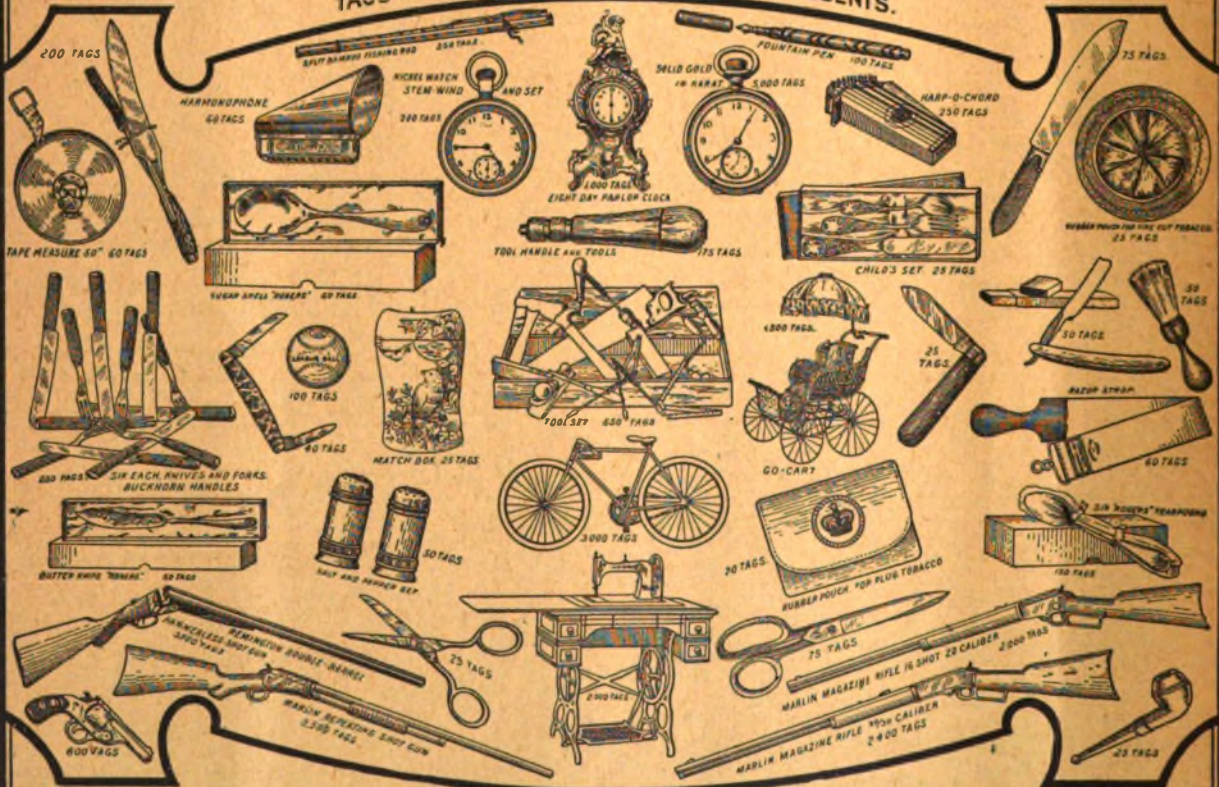
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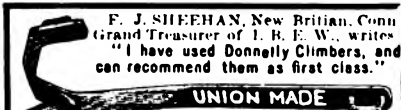
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THE TELEGRAPH AGE

No. 11.

NEW YORK, JUNE 1, 1903.

Vol. XX.

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SOME POINTS ON ELECTRICITY.

BY WILLIS H. JONES.

Interesting and Useful Information for Employes in a Modern Telegraph Office.

Operators and managers of offices in small and medium sized cities and towns visiting our large, modernly equipped metropolitan offices, become so impressed by the vast array and arrangement of apparatus to be observed on all sides, that they go away with the somewhat erroneous impression that to hold a position as chief operator in such an office one must necessarily possess the very highest degree of electrical knowledge.

It would, indeed, be a blessing to telegraph companies if all appointees to such positions could be induced to view the matter in that light, but unfortunately they do not. Some even argue that the acquirement of expert electrical knowledge is superfluous.

To a certain extent it must be admitted this is true. The work to be done is mapped out and divided among the chiefs in such a manner that unless one serves a long time and progresses from

one position to another, he may never have the opportunity to learn the electrical part of the business in all of its branches. The wire chief, the traffic chief, and the quadruplex chief, may each be an expert in his respective line and yet be a poor tool as an electrical engineer. The system in vogue in large offices is mainly responsible for this lack of general knowledge, for have they not got one or more electrical experts who attend to that branch of the service exclusively? The result is that many assistant chief operators instead of being compelled to ferrit out their own troubles soon get into the deplorable habit of depending upon the expert entirely and thereby lose a valuable lesson. After a while, unfortunately, they cease to concern themselves about that branch of the business and seem satisfied to be able, simply, to balance a quadruplex properly when the conditions are normal. This is not intended as a reflection on chief operators in large offices, for as a rule, they are experts in regard to the class of work to which they are respectively assigned. It is merely the explanation of why many of them are comparatively timed on general electrical knowledge.

The best school for acquiring a general electrical knowledge is in an important yet medium sized telegraph centre. There everything depends upon the chief operator and his one, or possibly two, assistants. At such points there is no one to fall back on in case of an emergency, hence one must understand every detail of the business from the plant in the cellar, to the wires and apparatus in the operating department. If anything goes wrong the individual alone must locate the fault and remedy it if he would retain his position. The result of this schooling is that some of our brightest electricians are those who hold or have held positions of responsibility in the smaller offices referred to.

With this apology and explanation to our rural visitors, we must admit, however, that the convenient presence of an electrical expert sometimes induces a chief operator to neglect certain details of the business which every one holding the position should possess a knowledge of.

The office electrician, obviously, cannot always be present or disengaged, hence the chief operator who depends solely upon that authority for help in case of an emergency is liable to cause the company great delay and perhaps pecuniary loss through his ignorance of what to do, or rather where to look for the seat of the disturbance. For example, let us suppose that one pole of a quadruplex battery is found to be open on one or more of the sets, and that the expert is temporarily un-

available. If the chief in charge has not familiarized himself with the general method and current distribution employed he may cause endless delay and confusion by the manner in which he tries to remedy the trouble. If the trouble effects several quadruplex sets he will naturally infer that the fault lies in the dynamo room and ambiguously send word to that department that the "quad batteries are open." After a while he receives a reply asking "which quadruplexes?" Later, another query comes wanting to know which potential, positive or negative, and whether it is the third, the fourth, or the fifth potential. These questions usually perplex the man who has depended solely upon the expert and he is compelled to hunt up the proper information by making inquiry among his better informed associates in other divisions. In the meantime business is suspended.

Now, every chief operator in charge of a division should acquaint himself fully regarding such details as the following:

If you lose one or both poles of the battery on one set only, the trouble is not in the dynamo room or the battery itself. It will be found most probably either in the pole changer connections or in the 600 ohm lamp at the lamp stand. If you suddenly lose the same "pole" on a number of quadruplex sets, simultaneously, the seat of the disturbance will not be found in your apparatus or at the lamp stand, but in one of two places—the dynamo room, or the main fuse near the lamp stand. If it is the "closed" pole of the transmitting apparatus, tell the dynamo attendant that it is the positive polarity that is missing, and at the same time state whether it is the third, fourth, or fifth potential you mean. He will then know exactly where to investigate. This information is easily obtained and should be written down in your diary if your memory is poor.

In all main offices of any telegraph company, the same polarity of electromotive force is invariably connected to the "closed" contact point of the polechanger, while the opposite polarity of course, is run to the "open" position points. In the Western Union Company it is positive to the line when the key on the polar side is closed. This rule is followed for the purpose of making all quadruplex sets interchangeable and suitable to respond properly to the incoming current from a distant point, regardless of the latter's geographical location. The respective value of the potential assigned to the various quadruplex apparatus depends upon the length or resistances of the circuits upon which they work.

Thus all large copper wires of, say, 100 miles long will "quad" well on the second or the third potential. Wires of two to three hundred miles length usually require the fourth potential, or 270 volts, while circuits of 400 miles and over are fed by the fifth potential or 320 volts. It will be readily seen that the potential assigned to any given set may usually be determined, in the absence of other available information, by merely

noting the length of the circuit to which it is daily assigned.

(To be continued).

Recent Telegraph Patents.

A patent, No. 727,325, has been obtained by Reginald A. Fessenden, of Allegheny, Pa., for the transmission and receipt of signals.

A patent, No. 727,060, for an improvement in telegraph apparatus has been granted to J. C. Barclay, of New York, and by him assigned to the Western Union Telegraph Company.

Thomas A. Edison was recently granted three United States patents. Two of them relate to his new alkaline storage battery and consist of an improved electrode of copper and iron and a process of making electrolytically active finely divided iron for the electrode.

Personal Mention.

Mr. Albert C. Phillips, son of Walter P. Phillips, managing editor and business manager of the Chicago Inter-Ocean, was married in New York recently to Miss Eleanor Ryan.

Mr. W. S. Logue, the well known old time telegrapher, and for some years past general sales agent of the Edison interests at Chicago, Ill., has been promoted to be general sales agent with headquarters at 83 Chambers street, New York.

General A. W. Greely, chief signal officer of the United States Army, is representing the United States Government at the International Conference, now being held in London, England. He will have a voice in the proceedings but not a vote.

"The American Syren and Shipping," in its issue of April 18, prints as its frontispiece a well executed portrait of Mr. George Gray Ward, vice-president and general manager of the Commercial Cable Company, together with a sketch, on an inside page, descriptive of Mr. Ward's life and business career.

Mr. Bernard E. Sunny, western manager of the General Electric Company, was re-elected president of the Civic Federation of Chicago at the ninth annual meeting of that body held on May 8. Mr. Sunny was twenty years ago a prominent telegrapher in the Chicago office of the Western Union Telegraph Company.

Mr. Francis W. Jones, electrical engineer of the Postal Telegraph-Cable Company, New York, was married on May 9, at Atlanta, Ga., to Miss Melanie J. LeBel of Quebec, Canada. The ceremony was private and took place in the parlor of Mrs. W. T. Chandler, Washington Seminary, at 36 North Avenue, the Rev. Dr. Wilmer of St. Luke's Episcopal Church officiating. The bride was strikingly handsome in her traveling suit and the floral decorations were in keeping with the happy occasion. After an informal reception of a few friends including Mrs.

W. T. Chandler, C. C. Adams, general superintendent of the Postal Telegraph-Cable Company, and wife; and Assistant Superintendent S. A. Duncan and wife; Mr. J. Hargrave, Mr. Llewellyn Scott, superintendent of the Washington Seminary, and Miss Lovelace, musical directress, Mr. and Mrs. Jones immediately took the train for Atlantic City. N. J., stopping a few days in Washington, D. C.

Resignations and Appointments.

Mr. C. H. Harpst has been appointed manager of the newly opened office of the Postal Telegraph-Cable Company at Ventura, Cal.

Mr. Charles Irwin, manager of the Postal Telegraph-Cable Company, at Birmingham, Ala., has been promoted to be chief clerk to Superintendent W. J. Slater at Louisville, Ky.

Mr. T. Masters, for many years employed in the Canadian Pacific Telegraph office, at Vancouver, B. C., has resigned to accept the position of night chief of the Western Union Telegraph Company, at Spokane, Wash.

Mr. J. Q. Ryder, for the past fourteen years manager of the Western Union interests at New Bedford, Mass., has resigned to accept a more lucrative position with the Morse Twist Drill and Machine Company of that city.

Mr. L. W. Janes, chief operator, of the Postal Telegraph-Cable Company, at Louisville, Ky., has been promoted to the managership; J. D. Holland, traffic chief, promoted to be chief operator; J. A. Cahoe, all-night chief, promoted to be traffic chief; J. S. Wright, operator, promoted to be all-night chief operator. Miss Annie Barden will be the stenographer.

Mr. W. H. Doherty, manager of the Western Union Telegraph Company's branch office at 319 Greenwich Street, New York City, located in the egg, butter and fruit district, has been appointed manager of the main office at Albany, N. Y., vice W. L. Morgan, resigned. Mr. W. H. Cass, chief operator of the office vacated by Mr. Doherty, has been promoted to its head.

On May 1, the following promotions were made effective in the Postal Telegraph-Cable Company at Augusta, Ga. Mr. H. H. Duvall, chief operator, was appointed manager; (Superintendent T. R. Rusk formerly looked after the duties of this position in addition to his superintendency), J. P. Edwards, assistant chief operator, has been appointed chief operator; F. A. Luck, traffic chief, promoted to be assistant chief operator, and F. L. Wood, repeater chief, promoted to be traffic chief.

General Mention.

Two Italian scientists, viz., Professor Bruni and Signor Turchi, are credited with the invention of an apparatus enabling the same wire to be used for simultaneous telephonic and telegraphic transmissions.

Mr. Walter F. Barton, of the superintendent's office of the Western Union Telegraph Company, Atlanta, Ga., was married April 28 to Miss Leslie Ryman, one of the most charming young ladies, of Nashville, Tenn.

The Mutual Telegraph, Messenger and Burglar Alarm Company has been organized at Washington, D. C., with Mr. R. G. Callum as general manager. Mr. Callum occupied a similar position with the American District Telegraph Company for some twenty years, and is, therefore, well qualified to fill his new office.

Mr. H. F. Horton, manager of the Western Union Telegraph Company, at Auburn, N. Y., in renewing his subscription writes: "I forward herewith remittance for renewal. I feel that an operator cannot afford to be without the technical and general information TELEGRAPH AGE gives, aside from the news it contains regarding changes, etc." This is further proof that TELEGRAPH AGE is an indispensable factor to an up-to-date telegraph manager.

The Postal Recognizes Its Old Employees.

It was the earnest desire of Mr. John W. Mackay, late president of the Postal Telegraph-Cable Company, that some provision should be made by the company for the benefit of faithful employees who had grown old in the service and whose usefulness had been impaired by age or misfortune. In furtherance of this beneficent desire the officers of the company have had the matter under long and careful consideration and while they have not been able to formulate a systematic plan of pensions, they are authorized to make the following announcement:

Any employee of the Postal Telegraph-Cable Company who has been continuously in its service for a period of fifteen years and who, through no indiscretion of his own, has become incapacitated for work, may apply for relief to the person under whose immediate direction he is employed. Upon the recommendation of such person and of the superintendent of the district in which the employee is located and with the approval of the general superintendent of the division and of the Executive Committee, such employee may be allowed, in monthly payments, an amount not exceeding twenty per cent. of the regular salary pertaining to his position.

In the case of an employee who has been more than fifteen years in continuous service of the company, an additional three per cent. may be allowed for each additional year of service up to twenty-five years, making the maximum allowance fifty per cent.

No telegrapher, no matter what his position may be, who values his place and aspires for promotion based on all-around practical knowledge, can afford to be without "Pocket Edition of Diagrams and Complete Information for Telegraph Engineers and Students." See advertisement.

The Central Cable Office of the Western Union Telegraph Company.

The Central Cable office, New York, of the Western Union Telegraph Company, although a branch office in character, is nevertheless in fact one of the greatest and most important centres of telegraphing in the world, for here is concentrated the vast bulk of the telegraph business of the financial district of the Metropolis of America. As has been previously stated, this office occupies the ground and basement floors of the south end of the magnificent new Stock Exchange Building, the area included being 40x160 feet, extending through from Broad to New streets. The operating room, which is fitted with every improvement, a marvel of completeness in modern telegraphic equipment, is on the ground floor, at the Broad street end, while at the rear is found the office of the American District Telegraph Company and of the Gold and Stock Telegraph Company.

While the arrangements of these quarters were fully described in TELEGRAPH AGE on December 1, 1902, it is interesting to note other details of plan and scope incident to the business which is carried on at this point. In order to handle the vast telegraphic traffic, eighty-five aerial lines and two submarine cables centre here, while seventy operators are employed, besides a clerical force of fifty-three. The office is always open, day and night, and every day in the year, without reference to Sundays and holidays. The longest circuits maintained continuously anywhere in the world are operated from this office. One of these is a duplex to San Francisco, 3,000 miles and more in length, over which the traffic to the Pacific Coast passes. There are three duplexes leading to Galveston, Tex., 2,200 miles away, where connection is made with the Mexican and South American cable systems. Two direct duplexes extend to Havana, 1,800 miles distant, there connecting with the Cuba Submarine Cable Company's system, and the land lines of the Insular Government. Five duplexes reach out to North Sydney, C. B., and are employed to carry the traffic of the European cables landing in that vicinity. A duplex to Duxbury, Mass., connects with the cable landing at that place. Every important centre in the United States is in direct communication with this office. To Chicago, two duplexes are operated; two to New Orleans; three to Boston; several connect with Philadelphia, and others bring St. Louis, Cincinnati, Baltimore and other places in close touch.

The office is connected with the floor of the Stock Exchange in the same building, by an extensive pneumatic tube service. The Stock Exchange floor is divided into eight sections, and sixteen tubes are in constant use to carry from and to each of these sections the telegraph business of the Exchange. An average of but nineteen seconds only is required in the transfer of such messages. Similar tube connection is also maintained with the operating room at the main office, No. 195 Broadway.

The manager of this office is P. J. Tierney; B. H. Reynolds, manager's clerk, and C. R. Clampitt, chief operator. The cables are under the care of William Finn.

The American District Telegraph Company, which is the largest plant of the kind in the world, has 1,813 call boxes connected with its office, and operates twenty-six circuits. From 1,000 to 1,500 calls are answered daily, the number being regulated by the activity of the stock market. The number of boys employed will average 100, although frequently 200 are brought into requisition. Of this department D. Skelton is superintendent and T. F. Hull manager.

The Gold and Stock Telegraph Company, incorporated in 1867, now divides the entire Stock Exchange ticker reporting business with the New York Quotation Company. By special agreement with the New York Stock Exchange, both companies receive their quotations at the same moment, by the same wire.

The New York Quotation Company furnishes the quotations by ticker to members of the Exchange only and The Gold and Stock Telegraph Company by ticker to all other business houses whose applications may be approved by the Stock Exchange. Its ticker circuits embrace New York City, Brooklyn, Jersey City, Newark, Elizabeth, Paterson and other nearby points, about 670 stock tickers being in operation. This company also receives and issues by ticker, quotations and market reports from the Chicago Board of Trade, the New York Produce Exchange and the Cotton Exchange, as well as general markets and prices of petroleum and coffee. On these systems it has over 300 tickers.

The systems are operated by a large storage battery plant and central transmitting machinery. It has over 1,000 miles of cable conductors in use in the city, as well as some outlying air line wires on Western Union pole lines. A force of about 60 men is employed in attending to the ticker service and in keeping the cables and wires in good order.

Perhaps the most prominent feature of the new Central Cable office is the apparatus which is situated along the north end of the room and which presents a very striking and attractive appearance.

There are two submarine cable circuits in operation between this office and Canso, Nova Scotia, from which latter point direct communication with the cable station in Penzance, England, is maintained. Both circuits are worked duplex at rates of speed varying from 25 to 32 words per minute.

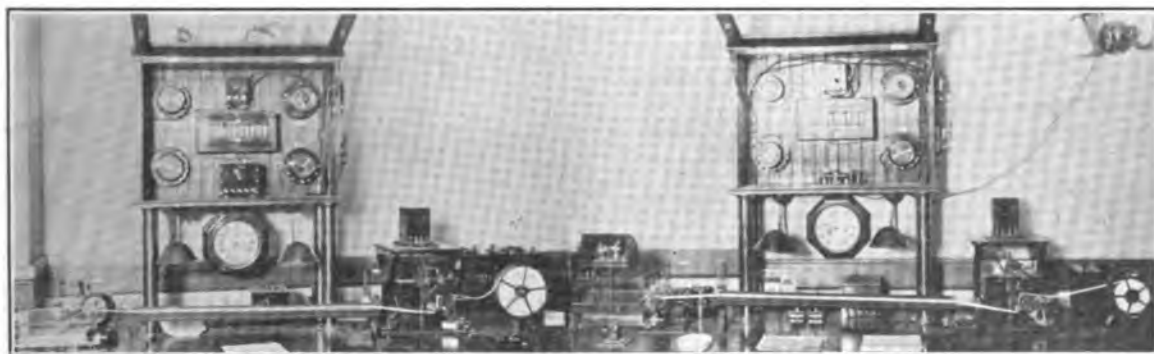
The automatic system is in successful operation over both sections of these cables, and, in connection therewith, it may be stated that a transmitter mechanism has been recently devised by Mr. J. C. Barclay, the assistant general manager of the Western Union Company, which insures the most absolute uniformity of running at whatever

rate of speed the transmitter may be set for, a great desideratum in cable work.

For "punching" or preparing the slip for automatic transmission a new and novel electromagnetic perforating machine is in use, which can be operated at a speed much higher than the old style of perforator and with considerably less expenditure of energy.

Electro-magnetic polechangers, specially de-

The adjustable portions of the artificial lines are enclosed in two smaller cabinets conveniently placed near the recording instruments and comprise a variety of shunts, subdivided condensers, leak resistances, and other paraphernalia, without which the difficult problem of securing and maintaining a perfect balance under climatic or other varying conditions could not be successfully solved.



CABLE RECORDING APPARATUS SHOWING ADJUSTABLE PORTION OF ARTIFICIAL LINE.

signed for rapidity of action and precision in transmission, form part of the sending equipment.

The receiving apparatus consists of two Thomson siphon recorders, each mounted upon a hollow iron pedestal solidly embedded in the cement flooring, a soft rubber cushion being interposed between the instrument and its support so as to prevent the possibility of the apparatus being affected by the mechanical vibration of the building. In each instrument a light coil of wire moves between the poles of a powerful compound permanent magnet. The signalling currents from over the cable pass through the suspended coil to ground, and in doing so, the coil turns to left or right according as the currents are positive or negative. The coil movements are communicated by a connecting thread to a fine glass siphon which is constantly spurting ink upon a slip of travelling paper, and hence the trace of the ink on the paper follows and delineates the movements of the coil. These instruments are so sensitive that they will readily respond to a current of one one-thousandth part of a milliampere, and the delicacy of adjustment in securing a balance is such as to require the use of equating resistances of the fractional parts of an ohm, and condenser capacities as low as the one-hundredth part of a microfarad.

The artificial lines or cables which must exactly resemble the real cables so far as resistance, electrostatic capacity and leakage conditions are concerned, are contained in a large cabinet, into the various compartments of which huge combination rheostats and condensers are placed. These constitute the fixed or stationary portion of the "compensation" required for duplex purposes and aggregate about 30,000 ohms of resistance and 880 microfarads capacity, graded in such a manner as to correspond mile per mile with the resistance and capacity of the actual cable.

As the requirements of the cable system call for more refined methods of electrical testing than in any other branch of the telegraph service, an



THE STATIONARY PORTION OF ARTIFICIAL LINE OR CABLE.

elaborate outfit of measuring and testing appliances has been provided in the comfortable and commodious quarters known as the "dark room,"

adjoining the terminal and dynamo rooms. A conspicuous feature of the dark room is the large terminal and distributing switchboard, with its 100 porcelain binding posts, into which all the wires connected with the cable service are brought.

The testing tables glitter with an array of apparatus comprising ammeters, voltmeters, reflecting, D'Arsonval, and other galvanometers; Wheatstone Bridge and combination sets; keys, switches, standard condensers, and other conveniences for locating faults and ascertaining the electrical condition of the aerial, underground, and submarine sections of the cable circuits.

The terminal room in the basement, which is the second largest in the Western Union service, has accommodation for 4,000 wires. Thirty, one-hundred conductor cables—26 from Broad street and 4 from the New street side—enter this room, which is the general distributing point to all the lower part of New York City.

The frame of the terminal board is constructed of 30, 100-conductor cable heads $5\frac{1}{2}$ feet high and 6x6 ft. square. Each cable head is equipped with an iron frame containing 52 insulating binding posts on opposite sides, and a runway frame for the distribution of wires from one cable to another, the arrangement being such as to greatly facilitate the rapid changes desirable in cases of failure of any conductor in use.

Attached to one portion of the framework are slate terminal boards from which connections are made to the 1,600 wires distributed throughout the building, all wires being properly fused so as to protect the instruments from electric light or other stray currents that might endanger their safety.

A surplus of 200 wires has been added to this district so as to provide for future growth or be available in replacing faulty conductors.

Two Crocker-Wheeler motor-dynamos supply current for all short wires to brokers and other outside offices, as well as to all the local sounders in the operating room. These two dynamos released the large plant of storage and gravity batteries formerly used for these wires.

Death of Ezra T. Gilliland.

Ezra T. Gilliland, an old time telegrapher and a well known electrical engineer and capitalist, of New York, died of Brights disease at Pelham Manor, New York, on May 15. Mr. Gilliland was born at Cuba, N. Y., in 1846. He learned telegraphy on the western division of the Erie Railroad in 1860, and was employed at different times in nearly every office on the division, including the train dispatcher's office at Dunkirk. In 1862, he went to Michigan, and was employed as extra operator upon both the Michigan Southern and Northern Indiana (now the Lake Shore), and the Michigan Central railroads in most of the principal offices of those lines, including Chicago. In the Fall of 1863, Mr. Gilliland left the railroad business and engaged with the Western Union Telegraph Company, at Cincinnati, remaining

there a number of years. In 1865, he started a small shop in that city for the manufacture and repair of electrical apparatus, at the same time retaining his position as night operator in the Western Union office, until the business grew



THE LATE EZRA T. GILLILAND.

sufficiently large to demand all his time and attention. Mr. Gilliland subsequently became interested with the Bell Telephone Company, in the beginning of the telephone business as inventor, manufacturer, and promoter, remaining with this company until a few years ago, when he retired to private life.

Obituary Notes.

V. G. Jamieson an operator of Boston, Mass., died on May 12.

Henry Hardy, an operator at Alliance, Ohio, died of Brights disease, May 16.

Harvey W. Chambers, aged 63 years, manager of the Western Union Telegraph Company at Georgetown, Ky., for over forty years, died of typhoid fever on May 18.

Charles V. Tracey, aged 38 years, who has worked for The Associated Press at different points for the past ten years, died of consumption at Salt Lake City, Utah, on May 16.

Daniel M. O'Driscoll, up to six months ago and for thirty years manager of the Western Union Telegraph Company, in Charleston, S. C., died May 19 in his sixty-sixth year. He was born in Bantry, Ireland, and was probably the oldest of the war telegraphers south of the Potomac. He sent the first message out of Petersburg, Va., announcing the surrender of General Lee.

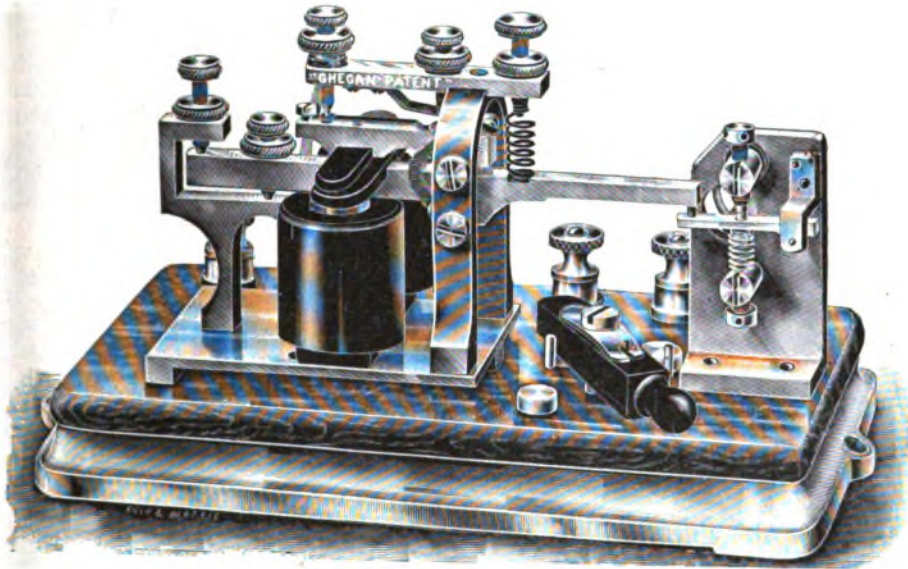
No operator should fail to read TELEGRAPH AGE regularly. It will pay him to do so.

The Ghegan Automatic Repeater.

The simple and ingenious automatic repeater invented by Mr. J. J. Ghegan, vice-president and general manager of J. H. Bunnell & Co., Incorporated, New York, appears to be attracting wide attention for it is eliciting much favorable comment. This apparently is due because of its

The fact that an armature on being drawn towards a magnet becomes itself magnetic by induction, and that the closer it approaches the magnet cores, the stronger the magnetism becomes, are the novel principles utilized in this repeater.

The diagram shows how the main, local and shunt circuits are to be connected.



THE GHEGAN CIRCUIT CONTROLLER OR TRANSMITTER.

simplicity of construction, of its reliability and quickness of action. Although a description of the device appeared in a former issue of TELEGRAPH AGE, when the apparatus was first placed

The operation of the repeater is explained as follows:

When a key on the western circuit is opened the instruments assume the positions shown in

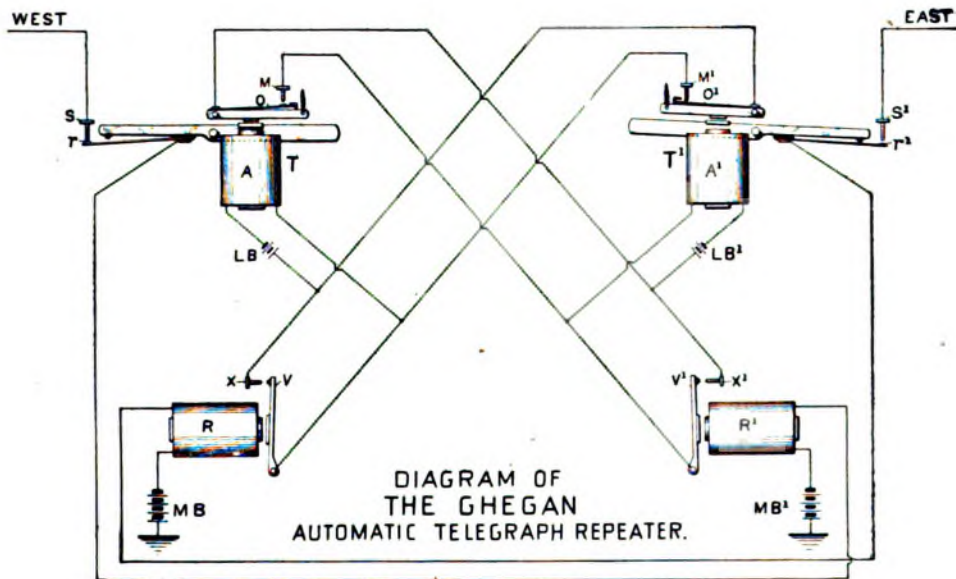


DIAGRAM OF THE GHEGAN AUTOMATIC TELEGRAPH REPEATER.

on the market, yet as some modifications have recently been made in the transmitter, or circuit controller, it seems fitting under the circumstances to again bring the device to the attention of the general reader, and to further refer to its mode of operation.

the diagram. The armature of relay R', first falls back and opens the local circuit of transmitter T', which in turn opens the eastern circuit at s' r', thus causing the armature of relay R to fall back. This falling back of the armature of relay R, however, does not affect the local circuit

of transmitter T, because before the eastern circuit was broken at $s^1 r^1$, the shunt around the local contacts of relay R was closed at $M^1 O^1$.

On closing the western key, the armature of relay R^1 closes the local circuit of transmitter T^1 , which in turn first closes the eastern circuit at $s^1 r^1$, and, as already explained, after sufficient time has elapsed to permit the armature of relay R to reach its front stop, opens the shunt circuit of transmitter T at $M^1 O^1$.

Should east "break" when west is sending, the armature of relay R would remain on its back stop, thus breaking the local circuit of transmitter T, on the first downward stroke of the superposed armature of transmitter T^1 , and so break the western circuit at $s r$.

There being no extra weight or attachment of any kind to either the relay or transmitter armatures, the quickest possible action can be obtained with this repeater. As both relay armatures work in unison, it can always be seen at a glance if the signals are being properly repeated.

The transmitters are provided with switches for working the lines independently or putting them together at will, and when once set, need practically no attention, the only adjustment necessary being that of the ordinary relay.

In this connection it is interesting to note that these repeaters are now in use on the lines of the Pennsylvania, Erie, Seaboard Air Line, Mexican Central and Mexican National railroads, the United States Telephone Company, American Sheet Steel Company, Standard Oil Company, United States Government Signal Service and the Postal Telegraph-Cable Company.

Municipal Electricians.

The seventh annual meeting of the National Fire Protection Association will be held in the assembly room of the Chicago Underwriters' Association, 159 La Salle street, Chicago, on May 25 to 28. An interesting programme has been arranged. The objects of the association are to promote the science and improve the methods of fire protection; to obtain and circulate information on this subject, and to secure co-operation in matters of common interest. Only fire insurance men are eligible to membership. Among other subjects which will be discussed, those of an electrical nature will be presented by committees as follows: "Thermo-electric Fire Alarms," F. E. Cabot, chairman; "Heavy-current Protectors on Wires of Signaling Systems," Ralph Sweetland, chairman; "Electric Fire Pumps," Ralph Sweetland, chairman.

On Thursday the association will visit the Underwriters' Laboratories at 67 East Twenty-first street, where the work of the Underwriters' National Electric Association will be inspected. Fire extinguishing devices of various kinds will be on exhibition for the inspection of members. The programme will be concluded by the operation of any testing apparatus which appears of interest.

Edison Battery Fan Outfits.

The Edison Manufacturing Co., New York and Chicago, are placing on the market two sizes of battery fan outfits, operated by Edison primary batteries.

The smaller outfit is furnished with an iron-clad motor of the enclosed field type, having a three-pole armature and copper commutator segments. The fan carried by this motor is 7 inches in diameter, and is protected by a handsome brass wire guard. The motor is operated by three Edison primary cells, type "S," 300 ampere hour capacity, fitted into a polished oak box. The speed of the motor averages about 1,200 revolutions per minute, and the whole outfit is substantial and thoroughly well made.

The larger outfit is furnished with a motor of the open field type, with Paccinoti ring armature. The fan carried by this motor is 9 inches in diameter, and the motor, when operated by four Edison primary cells, type "S," runs at a speed of from 850 to 900 revolutions per minute. This outfit is considered to be the best battery fan outfit on the market, and is very largely used for ventilating sick rooms, bedrooms and private dining rooms where it is impossible to obtain the street current. The armature shaft is mounted on ball bearings, so that there is practically no frictional loss.

Both outfits will run the fans for 150 hours before the charge in the battery is exhausted.

Wireless Telegraphy.

Wireless telegraphy will play a prominent part in reporting the International Yacht Race next Fall. It is to be hoped that the rival wireless telegraph companies will agree upon some plan of work that will insure non-interference with each other. From the present outlook, however, each company proposes to assert its rights to the exclusive use of the air, and as a result, none of the companies probably will be able to transmit their messages successfully to the shore. This is precisely what happened two years ago during the contest for the cup. Another such exhibition will tend to convince the public that wireless telegraphy is not always to be relied upon.

The International conference on wireless telegraphy proposed by the German Emperor will take place in Berlin probably in July.

G. Marconi was made a Roman citizen on May 7th by Prince Colonna, the mayor of Rome. In the afternoon Marconi delivered a lecture in the great hall of the capitol before King Victor Emmanuel and a large audience on what he had done and what he hopes to do in wireless telegraphy. At the conclusion of the lecture the king shook hands with Marconi and called him a glory to Italy.

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NEW YORK, June 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.

The Western Union and Pennsylvania Railroad.

The United States Circuit Court of Appeals in a decision handed down at Philadelphia on May 19, holds that the Western Union Telegraph Company had no rights under the act of Congress of July 24, 1866, to remain on the Pennsylvania Railroad and reversed a judgment of the Circuit court of the Northern District of New Jersey granting an injunction.

The opinion, written by Judge Dallas, says that the decree of the New Jersey Court was not made on the merits of the case, but upon the ground that it would result in irreparable injury to no one, and might be reviewed upon appeal, whereas an order refusing the injunction might have entailed much loss to the telegraph company. In his opinion, Judge Dallas holds that the claims of the telegraph company that it has a right by the contract to maintain its lines on the right of way of the Pennsylvania Railroad Company cannot be maintained. The Court also holds that the main contention of the telegraph company, that it is a post road and as such it has a right to maintain telegraph lines along the rights of way of railroads, is not well taken. After quoting numerous authorities the opinion says: "Having reached the conclusion that the fundamental position of the telegraph company in each of these cases is untenable, the decree of the Circuit Court of Western Pennsylvania is affirmed and the decree of the New Jersey Court is reversed."

Whereupon Judge Buffington, of the Circuit Court of Western Pennsylvania, refused an injunction, and the Pennsylvania Railroad Company, thus unrestrained, took matters into its own hands without waiting for a decision on final appeal to the United States Supreme Court, and forthwith removed the Western Union poles and wires from its right of way, destroying, it is said, a million dollars worth of telegraph property.

On the pole lines along the Pennsylvania system there were some forty thousand miles of copper wire, all of which was thrown into the ditches, largely impairing its value. The controversy between the Pennsylvania Railroad Company and the Western Union Telegraph Company has grown out of the fact that the Pennsylvania Railroad Company objected to Mr. George J. Gould invading its territory with his Wabash Railroad system. It will be seen, therefore, that the punishment inflicted was not so much directed at the management of the telegraph company as it was against Mr. Gould personally. As the Western Union Company foresaw the possibility of such a move upon the part of the railroad company, it had months ago duplicated its lines along the Pennsylvania Railroad system on other parallel railroad lines, thus when the open rupture came the telegraph company as a matter of fact experienced little inconvenience.

It is understood that a suit for \$1,000,000 damages will be brought by the Western Union Telegraph Company against the Pennsylvania Railroad Company on account of the destruction of its property.

Albert J. Wise.

Albert J. Wise, the subject of this sketch, although a lawyer by profession, is largely interested in the manufacture of telegraphic and electrical instruments, being the president and treasurer of the well known corporation of J. H. Bunnell & Co., New York. He is also connected with a number of other corporations, is president of the Fowler Trust Association and a director of the A. D. Ashmead Company. Mr. Wise was born in Lima, Ohio, September 24, 1869. After receiving his early education in the schools of his birthplace he entered Greylock Institute at South Williamstown, Mass., and subsequently Kenyon College, finishing at Yale University, where he graduated with the degree of LL.B. He also received the same degree from Columbia University. After graduation he returned to Lima, and began the practice of law. It was not long before



ALBERT J. WISE.

Lawyer and President of J. H. Bunnell & Co., Incorporated.

he began to be retained in many important cases connected with railroads and corporations, and became known throughout that section of the State as a lawyer of much ability and promise, although then not much beyond the age of majority.

In 1891 he removed to the City of New York, where he has been engaged ever since in the practice of his profession. As in Ohio, his clientele in New York consists largely of corporations and financiers connected with institutions of that character, and he has built up a large and lucrative practice. Mr. Wise is of a "nautical turn of mind," as he expresses it, and is the owner of the fine steam yacht "Chetolah," a superior type of vessel of the class to which she belongs. She is handsomely fitted up and in this craft his vacations are usually spent in cruising along the Atlantic Coast.

In 1896 Mr. Wise married Miss Gertrude Bun-

nell, daughter of the late Jesse H. Bunnell, the well-known old time telegrapher, inventor and manufacturer. Their home is in Brooklyn, where they dispense a most delightful hospitality.

Mr. Wise is a member of the New York Club, the Magnetic Club, the New York Yacht, Atlantic Yacht, and Sea Cliff Yacht clubs, and is Inspector of Public Schools for the Boroughs of Manhattan and the Bronx, which formerly comprised what was the old City of New York.

British Telegraph System Doesn't Pay Interest on Purchase Price.

A statement of the income and expenditures of the English telegraph system since the Post Office Department took it over in 1870, shows that for the first two years the revenue paid the interest on the purchase money. In no single year since has it been sufficient to cover the interest charge. The deficiency in the year 1872 was £119,000. This has steadily increased, until last year it was £950,740.

The major portion of the deficiency was due to the heavy charge for salaries, which is yearly growing more rapidly than the increase in the revenue. A few years ago a committee was appointed to investigate the condition of the Post Office employes. They made liberal recommendations in regard to an increase in wages. These were carried out at an immediate cost of £500,000 annually.

Fresh demands are now being put forward and will be a matter of debate in the House of Commons. Mr. Austen Chamberlain, the Postmaster General, wants to submit the demands to a committee of business men. The employes object, as they are anxious to have the matter go before the Committee of the House of Commons. They know that they can by their votes bring pressure to bear on members of Parliament in their favor. This is one of the very grounds on which John Burns, the Socialist leader in the House of Commons, recently advocated the disfranchisement of all Government employes.—London cablegram in the New York Sun.

T. M. B. ASSOCIATION.—Assessment, number 408, has been levied by the Telegraphers' Mutual Benefit Association to meet the claims arising from the deaths of H. Weatherford, of Pensacola, Fla.; Edwin J. Udell, of Rantoul, Ill.; Griffith Owens, of Duanesburgh, N. Y.; Alburn S. Parmelee, of Owego, N. Y., and Daniel Shaw, of Bath, Me.

American telegraph engineers Wiegand and Penniman have arrived at Rome, Italy, for the purpose of making certain telegraphic tests. They will apply Rowland's apparatus for the simultaneous transmission of eight despatches over one wire on the Italian telegraph lines.

"Pocket Edition of Diagrams," etc., is \$1.50 per copy.

The Telegraph Library at Chicago.

Editor TELEGRAPH AGE: In December, 1895, efforts were made to start an employees' library under the direct initiative of Mr. E. J. Nally, general superintendent of the Postal Telegraph-Cable Company, at Chicago. What success has attended this measure may be seen from a perusal of the yearly report, just issued, which I attach. It may be of sufficient interest to provoke a friendly rivalry on the part of others, if you have the space to print it. The requirements necessary to become a member of the Association are limited and simple, an employe of the company being called upon merely to pay into the treasury monthly dues of but ten cents.

If any city in which a representative of the fraternity desires information as to our methods, I will be glad to furnish the details, and if the results of any other library project are fruitful you and I will be more than repaid for our trouble. Thanking you for the courtesy.

J. E. Pettit, President.

Chicago, May 19.

Secretary's report of the Postal Telegraph Library Association, Chicago, for the year ending May 12:

Receipts:—Cash on hand May 12, 1902, \$23.98; received from collectors, \$183.95; Mr. Nally, interest on locker deposits, \$3.87; miscellaneous, \$1.70; total, \$213.50.

Disbursements:—New books, \$121.24; magazines, \$30.38; services of librarian, \$24.00; book-case, \$10.87; miscellaneous, \$4.18; balance in treasury May 12, 1903, 22.83; total, \$213.50.

Number books on hand last report, 885; new books purchased, 206; total 1091.

Number members last report, 126; new members, 192; total, 318. Withdrawn or resigned, 134; total members to date, 184.

L. E. Patten, Secretary

Chicago, May 18, 1903.

The Cable.

The longest submarine telephone cable in the world is 47½ miles in length, and connects Belgium and England.

Mr. George A. Rock, superintendent of the Direct West India Cable Company, whose headquarters are at Kingston, Jamaica, was in New York City recently, where he spent a week in visiting old friends. He left for Europe, May 27, where he will spend the remainder of a four months' vacation.

The twin screw cable steamer "Henry Holmes," built in England for the West India and Panama Telegraph Company, has run her trial trip on the measured mile with excellent results, a mean speed of 11½ knots having been easily attained. This ship takes the place of the "Grappler," which was destroyed by a tidal wave at the time of the volcanic explosion on Martinique about a year ago.

Civil Engineer Werry, who was sent to determine the position of Fanning Island, in connection with the establishment there of a station of the British-Australian cable, has found that the latitude as given on the Admiralty charts is 26 seconds too far north. The longitude, as shown by the charts, is correct.

The superintendent of the Commercial Cable Company at Waterville, Ireland, Mr. T. J. Wilmot, and his wife, celebrated their silver wedding on April 29, and received many congratulations.

The members of the staff and their wives were invited to a reception in the Recreation Hall.

During the evening Mr. and Mrs. Wilmot were presented with a handsome sterling silver rose bowl, which was subscribed for by every member of the staff.

In making the presentation Mr. Holt, the assistant superintendent, in a happy manner voiced the feelings of the staff towards their superintendent and his wife, who are very popular in this station.

There is every expectation that the Pacific cable will be completed to Manila by July 4. That is the date fixed by the cable company, which wishes to celebrate that day by making communication between the United States and its most distant possessions easier. The activity displayed by the company in the Pacific indicates that the work will be completed on time.

The cable will be run from Manila eastwardly. Two cable ships, the Anglia and Colonia, are to work simultaneously that the work may be expedited. One vessel will lay the cable from Manila to Guam. This stretch, when completed, will give Guam its first cable communication. The second ship will run the cable from Guam to Midway Island, and the first again from Midway to Honolulu. The vessel bearing the cable which is to connect Manila and Guam, the Anglia, started from Manila May 25, having on that date successfully landed the shore end at Malate. It will require probably eight days' time to lay the cable to Guam. The steamer Hanalei has sailed from Honolulu for Midway and Guam carrying material and stores for these points, in addition to operators' apparatus for the cable. Seven cable repairers and operators sent from San Francisco have caught the Hanalei at Honolulu. They will disembark at Midway and at Guam. Midway is called the loneliest spot on earth. It is smaller by far than Guam, and has no population. Midway, however, is to have an American naval officer as Governor in the person of Commander Rodman. A naval vessel is to visit Midway once every two or three months. In the intervals Guam, with its small population of cable operators, and Rodman, will know of the doings of the world only through the cable communications caught on the wing.

The electrical engineer of the Commercial Cable Company is Charles Cuttriss, who is at Manila to superintend the work. The cable from San Fran-

cisco to Manila will be 7,500 miles long, not taking into account the greater length necessary because of the unevenness of the sea's bottom.

On May 21 the Western Union Telegraph Company laid a five-conductor rubber insulated, double-armored submarine cable between the cable hut at Coney Island and Pier A, New York, at which point connection is made by an underground cable with the central cable office on Broad street. This harbor cable is to supplement the present overland cable, which is partly aerial and partly under ground, thus affording an alternate route to Canso, Nova Scotia, and greatly increasing their cable facilities. The total length of the cable is 79,200 feet, and its weight 29,000 pounds per mile, which makes it one of the heaviest submarine cables laid on this side of the Atlantic. The conductors are each made up of seven strands of copper wire, the total length of which placed end to end would amount to 425 miles. These conductors are thoroughly insulated with pure Para rubber and protected from mechanical injury by 46 armor wires, the total length of which, in a straight line, would be about 690 miles. The cable was laid in the main ship channel at the rate of about four miles per hour under the supervision of general foreman of construction, Alexander Kline, who also devised the "paying out" machinery which worked like a charm. The cable tug "Western Union" was engaged in the work, which was finished some four hours after leaving the starting point at Coney Island. Mr. Frank Kitton, the assistant electrical engineer, and William Finn, who has charge of the Western Union submarine cables, Superintendent Rodier and Mr. A. P. Eckert, who represented the Safety Insulated Wire and Cable Company, of New York, manufacturers of the cable, were on board looking after the various interests concerned.

By utilizing the cable conductors, assistant general manager, J. C. Barclay, of the Western Union Telegraph Company, was in constant communication with the "Western Union" while the cable was being laid.

The Morse Club Dinner.

The eighth annual dinner of the Morse Club took place at the Marlborough Hotel, New York, on the evening of Saturday, May 23. About seventy-five persons, including many ladies, sat down at the tables at half-past seven o'clock. President Gardner Irving presiding. The banquet room was handsomely decorated with flags, and a silken banner, bearing the motto of the club, "What Hath God Wrought," occupied a position back and over the president's chair. Letters of regret were read from Col. R. C. Clowry, Gen. T. T. Eckert, Thomas F. Clark, F. W. Jones, Col. A. B. Chandler, E. M. Mulford, W. H. Baker, C. P. Bruch and others.

Addresses were made by Gardner Irving, president of the club, M. J. O'Leary, W. J. Dealy and M. H. Kerner.

An election of officers of the club was held, which resulted in the unanimous return of the old board to serve for another year.

There was music, instrumental and vocal, and following the dinner a brief vaudeville performance was given.

The occasion was made the opportunity to present to W. J. Quinn, who, for thirteen years, had served as the financial secretary of the New York Telegraphers' Aid Society, and who refused a renomination at the late election of officers, a handsomely engrossed set of resolutions complimentary to his long and faithful services. The presentation speech was made by President E. E. Brannin of the society. At the conclusion of this interesting episode Gardner Irving, president of the Morse Club, in behalf of the members of the Telegraphers' Aid Society and friends of Mr. Quinn, arose, and in a neat speech presented Mr. Quinn with a certified check for \$500 as a further testimonial of regard. Hon. Walter C. Burton responded in behalf of Mr. Quinn to these expressions of regard by old friends.

The affair was closed by the entire assemblage rising and singing the "Ode to Morse," composed by M. H. Kerner, and which has been adopted as the club's song.

As is the custom, the club decorated the Morse statue in Central Park on Decoration Day.

Among those present were: Gardner Irving and Mrs. Irving; Mr. and Mrs. C. E. Rafford, Mr. and Mrs. M. F. Gaffney, Mr. and Mrs. R. C. McDonald, J. J. Conlon and ladies; Mr. and Mrs. H. A. Moody, Mr. J. B. Berthol and Mrs. Wallace, of Jersey City; Mr. and Mrs. C. A. Kilfoyle, Mr. and Mrs. W. J. Quinn, Mr. and Mrs. C. A. Meyer, Mr. and Mrs. H. L. Talbot, Mr. and Mrs. M. J. O'Leary, Mr. and Mrs. M. H. Kerner, Mr. and Mrs. E. F. Howell, Mr. and Mrs. E. Messler, Mr. and Mrs. J. S. Forson and Miss Alice Forson; Miss Belle Daly and escort, Miss K. Meyer and escort, E. E. Brannin, W. W. Price, A. G. Waring, W. C. McDonald, C. J. Power, C. D. Williams, E. G. Cremins, W. J. Dealy, Hon. W. C. Burton, T. F. Murphy, A. P. Sterling, A. E. Wilgus, W. E. Rath, Dr. J. McKinzey, Thomas Brennan, Walter Williamson, J. F. Stevens and others.

Magnetic Club Summer Outing.

At a meeting of the Board of Governors of the Magnetic Club, held May 22, it was decided to hold the Summer outing of the club at Cove Hotel, Livingston, Staten Island, on Tuesday, June 23. The club has held their outings at this place for several years. Colonel R. C. Clowry, president of the Western Union Telegraph Company, has placed the tug "Western Union" at the disposal of the club on the day of the outing, for the purpose of conveying the members to and from the grounds.

TELEGRAPH AGE will furnish operators with just the kind of practical information they need.

Vacations for The Associated Press Operators.

The request made by the telegraph operators of The Associated Press for a twenty per cent. increase in their salaries was taken up at the meeting of the board of directors on May 13.

The report of General Manager Stone to the board of directors was as follows:

"Gentlemen.—I have received the accompanying petition signed by a very large number of the telegraph operators in the service of The Associated Press. I am glad to say that this petition, which it must be admitted is most temperate in tone and conservative in statement, is not the work of any cabal or conspiracy, nor need there be any solicitude upon the part of the board of directors, or of the members of The Associated Press, that the gentlemen engaged in our operating department are under the control of unreasoning agitators. I should be wholly unjust if I failed to pay tribute to the splendid morale of our operating force. With exceptions so rare as to be unworthy of mention, I have found the operators as earnest for the success of the Association, as attentive to the tedious and exacting labor imposed upon them, as willing in an emergency and as uncomplaining in times of stress, as any others among those employed by you, and I feel that it would be impossible to pay a higher compliment to any one.

"Nor can it be denied, I think, that the substantial allegations of the petition in respect of the increased cost of living, are true. It must be admitted that persons with fixed incomes always suffer in times of advancing prices and the operators (as well as all other employes of The Associated Press) have been no exception to this rule.

"There are other facts, however, which seem to me worthy of equal consideration.

"First, although at the date of the adoption of leased wires by The Associated Press the salaries of operators were made uniform with the rates paid by the telegraph companies (\$17 a week for day work and \$19 a week for night work) these figures have been increased without solicitation from the operators, until we are now paying \$25 a week for day work and \$29 a week for night work, on our trunk lines, while no such advance has been made by the telegraph companies. This statement should be qualified by a recognition of the fact that, through the introduction of the code and the adoption of certain mechanical devices for sending, the work is undeniably harder than it was at the beginning.

"Second, there are over 40,000 telegraph operators in service throughout the United States, and, of these, The Associated Press employs less than one per cent., or 374. Investigation shows that you are now paying fully 25 per cent. higher salaries than is paid for like service by either of the telegraph companies or by any of the railway companies.

"Third, acting upon the authority vested in me by your board, I have, during the past two years, increased the salaries of a number of operators, and in several cases, by more than 20 per cent.

"For these reasons I cannot recommend that you grant the prayer of this petition for a horizontal increase of 20 per cent. in the salaries of the entire operating force, in advance of any like action on the part of the telegraph and railway companies.

"Mindful, however, of the splendid loyalty and zeal of the operating force, I ask authority to give annually to each operator who has been in the employ of The Associated Press for one full year, a two weeks' vacation without abatement in salary.

"I also recommend that the operators be relieved from the obligation to buy and maintain typewriters and ribbons, and that either The Associated Press or the individual newspapers bear this expense.

"Under the existing rule, if an operator is forced to absent himself from his work and provide a substitute, it frequently happens that he must pay his substitute more than he himself receives. This seems to me a hardship, and I recommend that any difference in such cases be borne by The Associated Press.

"I must take issue with the phrase in the petition which conveys the impression that all night operators are expected or required to work 365 days in the year. Such is not the fact. Indeed, it is far from the universal practice for night men to actually work every night, and those who do so work, a number could be relieved for the seventh night if they so desired.

"Some time ago I found that the time given for luncheon varied on the different circuits, and that luncheon was often dispensed with without sufficient cause. I, therefore, issued an order making the luncheon rest uniform, and have instructed the superintendents that it must not be withheld from the operators except in cases of great emergency.

"The allegation that in many cases the quarters provided for our operators are of an unsanitary character is unhappily a fact. I therefore suggest that the board authorize me to insist that in all cases our operators be provided with suitable accommodations, healthful and reasonably free from noise and interruption.

"Finally, I recognize that the board has already authorized me to adjust any inequalities in salaries that may from time to time appear. If it is the pleasure of the board to continue this confidence, I shall endeavor to meet each case as it arises, and after careful consideration, deal fairly by those in interest."

All these recommendations were approved by the board and Mr. Stone was authorized to carry them into effect.

Everybody in the telegraph service is reading "Pocket Edition of Diagrams," etc. It is endorsed by experts, and no telegrapher who would gain a thorough knowledge of his business, told and illustrated in a manner clear to every reader, should fail to procure a copy. See advertisement.

Out First "Bull."

BY R. R. HAINES.

"Come to Brunswick to-morrow and bring your fife," was the way the message read, and the way it was sent by "Jim" Brown, of Bath, to his musical friend "Bill" Smith, of Portland, all in the state of Maine, in the year 1850. But the careless operator substituted a "W" for an "F," so the telegram as delivered read: "Come to Brunswick to-morrow and brink your wife." Now, Smith could not divine what was wanted of his wife at Brunswick, but finally concluded that his musical friends at Bath were going on a picnic, and hence the invite. But to make sure as to what was wanted of him, he wired back to Brown: "Do you want me to play?" Brown promptly answered, "Yes," so Smith took his fife and his wife, and by the morning train hied him down to Brunswick. He learned upon arrival that it was no social gathering of his friends at all, but instead thereof it was the annual commencement day of Bowdoin College, which institution was a principal item in the make-up of the said Brunswick. The Bath band did the music for the occasion, and being minus a fifer, Smith was sent for to fill the vacancy. The outcome of this little ditty was that Smith marched the streets and blowed his fife, while his wife also walked the streets and "blowed up" the telegraph for making the blunder. William B. Clum, well known to all old time New Yorkers, was the Portland operator, and this humble scribe was the other victim. There was no end of the joking between us over the incident, but we never settled the dispute of who elongated the dot in that letter F. As "Respectfully Referred" had not then been invented, no official reproof ever reached us about it. If Clum is still on this side of Jordan, I hope he will forgive me for this expose of his youthful carelessness. [Mr. Clum is still hale and hearty and has charge of a wire in the Postal Telegraph-Cable Company, at No. 253 Broadway, New York.—Editor].

It was on a bitterly cold Winter morning that Mr. Nichols, who was a deputy sheriff of Lincoln County, Maine, rode from his home in the town of Phippsburg, and brought to my office a bunch of keys to be transmitted to Capt. Baker, at the U. S. Hotel, New York. He was a sadly disappointed man when I told him he would have to send them by mail or express. "What," he said, "cant' send a little bunch of keys like this! What's the darned telegraph for then, anyway?" I tried to explain the institution to him, but failed to reconcile him to his disappointment. The telegraph was six years old at the time of which I am writing, and although it had done wonders, it had not shown that the mysterious fluid could ever be made a burden bearer. But considering the age of the telegraph, Nicholas was more excusable for his ignorance than was a lady at Sacramento, in 1870, twenty years later, when she

presented her bank book at the telegraph office to be sent to San Francisco to a friend so she could draw her money. The lady was well dressed and had about her a general appearance of intelligence, but it was evident she had not read the papers to any advantage to herself.

An incident kindred to the above was that of a man in Oregon, who peered into the end of a piece of line wire for the purpose of discovering "the hole where the news comes through." Notwithstanding these evidences of ignorance among the people, it is a fact that the schoolmaster was well abroad in the land in and about the year 1850, and the papers had written up the great wonder fully, but it is evident many scholars played truant, and readers of papers did not all read understandingly.

And speaking about papers, I am reminded of a famous wipe out of the Morse telegraph system by the New York Herald, in or about the year 1850. It was a write up of the Bain telegraph, and predicted the Morse system was to be entirely superseded, and a thing of the past. It was sad reading to me, for I had set my heart on the dots and dashes, and was reminded of Othello, when he declared his "occupation gone." A copy of the Herald I allude to would be interesting reading today, in view of the fact that after over a half a century of wear and tear, the Morse system is still on deck, without a dot erased or a dash obscured, as Daniel Webster would say it. And the Morse alphabet is the most wonderful alphabet ever given to the world, as it can be read by sight, by sound, by touch and by electric shock. And the alphabet will remain in use forever.

Propogation of Electric Waves by the Earth.

A. Voller, in the *Physikal Zeitschr*, quotes some experiments which tend to confirm Lecher's hypothesis as to the part played by the whole earth in propagating electric waves to points hidden from their origin by the earth's curvature. He used Seibt's apparatus, consisting of a closed condenser circuit with slightly variable capacity but largely variable inductance. This apparatus, in which the indicator consists of a vacuum tube, was especially valuable in bringing out the value of earthing the receiver. When the receiver was insulated, the range of signalling did not exceed three feet. On earthing it, the range was extended some ten or twenty times. This was found not to be due to better resonance, but to the fact that the point which is opposite the antenna connection in the sending circuit, is the focus of strong electric oscillations, which are transmitted through the earth on earthing it, and are caught up by the earthing wire of the receiver. The earthing of the sender antenna itself does not give rise to the same phenomenon. The author thinks it quite possible that the energy transmitted through the earth does not decrease even in a linear ratio with the distance.

More History.*

At the twelfth annual meeting held at Milwaukee, in 1893, I gave a sketch of the various meetings of the Association, from its organization, up to that date. Since then a decade has passed. Perhaps it will be of some interest to continue a summary of the conventions up to the present. At Milwaukee we had an attendance of twenty-five members; papers were read on the "Commercial Telegraph Error Sheet," by L. H. Korty; on "Batteries," by G. L. Lang; on "Energy," by T. D. Lockwood; on "Introduction of Telegraph Wires Into Offices," by E. R. Adams, and on "The Railroad Signal and its Relation to the Telegraph Department," by J. W. Lattig. U. J. Fry, vice-president, presided in the absence of the president, L. H. Korty. The election resulted in the choice of Mr. Fry as president, and O. C. Greene, vice-president.

The thirteenth annual meeting convened at the Hotel Cadillac, Detroit, June 13, 1894, with U. J. Fry, president, in the chair, twenty-seven members being present. The committee on standard rules, G. C. Kinsman, chairman, presented their report. Papers were read on "Machine Currents" by J. W. Lattig; on "Treatment of Operators," by A. R. Swift; on "The Protection of Highway Crossings With Electric Bells," by R. J. M. Danley; on "The Inefficiency of the Ordinary Telegraph Operator to Properly Test and Locate Wire Trouble," by A. R. Lingafelt; on "The Telephone and the Railroad," by Charles Selden; on "The Manner in Which Buildings Should be Protected Against High Potential Currents," by L. S. Wells; on "Fuse Wires as Protectors," by G. L. Lang and on "The Electric Lighting of Railway Trains," by M. B. Leonard. O. C. Greene was elected president and E. R. Adams vice-president.

June 12, 1895, found the Association at its fourteenth annual meeting at the Windsor Hotel, Montreal, with thirty-two members present. Vice-President E. R. Adams died March 3, of that year, and the executive committee had selected M. B. Leonard to fill the unexpired term. The president, Mr. Greene, being absent, Mr. Leonard called the meeting to order. The committee on topics, W. W. Ryder, chairman, had procured the following papers, which were read and discussed: "Construction and Maintenance of Telegraph Lines," by W. F. Taylor; "Telegraph Line Construction," by C. A. Parker; "The Substitution of Electricity for Steam in the Baltimore Tunnel," by Dr. Louis Duncan; "The Lesson of Responsibility," by Ralph W. Pope; "Uniformity," by J. C. Ford; "Remedies for Disturbing or Interfering Currents on Telegraph and Telephone Circuits," by T. D. Lockwood; "Trolley Currents and Automatic Signals," by G. H. Thayer; "Storage Batteries," by C. F. Annett; "The Electrical Accumulator," by J. B. Stewart;

"Some Suggestions Concerning the Social and Moral Conditions of Railway Telegraphers," by R. B. Gemmell; "Things Worth Noticing," by G. C. Kinsman; "The System of Train Dispatching on Michigan Central Railroad," by E. E. Torrey; "Water Power in Connection With Electricity and Electric Locomotives in Railroading," by J. J. Burns; "Evolution of the Telegraph," by John Q. Mason. M. B. Leonard was elected president and J. W. Fortune, vice-president.

The fifteenth annual meeting was held at Old Point Comfort, June 17, 1896, M. B. Leonard in the chair. Twenty-six members were present. H. C. Hope read a paper on "Electric Light and Power at Superior, Wis.," and U. J. Fry on "Reduction of Relay Resistance." The latter provoked a long and interesting discussion and Mr. Fry received the thanks of the Association for the article. "Educating Operators in the Handling of the Switchboard," was written by W. F. Packard; "Highway Crossing Alarms," by G. L. Lang; "Telegraph Line Construction and Reconstruction," by H. C. Hope; "The Telephone in Railroad Practice," by W. W. Ryder. The election resulted in the selection of George M. Dugan as president, and J. W. Lattig as vice-president.

June 16, 1897, found the Association gathered at Niagara Falls, N. Y., at its sixteenth annual meeting. Charles Selden was elected chairman pro tem, the vice-president, Mr. Lattig, taking the chair at the evening session in the absence of the president. Twenty-six members were present. Mr. Selden read a paper on "Railroad Telegrams;" A. R. Swift, on "The Telegraph;" G. C. Kinsman, on "The Apprenticeship System;" L. H. Korty, on "Delivery of Commercial Telegrams at Railway Stations." W. W. Ryder read the report of the committee on low resistance relay experiments, which showed conclusively the advantage of using low resistance relays on heavily loaded railway telegraph circuits. T. D. Lockwood gave a paper on "The Relay and its Relation to the Telegraphic Circuit." These papers were followed by a thorough discussion, by the election of officers, resulting in making J. W. Lattig president and W. W. Ryder vice-president.

The seventeenth annual convention was called to order August 15, 1898, at Omaha by Vice-President Ryder, the president, Mr. Lattig, being absent. Twenty-three members were present. The Mayor, Mr. Moores, gave a welcoming speech, to which Mr. Charles Selden responded for the Association. The papers read were "Unnecessary Telegraphing," by C. S. Rhoads; "Railway Telephone Service," by E. A. Cheney; "Telegraph Construction and Maintenance," by K. McKenzie, and "The Telegraph Block System," by H. C. Hope. At the suggestion of H. M. Sperry it was decided to authorize the insertion of a few advertisements in the minutes to help meet the expenses of that publication. W. W. Ryder was elected president and L. B. Foley vice-president.

The eighteenth annual session was held at

* Read May 13, before the Convention of Railroad Telegraph Superintendents at New Orleans by the Secretary, P. W. Drew, of Milwaukee.

Wilmington, N. C., President W. W. Ryder calling the regular opening session to order on May 17, 1899. The members gathered at Norfolk, Va., where a preliminary meeting was held, to welcome our esteemed honorary member, Mr. Thomas A. Edison. The party occupied a special train of Pullman cars, furnished by the Seaboard Air Line Railway Company, from Norfolk to Wilmington. The papers read on this occasion were: "Electric Lighting for Railroad Stations," by C. F. Annett; "Electric Light Plants at Railway Terminals," by R. J. M. Danley; "The Protection of Telegraph Wires Against High Voltage," by Prof. C. E. Freeman; "Construction and Reconstruction," by C. H. Bristol; "Underground Office Connections," by G. M. Dugan; "Protection Afforded by Highway Crossing Alarms," by G. C. Kinsman; "Simultaneous Telephony and Telegraphy," by Chas. Selden; "Composite Transmission and Compound Telephony," by T. D. Lockwood. Mr. Wm. Maver, Jr., gave a practical demonstration of wireless telegraphy. These papers drew out a very interesting discussion, and were participated in by members generally. The presence of Mr. Edison at this meeting called out a large attendance and made it one of the most enjoyable gatherings the Association had ever held. L. B. Foley was elected president and W. F. Williams vice-president.

Thirty members were present at the nineteenth annual meeting, held at Detroit, Mich., June 20, 21 and 22, 1900, President Foley in the chair. Charles Selden read a paper on "The Telephone as an Adjunct in Railroad Train Movement," which was followed by Henry W. Pope on "The Railway and Telephone." These papers drew out a general discussion at once profitable and interesting. J. B. Tree read "Reminiscences of an Old Telegrapher," while J. H. Jacoby's paper was on the "Electrical Accumulator or Storage Battery for Telegraph Use." This was also generally discussed, as was also the paper on "Block Signals," by H. T. Simpson. "Highway Crossing Alarms" was given by J. S. Evans, and the "Electric Condenser and Some of Its Uses in Telegraphy," by Mr. Wm. Maver, Jr. The Detroit meeting was marked by the number and value of topics presented and the general participation in discussion by members. W. F. Williams was elected president and C. F. Annett vice-president.

The twentieth annual meeting was held at Buffalo, June 19, 20 and 21, 1901, twenty-five members being present, Mr. Williams in the chair. Henry W. Pope welcomed the company to the City of Buffalo and to the Pan-American Exposition, to which Mr. Selden responded. Papers were read as follows: "Rapid Telegraphy," by Walter P. Phillips; "The Voltaplex," by Charles Selden; "The Application of Storage Batteries to Railway Telegraph Service," by W. E. Athearn; "Cipher Code for General Railroad Telegraphing," by C. S. Rhoads; "The Inefficiency of the Ordinary Operator," by A. R. Swift; "The Importance in Telegraphy of Apparently Little Things," by T. D.

Lockwood; "The Telephone in Railroad Service," by F. P. Valentine; "Some Notes on Cables for Telegraphic Work," by Wm. Maver, Jr. C. F. Annett was elected president, and F. P. Valentine vice-president. The attendants at the Buffalo meeting entered into a general discussion on all of the papers named and also enjoyed their visits to the exposition.

The twenty-first meeting was held in Chicago, President Annett in the chair, on June 18, 19 and 20, 1902. The Lake City seemed a very fitting place to celebrate the Association's majority, for it was the place of its birth. A paper on "Typewritten Train Orders" was read by W. J. Holton; "A New Arrangement of a Duplex Circuit in Connection With a Quad," by U. J. Fry; "Telephoning From Moving Trains," by Benson Bidwell. Verbal addresses were made by O. C. Greene on the "Impedance Coil," and by J. J. Nate on the "Value of the Telephone in Railway Service." A report was made on cipher code by the committee. C. S. Rhoads, chairman of the committee, was instructed to report further at the next meeting. A new feature of the Chicago meeting was the calling of an executive session. J. H. Jacoby was elected president, W. J. Holton vice-president, and P. W. Drew was continued as secretary and treasurer.

At all of the meetings the committees of arrangement have more than done their duty. Time will not permit the telling of all the delightful hours enjoyed at these meetings. The boat ride on the river and visit to the parks at Detroit; the charming ride down the St. Lawrence from Kingston to Montreal; the memorable day at Quebec; the presentation of silver to Mr. and Mrs. Fortune; the trip by steamer over the historic waters of Hampton Roads and the visit to the Newport Navy Yard; the gorge ride at Niagara; the visits to the exposition at Omaha; our pleasant entertainment at the home of the late Col. J. J. Dickey; the ride to, and bathing at, the beach near Wilmington; listening to the "home talent" concert at the hotel; the presentation of silver to Mr. and Mrs. Williams; our second visit to Detroit; the trolley ride and Belle Isle; those never-to-be-forgotten evenings at the Pan-American with the lights coming up, while Sousa's Band rendered "Nearer My God to Thee," with the tragic future being providentially hidden from us; our rides through Chicago's parks and the other entertainments there, are all fresh in your memories.

Largely owing to the consolidation of railroads we now have a membership of only sixty. We, however, represent fifty-three of the principal railroads, with an aggregate of 129,340 miles of track. The Association may well be congratulated upon the work of the past ten years. Its papers and discussions have covered a wide range topics. Much valuable information has been given to its members and to others interested. Its minutes of proceedings are to be found in many State and other public libraries. Copies

of its papers are eagerly sought by the press and sometimes published before we can get our minutes out. The following have died since 1803: J. W. Stacey, E. R. Adams, M. B. Leonard, R. B. Gemmell, J. G. Pinkerton, C. Peterson, J. B. Donner, W. J. Holmes and H. T. Simpson. "The workmen fall but the work goes on."

Telegraph Camp Train.*

BY W. W. RYDER, CHICAGO.

One of the problems always before the head of the telegraph department, is the handling of line repair gangs, and the more sparsely settled the country through which the road runs, the more difficult the problem.

The average telegraph lineman seldom has sufficient money to pay his board, either through improvidence or the necessity of his sending home the major portion of his wages for the support of his family. This means that the company must assume the care of the linemen, so far as board is concerned, and numerous schemes have been adopted, the most of them rather more unsatisfactory than otherwise.

The one method that seems to afford the best solution of the problem with the least amount of trouble, is the use of a so-called "camp train," or outfit of cars, in which the gang can board and lodge.

These trains are run in various ways, by outsiders, who charge a regular rate, by the men themselves pro-rating the expense, or by the company, a regular salary and board being given the men.

Such a train was fitted up several years ago on the Chicago, Burlington and Quincy road, and results from the start have been more than satisfactory. The train consists of a sleeper with eight sections (double, lower and upper berths), with a small room at one end of the car for the foreman and assistant, giving accommodation for eighteen men without doubling up. The berths are fitted with springs and mattresses, blankets and linen, the latter being regularly laundered.

The diner was made out of a 34-foot box car with plenty of windows and a large cupola over the kitchen, and has room for sixteen men at one sitting. It is fitted up with a steel range, hot and cold water tanks, ice boxes, etc., and the dishes are furnished by the commissary department, all nicked or cracked china being immediately taken out of regular dining car service and turned over to these camp trains.

The other two cars in the train are box cars that have been fitted up with racks and bins for tools and material. Under the sleeper and dining cars are large cellars, in which are always kept a supply of emergency tools, so that no time need be lost in picking up tools in case the gang has to be moved in a hurry.

The diner and sleeper are fitted with air brakes,

while the other two cars are piped, enabling them to be picked up and put on the head end of the train; and all cars are fitted with heavy trucks, and standard couplers, so they can be put into any kind of a train.

For several years this train was run on the co-operative plan, the company furnishing the equipment, light, heat, ice, etc., while the men hired the cook and purchased the provisions, pro-rating the expense at the end of the month. This scheme, while a great improvement over previous practice, had some disadvantages, and nearly two years ago I induced the management to allow me to make the experiment of the company's boarding the men and paying regular Western Union wages, guaranteeing that the total expense should not exceed that heretofore incurred. An arrangement was made with the commissary department to furnish all supplies, and as a result, the quality of these supplies has been considerably raised, the commissary department being able to secure much better stock at lower figures than if the purchases were made locally.

The experiment has proven more of a success than anticipated, and my guarantee has regularly been made good. A careful check is kept of the expenses and there has been a difference in favor of the company every month of from ten to eighty dollars, depending on the size of the gang.

Men handled in this way are better satisfied and are always where you want them in case of an emergency; in fact, it is not an infrequent occurrence for the men to wake up in the night, particularly in the Winter, and find their cars in motion, not a minute being lost getting men together when a sleet or wind storm necessitated their presence elsewhere.

Another important point in favor of the camp train scheme is the fact that the men are as well or better off out on a blind siding than if in town. This saves many an hour lost otherwise in pumping a handcar to and from work, and also means a saving of the men's energy. There is an old adage to the effect that the better you treat men, the better they will treat you, and this is certainly borne out by our experience in handling a line gang in a camp train.

"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.

No up-to-date telegrapher can afford to be without TELEGRAPH AGE. Send for a sample copy.

* Read May 13, before the Convention of Railroad Telegraph Superintendents at New Orleans.

The Convention of Railway Telegraph Superintendents.

On Wednesday, Thursday and Friday, May 13, 14 and 15, the Association of Railway Telegraph Superintendents met in convention at St. Charles Hotel, New Orleans. It was the twenty-second annual meeting and vied with any of its predecessors in general interest and in attendance. Most of the important railroads of the country were represented in the membership present, and a large amount of business was dispatched and interesting questions relative to operation of the telegraph on railroads were introduced and discussed.

The St. Charles Hotel, a fine house, one of the best in the South, and convenient of location in the Crescent City, afforded an excellent place of meeting, and the management extended every courtesy possible to the visiting superintendents and their guests.

The spirit of hospitality, always delightfully manifest to the stranger in the Southland, was never more apparent than during the three days of this convention. Invitations without limit crowded upon the members for dinners, drives and excursions; for the opera and other functions, and although many such courtesies were gratefully accepted many were necessarily declined, because of the limited time at the disposal of the visitors, whose primary object in New Orleans, of course, was that of business. The committee of ladies, whose purpose it was to look after the comfort and pleasure of the visiting ladies, the wives and daughters of the superintendents, were most assiduous in their attentions and their acts of kindness were numerous.

New Orleans appeared at its best; the weather was propitious, and when the close of the convention came members reluctantly said adieu and turned their backs upon the fair city.

The convention was called to order at 10 A. M., on Wednesday, May 13, in the parlors of the St. Charles Hotel, New Orleans, by the president, J. H. Jacoby, of South Bethlehem, Pa., who warmly greeted those present. The welcome to the city was extended by Assistant City Attorney McGuirk, on behalf of Mayor Capdevielle, who assured the superintendents that they were more than welcome to the Southern Convention City. He extended the hospitality of the City Hall and all of its electrical departments to any of the visitors who might wish to call and inspect them.

President Jacoby responded to the address of welcome.

Reports from standing committees were then heard. Secretary-treasurer Drew reported a balance of \$24 in the treasury.

C. S. Rhoads, of Indianapolis, asked that the Association hold its session next year in that city, arguing that it was within an easy ride of St. Louis, whither so many would go to attend the big Fair, and as the "Big Four" would be at their command, members could easily make the journey from one city to the other. He said

there would be better hotel facilities than in a city crowded with Exposition people. The proposition struck the members favorably. They said they had found the statement true in connection with the World's Fair at Chicago, and that that year they had met in Milwaukee in preference to going to Chicago proper.

It was decided that the invitation from Indianapolis should be accepted, and it was so voted, the time of meeting being fixed for the third Wednesday in June, 1904. Then came the election of officers with the following results:

C. S. Rhoads, president, Indianapolis; C. P. Adams, vice-president, Chicago; P. W. Drew, secretary-treasurer, Milwaukee.

Each of the new officers responded in pleasantly spoken words to the honor paid him. Secretary Drew said he used to talk about not wanting the office, and suggested that he be relieved of the position, but he had long since gotten over that, and he had concluded that he would be filling the place to the end. "But," he added, "if there is any member seeking the honor, I would not feel at all offended should he rob me of this position."

C. E. Yetman, of New York, was given the floor of the convention to explain the workings of his new typewriter transmitter. It is being used by The Associated Press and by many other large concerns. The instrument was on exhibition, and the members were greatly interested in it.

Secretary Drew read some proposed amendments to the constitution, changing Article 3, relative to who can become members. It was moved by Mr. Jacoby that the amendments be adopted as read, and after discussion they were passed by a unanimous vote. Under the new limitations the membership can be greatly extended. Associate members will be admitted. They can enter into the proceedings of the Association, but cannot vote.

The only paper of the morning session was read by secretary P. W. Drew on the subject, "A Little More History." He said that ten years ago he had read a paper, and that he would take up the narrative where he had left off at that time. It was an interesting recital of what the several annual conventions had done, where they had met, how they had been entertained, and the increased membership and interest shown in them. There were now sixty active members, representing fifty-three railroads and about one hundred and twenty-nine thousand miles of track.

Mr. Drew closed with a touching tribute to those who have fallen in the line of duty, and said: "The workmen fall, but the work goes on."

The usual telegraph and telephone courtesies were extended to the members.

Under the reception of new members the following were voted into the Association:

E. H. Millington, Michigan Central Railroad, Detroit; F. G. Sherman, Central Railroad of New Jersey, Jersey City; W. A. Freeze, Chicago and

Alton, Bloomingdale; E. P. Griffith, Erie, New York; F. D. Cudliff, Atlantic Coast Line, Wilmington, N. C.; A. E. Roome, Southern Pacific, San Francisco; J. Munday, Colorado and Southern, Denver; W. W. Ashald, Grand Trunk Railroad, Montreal; J. S. Stevens, Chesapeake and Ohio, Richmond; F. G. Adams, Baltimore and Ohio, Baltimore, and W. H. Potter, Oklahoma and Gulf, Little Rock, Ark.

Honorary members elected were: C. A. Long, K. McKenzie, H. V. Miller, E. Borden, J. M. Stephens, F. E. Clary, W. A. Porteous, T. P. Cummings and M. F. B. Weeks.

Associate members elected were: A. P. Eckert, C. E. Brown, Col. W. H. Adkins, G. W. Conkling, C. E. Yetman, E. W. Vogel and M. J. O'Leary.

Among the deaths of members reported were those of H. T. Simpson, of Richmond, Va.; J. B. Donner, of San Francisco, Cal., and Col. J. J. Dickey, of Omaha, Neb.

Letters of regret were read from B. Brooks, J. C. Barclay and L. B. Foley, of New York; T. D. Lockwood, of Boston; T. P. Cook and W. J. Holton, of Chicago; E. E. Torrey, of Jackson, Tenn.; E. H. Millington, of Detroit, Mich.; E. A. Chenery, of St. Louis, Mo., and others.

A letter was read from the Remington Typewriter Company on the subject of typewritten train orders, and was accompanied by samples of the work which were distributed among the members.

After the menu had been disposed of, Col. William H. Adkins, traffic agent of the Southern Bell Telephone and Telegraph Company, at Atlanta, and a typical Georgian in every way, acted as toastmaster. He spoke of the pleasure of such occasions and the Colonel's genial wit abounded. The following toasts were responded to: "Our Visiting Ladies," by Mr. M. J. O'Leary; "Our Comrades," by George L. Lang; "The Past," by P. W. Drew; "The Press," by J. B. Taltavall; "New Enterprises," by F. W. Lane; "Our Retiring President," by J. H. Jacoby; "The Next Meeting," by C. S. Rhoads; "The Telephone," by A. G. Francis; "Our City," by W. A. Porteous.

Shortly after twelve o'clock the convention adjourned. The members took train for West End, where on arrival luncheon was served at Tranchina's. This was a most delightful affair in every particular. It was tendered by courtesy of the American Telephone and Telegraph Company, through its special agent, Percival W. Miller.

THE SECOND DAY'S SESSION.

The second day's session of the convention was called to order promptly at 9.30 A. M., on Thursday, May 14, by President Rhoads, who assumed the chair immediately upon his election the day previous.

Secretary Drew recited some historical facts concerning the Association and the amount of work it had accomplished since its organization. He also mentioned the names of some who were in attendance and who had been active in the As-

sociation during its entire existence. Among those old members beside himself, were G. L. Lang, C. A. Darlton, U. J. Fry, and others.

Mr. Jacoby then read a paper written by Wm. Maver, Jr., of New York, entitled "Railway Safety Block Signals; Some New Ideas on Block Signalling." The paper was discussed at length by G. L. Lang, N. D. Ballantine, E. W. Vogel, W. W. Ryder, F. H. Van Etten, C. S. Rhoads, C. A. Darlton, J. H. Jacoby and others. The next paper presented was also written by Mr. Maver, and read by Secretary Drew, and is as follows:

NOTES ON U. J. FRY'S PAPER ON A DUPLEX CIRCUIT IN CONNECTION WITH A QUAD.

"The writer was much interested in reading Mr. Fry's paper which was presented to the Association in Chicago last year. As Mr. Selden intimated in the discussion it was long ago shown to be feasible to operate a polar duplex on circuits in which there was the equivalent of a number of 150 ohm relays. The experiments in which the feasibility of so doing were shown, were described by the writer in the *Electrical World*, October, 6, 1888. Mr. Fry is, however, to be congratulated for utilizing in the practical manner he has described a way wire, with its 17 main line relays in circuit for duplex transmission. If he has also succeeded in operating the Edison quadruplex on a similar wire he is to be especially congratulated. I am free to say that I have never succeeded in making the No. 2 size of a quadruplex work in the manner required in commercial practice, with a number of relays or their equivalent in inductance, such as is furnished by graduating coils in the line. Of course, if one should, by fortuitous combination of circumstances, or by design, obtain capacity and inductance in the right proportion on the line, as pointed out by Dr. Pupin, he would doubtless get successful results on the quadruplex, even with a number of relays in the line. It would seem, however, in the cases mentioned by Mr. Fry that the inductance would exceed by a considerable extent the amount required to offset the capacity of the circuit; and it might be found in some instances that the balance would be improved by inserting inductance in the artificial line. It is, of course, understood that it is only in cases like those cited by Mr. Fry, where the relays are normally in the circuit, and where the way wire can be readily dispensed with while it is being used as a duplex or quadruplex, that this arrangement can be advantageously employed."

A series of letters were presented by C. F. Annett, of Chicago, written by those in charge of wrecking trains on the Illinois Central Railroad, testifying to the value of the telephone as part of a wrecking train equipment and the superiority of the long distance telephone over the telegraph in such connection.

Mr. C. A. Darlton, of Washington, Chairman of the Committee on Typewritten Train Orders, reported progress. He stated that the American Railway Association had agreed to look into the

proposition made by the Association of Railway Telegraph Superintendents to amend the rules to permit the use of the typewriter by operators in receiving telegraphic train orders. Mr. Darlton added that when the matter was first brought to the attention of the American Railway Association, strenuous objections were raised to the proposed amendment, but after the matter had been thoroughly discussed by the committee, and by Secretary Allen of the American Railway Association, he was confident that the rule would be changed before long, that the use of typewriters will be sanctioned and that the railways wishing to use the typewriter will be permitted to do so.

Mr. C. K. Jones, of Tusculumbia, Ala., was next given an opportunity to explain his device for block signalling on single track roads. Mr. W. W. Ryder read a paper explaining his new switchboard which he had found so simple that the average railroad operator could understand and handle it without previous instructions.

Mr. Ballantine suggested action on the part of the Association to instruct operators in the practical use of switchboard work, and that if general action on this line was had, the result would be beneficial. Further discussion on the subject was indulged in by P. W. Drew, E. P. Griffith, C. E. Yetman, Col. W. H. Adkins, C. F. Annett and J. H. Jacoby.

After adjournment at 1 P. M. the members of the Association spent two hours in an interesting ride around the Illinois Central Belt, taking in the Stuyvesant Docks and the river front, the freight sheds and terminals of the road. In the evening the entire delegation attended the opera at the Athletic Club Park, where Fra Diavolo was presented.

THE THIRD DAY'S SESSION.

When the delegates assembled for the third day's session at 10 o'clock on Friday, May 15, the Committee on Courtesies submitted its report, thanking all who had contributed to the pleasure of the delegates and to the success of the meeting. Mr. G. L. Lang then read a description of C. K. Jones' automatic telegraph circuit and signalling machine. This was followed by the reading of a paper by Mr. F. A. C. Ferguson on the composite telegraph and telephone circuit.

This topic was almost the sole subject of business at the morning session and was entered into with great spirit by all the members present, for it was a matter in which all were interested. The direct result of the discussion was the appointment of a committee to investigate the workings of circuits now in operation in order to pass on the efficiency of the use of a single wire for telephone and telegraph communication at one time. The ultimate result will be the installation of this composite system in all railroad operating departments. A representative of the Bell Telephone Company recited an instance where he received a telephone message with almost perfect precision between Pittsburg and

New York, while the wire was being operated for telegraphic purposes. In other instances it was announced, however, that the transmission of the telephone messages where the circuit was underground was interfered with by the Morse messages going over the wire at the same time.

One thing appeared evident from the discussion and that was that the composite system will be installed. The railroad managers want it and insist upon having these additional facilities at the earliest practicable moment. Such was the sentiment of the delegates. P. W. Miller, on behalf of the telephone company, announced that the composite circuit was being worked out now by his company and would shortly be ready for use.

Mr. C. A. Darlton moved that members present and those not present possessing information on the composite circuit should write out their knowledge on the subject and forward it to the secretary that he might issue it in circular form and send it to all members; and that a committee of four be appointed to further investigate into the composite circuit and report their conclusions. This committee consists of E. P. Griffith, of New York; J. H. Jacoby, of South Bethlehem, Pa.; W. W. Ryder, of Chicago, Ill., and U. J. Fry, of Milwaukee, Wis.

President Rhoads then read telegrams from three officials of the Big Four Railroad congratulating him on his election as president of the Association and upon the selection of Indianapolis as the next place of meeting. The Big Four pledges itself to "do the rest."

Mr. F. F. Fowle read a paper in which he demonstrated his proposition for transposition of telephone circuits which was illustrated by black-board diagrams.

Mr. W. W. Ryder read a paper on the Telegraph Camp Train, President Rhoads announced that he would appoint the committee on topics for next year's convention at a later date, but in time to appear in the printed proceedings.

The thanks of the Association were extended to Messrs. T. P. Cummings, W. A. Porteous and M. F. B. Weeks, and they were elected honorary members of the Association in recognition of their valuable services.

The president briefly expressed his thanks for the honor conferred on him and hoped that all would be present at Indianapolis next year.

An executive session was called to meet at 8 P. M.

At one o'clock, Friday, May 15, the convention adjourned sine die.

During the business meeting of the last day, the ladies visited the French quarter of the city under the skilful guidance of E. J. Davis, who is thoroughly acquainted with every historical spot in the Crescent City. In the afternoon a steamboat excursion around the harbor was given.

On Saturday, May 16, the Louisville and Nashville Railroad Company gave the delegates an excursion to Boloxi, Miss., the famous resort on the Mexican Gulf.

The local Committee on Entertainment was very active, and there was no want of variety while the superintendents and their wives were in New Orleans. This committee consisted of the following: Percy Hewitt, assistant superintendent of telegraph, Southern Pacific Company, chairman; T. P. Cummings, manager Western Union Telegraph Company; P. W. Miller, superintendent American Telegraph and Telephone Company; M. F. B. Weeks, chief dispatcher Illinois Central Railroad; William A. Porteous, manager Postal Telegraph-Cable Company; E. L. Powell, superintendent Cumberland Telegraph and Telephone Company; H. V. Mielly, assistant manager National District Telegraph Company.

Among those present were:

South Bethlehem, Pa.—J. H. Jacoby and wife.
Chicago, Ill.—Geo. M. Dugan, wife and daughter; C. F. Annett and wife; E. W. Vogel, W. W. Ryder, A. G. Francis, C. P. Adams, Charles E. Brown, N. E. Launbranch, A. J. Ferguson and F. W. Lane.

Indianapolis, Ind.—C. S. Rhoads and wife.

Milwaukee, Wis.—P. W. Drew and wife, and U. J. Fry.

New York.—E. P. Griffith, W. D. Griffith, F. E. Sherman and wife; M. J. O'Leary and wife; P. W. Miller, W. S. Logue and wife; L. R. Logue, J. B. Taltavall and wife; A. P. Eckert, C. E. Yetman, J. E. Gordon, G. W. Conkling and F. F. Fowle.

Washington, D. C.—C. A. Darlton, wife and daughter.

Dallas, Tex.—Mrs. S. M. English.

Chattanooga, Tenn.—Geo. L. Lang.

Atlanta, Ga.—J. M. Stephens and Col. W. H. Adkins.

Little Rock, Ark.—W. W. Potter.

Sedalia, Mo.—S. K. Bullard.

Kansas City, Mo.—N. D. Ballantine.

Baltimore, Md.—F. G. Adams.

Danville, Ill.—F. H. VanEtten.

Portsmouth, Va.—W. F. Williams and wife.

Greenville, Miss.—G. B. McCoy and F. A. C. Ferguson.

New Orleans, La.—J. Z. George, F. Ross, W. A. Porteous and wife; T. P. Cummings and wife; F. H. Moake and wife; M. F. B. Weeks, C. E. Best, H. V. Mielly and wife and E. J. Davis.

Richmond, Va.—J. S. Stevens and wife.

EXHIBITS AND EXHIBITORS.

Mr. W. S. Logue, manager of sales, Edison Manufacturing Co., New York, was on hand explaining the merits of the Edison products used in the railway telegraph service.

Mr. Avery P. Eckert, assistant treasurer of the Safety Insulated Wire and Cable Co., New York, showed samples of their well-known wires and cables.

Among the exhibits was a very neat and interesting display representing signals, etc., exhibited by Mr. E. W. Vogel. Mr. Vogel's new block signal in the shape of a neat iron encased indicator, gave rise to considerable discussion. Among

the articles shown were the relays and bells of the Chicago crossing signal; also various types, block signal relays and maintenance parts, such as pan bottom battery coppers, round battery coppers, round battery zincs, bond wires, channel pins, etc. Mr. Vogel says that his signal is now standard on practically all railroads throughout the United States and Canada, some of these signals having been recently installed on the Louisville and Nashville Railroad at Bay St. Louis, where the members were afforded an opportunity to inspect them on the pleasure trip over that road on May 15.

The Yetman Telegraph Transmitter was represented by the inventor, Mr. Charles E. Yetman and by G. W. Conkling, manager of the New York office. These gentlemen had on exhibition several of their typewriter transmitters which were thoroughly examined and tested by every members of the Association. On the afternoon of May 14 a long distance trial of the transmitter was given. Western Union Telegraph wires at Atlanta, Ga., and return, a distance of one thousand miles, were run into the convention room. The test was a success in every particular, the quality of the "Morse", which travelled over the one thousand miles circuit, was declared to be as perfect as machinery could make it, while the speed was graduated from sixty to fifteen words per minute, a range covering the ability of every operator. The Yetman transmitter seemed equal to every requirement of the telegraph service and all who witnessed this exhibition seemed perfectly satisfied that the transmitter would do all that is claimed for it.

Mr. C. K. Jones of Tusculumbia, Alabama, the inventor of an automatic telegraph circuit protector and signaling machine, exhibited one of his devices. It is calculated to eliminate delays to trains incident to failure to raise operators quickly, and by delays occasioned by open keys, etc. Briefly described, the "C. K. Jones Automatic Telegraph Circuit Protector and Signaling Machine" is an electrical instrument attached to the back part of a clock, the same being actuated by the clock mechanism. The electrical apparatus does not affect the correct time keeping of the clock.

The American Telephone and Telegraph Company was represented by Percival W. Miller, special agent, and Frank Fuller Fowle, of the engineer department, and J. E. Gordon, of New York; A. G. Francis, special agent, Chicago, Ill., and Col. William H. Adkins, traffic agent of the Southern Bell Telephone and Telegraph Company, Atlanta, Ga. Mr. Miller had a composite circuit in operation in his parlor which was subjected to severe tests by the superintendents during the convention. Not the slightest interference could be detected while the circuit was being used simultaneously for telegraph and telephone purposes.

Mr. M. J. O'Leary, secretary of the Telegraphers' Mutual Benefit Association, New York, attended the convention in the interest of his As-

sociation. Mr. O'Leary in his genial way made many new friends who will, no doubt, stir up a renewed interest in the well-known fraternal insurance association of which he is secretary. In fact, Mr. O'Leary returned to New York with the promise of a score of new applicants for membership.

Mr. M. E. Launbranch represented the Western Electric Company, of Chicago, Ill.

Mr. H. H. Hodgson, agent for the Remington Typewriter, New Orleans, was present at the convention and afforded every opportunity to those who wished to avail themselves of his typewriter facilities.

Mr. Charles E. Brown of the Central Electric Company, Chicago, Ill., and W. S. Logue of the Edison Manufacturing Company, New York, presented boxes of camellias and magnolias to the ladies each day of the convention.

On account of his old time telegraph service, and general good fellowship, Mr. Wm. H. Adkins, the general traffic agent of the Southern Bell Telephone and Telegraph Company at Atlanta, Ga., was given the title of Colonel by the newspaper fraternity of the Crescent City, and his old telegraph friends congratulated him on what was but a just recognition of his old time valuable services.

The New President of the Association of Railroad Telegraph Superintendents.

The election to the presidency of the Association of Railway Telegraph Superintendents, at the New Orleans convention, of Charles S.



CHARLES S. RHOADS,

President of the Association of Railway Telegraph Superintendents.

Rhoads, of Indianapolis, superintendent of telegraph of the Cleveland, Cincinnati, Chicago and St. Louis Railway Company, otherwise known as the "Big Four Route," places at the head of that

important association a man of strong and pleasing personality and one who has always been prominent in its councils. Mr. Rhoads is in the prime of middle age, he having been born near Cincinnati, O., on October 28, 1854. He has always been in the railway service, his entry therein dating from the first of January, 1874, when he found employment, a young man of nineteen, with the "Dayton Short Line," at Maud's, O. As an operator he served at various way stations along the line of that road until May, 1877, when, still as an operator, he entered the despatcher's office on the "Bee Line," now a part of the "Big Four" system. Here he remained until January 1, 1880, when promotion made him chief despatcher, a position he held until November 18, 1883, a date, it may be remarked incidentally, when standard time was adopted by the railways. Further advancement gave him the office of chief despatcher, which he retained until July, 1889, when he was again advanced, this time to be trainmaster of the Cincinnati Division of the "Big Four." In December, 1891, he was appointed superintendent of telegraph of the entire system, a post he has since filled most acceptably. It will be seen that Mr. Rhoads' promotion in the railroad service, which began at an early age, has been constant. He has been a faithful official, and his broad, practical and all around knowledge of railroading, and matters electrical, acquired through years of experience, entitles him to the high rank which he holds in railroad circles, as well as the warm, personal esteem with which he is everywhere regarded.

The Future of Electricity.

Dr. M. I. Pupin had a brief article in the twentieth anniversary number of the New York World in which he said: "Hitherto electricity has largely been employed as a motive power. It has been solving our problems of transportation and communication. It is just entering upon a new field, that of manufacture. It has moved things; now it will make them. The energy of our water reservoirs, our coal and oil fields will be transformed into electrical energy in great central electrical works, and from there distributed to various manufacturing points. Already Niagara is being to some degree utilized in this manner. I expect to live to see the time when most chemicals used for commercial purposes will be manufactured by electrical power. The United States will always lead in the development of electrical power, because it has enormous water power, coal and oil fields. This will enable it to attain and maintain an overwhelming commercial supremacy. This is all-important, for today commerce rules the world. Society rests upon an economical basis. Militarism, formerly triumphant, has lost its prestige. The influence of this country has brought about a revolution and instead of struggling for gold braid and hollow titles, men have learned here that position and influence are due to actual work done."

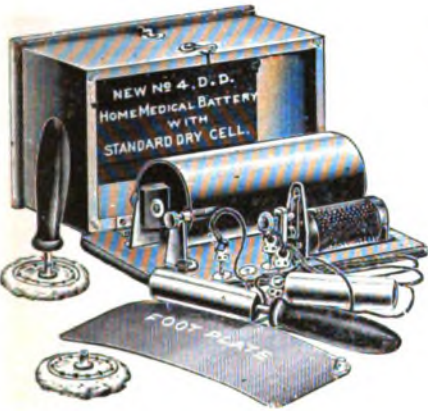
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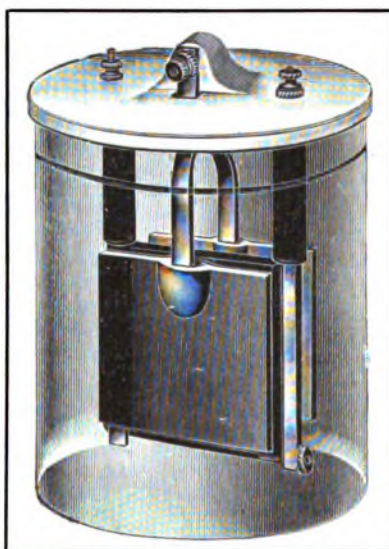
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5th. Cheap materials easily obtained.



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6th. No attention or inspection required until all the energy of its elements is exhausted.

7th. Convenience of form and freedom from noxious fumes or chemical deposits. No creeping.

8th. No polarization.

9th. Will not freeze at lowest temperature.

10th. The EDISON-PRIMARY BATTERY is now made in nine different types, each one of which is especially designed for the kind of work named.

The internal resistance of these Batteries is so small that several line circuits can be worked from one battery of a sufficient number of Type "RR" cells if the resistances are equalized. This also holds good in regard to "locals."

The "SS" cell is designed expressly for semaphore signal work and is in use on the following roads:

Illinois Central R. R.

Chicago & Alton R. R.

Central R. R. of New Jersey

Delaware, Lackawanna & West. R.R.

Cincinnati, New Orleans & Texas

Pacific R. R.

Baltimore & Ohio R. R.

Michigan Central R. R.

West Shore R. R.

N. Y. Central & H. R. R. R.

Erie R. R.

Long Island R. R.

WRITE FOR CATALOGUE No. 23

EDISON MANUFACTURING COMPANY

FACTORY, ORANGE, NEW JERSEY, U. S. A.

New York Office, 83 Chambers Street

Chicago Office, 304 Wabash Avenue

William James Holton.

William James Holton, of Chicago, vice-president of the Association of Railway Telegraph Superintendents during the past year, is the chief train despatcher of the Chicago and Western Indiana Railroad Company and of the Belt Railway Company, of Chicago, a position akin to that of a telegraph superintendent on other railroads. Mr. Holton was born near South Shaftsbury, Vt.,



WILLIAM JAMES HOLTON,

Who was Vice-President of the Association of Railway Telegraph Superintendents during 1902-03.

on November 9, 1859. On January 22, 1879, he became a night telegraph operator for the Chicago and Eastern Illinois Railroad, at Danville, Ill., where he remained for three years, until January 21, 1882, when he entered the service of the Chicago and Western Indiana Railroad Company as train despatcher. From this position he was promoted to his present post of chief despatcher in September, 1885. Mr. Holton possesses an intimate practical knowledge of all duties incident to railroad telegraphy, and is regarded in this respect as one of the brightest men in the profession.

"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.

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.

The recent arrivals at this office are Miss McIntyre, F. P. Garvey, F. Jean and T. Dalgleish. Messrs. Hall, Bondock and P. Delaney have resigned, and William Storey in on the extra list.

CHICAGO, ILL.

Anderson's improved resonator which met with such popular favor at the O. R. T. Convention, St. Louis, Mo., May 11th, will soon be placed on the market. It's a boon for "mill" men. Price \$5.00. Write for literature, etc. O. T. Anderson & Co., 405-495 Monon Building, Chicago

LOS ANGELES, CAL., POSTAL.

President Roosevelt has come and gone and the boys have had added a number of hours to their extra time as a result of the large volume of press matter and Government business filed at the numerous stopping places. The Postal representative, J. P. Gooch, of Washington, D. C., who accompanied the Presidential party, was met at Riverside by Superintendent C. L. Lewis of Los Angeles, attended by Operator Kuble, who went along in order to assist Manager Loraine Allen of Riverside on the occasion. The President's special arrived in Los Angeles at 1 P. M., Friday, May 8. Mr. Gooch was met at the depot by Assistant Manager Frank B. Cox, who remained with him during the afternoon at the President's apartments in the Westminster Hotel. To this point private wires were run by the Postal and Western Union companies with arrangements for connection with any point in the United States. L. C. McIntosh relieved Mr. Cox at 5 P. M. and remained until the President's party returned to the train.

The Postal office was beautifully decorated with

flags and bunting and the office force and their families were provided with specially constructed seats to view the beautiful floral parade. We are unable to decide whether the beautiful decorations so tastefully arranged by General Superintendent L. W. Storrer and Superintendent C. L. Lewis or the bevy of handsome young ladies was the cause of the characteristic smile and graceful bow of President Roosevelt directly toward the Postal office.

We have just received a case of Weston meters for our dynamo plant and will soon be able to boast a model office.

PHILADELPHIA, PA.

My motto—honorable dealing. OPERATORS, THROW PREJUDICE ASIDE long enough to look into the merits of the No. 3 Fox, and the No. 6 Fay Sholes typewriters for "news-paper" as well as "message" work. Booklets, prices and easy monthly payment plan upon application to me. SPECIALTIES—Remington's and Smith's fitted with reversible rolls, \$40.00 and \$45.00, GUARANTEED. BEAR IN MIND—No "mill" no work in this city. Write or wire D. A. Mahoney, Western Union, Philadelphia.

WESTERN UNION.

Our former chief operator, Thos. A. McCammon, who was recently summoned to the New York office to fill the responsible position of chief operator there, was the recipient of a farewell banquet, tendered to him by his host of friends and admirers here. The affair took place Saturday evening, May 16, and was a splendid tribute to one of nature's noblemen. Although with us less than a year, the sentiment that was spoken and the feeling that was manifested on the occasion showed conclusively that Mr. McCammon had firmly entrenched himself in the hearts of the employes here, and there is no doubt but what he will do the same in New York. When called upon for a speech Mr. McCammon remarked feelingly about the severing of his connection with the Philadelphia office and its congenial people and employes, yet said he must go where duty bids, however reluctant he might be. He eulogized his successor, Mr. J. P. McLoraine, in highest terms, and thanked one and all for the many nice things that were said, all of which he very modestly disclaimed any title thereto. A feature of the evening was the unique manner in which Toastmaster Hodgins had arranged subjects for the many speakers. They were all appropriate and created no end of merriment. The famous Clover Club tactics were in force and every speaker ran a gamut of spicy jibes and songs while trying to speak. Mr. McLoraine's advancement was a well merited one and was received with genuine pleasure and gladness by all. He is well fitted for his new position, having risen from the ranks with a record that he can well be proud of.

Mr. McLoraine was born in April, 1863. He entered the telegraph service in 1876 as night clerk

boy for the old Franklin Company, this city. Afterwards he was connected with the Atlantic and Pacific Company as messenger, then as operator for the American Union in 1881. After the consolidation of this company with the Western Union he was operator at Atlantic City during the Summer of 1882, then at Chester, Pa., and test operator at Conowingo, Md., during the Fall of 1882, returning to the Western Union as operator and remaining in that capacity until March, 1887, when he was promoted to be night wire chief, then to all night chief in June, 1888. In December, 1889, he was appointed night manager, a position he has held ever since, until promoted to be day chief operator on May 11, 1903. During that time he was never known to remain away from duty a day, with the exception of two or three months in 1900, when his health failed him and it became necessary to take a much needed rest. He had full charge of the Convention Hall during the last Republican Convention and, needless to say, it was handled without a complaint, and for which he was highly complimented by Superintendent W. B. Gill. Mr. McLoraine is a strict disciplinarian, but always just and courteous, cool and collected under the most trying conditions, and we predict for him a splendid success in his new position, in which he will be sure to have the hearty co-operation of all.

Mr. Frank R. Webb, a life sketch of whom will be found in the next issue of the AGE, has been appointed night manager, succeeding J. P. McLoraine.

The Yetman Transmitter will be a prominent feature in the next telegraph tournament, and from present indications, it looks as though some of the very best operators in America will visit Philadelphia to take part in the contest. It certainly will be interesting to have a comparison made between sending by hand and sending by the Transmitter.

POSTAL.

With the acquisition of the Pennsylvania Railroad offices in the Delaware division our business here has taken on a decided boom; especially so as this is the season of the year in which the greatest volume is handled in that section.

This fact, principally, is the cause for the establishing of a duplex circuit to Wilmington and the assignment thereto of two men who have been added to the list of bonus workers. Hustle, here, is the order of the day. The early force, also, has been increased to seventeen, the Messrs. Fulam and Greene having been added to the 6.30 A. M. trick, and Steltz, Scholl and Madden to the 6 o'clock, and Samuel Higo, who, for a number of years has been a fixture on the early force, has been assigned the 5.30 A. M. trick.

The three original New York, Philadelphia and Norfolk wires to the Delaware, Maryland and Virginia berry districts are taxed to their full capacity and ably cared for by the Messrs. Carpenter, Steltz and Madden.

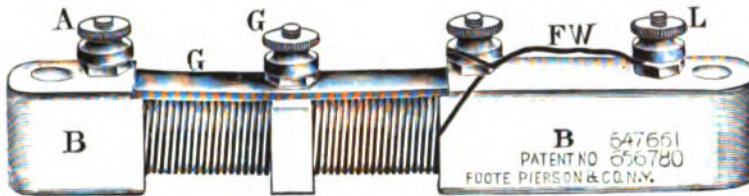
We learn with regret that Earl W. Miller is

Foote, Pierson & Co.

A FEW OF OUR POPULAR TELEGRAPH SPECIALTIES

The Argus Lightning Arrester

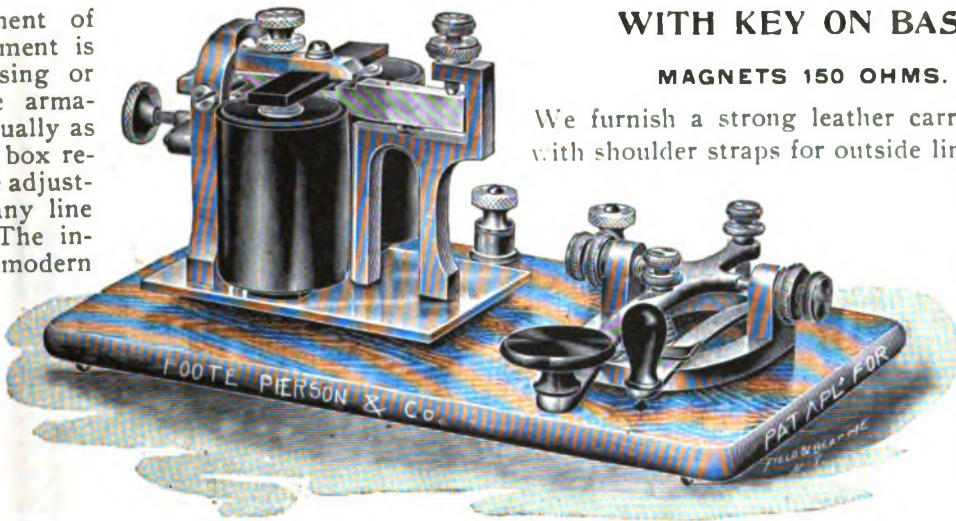
The most reliable and efficient protection to instruments and cables against lightning ever known.



It interrupts lightning of any degree without grounding or disabling the line. It is always ready.

Our Main Line Telegraph Combination Instrument

The adjustment of this instrument is done by raising or lowering the armature. It is equally as delicate as a box relay and can be adjusted to meet any line conditions. The instrument is modern in design and its use has made the box relay and pocket relay almost obsolete as it is cheaper and far better.



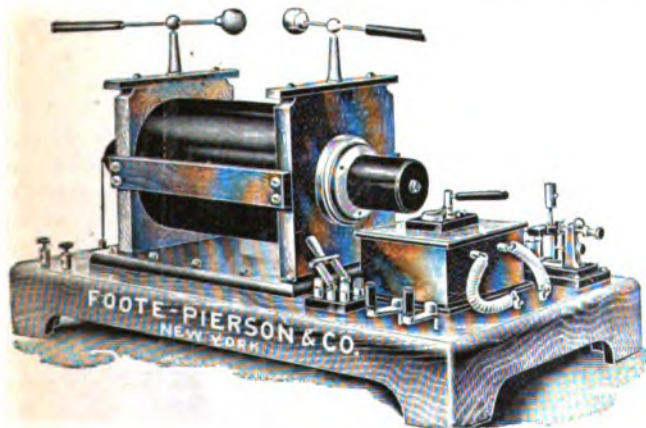
WITH KEY ON BASE.

MAGNETS 150 OHMS.

We furnish a strong leather carrying case with shoulder straps for outside line testing.

It makes the most convenient and efficient instrument for this purpose known.

Coils for Wireless Telegraphy



WRITE FOR OUR NEW CATALOGUE.

THE DELTA Portable Testing Sets

A full Line of Measuring and Testing Instruments in Stock.

For all around work. Universally used by Railway Telegraph and Telephone Engineers.



FOOTE, PIERSON & CO., 82-84 FULTON ST., NEW YORK CITY, U. S. A.

Absolute Reliability

under all conditions of service, makes the

Remington Typewriter

the ideal machine for telegraphic work.

The New Remington Train Order Special

retains all the good points for which the Remington
is famous and adds a few of its own.

The Keyboard

is arranged to facilitate the highest speed in train order work.

The Type

is made especially for the requirements of heavy manifold-
ing. The characters are open in form, thus insuring the
absolute legibility of every copy.

The New Remington Train Order Special

has the same adaptability as the regular Remington models
for all other kinds of writing. It constitutes a complete
typewriter equipment in every office where it is used.

Remington Typewriter Company

327 Broadway, New York

detained at the German Hospital, a victim of typhoid fever. We hope for his early recovery.

"Meet girl, white waist, red hot grip" was the way the message read, although the sender avers he wrote it "red hat, grip."

The prospects of connecting the near by branches and the main office by tubes is becoming more definite. City Councils having passed the bill granting the necessary permission, it now remains for the work of laying of the ducts and tubes to be accomplished. The offices in the Pennsylvania Railroad, Broad Street Station, and the Arcade Building, are the first to be connected.

Manager Edward Greene, of the Conshohocken, Pa., office, is experiencing more trouble now-a-days with wire thieves than from other causes.

The annual influx of Spring arrivals has been much heavier this year than heretofore. Among those recently added to the force are: Messrs. M. J. Madden, J. V. Baldwin, F. E. Brown, H. A. Whitehead, J. Condon, J. S. Nicholas, H. Woermer, H. C. Hayden, C. J. Nichol, James J. Walsh, J. J. Sinnott, E. A. Roper, Thomas Farley and Miss C. B. Cullen.

ST. LOUIS, MO., WESTERN UNION.

Mrs. Ringe from St. Charles, Mo., is again with us.

Miss Annie Steinbach, who has been working at Austin, Tex., for the past two months, is back again.

Mr. Ton Minton and Miss Pauline Koch, transferred from branch offices, are now at this office.

Miss Annie McLaughlin, who has been at the Atlanta office for the past eighteen months, has returned.

The many friends of Miss Lula Koch and Patrick Stevens, of the Western Union and Cella Commercial Company, respectively, will be glad to hear of their marriage, which occurred April 29.

Miss Elsie Tanner, of this office, and Herbert Hussman, a branch office manager, were married on April 28.

Fred Brownold, the St. Louis representative of TELEGRAPH AGE, who has been successful with several musical compositions, has just had published a new set of waltzes dedicated to Miss Julia Marlowe and called "The Cavalier Waltzes." The music is pleasing and has received favorable newspaper comment.

Mrs. Potter and Miss Goedecke are working here, coming to this city from Kansas City, Mo.

L. F. Brannan, who worked in New York City during the past four years, died on May 11, at St. Luke's Hospital, this city.

PEORIA, ILL., POSTAL.

F. C. Lacey, for the past six years manager of this office, resigned on May 10, to enter the service of E. H. Prince, the well known Chicago commission man, and was succeeded by F. H. Jacobs, who has been for the past thirteen years chief operator. Mr. Lacey has opened an office for Mr. Prince in the Chamber of Commerce Building and will have charge of the same as manager. His connection with the Postal dates from January 1, 1890, when he opened its office at Topeka,

Kan., becoming the manager. He has since been successively a clerk in the general offices at Chicago, manager at Lincoln, Neb., and Sioux City, Ia., coming from the latter place to Peoria six years ago. During his administration of this office, the office itself has been doubled in floor space, the force doubled in numbers and a motor dynamo plant installed. Peoria is to-day an important repeater station in the Postal system.

Mr. Lacey's retirement from the service of the company, for which he has labored so long and zealously is much regretted by his late subordinates, as well as his official superiors, and the business public generally. He has been a painstaking employe.

Mr. Frank H. Jacobs, our new manager, is well qualified to fill the important position to which he has succeeded. He has grown up in the service and in this office and knows it from A to Z. He is a fine operator and wire man as well as a conservative man of business. He is peculiarly fitted to take hold where Mr. Lacey left off. The friends of both gentlemen in Peoria telegraph and social circles will wish them success.

The promotion of Mr. Jacobs advanced Mr. S. S. Lacey to the position of chief operator. Mr. Lacey has been with the Postal since 1892, entering its employ at Topeka as messenger. He learned telegraphy under the tutelage of his uncle, then manager, and has worked for him as an operator in every office the latter has held as manager. He worked the Chicago wire in this office for the past six years and his gilt-edged typewriter copy will be missed by the patrons of the office.

Mr. John F. McGrath succeeds to the Chicago wire. Other changes in the office are in contemplation.

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.

She came to the door of the operating room and was asked her business. She said she was looking for employment, and was turned over to the tender mercies of the official tester. That individual conducted her to a desk, put before her pen, ink and blanks and, in a perfunctory way, repaired to his switchboard to send her his accustomed three test messages with wrong checks, misspelled words, etc. When he had finished he said: "Repeat back the first one sent, please." There was no response. A glance in her direction discovered her sitting peacefully at the desk, contemplating the unusual scenes about her. With rapid strides the official tester approached her, and the following dialogue ensued:

"Did you get those three messages?"

"What three messages?"

"I just sent you three."

"What for?"

"To test you, I am the official tester."

"To test me for what?"

"To test your ability as an operator, to be sure, what would you suppose?"

"Well, I did not know, I am not an operator, I am looking for a position as waitress in the lunch room."

The expression which took a deep seated hold on the countenance of the official tester was worthy the efforts of a kodak fiend, but as it is a poor time just now for wire chiefs to drop dead, a forced smile chased it away, and she was told to apply on the 9th floor.

H. A. Campbell, who has charge of the telegraph department of the New York Tribune, was married on April 27 to Miss Minnette Chappell at the home of the bride in Rochester, New York. Mr. and Mrs. Campbell will be at home in Brooklyn after June 1.

E. J. Hart, formerly of this office, has gone to the Hotel Frontenac, Thousand Islands, for the Summer season. Mr. Hart, who is an expert at providing entertainment, has been engaged at this hotel for this purpose.

William J. McCoy, lately of this office, is now working as operator for the Western Union at New Britain, Conn.

Our timekeeper, Titus A. Brooks, who has been seriously ill for two weeks, has resumed duty, but is yet far from well.

Charles S. Pike, of this office, who is known for his knowledge of military affairs, was at the recent trial for marksmen to be sent to Europe to compete for the Palma trophy.

H. B. Rathbone, now an attache of the Chicago American, and formerly an operator in this department, has been East on a visit to his father, John Rathbone, the well known old timer of this office.

A noticeable feature of the class of men who have come here as operators during the past year is their great stature, some being far over six feet in height, making it necessary for them to stoop considerably in order to pass under the aerial message railway. It may be remarked that these men are good looking and manly.

William H. Young, for some years connected with the Commercial News Department and operating room, and recently with a broker, died at Seney Hospital, Brooklyn, on May 11.

James A. Dunn, reputed to be America's greatest banjoist, son of Traffic Chief Dunn, sails for New York on June 7. He has been abroad two years, during which time he has played in the principal cities of England, Germany, France and Spain.

Mrs. May Murray, nee Spellman, has, after an absence of nine years, returned to work.

Miss Emma Firl, of the Western Union, Waterbury, Conn., was a visitor May 25.

An old, unused and nearly forgotten well underneath this building, sunk no one remembers how long ago, came into fortunate use on Sunday, May 17. By reason of a break in the Broadway

water main, the regular flow of water needed for the boiler, which runs the engine for the compressed air system for the tubes, was shut off for some time. The prompt utilization of the water in the well, however, averted all trouble.

Mr. E. Payson Porter, the veteran typewriter operator, works the second Philadelphia wire and uses a Yetman transmitter. Mr. Porter first began using a typewriter in connection with telegraphy in the Chicago office of the Western Union Telegraph Company in 1869, which entitles him to the distinction of being the first telegrapher to use the typewriter in connection with telegraphy in the world. To show the value of the transmitter, it is noteworthy to state that Mr. Porter, who lost his grip about ten years ago, has had to confine his telegraph duties since that time to the receiving sides of the quadruplex. Since the advent of the transmitter, however, he has been able to render first class service as a sender as well as a receiver. The Yetman transmitter is also used on the first Philadelphia wire by Messrs. Ragsdale and Watkins. Mr. Emanuel at the Philadelphia end of this circuit is also using a transmitter.

Mr. F. M. Blake also uses the Yetman transmitter on "A" Boston wire nights, while several other members of the staff are perfecting themselves in the use of the transmitter.

The Telegraphers' Social and Dramatic Club gave its initial performance on the evening of May 22, presenting the comedy "An Awful Night, or the Three Hats," under the direction of Arthur J. West and F. J. Sheridan. Among those who took part were: M. W. Jones, Wm. J. Keegan, Robert Irwin, F. A. Turner, W. P. Brady, Nellie H. Milliner, Genevieve Boland, Doratheal Karlein and Anna Zillman, all of whom were members of the general operating department. They acquitted themselves admirably.

In the character of "Boscoe Blithers," Professor of Penmanship Mr. Frank A. Turner had a fine conception of make-up, was exceedingly droll, bearing himself with the ease of a professional and giving evidence of occult talent. Mr. W. P. Brady also made a decided hit as "Dibbs."

Dancing followed, the floor committee being under the direction of Mr. A. M. Lewis, accompanied by his daughter, who led the march. His assistants were Messrs. E. C. Salmon and Frank McGovern. Mrs. C. A. Hastings-Mauer was chairman of the reception committee.

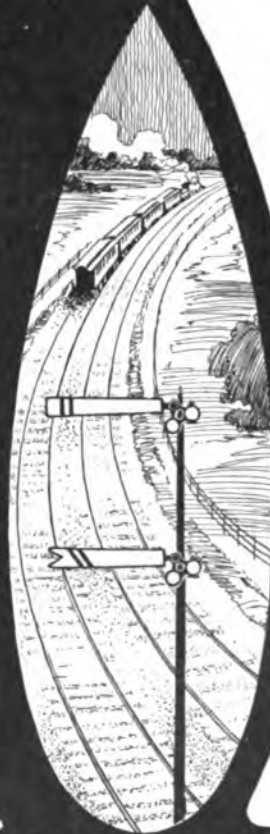
Among those present were: Mr. Herbert Smith, assistant superintendent; Mr. J. A. Hill, chief clerk, and Mr. A. F. Kelly, all of Superintendent Mulford's staff; Mr. Thos. M. Brennan, assistant manager, and daughter, and Mr. M. J. O'Leary.

The club has a membership of 170 and holds a private reception each month at their rooms. An invitation is extended to all telegraphers and their friends, who may wish to become members, to send their names to the secretary, Miss Nina M. Voorhees, of this office, to whom great credit is due for the success of this new telegraphers' club.

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THE CHICAGO CROSSING
SIGNAL FOR HIGHWAYS
AND BLOCK SIGNALS FOR
PROTECTION OF MAIN LINES,
YARDS, CURVES ETC.**

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WIRE ROPE and CABLES for ALL PURPOSES

117, 119 & 121 Liberty Street, NEW YORK

H. L. SHIPPY, Treasurer.

WORKS: - - - - TRENTON, NEW JERSEY.

which meets a social want among the younger element.

NEW YORK POSTAL.

F. C. Yule has resigned to enter business in Chicago, his home.

Mr. W. J. Reilly has been transferred to the Cotton Exchange office.

Arrivals: T. E. Greene, B. L. Thomas, W. C. Mullin, F. W. Agnew, R. C. Patterson, W. J. Crozier, H. C. Kline.

Business is booming, every one is busy and very few are absent on account of illness. Many are planning their annual vacation trips.

Extra list to split trick: V. C. Poc, P. H. Tree, W. A. Sasser, E. J. McDonald. W. J. Rutter has been assigned to the night force.

THE ASSOCIATED PRESS.

Mr. A. C. Thomas, superintendent of leased lines of The Associated Press, Chicago, Ill., was a recent New York visitor.

Col. A. G. Durrie, of the New York bureau, has been an employe of The Associated Press for thirty-seven years.

Mr. James Uncles, formerly of The Associated Press, New York, is now connected with the Yetman Transmitting Typewriter in their New York office.

The Railroad.

The Midland Railroad of England has 3,000 telephones in its offices along its system.

Mr. S. C. Shaw has been appointed superintendent of telegraph, succeeding E. A. Chenery, of the Terminal Railroad Association, St. Louis, Mo.

Mr. E. A. Chenery, superintendent of telegraph of the Terminal Railroad Association of St. Louis, Mo., has been appointed superintendent of telegraph of the Missouri Pacific Railroad Co., with office at St. Louis, vice C. W. Hammond, who on account of illness, has been made assistant superintendent.

By the choice, recently, of Frank S. Gannon as vice-president of the Interurban Street Railway Company of New York, two men who early in their railroad careers were telegraph operators and train dispatchers in the same office are now respectively president and vice-president of a great railway system.

It was on the Long Island Railroad, about twenty years ago, that Frank S. Gannon was a train dispatcher, and in his office as telegraph operator was H. H. Vreeland. It was then that a life long friendship began between these two men. In their long night talks together in the dispatcher's office they drew word pictures of dreams that are now realized.

Since those days each man has climbed a separate ladder of success until near the top, they find themselves again together.

Mr. Gannon began his career in an humble capacity on the Erie Railroad. Thence he went to the Long Island road. When the Baltimore and

Ohio first contemplated making a gigantic terminal at Staten Island Mr. Gannon was chosen to work out the problem.

Here he met Samuel Spencer, and when Mr. Spencer was placed at the head of the newly formed Southern Railway he took Mr. Gannon with him as third vice-president and general manager. About six months ago Mr. Gannon resigned. Mr. Vreeland's influence caused him to accept the vice-presidency of the Interurban.

Mr. A. B. Taylor, superintendent of telegraph of the New York Central and Hudson River Railroad Company, has removed his headquarters from Weehawken, N. J., to Syracuse, N. Y.

New York Visitors.

Mr. H. P. Dwight, president and general manager of the Great North Western Telegraph Company, Toronto, Ont.

Mr. G. W. Hickey, for many years manager in the Western Union office at Plattsburg, New York, but for the past three years in the Government service and other business in Porto Rico, is now located in New York City.

Revolt From Municipal Ownership in England.

In a recent article in Harper's Weekly Sydney Brooks says: "I do not think it would be too much to say that the intelligent public spirit of this country [Great Britain] is preparing for a revolt from the extremes of the new municipalism. Rate-payers' defense clubs, property owners' associations, citizens' unions, industrial protective societies, and so on, are multiplying all over the kingdom, and endeavoring to arouse the average respectable citizen, whose apathy is at the root of the mischief, into some active sense of the dangers that lie inevitably ahead."

Mr. Brooks notes a prodigious expansion of municipal indebtedness—it now stands at well over \$1,500,000,000—and an increase in local rates almost as great, and adds: "The way in which local authorities plunder manufacturers, industrial companies, well-to-do traders, and property owners, that some fresh municipal enterprise may be undertaken, is almost incredible. The question of local rates is becoming as formidable to British industry as is the question of trade-unionism. Moreover, it is a fact that the new municipalism is the direct outcome of the concerted movement which English trade-unionists, socialists, and labor men have organized for the capture of the local authorities.

"One reason of their irruption into city councils is that the best type of men are ceasing to interest themselves in local affairs; another is that while the range of municipal activity is constantly widening, its efficiency is as steadily deteriorating. At the same time, a bureaucracy of municipal officeholders is being solidly formed, and even the municipal employes are now a sort of trade union on their own account. Add to this the unfairness of a local authority competing with and finally

crushing private traders and professional men, add the paralyzing effect on invention and initiative, add further the recklessness with which wild-cat schemes are plunged into, and the extravagant inefficiency with which they are usually prosecuted, add finally the suspicion that a municipal balance sheet needs as close a scrutiny as a prospectus from Mr. Whitaker Wright's pen, and you will understand why Englishmen envy America her hundred years' backwardness."

Our Book Table.

There are two books lately published from the press of Frederick J. Drake and Company, Chicago, that should find a place in the library of every telegraph operator. They are "Easy Electrical Experiments, and How to Make Them," by L. P. Dickinson, and "Bookkeeping, Self-Taught," by Philip C. Goodwin. The former is an elementary hand book of lessons, experiments and inventions, and contains much valuable information regarding galvanometers, batteries, magnets, induction, coils, motors, voltmeters, dynamos, storage batteries, simple and practical telephones, telegraph instruments, rheostat, condensers, electrophorous, resistance, electro plating, electric toy making, etc. It is profusely illustrated and printed on a superior quality of paper. The price is \$1.25.

The question of bookkeeping among telegraphers involves a serious proposition to many. This is shown in the wide reading given to the series of articles entitled "Telegraphic Bookkeeping" that have appeared in our columns during the past few weeks. Mr. Goodwin's treatise appears to be a new departure from former methods of self-instruction, and his volume has been prepared with skill and simplicity. It treats its subject thoroughly, taking the student from the very beginning of the subject and leading him through all of its perplexing mysteries to the culminating exhibit of the balance sheet. This volume is valued at \$1.00 per copy. Both books may be had of J. B. Taltavall, TELEGRAPH AGE, 253 Broadway, New York, and will be mailed, postpaid, to any address, upon receipt of price.

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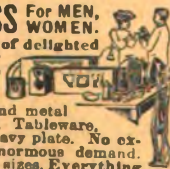
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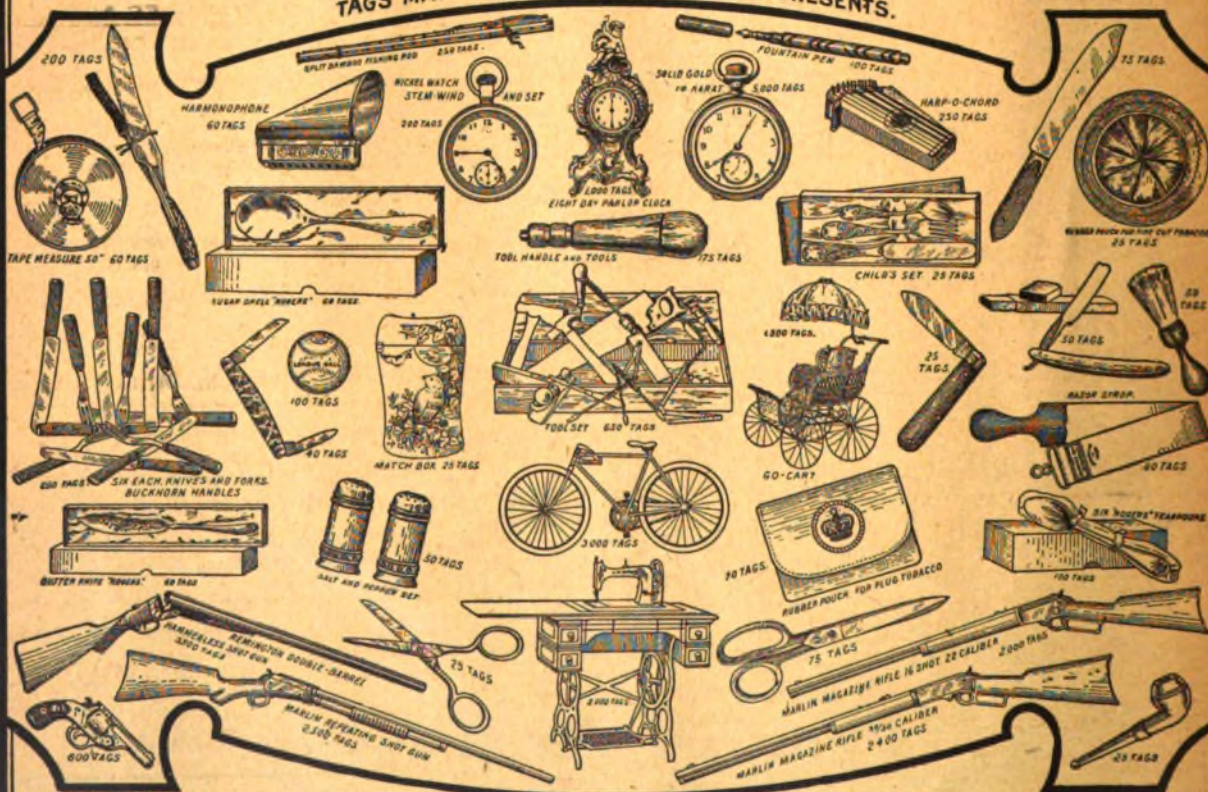
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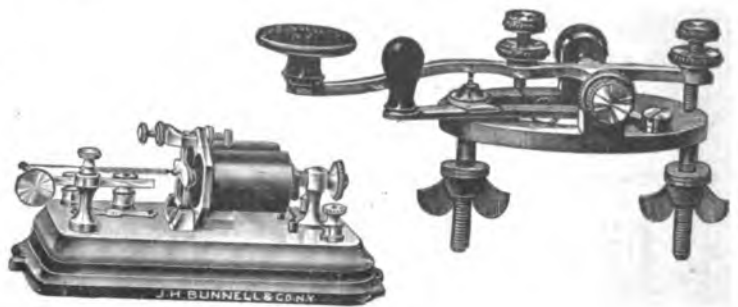
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THE TELEGRAPH AGE

No. 12.

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SOME POINTS ON ELECTRICITY.

BY WILLIS H. JONES.

Interesting and Useful Information for Employees in a Modern Telegraph Office—Continued.

[Correction.—In the first installment of this article, appearing in the issue of June 1, it was erroneously stated that the rule of the Western Union Telegraph Company is to connect the positive polarity of battery to the closed contact points of the polechangers. It should have read "negative."]

In the last issue of this journal the location, connections and potential values of batteries assigned to quadruplex apparatus generally, was stated and certain information given which would enable a division chief to discover at once the seat of any battery disturbance which might suddenly develop, and thus know what to do in the emergency.

One of the suggestions as to the probable location of the source of the disturbance which accidentally opened one pole of the battery on a number of quadruplex sets was that it might pos-

sibly have been caused by a burned out fuse in the main battery fuse-box near the lamp stand. This information in itself would not enable one to remedy the fault properly unless he also possessed a knowledge of the respective melting values of different fuses, and knew approximately about how much current normally flows through them.

MELTING VALUES OF FUSES.

For the purpose of illustration we will continue to give figures representing values used in the New York Western Union office. The principle and method is the same in all offices.

A fuse is a small piece of lead wire from one to two inches in length, varying in diameter according to the quantity of current it is expected to carry without melting. It is obvious, therefore, that where great quantities of current first flow through the fuse before dividing between many circuits the fuse must necessarily possess a high melting value, while on the other hand, if the total quantity is normally small, a thin wire of low value will be required. Thus we have what are called 1, 2, 3, 4, 5, 10 ampere fuses, as well as other lesser values, to meet the many requirements of a modern telegraph office.

The dynamo "mains," or feeders, require one size, the external line wires another, while the "locals," 6 volts and 23 volts, respectively, also demand suitable values. The chief operator should know exactly which value is assigned to each of his circuits and thus avoid wrongly substituting a fuse where it might cause injury by failing to melt at the danger mark of that circuit.

For dynamo mains or feeders use a 10 ampere fuse. It is inserted at some point between dynamo and where the conductor is tapped and the current distributed through the lamp stand to various multiplex apparatus or to the main wire switchboards in the operating department. Each of these taps, in turn, require an individual fuse and a lamp resistance before the current is permitted to reach the relays or other apparatus in the circuit.

For main wires, insert an 8-10 ampere fuse in the circuit behind the switchboard. Main line wires carry comparatively weak currents, hence a small capacity fuse must be used in order to protect the highly wound relays which would soon be injured should a greater quantity of current than 8-10 of an ampere flow through the coils for any considerable length of time. Use 8-10 ampere fuses also at the lamp stand for quadruplex and duplex circuits. For local circuits use

1½ ampere fuses. The instruments connected in local circuits are usually sounders, polechangers and transmitters, which, being wound with coarser wire and possessing fewer convolutions, are expected to safely withstand a much greater quantity of current than the apparatus first mentioned.

VALUE OF RESISTANCE LAMPS.

Should a resistance lamp become broken, the necessary ohmic value of the substitute may be known by memorizing the following rule: For quadruplex main battery leads use 600 ohm lamps. For duplex and quadruplex local circuits the lamp resistance must be the same as that of the loops which they compensate for when the latter are removed. As duplex loops are usually all built up to the same value, usually 90 ohms, it follows that all lamps for multiplex "locals" should contain 90 ohms resistance. The lamps over the main wire switchboards and in duplex circuits, possess 2 ohms for every volt potential feeding the wire. Thus, the first potential, which is 70 volts, demands a 140 ohm lamp, the second potential of 140 volts requires a 280 ohm lamp, while other electromotive values are likewise multiplied by two to ascertain the proper lamp value.

This rule is followed in order that no matter how near the office a wire might become grounded it would be impossible for more than one-half of an ampere of current to flow through the home relays, yet be of sufficient quantity to cause the lamp to glow brightly and give warning to the wire chief before great injury could result.

RELAY AND SOUNDER WINDINGS.

The size and length of wire employed in the winding of telegraph apparatus may also be of interest to some readers. The following data, sent in reply to a subscriber's curiosity to learn the approximate number of convolutions of wire within the spools of the following instruments, will fit in here as well:

Freirs self-polarized No. 2 relay has 2,350 turns of No. 35 A. W. G single silk covered wire on each half of the three spools, or 14,100 turns in all. Resistance of each differential winding is 400 ohms.

The polar relay (flat pattern) has 2,850 turns of No. 36 A. W. G. wire on each half of each spool, 11,400 turns in all. Each circuit contains 400 ohms, or 800 ohms when both spools are in series.

One hundred and fifty ohm single line relays have 4,250 turns of No. 29 B. & S. single silk covered wire on each spool.

Four ohm sounders have 615 turns of No. 22 B. & S. single silk covered wire on each spool.

Recent Telegraph Patents.

A patent, No. 728,851, has been awarded to Wm. R. Brixey, of Seymour, Conn., for a vulcanized Kerite compound.

A patent, No. 728,254, for a facsimile telegraph, has been granted to Hans Liebreich and John C. Francis, of Detroit, Mich.

A patent, No. 729,420, for an improvement in the art of telegraphy has been granted to Henry A. Rowland, of Baltimore, Md.

A patent, No. 729,497, affecting the receiving apparatus of wireless telegraphy, has been awarded to James F. King, of New York.

Business Notice.

Mr. E. S. Russell, 253 Broadway, New York, the general agent for the 20th Century Telegraph Key, has met with remarkable success in effecting sales of this instrument, its ability to overcome and to prevent loss of grip, naturally recommending it among operators everywhere. Mr. M. O'Connor, manager of the Postal Telegraph-Cable Company, at Olympia, Wash., recently wrote to Mr. Russell: "About two years ago I got from you a 20th Century Key, the use of which has enabled me to retain my position here. On account of the amount of 'specials' filed with me I could not otherwise have handled it and would have had to give up the office. The manager of the Western Union here is now in the same condition as I was and I have persuaded him to try a key, so please send me one by express."

Anderson's Improved Extension Arm for Resonators.

Mr. O. T. Anderson, of Chicago, manager of the Telegraphers' Typewriter Company, that city, has applied for a patent to cover an invention of his of an extension arm for resonators, bearing the title of "Anderson's Improved Extensible Resonator." As shown in the illustration the device clearly indicates the method employed of



ANDERSON'S IMPROVED EXTENSION ARM FOR RESONATORS.

extension and adjustability. By its use any style of resonator or box may be brought in closer proximity to the ear of the operator, thus more effectually shutting out distracting foreign noises, and correspondingly lessening the liability to error, at the same time enabling the operator to pursue his work sitting erect and in a comfortable position. The price of the instrument is \$5.

Subscribe for TELEGRAPH AGE, \$1.50 per year.

Personal Mention.

Messrs. Hubert G. Dietl and Charles von Barth, from Vienna, representatives of the Austrian telegraphs, are visiting the United States for the purpose of looking into the system in vogue in this country.

Hon. Wilson H. Fairbank, of Warren, Mass., the well known constructor of telegraph lines, was recently in the city en route to St. Louis, whither he goes as a Massachusetts Commissioner on a preliminary visit to the Louisiana Purchase Exposition.

Col. Robert C. Clowry, president and general manager of the Western Union Telegraph Company, has purchased the handsome dwelling, No. 141 West End avenue, corner of Seventy-sixth street. The building has a limestone front and stands on a plot 28.4x63 feet. Col. Clowry will make the house his home.

Miss Nellie A. Hope and Miss Nellie B. Hope, the sister and daughter, respectively, of H. C. Hope, superintendent of telegraph and signals of the Chicago, St. Paul, Minneapolis and Omaha Railway, St. Paul, Minn., accompanied by Miss Edyth Reed, of Minneapolis, sailed for Europe from Boston on the steamer Commonwealth, on June 4. Miss Nellie A. Hope will devote the summer to study in London and Paris to the three branches of music to which she has already devoted many years—the voice, violin and orchestration. Miss Reed will study the violin in Paris. While en route to Boston, accompanied by Mr. H. C. Hope, the party spent a few days in New York visiting friends.

Mr. Orrin S. Wood, of New York, the veteran telegrapher, has gone to Turners, N. Y., where he will spend the summer. Mr. Wood, who is now in his eighty-sixth year, was the first telegraph operator in the world, becoming such on the original Morse line connecting Washington and Baltimore, as long ago as 1844, being selected for that position by Prof. Morse himself. Mr. Wood is still hale and hearty, and although his hair is snow white his tall figure is almost as erect as in former years. While he long since retired from active business, he continues to take a lively interest in telegraphic affairs and is an occasional visitor at TELEGRAPH AGE office, where he is always a welcome guest.

General Mention.

Mr. C. S. Scales, of Boston, Mass., is now identified with the engineering department of the American Bell Telephone Company, at 22 Thames street, New York.

Mr. F. W. Futherer, of East Liverpool, Ohio, has established himself in the brokerage business at 204½ Pearl street, Buffalo, N. Y., under the firm name of F. W. Futherer & Co.

Mrs. John Wilson, nee Miss Annie L. Miller, of the Western Union, Troy, N. Y., now located

at Sawyer, Minn., in remitting to cover her subscription writes: "TELEGRAPH AGE is quite an old friend of mine now and I wish to continue the friendship."

When Mr. E. E. Williams assumed the management of the Birmingham, Ala., Western Union office, fifteen years ago, the number of messages handled were only fifty per day. Since that time so rapidly has the business developed, that three thousand messages per day are now exchanged.

In a recent telegraph case where the company defendant was sued for damages caused by an error in a telegram when the case was handed down by the judge, neither the plaintiff nor the defendant could read the writing of the judge. Both sides claimed a victory, but neither one of them could explain where the victory came in.

Col. M. J. Burke, United States consul at St. Thomas, Ont., a well known old time telegrapher, on May 22, presented Capt. Alex. Brown of the Gordon Brown of Port Stanley, and Coxswain J. Reginald Moore of the life-saving crew with gold watches and chains, and six of the crew with medals, on behalf of the President of the United States for their gallantry in saving the crew of the United States schooner Mineral State, wrecked off the port October 30, 1902. This is the second time during Col. Burke's incumbency of this consulate that the Port Stanley Volunteer Life Saving Crew has been so signally rewarded by the President of the United States for humane conduct. The first instance was for the rescue of the captain and crew, six in all, of the American schooner Groton, which foundered November 11, 1897, off Port Talbot.

Obituary.

Charles R. Allen, a telegrapher, aged fifty-four years, died at Springboro, Pa., May 13.

J. A. Hickman, twenty-four years old, an operator in the Western Union Telegraph service at Eutaw, Ala., died on May 24.

Dr. Joseph S. Hall, aged forty-six years, an old time telegrapher, died at Worcester, Mass., June 3. He was for many years prominent in telegraph circles in Providence, R. I., prior to his graduation as a physician and removal to Worcester.

Dr. John Reid, a well known New York physician, and a brother of the late James D. Reid, died in London, England, on May 15. Dr. Reid left New York a week previous for England, where he intended to visit his sister. He died on reaching London. There are now only two members living of the original family of eleven children, Mr. Douglas Reid, of River Falls, Wis., and Mrs. Griffin, of England.

Harry C. Wooden, for many years manager of one of the branch offices of the Postal Telegraph-Cable Company, Washington, D. C., died sud-

denly of rheumatism of the heart while on duty, on May 24. Mr. Wooden was a native of Baltimore, Md., where he learned telegraphy and where he was advanced to the position of assistant manager of the Postal interests at that point. About ten years ago he transferred his services to the Washington office, where he had remained up to the time of his death. He was a great sufferer from rheumatism. He leaves a widow and six children.

Resignations and Appointments.

Mr. Lloyd M. Ward has been appointed manager of the Western Union Telegraph Company at Johnstown, Pa., vice S. W. Kirk, resigned to enter other business.

Mr. T. D. Jackson, of Augusta, Ga., is temporarily acting manager of the Postal Telegraph-Cable Company at Birmingham, Ala., vice Charles Irwin, absent on account of ill health.

Mr. W. E. Pierce, for twenty-two years located at Washington, D. C., in the Western Union service, is temporarily in Wheeling, W. Va., as quadruplex expert for the same interests.

Mr. J. M. Fair, manager of the Western Union Telegraph Company, at Saginaw, Mich., has been promoted to the management of the Grand Rapids office. Mr. F. P. Duckett, of Mansfield, O., succeeds Mr. Fair at Saginaw.

New York Visitors.

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

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

Mr. George M. Dodge, manager Western Union Telegraph Company, Valparaiso, Ind.

Mr. W. F. Williams, superintendent of telegraph, Seaboard Air Line, Portsmouth, Va.

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

Mr. P. V. DeGraw, who is at the head of the newspaper department of the St. Louis Exposition, with headquarters at Washington, D. C.

Col. W. H. Adkins, traffic agent of the Southern Bell Telephone and Telegraph Company, Atlanta, Ga. Col. Adkins is an old time telegrapher.

Mr. G. W. Parkhurst, of Plattsburg, N. Y., an old time telegrapher, now identified with the wood pulp industry. He was en route to Seattle, Wash., where his company will establish a pulp mill.

Mr. P. W. Williams, of the Western Union Telegraph Company, Detroit, Mich., who, by special request of the President, accompanied the latter on his late trip to the Northwest and the Pacific Coast, as the Western Union representative.

Wireless Telegraphy.

Nikola Tesla's wireless telegraph tower at the extreme end of Long Island is nearing completion. It is a very elaborate and costly structure.

Marconi wireless telegraph stations have been established at Chicago and Milwaukee, between which points messages are stated to have been exchanged very successfully. The Marconi people, it is said, propose to extend this system to Grand Haven, Mich., which is across Lake Michigan from Milwaukee, and to other cities on the Great Lakes. The Morse key and alphabet are used. Messages are received by means of a tape machine, on which the dots and dashes are printed. The Chicago-Milwaukee instruments will receive from 15 to 25 words a minute. Improvements are under way which, it is expected, will greatly increase the receiving capacity.

The steamships *Lucania*, *Campania*, *Etruria*, *Umbria*, *Ivernia* and *Saxonia*, of the Cunard Line; the *New York*, *St. Paul*, *St. Louis* and *Philadelphia*, of the American Line; the *Kaiser Wilhelm der Grosse*, *Kaiser Wilhelm II.*, and *Kronprinz Wilhelm*, of the North German Lloyd Line; the *La Savoie* and *La Lorraine*, of the French Line; the *Minnehaha*, *Minneapolis* and *Minnetonka*, of the Atlantic Transport Line; the *Deutschland* of the Hamburg-American Line are now all equipped with the Marconi apparatus, and the telegraph companies accept telegrams for passengers on these steamers while they are at sea. The messages are transmitted to the steamers named by the wireless telegraph system. Each steamer has among its complement of officers a first class telegrapher.

It is announced that Mr. T. A. Edison has been appointed to the board of technical engineers of the Marconi Wireless Telegraph Company of America, and has permanently identified himself with the company by the acquirement of an interest therein as a stockholder. It is officially announced at the office of the Marconi Company that the company has acquired Mr. Edison's patents. The principal Edison patent, in its claims, covers the field of wireless telegraphy by inductive means. While modern wireless telegraphy is based upon Hertzian wave transmission and not on induction, the Edison patents are stated to be considered important additions to the patents owned by the Marconi Company, which include also the inventions of Prof. M. I. Pupin, who, it is stated, is also a member of the company's technical corps.

The Cable.

A British war vessel, which arrived at Shanghai, China, on June 6, reported having called at Midway Island on May 13 and found the cable colony all well.

Mr. E. C. Sweeney has been appointed superintendent of the New York office of the French

Cable Company, under the order of Mr. L. A. Lurienne, representative of the company in America.

Mr. M. Fitzgerald, of the French Cable Company, Cape Cod, Mass., was a recent New York visitor while on his vacation. He paid his respects to many of his old New York friends. Mr. Fitzgerald was at one time superintendent of the New York and Hayti Cable Company in this city.

The section of the Commercial Pacific Cable, connecting Manila and Guam, was successfully completed on June 2. The cable steamer Anglia at once started for Midway Island, from whence she will proceed to lay the cable to Honolulu. That work, it is expected, will be finished about July fourth. The section of 2,753 nautical miles, which will connect Guam and Midway Island, is now being laid by the cable steamer Colonia.

The Railroads.

Mr. Andrew Keiser has been appointed superintendent of telegraph of the Pennsylvania Railroad Company, with headquarters at Philadelphia, vice Charles M. Sheaffer, promoted.

Mr. Jonathan D. Price, of Aurora, Ill., has secured a patent for a railway signal—a system in which the track rails are utilized as a part of the circuit for operating signals located on the train.

Mr. Charles M. Sheaffer, superintendent of telegraph of the Pennsylvania Railroad Company, Philadelphia, Pa., has been promoted to be superintendent of passenger transportation, with headquarters at the same point.

Mr. M. F. B. Weeks, chief train dispatcher of the Illinois Central Railroad, New Orleans, La., has been appointed assistant superintendent of telegraph of the system south of the Ohio River, with headquarters at Memphis, Tenn.

Mr. Frank Tremble has been appointed superintendent of telegraph of the Texas and Pacific Railroad Company, with headquarters at Dallas, Tex., vice C. W. Hammond, resigned. The position of assistant superintendent of telegraph has been abolished.

Mr. C. F. Annett, assistant superintendent of telegraph of the Illinois Central Railroad Company, Chicago, Ill., has resigned. He is succeeded by Mr. E. Parsons, who was in charge of the operating room at Chicago. Mr. Parsons' jurisdiction will cover the territory north of the Ohio River.

Wire thieves are again in evidence in various sections of the country. The Postal had its poles stripped of over \$200 worth of copper wire near North Wales, Pa., a few nights since. Long terms in the Penitentiary given to several wire thieves do not seem to check these depredations.

Every time you complain some one thinks less of you.

Composite Telephone and Telegraph on the New York Central.

BY A. B. TAYLOR.

Superintendent of Telegraph.

Press of other business has delayed attention to your request for information as to composite telephone and telegraph circuits working on the New York Central.

Our experience in this line has been limited to the use of the apparatus of the National Telegraphophone Company, which has been used to a considerable extent on our Rome, Watertown and Ogdensburg division, and also on our Pennsylvania division, with very good results, excepting a recent application by the American Bell Company where they have superposed a telephone circuit on a Morse circuit working on a through copper wire which extends from New York to Buffalo, the telephone circuit extending only between New York and Albany. This wire has no working offices on it between the latter two points, and by making connection of the telephone circuit to it at Mott Haven, so as to get rid of some five miles of telegraph cable, we have had a very fair talking circuit. The arrangement of this Bell system provides for the ringing of the bells in the usual manner, with special generators of a frequency high enough to prevent interference with the Morse when they are operated.

Of course, the telegraph line in case of trouble, is sometimes patched with other wires temporarily, and this sometimes interferes with the working of the telephone circuit. We have not yet had experience with the system through any severe thunder storms, but on the whole it would seem that the Bell Company were able to furnish pretty good service in this line, within a reasonable distance and on wires of low resistance.

The system of the National Telegraphophone Company is used quite extensively on dispatcher's wires where the service is light, on the side lines, etc., the arrangement being that the call comes in on the dispatcher's relay, who then comes in on the telephone and answers. The arrangement of call on the relay is not objectionable where the service is used to help out the dispatcher's work: For instance, where work trains are equipped with the telephones, or emergency stations are placed at certain points where trains can call up the dispatcher's office. The system is also applied to wreck trains and to the superintendent's inspection engines, so that these trains by means of a reel of wire and a specially arranged pole, can connect to a given wire and call up. Under this system the intermediate stations are bridged with a low capacity condenser and no connections are made to the ground excepting just while parties are working over the telephone circuit. The result of this has been that there has been practically no trouble whatever to Morse circuits by reason of having the telephone circuit imposed on the line. As there are no permanent grounds through condensers there is no trouble from light-

ning grounding the line and making trouble on the Morse circuit.

The arrangement of calling on the telegraph relay would hardly be acceptable for general work, but for working with the despatcher's office it has been found very practicable and has a great advantage of freedom from anything that would cause trouble on the Morse circuit.

The American Bell Company, though heretofore neglecting this field of railroad work, have now taken it up, and state that they are now prepared to furnish any kind of composite circuit that the railroad company might want to make use of.

It is unquestionably the fact that the service furnished by the National Telegraph Company for a year or more past has been found very useful in actual railroad practice.

Type Written Train Orders.

At the Railway Telegraph Superintendents' Convention at New Orleans, May 13, says the Railroad Gazette, the use of typewriters for copying train orders was looked upon with favor. If the sense of the meeting was correctly interpreted, there was much sentiment in favor of the typewriter and none against it. One maker has devised a machine called "The Train Order Special" in which the numerals are larger than in most typewriters. From sample train orders furnished by the typewriter company, the recommended practice appears to be to write train orders wholly in capital letters. In the samples, the sixth carbon—that is to say, the seventh sheet—is entirely legible; but in view of the fact that, at best, a figure or letter in a fifth or sixth carbon may often be slightly defective, and that often more than seven copies are needed, one naturally questions whether the time in an order should not be written in words and not repeated in figures. As long as the figures are there, it is difficult to believe that trainmen will not, when in a hurry, depend on them and neglect to carefully read the words. This criticism applies, of course, to pen writing also. If the typewriter is to be used there will be an advantage in putting double space between each two adjacent figures; though constant care would be necessary to enforce an order to this effect.

But whatever may have been the sentiment about the typewriter at New Orleans, it is a fact that certain careful railroad officers are not yet convinced that the use of the machines for train orders is justifiable. One big road, which has tried them in this work, has decided not to use them. The feeling seems to be that mistakes in writing are more likely to occur on the typewriter than when the operator uses the pen or pencil; and mistakes are, of course, unpardonable; that is to say, the requirement is that always in such a case the operator shall destroy his message and begin at the beginning and write a new one. Quite likely it is true that such mistakes would occur frequently during the first few months.

Whether or not they would continue after a suitable instruction period is not so easy to determine. This same question came up in a discussion before the Iowa Railroad Club last month, and Mr. H. A. Dalby said that he had been unable thus far to convince himself that the typewriter was suitable for train orders. Mr. Dalby is one of the most prominent despatchers in the country and has shown good judgment in expressions of opinion. His only suggestion for more surely providing against errors in train orders was to maintain strict discipline; a tacit admission that discipline usually is not strict—which everybody knows, whether the fact is or is not admitted in public discussion. In short, the rules for perfect train despatching to-day are the same that they were a dozen years ago, when Mr. Anderson made them clear in "The Train Wire." It is a maxim in morals that the worst man knows the law better than the best man obeys it. This will almost apply in train despatching. One of Mr. Dalby's reasons for wanting numbers spelled out was that operators frequently do not send plainly (in repeating orders). But why not compel them to send plainly? Would the sending then be so slow that it would be quicker to send the orders by a messenger boy? The enlightened reader of the Railroad Gazette will understand, of course, that all of the foregoing is for the benefit of the unregenerate; those who do not use the block system. The block system does away with most of our train order troubles.

Writing by Telephone.

The first public test in this country of Ernest Carl Gruhn's telechirograph, or recording telephone, was made recently and was a success.

The telechirograph is a device which transmits over an ordinary telephone wire the written as well as the spoken message. It is all contained in a little wooden box about the size of an ordinary typewriter. The transmitter consists of a metallic pencil holder, to which are attached two wires, each being a part of an independent closed electric circuit. When not in use the pencil lies in a rest which opens a switch, breaking the circuits. In the holder is an ordinary piece of lead, the writing being done on an ordinary piece of paper on a tablet of slate, the up and down motion of the pencil setting in action the ordinate current and the left to right motion starting the so-called abscissa, or horizontal current. Sensitized paper is used, on which, by the aid of a mirror, magnets and lights are produced the messages sent at the other end.

Neither the Postal nor the Western Union Telegraph companies will maintain branch offices in the various hotels at Saratoga Springs, N. Y., this summer.

The usual quarterly dividend of 1½% was declared by the Western Union Telegraph Company on June 10. The earnings of the company show most gratifying figures.

The C. K. Jones Automatic Telegraph Circuit Protector and Signaling Machine.

The success of a railway depends largely upon the prompt handling of its trains, consequently train despatching becomes one of the most important factors thereof.

Mr. C. K. Jones, of Tuscumbia, Ala., a train despatcher of long experience, has perfected an ingenious device to which he has given the name of "C. K. Jones Automatic Telegraph Circuit Protector and Signaling Machine," the design of which is to expedite and promote the safe running of railway trains.

Briefly described, this apparatus is an electrical instrument attached to the back part of a clock, the same being actuated by the clock mechanism. The electrical apparatus does not affect the correct time keeping of the clock, and as good clocks will be used, the operator and the public may use these clocks for the time.

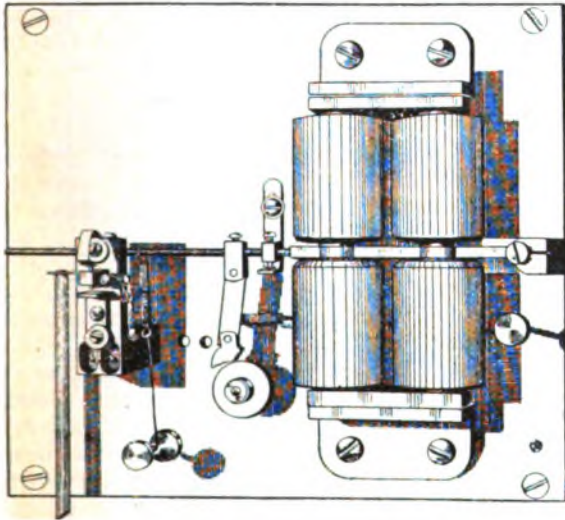


FIG. 1—ELECTRICAL APPARATUS.

By reference to Fig. 1, those who possess a fair knowledge of electrical instruments will readily understand the invention and its workings. It is simple, easily adjusted, and requires no attention whatever, after the clock is placed in position on the wall, except that the battery must, of course, be kept in good condition. The minute shaft of the clock is extended through the back of the clock. Secured to this shaft, is a hard rubber disc. Above the disc is an armature, placed between two sets of electro-magnets. The upper set of magnets are connected with the relay and battery, and the armature works similarly as does that of the relay and the sounder. When the wire is open the armature will rest on the disc, and the serrated shoe of the armature will be carried around with the revolving disc until the armature comes to a rest upon electrical contacts, which cuts out the upper set of magnets and instantly energizes the lower set of magnets, thus causing perfect electrical contact. The electrical contacts produce a bridging or short circuiting of the key, a separation

of the ground wire and the ringing of the bells. The machine is set for two minutes. Should an operator leave his key open for two minutes the device short circuits that key and at the same time an alarm bell on the back of the clock and another bell in the freight wareroom, which are connected in circuit, will

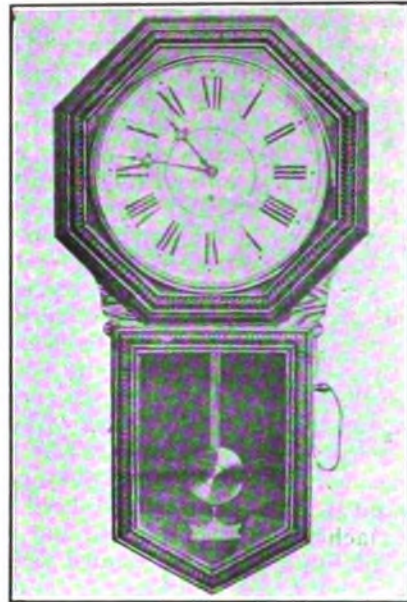


FIG. 2—FRONT VIEW OF CLOCK.

commence to ring and will continue to ring until the operator goes to the clock, raises the button on the bottom of the clock and closes his key, when the ring-

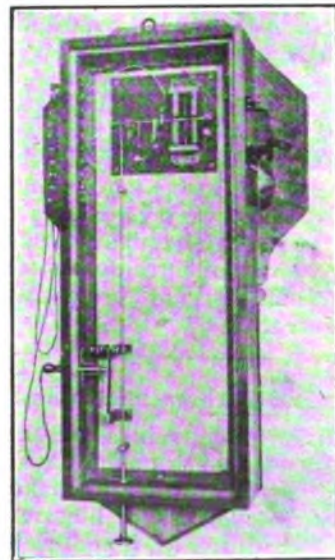


FIG. 3—REAR VIEW OF CLOCK.

ing will cease. During this ringing of the bells the telegraph instruments are restored to a normal or working condition, with the exception of the key, which is short circuited, and work goes on regardless of the open key. Should an operator, through

forgetfulness, leave his ground wire on to exceed two minutes, the same result will follow as given above, in the case of an open key, except that the machine only at point of ground connection will be affected. The relay and sounder work right along, and the ground connection is removed automatically, and the two alarm bells ring continuously until the operator raises the button on the bottom of the clock, when the ringing will cease.

When it is desired to send a message to all operators, the operator at the sending point will open his key for two minutes (this will cause the bells in every office to ring), close the key and make the signal "15" several times, which means everybody copy this message, and without calling anyone, send the message. When through sending, the sender may say to either one of the terminal offices desired, "go ahead, O. K., and others follow in rotation."

Should the despatcher want one particular office, or, say, five offices, in the next ten minutes, he will open his key for two minutes, when the bells in every office will ring continuously, close the key and say twice, "I want D E," or where the despatcher wants to make one ringing do for, say, four or five offices, he can say twice, "I want DE, B, D CD." All operators will be instructed that should they not get to their instruments in response to the bell call in time to hear the despatcher say, "I want so and so," such operator will assume that he is wanted and will call the despatcher and say, "Here am I," and sign his office call. By this arrangement business can proceed right along, and the despatcher will know that the ringing of the bell will in time reach the operator, and that the operator will call him as soon as he gets to his instrument. It is not proposed to call into use the automatic calling signal for trivial and unimportant business. Rather hold it in reserve for urgent business, so that operators will regard it as such, and thus secure quick attention and quick results.

A telegraph call is only understood by telegraph operators, but an alarm bell is understood by everybody, and it is safe to assume that some one hearing the constant ringing of the bell will tell the operator about it and get him to his key, when he will say, "Here am I," and sign his office call.

Mr. Jones offers to rent these clocks to railway companies at the rate of three dollars per month for the first four months, and for twenty-five cents per month thereafter.

Edison's Absentmindedness.

I had occasion once, said a well-known artist recently, to spend a week or ten days at Edison's place, near Orange, in order to make the necessary sketches for a series of illustrations I was commissioned to draw. I found Edison himself much more interesting than his wonderful laboratory or his equally wonderful experimental workshops.

The many stories of his simplicity and absent-mindedness are seldom exaggerated. For instance, while I was there his "boys," as he is wont to term his assistants, discovered that in the "old

man's" office there was a convenient store of very good cigars. He bought them by the thousand and kept them loose in a big box, so when anyone wanted to smoke he would stray casually in, nod to the "old man," affect to look up some reference in one of the books with which the room was littered, and calmly dip a handful of cigars out of the box.

Finally Edison dropped to it. He said nothing to the "boys," but called on his cigar-merchant and asked him to send on a box of the very worst cigars that perverted ingenuity could manufacture. The cigar man smiled, booked the order, and sent the carefully-selected "bad 'uns."

A month or so later Edison dropped in and asked him why he had not obeyed his instructions.

"Why, I did, Mr. Edison; the bad cigars were delivered six weeks ago."

Edison asked a few questions, the answers to which confirmed the cigar merchant's statement. Then a sweet smile overspread the inventor's countenance. "I see how it is," he said: "I forgot all about it and must have smoked them myself. I thought they lasted longer than the first lot."

The Magnetic Club Outing.

It should be remembered that the regular Summer outing of the Magnetic Club will occur this year on Tuesday, June 23. On this date the members are invited to assemble at the Cove Hotel, West New Brighton, Livingston station, Staten Island, where, in past years, the outings have been held, and where the hotel grounds are well adapted for the athletic sports that will be indulged in. The entertainment committee, which is composed of T. A. Brooks, chairman; George F. Fagan, D. W. McAneny and F. J. Scherrer, have arranged an attractive programme of sports. A feature of the occasion will be a drawing for ten prizes designed for members. A game of base ball is announced to be played between the Western Union and Postal Telegraph base ball clubs. Dinner will be served at seven o'clock at the hotel, and a choice menu is printed on the circular of invitation. The reception committee has Thomas E. Fleming for chairman, with such aids as Theo. L. Cuyler, Jr., M. J. O'Leary, R. E. Bristol, M. R. Cockey, R. E. Fagan and R. J. Murphy. Through the courtesy of Col. Robert C. Clowry, president and general manager of the Western Union Telegraph Company, the club has been granted the use of the cable boat "Western Union," which will leave Starin's Pier, foot of Cortlandt street, North River, at 1.45 P. M., and again at 3.45 P. M., in order to carry such as may be able to leave at either of the hours named. For the information of those who may not be able to leave as above, it is stated that the hotel can be reached via Staten Island Ferry to St. Georges, and thence by rapid transit to Livingston station, or by trolley line, which passes the door.

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NEW YORK, June 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.

Postal Telegraph's Relief Measure.

One of the features of the Postal relief plan, which was announced in our issue of June 1, is particularly worthy of note; that is, that the plan is based upon length of service regardless of age. One of the greatest objections to the pension plans that have been adopted by various railroads is the arbitrary age limit placed upon applicants for employment. The railroads that have established pension systems have adopted in connection with such systems the rule that persons who are over thirty or thirty-five years of age may not be engaged as new employes, the reason being that an employe must be in the service of the company at least twenty-five years before he is entitled to draw a pension. The effect of this is that a railroad man, however competent, who for any reason finds himself out of employment, cannot obtain a position with the railroads that have adopted the pension system if he has passed the low age limit.

The Postal Company seems to have solved this difficult question by making length of service only the qualification for participation in the benefits of its plan, so that there will be no change in the policy that has always been followed by commercial telegraph companies of engaging competent men of any age.

It will be observed that the Postal Company's plan cannot properly be called a pension scheme, but that it merely provides systematic means of relief to faithful employes who are in need of aid. The statement issued by the Postal Company's officials on this point, as printed in our previous issue, reads as follows:

"Any employe of the Postal Telegraph-Cable Company who has been continuously in its service for a period of fifteen years and who, through no indiscretion of his own, has become incapacitated for work, may apply for relief to the person under whose immediate direction he is employed. Upon the recommendation of such person and of the superintendent of the district in which the employe is located and with the approval of the general superintendent of the division and of the executive committee, such employe may be allowed, in monthly payments, an amount not exceeding twenty per cent. of the regular salary pertaining to his position.

"In the case of an employe who has been more than fifteen years in continuous service of the company, an additional three per cent. may be allowed for each additional year of service up to twenty-five years, making the maximum allowance fifty per cent."

Kind Words for Telegraph Age.

We have lately received a number of letters from old subscribers, many of whom are of years standing, speaking in highly commendatory terms of TELEGRAPH AGE, and all breathing a spirit of affectionate regard for a journal which they admit has rendered them helpful service.

From among these we select one from Mr. E. W. Collins, superintendent of the Postal Telegraph-Cable Company, at Cleveland, O., who, in renewing his twentieth yearly subscription, takes occasion to write:

"It gives me pleasure to hand you herewith my check. TELEGRAPH AGE, has come to me regularly for twenty years and it has been helpful to me. I have never perused its pages without feeling that I have been benefitted, better informed and better equipped for the next battle."

Mr. James B. Dillon, a chief operator of the Western Union Telegraph Company, at Louisville, Ky., in remitting to cover his subscription for 1903, has this to say:

"This is my fourteenth renewal, and if we continue to exist, you may count on my one hundred and fourteenth without an intermission. Your paper, as its name signifies, does great credit to our 'telegraph age,' and I cannot see that it has lost one golden hour. Yea, rather, it is in touch with all that is praiseworthy."

Mr. Jesse Hargrave, electrician of the southern division of the Postal Telegraph-Cable Company, at Atlanta, Ga., in renewing his subscription, writes:

"Herewith is my check for subscription. After twelve years continuous subscription to TELEGRAPH AGE I can scarcely get along without it."

Mr. J. E. Pettit, the chief operator of the Postal Telegraph-Cable Company, at Chicago, is an enthusiastic supporter of TELEGRAPH AGE, as the following letter clearly shows: "There are three things very dear to me, and I might say are necessities of my life: First, my salary; second, my testament; third, TELEGRAPH AGE. You will note the salary comes before the others; and the AGE—well, its next to the Bible!"

Still another, Mr. Thomas H. Hubert, of the Western Union, Macon, Ga., in extending his subscription for the following year, remarks:

"It took me a long time to make up my mind to subscribe for TELEGRAPH AGE, but now that I realize what an advantage the paper is, I think you will always find my name on your list. I consider it an essential magazine to any one connected with telegraphic work in any capacity."

These are kindly and appreciative words. They give voice to expressions of approval that tend to encourage the conductors of this journal, whose efforts are continually directed to provide a paper that shall furnish to its readers such information relative to their business as shall be practical and educational in its influence, and upon which the telegrapher, no matter what his position in the service, may rely for the necessary instruction calculated to fit him for advancement in his chosen profession. The columns of TELEGRAPH AGE also furnish a full transcript of the news, the progress made and the inventions wrought in the telegraphic field.

We believe we are printing a paper that no telegrapher, who loves his calling and is determined to forge ahead in it, should neglect to

read carefully and regularly. If our friends everywhere, those who esteem the paper for the value it has been to them, would each make it a point of friendly concern to secure one or two additional subscribers, the subscription list of TELEGRAPH AGE might easily be doubled. This would cause a wider distribution of carefully prepared telegraphic information, so essential to the higher education of individuals in the service, and at the same time would enable the publisher to still further improve the paper, making it even of greater value to its readers.

We do not think we mistake the temper of our friends when we touch upon this proposition so really vital to the welfare of so many, and it is earnestly hoped that action by our readers in the matter proposed may be spontaneous, generous and speedy. The support requested would give us the desired opportunity to carry out plans of betterment long anticipated.

Western Union and Pennsylvania Railroad.

Directors of the Pennsylvania Railroad Company a few days ago appropriated \$300,000 to build a new telegraph line along the company's right of way in the place of that of the Western Union Telegraph Company destroyed by the order of President Cassatt.

The Pennsylvania will virtually install a new telegraph plant on all its lines east of Pittsburg and Buffalo. The cost will probably be \$500,000, so the company will be called upon to add \$200,000 to the amount already appropriated. The railroad company will erect and own the poles and string the wires it needs to replace the former plant. It will permit the Postal Telegraph-Cable Company to string wires on its poles but without any right of ownership.

The Western Union Telegraph Company on May 28, asked the United States Court of Appeals to issue an order restraining the Pennsylvania Railroad Company from continuing the removal of Western Union poles and wires from the lines of the railroad. The request was made on the ground that the telegraph company has appealed to the United States Supreme Court, which held that the railroad company had a legal right to remove the poles and wires from along its right of way. This request was refused by the court on June 11.

Judge Bradford, in Federal Court at Wilmington, Del., has granted an order restraining the Pennsylvania Railroad Company from removing the wires and poles of the Western Union Telegraph Company, which are stretched along the lines of the Delaware and the Maryland divisions in that State. On June 19, the court will hear the application of the Western Union Company for a permanent injunction against the railroad corporation.

The telegraph company claims that it is unable to tell whether the railroad corporation claims the possession of the poles and wires along the Delaware and Maryland divisions or whether the railroad com-

pany desires the telegraph equipment removed from its right of way. The Maryland division extends from Philadelphia to Washington, and the Delaware division embraces the lines in Delaware and on the eastern shore of Maryland.

The Western Union Company was required by the court to furnish a bond of \$10,000 to cover damages that might be sustained by the railroad company as a result of the litigation.

Charles M. Shaeffer, of Philadelphia, superintendent of telegraph of the Pennsylvania Railroad, in his affidavit, sets forth that the railroad company has adopted a policy of owning all the telegraph poles along its route, as such ownership gives the road a higher degree of safety so far as operating the road is concerned. It is further declared that the railroad company proposes that there shall be a line of telegraph poles on either side of its tracks from Philadelphia to Washington, and that, such being the case, there is no room for the poles of the Western Union.

Early Employes of the New York, Albany and Buffalo Telegraph Company.

The publication on May 16, by the courtesy of Mr. E. M. Mulford, superintendent, Western Union Telegraph Company, New York, of the quaint old circular issued by the New York, Albany and Buffalo Telegraph Company, in April, 1851, in which were embodied the governing working rules promulgated by that company, and bearing the signature of John A. Johnston, its superintendent, which is framed and hangs in Mr. Mulford's office, has awakened considerable interest among old timers, and many thoughts reminiscent of the telegraph line of fifty odd years ago have been stimulated thereby.

The most important contribution to the subject is from that veracious chronicler and genial authority of the old telegraphic days, Mr. Sidney B. Gifford, of Syracuse, for many years a superintendent of the Western Union Telegraph Company in that city. He says that Mr. Johnston, during 1850, and prior to becoming superintendent of the New York, Albany and Buffalo Telegraph Company, when he succeeded Samuel Porter, was manager of the New York office, located at 2½ Wall street. Early in 1852, Samuel N. McGowan became the New York manager, but later resigned and went to Australia, in company with several operators, where they introduced the telegraph. They all became prominent in their adopted country, Mr. McGowan rising to be the head of the telegraphs and Postmaster-General. About ten years ago Mr. McGowan paid an official visit to this country on behalf of his Government, and died soon after his return to Australia.

Mr. Johnston soon severed his connection with the company, but why he did so after serving for so short a term as superintendent, Mr. Gifford does not remember. He remarks, however, that Mr. Johnston was efficient, both as a manager and as a superintendent.

Referring to managerial positions held during the years 1850-51, Mr. Gifford says that E. Payson Porter, a forty-niner, now at the Western Union main office in New York, and a brother of Samuel, was the manager at Geneva, N. Y., his appointment dating from 1849, while William C. Buell held a like position at Troy, N. Y., where William H. Hall, who learned telegraphy at Syracuse, and who died a few years ago, was an operator. Other managers of that period were George E. Allen, now retired and living in the country south of Utica, who had charge of the Rochester office, and who became an operator in 1847; and John D. Stone, also retired, whose entry into the telegraph service dates from 1846, who presided over the offices at Syracuse and who is now a resident of that city.

Another prominent figure was Madison Buell, who, from his entry into the service as a messenger boy, in 1847, became an operator on the line at Buffalo in 1850. In after years he returned to that city, where he is now a well known repeater chief in the Western Union office. Of Mr. Gifford himself, to whom reference he modestly omits, it may be remarked that his connection with the New York, Albany and Buffalo Telegraph Company began in 1850, when, on the completion of the line to Syracuse, he entered its service as a messenger boy. In December of the same year he was given charge of the office at Canajoharie, and in May, 1851, became manager at Auburn.

Mr. Gifford states that, so far as he knows, besides himself, Messrs. Madison Buell, Allen, Porter and Stone, are all that are living of those employed by the old company in 1850 and 1851.

Utilizing the Power of Tides and Other Forces.

Utilizing the power of tides is an inviting proposition, says the *Electrical Review*, but even under those conditions where there is a rise and fall of twenty or thirty feet, it has been shown that a tide motor would not be a paying investment. There are four sources of power at present in use, the various kinds of fuel, waterfalls, wind and the sun. The first two form our main dependence. Windmills are useful for small powers where other means are inconvenient, and in certain sections of the country, where cloudless days are the rule, the heat of the sun has been used on a small scale to drive machinery. At present there seems to be no reason to believe that the important position now occupied by fuel and waterfalls will be approached by any other source of power.

The testimony of progressive operators is that TELEGRAPH AGE is so thoroughly comprehensive in character as to make it absolutely indispensable to those who would keep informed. Its technical articles are of high practical value. Write for a free sample copy.

The New York Telegraphers' Aid Society.

The New York Telegraphers' Aid Society is the largest and most influential organization of the kind in the United States. It is in a highly prosperous condition. This is due to the fact that its affairs have always been carefully managed, and consequently it has appealed with exceptional directness and force for telegraphic support. Its purposes are most beneficent and it has conferred many benefits. In the recent election of officers, which occurred on March 24, the following named gentlemen, a picture and sketch of each of whom is given, were elected for the ensuing fiscal year:

E. E. BRANNIN THE NEW PRESIDENT OF THE NEW YORK TELEGRAPHERS' AID SOCIETY.

In the recent election of officers of the New York Telegraphers' Aid Society, Mr. E. E. Brannin, the vice-president, was elected to the presidency for the current year. Mr. Brannin is in the prime of life, having been born in New York city on March 15, 1854. In 1872, when but a boy of eighteen, he acquired the art of telegraphing at Matawan, N. J. Since 1881 he has been



E. E. BRANNIN.

President of the New York Telegraphers' Aid Society. in the service of the Western Union Telegraph Company, at 195 Broadway, New York. In 1888 he was promoted to be traffic chief and placed in charge of the Pennsylvania and New Jersey way division, a place he still continues to fill. Mr. Brannin, who is large of stature, while quiet and unassuming in his manner, possesses an alert mind and is deemed a good, all around telegrapher. He has filled his present position in the Western Union Telegraph Company most acceptably, intelligence dominating all of his actions. As a club member of the various organizations, insurance, social, etc., of his profession, he comes in close touch with fellow members, by whom he is regarded with affection and esteem.

JAMES CLAYTON WATTS, VICE-PRESIDENT.

James Clayton Watts, the new vice-president of the New York Telegraphers' Aid Society, is a sturdy son of Canada, having been born at St. Stephens, New Brunswick, in 1856. He entered



JAMES CLAYTON WATTS.

Vice-President of the New York Telegraphers' Aid Society.

the telegraph service at Woodstock, N. B., in 1874, but very shortly thereafter moved to St. John. Coming to New York in 1884 he first found employment with the Baltimore and Ohio Telegraph Company. Two years later, however, in 1886, he transferred his services to the Western Union Telegraph Company where he has since remained. He now fills the position of night quadruplex chief. Mr. Watts is a member of the Magnetic Club, of the Gold and Stock Life Insurance Association, is regent of the Amaranth Council, Royal Arcanum, and is secretary of the Royal Arcanum Club of Brooklyn. He is a very domestic man, fond of family and home, and resides at Bath Beach, Brooklyn, where he owns the dwelling in which he lives.

THOMAS M. BRENNAN, TREASURER.

Mr. Thomas M. Brennan, who was re-elected treasurer of the New York Telegraphers' Aid Society, a position he has filled most acceptably for a number of consecutive years, is a telegrapher who has more than forty years of active service to his credit. He was born in Ireland on Christmas Day, December 25, 1844, so that "Merry Christmas" to him has a double meaning. Coming to New York in 1850, he began his telegraphic career on October 11, 1861, when he became a messenger boy for the American Telegraph Company, at an office then located in the drovers yards at Madison avenue and 44th street. In 1862 he became a local branch office manager of that company, afterwards being employed at various other offices in New York and Brooklyn, subsequently

going to the superintendent's office at the old main office at 145 Broadway. In the merging of the American and Western Union companies Mr. Brennan, in 1870, was made night chief of the city department of the Western Union. Ten



THOMAS M. BRENNAN.

Treasurer of the New York Telegraphers' Aid Society.

years later, in 1880, he was transferred to day duty as chief of force and assistant manager of the operating department, a position he still retains.

CHARLES A. KILFOYLE, FINANCIAL SECRETARY.

Mr. Charles A. Kilfoyle, the financial secretary



CHARLES A. KILFOYLE.

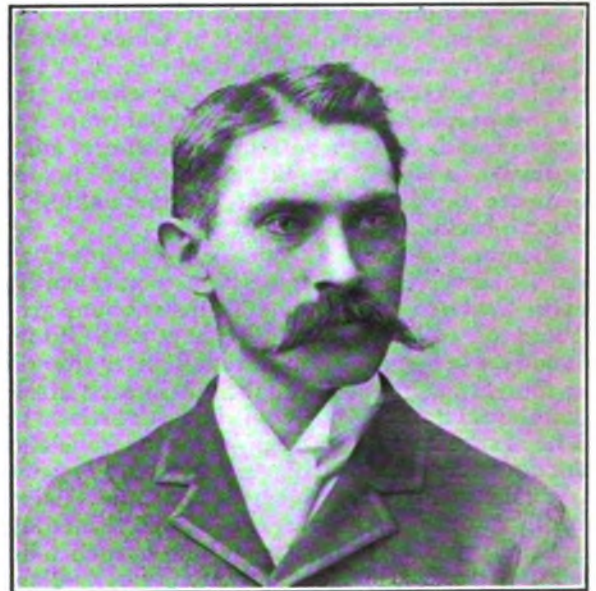
Financial Secretary of the New York Telegraphers' Aid Society.

of the New York Telegraphers' Aid Society, who succeeds W. J. Quinn, was born at Hartford,

Conn., on September 25, 1865. He became an American District Telegraph messenger in New York in 1878, and was appointed an operator for the Western Union Telegraph Company at Long Branch, N. J., in 1882. With the advent of the Baltimore and Ohio Telegraph Company, Mr. Kilfoyle was appointed manager of their Church street, New York, office, later taking charge of the office at Broadway and 26th street. With the absorption of the Baltimore and Ohio by the Western Union, Mr. Kilfoyle re-entered the employ of the latter, and was assigned to the race bureau. He is still in the service of the Western Union and works the wire which leads to the city of his birth. Mr. Kilfoyle is a modest unassuming man, careful in his attention to business, and will no doubt make an efficient officer of the society.

CHARLES J. POWER, RECORDING SECRETARY.

Mr. Charles J. Power, the recording secretary, of the New York Telegraphers' Aid Society, was born in Brooklyn, N. Y., February 8, 1861. At the age of eleven years he began his telegraphic career as a messenger in the American



CHARLES J. POWER.

Recording Secretary of the New York Telegraphers' Aid Society.

District Telegraph Company. In 1874 Mr. Power entered the service of the Western Union Telegraph Company in their Marine Department, at that time located in the old Cotton Exchange Building. Later he was transferred to the Commercial News Department where he became an operator in 1877. He has since continuously served in that department, where he is now one of the chief operators. He has been a member of the Executive Committee of the Telegraphers' Aid Society for a number of years, and for the past two years, secretary of the Morse Club, in both of which organizations he has always taken an active part.

"Get Out of the Ruts."

Editor TELEGRAPH AGE:

Being moved by the excellent editorials in your issue of May 16, under the headings, "Get Out of the Ruts" and "Industrial Harmony," I hope to be allowed to refer to the fraternity through your pages.

The thoughts you express lead me to suggest the great importance and desirability of influencing in every possible way the betterment of the every-day work done by all telegraphers. We are living in days of rush and change, when old ideas and processes are deemed too slow to meet the demands of what is called modern progress, and when novel and accelerated notions have invaded the business, the politics, the social life and even the religion of our people. Appreciating the points you raise, how can so many of the fraternity fall in the rut of trying to cling to the old and heretofore approved theories of telegraphy?

The technical articles by Mr. W. H. Jones, regularly appearing in each issue of TELEGRAPH AGE, would alone make an invaluable book for despatchers, operators and managers, and for anyone else connected with the complicated system of telegraphy. Then the clear and concise manner in which Mr. W. H. Doherty has handled the subject of "Telegraphic Bookkeeping," in a series of articles, gives the telegrapher an insight into that important department hardly to be found elsewhere, and is especially adapted to those who are holding mediocre positions in small commercial offices and are seeking advancement.

To simply read these articles by Mr. Jones and Mr. Doherty is not enough; they require careful, methodical drill and study. The instructions given should be followed carefully, and each student should have some one question him thoroughly on the various points brought out in each article. One should never pass a point in these articles until he is sure he is a master of it. The average operator does not seem to realize that nothing is gained by rushing hurriedly over the ground. This is readily proven in the average "copy" turned out, especially when typewritten. The branch office, small city office, and, alas! too many of the large main office operators, have no idea of "form" (copy) nor the technical laws governing sending and receiving operators, judging from their copies. Speed is no excuse for poor copies. Good "forms," laws governing sending and receiving operators bring success to all operators and sure promotion.

There is a lamentable need of a series of articles with a general exposition of the technicalities of commercial and railway work, embracing phrases, up-to-date abbreviations, eliminating the old single letter contractions as well as other contractions, and both railway and commercial telegraphers taught the absolute necessity of the universal adoption of the elementary part, at least, of Phillips' code.

The universal use of the second or closing punctuation marks, such as "qj" for closing quota-

tion mark and "py" for closing parentheses, as well as other compilations of vital importance to all operators, should be embodied in short articles in a practical, concise and lucid manner.

A careful study of message forms will not only be found interesting, but very desirable. Take, for example, the average "received" copy. What an improvement is made in the first line when the receiving operator takes pains to make either the first or both letters of an office call in capital letters and inserts a period between it and the next letter or the sending operator's "sine," and the same between that and his own "sine," leaving ample space between the latter and the "ck." Example:

125CH.MB.MK. 10 Paid.
or 125Ch.Mb.Mk. 10 Paid.

Following this how much better the copy looks when the operator in shifting for the "fm" begins about the centre or 35 on the typewriter, punctuating and writing the date in full.

Examples:

Chicago, Ills., May 23d-1903.

or in part caps,

CHICAGO, ILLS., May 23d-1903.

Why the telegram should be made up with the "fm" or originating point written in the left hand corner when all laws governing the practical business world demand the originating point on bill-heads, letter-heads and negotiable papers and everything else in the right hand, upper corner, seems incomprehensible.

It takes little or no time to take a message in a practical form and properly punctuate it, and there can be no question as to the advantages found in the same, as office calls and operators' "sines" often spell some word and greatly puzzles the recipient.

A good copy is the first step out of the rut and sounds the first note in "Industrial Harmony."

It is an actual fact that the average copy turned out at Buffalo, Boston and many other important centres, to say nothing of smaller cities, looks something like the following:

a235 chinze 9paid
Chicago ills 23 (date stamped here)

J J Miller

Transient, Buffalo n.y

Will arrive in buffalo tonight meet me at depot

Mrs J J Miller 435pm

One would judge from the copy that the receiving operator was "rushed," but a careful investigation on my part in nearly all the leading telegraph centers of the country proved the operators were either too lazy or "bull-headed" to make good copy, although ninety per cent. turning out such copies were expert operators.

If the average operator would try he would find it just as easy and much better by using the following form":

A235 CH. N. ZE.

9 Paid.

Chicago, Ills., May 23d-1903.

J. J. Miller,

Transient,

Buffalo, N. Y.

Will arrive in Buffalo tonight meet me at depot.

Mrs. J. J. Miller.

4:35 p. m.

The first point in this form is found in the top line. It is not crowded up against the originating point. The second point of distinct advantage to all business houses is found in the second line or originating point. When the message has been filed with other papers it is systematically correct and easily referred to. The third point is found in the body which is not crowded in two inches space on the left hand side but runs with other papers. The fourth point is found in the time; below the last name is the only place a typewriter operator can place the "time" so that it cannot conflict with the body or text of the message.

Constant Reader.

Des Moines, Ia., June 3.

The Pacific Telegraph.

BY C. W. MC REYNOLDS.

The article entitled "The Pacific Telegraph," appearing in TELEGRAPH AGE of May 16, was read with a great deal of interest, as it carried me back to the early days of the electric telegraph, the days that tried men's souls, at least those who were the pioneers on the Pacific line.

The writer, together with "Billy" Brown, Oscar Collier and — Swartzenburg, all from Cleveland, O., (with the exception of Brown who hailed from Norwalk,) left Cleveland early in September 1861, for the great unknown West, destined for points along the Pacific telegraph line. We were young, and the journey was not without great interest to us all. Passing through Quincy, Ill., at which point the force consisted of but one "man," we journeyed slowly through Hannibal to St. Joseph at which places but one operator comprised the force. At St. Joseph we left the railroad and from that point began our first experience in staging.

Many incidents occurred which, were they written, would recall to those alive, if any, many laughable incidents which perhaps have been long forgotten. We remained at Fort Kearney two days resting and recuperating for the long and weary journey still to come. Swartzenburg left the party at Chimney Rock, not far from Julesburg; Brown bade us adieu at Fort Laramie and Collier at Deer Trail, I think, a trading station on the line; the writer proceeding to Rocky Ridge, passing John Clow who was stationed at Slades' headquarters at Horse Shoe. Poor Clow passed away many years ago, and so far as I am able to ascertain the writer is all that is left of this early party of pioneers. The line was opened the following month while I was at Pacific Springs, having been transferred to that point, Clow having been sent to Salt Lake. "Billy" Hibbard, the first superintendent, and who was one of the first operators on the line, died a short time since at Colorado Springs.

Telegraphing in those days was primitive as compared with to-day. Each operator had a certain amount of line work to look after, as many as one hundred and fifty miles being allotted to some, and

this being done alone and on horseback, and in many places in the heart of the Indian country, was not a pleasant task to the tenderfoot.

I do not often become reminiscent over the past, for the present busy life gives but little time for such memories, but the article in TELEGRAPH AGE carried me back to those old days and a flood of memories seemed to crowd around me to the exclusion of all else. I personally do not know the names of any of the old force who may be living at this time, and believe I am among the very few who were employed on the old line, who are alive to-day. If this should reach the eye of any of them I should be glad to hear from them.

Timnath, Colo., May 30.

Matthew J. Davin Fifty Years a Telegrapher.

For half a century, dating back to 1853, the early days of the telegraph, Matthew J. Davin, of Boston, has been connected with the telegraphic service. Mr. Davin was born in New York on August 31, 1841, and when twelve years of age became a messenger boy for the Union Telegraph Company, at 23 Wall street. From this service he entered the employ of the old House-Printing Telegraph Company. Young



MATTHEW J. DAVIN, OF BOSTON.

Who has been Fifty Years in the Telegraph Service.

Davin next transferred his services to the New York, Albany and Buffalo Telegraph Company, at 2½ Wall street, the office manager being Alonzo B. Cornell, since Governor of New York State.

Prof. Morse and Ezra Cornell, founder of Cornell University, and deeply interested in the telegraph, were frequent callers. Mr. Davin became personally acquainted with both and recalls with pleasure many interesting chats had with them. These were the days of the old Morse register, messages being received on embossed tape. The companies of that day generally forbade their operators receiving by sound, claiming this method was unsafe. But a few years afterward the sounder displaced the old registering machine, and receiving by sound became universal.

Having become an operator, Mr. Davin entered

the service of the New York and Erie Railroad as night operator at Suffern's depot, N. Y.

Soon returning to New York, he accepted a position with the mercantile agency of B. Douglas on the private wire system. This concern occupied offices at 111 Broadway but moved farther up town to 314 Broadway, retaining its old quarters and connecting both offices by private wire. This firm, which was the predecessor of R. G. Dun & Co., was undoubtedly the originator of the "private wire" service, now so extensively used by banking, brokerage and general mercantile houses throughout the world.

In 1853, Mr. Davin went to Boston and entered the employ of the old American Telegraph Company, at 31 State street. In those days the hours were from 8 A. M. till 8 P. M., with one night off every two weeks. This was before the Atlantic cable was laid and foreign or European news came by steamer to Halifax, N. S., and was telegraphed to Boston for distribution. An operator was detailed to handle this foreign news each night, and it is needless to say he was kept busy. Mr. Davin remained with this company until its consolidation with the Western Union Telegraph Company.

He next went with the People's Telegraph Company as chief operator. The lines extended between Boston and Washington and intermediate points. The late W. H. Fessenden, the celebrated singer and a member of the Boston Ideals, was also employed at this time in the office as operator.

In 1864 Mr. Davin was transferred to the Baltimore office of the People's company and remained there thirteen months. These were the stirring war times, and Mr. Davin passed many alarm-filled days and nights, Baltimore being strongly anti-Union in sentiment. On several occasions the city was cut off from all communication with the outside world by the rebel forces.

Returning East Mr. Davin engaged with the New York, Newfoundland and London Company, a Newfoundland telegraph company connected with the Anglo-American Cable Company, and went to Hearts Content, N. F., on the opening of the great Atlantic cable in 1866, arriving there a few days after that event. He remained in Newfoundland with this company three years, dividing the time between Hearts' Content and Placentia.

While in Newfoundland Mr. Davin made the acquaintance of Cyrus W. Field of cable fame. Mr. Field having visited these stations at that time.

In 1869 he went to Boston again, where he was immediately appointed manager of the Bankers' and Brokers' Telegraph Company. The office of this company was at the Gold Exchange on Congress street, a few doors south of the Congress street entrance to the old postoffice, which was then on the site now occupied by the Stock Exchange. Gold was at that time at a very high premium and the amount of telegraph business handled was enormous.

This company was also eventually absorbed by the Western Union, and Mr. Davin was displaced. After several years with various companies he accepted a position with the New England Associated Press in Boston and continued in its employ until that concern dissolved, six years ago. Mr. Davin worked the heavy eastern press circuit for the New England Associated Press.

When this concern closed up its business Mr. Davin went to the Postal Telegraph-Cable Company, where he is working today.

"Matt" still retains his "grip," and is today the equal in skill of many of the younger men in the business. A part of his "trick" is to work the Chicago grain wire at the Chamber of Commerce from 10 A. M. till 2.30 P. M., or during market hours, and this wire is conceded to be a "roast" by all telegraphers.

Old Time Telegraphing.

"I am reminded," remarked a retired cordage dealer, now eighty-four years old, as he sat at lunch in down-town Delmonico's a few days ago, with a group of much younger men, says the "New York Commercial," "I am reminded of how times have changed when I read in the papers about the big telegraph bills of some firms nowadays. Why, I saw it stated not long ago that one firm of New York brokers pays out about \$250,000 a year for cablegrams alone. Whew! That staggered me.

"Why, only as far back as 1862 it was only on the most extreme rare occasions that we thought of using the telegraph in our business at all—and that business wasn't small by any means, either. I recall distinctly how my partner and I spent over an hour one day trying to get all we could into a telegram to a rope-walk concern up in Maine. The minimum rate for ten words was fifty cents to Maine points. I wrote out the telegram with a good deal of difficulty. My partner criticised it because its meaning wouldn't be quite clear he thought. So he tried his hand at it—with no better results. Then I called my son in to help us out. He did manage to express our meaning fairly well within the ten-word limit. Still, it wasn't just right in every particular. The thing was copied in long hand and the copy filed away, and we all heaved a sigh of relief and expressed some doubts yet as to whether the firm up in Maine would interpret the telegram correctly.

"It had never occurred to any of us to add half a dozen or so words at four cents apiece and thus have the thing properly plain. That would have been rank extravagance."

The articles, "Some Points on Electricity," published regularly in TELEGRAPH AGE, are filled with practical information for the up-to-date operator. Send for a sample copy.

New Telegraph Equipments.

NEW POSTAL OFFICE AT BOSTON.

The main office of the Postal Telegraph-Cable Company at Boston, Mass., will, in the near future, be removed from its present building on Devonshire street to more commodious quarters in the India Building, 88 State street. The operating room will be ample to accommodate seventy operators with capacity for growth. Among the conveniences of the new quarters will be lunch rooms for both the men and women employees. The space occupied by the operating department will embrace 5,500 square feet. It will be one of the best ventilated and lighted rooms in the country, no artificial light being required during the day time.

forty years. The new quarters are on the ground floor of the same structure, which is located at 26 Exchange street, and the equipment work was done under the direction of Mr. S. R. Crowder, of Richmond, Va., Mr. Frank T. Viles, of Boston, Mass., and others.

NEW POSTAL OFFICE AT DAYTON, O.

The new main office of the Postal Telegraph-Cable Company at Fourth and Jefferson streets, in a new ten story structure, at Dayton, O., was occupied for the first time on May 31.

The new quarters are thoroughly modern in every way and possess great advantages over the former location, where the business of the company was conducted under hampered and unsatisfactory conditions.



VIEW OF THE NEW OPERATING ROOM OF THE WESTERN UNION TELEGRAPH COMPANY, BALTIMORE, MD., DESCRIBED IN A RECENT ISSUE.

The receiving and delivery departments in connection with the new office will be located at 102 State street, connection being made with the operating department by pneumatic tubes. The manager's and cashier's offices and the linemen's storeroom and workshop, will also be located in this building. When completed the office will be one of the most modern and best equipped in the service.

NEW WESTERN UNION OFFICE AT PORTLAND, ME.

Manager Allan Woodle and Chief Operator C. D. Livermore of the Western Union Telegraph Company, Portland, Me., together with their able staff, are the happy possessors of a new main office, which was occupied for the first time on May 28. The old quarters, which the company had outgrown, were occupied for a period of about

The entire finish is of antique oak and the interior of the offices presents an appearance of neatness and has proportions more commensurate with the amount of business transacted. Every article of equipment in the new offices is new, none of the old instruments or appliances of any kind having been removed.

The new Carroll system of electric light indicators, together with the more modern type of push button service, create conditions that greatly facilitate the work of the operator, as by the adoption of this system the old method of continued "calling" is abolished.

Mr. Fenton T. Bott is the manager. He is assisted by Wm. H. Hunsaker, chief operator, and J. R. Hanrahan, press operator. The operators are: H. H. Githens, M. L. Flynn, S. C. Shank and

O. Paul, Jr. Loretto Brogan is the receiver and Robert Campbell the delivery clerk. There are ten messengers. Manager Bott assumed charge of the Dayton office in September, 1902, and from all indications has greatly improved general conditions for his company.

Mr. S. C. Shaw Becomes Superintendent of Telegraph of the Terminal Railroad Association of St. Louis.

Mr. Samuel C. Shaw, whose appointment as superintendent of telegraph of the Terminal Railroad Association of St. Louis, Mo., was noted in



SAMUEL C. SHAW.

Superintendent of Telegraph, Terminal Railroad Association, St. Louis, Mo.

TELEGRAPH AGE, in its issue of June 1, has had long experience in both commercial and railroad telegraphy, climbing the ladder of promotion step by step. He is a native of St. Louis, where he was born on August 15, 1859. He entered the telegraph service as a messenger in 1875. Being naturally of a bright turn of mind he soon acquired the art of telegraphy and served as an operator for the Western Union Telegraph Company at St. Louis and other cities. In 1878 he secured employment with the Terminal Railroad Association of St. Louis as an operator. His succeeding promotions to the positions of dispatcher and chief dispatcher, and now to be superintendent of telegraph of the system, has been served so faithfully and long, were well earned, bestowed in recognition of inherent ability; and in the latter place he is a worthy successor to his former chief, Mr. E. A. Chenery, who has become superintendent of telegraph of the Missouri Pacific.

Don't borrow your neighbor's paper; subscribe yourself for TELEGRAPH AGE. You can't afford to be without it.

The New Superintendent of the Postal at New Orleans.

After holding the position of manager of the Postal Telegraph-Cable Company, at New Orleans, La., since October, 1899, when he was promoted from the assistant managership, William A. Porteous, as announced in TELEGRAPH AGE of May 16, has been further advanced to the superintendency of the newly created Sixth District, with headquarters at New Orleans, the appointment going into effect on June 1. This act is a distinct recognition of merit and confers reward upon a man who has proved his capacity for high office. Mr. Porteous is of Scottish extraction, and to this fact, of which he appears to be proud, may be attributed much of his sterling character, the possession of which has had a marked influence on his career. He is a native of the city in which he is finding a reward for faithful service, is yet a young man, and has been thoroughly grounded in telegraph work. Beginning when but a boy in the employ of the Western Union Company as a messenger on the floor of the Cotton Exchange, he finally became an expert operator, and worked at many other points in the country. With the advent of the Postal in the Crescent City in 1891, he became connected with that company, with which he has since been associated, rising step by step until he has attained to one of the best positions in its bestowal. Mr.



WILLIAM A. PORTEOUS.

The New Superintendent of the Postal Company at New Orleans, La.

Porteous is a man of fine instincts, of excellent attainments, a competent business man, and enjoys the confidence and respect, not only of his superior officers, but of his office associates as well, those who know him best because of every day contact.

"Pocket Edition of Diagrams," etc., is \$1.50 per copy.

The Postal Manager at Fort Worth, Tex.

B. Frank Shrimpton, the manager of the Postal Telegraph-Cable Company of Texas, at Fort Worth, Tex., is one of the youngest telegraph managers in the United States. He was born in Aurora, Ill., on December 5, 1877, and is consequently but twenty-five years of age. Beginning as a messenger with the Western Union Telegraph Company at Kansas City, Mo., on October 18, 1893, he became an operator in that office in 1897. On October 1, 1898, he resigned to enter the employ of the packing firm of Swift & Co., Kansas City, as an operator on their private wires. On May 22, 1899, he went with the Postal Telegraph-Cable Company, at St. Louis, but in August of the same year was obliged to throw up his



B. FRANK SHRIMPTON.

Manager of the Postal Telegraph-Cable of Texas, at Fort Worth, Tex.

position and seek relief from hay fever in Colorado. After brief periods of employment at Austin, Tex., New York, Washington, D. C., and Chicago, on September 1, 1901, he accepted employment with the Texas Postal at Dallas, Tex. On January 1, 1902, he was appointed manager of the Postal interests at Waco, Tex., and on November 1 following, was transferred to the manager-ship of the Fort Worth office. Mr. Shrimpton is a painstaking manager, is prompt and attentive to business, possessed with a genial manner, and has won for himself an excellent reputation in his adopted city.

Where there is energy there is always success.

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.]

NEW ORLEANS, LA., WESTERN UNION.

The Western Union office was considered one of the handsomest decorated buildings during the recent Confederate reunion held here.

Following is a copy of a message sent to General Robert Lowry, Jackson, Miss., by the Mississippians of this office, in honor of the dedication of the new State House: "Greetings to our native State, may she ever be right, but right or wrong, our home."

C. H. H. Cottrell has returned from New York. Ashton Carroll has gone to El Paso, Tex.

Our old time friend, W. D. West, paid us a visit a few days since, and a royal greeting was extended to him. He was accompanied by his estimable wife.

The engagement of Miss L. Garrigan to Henry Farwhener, of this office, is announced. The wedding takes place June 17.

Arrivals: T. K. Lewis, P. H. Wilson, R. F. Ross, G. H. Millener and John Plume. Departures: F. H. Bell and J. W. Porter.

CHICAGO, ILL., WESTERN UNION.

Wire Chief Benjamin Powell, who has been forced to leave this climate on account of his health, has gone to El Paso, Tex., for an indefinite period. Mr. Powell has been a faithful worker and was a valuable wire chief. He also acted as Sunday chief operator. It is hoped that the change will be beneficial.

Assistant General Manager J. C. Barclay, of New York, who visited this city a short time ago, was warmly greeted by his many friends and admirers.

J. F. Nathan, chief operator at Boston, Mass., took a trip recently to Chicago. Mr. Nathan seems pleased with his new location.

Thomas Hanley was a visitor here a few days ago, coming from old Mexico, where he and Mrs. Hanley have been sojourning for the past few

months. He was not accompanied by his wife, she having remained in Mexico.

The home of Mrs. Pollock, of the St. Paul division, was recently burned. She lost almost everything.

F. G. Gardner, an enterprising young man, who hails from Salt Lake City, Utah, is ably assisting Division Chief Harry Allison. He is fully equipped for the position, being familiar with all quadruplex work as well as the intricate work of handling a division.

Some of the young men of this office, comprising the check clerks and check boys, have organized a base ball team under the name of "Clarmonts," the principals being Messrs. I. J. Wilson, L. Wegner, J. Ryan, A. Wilmot, H. Steinberg, G. Brautigan, W. Wallace, R. Williams and F. Parker. They are to play against the "Lone Star" team, also composed of young men of this office, whose names will later appear. The game will take place at Michigan avenue and VanBuren street, June 21.

The military ball given by the Signal Corps on Friday evening, May 8, at their armory, proved to be a most enjoyable affair. The grand march, led by Colonel James Stuart, began at ten o'clock and included 350 couples, made up largely of Western Union and Postal operators. Medals won at rifle practice, by members of the Signal Corps, were presented, and it is interesting to observe that some of our operators are as well qualified as riflemen as telegraphers. Among the recipients were Messrs. Deacon, Sherwood, Billingsley, Cosgrove and Price, sharpshooters. An innovation was introduced that was very favorably received, Messrs. Stark and Prescott, both operators, sounding the entire number of bugle calls used in a day's routine while in the field.

Among those present were Mr. and Mrs. W. J. Lloyd, Mr. and Mrs. J. J. O'Brien, Mr. and Mrs. E. D. Bangs, Mr. and Mrs. Henry Jahn and Mr. Potter of the Postal.

The friends of S. G. Brown, formerly of this office, who was forced to go South on account of his wife's health about a year ago, will be pleased to learn that he was recently appointed chief operator for the Western Union at El Paso, Tex., vice J. W. Brooks, transferred.

CHICAGO, ILL., POSTAL.

On account of the floods in the western country, business in that section was demoralized for a short time. Six men were sent to Omaha to take care of the western business.

Among the arrivals are Messrs. Burmeister, Haensler and Thomas Walsh.

Departures: E. A. Leekley, O. T. Donnolly, W. B. Scrivener and P. H. Wold.

M. J. Paulson, our night timekeeper, has gone back to a wire, days, being succeeded by Richard Ahlers. We are sorry to lose Mr. Paulson, as he was a most acceptable timekeeper.

BUFFALO, N. Y., POSTAL.

Mr. Fred Hver, who for the past month has been dangerously ill with malaria, is now improving.

Mr. George Haynes, of the New York bonus wire, nights, is the proud father of a daughter.

Messrs. Kane and Witter, of Rochester, N. Y., have been added to the force.

Mr. Erastus Shephard has been assigned to the key after serving a number of years as assorting clerk.

Mr. R. C. Collins, night operator at the Iroquois, has been promoted to the main office.

PITTSBURG, PA., POSTAL.

The employes of the Postal Telegraph-Cable Company defeated the Western Union Telegraph employes in a game of ball on June 5, at Lafayette Park, Hazelwood, by a score of 17 to 6, this making the second defeat for the Western Union team this season by Postal. The line-up was as follows: Postal—Lonard, Short, Morse, Hall, Moore, Bruce, Millee, McDowell and Rinehard. Western Union—Reynolds, Scott, Klee, Dugan, Newman, Haws, Carroll, Malone and Brown. The third game will probably be played at Exposition Park the first week of July. The Postal boys would like to arrange a game with National Transit team.

SAN FRANCISCO, CAL., WESTERN UNION.

Arrivals: Mr. E. B. Harrington, of the district branch, Los Angeles, has been transferred to this office as assistant manager, vice Mr. R. W. Whipple, who goes to the broker office of Bresse & Co.

Mr. Whipple also works a short P. M. trick in the main office after broker hours, and maintains his magnificent sending qualities. His rest from active service has been of much benefit to him.

Mr. C. S. Raleigh, of New York, and recently of Denver, is with us and works the New York wire with Egbert Brown. Mr. Raleigh is one of the best and is making many friends.

Messrs. J. S. Woods, J. H. Tobin, and H. B. McChesney, are from Denver; and B. L. Brooks, formerly manager of Las Vegas, N. M.

In the Wheatstone department the following operators have been added: Miss Jessie Batchelder, Miss Ida Murray and Mrs. T. E. Hoffman.

Departures: Mr. H. W. Codd, to Chicago and the East; F. L. Bradley, for an extensive pleasure trip to the Hawaiian Islands.

Mr. G. A. Mitchell has returned to the main office after a sojourn in Oakland, taking Western Associated Press for the past fortnight in the way of variation.

Mr. E. L. Rector is back again, convalescent from sickness.

Morris B. Dudley has married Miss Daisy Maxfield, of the Wheatstone department.

Hugh Rissell has become the father of a son, and John Holmes the father of a daughter.

In consequence of the mid-country floods we have been greatly taxed to handle the business, the force working considerably out of regular hours.

Mr. Ed. Spawr succeeds William Otte in the baseball team of this office for this season; it challenges anything west of the Rockies for the telegraph championship.

PHILADELPHIA, PA.

My motto—honorable dealing. OPERATORS, THROW PREJUDICE ASIDE long enough to look into the merits of the No. 3 Fox, and the No. 6 Fay Sholes typewriters for "newspaper" as well as "message" work. Booklets, prices and easy monthly payment plan upon application to me. SPECIALTIES—Remington's and Smith's fitted with reversible rolls, \$40.00 and \$45.00, GUARANTEED. BEAR IN MIND—No "mill" no work in this city. Write or wire D. A. Mahoney, Western Union, Philadelphia.

WESTERN UNION.

Frank R. Webb, our new night manager, whose appointment was briefly mentioned in the last issue of TELEGRAPH AGE, was born in this city 45 years ago. At the age of 11 he entered the employ of the Pacific and Atlantic Telegraph Co. as messenger, two years later being made clerk for the Franklin Telegraph Company. In 1873 he was promoted to be operator on the night force, remaining in that capacity until the absorption of that company by the Pacific and Atlantic Company. Here his abilities were recognized and he was appointed night manager during the busy Centennial year of 1876, a position he held until the company was absorbed by the Western Union Telegraph Company. In 1882 Mr. Webb was appointed chief operator for the Bankers' and Merchants' Telegraph Company. From 1885 to 1890 he was an operator for a private firm, afterwards entering the service of the Western Union Company as operator. In 1892 he was advanced to night wire chief, in which capacity he has remained, filling the position very successfully, until his present appointment, which was a very gratifying one all around.

Mr. Webb is a genial gentleman, making friends easily, and has the happy faculty of retaining them. He has already succeeded in getting a firm grip upon his new duties and will no doubt prove a fitting successor to his worthy predecessor.

Our present chief operator, Mr. J. P. McLoraine, is to be congratulated upon the birth, several weeks ago, of a second daughter.

Mr. W. B. Powell, of this office, was married on June 9 to Miss Catharine Parks, of Chattanooga, Tenn.

Miss Edith E. Vanarsdale, daughter of our cashier, W. E. Vanarsdale, was married recently to Howard G. Sharpley, of this city.

Owing to the continued illness of Manager Finan, of the Bullitt Building office, Mr. Harry Hehl is still the acting manager.

W. S. Sullenberger, former manager at New Brunswick, N. J., has been appointed manager at Lancaster, Pa., vice O. C. Balmer, resigned.

H. J. Butland, an operator well known here, now located at Easton, Pa., was married on April 14 to Miss L. M. Smith, of Bartlett, N. H.

PHILADELPHIA, PA., POSTAL.

E. W. Price, having returned from the Wilmington, Del., office, remained here but a few days and then left for Atlantic City, N. J., where he expects to stay during the summer season.

The Messrs. T. J. Farley, Jr., and Phillip Riley have been sent to Wilmington, Del.

By the erection of a new platform, supplemented with a railing enclosure, Chief Operator Stimpson's headquarters have assumed such a legal aspect that the title "Judge" has been given him.

It is interesting to note to what extremes the plans have already been carried to utilize every available inch of space to provide desk room.

Mr. Joseph Beasley has returned after an extended tour through the South and West.

A new and much needed distributing table, provided with convenient trays, has been installed in the operating room, replacing one which had long since become inadequate to the demands of the office.

Much sympathy is felt for Mr. A. Goldstein who was advised of the death and burial of his brother, at the home of his parents, in Winnipeg, Man. The circumstances surrounding the death were very sad and fell the more heavily on Mr. Goldstein on account of his inability to be present. He, however, left for Winnipeg at the first opportunity, carrying with him the best wishes of a host of friends.

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.

The executive offices on the sixth floor have been rearranged to make room for the office of the assistant general manager. The office of the president and general manager, Col. R. C. Clowry, is on the corner of Dey street and Broadway, with windows facing on both of these thoroughfares. Next to this is the one occupied by the president's office force. Next to this office on the Dey street side of the building is the one occupied by the assistant general manager, Mr. J. C. Barclay. Adjoining Mr. Barclay's office is the bureau of contracts, presided over by Mr. G. W. E. Atkins, superintendent. Next to this department is the office of Mr. Thomas F. Clark, vice-president of the company. Then comes the room occupied jointly by Mr. A. G. Saylor, chief clerk to General Superintendent B. Brooks, and Mr. W. N. Fashbaugh, superintendent of leased lines.

Mr. B. Brooks, general superintendent of the eastern and southern divisions, occupies the adjoining office, and adjoining Mr. Brooks' office are the spacious quarters of the auditor's department, presided over by Mr. J. B. VanEvery, vice-president and auditor of the company. On the opposite side of the hallway is the secretary's office, headed by Mr. A. R. Brewer, together with his

staff, and at the extreme end of the floor is the office of Mr. George H. Fearons, the general attorney of the company.

Mr. Fred O. Nourse, general traffic chief of this office up to about a year ago, when he resigned to enter the hotel business, has bought the Lake House at Partridge Lake, N. H., in the White Mountain section. The house has been renovated and put in good condition for the accommodation of guests. Mrs. Susie Goodwin will assist Mr. Nourse in the management of the house, which has already been opened to the public.

Mr. J. R. Klinefelter, an old timer in this office, has resigned his position to enter other business, at Woodbrook, Md.

Mr. Amos L. Bougher, who represents TELEGRAPH AGE in this office, is making a record in obtaining a large number of subscriptions. Mr. Bougher has recently secured many subscribers among the lady operators, and he carries about with him an ample supply of subscription blanks ready for those who wish to favor him with their business.

We regret to learn of the death of Mr. Joseph P. O'Leary, brother of Mr. M. J. O'Leary, secretary of the Telegraphers' Mutual Benefit Association.

Mr. M. W. Hamblin, the manager of the New York main and city offices, although he has only occupied this position about a year, is regarded as one of the most efficient managers the New York office has ever had.

Among the expert lady operators employed at the Central Cable office are: Miss M. White, Miss K. Tyrrell, Miss Anna Brown, Mrs. E. H. Rogers, Miss I. C. Tracy and Miss Anna Dunnigan. These, together with Misses K. Finnegan and J. Brown as office girls, constitute the female force of this office.

Mr. E. G. Powers, of the Commercial News Department, has resigned to accept a position with a broker at Toledo, Ohio. Mr. C. W. Wallower fills the vacancy.

At the entertainment lately given by the telegraphers of this city, at Turn Hall, a special feature of the occasion was the singing by Mr. D. S. Murtha, a well known singer of Brooklyn, of Barrington L. Brannan's song, "My Old Virginia Home Upon the Farm." The song made a decided hit and the artist had to repeat it before the audience was satisfied. Mr. Brannan, who is a member of the night force, also scored another hit with his new march and two-step, "The Norsemen," which is now being played at the theatres and by the orchestras in New York. The orchestra had to repeat this number also.

Mr. H. W. Jones, chief clerk of Superintendent Wells of the Long Island Railroad, Long Island City, gave a dinner and reception at his home, 1231 Herkimer street, Brooklyn, to twenty-two members of the Social and Dramatic Club, on the evening of June 5. The favors were unique, and the decorations of special design commemorative of the occasion.

STANDARD OIL COMPANY NOTES.

The operators for the Standard Oil Company, at 26 Broadway, have all been attending the Yetman school for some time and are fast becoming proficient on the transmitter.

Mr. W. T. Daley, of the Central Cable office, has been appointed to fill the vacancy caused by the resignation of G. W. Ellis.

Mr. L. W. Sitzenstatter is very ably filling in the time while the operators are on vacation.

NEW YORK, POSTAL.

The supply department of the company is now located in its new quarters, Nos. 12 and 14 Desbrosses street. The removal of this department uptown releases considerable office and cellar space, which will now be utilized to advantage by the executive officers.

Chief J. T. Needham and Stephen Fitzgerald are absent on vacations, the latter to be away for two months at Manchester, Vt.

T. E. Green, of the city department, has resigned.

Wm. S. Williams of the night force met with a very sad loss on Monday, June 8, in the death of his son, a promising young man 22 years of age, who was killed by a trolley car in Jersey City colliding with the bicycle which he was riding. Mr. Williams has the sympathy of the whole force in his bereavement.

J. T. Ewing, of this office, and Miss A. A. Biggs, of Jersey City, were married at the residence of the bride's parents in Jersey City, on Monday, June 8, and left for Atlantic City the same day on their wedding tour.

Messrs. Charles L. Leibrock, R. C. Patterson, W. J. Crozier, W. C. Mullin, H. C. Klein and Mr. Thomas are late arrivals who are on the waiting list.

The rooms formerly occupied by Mr. W. D. Francis, superintendent of supplies, on the tenth floor, have been turned over to Mr. Minor M. Davis, traffic manager, and Mr. John Doran, superintendent of complaint and claim department. Both of these officials had previously occupied rooms on the ninth floor.

Mr. C. A. Stimpson, chief operator of the Philadelphia office, was a recent visitor.

THE ASSOCIATED PRESS.

Mr. H. R. Clark, chief operator of the New York bureau, has resigned to enter other business.

Mr. H. C. Conley, of Baltimore, Md., has resigned and Mr. J. L. Fitzpatrick has been appointed to fill the vacancy.

Mr. W. J. Killea and Mr. F. A. Pressell, of the Albany, N. Y., bureau, have resigned and Messrs. J. H. Boothby and J. L. Yawman have been appointed to fill their places.

Mr. W. J. O'Neil, of the New York bureau, is taking his vacation and A. J. Coates, from Dayton, O., is relieving him.

Mr. J. J. Newcomb, of the New York bureau, is relieving the operators in the New Haven, Conn., bureau, during their vacation season.

Mr. A. J. Ivey is relieving the New York State operators during their vacation.

Mr. G. S. Stryker is relieving on the Connecticut circuit.

Messrs. A. J. Clark, M. F. Dacey and J. Feeley are relieving the operators on the New England circuit during the vacation.

In connection with the new system of vacations, it will astonish those interested to learn that it will require the services of about twenty-five additional men for some six or seven months in order to relieve each of the operators in the Eastern division alone for two weeks. The Western division being much larger, will, therefore, require more men or a longer period to take care of the interest of each operator.

The Municipal Electricians.

G. F. Breitenstein, superintendent of fire alarm telegraph, Utica, N. Y., died on June 2 of typhoid fever.

The published annual report of the Wire Department of the City of Boston, Mass., of which Patrick J. Kennedy is commissioner, has made its appearance. It affords a comprehensive statement of what has been accomplished during the past year at the Hub in this important field of municipal care, and in its descriptive matter, tables, illustrations, etc., forms a valuable and convenient handbook of reference.

The Eighth Annual Convention of the International Association of Municipal Electricians will be held in the Banquet Hall, of the Hotel Rudolf, Atlantic City, N. J., on Wednesday, Thursday and Friday, September 2, 3 and 4.

The following rates have been secured from the hotel: \$3.00 each, one or two persons in one room; \$2.50 each, three or four persons in one room, and two beds; with bath, \$4.50 one person and \$7.50 for two persons. Those desiring rooms should write to Mr. Wm. Cochran, manager, Hotel Rudolf.

The following papers have been promised for the occasion: "The Best Methods for Lighting Small Cities;" "Classifying of Records of Electrical Departments, and Standard Specifications for Supplies and Contracts;" "Importance of the Fire and Police Telegraph Systems."

There will also be a "topical discussion" of line construction, which is expected to bring out an interesting talk by the members regarding this important question.

On the last day of the convention an opportunity will be given to the associate members to explain such exhibits as they may make. It is hoped that a large exhibit by manufacturers and selling agents will be made in order that the members may be fully advised of all that is new and of especial interest on the market.

The discussion of practical subjects of inquiry, which have been addressed to the "question box," will be an interesting feature of the occasion.

You can't afford to be without TELEGRAPH AGE.

Humors of the African Transcontinental Telegraph.

The following letters are from our Johannesburg, South Africa, correspondent, who sends them as samples of a kind frequently received from native operators along the Transcontinental line.

Here is a copy of an official letter written by a native operator, at Kota Kota, Lake Nyassa, remitting a fine for late attendance:

The Superintendent at Blantyre.

Dear kind Master:

Herewith haf-crown fine, but it is not haf-crown, for it is three shillings. Please send the change in candles.

Your most obediently boy,

Sam Kataye.

This is a duplicate of an official letter of complaint from a native operator at Karonga, who spent the cash he had taken in over the receiving counter:

Dear kind Sir:

Mr. ——— (Inspector) came into my office from North and said unto me "What have you done with that—money?" I reply, "I have spent it, Sir." Then Mr. ——— curse me and these are the words which he curse:—"You black cow, you missionary ———, etc. I will kill you," and then he jump at me, sir, and he kick me many times till I am sick. This is not good, kind master. I am a christian boy, I pray God for you, sir.

Your obedient boy,

Walter Aaron.

The author of the above is at present doing "time" for his sins. Some of the native Africans make much better operators than Indian half castes or Portuguese.

Limit of Taxing Power.

The question of the use of the taxing power by municipalities was broadly treated in a decision by the United States Supreme Court on June 1, in the case of the Western Union Telegraph Company vs. the city of Philadelphia, in which it was held that the right of the city to tax poles and wires is not unlimited, and that it is questionable whether it can be exercised for purposes other than taxation. The court rules that a municipality can impose no more than reasonable tax on such property.

It appears that the municipal authorities devised a large tax in order to compel the corporation to place its wires under ground. The decision, therefore, means that municipalities should compel the removal of wires from poles to conduits by direct legislation, by virtue of the police power, rather than by excessive taxation.

"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 International Telegraph Conference.

The ninth quinquennial conference of the States adhering to the International Telegraph Convention was opened in London, England, on May 26, by the Postmaster-General (the Right Hon. J. Austen Chamberlain) at the Examination Hall of the Royal Colleges of Physicians and Surgeons, Victoria-embankment, W. C. The following States were represented: Argentine Republic, Austria, Belgium, Bosnia-Herzegovina, Brazil, Bulgaria, Cape of Good Hope, Ceylon, Commonwealth of Australia, Crete, Denmark, Dutch East Indies, Egypt, France and Algeria, Germany, Great Britain, Greece, Holland, Hungary, India, Indo-China, Italy, Japan, Luxemburg, Madagascar, Montenegro, Natal, New Caledonia, New Zealand, Norway, Persia, Portugal, Portuguese Colonies, Roumania, Russia, Senegal, Servia, Siam, Spain, Sweden, Switzerland, Tunis, Uruguay and the United States.

In welcoming the delegates, the Postmaster-General referred to the importance of the matters which they had met to discuss, and wished them success in their labors, which had for their object the amelioration of international telegraphs in the interests of the public. Dr. Hennyey de Henny, the principal delegate of the Hungarian Administration, responded, and, as the representative of the Administration which last entertained the conference at Buda Pesth, gave a resume of the events affecting the International Telegraph Convention which had occurred since the last conference. The business of the conference will go on from day to day until the end of June. Mr. J. C. Lamb, C. B., C. M. G., the principal delegate of Great Britain, was chosen president of the conference, and Mr. John Ardron and Mr. P. Benton vice-presidents. The following presidents of committees were appointed: M. Delarge (Belgium), M. Sydow (Germany), M. Neubauer (Austria), M. Bordelongue (France). These gentlemen are to be assisted by the following vice-presidents: M. Gvozditch (Servia), M. Sevastianoff (Russia), M. Pop (Netherlands), and M. Pereira (Portugal).

The secretarial duties of the conference will be carried out by the International Telegraph Bureau of Berne, Switzerland, which is represented by M. le Colonel Frey, the distinguished director of the bureau, M. Eschbaecher, the vice-director, and M. Homberger. On the nomination of the president, Mr. N. Hautrive, Mr. J. I. deWardt, and Mr. J. F. Lamb, of the General Post Office, London, were appointed as the British secretaries to the conference.

The Right Hon. Austen Chamberlain, M. P., the English Postmaster-General and the head of the telegraph department, entertained at dinner, on May 26, the delegates to the International Telegraph Conference at the Grafton Galleries, Grafton street. Among those present were the Duke of Norfolk, the Duke of Abercorn, the Marquis of Londonderry, the Marquis of Tweeddale, Lord George Hamilton, Lord Kelvin, Lord

Allerton, Sir Thomas Sanderson, Sir W. Huggins, Sir James Fergusson, M. P., Sir J. Wolfe Barry, Sir W. Brooke, Sir A. J. L. Cappel, Sir H. Fisher, Sir Frederick Harrison, Sir Robert Hunter, Sir George Murray, Sir J. Denison Pender, Sir W. H. Preece, Sir Spencer Walpole, Sir Douglas Straight, the Hon. A. G. Brodrick, Mr. J. C. Lamb, C. B., C. M. G., Mr. Bonar Law, M. P., Mr. Henniker Heaton, M. P., M. Marconi, Hon. G. Peel, Hon. H. Copeland, Hon. W. P. Reeves, Mr. G. W. Smith, C. B., Mr. J. M. LeSage, Mr. Lang, C. B., Mr. Moberley Bell, Mr. Reynolds, C. I. E., Mr. Buxton Forman, C. B., Mr. Babcock, C. B., General A. W. Greely, Mr. George G. Ward, Mr. Daniel Le Rougetel, Mr. H. St. L. Smith, Hon. Henry Marsham, Mr. Nops, I. S. O., Colonel Thompson, Major Darwin, Major O'Meara, C. M. G., Mr. Stratford Andrews, and a large gathering of representatives, including Colonel Frey, Baron Fries, Commander Carderelli, his Excellency M. Metaxas, Dr. Neubauer, Colonel Schleyer, Commodore Suenson, Major Pop, M. Ivanoff, M. Grozditch, M. Sydow, and many others. The Postmaster-General, speaking in French, expressed his great pleasure at meeting the delegates from foreign countries, and stated that he hoped public benefit would result from the conference which had taken place.

Those present at the conference representing the American telegraph interests are: General A. W. Greely, of Washington, D. C., the United States Government; George G. Ward and Albert Beck, of New York, the Commercial Cable Company and the Postal Telegraph-Cable Company, and Daniel Le Rougetel, of London, England, the Western Union Telegraph Company.

It is clear from the trend of expressed opinion that the conference will not adopt the new official vocabulary proposed by Belgium and seconded by France, but which is opposed by important commercial interests in the United States and Great Britain. The Germans having yielded to Anglo-American pressure, the scheme probably will be postponed, which will be equivalent to its rejection.

Gen. Greeley's instructions were to oppose the scheme, and having done this by communication and in committee, his work ended. One beneficial reform will probably result from the conference, namely, a concession to commercial men by which any arbitrary group of five letters will be allowed as a word.

Twelve years ago the official vocabulary was initiated, and seven years ago the first edition was introduced, only to be withdrawn from the serious blemishes and deficiencies it contained. A new and much larger edition has been issued within the past eighteen months, and, as at the last convention, it was left open for the next or some future convention to authorize its compulsory adoption for all cipher messages. The first issue was withdrawn mainly because the adverse criticism of commercial bodies exposed its serious risks.

The American Telegraphers' Tournament Association.

The temporary organization composed of Messrs. C. A. Stimpson, W. W. Donnelly, C. B. Wood, D. A. Mahoney, and H. W. Hetzel, of Philadelphia, after having held three preliminary meetings in which they laid out proposed plans for a telegraph tournament next October, held a meeting on June 10 for the purpose of effecting a permanent organization. The meeting was most enthusiastic and augurs well for an unprecedented success of the Philadelphia telegraphers' tournament. The following officers were elected: President, W. A. Connor, manager of The Associated Press; vice-president, John Wintrup, International Mercantile Marine; secretary, C. B. Wood, Western Union, and treasurer, H. W. Hetzel, of the Postal. An advisory board was also elected composed of the following gentlemen representing the various corporations in the telegraph and telephone fields:

J. P. Altberger, superintendent of the Western Union; L. Lemon, superintendent of the Postal; C. M. Sheaffer, superintendent, Pennsylvania Railroad; C. M. Lewis, superintendent Philadelphia and Reading Railroad; S. S. Garwood, Bell Telephone Company; C. E. Wilson, Keystone Telephone Company; F. M. Griffin, Long Distance Telephone Company, and J. C. Sager, chief of Electrical Bureau.

It has been arranged that the Executive Committee shall be composed of the chairman of the various committees, so that every department shall have recognition and take part in the executive work. C. A. Stimpson, of the Postal, was elected chairman and W. W. Donnelly, of the Western Union, vice-chairman, the following committees being represented on the committee: Finance Committee, D. A. Mahoney, Western Union; Reception and Entertainment Committee, W. S. Sullivan, Postal; Program Committee, J. J. Mishler, Reading Company; Committee on Prizes, Preston Stratton, with a brokerage firm; Committee on Hall, Hon. G. W. Dunn, Postal; Committee on Printing, S. W. Graham, Pennsylvania Railroad; Committee on Contest Rules, R. C. Murray, Jr., Western Union; Committee on Press, L. S. Abrams, of The Associated Press; New York Committee, J. B. Taltavall, publisher TELEGRAPH AGE; H. R. Clark, chief operator The Associated Press; G. W. Conkline, of the Yetman Transmitter; Walter P. Phillips, author of Phillips' Code, now with the American Graphophone Company; Fred Catlin, the expert tournament manager; A. E. Marr, expert code operator, representing broker interests; Minor M. Davis, traffic manager, Postal Telegraph-Cable Company, and J. C. Barclay, assistant general manager of the Western Union Telegraph Company.

Each committee will be composed of five members. A Ladies Auxiliary, with Miss Clara Grimley, of the Western Union, at its head, will be a prominent feature of the demonstration. It was decided that all lady operators shall be honorary members.

A set of by-laws was adopted which will govern the working of the association. A general meeting will be held on the second Wednesday of each month, at 1414 Arch street, Philadelphia.

A circular to be forwarded to all sections of the country and Canada will be prepared and mailed at an early date.

The contests will be unique and various. It is proposed to have a contest for veterans over fifty years of age, and it is expected this exhibition will create peculiar interest showing, as it will, that operators over fifty are not by any means dead letters.

There will probably be a contest of hunting "bugs" on the quad, for wire chiefs and others.

The railroad telegraphers will have a contest incident to their own class of work, likewise one for the broker operators.

Besides contests in commercial, cipher, press, and machine transmitter work, there will be an effort made to have an exposition of, and a contest in, cable work on the siphon recorder.

A commodious hall will be engaged for the contest in which there will be a display which will make the coming tournament a veritable "World's Fair in Telegraphy."

The names of the various committeemen will be announced in the next issue of TELEGRAPH AGE and regular reports are to be given on the progress made.

The directors of the American Telephone and Telegraph Company—the holding company of the Bell telephone system—are considering the advisability of issuing \$20,000,000 additional capital stock, the proceeds to be used for improvements and to extend the company's lines in the West.

If you wish to know all about the instruments you work, invest \$1.50 in a copy of Jones' Diagrams.

HANDY ELECTRICAL DICTIONARY

VEST POCKET EDITION

Compiled and Edited by
WM. L. WEBER, A. E.

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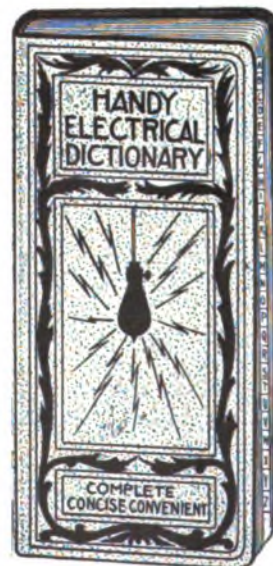
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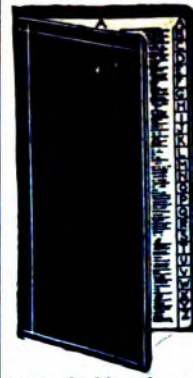
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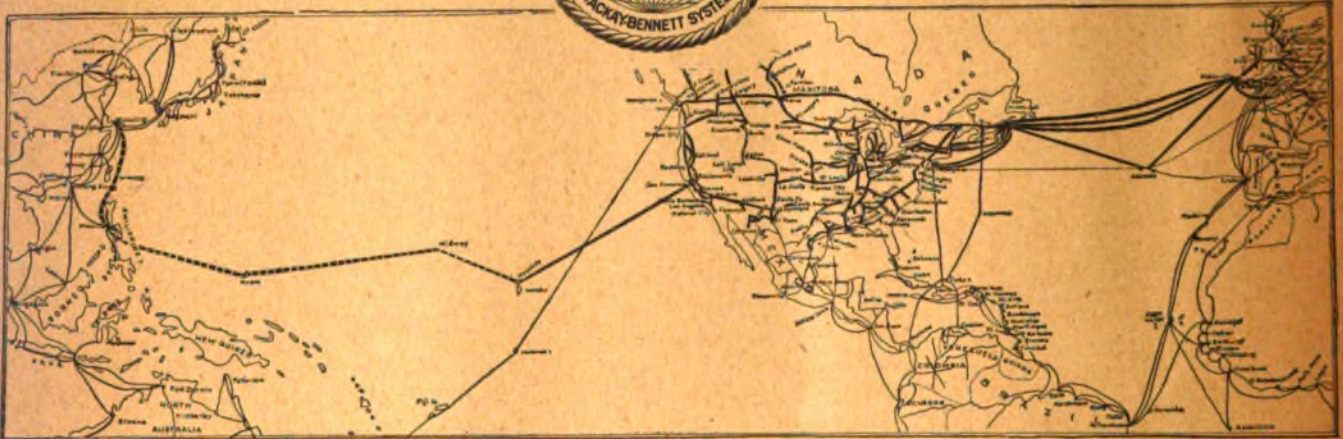
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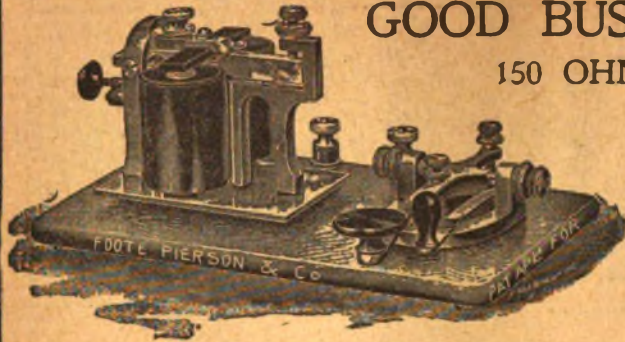
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