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Vol. XXIV—No. 23.

NEW YORK, DECEMBER 1, 1901.

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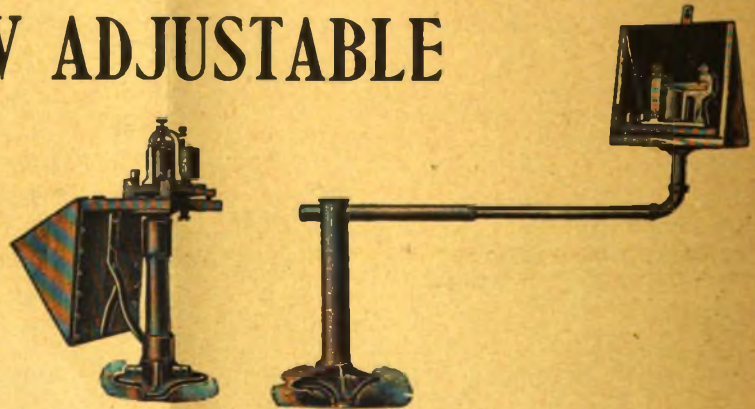


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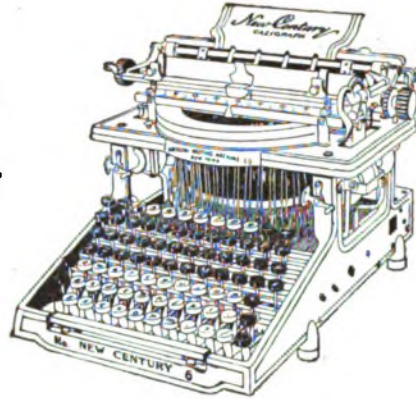
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# THE TELEGRAPH AGE.

No. 23.

NEW YORK, DECEMBER 1, 1901.

VOL. XXIV.

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of the dynamos, his aim will be to carry the reader step by step from the cellar to the operating department; thence through the labyrinth of house wires underneath the floor to the various apparatus, stating the size of wires to be used for the main and sub-leads, and last but not least, to give a full and accurate reason for each move.

The series will be a complete handbook for any one contemplating the instalment of a new office or making alterations in an old one. The value of these important articles will be such as to interest a wide circle of readers, and those who desire to follow them in their consecutive order should send in their subscriptions at once. In a few months hence these articles will appear as a chapter in "Pocket Edition of Diagrams and Hand-Book for Telegraph Enquirers," by Willis H. Jones.—Editor.]

The wiring and arrangement of springjacks in the loopswitch described in our issue of November 16, represents the method adopted by the Western Union Telegraph Company in most of their larger offices.

The Postal Telegraph-Cable Company, however, connect the local circuits of their multiplex apparatus with the loopswitch somewhat differently.

A glance at the illustration will show that instead of making one springjack serve for both the sending and the receiving side of the multiplex, they employ

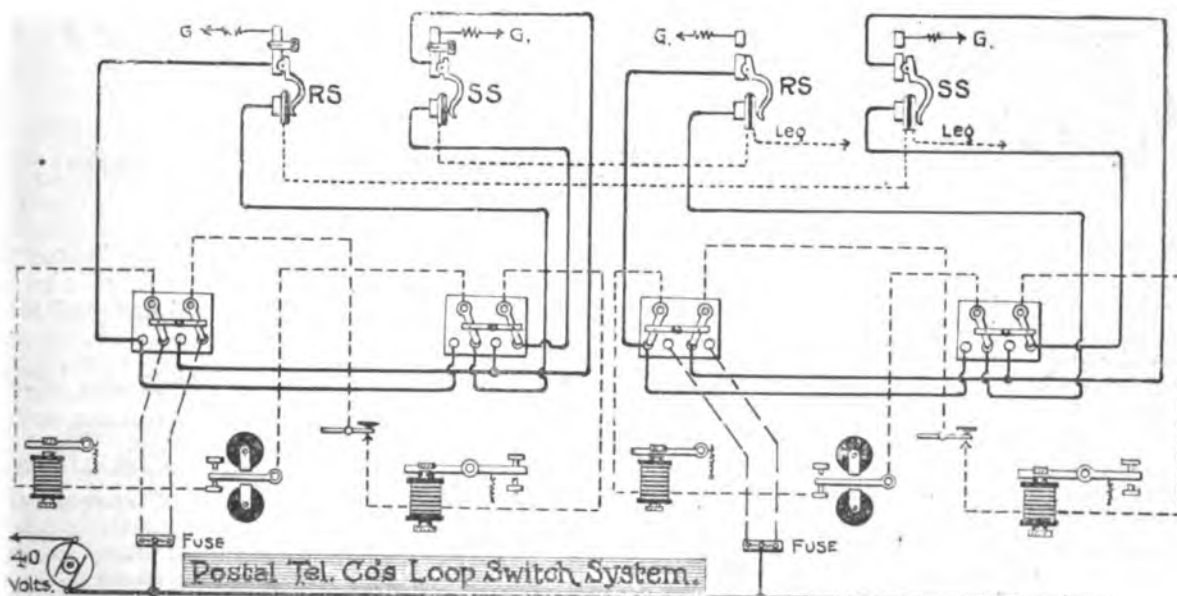
## SOME POINTS ON ELECTRICITY.

### The Equipment of a Modern Telegraph Office.

(Continued.)

BY WILLIS H. JONES.

[In the September 1 issue of this journal Mr. Willis H. Jones began a series of articles showing



the complete details of equipping a modern telegraph office. Beginning with the proper selection

two—one for the sending side and one for the receiving side.

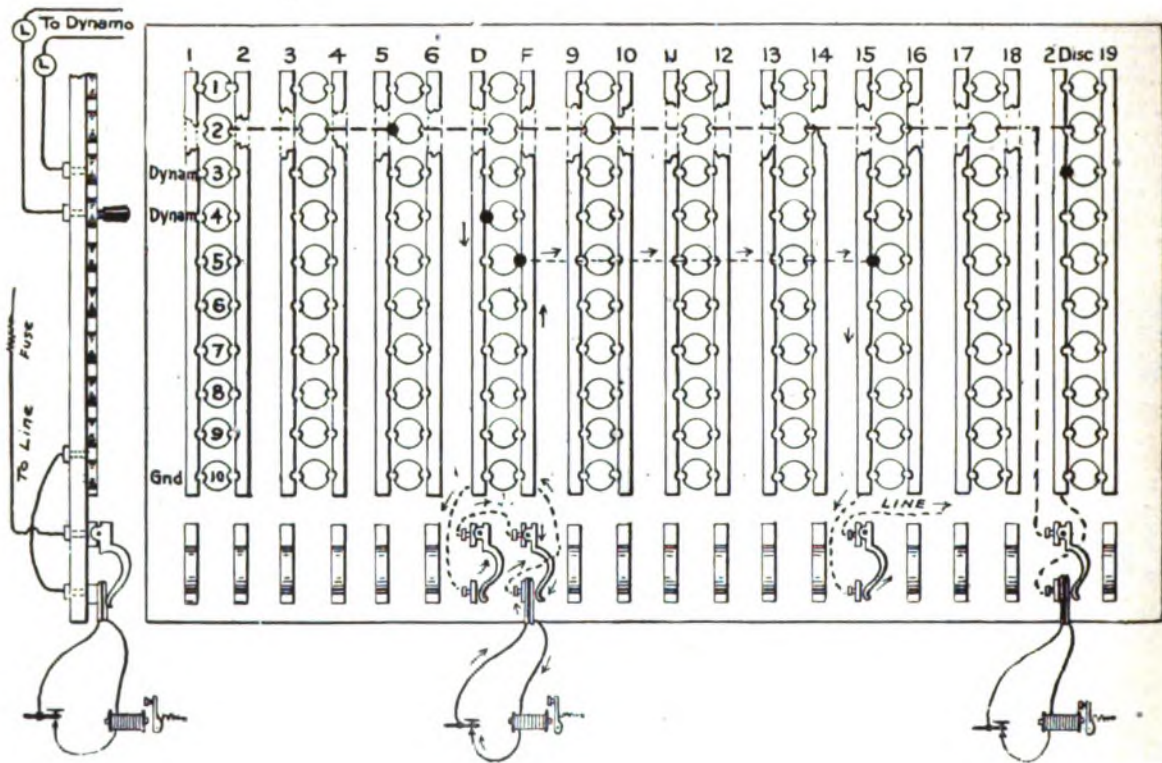


It will also be noticed that the lamp, or loop compensating resistance, is not located under the desk apparatus, but behind the loopswitch, and that the right hand disks of the three point desk switches, which in the Western Union arrangement would contain the lamp resistance, are now connected by an additional wire to one side of a springjack in the loopswitch. In consequence of this duplicate arrangement, it is necessary to provide two flexible cords and wedges for each loop that is expected to work on a duplex or quadruplex apparatus, one for each leg.

While the Postal loopswitch occupies more space and requires more conductors and springjacks for an equal number of loops and apparatus than the Western Union arrangement, it possesses some very happy features which go a great way to atone for the extravagance.

set with the compensating ground resistance removed. It is not necessary to remove the plugs from the St. Louis springjacks because the wedges of the conductors which are inserted there as shown, to connect the two duplexes together, are insulated on one side with hard rubber, which cuts off the ground coils at those points.

If you will now trace the course of the current from the fuse and three point switch at the St. Louis set, it will be seen that after it traverses the instruments of both the St. Louis and the Boston apparatus it finally reaches the upper lips of the springjacks in the loopswitch, where it disappears via the grounded resistance coils when normally connected by means of a metal plug, or via a Sun or other branch loop which may be inserted in those jacks. When making the connections for such a combination it is necessary, of course, to see that the brass



The Postal device permits a branch office loop to be placed on a multiplex circuit at a repeating station while one apparatus is repeating into another.

The accompanying diagram shows the manner in which the connections for such a combination is made.

Let us assume that the left hand half of the cut represents the St. Louis duplex apparatus in the New York office repeating into the Boston set on the right, and that St. Louis desired the New York Sun to take a copy of the despatch he was sending to Boston. The process would be as follows:

No change in the position of the switches at the St. Louis set need be made, but the levers on the Boston table must be turned to the left and the metallic plugs at the loopswitch which connects the respective sending and receiving sides of the Boston

sides of the connecting cords and the branch legs face each other in the springjacks in order to connect the loop with the local apparatus, and at the same time remove the grounds without making it necessary to actually remove the plugs. The main wire switchboards in large offices are almost invariably of the "terminal" pattern, such as shown in the accompanying diagram. Their construction, however, is such that they may be used for both intermediate and terminal wire connections.

The board is made up of a number of brass springjacks, perpendicular strips of brass, and disks arranged side by side across the structure.

With the exception of the springjacks and upright bars employed as "flips," the construction of the others are identical, and each bar and companion springjack represents the switchboard connections



for a given external main wire circuit. The detached cut on the left of the diagram shows the complete switch wiring for an external circuit.

The main wire should be attached to one lip of the springjack—it does not matter which, so long as you connect all alike—and the other lip connected by wire to the perpendicular bar immediately above it. This extends the main wire across all of the horizontal rows of disks in the board, any one of which may be connected with the circuit by means of a metallic plug inserted between the bar and a disk alongside of it. This means that whatever is already connected to the disk or row thus metallically attached will form part of the circuit. Thus, a plug inserted at a battery disk would merely extend the circuit to the dynamo room, while a connection with a row of disks to which another external circuit was attached would place two wires in series and make the connecting office an intermediate station.

The single and double "flips" are means for extending a circuit to a distant part of the switchboard structure, where it will be within reach of a flexible desk cord, which latter may be too short to be inserted in that circuit normally located in a remote part of the board.

The single flips are merely duplicates of the other springjack-bar devices, with the exception that one lip of the former jack is connected to a certain row of twenty-four horizontal disks, instead of to an external circuit, as shown in the cut, and the flip designated by the numeral which represents the number of the row assigned for the purpose.

Thus, in the illustration the second horizontal row of disks is connected to the upper lip of a certain springjack, which latter, with its upright bar and switchwiring, becomes No. 2 flip. A desk cord inserted in that jack will connect a relay in any external circuit in the board provided the latter be metallically connected to the second row by means of a metal plug. When such extensions are made, the battery, of course, must be connected at the flip employed.

A "double flip" is two upright bars and springjacks joined in series, but not connected permanently to any row of disks (see diagram). As both bars cross all of the horizontal rows, the combination is employed to use idle or unassigned rows in making extensions similar to the one just described. In this case, however, two horizontal rows are required in the operation, one for the battery and the other for the circuit connected thereto.

Where there are several hundred wires to be provided for, it is customary to divide the switchboard into sections suitable for fifty wires each. This arrangement provides greater facilities for testing and patching the various circuits than would be the case were the wires all in one long switch, because the chief operator in each section, unless he has joined his section to one adjoining by means of a metal plug, may have full control and use of each and every unassigned horizontal row of disks between the top and bottom of the board.

In addition to dividing the switchboard into sections of fifty circuits each, it is a good plan to construct separate boards for each geographical division

of the circuits, where the number will warrant it, and locate each structure as conveniently as possible in that part of the room where the traffic which their respective circuits control is handled.

(To be continued.)

#### Business Notice.

The twentieth century operator uses a typewriter and a Twentieth Century Telegraph Key, and is up to date. Address Foote, Pierson & Co., 82-84 Fulton street, New York.

#### Recent Telegraph Patents.

U. G. Rogers of New York has been granted several patents for improvements in telegraphic apparatus.

#### Miscellaneous Items.

Mr. C. W. Henry of the Western Union office, Pittsburg, Pa., has returned to duty in that city after a two weeks' visit with his parents at Richmond, Ind.

Mr. Frank E. Smith, brother of Mr. Isaac Smith, superintendent of tariffs of the Postal Telegraph-Cable Company, New York, is now the New York manager of the Derby Desk Company.

Mr. William McL. Fayssoux, at one time chief operator in the telegraph department of the Ocean Tow Boat Company, at New Orleans, La., has been appointed on the Levee Board by the Governor of Louisiana. Mr. Fayssoux is also a member of the Legislature, and is otherwise prominent in politics in that section.

After having held the position of manager of the Texas department of The Associated Press for more than eight years, James H. Ward of Dallas, Tex., resigned in October to take charge of the "News" intermediate wire. His old wire associates, Messrs. H. C. Strachan, L. A. Hoskins, W. H. Conway, O. C. Morgan, E. M. Morton, R. E. Parnell and E. H. Rogers presented him with a silver loving cup, bearing the inscription: "Presented to James H. Ward, October 26, 1901, by The Associated Press employees of Texas."

Mr. J. B. Berthoff, manager of the Western Union Telegraph Company, and Mr. C. P. Adams, superintendent of telegraph of the Central Railroad of New Jersey, both of Jersey City, N. J., have been indicted at that place for alleged aiding and abetting green goods operators. These are cases of persecution on the part of the police authorities who have been baffled in their attempts to capture green goods swindlers who operate within their jurisdiction. The police entertain an insane idea that telegraph officials work hand in hand with green goods swindlers.

This winter Lieutenant Mitchell of the Signal Corps will build a temporary telegraph line from Fort Egbert to Valdez, in Alaska. This line is now built fifteen miles up the Copper River from Valdez, and it will be continued 480 miles further this winter. Next summer it is expected that both Valdez and Nome will be connected with the civilized world by a substantial telegraph system.

**Death of M. H. Redding.**

M. H. Redding, assistant superintendent of the Western Union Telegraph Company's central cable office, 46 Broad street, New York, died at his home in Brooklyn, after a brief illness, on November 17.

Mr. Redding was born in Ireland on March 31, 1842, and came to this country when but a small child. During his early boyhood years he was an attendant at the public schools of New York, leaving the same at the age of twelve to become a messenger of the New York and New England Union Telegraph Company, or as it was known, the "Union Line," at 23 Wall street, a year later becoming office boy. There he acquired the art of telegraphing, and in 1857, when but fifteen years of age, he became an operator in the employ of the Magnetic Telegraph Company, opening the Hoboken office of that com-



THE LATE M. H. REDDING.

pany. There he remained until 1861, when he entered the service of the American Telegraph Company, at 145 Broadway, New York, and was assigned to duty on the Washington wires, which in those days were seldom cleared of war dispatches and press matter. In 1864 he became chief operator of the Gold Board, and in September, 1865, on the organization of the Bankers' and Brokers' Company, he was made chief operator in the New York office, afterwards succeeding to the managership of the office, and in 1870 becoming the superintendent of the Metropolitan district of the company. In 1872, upon the absorption of the Bankers' and Brokers' Company by the Western Union Telegraph Company, the latter created a special position for Mr. Redding, making him manager of branch offices. In 1883, he was appointed to the important place held by him up to the time of his death. He leaves a widow and

three daughters. The funeral services were held on the evening of November 20, and were attended by about two hundred members of the profession, including almost all of the officials of the Western Union Telegraph Company and others of the fraternity, many coming from distant points. The funeral services were conducted under the direction of the Masonic order, of which he was a member for many years, the ritual being highly impressive.

**Obituary Notes.**

George V. Dunham, son of C. B. Dunham, manager of the Western Union Cable station at Canso, Nova Scotia, died on November 16.

Cyrus W. Anderson, a well and favorably known operator, of Newark, Ohio, died on November 11, after a brief illness. He was the brother of C. A. Anderson of Newark, Ohio, and Joseph Anderson of Buffalo, N. Y., two well-known telegraphers. He was thirty-eight years of age.

Mrs. Sarah Elizabeth Griswold Morse, widow of Prof. Samuel F. B. Morse, inventor of the telegraph, died in Berlin, Germany, on November 14. She was Professor Morse's second wife, and was married to him in 1848. She was born in 1822. Four children—one daughter and three sons—were born to her, and it was at the home of her daughter, Mrs. Franz Rummel, in Berlin, that she died.

**Resignations and Appointments.**

Mr. James H. Knoll, a well-known telegrapher of Reading, Pa., has resigned to enter other business.

Mr. L. N. Merrick has been appointed night chief operator at Western Union Telegraph office at Pittsburg, Pa., in place of George M. Eitemiller.

Mr. A. M. Fisher, who for the past year or two has been manager of the Western Union Telegraph Office at Salt Lake City, Utah, has resigned. Mr. J. B. Twiford, the veteran manager at Ogden, has been appointed to fill the vacancy. Mr. Twiford will also have charge of telegraphic affairs at Ogden.

The report of the East Indian telegraph department for 1900-1 has been issued. In 1890-91 the line mileage had grown to 37,000, and of wires to 113,000, and on March 31 last there were over 55,000 miles of line and 182,000 of wire, increases during the year of 2,146 and 11,130 respectively. The year's receipts greatly exceeded those of previous years.

The cable steamer *Faraday* sailed November 15 from Waterville, Ireland, laying a cable to Fayal, Azores, for the Commercial Cable Company, completing the same on November. By its connection at that point with the cable running direct to Canso, Nova Scotia, this completes the fourth line of this company between the United States and England.

It is announced that the American District Telegraph Company, at Cincinnati, O., will deliver the special delivery letters for the government in that city.



**When the Telegraph Came to California.**

BY JAMES GAMBLE.

(Concluded from page 479.)

No sooner had the telegraph in California been demonstrated a success than the people of the Pacific Coast began to realize their isolated position from the rest of the Union, and the question of an overland telegraph line was agitated. After many political skirmishes and the introducing of many bills it was finally decided that no private company would be able to undertake so vast an enterprise without the aid of the Government. It was not only a question of building the line, but the matter of maintenance after completion had to be considered.

A bill finally passed Congress appropriating \$40,000 a year for ten years toward the construction and maintenance of a line of telegraph between the Atlantic and the Pacific States. The contract for building the line was awarded to the Western Union Company, who put in a bid at the maximum price fixed by Congress, the bid to go in Hiram Sibley's name, but if successful all the California lines so disposed were to share in the benefits. Other companies had made bids, but withdrew before the time to put up the necessary bonds.

The parties whom Mr. Sibley represented met at Rochester, N. Y., and agreed that if all the California lines would consolidate they should have the construction of the line from Salt Lake to the Pacific connection, while the Western Union should build from Salt Lake to the eastern connection. It was also agreed that the California and general subsidies, together with the receipts, should be divided equitably between them.

In the fall of the same year, 1860, J. H. Wade, the representative of the Western Union Company, came to California to complete arrangements for the commencement of the great work. He brought the matter before the several companies then in operation on the Pacific Coast, proposing to them a plan of consolidation of all their lines, which was immediately carried out. The different companies agreed to consolidate with the California State Telegraph Company and to create a new company called the Overland Telegraph Company, with a capital stock of \$1,250,000, to complete a line from San Francisco to Salt Lake. This company on the completion of the line, was merged into the California State Telegraph Company (the capital stock being doubled), which from that time until its later consolidation with the Western Union owned and controlled the telegraph lines from San Francisco to Salt Lake. The Western Union had in the meantime established a similar organization on the eastern side of the continent to meet the line from this side at Salt Lake.

The work of construction was commenced without delay. All the material was ordered and plans were made to complete the line before the close of 1861. The work on the eastern end was under the superintendence of Edward Creighton, while I was given charge of the construction from this end.

The lines of the California State Telegraph Company had been extended as far as Virginia City, in Nevada, and after the consolidation of the lines, so

it was decided that we should begin on the overland telegraph at Carson City. The wire and insulators had been ordered from the East and shipped around Cape Horn. The next most important item of materials were the poles. These had to be hauled on wagons and distributed along the route from Carson City to Salt Lake, a distance of 600 miles. As there was not a stick of timber in sight all along the whole distance it seemed a puzzle that would be hard to solve. Fortunately among my assistants was a young man full of pluck and energy, James Street, who was a personal friend of Brigham Young, and early in the spring he went to Salt Lake and made arrangements with the Mormons for the necessary poles along that section of the line. Furthermore he made friends of the Indian chiefs as far as possible and this proved of the greatest advantage. A man who in a negative way did a great deal for the telegraph was Sho-kup, head chief of the Shoshones. He was not only a man of power in his own tribe, but exerted a strong influence over the Goshutes and Pah-Utes.

Sho-kup was persuaded to take a stage ride as far as Carson City and the telegraph was explained to him by an interpreter. He afterward called it "Wente-mo-ke-te-bope," meaning "wire rope express." His idea of the telegraph was that it was an animal, and he wished to know on what it fed. They told him it ate lightning; but, as he had never seen any one make a supper of lightning he was not disposed to believe that. He was very well treated in Carson City and was told that he might talk with the Big Captain (President H. W. Carpentier) of the telegraph Company at San Francisco. Thereupon he dictated the following dispatch:

"Sho-kup, Big Chief of the Shoshones, says to Big Captain at San Francisco that his Indians will not injure the telegraph line. Sho-kup is a friend of the white man. His people obey him. He will order them to be friendly with the white men and not injure the telegraph. He would like to see Big Captain, but must return to his tribe and cannot go to San Francisco."

On receipt of this message General Carpentier, president of the company, sent Sho-kup several friendly messages and ordered presents of food and clothing to be made to him. We realized fully the necessity of having the Indians for our friends and no pains were spared to this end.

Mr. Street contracted with the Mormons for two hundred to three hundred miles of poles for the eastern section of the line, from Salt Lake west, and I contracted for one hundred miles running east from Carson City to Ruby Valley. I had many misgivings in respect to these contracts for poles, especially regarding those for the middle section. Along that portion of the route the mountains and plains were treeless as far as the eye could reach. Where, then, the poles were to come from I could not conceive. But the frontier men with whom the bargain had been made appeared to know their business, and as I afterward learned had in their hunting expeditions discovered canyons and gorges in the mountains where stunted pine and quaking asp could be found

sufficiently large for telegraph poles. So far, then, all was satisfactory.

We purchased twenty-six wagons to carry the materials over the Sierra Nevadas, and on the 27th of May, 1861, the outfit was ready to move. It comprised 228 oxen, fifty men and several riding horses. The expedition was placed in the charge of I. M. Hubbard, an experienced and energetic telegraph builder. In spite of our best efforts it took us a month to get over the mountains instead of fifteen days, as had been first calculated, so it was late in June that the expedition reached Carson Valley and the work of construction commenced.

In the meantime, the poles were being distributed from both ends of the line, and as the wire and insulators for the eastern end had been ordered shipped from the Missouri River to Salt Lake, the work began energetically from both ends.

The route selected was by way of Omaha, up the South Platte, via old Fort Kearney, Fort Laramie, up the Sweetwater and through the South Pass to Salt Lake. Thence to Deep Creek, Eagan Canyon and Ruby Valley to Virginia City. Austin and Eureka were not at that time in existence. In fact, the only settlement along that part of the route was one at Ruby Valley, where some troops were stationed.

Mr. Creighton, who, as I have stated, was in charge of the eastern section, and myself communicated freely advising each other at frequent intervals of the progress of the work. His reports showed me with what energy he was pushing forward, and so enthusiastic were we both that a wager was laid between us as to who would first reach Salt Lake ready to open communication with San Francisco and the East.

The line was first staked off, the hole-diggers followed; then came the pole-setters, and next the wire party. We made from three to eight miles per day. An advance telegraph station was kept up with the head of the line and progress reported from day to day. The news received on the arrival of the Pony Express was telegraphed at once to San Francisco and other points. Commercial dispatches were also sent and received daily, and in this way the newspapers in San Francisco were supplied with news and were daily gaining on time as the lines advanced east and west across the continent to their meeting point.

The most friendly relations were maintained with the Indians, and many of them were employed by us largely with this point in mind: that they might report to their tribes how well they were treated and thus favorably influence them toward the members of the party and the telegraph line. That this good feeling was maintained throughout was also in a measure due to an order issued at the start that any man of the expedition getting into trouble with the Indians, or their squaws, would be immediately dismissed from the service, and this rule was strictly enforced.

Besides our general kindness, several incidents occurred that made the Indians think that "the wire express" was distinctly a spirit to be tampered with only by the tribe of white men telegraph operators. At one time, about 200 miles east of the Sierra Ne-

vada, a thunder storm broke over the valley at some distance from where we were working. The wires became so charged with electricity that the men were obliged to use buckskin gloves to avoid the shocks. Some strange Indians came up about this time, and one of the bucks volunteered to help pull on the wire that the men were stretching. His bare hands and feet were just the kind of a conductor that old electro had been waiting for and it gave him such a shock that he doubled over to the ground.

Quick as a flash he dropped the wire and made the prettiest 400-yard dash that I have ever seen. He didn't even stop to take breath. Off at a safe distance, he recovered his dignity, came to a full stop and gravely motioned for the uninitiated bucks of his party to approach.

What he said to them is probably a matter of Indian history, but always remained a dark secret with us. He felt no antagonism toward the party. In fact, we went up a thousand per cent. in his estimation. Those Indians decided that we were an exclusive tribe of white Indians all by ourselves who could handle the unseen spirits without trouble, and they passed the word around among the tribes that the best thing to be done was to treat us well and look out for the wire.

After that when an Indian wanted to cross under a telegraph line the favorite method was for him to get on a horse and go under with full speed ahead.

Even later, when the Indians were on the rampage for soldiers and settlers, they always treated the telegraph with a certain amount of respect. At one time they wrecked an office and carried away a carboy of nitric acid under the delusion that it was a superior brand of firewater. The Indian does not drink his whiskey in pony glasses, but always takes a good swig out of the demijohn to make sure. The first buck who tackled the nitric acid was laid out stiff and cold in less time than it takes to tell about it, and thereupon it was decided in council hurriedly called that any tribe of white men who could drink firewater as strong as that were entitled to the undying respect and admiration of the best Indian buck who ever wore moccasins. And so the decree went forth that the best thing for good Indians was to give any of the paraphernalia of the "wireless express" men a wide berth; that telegraph operators and linemen were good fellows themselves, but their affairs must not be meddled with under any circumstances.

The construction of the line was pushed forward as rapidly as possible. Many serious difficulties were encountered that required our greatest energies to overcome. In one instance sixteen miles of line were built in one day on the desert in order to reach a point where water could be obtained. Again, our pole contractors failed us, and it was necessary to send our own teams to the mountains to procure and haul them.

The first contract with the Mormons was also a failure, but Brigham Young denounced the contractors from the pulpit and said that the work of furnishing poles should and must be carried out. After that things went better. Some of the poles had to be hauled two hundred miles, most of them



being taken from the mountains in the vicinity of Salt Lake, there being very few to be had west of that point.

Up to the 1st of October the work had progressed as well as could have been expected, all things considered. The poles were nearly all delivered and the line completed, with the exception of some fifty or sixty miles between Ruby Valley and Schell Creek, about midway between Carson City and Salt Lake. For that section of the line we were obliged to go into the mountains ourselves to get poles. We narrowly escaped being snowed in, but after hard work managed to get all that we wanted and be back on the plains before the winter storms had started in earnest. It was a close shave, however, and I had to go with the men myself to keep them from stampering.

Having now secured all the poles necessary for the completion of the line and having given orders for winding up all matters and for the return of the expedition, I returned to Ruby Valley on my way home, so as to be in San Francisco at the moment of the opening of the line.

I reached home in ample time for the first message across the great transcontinental telegraph line, which flew over the wire on the evening of October 24, 1861. The great work which had been agitated for so many years on this coast, in the East and in Congress was completed, and in the short space of five months from the time the expedition moved from Sacramento.

It had been proposed to get up a celebration in honor of such an important event, but owing to the uncertainty as to the exact time when the line would be completed no preparation had been made.

The employees of the company who stood around manifested the greatest anxiety, watching for the first click of the instrument across the continent. At last it came, and read as follows:

"Salt Lake, October 24, 1861, 5.13 P. M.

"To General H. W. Carpentier: Line just completed. Can you come to office? STREET."

The next dispatch was from Brigham Young, and read as follows:

"Great Salt Lake City,

"October 24, 7 P. M.

"To Hon. H. W. Carpentier, President of the Overland Telegraph Company—Dear Sir: I am very much obliged for your kindness, manifested through you and Mr. Street, in giving me privilege of first message to California. May success ever attend the enterprise. The success of Mr. Street in completing his end of the line under many unfavorable circumstances in so short a time is beyond our most sanguine anticipations. Join your wires with the Russian Empire, and we will converse with Europe. Your friend, BRIGHAM YOUNG."

The first message sent from San Francisco was as follows:

"San Francisco, Cal., October 24, 1861.

"To Hon. Brigham Young, Great Salt Lake City: That which was so long a hope is now a reality. The transcontinental telegraph is complete. I congratulate you upon the auspicious event. May it prove a bond of perpetual union and friendship be-

tween the people of Utah and the people of California. H. W. CARPENTIER."

This message, the first sent over this section of the overland line, I had the honor to manipulate myself. The next in order was the following message, containing the painful announcement of the death of Col. E. D. Baker. It read:

"Great Salt Lake City, October 24, 7 P. M.

"To H. W. Carpentier: Colonel Baker was killed in battle on the 21st, while in the act of cheering on his command. Intense excitement and mourning in Philadelphia over his death. STREET."

The street in front of the office was densely crowded during the evening, and there would probably have been an impromptu celebration of the great event but for the sad news above mentioned, which cast a gloom over the city and prevented any demonstration taking place. Other dispatches were sent during the evening, and among them the following to the President:

"To Abraham Lincoln, President of the United States: In the temporary absence of the Governor of the State I am requested to send you the first message which will be transmitted over the wires of the telegraph line which connects the Pacific with the Atlantic States. The people of California desire to congratulate you upon the completion of the great work. They believe that it will be the means of strengthening the attachment which binds both the East and the West to the Union, and they desire in this—the first message across the continent—to express their loyalty to the Union and their determination to stand by its Government on this its day of trial. They regard that Government with affection and will adhere to it under all fortunes.

"STEPHEN J. FIELD,

"Chief Justice of California."

There were also received a large number of news dispatches, among which were the particulars of the death of Colonel Baker and another announcing:

"Beauregard will retire beyond Bull Run."

The overland telegraph was then an accomplished fact. A few years previous news from the other side was only semi-monthly and usually from twenty-five to thirty days old. Then came the semi-weekly mail by the overland route, with news on an average from eighteen to twenty days old.

After that came the pony express. This latter, though a vast improvement on both the first and the second, only made clearer that something still remained to be done to bring California within the sphere of the other civilized countries of the world.

This the telegraph in its first click did.

With it disappeared the feeling of isolation the inhabitants of the Pacific Coast had labored under. San Francisco was in constant communication with New York and the Atlantic seaboard.

The change was a great one, but it was one to which the people readily adapted themselves, having wished and waited so long for it. In that moment California was brought within the circle of the sisterhood of States. No longer as one beyond the pale of civilization, but, with renewed assurance of peace and prosperity, she was linked in electrical bonds to the great national family union.

### The Bunsen Battery Cell.

The Bunsen cell contains a carbon plate in a cup of porous earthenware filled with strong nitric acid. The zinc is placed outside the porous cup in a jar filled with dilute sulphuric acid made of about one part of acid to twelve of water. A number of molecules of the sulphuric acid seem to be broken up into free hydrogen ions and sulphions. When the cell is in operation, the sulphions appear at the zinc anode and form zinc sulphate, while the hydrogen ions appear at the carbon cathode where they take part of the oxygen from the nitric acid to form water, and leave nitrous acid or hyponitrous acid; or, the hydrogen may even reduce the latter acid to nitric oxide, which escapes as a very corrosive and objectionable gas. This cell gives about 1.8 volts.

The reason why it is necessary to remove the zinc from some forms of open circuit battery when not in use, is because that some cells of batteries where the zinc should be removed when the battery is not in use, and batteries which use permanganate of potash or sulphuric acid in order to secure a high e.m.f., the electrolyte acts upon the zinc by ordinary chemical action, even when not delivering current; such cells are therefore provided with means for removing the zinc when not in use.—American Electrician.

### New Australian 15,000-Mile Cable.

On November 1, according to press dispatches, the new cable of the Eastern and Eastern Extension Telegraph Companies between Durban, Natal and Perth, Australia, was opened for general traffic. This cable is a part of a new system of the above-named companies, involving the laying of no less than 15,000 miles of cable to connect England with South Africa and Australia. The new line has been completed between Cornwall, England, and the Cape of Good Hope. The extension from Durban to Perth has just been completed, as above noted, and the remaining section, between Perth and Adelaide, will be laid early next year. The new route takes in the islands of Ascension and St. Helena in the Atlantic, and Rodrigues and the Cocos-Keeling Islands in the Pacific Ocean, all of which were hitherto outside the pale of telegraphic communication. It is a notable fact in this connection that the entire enterprise was carried out without any government assistance whatever in the shape of subsidy or guarantee. The business will be handled entirely by the companies' employees, and not by operators of the different administrations, thus rendering the system independent at all times.

The Chamber of Commerce at Manila has cabled to President Roosevelt urging that the Pacific cable be laid, and saying that the main object would be an immense increase of the rubber industry of the Philippines, estimated at \$15,000,000.

Among the recommendations of the annual report of the Lighthouse Board, now in the hands of the Secretary of the Treasury, is that an appropriation of \$25,000 be made for connecting lightships with the main land by means of wireless telegraphy.

### Sir W. H. Preece's Vindication of the Postal Telegraph Service.

In the course of an instructive and interesting article in the current issue of *St. Martins-le-Grand*, London, England, Sir W. H. Preece, formerly engineer in chief to the general post office, says:

"Telegraphy became . . . so closely allied with other modes of communication that public opinion in 1868-9 forced the Government to purchase and absorb all the telegraph companies, and to transfer their business to the care of the Post Office, which had shown itself so capable in dealing with letters and newspapers, and in establishing the penny post.

"The telegraphs of this country again became a great monopoly; but there is a vast difference between a monopoly in the hands of a private speculative corporation, subject to no control but that of its own close ring, and whose sole object is to earn dividends, and a monopoly in the hands of the Government, whose sole object is to serve their masters, the public, faithfully and well, and whose actions are incessantly supervised by the jealous and watchful eyes of those they serve, who have an equally watchful and much less tolerant press in which to air their wrath and grievances, and an active House of Parliament, ever ready to counteract and reform real abuses when fairly and properly laid before it.

"It is impossible to conceive supervision more complete than that to which the post office is subjected. The receiver of every letter, the transmitter of every message, the editor of every newspaper, the reader of every news despatch, every householder or business man, can see for himself how his own business is conducted; he can growl and grumble to his heart's content at any error or delay that may occur, with a certain knowledge that his complaint has been heard, and, if just, remedied, although he may not always be satisfied with the attention he receives. The telegraphic business of this country has reached its present dimensions because the work has been done well, and it has been done well because the mode of doing business has been so well and so thoroughly supervised by the public.

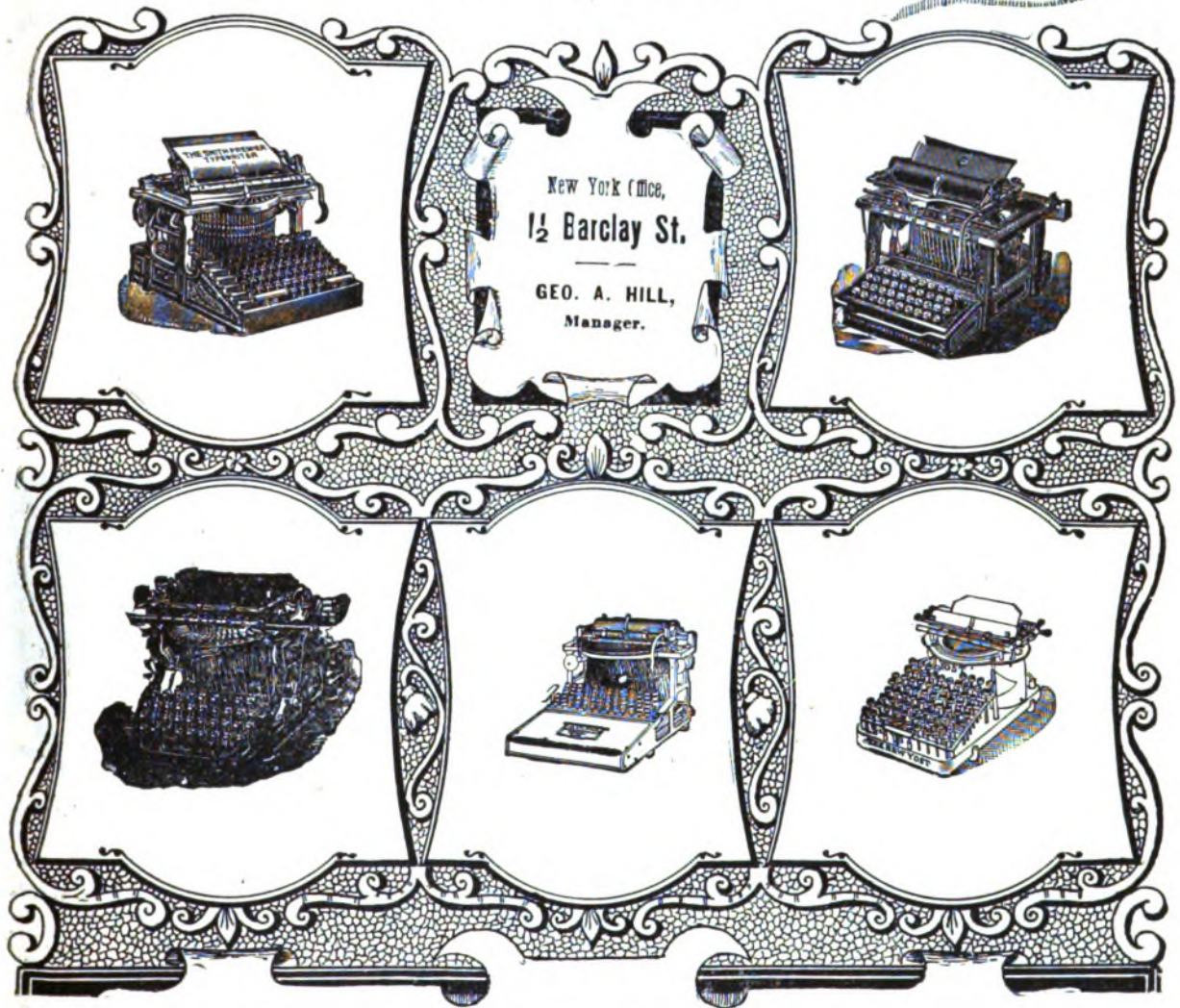
"One consequence of the introduction of advanced systems of working has been the necessity of educating the operating staff in the scientific and technical details of the business. The absence of technical knowledge in all branches has hitherto been a great difficulty to surmount. The technological examinations inaugurated by the Society of Arts, and continued by the city and guilds of London Institute, have been most beneficial, but the most successful incentive has been the selection and promotion of those who have given their attention to their own scientific education. This evident necessity for technical knowledge is reacting on the higher post office officials, and one finds all over the country a healthful spirit of inquiry arising—a striving after something better than the mere perfunctory discharge of official duties."

The wireless telegraph system seems to have been designed by nature for the benefit of ships at sea.



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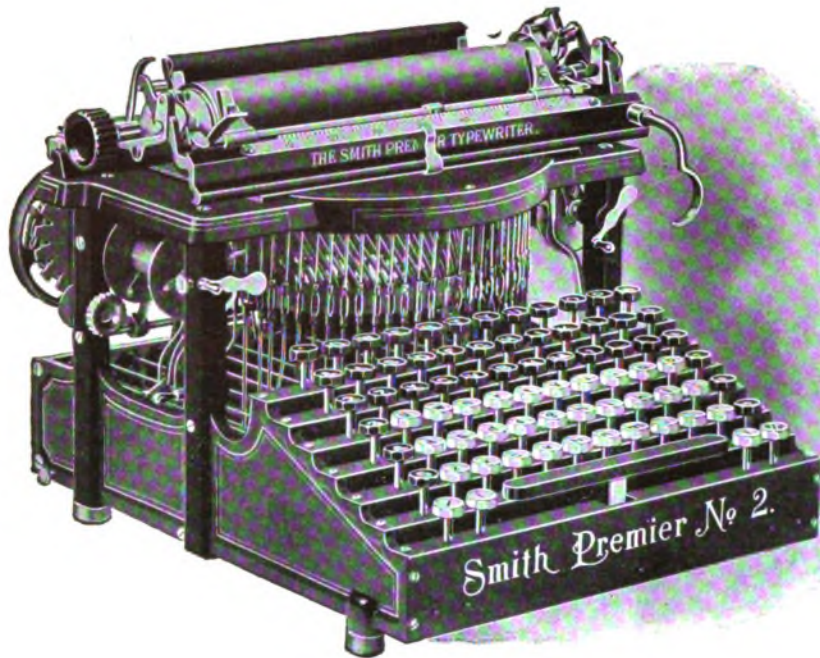
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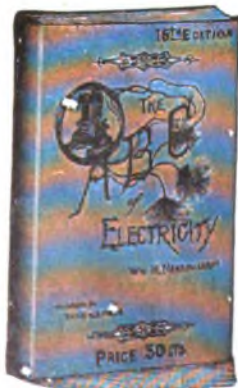
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Entered as second-class matter at the New York, N. Y., Post Office.

Published on the 1st and 16th of every month.

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NEW YORK, December 1, 1901.

**NOTE.**—We desire to state that back numbers of this paper, those issued more than six months prior to any current date, will be charged for at the rate of twenty-five cents apiece when they can be furnished. This price is fixed because of the necessarily limited stock we carry, and of the difficulty we commonly have in filling an order. Oftentimes the request is for papers of a more or less remote date, with the expectancy of being supplied at but ten cents a copy, whereas in order to obtain the desired issue we are ourselves frequently obliged to pay the larger sum, or even more. The growing value of complete files of TELEGRAPH AGE should cause our readers to carefully preserve their issues.

**THE ROBERSON QUADRUPLIX.**—The Roberson Quadruplex System, which has been recently adopted by the Western Union Telegraph Company, and which will be put into extensive use throughout that system, was illustrated and described in our issues of March 16 and April 1 of this year. Those who desire copies of these issues can obtain the same at 10 cents apiece. As there are only a few of these numbers left, we would urge those who wish to become posted on this new system to procure copies before they are entirely out of print.

### The Pacific Cable.

One of the interesting topics discussed at the White House a few days since was the construction of a Pacific cable. The subject was brought up by President Roosevelt during a visit of Representatives Hepburn of Iowa and Sherman of New York,

the former chairman of the House Committee on Interstate and Foreign Commerce, and the latter an influential member of that committee. The proposition of the Commercial Cable Company to build a cable is understood to have been brought up, although it is not known what attitude the President takes with regard to it.

Mr. Sherman will introduce a bill early in the coming Congress authorizing the Postmaster-General to enter into a contract with private persons or a corporation for the construction of a cable from San Francisco to Manila, by way of Honolulu and Guam. It will be essentially the same bill which was reported from the House Committee on Interstate and Foreign Commerce in the last Congress, and on which a minority report was written by Representative Corliss of Michigan. Mr. Sherman says he is not committed to the proposition to be set forth in his own bill to the exclusion of all others. He prefers, however, that the Government should not become an owner of telegraph or cable lines.

The President agreed with Representatives Sherman and Hepburn that a cable to connect the United States western coast with the possessions in the Pacific Ocean and Far East is a matter of vital and immediate importance, and it is his hope that the Congress about to convene will take decisive action.

Mr. Sherman told the President that although he proposed to introduce a bill containing a definite proposition for laying the cable, he should not oppose any other reasonable plan that might be brought forward. "The main thing is to get a cable," said Mr. Sherman, "and I don't care much how we get it." He and Mr. Hepburn agreed in the view that no special legislation by Congress is necessary to enable a private concern to lay a Pacific cable on its own account. The State Department, they said, has ample authority to grant a permit for landing the cable.

### The Commercial Pacific Cable.

Announcement was made November 10 that the Commercial Pacific Cable Company, which was recently organized in New York for the purpose of constructing and maintaining a cable across the Pacific Ocean, and of which Mr. John W. Mackay is president, had awarded the contract for the manufacture and laying of the first section of the great submarine strand to the Silvertown Cable Manufacturing Company, of Silvertown, near London, England.

The award was made a few days ago after examination by the officers of the new company of three bids from the most prominent cable manufacturers in the world. The cost of making and laying this section is estimated at about \$3,000,000. The section will reach from San Francisco to some central point in the Hawaiian Islands, probably at Honolulu, and it is expected it will be completed and ready for the transmission of messages in October, 1902.

The Silvertown Company have already commenced the work of constructing the immense steel rope, and will have the work finished about next July or earlier. The cable will then be loaded on board ships, and it will be three months more before

it reaches San Francisco, the starting point of its journey across the Pacific. The actual work of laying the cable will consume about seventeen days, and with additional time for establishing the stations and allowing for possible mishaps it will be ready for service in two months after its arrival.

Mr. George G. Ward, vice-president and general manager of the Commercial Cable Company, said when asked why the contract had not been awarded to an American company: "The Commercial Pacific Cable Company would have been very happy to have given an American company its contract, but there is no company in the United States that could, we felt, perform the work. They have not the machinery, and we could not afford to have the work of laying the cable take the form of an experiment. The Silvertown Company has been established for over forty years, and has laid most of the deep ocean cables throughout the world, so that it understands perfectly just how the work should be accomplished.

"The company has assured us that they will complete the cable and have it here in seven months. Just as soon as this section is complete and out of the way we shall commence work on another section that will connect the Hawaiian Islands with the Philippines. Our station there will probably be on the island of Luzon and near or in Manila. We have not decided on that point yet, nor have we fixed our schedule of rates, but I may say, in speaking of rates, that we shall reduce them to a reasonable figure. We expect to have the work completed in about two or three years. The estimated cost of the undertaking is about \$15,000,000, but we have capitalized our company at only \$3,000,000, because we prefer to increase our capitalization as we proceed rather than use such a large figure at the beginning."

Mr. Ward said it was expected that the new cable would allow of the transmission of messages in nearly four hours' less time than required at present. He commended Mr. Mackay's enterprise in assuming the responsibility, and said he believed he was deserving of much credit.

#### A Case of "Jollyng."

J. Jolly Jones of Dubuque, Ia., is the name of a plaintiff in a suit against a telegraph company for damages. He is described by the press as a peculiar personage, with a peculiar name, and is following out his reputation by entering a most peculiar suit. He claims that the operator handling his message jollied with it, which caused his return home before he had time to consummate the business he was engaged in. He wants \$1,000. This case recalls the celebrated sheep litigation, which was recently terminated in a Texas court. A man wired his hired man in another section of that State the following: "Please come at once and bring Shep." In transmitting the telegram the company made the last word "sheep." The hired man returned, bringing with him several thousand head of sheep instead of the dog, as the plaintiff intended.

When a man has not a good reason for doing a thing he has a good reason for letting it alone.—  
Sir Walter Scott.

#### The Telegraph Operator.

The visit of Rev. Edgar Y. Mullins to this city, says the Memphis (Tenn.) Appeal, is a reminder of the excellent mental discipline which the telegraph business gives to young men. Rev. Mullins was a Texas boy and man who for many years distinguished himself as a star operator at the telegraph key. In his spare time he read law, but, harkening to a call, turned to theology and at present occupies the highest position in the Baptist Church in the South, being president of the great university of that aggressive denomination in Louisville, having succeeded Dr. Whitsett. He preached twice in this city on Sunday last, and those whom he has pelted with Morse symbols, and who strained and scratched to put down what he transmitted from the other end of the line, realized that in the pulpit he was equally clear, firm and accurate, and that he could "send" with his old time spirit and speed.

From the telegraph instrument have arisen many eminent men. Andrew Carnegie, the multimillionaire, philanthropist and library builder; Lyman J. Gage, secretary of the Federal Treasury; the late Senator Cushman K. Davis, who stood head and shoulders above any one else in this country as an authority on international law; Thomas A. Edison, the Wizard of Menlo Park and inventor of world fame; George Kennan, the writer and Russian traveler. All these served their apprenticeship at the "key." And throughout the country may be found thousands of ex-operators who have achieved success in law, in medicine, in religion, in science, in commerce, and the telegraph operator seems to gravitate naturally to the railroad business and to journalism.

The character of the business is such as to bring out and train the mental faculties to their highest development. The tax is severe. The brazen "sunder" must be listened to, and its clickings translated into English. At the same time it must be written down legibly and accurately, which insures good penmanship and mental nimbleness. The words must be counted at the same time, so that no error may creep in, and both consciousness and subconsciousness are taxed to the utmost to bear the burden imposed on them. The mind and hand, thought and movement, are trained to act synchronously, and the discipline, while severe, is fruitful of excellent results.

Strange to say, that while the telegraph business is a splendid one to engage in, it is not the best to remain in. This is because while it is a splendid disciplinarian for the young mind, it has its financial limitations and possibilities which are not extensive. Those who remain too long, no matter how mentally alert and active, dislike leaving the business to engage in anything else. Those who leave in time, before habit and custom have secured a hold too strong to be broken on them, usually rise to eminence in any avocation they may select. As a signal compliment to the Baptist Church, it must be said that only a few telegraph operators are found in the pulpit, and among these few none so conspicuous as Rev. Mullins.



**A Mysterious Call.**

BY MARY AGNES BYRNE.

(Concluded from page 476, November 1.)

It was the day before Thanksgiving, a wet, slushy, dismal day, the kind suited to having the "blues." We were all working hard; it had been a week of wrecks and detentions; all the engines seemed to have gotten out of gear, and their crankiness affected the crews and the dispatchers. The office force had been working extra, and with the wear and anxiety our nerves were in a state of tension. To make matters worse, some of the boys had succumbed to a prevailing fever and were obliged to stay home under the doctor's care, so that we who had escaped were compelled to do double duty. Gregory complained of having symptoms of the disease, but when the others failed he felt that he simply could not give in when his help was most necessary. He sat at his post day and night, hardly stopping to eat, allowing himself only a few hours' sleep, during which his mind was still on his work, so that it did him little good.

The afternoon's mail brought to the office a square black-bordered envelope bearing a foreign postmark, addressed to Orin Gregory. It lay on his desk for a time until he managed to snatch a few seconds to break the seal. His face grew even paler than usual while he read its contents. It announced the sudden death of his brother, his only surviving relation, whom he had not seen for many years. He was in business in Australia, and they had looked forward to a meeting in the spring. Gregory told me this in a few broken sentences, adding bitterly as he again gave his attention to the train book, "Thanksgiving Day! I'd like to know for what I can give thanks!"

"It has been pretty bad for us all, old fellow," I said, "but particularly hard lines for you." That evening a terrific storm set in, the wind blew hurricane-like and with it came a heavy fall of sleet that made havoc of the wires. They were all down, and we thought ourselves lucky when we succeeded in patching up a couple of train wires. The tracks were in a fearful condition, the trains badly delayed. Midnight found us all quite exhausted, but we could expect no relief for several hours, and doggedly stuck to our posts.

Just as the hands of the big clock pointed to half past one we were all startled by Gregory jumping to his feet while he shrieked: "My God, boys, I forgot that order! 77 and 2d 2 will come together! I am a murderer, and yet I thought I could not make a mistake in running trains if I tried!"

For a moment we were all as though paralyzed. Surely it could not be so! No, old Gregory was overwrought, mistaken. But, alas, we soon found that the order for 2d No. 2 to wait at Frazertown for the passing of 5th 77 special freight had indeed been overlooked. They would meet near Silverton, and the people, the poor, helpless ones hastening along with expectations of Thanksgiving greetings and cheer, would find instead a sudden horrible fate! In imagination we could see the spot—for, of course, we were all more or less familiar with every inch of the road; could hear the crash of

the two iron monsters as they came together with lightning speed; could hear the cries and moans of the hapless doomed creatures amid the awful ruin and fire.

"If we could run 2d 2 on the other track to Bronson," began one of the boys. "There is a switch at Silverton," interrupted another. "But no operator there at night," we groaned in despair.

Suddenly, as if seized by an inspiration, poor Gregory, who had been wildly tramping back and forth across the room, sat down at his desk and grasped the key and began calling, "Sv"—the call for Silverton. "She told you she was going home hours and hours ago," said some one, sadly, but he paid no heed. Had his mind given away under the terrible strain, we asked ourselves. Would it not be well to get out the wreck car and send physicians to the scene without delay? But something kept us inactive. We waited in mute agony, watching that pallid face, on which great beads of perspiration stood out. His black hair hung in straight, clammy locks; he sat as one petrified, and the hand which held the key seemed to guide it without the stir of a nerve. Straight before him he stared, and I and some of the others who passed within range of his sight knew that he was looking beyond us; we even imagined that we felt a slight electric thrill.

Still he sat calling, calling. "O Heavens!" we thought, as the few moments glided away, seemingly an eternity, "if there were only an operator at Silverton we would still have a chance to save the train," but, alas, that terrible "if!"

Irma generally quit work at seven o'clock each evening. That night she locked up the office at the usual hour and went home. Feeling tired she retired early. She usually slept soundly all the night long, never awakening until summoned by her mother to breakfast. On this occasion she fell asleep as soon as her head touched the pillow. She did not know how long she had slept, when she was aroused by hearing her call, "Sv, Sv," as if on a telegraph instrument. She sat up in bed, thinking she had dreamed it, but, no, she still heard the click of the sounder, "Sv, Sv," fast and faster, signing "B," the call of the despatcher's office, and she recognized the sending of her instructor, Orin Gregory.

As if impelled by some unseen power, Irma hurriedly dressed herself and went out into the disagreeable night. She was naturally very timid, but, strange to say, no fears troubled her then. On and on she ran through the drenching rain, still hearing that mysterious summons. She did not wonder what it meant, nor question the source from whence it came; she only felt that she must answer it, that the call must be obeyed.

It was not until she stood outside the office door that a momentary hesitation came to her. She thought how foolish she was; everything looked all right; her mother would be alarmed if she awoke and discovered her absence; she had had the nightmare no doubt—but no, that call was real, imperative—it still rang on her ears. She heard also the rumbling of trains, the loud warning of locomotives at some crossing in the distance; but the noise was familiar, she paid no heed. She unlocked the door,

and, standing there in the darkness "cut-in" the instrument. It was calling her just as she had heard it all along. She answered the call, "I, I, Sv."

The crash of a thunderbolt would not have created greater consternation in the office; a celestial visitant appearing in our midst could not have caused more joy than did the light touch of that young girl's hand upon the key. We all held our breaths after the first murmur of mingled emotions, while Gregory gave his orders in his usually terse manner, the clear cut, staccato characters as played by a master hand. Then came Irma's "O. K." promptly, hurriedly.

The sounder hushed; Gregory's hand lay on the closed key, expectant. The telegraph instrument, hitherto a common thing, often a wearisome, clamoring one to us, was suddenly invested with an eerie spirit. We waited around it, hoping and fearing. What was the message it would click out next—life or death?

What was taking place at Silverton? Everything depended on a frail little girl—if she lost her nerve, became confused, if her strength should fail in trying to operate the switch—a thousand lashing "ifs" to torture the brain.

At last! Blessed relief!

I think we were half mad with joy when we heard that all was well; that 2d 2 had run in safely past the station just before the heavy freight went thundering along on its way to the west.

"What hath God wrought!" cried one of the boys, the words forever to hold a newer meaning to us all.

As for Gregory, he laid his head on the table and sobbed like a child.

"And I thought I would have nothing for which to be thankful," he said, brokenly. He was totally unstrung and had to be assisted home. His work of train running was over—he never afterwards touched a key.

The doctors said he had been a victim to the fever for several days; it was only his obstinate will power that had kept him at work so long. For six weeks after Thanksgiving he raved in delirium, always going through the experience of that terrible night, often calling for Irma and becoming unusually calm when she came with her mother to see him.

"Of course, he recovered and married Irma," exclaimed one of the listeners.

"You have guessed aright. Gregory's brother had left him a competency; he entered business in a western city, where they are now living happily."

As the narrator concluded, a silence fell upon the little group. They gazed at the flickering firelight.

"I wonder what it was that Irma heard," Caddie remarked at length. Some one murmured something about the transmission of thought or the power of one mind over another while Cecil said softly, "I think it was God who called her in answer to that poor man's earnest prayer."

"Died very sudden, aged 89 years," the press dispatch read regarding some prominent citizen who had just passed away.

"Sudden," mused the receiver, then added aside, "Huh, I don't call 89 years very sudden."

### Greengoods Telegrams.

In the annual report of J. L. Bristow, the Fourth Assistant Postmaster General, it is recommended that an amendment be made to the Interstate Commerce law to prohibit telegraph and express companies or their employes from aiding and abetting in green goods or lottery swindles, or any other scheme carried on partly by mail and partly by common carrier in violation of the postal laws. (If Mr. Bristow thinks he can distinguish a green goods telegram when he sees or reads it, he will undoubtedly be regarded as the brightest man in America.)

The Dawson overland line, via Ashcroft, B. C., has been interrupted almost continuously since the line was constructed, about three months ago. These interruptions prove conclusively that the telegraph engineers have a difficult problem to solve in maintaining telegraphic communication with Alaskan points during the severe weather which prevails in the northern climate about nine months out of the twelve.

On October 30, the cable steamer "Viking," which has been built under British corporation special survey, to the order of the Amazon Telegraph Company, was launched in England. The vessel is of somewhat unusual type, and is intended for special service on the Amazon river, in South America, up which for several thousand miles submarine cables are laid.

The cable between Skagway and Juneau, Alaska, which was laid in the past summer, worked successfully only about three days.

A B C of the Telephone, a practical treatise, by J. E. Homans, A.M., containing 352 pages and embellished with 269 illustrations, is without doubt the lowest priced work of high character on the subject that has yet appeared. The book is arranged in twenty-eight chapters, dividing the subject into definite departments for reference.

Owing to the great growth of the telephone industry during the past few years, and in response to the demand for a comprehensive book giving a clear, terse idea of the different principles governing the construction, installation, care and management of the various telephones and their appliances, the A B C of the Telephone has been compiled. It is written in a most clear and careful style, and aims to give a complete review of the subject of telephony from the first invention to the most recent improvements.

No expense has been spared in gathering valuable information, and it has been the aim of the author to make this treatise the most complete elementary book ever written on this subject for the practical electrician, wireman, lineman, engineer and all persons interested in this great achievement of modern science.

This book will be sent to any address, express charges prepaid, upon receipt of one dollar. Send orders to J. B. Taltavall, Telegraph Age, 253 Broadway, New York.



### Annual Meeting of the Telegraphers' Mutual Benefit Association.

The annual meeting of the Telegraphers' Mutual Benefit Association was held at 195 Broadway, New York, on November 20, President Walter C. Humstone in the chair.

After greeting the delegates, President Humstone requested the reading of the reports of the president, the secretary, the treasurer and the auditing committee, all of which were ordered printed and distributed among the members.

The secretary's report shows that the total membership is 4,651 in the full grade, and 501 in the half grade, an increase of 84 in full grade and 63 in half grade.

The sum of \$10,000 was carried to the reserve fund, which now amounts to \$188,213.82. The interest on the reserve fund not only pays the current expenses of the association, but also five assessments.

The old officers of the association were then re-elected for the ensuing year: President, Walter C. Humstone; first vice-president, W. H. Young; second vice-president, Charles P. Bruch; secretary, M. J. O'Leary; treasurer, A. R. Brewer; executive committee, W. C. Humstone, A. R. Brewer, James Merrihew, Charles P. Bruch, Joseph L. Edwards and M. J. O'Leary, all of New York; E. J. Nally, Chicago; S. S. Garwood, Philadelphia; W. H. Young, Washington; B. Brooks, Denver; C. W. Hammond, St. Louis; auditing committee, E. B. Pillsbury, chairman, Boston; W. J. Dealy and Thomas E. Fleming, New York. Sixty-four full grade members and four half grade members died during the year, and \$70,500 in death claims was disbursed during the same period.

President Humstone in his report said:

"The business for the fiscal year just closed shows that the revenues from assessments and fees exceeded the average of the preceding five years by more than nineteen per cent., and from interest by nearly seven per cent., while the payment for death claims increased forty-one per cent., and expenses, two per cent., respectively. During the same period the reserve fund increased thirty-seven per cent. and the membership, seventeen per cent.

"While these statements are in the main satisfactory, your attention is again directed to the steady increase in the death rate and to the fact that the ratio of membership practically remains unchanged from year to year.

"Of the deaths reported during the past year, nearly one-half were members for more than twenty years, and of that number many were admitted at ages exceeding thirty years, who, had they been admitted under the present graded system of rates, would have been much larger contributors to the mortuary fund. It is largely to overcome this inequality, which to some extent continues to exist, that a considerable increase in membership is so much to be desired during the present and future years. To that end I cannot too strongly urge upon all the necessity for earnest work in this direction, and also to the importance of maintaining membership, when once acquired. It is much to be regretted that so many lapses occur among our young members, fresh

from the hands of the medical examiner, long before the advantages of the association can have been fairly tested by them."

The secretary, in a brief address, stated among other things that the records of his office showed that during the past eleven years \$536,000 was paid in death claims to the beneficiaries of deceased members, and that the greater part of this large sum was paid in cases where there was absolutely no other insurance of any kind, thus demonstrating in the most practical manner the great field that the association is filling for the members of the telegraph fraternity and how much it deserved the earnest support of all. He made a strong appeal to the members present to not in any way relax their efforts to bring its advantages to the attention of their associates, and especially the younger men and women entering the business. After thanking the agents for their services he closed with a touching tribute to the memory of the late M. H. Redding, who was a member of the association for thirty-three years, and who was at all times one of its warmest friends and supporters.

Among those present were H. W. Sauer, W. D. Schram, Frank Coyle, J. Costelloe, J. H. Montgomery, C. S. Pike, Thomas E. Fleming, Charles P. Bruch, Walter C. Humstone, C. Hicks, C. D. Phelps, W. E. Conrad, E. E. Brannin, W. Guthrie, Isaac Smith, W. J. Morrison, E. F. Howell, A. R. Brewer, J. L. Edwards, M. J. O'Leary, J. B. Taltavall, John Brant, William Holmes, William L. Ives, Lewis Dresdner, all of New York; W. H. Young, Washington, D. C.; C. R. Tracey, Wheeling, W. Va.; J. J. O'Connor, Albany, N. Y.; W. E. Vanarsdale, S. S. Garwood, John Wintrup and J. Chapman, of Philadelphia, Pa.; J. W. McLean, Baltimore, Md.; E. B. Pillsbury and J. P. O'Donohue, Boston, Mass.; H. L. Waterbury, Saratoga, N. Y.; J. E. Golden, Bradford, Pa.; W. P. Cline, Richmond, Va.; H. V. Shelley, Bridgeport, Conn.; F. W. Conn, Brooklyn, N. Y.; J. W. Tillinghast, Buffalo, N. Y.; J. B. Bert-holf and J. Van Dusen, Jersey City, N. J.

**MUNICIPAL ELECTRICIANS.**—Mr. Frank P. Foster, the secretary, announces that there will be a meeting of the executive committee of the International Association of Municipal Electricians at Corning, N. Y., on December 14, to select and assign subjects for papers to be read at the meeting of the association to be held at Richmond, Va., next year.

"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 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.

### The Magnetic Club Dinner.

The Magnetic Club held its autumn dinner at the St. Denis Hotel, on the evening of November 20. The affair of last week was a representative gathering in the best sense of the word, about 200 members of the club being present, including many from out of town. Dinner was announced at 6.30 o'clock; Mr. Gerritt Smith asked a blessing. The tables presented a handsome appearance. Over that of the president was the motto of the club, "Are You Happy?" and a huge magnet, in the center of which appeared the symbolic figures, "73." President Francis W. Jones had gathered around him such prominent telegraph people as Thomas F. Clark, Col. A. B. Chandler, A. R. Brewer, James Merrihew, W. H. Baker, W. C. Humstone, E. C. Platt, C. H. Wilson and others.

The Hungarian Band furnished music, and a varied entertainment of song, interspersed with violin solos by Professor Bimberg were much appreciated by those present. The "Holy City," sung by Mr. Fisher Miller, an old member of the club, as well as the singing of J. E. Stanley, a newly elected member, won especial praise.

Letters of regret were read from George G. Ward, C. A. Tinker, E. J. Kelly, L. C. Weir, W. J. Dealy, J. H. Smart, D. J. Ludwig, T. P. Scully, Charles Selden and H. J. Pettengill.

New members elected were J. Edmund Stanley, J. H. Hess, I. M. Post, D. F. Mallen, William Hawes, F. A. Williams and W. H. Ten Broeck.

President Jones, in his opening remarks, stated that it was to be regretted that the funeral services of the late M. H. Redding were arranged to take place at the same time as that selected for the dinner, and that many who were then in attendance at the funeral services, and consequently not present at the dinner, would doubtless make their appearance later in the evening. He said that from his point of view he could see nothing at all incongruous in attending both functions upon the same evening, providing a broad and proper view of the object of both be taken, for, as he said, one function was to extend sympathy and show respect to the memory of a deceased comrade and friend by personal attendance at the ceremonies to be performed over his lifeless body prior to its being forever laid away. The dinner was not at all a matter of mere feasting and merrymaking. Those features were entirely incidental and subordinate; the prime object being to meet and greet acquaintances and friends who have long been associated, but whom members would not see for years unless brought together at stated periods upon such an occasion as is afforded by the holding of the Magnetic Club dinner.

He said also that there was more than that involved, because the stepping down from official position of those who have the direction of affairs, to the common plane of the every-day worker, who may be likened to the man behind the gun, was to establish an entente cordiale between those whom the employers have selected to direct and regulate, and the much larger number that are called upon to labor and obey. And, holding this view, which he believed to be the correct one, it seemed to him that the occa-

sional falling out of the ranks of some well-known and well loved comrade, either officer or private, should be a spur to those who are permitted to remain a while longer, to give more attention to their duties in a fraternal and a social way, especially towards those who are working together in the same line of business.

The president later introduced Mr. Thomas F. Clark, who, in some lengthy preliminary remarks, referred to the professional pride entertained by lawyers, doctors, artists, literary men and others in their several vocations. Then, branching into the subject of telegraphy, he said:

"And now, gentlemen, you are, I am sure, asking yourselves what application these disjointed remarks have to us, who represent the working force of electrical industries. They have, I think this application. No matter how strenuous the efforts of the individual may be, it is to the pride of our craft that we must look for the best result of our combined exertions. It is so with all callings and professions. If I have lent a suspicion of jocularity to the instances that I have cited, still I believe in the seriousness of the proposition that where there is such an interdependence of action as there must be in the details of such large organizations as ours, only the coherence of our endeavors will achieve the prosperity on which we all depend. And if the lawyers, the doctors, the authors and the artists put this idea into practice how much more reason have we to do so? There is no calling that justifies more surely such a pride.

"I believe that to the telegraphers, who are the seniors in rank of all electrical workers, it is unnecessary to make an appeal for such a condition. It exists, it always has existed, and will always exist. I have also good reason to believe that it is equally alive in the other departments of electrical activity that are represented here this evening. It is the spontaneous outgrowth of the conditions of our work. Promptness, regularity, exactness, judgment and courtesy are the natural outgrowth of the business. Without them the complaint bureaus would be much larger concerns than they are now, and the business less. The daily, hourly schooling of these qualities result in the expansion of natural abilities that find their way to recognition. The skilful manipulation of electrical devices has made us the servants of the world. Enterprises have grown in magnitude so as to stagger the powers of comprehension. One almost essential element in their creation has been an unqualified faith in the employment of the means of communication between distant factors which our calling provides. The years, the days, the hours, are crowded with events because of faith in the integrity of the system that conveys the mandates of rulers from hemisphere to hemisphere, the transactions of commerce from city to city, and messages of personal love and sympathy from home to home.

"With such a universal confidence we have every reason to take pride in our craft, and we do! It not only lends efficiency to our work, it helps us also in the perplexity of management. You must never forget that we are bound by inexorable com-



mercial necessities and laws, as every responsible financial undertaking must be. The vision has sometimes to be very long, future consequences must be anticipated with almost prophetic prevision, and just as this is done successfully so prosperity is achieved. It is only done, however, at the cost of untiring vigilance, of incessant labor and the nicest calculations of profit and loss. But this is apart from the question. Through all the troubles that may be common to all of us on whom the hand of labor is laid, I hope that the pride of telegraphers in their calling will always be justified and never cease to be an inspiring tradition, and I have confidence to believe that it will."

The affair was brought to a close about 11.30 o'clock, a benediction being pronounced by Col. A. B. Chandler.

Among those present were: R. E. Fagan, R. J. Murphy, G. Roehm, T. A. Brooks, Gerritt Smith, Col. A. B. Chandler, W. S. Eckert, A. P. Eckert, Isaac Smith, Frank E. Smith, C. A. Rhodes, R. W. Scheffler, W. D. Francis, C. A. Benton, A. E. Price, A. R. Brewer, W. H. Ten Broeck, George H. Hamilton, C. F. Pearce, J. F. Ahearn, E. J. Rankin, F. E. McKiernan, D. F. Mallon, C. P. Bruch, F. Pearce, F. D. Murphy, T. L. Cuyler, Jr., T. E. Fleming, E. C. Platt, D. W. McAneeny, James Kempster, W. B. Vansize, G. H. Usher, John Costelloe, M. R. Cockey, C. H. Wilson, G. T. Manson, H. S. Young, D. J. Murphy, C. B. Mears, J. A. Henneberry, S. F. Miller, F. M. Ferrin, J. B. Taltavall, W. C. Humstone, F. W. Jones, John Brant, W. J. Wendell, A. H. Hess, S. F. Jones, C. F. Colver, M. H. Kerner, C. Shirley, J. F. Skirrow, W. Mavor, Jr., William Marshall, A. H. Watson, Thomas F. Clark, H. G. Pierson, G. W. Fleming, F. F. Norton, G. Edward Harding, B. M. Downs, F. F. Downs, J. B. Sabine, J. McKenzie, W. Conover, J. F. Shorey, J. R. Van Wormer, R. J. Marrin, W. W. Briggs, C. W. Morris, Col. C. P. Simmons, James Watson, E. B. Bruch, E. T. Bird-sall, W. S. Hallett, I. A. Van Dusen, J. F. Cleverdon, R. N. Cleverdon, W. Cleverdon, Col. A. B. de Freece, Prof. D. Bimberg, W. H. Hodgins, M. J. O'Leary, J. D. Underhill, F. W. Conn, J. K. Calvert, W. L. Ives, J. F. McGuire, James Merrihew, T. Brennan, A. E. Sink, W. T. Larkin, T. J. Smith, Gardner Irving, Hon. P. Bloch, J. McParlan, J. H. Robinson, L. R. Hallock, M.D., W. H. Baker, A. E. Chandler, H. L. Shippy, A. E. Pearsall, W. D. Schram, W. J. Austin, G. H. Dickinson and J. E. Stanley, all of New York; A. C. Kaufman and J. J. O'Connor, Albany, N. Y.; J. P. O'Donahue, E. B. Pillsbury, S. A. D. Forristall and E. A. Smith, Boston, Mass.; H. V. Shelly, Bridgeport, Conn.; J. E. Golden, Bradford, Pa.; George F. Williams, Foxboro, Mass.; E. B. Baker, New Haven, Conn.; W. A. Vanarsdall, S. S. Garwood, J. A. Chapman, J. Wintrup and W. P. Phelps, Philadelphia, Pa.; W. P. Cline, Richmond, Va.; H. L. Waterbury, Saratoga, N. Y.; I. W. Copeland, Troy, N. Y., and J. W. McLean, Baltimore, Md.

The sunshine of life is made up of very little beams that are bright all the time.—Aiken.

### The Trans-African Telegraph.

The report recently issued by the British South African Company contains much of interest to engineers, says *Engineering*. The work being done on the transcontinental line appeals in a special degree to the imagination. The adventurous servants of the company had, at the date of the report, carried the line up to the southern shore of Lake Tanganyika, and thence into German territory; the total length erected during the year being 325 miles. At the end of the previous season the line had reached Karonga, near the northern extremity of Lake Nyassa. From this point to Lake Tanganyika is a distance of nearly 200 miles, in the course of which a "divide" has to be crossed. For the first forty miles the road is quite impracticable for wheeled traffic, and all transport had to be effected by carriers. Smallpox broke out among these and they deserted in thousands. Further on, the road proved easier, but required to be almost entirely remade, and many drifts had to be constructed across the rocky beds of streams. Some trouble has been experienced in maintaining certain sections of the line previously completed. The sixty-seven-mile section from Chirromo to Chikwawa passes through a large marsh in which the vegetation grows to such a height during the wet season as to top the wire, thus causing great loss by leakage. The natives can not be persuaded to cut down the grass and trees, as the place swarms with crocodiles. In the next section the line passes through a thick forest, and as no proper clearance was made at the outset, constant watchfulness on the part of the patrols has been necessary to prevent serious interruption from falling trees. In the section from Zomba to Fort Johnson the elephants caused an interruption by breaking off poles. In the sections immediately following, the line passes through marshes and forests. Some of the trees met with were enormous, one specimen measuring over 100 feet in circumference. This district is stated to be most unhealthy in the rainy season, and it is difficult then to repair faults, as most of the track is under water. In the rough country following these belts of marsh and forest the line has had to be carried over numerous gorges and ravines in spans of from 200 to 300 feet. These ravines are impassable to linesmen in the rainy season, but plant is now being provided to cope with this difficulty.

### Telegraphs in Great Britain.

The number of telegrams in Great Britain sent during the last fiscal year, according to the Postmaster-General's official report, was 80,576,961, showing a decrease of .92 per cent. The net deficit on telegraphs was £353,216, or £64,624 more than last year. If allowance be made for interest on the capital—£10,868,663—created for the purchase of the telegraphs, the deficit on the year is raised to £652,104.

Operators interested in the method of treatment of writers' cramp will find very complete information in the little booklet entitled "The Cure of Telegraphers' Paralysis," published by TELEGRAPH AGE, New York. Price 50 cents.

## 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.]

## CINCINNATI, OHIO, WESTERN UNION.

A. L. Buchanan has the sympathy of all in the sudden death of his venerable mother, which occurred on November 9.

Martin L. Cook has joined the great army of benedicts, leading to the altar, the latter part of October, Miss Automeit, a charming young lady of this city.

Miss Eda Emigholz has recently returned from a three months' sojourn in Colorado much improved in health.

Miss Bartlett has also returned to duty after an extended leave of absence.

Among the late arrivals are H. F. Erd and L. D. Grace.

The annual reception and ball given by the Morse Mutual Benefit Association at Greenwood Hall on the evening of November 15, was one of the notable features of the present social season, and from the opening note of the orchestra until the last "good night" had been said, joy and good cheer reigned supreme. The success of the occasion was due to the untiring efforts of the entertainment committee, consisting of J. F. Calligan, George Derfus, W. S. Slover, W. H. Keer, A. L. Buchanan, J. E. Nieville and H. J. Beckmeyer.

The programme was replete with a choice selection of music and such dances as fill the heart of terpsichorean lovers with delight.

Refreshments, consisting of ice cream, cake and lemonade, was served freely to all who cared to partake.

Among those present were noticed the following: Mr. and Mrs. Frank Minning, Mr. and Mrs. John Garner, Mr. and Mrs. J. F. Colligan, Mr. and Mrs. A. H. Brockman, Mr. and Mrs. M. L. Cook, Mr. and Mrs. J. H. Beckmeyer, Misses K. E. Creighton, Mayme Johnson, Katherine Koehler, Katherine Litherland, Eda Emigholz, Messrs. W. S. Slover, W. J. Connelly, J. H. Hohnsteaht, George Derfus, W. H. Keer, Walter Fallon, William Holtz, H. F. Erd, A. M. Creighton, John Pons, O. H. Steedle, H. L. Duckett and J. C. Rogers.

There were many friends of the members present not directly identified with the craft. All apparently enjoyed the evening's entertainment.

## INDIANAPOLIS, IND., WESTERN UNION.

In the absence of Assistant Chief Operator Sim Fulton, who is in Phoenix, Ariz., for the change of climate, seeking better health for his wife, the official staff of this office is now as follows: J. M. Taylor, chief operator; F. E. Coit, assistant chief operator, formerly wire chief; M. S. Allen, wire chief, for-

merly quad chief; Washington Price, quad chief, formerly traffic chief; Carl Steinhauer, traffic chief, formerly assistant traffic chief; Fred C. King of night force promoted to assistant traffic chief. "Hi" Henry of the Pittsburg office spent a few days recently with his Indianapolis friends.

## PITTSBURG, PA.

Telegraphers are "queer," and more especially as regards their "mills". You want that "easy, gliding movement" which we have studied for your benefit. Let us rig you out with an excellent Second Hand Typewriter. Big stock for sale or rent. The Typewriter Exchange, 432 Diamond St., Pittsburg, Pa.

## POSTAL.

So many changes have taken place in the personnel of this office during the past two years that a run over the roster will not seem out of place. A large number of the old time stars are enjoying lucrative positions among the broker firms of the city, while many have branched out into business channels other than telegraphic.

Later on your correspondent will make personal mention of a number of those who are remembered by their brilliant work. The branches will also be taken care of, and we will try to make the monthly or semi-monthly letter from Pittsburg interesting not only to those locally concerned, but also to those on the outside.

Manager Kimmey has had incandescent lights placed on all of the city circuits. The service on these circuits has been greatly benefitted by the use of the lights, as a flash of them guarantees prompt attention.

An addition has been made to the fuse board, providing for fifty wires.

The building of the twenty-eight-story Frick structure adjoining the office necessitated the temporary running of overhead cables. Foreman Ryan has just completed the rerunning of the permanent cables, and matters have assumed their normal condition.

The office force, as it now stands, includes the following: L. Lemon, superintendent; Edson Kimmey, manager; A. M. Smith, chief operator; H. J. Colebrook, wire chief; John W. Lapp, repeater chief; W. H. Graham, assistant repeater chief; J. A. Walker, leased wires; J. A. Larimore, traffic chief; A. W. Rinehart, night chief operator; G. W. Dull, assistant night chief operator; D. F. Lloyd, night repeater chief, and G. O. Morse, all-night chief.

Operators of the day force: H. A. Toms, W. J. G. Cooper, W. R. Hall, J. W. Davis, J. N. Shannon, W. H. Torrence, W. F. J. Craig, T. E. Roon, A. W. Naylor, T. H. Lawler, W. J. Crozier, M. R. Kerins, B. S. O'Neil, Miss Florence G. Logue, M. L. Swinger, D. J. Morgan, J. G. Jenkins, Frank C. Barr, M. F. Leahy, H. F. Stuckrath, E. M. Love, J. F. Morris, W. H. Page, J. M. Russell and A. B. Lafferty.

Miss Alice A. Trill is stenographer to Superintendent Lemon and Miss Della M. Black is stenographer to Manager Kimmey.

Operators of the night force and split trick are:



F. E. Chaffey, in charge at the Dispatch; G. F. Shade, in charge at the Tri-State; R. J. Stewart, in charge at the Commercial-Gazette; G. L. Hoff, P. J. McPike, R. K. Lees, M. J. Finnegan, M. C. O'Brien, R. N. Reynolds, E. D. Walker, F. C. Dugan, Thomas McCauley and J. A. Quigley.

Day checks: Miss Georgie Thompson, Miss Laura Stewart and Master W. H. Kane.

Day file clerk, Gus Lintner; Homer Brown, night check.

Receiving department: T. G. Davis, cashier; Charles Gabig and William Pennell, bookkeepers; Elmo Green, collector; Miss B. M. Louny and Miss Elizabeth Davis, counter clerks; George Flemman, night receiver; Walter Sawyer, office boy.

Delivery department: George W. Deal, chief clerk; Thomas Miller and Thomas Higgins, assistants; William Dugan, signal clerk.

Andrew Crozier, night delivery clerk; Chester Quinn, assistant; Frank Weaver, all-night clerk.

#### MONTREAL, QUE., GREAT NORTHWESTERN.

Robert Kane has been promoted to the fast market wire. David Barclay has replaced him on second Toronto.

John Moore has resumed his regular duties on the Halifax duplex.

Chief Operator James Baclay, of Quebec, was a recent visitor to our office.

Wire Chief R. E. McCord, has returned from his vacation in excellent spirits.

It is with pleasure that we welcome Herbert Keating back in our midst after an illness of several weeks. He looks fine.

Leslie Hall is the latest addition to our staff.

George Gittus is back with us again after spending the summer at Banff Hotel, Northwest Territory.

Although the greatest secrecy has been observed, it is now stated that Mr. John Baker has married a Montreal lady.

Mr. Albert Ross has quit working extra in our office owing to the rush having ceased and new men having been taken on, and is subbing in Canadian Pacific Railroad.

William Buckingham is subbing in our Peel street branch.

Chief Operator Walter Graham has installed a set of repeaters in Prescott, Ont.

#### INDIANAPOLIS, IND., POSTAL.

Chief Operator John Looney, has been away on his vacation. During his absence Night Chief John Dobson took his place, Chief Operator Frank Fuller acting as night chief.

#### NASHVILLE, TENN., WESTERN UNION.

S. E. Elliott is the proud father of a little daughter, who arrived recently. William Musgrove is quite a gymnast, being a class leader of the Y. M. C. A. Felix Houston is receiving Scripps-McRae for our new (Democratic) paper, the Daily News. The veteran telegrapher, N. J. Gibson, Sr., is still at Market street office. Harry Musgrove has charge of the Maxwell House office. Lee Bradford and Hickman Gibson are at the Union station. Herbert Shea was

recently rewarded for his diligent practicing by being promoted from file clerk to the Tulane Hotel office. J. H. Lewis is in charge of the American office. While there are fewer changes in our Nashville office than any office of the same size in the United States, it may be of interest to the readers of the Telegraph Age to mention the personnel of the office: Mr. A. H. Stewart, chief; Neil S. Brown and William G. Pfingstay at the board; H. B. Geer, traffic; Night—E. W. Morgan, chief; R. Purcell Cowardin at the board; R. H. Hunt, traffic; W. C. Atkinson, all night, and J. O. Newman, Sunday; John F. Fleming, W. Edward Campbell, William B. Gillespie, A. Boyd Durrett, J. A. Crawford, Ozro and Robert G. Stanley, Robert L. and W. H. Redford, N. J. Gibson, Jr., William Knoch, Lawrence Brennan, Thomas B. Adams, W. F. Burton, Thomas E. Durrett, William McKinney, Stanley (Dan) Norton, J. D. Hester, A. M. Smith, William Musgrove, Martin O'Shaughnessy, S. E. Elliott, J. E. Cox, Edward Jenkins, Mrs. A. R. Halley, Misses Mamie and Maggie Costello, Miss Bessie Sullivan, Miss Ellen M. Morris, Miss Mamie T. Fleming, John R. Newton, William Rich, C. A. Acton, J. N. Brist, R. P. Jay, C. F. Mann, J. K. McCants, John F. Haas, Paul Rainey, W. L. Mounce, John L. Ridley and E. F. Dempsey. To give a little idea of the excellent office we have under the supervision of our chief, A. H. Stewart, a new arrival remarked the other day that he had been trying for ten years to get to Nashville. He has been here several weeks, has bought him a home and has decided to stay.

#### CHICAGO, ILL.

**Typewriters** bought, sold, rented and repaired. Renting a specialty. Also Agency for "Telegraph Age." Telegraphers' Typewriter Co., Room 5, 122 La Salle St., Chicago, Ill. Be sure to mention TELEGRAPH AGE.

**SOMETHING NEW**—no operator should be without. The Eacutt-Cawthern Typewriter Cleaner is a simple little brush; can be inserted in machine in two seconds, type thoroughly cleaned in 30 seconds without soiling fingers. Formerly required 15 minutes, and soiled and inkstained fingers. Price 50 cents, postpaid. Agents wanted. Eacutt and Cawthern, Room 704, 86 La Salle St., Chicago, Ill.

#### WESTERN UNION.

Our chief operator, L. K. Whitcomb, looks refreshed, having spent a couple of weeks among the fishing waters in Wisconsin.

Ray Finley of Maumee, Ohio, took a flying trip to Chicago and spent Sunday with his father, C. H. Finley, assistant chief operator.

Mr. and Mrs. O. T. Rullman, were called to Red Banks, Mo., recently, on account of the illness of Mr. Rullman's father.

Superintendent J. J. Dickey of Omaha and Manager J. B. Twiford of Ogden, Utah, were recent visitors here.

Miss Teska of the Rock Island Western Union office, recently visited this office and was introduced by Frank Donaldson, the loop chief.

C. F. Ireland of this office had both legs broken below the knees and was internally injured in the

elevated railroad collision of November 19. His condition is critical and may terminate fatally. Profound sympathy is extended to his wife.

J. L. Martin is quite sick with pneumonia.

Morse Council gave the second of its winter series of entertainments on Saturday evening, November 9. It was a complimentary social hop to the members and friends, and was a decided success in every way. Their new hall was tested and found to be equal to all the requirements of terpsichorean entertainment. A large number enjoyed the occasion.

A son was born November 15 to Alfred Dickson, chief on the overland wire.

On November 23 occurred the fifth annual reception and ball given at American Hall by the General Meagher Council of the National Union. The affair was a complete success, largely due to the efforts of O. W. Montague of the bookkeeping department.

#### POSTAL.

Mr. John Smith has returned to work after a long absence occasioned by sickness.

Business continues good, and the extras are glad in consequence.

Dr. Ward and E. Soule are now working split trick, Mr. Slack going on straight days.

Mrs. Reynolds and Mr. J. Eagan are among the recent arrivals.

Mr. C. E. Herr has returned to work after an illness of two weeks.

#### CINCINNATI, OHIO, POSTAL.

Visitors: S. A. Duncan, assistant general superintendent, Atlanta, Ga.; P. C. Reyer, manager at Co-shocton.

Changes: J. E. Nevill, night chief, who has been with the Postal for twelve years, left on November 16 to take a position with a brokerage firm. He has been succeeded by Samuel Sprong.

F. D. Wheeler and H. Stoker have left the Postal and gone with Haight & Freese Company, brokers.

#### TOLEDO, OHIO, WESTERN UNION.

Mr. C. D. Sweeney, the all-night wire chief, was married on November 5 to Miss Emma Nohl, of this city. Mr. and Mrs. Sweeney received the hearty congratulations of their many friends here. A handsome silver tea service was presented to them, beautifully engraved with the words, "From your telegraphic associates."

#### QUEBEC, QUE., GREAT NORTHWESTERN.

George Matthews has been transferred from the first Montreal quad to the Canadian Press wire, much to the regret of the Montreal operators. Michael Sweeney has replaced him on Montreal first.

George Alexander runs the first Montreal at night, John Sheridan having accepted a position in Sorel, Que.

"Sandie" Alexander has resigned the management of the Parliament House office and accepted a position on the Great Northern Railway system.

Height & Freese, brokers, of New York, have opened an office here, and Mike MacKay is the operator.

Assistant Chief M. O. Reilley spent a few days in Bathurst and Port Daniel, Que.

J. H. Naulin, for the last ten years operator at Three Rivers station, has accepted a position here.

#### PHILADELPHIA, PA.

My motto — Honorable Dealing. D. A. Mahoney, special representative, main office Western Union, Philadelphia. Write for special Telegraphers' price and terms for the New No. 6 FAY-SHO typewriter. Specialties, \$35 to \$50 rebuilt Remingtons and Smiths. All makes rented \$3 per month.

#### WESTERN UNION.

W. E. Durnin, who is as well known to the Washington fraternity as he is to us, was recently married to Miss Margaret Walsh of this city. Another marriage is that of E. F. Ramsey of this office to Miss Ida Garner of Reading, Pa. Miss Johnson who was with us for a number of years resigned recently and was married to Mr. Maurice Baskins, a wealthy coal merchant of this city.

W. Vance Compton, manager at Chester, Pa., for several years, has resigned to go with the Midvale Steel Company; E. J. Mullen has temporarily taken Mr. Compton's place. Albert Zintl, our six-foot check boy, has been promoted to be an operator at the Reading terminal, vice Richard Murphy, resigned.

A. P. Jones has been sent to Altoona, Pa., vice C. A. Howe, who returns to Washington, D. C.

Mr. J. D. King, who was recently appointed chief train dispatcher of the New York, Philadelphia & Norfolk Railroad, at Cape Charles, Va., has been again promoted, this time to chief clerk to Superintendent Rogers, vice J. W. Carroll.

E. A. Maaske has resigned to go to Jacksonville Fla., for this company.

H. A. Leavitt, who has been absent several months on account of illness, has again returned to duty.

Miss Clara Grimley and Miss Ella Hellings spent a week by the sea.

#### POSTAL.

The advent of a daughter into the family of Chief Operator Stimpson causes a satisfactory smile to light up his erstwhile beaming countenance.

It is not generally known, but this company is the gainer by the adoption of the ingenious device of Manager C. E. Diehl of Harrisburg, Pa., which adds to the utility of the common side of quad sets by using the forward stroke of the repeating local relay armature to record signals, instead of depending on the relay spring to record them in the old back-stroke style.

By the resignation of Mr. J. F. Haughton the early morning force loses a good worker and Mr. Haughton secures a more desirable position with a broker.

Mr. W. T. McCorkle assists daily at one of the down-town broker's offices.

Among the recent conspicuous changes on the night force we notice Mr. C. E. Cox on the A. New York bonus wire, Mr. Kline on Pittsburg and Oscar H. Phillips permanently assigned to the North American.



After many years' service with this company as manager at Lancaster, Pa., Mr. Robert Robinson has resigned to go into the stock brokerage business.

Manager Kirby L. Smith of Salisbury, Md., was married November 17.

Departure: F. E. Koehler.

#### LOS ANGELES, CAL., WESTERN UNION.

The installation of a Crocker-Wheeler dynamo and motor plant has just been completed in this office. The increase of business and consequent stringing of many new wires rendered the uncertain pressure derived from the thousands of gravity cells entirely inadequate, and the need of the much more reliable source of energy has been felt for some time.

The photograph of James E. De Long which appeared in the November 1 issue of *Telegraph Age* and the accompanying notice of his demise spread a wave of sorrow over members of the profession of Southern California. He was well known, and his death is much regretted.

Dr. C. S. Porter, well known in many of the large offices of the Western Union Telegraph Company, has accepted a lucrative position with the Esperanza Mining Company of Cedros Island, Mexico, as assayer. He also expects to establish a medical practice among the mining people. His many friends wish him every success in his new field of operations.

#### BOSTON, MASS.

**Typewriters** for sale, to rent and repaired. Remington, Smith, Densmore and all makes sold or rented on easy monthly terms to telegraphers. Send for samples, catalogues and full information to E. M. Bennett, Manager, The Typewriter Exchange, 38 Bromfield Street, Boston, Mass.

#### NEW YORK CITY.

All popular music at less than half price. "Utopian Waltzes," "Whirlwind March," "Ben Hur Chariot Race," "Belle of Manhattan" March and Two-Step, "When You Were Sweet Sixteen," "My Old Virginia Home," "Left on the Battlefield," "Dolly Gray," "The Sweetheart That I Loved In Boyhood Days," "Spider and Fly," 18 cents each. "Palms," "Popular Gems," "Lang's Flower Song," "Calvary," "Rusticana," 10 cents each. Pianos—all makes—sold, \$1.00 per week. B. L. Brannan, 195 Broadway, New York.

#### POSTAL.

Assistant Night Manager D. F. Mellen is away on his vacation.

Messrs. R. F. McKune and F. E. Wheeler have been absent during the last four weeks on account of severe illness. They are now recovering.

Miss Jean M. Black, manager of the Western Union Telegraph Company, at Poland Springs, Me., was a visitor recently, and was entertained by some old friends here.

A large number of scholars from some of the city public schools paid this office a visit recently

and were entertained by Quad Chief Glen Newman, who escorted them through the operating department. They were highly interested and pleased with all they saw.

The following named now constitute the piece work teams here:

Buffalo wire, Messrs. Good and Perrin.  
St. Louis wire, Messrs. Heath and Hibbits.  
Boston wire (days), Messrs. Price and Murphy; (nights), A. L. Ewing.

Pittsburg wire (days), Messrs. Harper and Kehos.

Chicago wire (days), Messrs. Goodwin and West; (nights), Messrs. Whittaker and Applegate.

Philadelphia wire (days), Messrs. Bauman and Rhodes; (nights), James Driscoll.

Resignations: Miss Lizzie Leahy, G. A. Agnett, R. J. Rutherford and T. Byrne.

The following named persons are on the waiting list: J. T. Fot, E. B. Thompson, C. C. Main, F. A. Shandley, J. F. Hannigan, C. Bossler and F. A. Bates.

Mr. Henry Scrivens, chief clerk in General Superintendent E. G. Cochrane's office, was married on November 20. His numerous friends extend hearty congratulations.

#### WESTERN UNION.

At the entertainment and ball to be given by the Telegraphers' Aid Society at the Lexington Avenue Opera House, December 6th, Mr. T. A. Brooks, Chairman of the Entertainment Committee, states that he has made arrangements with professional talent, and the features of the entertainment will highly commend themselves to all. Mr. Brooks predicts that this will be the best "show" that the society has had in years, and from his long experience in this line his prediction will doubtless be realized.

Miss Eleanor Ohlandt, of the Eastern Division, spent a week in Washington, D. C., with friends.

Edward F. Cummings, formerly night manager of this office, has so much improved in health that he has returned to New York. He has been elected a director of the Serial Building Loan and Savings Association to fill the vacancy caused by the resignation of Mr. E. W. H. Cogley.

#### How's This?

We offer One Hundred Dollars Reward for any case of Catarrh that cannot be cured by Hall's Catarrh Cure.

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Hall's Family Pills are the best.

Mr. James T. McCormack is quite ill at home.  
New appointments: W. J. Calveet, J. D. Thomas, F. A. Post.

Resigned: J. W. Hartigan, J. M. Morgan, J. C. Dolive, H. L. Dolive, L. F. Bannon.

There is considerable talk regarding the pension system, especially among the old-timers, referred to in the last issue of TELEGRAPH AGE.

The sympathy of his friends is extended to Mr. Herbert Smith, chief clerk in Superintendent Humstone's office, on the death of his aged mother, who was run down and badly injured by a fire engine in New York city a week previous, the result of which caused her death.

Mr. Frank A. Stumm, an old-timer, having charge of the gallery nights, has been ill for three months.

Mr. Charles C. Murphy, brother of Frank D. Murphy, this office, has just returned from a prolonged trip in Spain.

Mr. W. B. Purcell, of the loop switch, is at the Presbyterian Hospital for a couple of weeks for a slight operation.

Miss Mamie May, of the city line, has gone to Jacksonville, Fla., for the winter.

Mr. John R. Heidemark, wire chief Southern switch, is on a vacation.

Mr. Charles Loops, of the night office, has the sympathy of his friends on account of the death of his father, which occurred at Kinston, N. C., November 17.

#### Pat and the Anarchists.

They stood outside One Ninety-Five,  
Famed meeting place—Broadway and Dey—  
The place where telegraphers hive  
And strive, by night as well by day.

They mustered there a dozen strong,  
To have a little friendly chat.  
The New policeman came along:  
No anti-Devery man was Pat.

Though he'd shifted from his beat  
On Forty-second street that night,  
And now he burned to do some feat  
To square himself, and "make it right."

He slowly strolled along the pave,  
As Trinity chimed one o'clock:  
"Th' bhoy" was feeling mighty brave,  
And hummed "The Babies on our Block."

The gossipers ne'er saw him stand  
(They were too busy talking "shop")  
Upon the corner, mute and grand:  
He looked the part—did Pat, the Cop.

"Whisht!" And he gazed down gloomy Dey,  
"A dozen av thim—'s I live!  
They're whisperin', too: w'at's thot they say?  
McKinley's roast—Oh, what th' div—!!

"They'se Anarchists! Now here's me chance!"  
And Pat stepped in a doorway quick:

He eyed the group with startled glance,  
And also tighter grabbed his stick.

"They sent Ca to Buffalo—  
("That's ivvidence, me lad," thought Pat.)  
"The best they have in A, y' know.  
("More ivvidence, ye murtherin' brat!")

"You bet, he's well up in the code.  
("Th' code, b' cripe's th' thing fer me!")  
"When he sat in—well, he just showed  
Those Bu hams weren't 1—2—3.

"His Morse was great, 'twas out o' sight—  
("A furrin name—O'll putt it down.")  
"Greased lightning and pure dynamite.  
("D'ye hear that now—Oh, Garry Owen!")

"If he'd got in right at the start,  
The Postal would have got no biz.  
He almost broke Bx's heart,  
You'd ought to hear his Phillips whizz!"

And then another voice was heard:  
"They're sending him to Wa  
For Teddy's 'message.' 'He's a bird—  
So Brinnan said the other day!"

"So Brinnan ses," repeated Pat.  
"They're goin' t' slawter Roosevelt nixt.  
Who ivver h'ard th' loikes av that.  
'So Brinnan ses'—they must be mix't.

"Who ivver see an Oirishman  
Mix't up wid sich a divillish job,  
Fit fer a Dago Omadhaun;  
But Brinnan—nivver!! Naw b' gob!

"I 'r-r-rist y' all!" and Pat stepped out.  
"Ye's murtherin' villains; ye's gallus cheats!  
Ye's Anarchists!" He raised a shout  
That echoed through the empty street.

It took the gang of split trick men  
An hour, with steady argument  
To work that cross off; even then  
The officer was not content.

"Don't do 't ag'in!" was what he said;  
And now the gang when talking "shop,"  
Avoid all reference to Ted,  
And keep an eye on Pat, the Cop.

—B. A. MACNAB.

Montreal.

#### Pensions for Telegraphers.

Editor Telegraph Age:

In view of the fact that Mr. Andrew Carnegie favors the formation of a pension fund for aged and invalid telegraphers, it would be a good idea for the Old Time Telegraphers' Association to appoint a committee and confer on the subject immediately. Your suggestions printed in the last issue of Telegraph Age are fortified by corresponding suggestions held by many members of the profession.



The pension system will meet our purposes infinitely better than a "pauper's" home for self-respecting operators, rendered incapable of providing for their wants by age or infirmity. Our aim should be to assist those who by misfortune can no longer earn a living, and at the same time avoid dealing out the humiliation that pains a worthy beneficiary, who is compelled to end his days in a charity institute.

By subscription a member of a pension society buys a right for care at an opportune moment; he is not really a charity subject, and in this fact has no occasion to look upon himself as a public dependent, therein maintaining a just and encourageable pride.

Your observation regarding the shifting positions of telegraphers, promising unusual difficulty in adjustment of pensions, does not appear to be important. The avoidance of any complications on this score will be easily settled on familiarizing ourselves with the systems of the insurance companies, information readily obtained from available expert sources. The only points to be determined are conditions of membership for our proposed society, and the years and infirmities establishing an indigent eligibility of the applicants for stipends.

Very respectfully yours,

W. A. HENNESSEY.

New York, November 21, 1901.

Editor Telegraph Age:

Your valuable article quoting correspondence between Mr. Carnegie and Mr. Connolly of Pittsburg on the subject of a Home or of a pension fund for old and indigent telegraphers, puts this matter, which of late has been more or less vaguely stated, in a clear light.

The scheme for a home has, it appears, after full consideration, been declared impracticable, and is not the scheme for a pension fund equally so?

Such a plan presupposes three important requisites: First, that the employees should contribute from the time of entering the service until a certain stipulated age, say, 65 years; second, that the commercial telegraph companies should contribute in bulk about an equal amount to that contributed by all the employees; third, that a nucleus fund should be donated from outside sources, or contributed by the first two, in order to launch the project.

Now, as it is evident, in order to attain any degree of proficiency, the art of telegraphy must be acquired at an early age; large numbers of young people of both sexes enter the service, many of whom become operators of various grades, others branch off into the clerical and other service required by the companies, while many leave and take up other vocations.

The young operator, after assignment, generally commences to cast round for an opportunity to improve his position, either by seeking other business, or going to other points than the one first entered, and as up to this stage the remuneration is necessarily small, it would be impracticable, as well as grievously unjust to tax these people for a contingency to which only a very insignificant number could by any possibility hope to attain, while to leave to each individual to voluntarily join such a scheme would be futile.

It is probably only after a service ranging from five to ten years, that the average operator commences to think of the future and takes membership in the insurance, aid and other societies which he finds at hand and ready to welcome him, but which he joins voluntarily and without the slightest compulsion from any source; and he is equally free to leave the service and retain his membership, or to resign, or lapse, after having received the protection afforded during its continuance, while contributions to a pension fund in such case would be forfeited, without any equivalent having been received.

Is it not, therefore, along the line of the societies as at present existing that Mr. Carnegie's propositions, if applied, would be found to be most useful?

The two insurance organizations in the telegraph field, the Telegraphers' Mutual Benefit Association and the Gold and Stock Life Insurance Association, have disbursed in benefits to the heirs of deceased telegraphers about \$900,000 to the former and about \$70,000 to the latter, at an average cost to each member of about \$1 per month for each \$1,000 insurance, while the New York Telegraphers' Aid Society has disbursed about \$50,000 in sick and burial benefits at an average cost to each member of about \$6 yearly.

The membership of all three is about 7,500 (there being many joint members), and there is a surplus fund of about \$220,000. It is largely due to the revenue from this fund that the societies are enabled to offer their advantages at such small charges, but as they progress, they are confronted with the problem that their members are growing older in average age, and the cost is steadily but surely becoming greater, although it will probably never become very heavy.

Other aid societies throughout the country are also doing a noble and effective work in this direction.

Were Mr. Carnegie to endow a fund the proceeds of which would be paid over to all such telegraph societies, insurance and aid, in proportion to their numbers and extent of their usefulness, it would serve as an addition to the present reserve held by each, and thus they would be enabled to maintain or perhaps reduce their present rates, or to enlarge their benefits, and thereby attract to their membership a much larger number of the telegraph workers than they are doing at present.

"MEMBER."

New York, November 23, 1901.

#### New York Visitors.

Mr. H. B. Perham, of St. Louis, Mo., president of the Order of Railroad Telegraphers.

Mr. J. W. Tillinghast, manager of the Western Union Telegraph Company, Buffalo, N. Y.

Mr. Joseph W. Kates, general superintendent of the Postal Telegraph-Cable Company, Richmond, Va.

Mr. W. H. Young, night manager of the Western Union Telegraph Company, Washington, D. C.

Mr. Geo. S. Williams, manager of the Postal Telegraph-Cable Company, Foxboro, Mass. Mr.

Williams is a member of the State Legislature, and is otherwise prominent in Massachusetts politics.

Mr. C. R. Tracey, manager of the Western Union Telegraph Company, Wheeling, West Virginia.

Mr. G. O. Perkins, superintendent of Telegraph, Mexican Central Railroad Company, City of Mexico, Mexico.

Mr. Joseph Uhrig, formerly of the Western Union Telegraph Company, Chicago, Ill., and now in the marble business in that city.

Mr. J. D. Flynn, superintendent of the Western Union Telegraph Company, Pittsburg, Pa. He came to New York to attend the funeral of his old friend, M. H. Redding.

Mr. E. A. Smith, superintendent of the Boston and Maine Railroad Company. S. A. D. Forristall, superintendent of telegraph of the Boston and Maine Railroad Company. E. B. Pillsbury, superintendent of the Postal Telegraph-Cable Company, and J. P. O'Donohue, chief operator of the Postal Telegraph-Cable Company, Boston, Mass.

#### Personal Mention.

Mr. E. C. Bradley, vice-president of the Postal Telegraph-Cable Company, New York, has returned from a business trip through the South.

Mr. Andrew Carnegie, the old time telegrapher, has been elected Lord Rector of the University of St. Andrews, Scotland. Mr. Carnegie is undoubtedly the first telegraph messenger and operator to attain this high distinction.

Mr. O. S. Wood, the oldest telegrapher in the world, and the first student on the first telegraph line ever constructed, which was erected between Washington and Baltimore, in 1844, was a recent and welcome caller at the office of Telegraph Age.

Mr. Charles H. Erwin, assistant superintendent of the Western Union Telegraph Company, New York, has been placed in charge of the district lately presided over by M. H. Redding, deceased. Mr. Erwin's district now covers all the branch offices in the entire city of New York.

Mr. P. V. DeGraw, who for four years past has been managing the Philadelphia business of the Columbia Phonograph Company, has resigned to accept a position on the Cincinnati Enquirer, with headquarters in Washington, D. C., where, prior to September, 1897, Mr. DeGraw had served with distinction upwards of twenty years, in telegraphic, press association, and general newspaper work—fields in every way congenial. Upon his retirement from

journalism to accept a very attractive offer from the Columbia Phonograph Company, Mr. DeGraw entered an entirely new line of work never previously having had experience in commercial life. That his services were successful and highly appreciated by his associates can be best attested by quoting from President Easton's letter, as follows:

"In accepting your resignation as manager of our Philadelphia office, to date from November 1, I take this opportunity of expressing my cordial appreciation of your devotion, industry and loyalty to the interests of the company and my official and personal regard. You will carry with you to new fields of endeavor the very best wishes of all your associates in this service, and especially of

Yours very truly, F. D. EASTON.

#### Adopted the Delany System.

We are able to announce on good authority that the Pennsylvania Railroad Company has adopted the Delany System of Automatic Telegraphy. The system has been in practical operation between Philadelphia and Altoona for the past month, carrying regular business, and the results obtained have been satisfactory in the highest degree. This undoubtedly marks the beginning of a new era in American telegraphy, and a rapid extension of this new method may be looked for. It is well worked out after years of persevering effort by the inventor, Mr. Patrick B. Delany, a practical telegrapher, who knew what was needed. Those who saw the system in operation at the Pan-American Exposition were not surprised at its being awarded the gold medal.

The Cape (Good Hope) Government some time ago sent an official to London, England, to engage telegraphers for the colonial service, and it is now announced that 250 Government telegraphers, all first-rate operators, have been engaged for the South African service.

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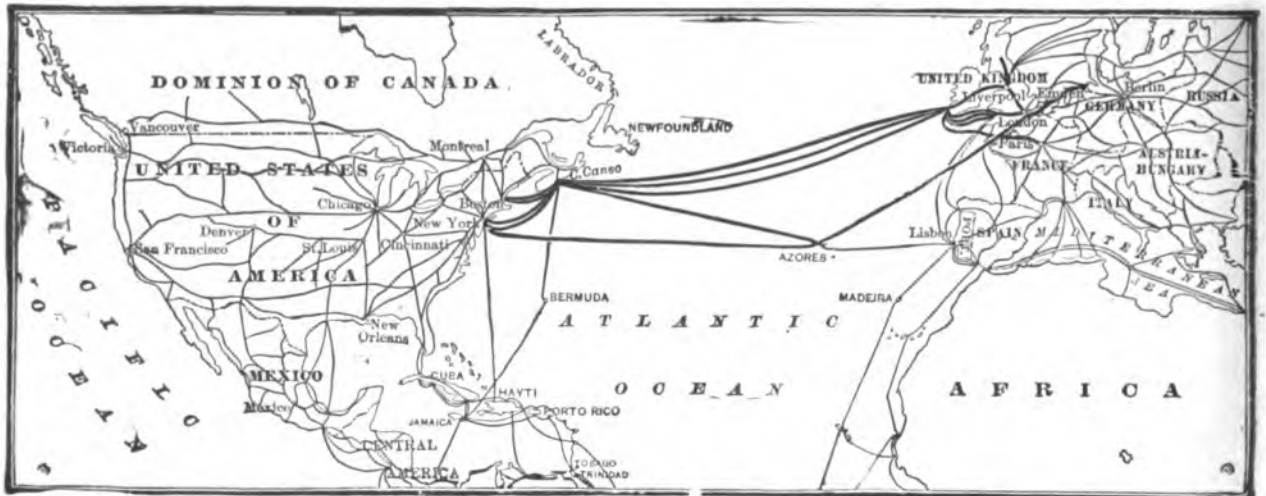


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# THE TELEGRAPH AGE.

No. 24.

NEW YORK, DECEMBER 16, 1901.

VOL. XXIV.

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## SOME POINTS ON ELECTRICITY.

### The Equipment of a Modern Telegraph Office.

(Continued.)

BY WILLIS H. JONES.

[In a few months hence this series, together with the most valuable of the articles appertaining to the duplex, the quadruplex, storage battery and other telegraph matters, which have appeared in this journal during the past three years under the caption of "Some Points on Electricity," will be published, and the book substituted for "Pocket Editions of Diagrams," by Willis H. Jones. Those desiring a copy of the new book should send in their names at once.—Editor.]

When the various main wire switchboards have been erected and arranged in suitable positions in the operating department, one would naturally conclude that the work was completed, and that all that yet remained to be done in order to connect the external circuits thereto is merely a matter of bringing the latter up bodily from the cellar and binding them to the springjacks.

This idea is erroneous. In practice all main wires, loops, and other external circuits end, or rather, begin in the cellar, or at least, where they enter the building.

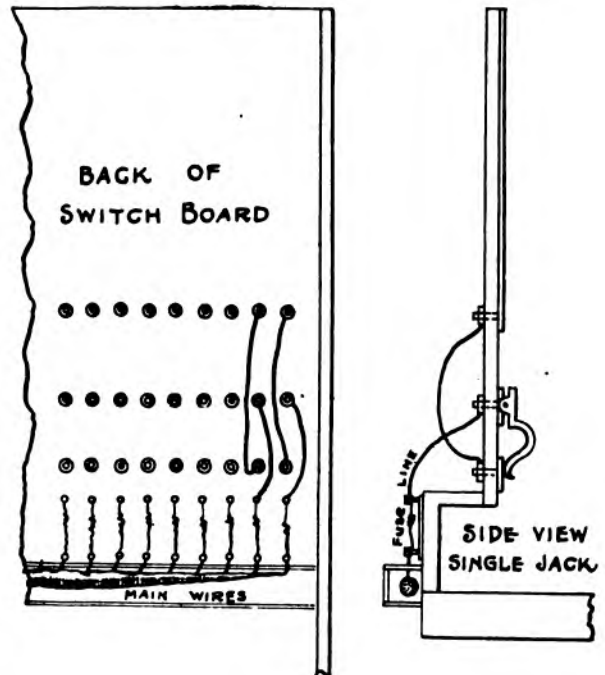
At that point they should all be connected to one common, or general switchboard from which device special conductors radiate to the springjacks in the main switches upstairs. These linking conductors should not take the number of the external wires which may be temporarily connected

to them, but be given separate marks for identification, and a record of their numbers and positions kept in a book for reference.

It will be seen that these conductors are in reality part of the switch wiring and therefore permanent fixtures, while the main and the cellar boards are consequently in a manner practically one and the same device—one being the extension of the other.

To the wire chief, however, each springjack and conductor is known by the number of the external circuit temporarily attached to its distant terminal in the sub-switchboard, and is so labeled.

Thus if, say wire No. 10 east, be connected to a certain conductor in the cellar, the springjack in



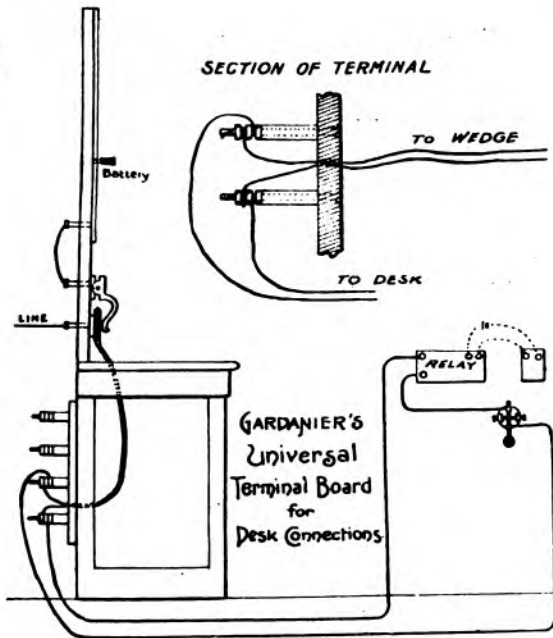
the main office board, to which the other extremity of that conductor is connected, would be temporarily known as No. 10 east, but should, say 20 east, be substituted in the cellar for No. 10, the same jack and conductor would then become No. 20 east and the tablet must necessarily be changed.

Where there are two or more main wire switchboards in the operating department, it is customary to bring the conductors up from the sub-switch in separate cables containing 50 or 100 strands each of about No. 16 gage insulated copper wire, the whole well taped or otherwise protected.

After a cable has been drawn lengthways across the full width of the board from behind, and laid

in close proximity to the row of springjacks, the free end of the cable should be gradually unraveled and the strands distributed and connected to the fuse holders of the various jacks assigned for their reception, as shown in the first accompanying cut. As the latter are situated side by side in regular rotation, the unraveling of the cable offers a method of making such connections in the neatest possible manner.

The next move is to connect the flexible cords, to one end of which the wedges are attached, with the conductors leading to the loops and the desk instruments throughout the operating department. One would naturally think that this was a very simple problem, but to make such connections properly and systematically it is first necessary to arrange a suitable device for the operation. This device consists of one or more long boards, perforated with holes for the cords, the rows and numbers of which orifices correspond with those in the



shelf or main switch desk, through which latter the wedge end of the cords come up.

By this method the location of the other terminal of any given cord may immediately be found by noting the number of the row and hole in the lid through which it comes up. The corresponding number behind the board will show the exact spot where the connection is made. Between each pair of holes in this board is a wooden extension pin to which both terminals of flexible cord and the conductors leading to and from the loops and desk instruments are metallically joined by means of three metal disks, as shown in the illustrated cut. This diagram shows Mr. George W. Gardanier's universal switchboard arrangement for connecting flexible cords with loops, desks, and other apparatus. It is self-explanatory so far as the connections are concerned and no one should fail to make such connections properly. The chief feature of the device is the extension pins which hold the

cords permanently in a position which will prevent twisting where the joint is made, the pull being always in the same direction.

(To be Continued.)

#### Business Notices.

"That chap's a fine sender." "Why wouldn't he be, he uses a 20th Century Telegraph Key." Address Foote, Pierson & Co., 82-84 Fulton street, New York.

The Gordon Battery Company, now at 13-15 Laight street, New York, will remove on January 1 to the premises Nos. 439-445 East 144th street. The necessity for more room in which to handle their increasing business is the occasion for this change. The entire plant of the company will be concentrated in the new quarters.

Mr. O. T. Anderson, one of our enterprising Chicago agents, who is also in the typewriting business, has lately consolidated his interests, conducted under the name of the Telegraphers' Typewriter Co., with those of the Chicago Typewriter and Supply Co., at 122 La Salle street, Chicago. Mr. Anderson will have charge of the department dealing with telegraph operators.

The Electric Storage Battery Co., of Philadelphia, Pa., is distributing a beautifully illustrated pamphlet describing the uses to which the storage battery is now applied. That portion of the book covering telegraphy shows illustrations of a storage battery for fire alarm, police telegraph and municipal work, this branch of the service being as readily covered by this system as is the telegraph, electric lighting and all other branches comprising the electrical field. Copies of this book may be had on application.

THE TYPO-TELEGRAPH.—The typo-telegraph, a printing telegraph system which has been in operation for many months past on the lines of the Long Island Railroad, Long Island City, N. Y., has so pleased the inventor, Dr. G. A. Cardwell, and the railroad officials, who indorse it as a very useful and efficient system of telegraphy, is described in a neat brochure which is now being distributed. The typo-telegraph can be operated over any distance and may include a number of intermediate stations. It is a one-wire system and will transmit at a speed exceeding the skill of an expert typewritist. The apparatus is operated by a keyboard similar to those found on the usual typewriting machines, and the receiving at the distant end is in typewritten form. This invention can be seen in actual operation at any time in the office of Mr. L. S. Wells, superintendent of telegraph of the Long Island Railroad at Long Island City, N. Y.

Many foreign governments are considering the advisability of teaching telegraphy to their naval officers so that they may be competent to successfully handle the wireless telegraph system when it shall be introduced into the navies of the world.

**General Mention.**

Mr. George C. Zachow, of the Western Union Telegraph Company, at Milwaukee, Wis., was married on October 30 to Miss Elizabeth E. Johnson, of Janesville, Wis.

Mr. J. A. Ridgely, an old-time telegrapher, for the past three years soliciting freight agent of the Louisville and Nashville Railroad at New Orleans, has been appointed general agent of the company at Chicago, Ill.

Mr. Omar H. Bartlette, general agent of the Louisville and Nashville Railroad at New Orleans, La., and well known among the telegraphic profession of the South, was married on November 30 to Miss Georgia Maybin, of the Crescent City.

Mr. John J. Kelly, operator for the New York Herald at the Nantucket lightship, is a subscriber to this journal. We expect soon to have quite a subscription list among the members of the fraternity employed on ocean steamships, operating the wireless telegraph system.

Mr. James H. McCalla, of the Postal Telegraph-Cable Company, Birmingham, Ala., was married November 27 to Miss Allie E. Edwards, of Childersburg, that state. His office associates remembered their friends with a handsome silver service, which was tendered with hearty congratulations.

Mr. John A. Townsend, manager of the Western Union Telegraph Company, at Dunkirk, N. Y., a veteran telegrapher, but up-to-date in all particulars, will soon occupy a new main office, which will be located in the new post-office block. It will be the most modern telegraph office between Buffalo and Cleveland.

Mr. E. M. Ringler has been appointed manager of the Canadian Pacific Railroad Company's telegraphs at Ashcroft, B. C., succeeding C. A. Shaw, who was in charge for the past three years. The importance of this office has been greatly enhanced since the opening of the Government telegraph line to Dawson, Yukon.

The land lines to connect the shore end of the Pacific cable, the first section of which will be laid in January, 1902, at Cape Beale, Vancouver Island, and Nanaimo, will follow the wagon road from that town to Alberni and will be carried thence to Cape Beale by as direct a route as possible. It is proposed to cut out a road 120 feet wide to prevent any breaking of the wire by falling trees. Superintendent Wilson, of the Canadian Pacific Railroad Company's telegraphs, is looking after the work.

Nothing reveals the cosmopolitan character of the city of New York more forcibly than the sign of the Western Union Telegraph Company displayed at the corner of Bayard and Mulberry streets. The title of the company on the familiar blue background is in English, while below it appears in both Italian and Hebrew. Doubtless the sign attracts more readers of the two latter nationalities than of English-speaking people, for

the location is in the heart of the Italian and Hebrew quarter. Within the little corner office, resonant with the click of the telegraph, a banking, express, and ship-passenger business is also transacted, and a visit therein at almost any time discloses a crowd of gesticulating and loud-speaking foreigners, the scene, as well as the section in which it is found, being decidedly un-American.

"Six months ago Chicago had 30,000 telephones, to-day she has 40,000, and within the next two years we will install instruments that will bring the total number of subscribers up to 100,000."

This is the way that President John I. Sabin, of the Chicago Telephone Company, tells the story of the enormous increased number of telephone subscribers in that city. The tremendous growth is in great measure due to the system of placing of 5-cent telephones throughout the city.

Mr. Sabin is an old-time telegrapher, and his success in the telephone field is viewed with pride by his old associates of the key.

**New York Visitors.**

Mr. George Hoyt, an old-time telegrapher, of Chicago, Ill.

Mr. H. B. Perham, of St. Louis, Mo., president of the Order of Railroad Telegraphers.

Mr. Thomas Roche, superintendent of the Western Union Telegraph Company, Boston, Mass.

Mr. Joseph W. Larish, electrician of the Western Union Telegraph Company, Boston, Mass.

Mr. H. J. Pettengill, of Boston, Mass., vice-president of the Michigan Telephone Company.

**DYNAMOTORS WITH FLY WHEELS.**—Mr. S. F. Jones, electrician of the electrical engineer's office, Postal Telegraph-Cable Company, New York, has just installed three dynamotors of the Sprague type, in the Postal Telegraph-Cable Company's office at Albany, N. Y.

The great desideratum in the operation of telegraph wires is to have the currents smooth and unvarying in strength, particularly for working the quadruplex circuits. The electrical engineer's department of the Postal Telegraph-Cable Company has paid attention to this feature for several years, only selecting such machines as possessed strong field and armatures with numerous segments. The method of testing to determine the suitability of a machine is by using a telephone receiver connected in the secondary of a suitable induction coil, the primary of which is in the circuit of the armature. With a smooth current similar to that of a chemical, or storage battery, the diaphragm of receiver is comparatively quiet. In the Albany machines an improvement in the current has been effected by the addition to the machines of fly wheels, which preserve uniform voltage under variation of load.

A subscription to TELEGRAPH AGE is one of the best investments a progressive telegrapher can make; it keeps him thoroughly posted.



**Personal Mention.**

Mr. John W. Mackey, president of the Commercial Cable Company, New York, is in California on private business.

Mr. Chas. A. Tinker, general superintendent of the Western Union Telegraph Company, New York, is spending a brief vacation in North Carolina.

Mr. Robert C. Clowry, vice-president of the Western Union Telegraph Company, Chicago, Ill., has been visiting the Pacific Coast on one of his regular tours of inspection.

Mrs. James D. Reid, wife of the late James D. Reid, whose health has not been of the best for the past year, is at present sojourning at Nice, France, where the change of climate is greatly benefiting her.

Mr. H. D. Reynolds, superintendent of the Postal Telegraph-Cable Company, Buffalo, N. Y., who has been seriously ill with typhoid fever for the past thirteen weeks, is still reported to be in a critical condition. The duties of his office are looked after by Mr. L. Lemon, superintendent of the same company, Pittsburg, Pa., who divides his time in the two cities.

The resignation of Mr. Chas. J. Glidden, an old-time telegrapher, as president of the subsidiary companies of the Erie Telephone and Telegraph Company, which was placed in the hands of the directors several months ago, has now been accepted and Mr. Glidden has severed his connection from the management of these corporations. He remains as a director.

Another revolution has taken place in municipal politics at Pittsburg, Pa., and Mr. Morris W. Mead, chief of the electrical bureau of that city, who was swept out of office by the political upheaval of three months ago, has again been reinstated to his old position which he has held for so many years to the general satisfaction of all concerned. Mr. Mead's friends are rejoiced to learn of his reinstatement.

Mr. Frank A. Munsey, an old-time telegrapher, proprietor of the Munsey Magazine and other periodicals, has within the past two weeks launched into the daily newspaper field by purchasing the New York News and the Washington (D. C.) Times. Mr. Munsey accurately realized years ago what the masses desired in the way of magazines, and he furnished them. His ideas on the proper methods of conducting daily papers, are no doubt equally sound. It is understood that he intends to purchase newspapers in other cities, thus forming a chain of them which he proposes to control from New York city.

Mr. P. J. Tierney, for many years manager of the Central Cable office, New York, has, in addition to his regular duties, also been placed in charge of the regular Western Union office at 46 Broad street, as manager. Mr. Tierney has been identified since 1870 with the telegraph service of

New York, of which he has always been a popular and respected member. His appointment to the managership of the most important branch office in the metropolis, it being located in the very heart of the financial section of the city, was received with delight by his numerous friends, who extend their sincere congratulations and best wishes.

**A Decision of Interest.**

The Missouri supreme court handed down a judgment of special interest upon a tax case on December 3. Similar cases are pending in other States, and the matter at issue is of interest throughout the country. The question upon which the Missouri court rendered judgment was whether a tax assessed upon the Western Union Telegraph Company by the Missouri board of equalization was legal. The contention of the company was that it is a corporation of Federal character, and therefore not taxable by the States. In the opinion of the court that contention is not warrantable. The court holds not only that the franchise is property, but that the company owning and operating it is taxable in the several States, in that proportion of its total value which is represented by that part of its line which is operated within the State imposing the tax. This case will no doubt be appealed to the United States Supreme Court.

**Senator Mason's Idea.**

Senator Mason, of Illinois, who is to be chairman of the committee on post offices and post roads, thinks that a good field for postal experiment is to be had in the use of the telephone and telegraph for the rapid transmission of mail. "It is believed by many," he says, "that a large share of the mail between New York and Chicago, short communications could be sent by telegraph or telephone, and delivered by the government for 10 cents and at a profit. A short message to New York, if put in the mail box in Chicago at 5 o'clock, would be delivered the next morning in New York by the regular carrier, whereas if it went by mail it would not reach New York until the next night and would not be delivered until the second morning."

If we understand the Senator's idea, he would provide in connection with the postal service and under its stamp for a cheaper use of telephones or telegraphs for long-distance communication in short messages than is now available under the retail tolls of the telephone and telegraph companies.

The Crehore-Squires system of duplex telegraphy is being experimented with on one of the Delaware, Lackawanna and Western Railroad wires between Hoboken and Dover, N. J. The duplex is similar to the phonoplex system, it being operated on a wire, without interfering with the regular traffic. This system requires an alternating current in its operation.

You can't afford to be without TELEGRAPH AGE.

**Telegraphic Domination.**

BY PHILIP H. FALL, OF HOUSTON, TEX., ONE OF THE OLDEST OF OLD TIMERS IN THAT STATE.

Mercantile affairs are inseparable and dependent upon telegraphy for its existence.

Lumber, oil, rice, sugar, and, in fact, every line of industry, depends upon telegraphic quotations each day for the consummation of deals, and the telegraphic columns of our great dailies are eagerly scanned for information most vital to the welfare of buyer and seller.

The sleepy old stage coach of our fathers, and even the lightning express mail, are relegated to the shades, being antiquated, out of date, for the conveyance of information for the mercantile world of to-day.

Steam is being fast supplanted by electricity. The civilized nations of the world are even more dependent upon telegraphy than commerce. Armies are moved and placed; the ships of the ocean watch the telegraphic weather reports, depending upon its accuracy for foul or fair navigation.

Railroad trains dare not turn a wheel without telegraphic instruction.

In y<sup>e</sup> olden time, when the reader and I were young, commodities of every description retained the same prices for lengthy periods, until such time as ships arrived from across the ocean, and the slow mail advised us that different articles had advanced or declined in value, while now, each day witnesses a rise or fall in prices.

Whether the swift communication is to the advantage of the human race is a question to be settled. It no doubt often gives fictitious values and admits of so much wild speculation to the detriment of thousands that many of us old fogies sigh for the olden time, when, we believe, the world was more honest than now.

There are those, no doubt, who are looking forward to some means of more rapid communication than that offered by the telegraph, but they will look in vain, for were a wire strung around the world and the other end arranged on the same desk where it started from, a pressure upon the key would cause a dot to traverse the distance around the earth in two and a quarter minutes. Twenty-five thousand miles in such a short time ought to satisfy even the bucket shop man. We, no doubt, have arrived at the acme of rapid communication. Texas is not behind any portion of the world in splendid telegraphic facilities. A perfect network of wires has been strung to almost every hamlet and saw mill within its broad domain and the lumberman, through his 'phone or telegraph wire is in rapid communication with all the world. What a contrast to a few years back! The farmer, the cattle man, the lumberman and denizens of small towns, unable to acquire this splendid system of communication, were entirely ignorant of appreciation or depreciation of their wares, and at the mercy of the speculator. They groped in the dark, as it were, and were often taken advantage of by the wide-awake manipulator. But the order of affairs is now reversed. There is no excuse for the manufacturer being taken unawares. He has

the same facilities as the shrewd speculator, and need not be victimized as formerly. This view of the advantage or disadvantage, of telegraphy to the commercial world is in its favor, for it renders all upon a par as to the value of what they desire to buy and sell.

That great corporation, the Western Union Telegraph Company, with its 23,000 offices in America and cables across the ocean, has so reduced the price of telegrams within the last few years that it is not much of a hardship for any concern to use it. Each year witnesses still further reductions, and the writer is confident that soon its service will be so cheap that very few will use the mail.

Thirty years since a telegram of ten words, from Texas to New York, cost \$5, while now it is 75 cents. From Texas to San Francisco, \$10, while now it is only \$1. A few more years, I am convinced that 10 cents will pay for a ten-word message to New York. Many large Texas concerns will no doubt have their own leased wires to every part of the state, and postage stamps and mail bags will be almost discarded by the heavy business men.

We are in a fast age, and we cannot repel the wave of what is called progress; let's get in the swim and add to its velocity by acquiescing in the conditions as we find them.

Let's be heroes in the strife, and not clog the wheels of improvement.—Southern Industrial and Lumber Review.

**Australian Cable Soundings.**

Mr. Isaac Robinson, United States consular agent at Norfolk Island, gives some interesting news concerning the Australian cable soundings. The British cable steamer *Britannia* arrived June 12 from Brisbane, Queensland, her work being to mark out a track for the new Pacific cable. On the passage across from Australia soundings were taken every ten miles. About 100 miles from the coast an obstruction was met with, a mountain or range of mountains coming right in the track, and a slight deviation south had to be made in order to clear it. Two thousand eight hundred fathoms was the greatest depth obtained, and 257 fathoms the shallowest, on top of the mountains referred to. It has been decided that Anson Bay, on the west side, is the best place to land the cable here. Anson Bay is six miles from the settlement of Kingston. A cable house is to be built close to the shore in the bay.

Norfolk Island will be one of the most important stations, as all messages to Australia and New Zealand will converge here, to be repeated. The Australian and New Zealand portion of the line will, it is stated, be completed by the middle of next year; the other portion, by the end of 1902.

"Well, I declare," shouted a man, "here's a telegram to my wife, and it reads 'to D. H. Frank.' I bet I'll find out who this fellow 'Frank' is before he is another day older."

### Recollections of Mr. Dugan.

George M. Dugan of Chicago, superintendent of telegraph of the Illinois Central, was in New Orleans a few days since.

Mr. Dugan is practically the father of the art of telegraphy in the south. He was born in Brown County, Ohio, in 1835, and in 1854 he had settled in Memphis as the sole operator of the Great National Telegraph Company.

"There was only one wire into Memphis," said Mr. Dugan to a New Orleans reporter, "and whenever it got in trouble I would hire a buggy and start out to find what was wrong. Often I drove miles into the country and repaired damages which had been inflicted by rain or wind. I was in New Orleans the year following, and at that time there was only one wire which connected that city with the rest of the country. I have a telegram which was sent in that year to one of my wife's relatives. The paper on which the message was written bears the likeness of a man, bearing in his hand bolts of lightning. This individual, with his fist full of forked fire, was the trade mark of the company."

Mr. Dugan was a comrade, in the days immediately following the war, of some of the most picturesque characters in the history of southern railroads. One of his partners was Barney Hughes, passenger agent of the old Memphis and Charleston, in the Bluff City. Mr. Hughes was also a telegrapher. He died a few years ago.

"Barney and Sam Carey, who was one of the most popular passenger agents New Orleans ever gave to the world," said Mr. Dugan in talking over old times, were wont to run together when they got in the same town. Once Sam was in Memphis and wanted to get back to New Orleans. Barney routed him via Grand Junction, Miss. He told Sam that it didn't make any difference whether he made connection at Grand Junction or not—that it was one of the garden spots of the earth, and that he would find the hours to fairly fly while he laid there.

"It was in summer, and a very dry, hot summer it was. Sam took his train, missed connection at Grand Junction and found himself confronted with the necessity of spending half a day there. He looked about him and saw nothing but railroad tracks, which were shimmering beneath the hot rays of the sun. There was nothing to do in Grand Junction and nowhere to go. He thought of the praises which had been heaped upon the station by Barney and finally sat down and wrote him a message, which he sent by wire. The message read:

"Barney Hughes, Memphis: I wish you were in h—l."

"Barney got the telegram all right and lost no time in answering it. This was the message Sam received in reply:

"I had rather be in h—l than Grand Junction."

Mr. Dugan, in hearing back over the old days, told a great story on Milton H. Smith, president of the Louisville and Nashville Railroad. When Mr. Smith was growing up he earned his board in Holly Springs, Miss., by minding the door of the railroad eating room kept there by Joe Buffalo. It was his

duty to take the meal tickets of those who wanted to feed.

"Joe Buffalo left Holly Springs," said Mr. Dugan, "and after many years was settled in New York. He had lost sight of Milton H. Smith, who in the meanwhile had risen to the position of president of the Louisville and Nashville, after having secured a small position with that company, and worked himself up. Buffalo had heard nothing whatever about Mr. Smith's career. One day he was walking down Broadway when he was halted by the man who had once taken meal tickets for him. "'Hello, Joe!' said Mr. Smith, as he extended his hand.

"Buffalo shook hands, but when he had gotten away he snorted out his indignation to a friend.

"'What do you think of that fellow Smith's nerve?' he said. 'He used to mind the door for me when I ran a railroad restaurant in Holly Springs, and now he stops me on the street and calls me 'Joe,' just as if we had grown up together.'

"The friend who had been confided in, laughed. 'Don't mind Mr. Smith's familiarity,' he advised. 'He's president of the Louisville and Nashville now.'

"'Well, I'll be d—d,' said Joe. Ever after that it was as much as a man's life was worth to talk to Buffalo about that 'fellow Smith's nerve.'

Mr. Dugan also told an incident in the lives of two railroaders whose names were household words not long ago in the south. Both of them are now dead, so no confidences are being violated in repeating the story.

"They were great spenders," he said, "and great rounders, whenever they wound up their day's work, and one night they started out to paint things red in one of the big cities of the middle west. I don't want to give their real names away, even though they are both across the 'great divide,' so I will give them the fictitious names of John and Henry. John went by the boards first, shortly after midnight, and was carried off to the lockup, where he was assigned to a cell. He was awakened an hour or so later by a noise in the corridor, and looked out to see his friend, Henry, with a couple of policemen. Immediately John got on his dignity.

"'This is a nice way to treat a friend,' he said. 'Here I've been in jail three hours and you're just coming to get me out.'

"'H—l,' said Henry, 'I'm just getting in myself.'"

T. M. B. A.—Assessment No. 386 has been levied to meet the claims arising from the deaths of A. Stanley Cross, at Huntsville, Ala.; John M. Moffat, at Dunmore, Pa.; Wm. J. Bodell, at Fortress Monroe, Va.; Warren Dow, at Plattsburg, N. Y., and John J. Tierney, at Brooklyn, N. Y.

He came luffing down on the starboard tack of the operating room, hitching his trousers, and his eyes well to port, in regular "Jack Tar" fashion. To his astonished witnesses he said, "Oh, that's all right; I am just practicing my sea-legs to get a job aboard an ocean liner, when the Marconi system gets installed on steamships."



**On the Watch for Wire Thieves.**

Possibly there are no suburban communities better protected from the depredations of midnight prowlers than the rural portions of Montgomery county, Pa. This practical immunity from thieving is the outgrowth of the presence of watchmen who nightly patrol the various telegraph, telephone and electric railway lines to guard the copper wires which is always profitable plunder for thieves.

Silent sentinels are on duty in frequented as well as lonesome localities to apprehend those yielding to the temptation to steal the wire. So keenly alive are the protectors of this important adjunct to travel that at times their over-zealousness causes some embarrassing and amusing annoyances.

A physician recently traveling along a country road at 1 A. M. was stopped thrice in three miles, lest perhaps his carriage might have contained a pair of malefactors with pliers and climbers for wire depredations.

An old farmer who journeys to market weekly, in order to facilitate travel, carried a lantern for several months. Whenever he saw a figure of a watchman emerge from ambush along the roadside he would slow up his team, hold the light up to his face and shout: "I am all right; come, get up there." He never realized the danger that he was making a mark of himself should a chance highwayman turn up until told so one day by a fellow marketer. The latter had a better plan on his route. He adopted a system of pass words to save loss of time by the interruptions of wire guardians. Whenever accosted he shouted out: "Corned beef and cabbage." The reply invariably came back: "All right, go ahead." This watchword became so prevalent in a certain region that for safety it was changed.

**Loan Association Meeting.**

The regular meeting of the shareholders of the Serial Building Loan and Savings Institution of New York, for the purpose of electing auditors and nominating officers to be elected at the annual meeting of the institution, will be held in the office of the corporation, 195 Broadway, on Tuesday, December 17, at 5 P. M.

The annual meeting of the shareholders will be held at the same place, on Tuesday, January 21, 1902, at 5 P. M. Polls for the election of officers will be open from 2 P. M. until 5 P. M. upon the day of the annual meeting.

THEN AND NOW.—The New York Times Jubilee number, issued on the fiftieth anniversary of its establishment, printed the following:

Western Union Telegraph Company, organized April 8th, 1851.

1851, 550 miles of wire; 1901, 1,000,000 miles of wire.

1851, number of offices, 12; 1901, number of offices, 23,000.

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**Telegraphic Signals and Code Vocabularies.**

During several years Mr. J. Nicolson, the superintendent of the River Plate Telegraph Company, at Buenos Aires, Argentine, has devoted much time to the preparation of an improved system of telegraph signals and international code vocabularies and the reclassification of conventional telegraph signals, and a work written by him on the subject was submitted to the Congress of Telegraphists held at Como, Italy, in 1899, on the occasion of the Volta Centenary. It was carefully reviewed at the first sitting of the Congress, June 1, 1899, by Mr. Brambilla, a member of the committee of organization, and, at his suggestion, it was unanimously resolved to send a telegram of congratulation and thanks to the author and that his work should be passed to the committee which was engaged in compiling the vocabulary. Mr. Nicolson's suggestions were also most favorably received by numerous technical and commercial journals and reviews of various countries. Arrangements have recently been made with Messrs. Whitaker & Co., London, to act as publishers for Mr. Nicolson's booklet. Although the system has since been developed, as shown by other papers from the author's pen, the principle remains the same; viz., a preconceived arrangement of phonetically composed words adapted to telegraph signals, which would be productive of very important advantages to telegraphy and commerce in precision and economy.

We understand that the Argentine Government has resolved to propose to the Telegraphic Congress which will be held in London in February next the adoption of Mr. Nicolson's vocabulary.

**Damages for Cutting a Cable.**

The United States Circuit Court of Appeals has upheld Judge Townsend of the District Court in the case of the Commercial Cable Company against the schooner William H. Bailey, a libel case. In the lower court the damages for the cable company were fixed at \$1,546.47.

It was alleged that on December 28, 1898, the crew on the schooner Bailey, in New York harbor, cut with a meat saw the European cable of the Commercial Cable Company. The damages first claimed were \$5,000.

This case was prosecuted by the Commercial Cable Company more as a warning to the crews of other vessels which frequently and with malicious intent cut Atlantic cables, when it is much easier to slip the cable from a foul of the anchor by simply holding on to the cable with a rope slip-knot and then lowering the anchor a few inches until it is freed from the cable. Where this is done it is only necessary to let go one end of the rope which releases the cable. In the case against the schooner Bailey it transpired that instead of freeing the cable from the anchor in the usual way which would consume less than five minutes' time, over one hour was employed in sawing apart the three-inch cable with a meat saw.

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### He Saved the Game.

H. A. Tuttle, general manager of the North American Telegraph Company, Minneapolis, Minn., had a narrow escape on November 16. With a party of friends Mr. Tuttle had been out on a hunting trip in the vicinity of Clearwater, a little town near South Haven on the Soo road.

At that point the Soo has a trestle, 500 feet in length and 75 feet high. Across this trestle Mr. Tuttle started to walk, leading his dog with him, as the animal was scarcely more than a puppy and could not be induced to cross on the ice below.

When part way over he heard a freight train approaching behind him. He turned, but thought he saw the brakeman signal to slow down and so continued on his way. A moment later, however, he heard the freight strike the trestle.

Some distance ahead there was a projection built out from the trestle to afford place for a water barrel. This, however, Mr. Tuttle could not reach in time, and he was compelled to throw himself upon the ties, just without the rails, and take his chances of being injured.

He feared that the cylinder would catch in his clothing and he knew if it did, nothing could save him. However, nothing more could be done, and he only had time to throw the dog to one side and hold him there before the train thundered over him.

Fastened to his back Mr. Tuttle had a number of partridges which he had shot. These were an additional source of danger, protruding as they did; and that he escaped unhurt is truly remarkable. The dog, however, was not so fortunate. The forward wheel of the engine ran over the tip of the animal's ear, splitting it badly.

### Self-Control.

Self-control is the greatest of all qualities, the one most eminently fitted to make a man successful; it is a divine saving grace. It is, thanks to that great virtue, that a man does not listen to a first impulse; that before embarking in any enterprise he carefully weighs all the consequences; that before uttering an important sentence he follows the old time advice to let his tongue first go seven times around his mouth; that before taking any important decision he holds a committee meeting with himself and hears all the pros and cons of the question before putting it to the vote.

It is thanks to self-control that a man never loses his temper, but lets others do it to his own advantage; that he uses gallons of oil and only a few teaspoonfuls of vinegar in his relations with his fellow creatures; that he faces all the perilous situations of life with a chance of success; that he does not believe he knows everything and is beyond taking advice, but constantly lives and learns; that he keeps the friends that are worth keeping; that his reliability inspires others with confidence in him and makes him hosts of useful friends.—Col. A. B. de Frece.

A word fitly spoken is like apples of gold in pictures of silver.—Proverbs.

### Some Excellent Books as Holiday Gifts.

Among the best books suitable for holiday gifts and which are at all times useful to members of the profession, never losing their interest and value, are the following:

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"TELEGRAPHERS OF TO-DAY," by John B. Taltavall, 354 pages. This volume presents a compendium of illustrated life sketches of over 800 well-known telegraphers who have been prominently identified with the telegraph during the past fifty years; bound in cloth; an eminently fit Christmas gift to any telegrapher. Price, \$5.

"THE TELEGRAPH IN AMERICA," by James D. Reid, 894 pages, illustrated. This book is of marked interest and worth, inasmuch as it contains telegraphic records of great historical value, not to be found elsewhere. There are only a limited number of volumes of this great work now available; bound in full morocco. This splendid legacy left by the late well-beloved "Father of the Telegraph," should find its way to many homes this holiday season. Price, \$7.

"TALES OF THE SIERRAS," by J. W. Hayes, 136 pages, illustrated. This volume, full of laughable incident, presents a collection of original and well told telegraph sketches, partaking in character largely of the former wild life of the frontier. The fun in the book, which never descends to vulgarity, is accentuated by droll illustrations by John L. Cassidy; bound in cloth; will be a welcome holiday addition to any library. Price, \$1.

"PHILLIPS' CODE," by Walter P. Phillips, 9th edition, 69 pages. This unique and efficient guide for the transmission of press reports still maintains its great popularity; bound in flexible leather; price, \$1.

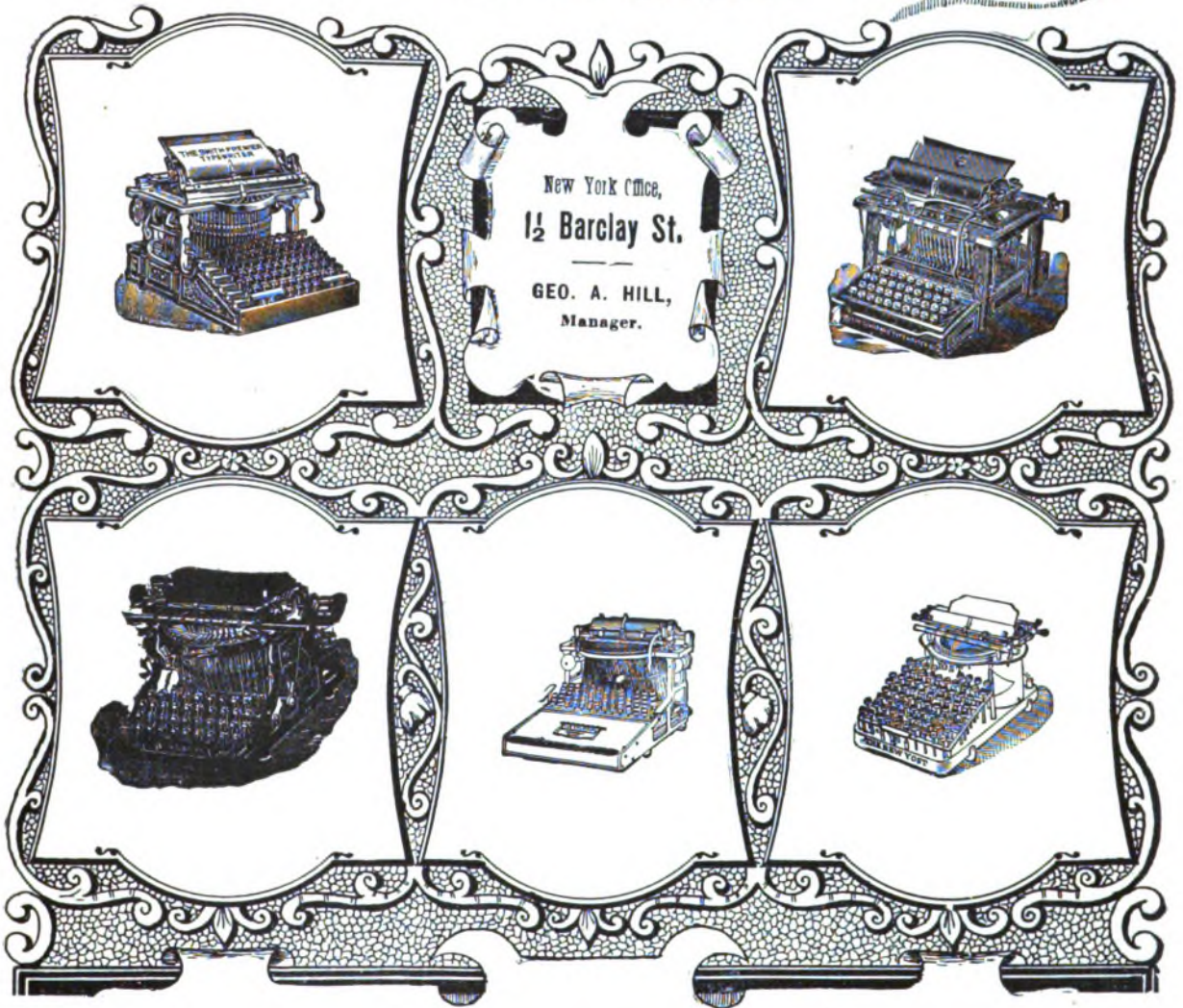
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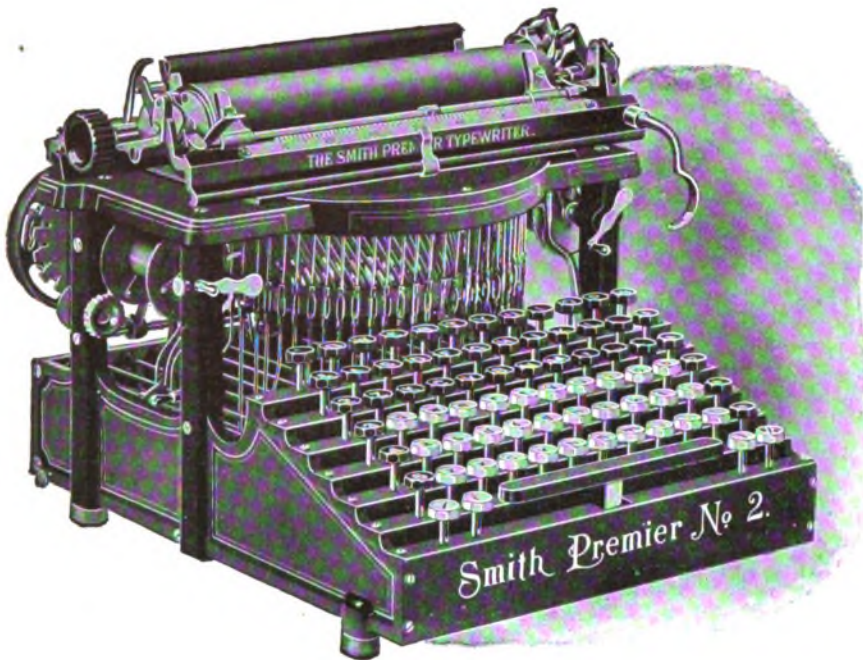
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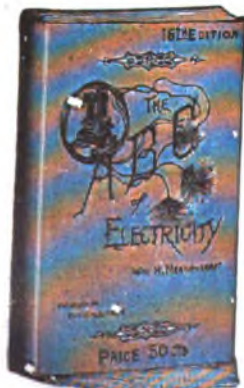
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Entered as second-class matter at the New York, N. Y., Post Office

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NEW YORK, December 16, 1901.

**NOTE.**—We desire to state that back numbers of this paper, those issued more than six months prior to any current date, will be charged for at the rate of twenty-five cents apiece when they can be furnished. This price is fixed because of the necessarily limited stock we carry, and of the difficulty we commonly have in filling an order. Oftentimes the request is for papers of a more or less remote date, with the expectancy of being supplied at but ten cents a copy, whereas in order to obtain the desired issue we are ourselves frequently obliged to pay the larger sum, or even more. The growing value of complete files of TELEGRAPH AGE should cause our readers to carefully preserve their issues.

**THE ROBERSON QUADRUPLEX.**—The Roberson Quadruplex System, which has been recently adopted by the Western Union Telegraph Company, and which will be put into extensive use throughout that system, was illustrated and described in our issues of March 16 and April 1 of this year. Those who desire copies of these issues can obtain the same at 10 cents apiece. As there are only a few of these numbers left, we would urge those who wish to become posted on this new system to procure copies before they are entirely out of print.

## The Closing of the Year.

With this issue of TELEGRAPH AGE, its publication year closes. It has been a year of magnificent prosperity to the country, few individuals have suffered, and although the shadow of a national bereavement still lingers, the Government is in strong and wise hands, and all indications point to a continuance of a satisfactory condition of affairs both at home and in our foreign relations.

As we stand on the threshold of the holiday period, of which Christmas is the opening door, viewing the future, and recalling in retrospect the bounty of the year, now almost gone, it is well to let the season with its beneficent influences of good cheer, kindly feeling and nobler impulses, take possession of our hearts and to extend the hand of cordial greeting and good fellowship to those all about us. On such an auspicious occasion TELEGRAPH AGE wishes its friends of the key everywhere, here at home and in foreign lands, the boundaries of which offer no barrier to the desires of the heart, the compliments of the season. What can better attest the sincerity of expression than to say: "A Merry Christmas!" Let this message, then, go over the wire, through the country, flashing around the world, reaching every telegraph office and every reader of this paper.

## Space Telegraphy for the Weather Bureau.

The fifth annual report of Secretary of Agriculture Wilson contains some reference to wireless telegraphy in connection with the work of the Weather Bureau during the last year. The secretary says the vast extent of our sea and lake coasts and the intimate communication between the Weather Bureau Stations, which are distributed along these coast lines, and the vessels of commerce have induced him to authorize persistent and systematic experimentation in space telegraphy. Substantial improvements have been made during the last year in the department's system. The line of research has been divided into three classes: First, the perfection of a more powerful transmitter, in which the energy of radiation shall be greatly increased; second, the devising of a more delicate receiver—one that would be positive instead of depending upon an imperfect and variable contact, as do all systems now in use, and, third, the perfection of a system of selective telegraphy, whereby messages may be differentiated, and only the receiver that it is desired shall receive the message may become responsive to the waves of ether.

The first of these problems may be said to have been successfully solved, with a transmitter capable of radiating all the energy generated. The second is believed to be nearing a successful solution. The third is thought to be well demonstrated theoretically, but has not been fully tested in practice.

In conclusion, the secretary says that while there is much experimental work yet to be done before the present system is reliable for inter-ship communication, or before any two systems can work within the same field without each rendering the other useless, such progress has been made by the Government experimenters that, with no interference by private systems, stations can be successfully operated over at least 150 miles of coast line, and they are now in operation on the North Carolina and Virginia coasts, and soon will be instituted between the Farallone Islands and the mainland and Tatoosh Island and the mainland, on the Pacific coast.

### The Pacific Cable.

The President in his annual message makes the following reference to the need of a Pacific cable: "I call your attention most earnestly to the crying need of a cable to Hawaii and the Philippines, to be continued from the Philippines to points in Asia. We should not defer a day longer than necessary the construction of such a cable. It is demanded not merely for commercial but for political and military considerations.

"Either the Congress should immediately provide for the construction of a government cable, or else an arrangement should be made by which like advantages to those accruing from a government cable may be secured to the Government by contract with a private cable company."

### The Board of Trade Quotation Case.

On the ground that the Central Stock and Grain Exchange, of Chicago, is a bucket shop and that as such it is conducting a business contrary to law, and, therefore, is not entitled to receive the market quotations of the Chicago Board of Trade, an opinion was handed down in the Appellate Court, November 21, reversing the decree entered a year ago by which the Board of Trade and the Western Union Telegraph Company were enjoined from interfering with the service of the concern by withholding from it the daily market quotations. The decision is a sweeping one and is a signal victory for the Board of Trade, for it means that the last and strongest of the reputed bucket-shops in that city has finally been forced to surrender to the crusade which was started some time ago and which has been carried on by the board.

### Christmas-tide.

If we would have a truly happy Christmas we must do something to make others happy. On every side, around and about us, there are those to whom a simple little act of kindness means a great deal, and no season of the year could be more appropriate for kindly acts than the coming Christmas time. There are many ways of helping people; often a little thought or a kind word does more real good than indiscriminate giving. No matter what our own condition or position in life, there are always, in every community, some people less fortunate than ourselves, who struggling on from day today and into whose life little sunshine enters. It is possible to make their Christmas happier, we brighten our own lives, for every kind thought, every kind action is bound to reflect upon ourselves. You may not be able to do much by yourself, but persuade others, your neighbors and your friends, to help you. Seek out those in most need of help and help them in the most practical way possible.

Of all seasons of the year Christmas should be the happiest and merriest, especially for the little folks, and it takes very little to make them so. For weeks before the wonderful day arrives joy and expectation run riot in their little hearts, while they plan delightful surprises for father and moth-

er. Christmas is essentially the children's time, for then they are allowed to play to their heart's content, lessons are entirely forgotten, and both father and mother vie with each other in making this season as happy as possible.—Col. A. B. de Frece.

### Cable Interruptions.

Faults, apparently due to fish bites, have been removed from time to time from submarine cables, which have either totally interrupted telegraphic communication or have seriously affected the working of the lines. Cables established in deeper waters have not hitherto, however, been often similarly attacked. But a fault removed a few months ago from the Sydney-Nelson section of the Eastern Extension Cable Company at as great a depth as 320 fathoms was found to contain a tooth firmly fixed in the core of the cable, although the core—or interior portion of the cable containing the conductor—was protected by the usual sheathing of thick iron wires and outer coverings. An expert examination of the tooth proved it to belong undoubtedly, to a species of shark, the exact variety of which could not be identified; but it appears that five known varieties of sharks are found to exist at a depth of 300 fathoms, and one at a depth of even 500 fathoms.

Propos of the above, Andrew Jamieson, of Glasgow, Scotland, who was engaged in cable repairing in South America for many years, states in a letter to the Electrician, of London, that he believes the tooth mentioned above is that of a sword fish and not of a shark. In his cable experience he had many interruptions of this kind mentioned, all of which were caused by the sword fish. They are, it appears, in the habit of slashing right and left with great rapidity, force and fierceness at an enemy; and, evidently they regard the submarine cables as such, for they so bury the teeth of their swords between the iron sheathing that they penetrate the dielectric of the core, and leave their teeth embedded therein! Such faults, he thinks, were therefore caused by a stabbing action. Some persons class these "sawfishes" as "sharks," but most assuredly they do not bite the submarine cable.

An important link in one of the Postal Telegraph-Cable Company's trunk lines was finished by the laying of a cable across the Detroit river, between Detroit, Mich., and Windsor, Ont., a few days since.

"How are things done in this office?" inquired a newcomer: "do you steal, beg or borrow pens, pencils, pocket-knives and rubber erasers?"

"Well," replied the long-timer, "it is better to steal, I guess, as its humiliating to beg, and you sometimes get found out if you borrow them."

Men of the noblest dispositions think themselves happiest when others share their happiness with them.—Duncan.



**THE CARNEGIE PROPOSITION.**

[Some of our readers who warmly indorse the pension scheme for telegraphers suggested by Mr. Carnegie, advocate a plan of collecting small sums from individual operators who wish to participate in the pension fund. Most every one who discusses the subject advances the opinion that in case any one who has contributed to the pension, even for a number of years, and who leaves the telegraph service or becomes too poor to keep up his payment, shall forfeit all the money paid in by him. We beg to inform those who entertain such ideas that a plan of this character is contrary to law, and therefore illegal. Not one dollar can be accepted from any one without an equivalent return. This fact should be borne in mind by those who wish to discuss the pension proposition in these columns.—Editor.]

**The Best Philanthropy.**

Editor TELEGRAPH AGE:

As you invite a symposium on a philanthropic subject, and as Mr. Carnegie has kindly considered it, I offer the following thoughts: The greatest enemy of the telegrapher is tuberculosis. The greatest beneficence that could be accorded him would be aid against this assassin. The best aid and comfort to this end that could be given by a great philanthropist would, in my opinion, be facilities for sojourning out of doors in a good climate, with suitable occupation, good food and medical supervision. This means a ranch in New Mexico, Colorado, or Southern California, or even in the Appalachian range, after the plan of the New York state sanitarium for consumptives in the Adirondacks, the proposed Pennsylvania sanitarium in the Alleghenies and the Massachusetts sanitarium, which was the first of the kind in this country. The ideal institution would add industrial occupation for the young consumptive, as is done for the epileptic in the Craig colony in New York. Tuberculosis is far more common than is generally supposed. In thousands of autopsies of adults after death from other diseases evidences of tuberculosis is found in about half. This, together with clinical experience, shows that consumption is curable in very many cases. In fact, the same disease, tuberculosis, is quite curable in other parts than the lungs, as bones and joints, which can be placed at rest; and it has been demonstrated that it is only the necessary motion of the lungs in breathing that makes it difficult for nature to cure tuberculosis in the lungs.

The pension scheme is good, libraries are superb, but as for me, were I a philanthropist, I would rather aid in restoring one such boy as our old comrade, Davie Strouse, to health and happiness than to circulate a great many books. It might not be thought desirable to admit incurables to such an institution. Indeed, I think it a great mistake to send hopeless cases of consumption away from home, at least under present conditions. If philanthropy should extend so far as to include them, they should be provided for separately. My

idea would be to limit the scope of the suggested scheme to cases susceptible of amelioration or cure, at least until science makes a further advance in this field. The details would be practicable. This is the philanthropic idea from the medical standpoint of an old telegrapher.

J. EMMET O'BRIEN, M.D.

Scranton, Pa., Nov. 28th.

**Give Us a Telegraphers' "Trust."**

Editor TELEGRAPH AGE:

Respectfully, for the attention of Mr. Andrew Carnegie, and whoever thinks of his money for telegraphers, it is submitted that what we want is neither homes nor pensions. First, what the telegrapher most needs is a thorough schooling in the brainy, sturdy character class that the old Scotch blood has developed in Mr. Carnegie. He cannot impart that to us, but it could help some of our number if he would write a book on the vicissitudes of his own career and how he overcame difficulties to success.

We of this calling die young or go out of the business generally before we could qualify for a home for the aged or disabled. Not differently a pension is impracticable and almost too droll a thought for more consideration than respectfulness demands for the mover of the proposition.

In fact, Mr. Carnegie's suggestions ought to shame us rather than delight anyone, coming as it does from a man who began life more lowly perhaps than many of us, and who has singly done such tremendous things to help himself and thousands more, while we, who are many, have succeed in comparatively nothing for ourselves and not more than a mere trifle now and then for anybody else.

It is a pitiful plight that, after nearly half a century's existence as a body of expert wage earners, now in the presence of millionaire philanthropists, we are found, hat in hand, the latest comers at the "easy" door of one man's colossal fortunes, and with no other plea than that we have done little for ourselves or for anybody else.

Mr. Carnegie's gentle reference to what certain railroad companies and employees are doing is, after all, a cut, however kindly given, that deserves to prod us and the people we work for with something like a pang of conscience! It is a rebuke that every person in the telegraph business can take to heart as meant for him! Telegraph companies are, in fact, about the only concerns of any consequence that never did anything in general for their employees and never permitted them to do anything for themselves without the employers' dictation, although there has never been an organization at our hands which did not aim at some of the objects of these arguments.

In times when we have dearly needed the sympathy and counsel of men of brains and hearts the iron hand has been manifest instead, when some puny figure in authority would deal a blow from which there could be no rising and no appeal. But, from these experiences, it is not conclusive that telegraph companies would not, under certain cir-

cumstances and conditions, attempt something commendable for employees. Nowadays are not other days in fact, and a newer great system has fixed itself in the telegraph field, without the proverbial sign, "For Sale," hung out. It means more modern things for us, and gives ground for hope that the example of railroads, of Mr. Carnegie and others toward employees may have wholesome effect somewhere in our midst when the proper time comes to pass.

No people can better afford to do for one another among themselves than can those of the telegraph. Few are more generous than they in such matters when once the object is defined as worthy, and an honest administration of their commissions is assured. Then why cast about for a "nucleus" around which to gather a fund or something of lasting benefits to telegraphers of this continent? To this end we have two of the best life insurance associations of their kind in existence, and also "aid" societies in several large cities.

Let all these be merged into one great organization for North America—a "trust" practically, with all the benefits needed in life and something left over after we are dead. Mr. Carnegie can tell us how to organize a "trust," so that none of these associations and societies will lose its identity, and still all work clock-like together. Then the solitary man at some far off railroad point could be as well provided for in these essentials as the man living close at the fountain head where these several advantages flourish.

A free discussion of this matter is an excellent opportunity for every man to decide the line of his choice and determine his action for a continental movement sometime that will crystalize to the permanent benefit of the telegraphers of North America.

M. W. R.

New York, December 6.

#### **Pensions for Telegraphers.**

Editor TELEGRAPH AGE:

Referring to the pension plan spoken of by correspondents in Telegraph Age and discussed at the meetings of the Old Time Telegraphers' Association, it seems to me that it could be very easily arranged. The migratory habit of telegraphers need be no bar to their participation in the pensions, provided they keep up their dues to an association to be formed upon the establishment of such a fund. My suggestion for a starter would be that each man who expects to reap the benefits of such an association shall subscribe one day's pay, this to be collected at a stated time by the manager of the Postal and the Western Union in each city of the United States, thus forming the nucleus of a fund, and the more substantial the operators make this nucleus the more substantial will be the amount that Mr. Carnegie will give. Here in Pittsburg it is a pretty well-known fact that Mr. Carnegie always helps most those that helps themselves. Let the operators of the country show Mr. Carnegie that they appreciate his offer and show him, too, by liberally meeting him with a fund of their own, and I venture the amounts given by Mr. Carnegie

and the two leading telegraph companies will be liberal. No doubt there are many telegraphers who will prefer to remain outside of such an association, claiming that they do not expect to remain in the business. Their remaining in the business should not be compulsory; if they go into other businesses and succeed so much the better. If they fail and have kept their dues paid up they should be entitled to the benefits. Now, Mr. Editor, I have complied with your suggestion that we all be heard from. I would like to hear from some one who can put these crude ideas in better shape. As for a colonizing scheme or a home for superannuated men I fear such schemes would not work. I for one would hesitate a long time before I forsook the scenes of my life's labors to go into a home in some distant State. Let the plan be a pension one.

P. J. MCKEEVER.

Pittsburg, Pa., Dec. 6.

#### **Amusing Telegraphic Errors.**

The telegraph operators wields an important stroke in the sports of the day, although his personality is frequently hidden behind his instrument. It crops out, however, on occasions with direful results. The other day, in transmitting the report of an important football game, the careful operator sent the awful information that "the quarter back kicked a goat from the field." It was a goal that was kicked from the field. Here's another: In the report of a Brooklyn-New York baseball game last summer the receiver at the other end of the wire got the startling announcement that "Willie Keeler sent a hot liver to short." Of course, the receiver, who knew the game, tumbled to the fact that Willie had walloped out a hot liner. The sender was a woman and wasn't supposed to know. Perhaps she thought the shortstop was hungry—Brooklyn Eagle.

#### **Cats Cause Trouble.**

A cat climbed a pole of the Buffalo & Lockport Electric Railway on November 13, at Hoffman, N. Y., and while attempting to walk along one of the feed wires her tail touched one of the 22,000-volt Niagara transmission lines. Instantly there was a flash and kitty was killed. The dead body fell across the wires, causing a short circuit, which resulted in the shutting off of the power at Niagara for two hours. In the meantime, several of the electric railways and lighting systems in western New York were without power. The next day a cat in Utica, N. Y., prowled around the power house of the Utica Belt Line and came in contact with some live parts. A short circuit was caused, several fuses were blown, and the cars were stalled for some time, but puss still lives.

In a recently issued circular, the Commercial Cable Company states that it has completed its fourth route to Europe, and adds that it is now the leading Atlantic telegraph system, having over 13,000 miles of Atlantic cable. The fourth route to Europe runs via the Azores to its cable station at Waterville, Ireland.

**The Wreck at Sugar Creek.**

BY W. W. WILSON.

The train dispatchers at Flemington on the M— route had taught me to telegraph, and when I had reached the age of seventeen, the superintendent deemed me a capable enough master of that profession to take charge of the night office at Lindley.

The business had great fascination for me, and the tick-ticking of the sounder was mysterious music to my ears as the dots and dashes resolved themselves into words. I had applied myself to its thorough study with great earnestness.

So it was indeed a proud and happy launching into my chosen career when I stepped from a north bound accommodation at Lindley and watched the baggageman unload my trunk, which was the only one checked for that station by that train.

Lindley was then a small town of one thousand inhabitants situated about half way between Ford City and Fayette, Ind., twelve miles north and south respectively. The depot where I was to work was nearly a mile from the town, and at a point where the K. C. and M— roads crossed each other. It was the only night telegraph station between the two cities, and important as an order point when trains were behind time, as there were no double tracks in those days.

My duties, when trains ran on regular schedule time, consisted in reporting their passing to the dispatcher at "D. S." office, Flemington; checking an occasional trunk, and keeping awake—the latter being the most arduous work attached to the position.

I was much delighted with my new place, and sent the train reports with enthusiastic promptness. Most of my idle time while on duty was spent talking on the wire to Jim Ellsworth, the late trick dispatcher at "D. S." when the circuit was not busy, and copying messages for practice when things were lively. When a train would pass a station, the operator there would signal the dispatcher by repeating the letters "O. S." several times, sign his office call, and then give the time of arrival and departure of the train. The dispatcher usually acknowledged these reports by "O. K." or making a couple of dots on the wire. I soon became so familiar with the time of trains at the different telegraph stations that, on hearing an "O. S." report, I could determine exactly how much time should elapse before they reached me, and thus each night I would fix in my mind the position of all the traffic on our division. Eventually, however, the sameness of these duties grew monotonous, and I found myself napping during the easy hours of the morning. A little over half way between Lindley and Fayette ran a turbulent stream called Sugar Creek, which the railroad crossed by means of a long trestle suspended from high abutments on either side of the creek. This trestle was considered a masterpiece of engineering skill as it had been placed from one perpendicular wall to another with much difficulty, and at the only point where such a structure was possible.

Bulletins were posted along the line warning trains to approach and run slowly over it, as high speed might cause a swaying motion with possible danger of derailment.

On the night of April 10, 18—, I had been in charge of the office at Lindley four months. The day had been threatening as to weather, and old Jupiter Pluvius had just begun to get settled to steady work when I reported for duty at 7 P. M.

I put the signal lights in place on the semaphore arms, and prepared, as usual, red and white hand lanterns to be used in event of emergency. As the night wore on, the rain increased in force, until the water came down in fierce torrents, and beat upon the little box-like depot as though its fury were centered upon the destruction of that small structure. The night was stygian dark, and the red gleam of the signal lights on the semaphore looked out into the blackness like a pair of demon eyes eager for some nocturnal mischief. The dismal droning of the wires, as the wind tore through them, and the continuous rattle of the instruments, combined with the warring elements to create a feeling of awe and dread, as though something horrible must result as a consequence of their conflict.

As I looked out of the little bay window, the surrounding earth seemed to have been washed away, leaving the little depot standing alone on the pinnacle that remained, and wavering as in preparation of a last leap into unutterable space.

I was brought to a realization that my imagination was at work, by the distant long toot of a whistle. It was No. 42, a fast freight, south bound, which soon came thundering down the grade. I pulled the signal and gave her clearance, and stood watching the long line of cars as they wound around the curve into the darkness—and they seemed to my young fancy like a monstrous serpent, created especially to bear away the sins of mankind, and that it went out of sight with a hiss and a snort, as though weary of its burden.

After I had reported its passing, I sat down in my chair, put my feet on the telegraph table and lit a pipe, thus composing myself, as it was nearly an hour before No. 4, the limited night passenger was due.

I dropped into a doze, but was awakened by the operator at Ford City, twelve miles north, rattling the wire, and reporting "O. S., O. S., F. C., No. 4 on time." Dispatcher Ellsworth acknowledged "O. K.," and the wire was still again.

For some time I sat listening to the rain, half asleep, half awake. Suddenly the operator at Fayette, twelve miles south, began in a most frantic manner to call the dispatcher. Ellsworth answered promptly, and I heard the following message:

"No. 42 has gone through Sugar Creek bridge; entire train precipitated into water. Hold No. 4 at Lindley." No sooner had he closed the wire on this startling information than No. 4 whistled for the crossing half a mile up the track in front of me.

I saw her electric headlight darting a bright



streak through the intervening darkness, and heard the crash of the rails as she came booming along at full speed.

Not an instant was to be lost. There was no chance of signaling her if she got beyond me. I realized that I must stop her lest she plunge head-on into the bridgeless chasm ahead. It was almost an unprecedented thing to stop No. 4 at Lindley, and I shuddered at the thought that the engineer might not see my red block. I reached for the semaphore rope, as I had negligently left the signal white after the freight, which was subsequently wrecked, had passed.

Ellsworth was calling me on the wire—each second in a more rapid manner as he became uneasy—knowing as he did that No. 4 was then due at Lindley.

There was no time to answer him. I knew what he wanted!

I unwound the signal rope from its hook, and let the arm of the outside semaphore down so quickly that I could feel the thud as it settled into its socket.

I looked out of the window to see if the light showed red.

The light was out!

The jar of the descending arm of the semaphore had extinguished it. For one instant—it seemed an hour—I stood paralyzed. Jim was still calling me.

I seized the red emergency lantern, rushed out of the door, across the platform and up the side of the track. The engine was fairly upon me; the brilliant headlight sent its blinding rays directly in my face.

I raised the lantern to give the danger signal. At the first swing it went out.

Hardly knowing what I did, I sheltered a match under my hat. Fortunately it burned, and I lost no time in relighting the lantern. I swung the signal as the last coach passed me, and continued to do so until her tail lights faded from sight around the curve.

I stood, lantern in hand, by the side of the track in abject despair, utterly heedless of the driving storm. Then I walked to the office. Ellsworth was still calling me. I placed my hand on the key, but did not open it. What could I tell him. How could I explain? I had not answered my call. I could not prove I had not been asleep on duty. True, the engineer had passed the station without a signal, which was strictly against orders, but he was not accustomed to look for a stop at Lindley; and, then, he would be dead.

I alone was responsible for that train load of human freight plunged to eternity down that awful abyss. I knew it would be impossible to stop the fast flying train on the steep descent before it reached the place of its destruction.

I heard the crash of the wreck, the groans of the dying; the awful scene was before me, as plainly as though it had already taken place, and I was an eyewitness. I saw myself tried, convicted, and in prison for my crime of carelessness. As this terrifying picture so vividly presented itself to my

mind, and I was trembling with a sense of fearful responsibility, I heard a bumping of wheels over the crossing. I pressed my face against the window and peered out, expecting to see a train going east or west on the other road.

As I looked a thrill of inexpressible thankfulness came over me. It was No. 4 backing up. The engineer had seen my signal!

Jim was still calling me, but it was soothingly sweet music.

*A B C of the Telephone, a practical treatise, by J. E. Homans, A.M., containing 352 pages and embellished with 269 illustrations, is without doubt the lowest priced work of high character on the subject that has yet appeared. The book is arranged in twenty-eight chapters, dividing the subject into definite departments for reference.*

Owing to the great growth of the telephone industry during the past few years, and in response to the demand for a comprehensive book giving a clear, terse idea of the different principles governing the construction, installation, care and management of the various telephones and their appliances, the *A B C of the Telephone* has been compiled. It is written in a most clear and careful style, and aims to give a complete review of the subject of telephony from the first invention to the most recent improvements.

No expense has been spared in gathering valuable information, and it has been the aim of the author to make this treatise the most complete elementary book ever written on this subject for the practical electrician, wireman, lineman, engineer and all persons interested in this great achievement of modern science.

This book will be sent to any address, express charges prepaid, upon receipt of one dollar. Send orders to J. B. Taltavall, *Telegraph Age*, 253 Broadway, New York.

"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 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.

The following colloquy has not quite occurred as yet:

Applicant.—"Yes, sir; I am strictly first class."

Chief Operator.—"Can you take business with a pen?"

Applicant.—"With a pen? Well, er—, I prefer to borrow a typewriter—you don't have to ask for that, you know."

Beware of little expenses; a small leak will sink a great ship.—Franklin.

**White House Wires.**

Many interesting things are told about the work of the telegraph and cipher bureau at the White House by Capt. Benjamin F. Montgomery, Signal Corps, the officer in charge, in a report to the chief signal officer of the army recently made public.

"During the past year," says Captain Montgomery, who is an old-time telegrapher, "the telephone and telegraph systems have remained practically the same. To the twenty-five wires already in use have been added two telegraph wires with two sets of duplex instruments. This was found necessary in order to have an exclusive wire for the safe transmission of confidential cipher business between the executive office and the cable offices in New York. An extra wire was also needed for direct communication with the President, wherever he might be while absent from the capital.

"Arrangements are nearing completion for the installation of a telephone exchange in the White House, which will supplement the telephone service already in use. This will increase the working capacity of this branch of the office, and will undoubtedly prove useful and fully meet the rapidly growing demands of this particular department. It will consist of three separate trunk lines, with seventeen miles of exterior lines, giving direct wires to the eight executive departments, the government printing office and the Congressional Library, and also connect up the seven new stations in the different parts of the Executive Mansion, all of which will be controlled by the switchboard in the central exchange of the telegraph and cipher bureau.

"The total number of messages handled during the past year was 53,400, three-fourths of which were of a confidential nature and in the different departmental cipher codes.

"During the fiscal year just closed, the telegraph and cipher bureau of the executive office has fully measured up to the high standard attained in the past, and met every requirement necessary to the prompt and safe dispatch of the important and confidential business intrusted to its personnel. While the volume of business in some particulars has not been quite so large as in previous years, owing to the less active movements of the army and navy at home and abroad, it has been greatly augmented by reason of the increased work of every executive department, growing out of the new order of things, and the extended fields of commercial and government enterprise. The cause for this can be readily appreciated when it is remembered that the telegraph and cipher bureau is the medium through which the chief executive receives all important information touching the vast interests of the government and is the means and method by which he may the more quickly and rapidly communicate with his cabinet officers, the executive departments and the outside world.

"Many striking illustrations of the value and adaptability of this service to the needs of the hour in great emergencies were shown in the late war with Spain. Then the constitutional commander-

in-chief of the army and navy became the actual commander-in-chief, and from his office in the Executive Mansion gave orders direct to his armies in the field and his commanders on the sea, and from them received hourly reports of their operations ashore and afloat.

"While the tragedy at Buffalo was enacted, subsequent to the close of the last fiscal year, the signal officer on duty with the late President hopes it will not be thought untimely or improper to refer in these supplementary paragraphs to the work during the sad hours of watching and waiting, from the afternoon of September 6, 1901, when the fatal shot was fired, till the closing scene on September 19, 1901, when the body of our beloved chief was consigned to the grave.

"Within fifteen minutes after the late President was struck down by the assassin's bullet the signal officer in charge at the Executive Mansion had secured two direct and exclusive wires to Buffalo—one a telegraph wire and the other a long-distance telephone circuit—and had put the office in direct communication with the secretary to the President and those nearest to the distinguished sufferer. The terminus of the telephone wire was close beside the hospital, and from this source was first obtained the official details of the horrible crime. All during the afternoon the long-distance telephone connection was kept clear, and over this wire the news, from moment to moment, was received and freely and promptly communicated to the officials of the government in Washington, the anxious relatives and friends of the late President and the public. Immediately upon the removal of the late President from the hospital grounds to the Milburn residence a telegraph wire was placed in the latter building and there maintained, in good working order, from that moment, both day and night, until the body was taken away to start on its journey to the capital.

"During this period there was sent and received 4,351 messages, including official dispatches, bulletins and tidings of alternating hope and sorrow to the anxious world. It will ever be a source of pride and gratification to the officer in charge and the faithful assistants, who, without heed of time or personal comfort, that they were given the high honor and the great privilege to stand and serve with those who faithfully watched by the bedside of the dying President.

"Perhaps it is well to state at this juncture that the telegraph and cipher bureau was the creation of the great mind of the late President William McKinley, and it is well known to his official advisers and intimate friends that he has often spoken with evident pride and satisfaction of this particular part of the executive office. On many occasions he has spoken to the signal officer in charge in complimentary terms of this bureau, and often gave willing and cheerful testimony to what he termed in his annual message of 1898 as a service which 'was invaluable to the executive in directing the operations of the army and navy.'

"The chief signal officer, I am sure, will not think it improper or in any manner a violation of

the confidence reposed if I recite an incident to illustrate the late President's high regard for the work of the Signal Corps. The night before the late President left Canton, Ohio, for the trip to Buffalo, he made request of the signal officer in Washington, over long-distance telephone, for certain data concerning the telegraph work of the army during the late war. The result of that conversation is the following graceful tribute to the work of the Signal Corps of the army in his last public utterance, and which I take the liberty to quote herewith:

"It took a special messenger of the government, with every facility known at the time for rapid travel, nineteen days to go from the city of Washington to New Orleans with a message to General Jackson that the war with England had ceased and that a treaty of peace had been signed. How different now!

"We reached General Miles in Porto Rico by cable, and he was able, through the military telegraph, to stop his army on the firing line with the message that the United States and Spain had signed a protocol suspending hostilities. We knew almost instantly of the first shots fired at Santiago, and the subsequent surrender of the Spanish forces was known at Washington within less than an hour of its consummation. The first ship of Cervera's fleet had hardly emerged from that historic harbor when the fact was flashed to our capital, and the swift destruction that followed was announced immediately through the wonderful medium of telegraphy. So accustomed are we to safe and easy communication with distant lands that its temporary interruption, even in ordinary times, results in loss and inconvenience. We shall never forget the days of anxious waiting and awful suspense when no information was permitted to be sent from Peking, and the diplomatic representatives of the nations in China, cut off from all communication inside and outside of the walled capital, were surrounded by an angry and misguided mob that threatened their destruction, nor the joy that thrilled the world when a single message from the government of the United States brought through our minister the first news of the safety of the besieged diplomats."

Dr. William Duane of the State University of Colorado has "re-invented" the Delany multiplex system of telegraphy. His system is based upon the synchronous principle, and he states that he is able to maintain as many as eighteen circuits over one wire. The trouble with systems of this kind is the inability to secure perfect synchronism, and eighteen circuits could not possibly be obtained under the most perfect conditions. The doctor claims too much.

The Electrograph Company of America has been incorporated at Dover, Del., with a capital stock of \$1,000,000. The concern is to manufacture machines for the transmission of photographs and fac-simile writings by telegraph.

The machine is the invention of H. R. Palmer, of Cleveland, O.

#### The Telegraphers' Aid Society Entertainment.

The annual entertainment of the New York Telegraphers' Aid Society for the benefit of the relief fund took place on Friday evening, December 6, at the Lexington Opera House and Terrace Garden. It was equal to similar former occasions of the kind, all of which have been highly successful, both in the quality of entertainment and the financial results obtained. The entertainment consisted of high class vaudeville, which amused an audience of over fifteen hundred people until almost midnight, when dancing was indulged in, twenty-four selected numbers constituting the programme. The officers of the Society are:

H. W. Sauer, president; E. E. Brannin, vice-president; Thomas M. Brennan, treasurer; H. C. Fardon, recording secretary; Wm. J. Quinn, financial secretary.

Executive committee: Miss S. Dougherty, H. W. Sauer, E. E. Brannin, Andrew J. Gillman, M. F. Gaffney, J. McParlan, E. T. Dempsey, Miss M. E. Jermain, Thos. M. Brennan, R. C. McDonald, Geo. Leveene, W. W. Price, J. Gschwind, H. C. Fardon, Wm. J. Quinn.

Auditing committee: John H. Driscoll, Frank D. Murphy, John Brant. Trustees: Thos. M. Brennan, James C. Robinson, John K. Calvert. Relief committee: E. F. Howell, Miss A. McShea, Chas. Shirley.

Mr. T. A. Brooks, who arranged the programme of entertainment, is certainly deserving of great credit for his excellent judgment in the selections made. Mr. W. C. Burton was chairman of the reception committee, assisted by J. E. Walsh and Geo. E. Randolph; Edward T. Dempsey was the floor director, assisted by J. J. Fredericks and W. L. Shaw. These gentlemen were supported by some seventy-five assistants.

This yearly function of the New York Telegraphers' Aid Society has undoubtedly become a fixture in the telegraph life of the metropolis, having gradually won its way and demonstrated its right to the warm support of all telegraphers. The continued excellence of the vaudeville entertainment for several years past has finally convinced the friends of the aid society that they can see the best show in New York at a reasonable price, only the most desirable numbers from the leading vaudeville theaters of the city are secured for this entertainment. It is a matter of congratulation that the beneficent purposes of the relief fund are furthered, while at the same time every patron of the entertainment feels amply repaid for the outlay.

It is proposed by one of the numerous wireless telegraph companies to open offices at Washington, Baltimore, Wilmington, Philadelphia and New York, for the transaction of public business. Great advances in efficiency will first have to be made in the wireless system before it can be worked in the manner contemplated. Many persons believe that this move is only a guise to induce the public to invest in wireless telegraph stock, so much of which is now being offered to the public at bargain counter prices.



## 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.]

## ST. LOUIS, MO., WESTERN UNION.

B. E. Black has returned from several weeks' leave of absence. He had been visiting his coal properties in the Indian Territory.

M. J. Goff resigned on November 15, and will spend the winter in Omaha, his home town.

C. W. Jost and his brother, Walter, lately returned from a three weeks' vacation at their old home. Both look fine and report an excellent time.

John R. Magill, chief operator at the Globe-Democrat, mourns the loss of his wife, who died November 19, after a very short illness.

Charles Palmer also mourns the loss of his wife, she having died November 3.

## CINCINNATI, OHIO, NOTES.

The many friends of Mr. William Lukens will be pleased to learn that he is recovering from an operation recently performed for appendicitis.

A son arrived at the home of Mr. and Mrs. William McGarry.

The well-known and efficient operators, Mr. L. D. Johnson and Mr. Eugene Barnard of the Western Union, have returned to work, after the close of the fall race meeting, where they were employed in reporting and describing the racers.

A late arrival is Mr. Charles B. Luckey, of Chicago, who has accepted a position with the Scripps-McRae Press Association, operated in the office of the Cincinnati Evening Post.

## DALLAS, TEX., POSTAL.

On October 1st the Postal Telegraph Company moved into a new up-to-date office at 243 Main street, the building having been constructed especially for the purpose. All of the equipment, which was installed under the supervision of S. M. English, assistant general manager, is of the latest pattern and the office has been conceded to be one of the best equipped in the South. The move was made with practically no interruption to business. All wires are now brought into the main office through an underground cable, consisting of fifty conductors.

The personnel of the new office is as follows:

W. I. Church, manager; I. D. Hough, chief operator; W. L. Jones, traffic chief; W. H. Ocker and E. E. Bruckner on the St. Louis bonus wire; V. C. Mayhew on the New Orleans Commercial News Department circuit; C. E. Spencer and R. H. York on Houston; J. H. Staples on Galveston; P. H. Byrd on Memphis; B. F. Shrimpton on Shreveport; E. E. Taylor on San Antonio; C. F. Avery

on Austin and Waxahachie; G. S. Hereford on the Indian Territory wire; I. L. Adkins on the Waco phonoplex; H. N. Wiley on Fort Worth; J. A. Hudnall on Corsicana, and R. A. Ditch on Paris. The night force consists of W. W. Hoskins, chief, and operators, B. F. Lally, H. P. Wells, A. Lucas and E. J. Parsons. J. W. Gilliam has charge of the delivery department, assisted by Miss Delia Conboy, receiver; Harry H. Rinker, bookkeeper, and Craig Dunlap, night delivery clerk. Samuel Cabell is collector.

Recent visitors: Mr. M. M. Davis, traffic manager of the Postal Telegraph-Cable Co., New York, and the following Postal Telegraph Company managers: W. A. Porteous, New Orleans; W. H. Mann, San Antonio, Tex.; J. C. Witt, Houston, Tex.; C. J. Heath, Galveston, Tex.; W. Y. Nolley, Fort Worth, Tex.; W. A. Logan, Paris, Tex.

The Fairchild & Hobson private wire system is presided over by Mr. B. Wells, superintendent, assisted by J. B. Alexander, D. H. Hawley, L. Muller and E. R. Pickett.

## THE ASSOCIATED PRESS NOTES.

Mr. A. M. Routt of the New York bureau has resigned to accept another position at Washington, D. C. C. M. Baldwin, of Albany, N. Y., has been transferred to the New York bureau. J. W. Wood has been transferred from Norwich, Conn., to Albany, N. Y. Mr. S. E. Koehler has been appointed to fill the vacancy at Norwich. Mr. J. T. Stewart, of the Manchester, N. H., bureau, days, has resigned and his place has been filled by Mr. J. W. Taylor, who was formerly on night duty. The latter place, nights, is filled by Mr. T. E. Hunt.

Mr. F. M. McClintic has been appointed chief operator of the Texas circuit and day and night local correspondent of The Associated Press at Dallas, Tex., succeeding J. H. Ward, resigned.

## NEW ORLEANS, LA., WESTERN UNION.

James Whann, for years a Western Union operator, died a few days ago.

Joseph Thomson is the new manager of the Maritime Exchange branch office. Mr. Thomson is much liked and best wishes are extended to him.

Friend Cotthrell is in charge of the race track office, ably assisted by Messrs. Garland and Mauberrett.

Messrs. Nicholson and Murray work race wires in the main office and two better men could not be found in a day's walk.

Inspector Morris passed through here on his way to Lake Charles. Mr. Morris is full of enterprise and business.

Division Traffic Chief Gilthorpe has lately married. Best wishes are extended.

Superintendent J. M. Stephens passed through New Orleans on a hurried business trip one day last week.

Among our promising young operators we find Messrs. E. L. and A. J. Hamm, McMahan, Waitz, Ford and Relf.

Mr. Perry is now manager of the fruit dispatch office.

**DALLAS, TEX., WESTERN UNION.**

The personnel of this office remains practically unchanged. A few have been added to the extra and regular list. All extra men are making more than full time, and the block is vacant for once. Business continues good, notwithstanding the shortage in cotton as well as other crops.

The different quads are named as follows: Fort Worth-Dallas local, Elmer Cox, B. M. Martin, with Operators L. O. Moore and J. S. Maddox at Fort Worth; St. Louis, Roy Montgomery, E. E. Jackson; Houston, Harry Johnson, Charles M. Rapp; New Orleans, A. L. Adair, John Bogan; San Antonio, P. M. Wilson; Kansas City, Harry Hopkins, C. S. Aycock; Galveston, W. J. Wilhoite, George M. Brinkley; Chicago, S. J. Braun, recently of Chicago, and Charles Sale.

John B. Whitacre, son of our night chief operator, died on November 12, at El Paso. This makes two deaths in Mr. Whitacre's family in the past year.

Mr. Harry Johnson of this office was recently married, and the couple are now making their home in Oakcliff.

**BOSTON, MASS.**

**Typewriters** for sale, to rent and repaired. Remington, Smith, Densmore and all makes sold or rented on easy monthly terms to telegraphers. Send for samples, catalogues and full information to E. M. Bennett, Manager, The Typewriter Exchange, 38 Bromfield Street, Boston, Mass.

**POSTAL.**

J. D. MacDonald has been appointed assistant traffic chief, days.

Nathan H. Tracey, who looks out for the interests of the Postal at the Globe office, days, was married to Miss Lillian Michaels of New York, November 3. Several of Mr. Tracey's Boston friends went to New York to attend the wedding. Mr. and Mrs. Tracey are residing in Roxbury.

G. D. Bourcy of the Herald force is spending a month's vacation down in Maine hunting. J. D. Shoemaker, a broker operator, is filling in his time during his absence.

The Harvard-Yale football game occasioned the sending of a large amount of press matter.

The many friends of Frank C. Frazee will be pleased to hear that he has been admitted to the bar, and is now practising law at Baldwinsville, N. Y. Mr. Frazee resigned his position as manager at the Globe office recently, after having received a degree at the Boston University law school.

J. J. Benelisha, who is with a firm of brokers in the stock exchange, is putting in some "extra" evenings at the main office during the fall rush.

**MONTREAL, QUE., GREAT NORTH WESTERN.**

George Falle has been appointed manager of the Great North Western and Canadian Pacific Railroad Telegraph Companies for Montreal north branch office.

Mr. Lefebure, a former operator, has been transferred to St. Lawrence Hall managership.

Mr. James Tucker of the delivery department was married to Miss Mary Ann O'Sullivan.

Miss Malvina St. Pierre is ill at the Montreal General Hospital.

Mr. D. Aoke, director of Imperial Posts and Telegraphs, Yokohama, Japan, was a recent visitor.

Mr. Robert Kane has been transferred from the second Toronto wire to the lightning stock and market wire. Mr. David Barclay of the Halifax duplex replaces him.

George Alexander met with a painful accident lately. He slipped and fell against the chief operator's desk, his right hand striking the hook thereon on which messages are filed, and which passed almost entirely through his hand. He was laid up for over a week, but is now convalescent.

Mr. R. E. McCord, who has been acting as wire chief for the past year will from henceforth be known as traffic chief. Chief Operator Walter Graham having assumed control of the switch. Chief McCord fills all positions admirably.

**CHICAGO, ILL.**

**Typewriters** bought, sold, rented and repaired. Renting a specialty. Also Agency for "Telegraph Age." Telegraphers' Typewriter Co., Room 5, 122 La Salle St., Chicago, Ill. Be sure to mention TELEGRAPH AGE.

**SOMETHING NEW**—no operator should be without. The Eacutt-Cawthern Typewriter Cleaner is a simple little brush; can be inserted in machine in two seconds, type thoroughly cleaned in 30 seconds without soiling fingers. Formerly required 15 minutes, and soiled and inkstained fingers. Price 50 cents, postpaid. Agents wanted. Eacutt and Cawthern, Room 704, 86 La Salle St., Chicago, Ill.

**POSTAL.**

E. W. Blakely, manager of the Columbus, Ohio, office, was a recent visitor. He was shown about the office by Mr. Brosnan.

Operator Whitaker at New York sent Operator Simpson at Chicago 200 messages in two hours and a half the other evening on the bonus wire, an average of eighty messages per hour.

C. P. Wright, who has been ill, has returned to duty.

Frank Farrell is sick; we understand he has injured his eye.

Mr. Hatch has gone to Cleveland for a short visit.

**QUEBEC, QUE., CANADIAN PACIFIC.**

Manager F. G. Mahon of this office spent Thanksgiving Day in Montreal.

Messrs. A. R. McDonald & Co. have leased a wire from this company direct to New York.

**NORTH SYDNEY, C. B., NOTES.**

Mr. J. F. Dennehy of the Western Union Telegraph Company has resigned to become proprietor of the British-American Hotel at Halifax, N. S.

Mr. Alfred Robinson of the Anglo-American cable staff has gone to New York in the interests of his new perforator, which is being developed for telegraph service.

**PHILADELPHIA, PA.****MY MOTTÖ—HONORABLE DEALING.**

I will wager from \$100 to \$500 (seems incredible, doesn't it, that an "op" should possess this amount, still I have it and it is mine) that Henry V. Emanuel, of Philadelphia, using a No. 6 Fay-Sho Typewriter in a fifty message contest will defeat any telegrapher in this country using any other typewriter than the No. 6 Fay-Sho.

THE NO. 6 FAY-SHO IS THE FASTEST TYPEWRITER IN THE UNIVERSE.

Mr. Emanuel holds the world's record created by him on this typewriter of Madison Square Garden, May 14, 1898.

Send for circulars giving telegraphers' special price and terms.

D. A. Mahoney,  
Special Representative.  
Main Office, W. U. T. Co.,  
Philadelphia, Pa.

Read the notice at the top.

**WESTERN UNION.**

Our sympathy and that of many friends is hereby extended to E. W. Bartholomew, of The Associated Press, in the loss of his little daughter who died recently after a very short illness.

Christopher Troeller, the new manager for the office at Chester, Pa., has already become popular with the patrons of that office.

After a short sojourn at Altoona, Pa., A. P. Jones concluded that Philadelphia suited him best and he is again with us.

The floor boys and their Christmas list are very much in evidence just now. Artist Vollrath excelled himself decorating the cover of the list.

A Merry Christmas to one and all! May Dame Fortune bless us all with a lavish hand in the New Year that will soon dawn upon us.

Harry A. Given, of this office, has again erected his Christmas grove with the usual mechanical arrangements, including scenic railway, fountain, merry-go-round, Ferris wheel, water-fall, blacksmith shop, saw-mill, bicycle riders, mill and music box. Water is the motive power and when the device is in motion one is reminded of fairy-land. It will be open to the public until January 18, between the hours of 7 P. M. and 10 P. M. All are welcome to see this marvelous panorama at his residence, 262 North Clarion street.

**POSTAL.**

Christmas seems to be the one absorbing thought, everybody appears to be making some arrangement for his own or others happiness; requests for leave of absence are already on file, and the check boys have anticipations of a generously filled Christmas sheet.

Some, however, will not be so very happy, as death entered the home of Miss Gertrude McLaughlin, operator at the Hotel Lafayette, and removed a beloved mother. Miss McLaughlin

has our sincere sympathy. She was relieved for a few days by Miss Lillian Greiner, of this office.

Mr. Edward Hibbs, assistant to Mr. Stump, at the Fish District office, was absent several days on account of sickness. The Messrs. Geo. Plattenberg and Chas. McIntire alternated as his relief.

Mr. J. J. Fourney, of the Chicago local, enjoyed a short trip to New York city.

Home attractions were so strong that Mr. J. A. Thomas could not resist the temptation to spend a few days with his parents at Pittston, Pa.

Resignations: William Hagan, to go South, and Frank G. Spiker.

Visitors: Mr. Wm. Madden and Miss Brosnahan, two former office associates, now in business at Mahanoy City, Pa., and doing well.

Two recent changes in the branch offices are: Miss A. J. Corrigan, from Hotel Lafayette to Washington Hotel; and Miss Ida Van Vrankin from the Washington Hotel to the branch office at Second and Poplar streets.

**PITTSBURG, PA., NOTES.**

In scanning the news and names mustered on the role of telegraphic lore in TELEGRAPH AGE, which most of our men read, I bethought myself of the genial faces of heroes of the key who stand guard day and night at the American Telephone and Telegraph Company's plant, Brushton, Pittsburg. Geographically, we are pretty far out, being five miles from the court house, but really we must not be counted out of the fraternity, because peradventure we "line 'em up" and "drop the west" under "Long-Distance" conditions.

Our manager, Mr. A. C. Terry, formerly chief electrician of the Western Union Telegraph Company, at Syracuse, N. Y., heads the scroll. Mr. Terry is well known in telegraphic circles, participating jointly with Mr. Finn in giving us the graphic volume on telegraphic apparatus.

Our wire chief is Thomas Hooper. He is an old Western Union man and judging from the way he knows his business, he made no mistake when he joined the telephone interest in its infancy.

**Deafness Cannot be Cured.**

by local applications, as they cannot reach the diseased portion of the ear. There is only one way to cure deafness, and that is by constitutional remedies. Deafness is caused by an inflamed condition of the mucous lining of the Eustachian Tube. When this tube is inflamed you have a rumbling sound or imperfect hearing, and when it is entirely closed deafness is the result, and unless the inflammation can be taken out and this tube restored to its normal condition, hearing will be destroyed forever; nine cases out of ten are caused by catarrh, which is nothing but an inflamed condition of the mucous surfaces.

We will give One Hundred Dollars for any case of Deafness (caused by catarrh) that cannot be cured by Hall's Catarrh Cure. Send for circulars, free.

F. J. CHENEY & CO., Toledo, O.

Sold by Druggists, 75c.

Hall's Family Pills are the best.



Charles White, another Western Union product true, heads the list of five assistant wire chiefs. These gentlemen are supposed to be at once ubiquitous and omniscient, the happy receptacles of troubles great and troubles small, "hello" girls and all.

Elmer Heasley, of Postal fame, has suffered no "drop in potential."

George E. Hudson, another Postal man, needs no introduction as "Hudson's word Counter" was one of the first in the field and can be found everywhere.

W. S. Martin, a Pennsylvania Railroad man, keeps vigils during the eventide. He is our artist, blending beautifully at 11.30 P. M. with Frank Cella, of Postal identity, who guards the "coppers" till the break of day, doing all sorts of tricks on the "Bridge," taking Varleys, metallics and Murray loops.

Of the seven repeater men, The Standard Oil Company is responsible for five, namely, L. M. Whitney, L. L. Leith, H. R. Curtis, J. H. Macklin, and C. B. Unangst. These "pipe liners" the wire chief found to be strictly O. K., hence the invasion. L. L. Leith was formerly wire chief for the National Transit Company.

Charles N. Ege, an old Pennsylvania Railroad man from Altoona, and D. J. Desmond, a Western Union man from Buffalo, completes the force in the "test room."

The ticket wire men are: U. S. Foster, W. C. Leith, Edward Gorman and G. North.

L. J. Lemmon and Peter Stancliffe are our vigilant linemen, who can relieve the line of anything from a hickory tree to an ohm of spider wire.

#### MONTREAL, QUE., CANADIAN PACIFIC.

Mr. F. T. Jennings has returned from a well-earned vacation.

Mr. F. N. Caisse, accompanied by his wife, is absent on a trip to Hamilton, Ont., Buffalo and Niagara Falls. Mr. J. Mitchell is acting night chief during his absence.

All the employees were given a half holiday on the occasion of the King's birthday, which was highly appreciated.

Mr. Herb Keating, a former employee of this office, who has been confined to his home with typhoid fever, for the past nine weeks, has fully recovered, and was a recent caller.

Mr. Samuel J. Ritchie, a well-known telegrapher, and for a number of years past employed with a broker in this city, is reported to be seriously ill at the Western End Hospital.

Mr. James Spencer, who has returned from Grasset, Ont., where he had been for the past twelve months, is now temporarily employed with Fellowes, the broker, pending Mr. Ritchie's recovery.

Five new clocks have been placed in the operating room.

Mr. Al. Jarvis has returned from his annual hunting trip up the Lakes. He reports the deer plentiful this year, having been successful in capturing a fine specimen, a sample of which he generously

exhibited to his many friends in and out of the offices.

Mr. H. Bott also spent a couple of weeks hunting at Labelle, Que.

Mr. J. Mitchell is visiting Kingston and Brockville, Ont.

Messrs. L. M. Walden and D. Duff have resigned and gone South. Before leaving they were joined by Mr. Souls, of the Great North Western contingent from both offices were at the station to give the trio a grand send-off. A telegram was received from New York the following morning addressed to "The Bunch, Montreal," announcing their safe arrival.

Messrs. G. P. Moss and J. W. Ross have also resigned and gone West.

Mr. Henry McCann, manager at Sydney, N. S., and a former employee of this office, was a recent visitor and received quite an ovation from his old chums of the operating room who were all glad to see him.

The King's birthday and Thanksgiving day were generally observed in this office. All the telegraphers were extended a half-day off on both occasions, which they enjoyed and appreciated.

Mr. Walter M. Godsoe, of the Canadian Pacific Railroad Telegraph, Halifax, N. S., accompanied by his bride, were recent visitors.

#### QUEBEC, QUE., GREAT NORTHWESTERN.

Miss Marion Pope, daughter of Superintendent Edwin Pope, was married to Rev. William Barton, Anglican priest of Grand Mere, Que.

Assistant Chief Operator M. J. O'Reilly has returned from a tour of inspection to Bathurst, N. B.

Miss Jones, an operator, does fast work with Miss W. Ada Beck, on Montreal wire.

#### NEW YORK CITY.

All popular music at less than half price. "Utopian Waltzes," "Whirlwind March," "Ben Hur Chariot Race," "Belle of Manhattan" March and Two-Step, "When You Were Sweet Sixteen," "My Old Virginia Home," "Left on the Battlefield," "Dolly Gray," "The Sweetheart That I Loved In Boyhood Days," "Spider and Fly," 18 cents each. "Palms," "Popular Gems," "Lang's Flower Song," "Calvary," "Rusticana," 10 cents each. Pianos—all makes—sold, \$1.00 per week. B. L. Brannan, 195 Broadway, New York.

#### POSTAL.

Business is very heavy owing to the usual holiday rush, and the facilities of the office are taxed to the utmost in order to dispose of it promptly. The force is correspondingly happy, being able to make "extra" for the holidays. Very few are absent on account of illness, but the crop of colds is fully up to the average at this season of the year.

Mr. R. F. McKune has returned after a severe illness of five weeks, all of his family being ill at the same time.

Mr. F. E. Wheeler, who has been ill with acute nervous trouble, is back with us again.

Assistant Night Manager D. F. Mallen is once more on duty after a pleasant vacation of two weeks.

Mr. J. J. Sutphin has reported for work after spending the summer and fall in the Adirondacks.

Mr. J. P. Gallagher's name was unintentionally omitted from the list of piece workers mentioned in the issue of December 1. He holds down the first Philadelphia bonus wire days with Mr. Fred Bauman.

Mr. W. H. Rhodes, of the second Philadelphia bonus wire, has been absent some time on account of severe illness. Mr. G. W. Barrett is taking his place until he returns.

One hundred of the resonators on circuits where typewriters are used have been equipped with the new adjustable extension arms, with the result that the volume of sound in the office has been decreased more than fifty per cent. This office is now probably the quietest large telegraph office in existence. At the same time the receivers who use typewriters have been put at their ease, being relieved from all strain, discomfort and inconvenience.

Mr. H. C. Gorrell, of this office, was married to Miss Adelaide Le Cutler, of Newark, N. J., on December 4.

#### WESTERN UNION.

Mr. Harry W. Sauer, president of the Telegraphers' Aid Society, has resumed work. From his appearance and his statement, he has never been in a better condition of health.

Mr. D. W. Travis, formerly of this office, has recently been appointed chief operator of the Jacksonville, Fla., office, vice Mr. Peeples, appointed night manager.

New appointments: Nathaniel Taylor, O. Gedney, Thomas Gregg, W. J. Callahan, F. A. Hoag and W. F. Moore.

Resigned: L. D. Gaskill, W. W. Scott, T. Martin, C. J. Chryst, F. W. Wolf, L. A. Walters and M. E. Redmond.

Mr. D. Aoki, M.E., inspector of posts and telegraphs, Japan, visited the office December 7.

Mr. Alfred Robinson, of North Sydney, N. S., visited this office December 8 after an absence of 19 years. He said there was not as great a change in the force as might be expected in that long time.

Miss Nellie T. Calver is again on the sick list; also Mrs. Cora Mauer.

The appearance in most of the daily papers of articles on the subject of pensioning old telegraphers created considerable excitement, and it is wondered when the system will be put in operation.

James Mitchell, aged seventy-five years, father of David B. Mitchell, manager of the Race Bureau, died at Shrigley, Ont., on December 2. Only a month ago he was a visitor to New York.

ROOMS TO RENT.—132 State street, near Clinton street, Brooklyn, N. Y. New and elegantly furnished rooms to rent; all modern improvements; good table board; convenient single and square rooms. Mrs. L. N. Kirschbaum.

#### Obituary Notes.

M. W. Bissell, a telegrapher of Columbia, S. C., died on December 3.

Charles Newton, manager of the Western Union Telegraph office at Frankfort, Ky., died on November 29.

J. F. Hare, an old-time telegrapher of the Pennsylvania Railroad Company, Jersey City, N. J., died on November 28.

John A. Parkinson, for many years in The Associated Press service in various sections of the country, but for the past year, with a broker firm at Albany, N. Y., died of typhoid fever, at that place on December 8.

J. A. Johnson, manager of the Postal Telegraph Company, Newton, Miss., his son and a negro driver were killed near that place on December 9 by a falling tree. They had gone to repair a telegraph line when a tree fell across the road, crushing them to death.

Elias W. Fish, for the past thirty years manager of the Lake Shore and Michigan Southern Railroad telegraph office at Toledo, Ohio, died on December 4. He was 55 years of age, and for the past quarter of a century, in addition to his telegraph duties, acted as agent of the Telegraphic Mutual Benefit Association for Toledo and vicinity.

Edward J. Mathews, president of the American District Telegraph Company, at Philadelphia, Pa., and one of the best known brokers and club men in that city, was thrown from his horse and instantly killed December 7. He was 65 years old. Among those in attendance at the funeral at Valley Forge, Pa., on December 10, were: Messrs. Wm. H. Baker, George G. Ward, and Edward C. Platt, of the Postal Telegraph-Cable Company, New York.

John T. Brown, manager of the Western Union Telegraph Company, at Newburyport, Mass., died November 24, aged seventy years. He was well known for his public gifts, among them being the Market square clock, the fountain at the Three Roads, the Oak Hill cemetery gates, in that city, and the library building recently given to Hampton Falls, besides clocks to Salisbury and Hampton.

John W. Sampson, an old-time telegrapher, died in Washington, D. C., December 4, of paralysis, aged 55 years. He had worked in many of the large cities of the country, but for the past ten years had been employed by the Western Union in Washington. Mr. Sampson was in the military telegraph service during the civil war, and at one time was attached to General Sheridan's headquarters. His remains were taken to Wilmington, Del., for interment.

Great hearts alone understand how much glory there is in being good.—Michelet.

**Field Telegraph Systems.**

The use of electricity in warfare has, in the last few years, brought out a large number of inventions, and many feats which were useless to attempt a few years ago have been made simple. Two wars, the Boer-English and the Spanish-American, have given excellent opportunity for testing the real merits of many inventions, and in the three years' campaign in the Philippines much has been gained from observation of the workings of electricity in modern warfare. While the use of electric current for firing and sighting large guns, and the operation of searchlights for signaling and illumination, are mentioned, it is said that transmitting information by means of the telegraph and telephone has been the most general and valuable application of electricity. The extent of the business now handled for the United States military telegraph system in the Philippines is realized by comparatively few people, the figures for a single month being as follows: Manila central office, sent and received, 23,906; Luzon system, sent and received, 260,735. The messages frequently were over 1,500 words, and ranged in importance from orders from the commanding general to social invitations. All stores are ordered by telegraph, and the chief function of the mail is to carry certain printed forms and signatures required by the service, long after the real business has been transacted by wire.

**Government Ownership.**

The proposition that the Government shall construct and own the Pacific cable suggests the query, says an exchange, whether such a step once taken will some day be looked back upon as the beginning of governmental ownership of telegraph lines. The Government has long controlled the postal service. Through the inter-state commerce law it has taken an advanced step in the control of the railroads. By laying the Pacific cable it would establish itself in that business also. And thus we come to a general survey of the possible and probable advantage of the Government's ownership and control of all the means of communication and transportation in its territory. It is a question of growing interest and importance.

The Seattle Chamber of Commerce has taken the initiative in an endeavor to secure a trans-Pacific telegraph cable, following the northern route along the coast of Alaska and the Aleutian Islands, by passing suitable resolutions instructing Senators and members of Congress from the Pacific Coast states to use their best efforts to secure the adoption of the project.

**Grate-que Messages.**

An operator once copied from the wire this message: "Arrange for my funeral Sunday. Notify my family." It came from a place five hundred miles distant from the delivery office. Such messages are not infrequent, but they generally bear the signature of a third party expressing a dying request. The following is one of a kind of messages that is hard to classify, but which speaks for itself: "Father better, mules and horses all right; Eleanor buried yesterday." Some people with the best intentions use very little judgment in wording or addressing messages, and without meaning it cause great distress. This message was actually addressed to the head of a family at his place of business, from a point over one thousand miles distant where his family were temporarily staying: "Mrs. — and I, a seriously injured; Martha, Joseph and Freddie killed." Imagine if you can the feelings of that husband and father while hurrying half across the continent with the words of such a message ringing in his ears.

Marconi, of wireless telegraph fame, is now in Newfoundland arranging for the construction of a 240 foot pole at Cape Race, from which he hopes to communicate by his system with vessels 400 miles from shore.

In spite of numerous arrests and sentences for wire stealing, thieves are still at work nightly, robbing telegraph, telephone, and electric power poles of their copper wire.

Those desiring electrical or telegraph books will consult their own interest by securing our book catalogue. We make it a point to fill all orders the same day they are received. Address TELEGRAPH AGE, 253 Broadway, New York.

Send for a sample copy of the next issue of TELEGRAPH AGE.

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is the motive power that keeps the domestic machinery in motion. When it stops, those who are dependent upon you must suffer. Provide against that by membership in the

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

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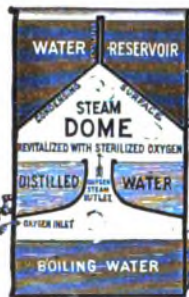
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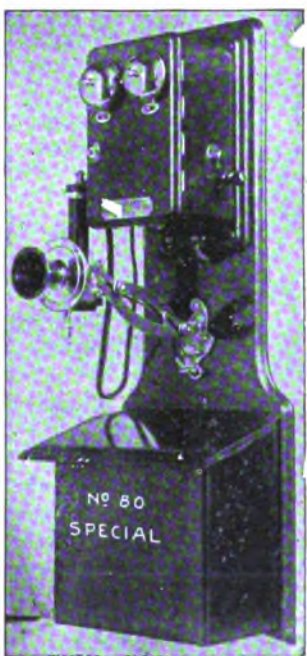
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I wish simply your name and address —no money. Tell me which of these six books you want.

I will send with it an order on your druggist to let you have 6 bottles Dr. Shoop's Restorative. He will let you take it for a month; then if it succeeds, he will charge you \$5.50 for it. If it fails, he will send the bill to me. He will trust to your honesty, leaving the decision to you.

Such an offer as this could not be made on any other remedy. It would bankrupt the physician who tried it. But in five years I have supplied my Restorative on these terms to over 550,000 people. My records show that 39 out of each 40 paid for it, because they were cured.

This remedy alone strengthens those inside nerves that operate all vital organs. It brings back the only power that can make each organ do its duty. No matter how difficult the case, it will permanently cure, unless some organic trouble like cancer makes a cure impossible.

I have spent my lifetime in preparing this remedy. I offer now to pay for all you take if it fails. I cannot better show my faith in it. Won't you merely write a postal to learn if I can help you?

Simply state which book you want, and address

- Book No. 1 on Dyspepsia.
- Book No. 2 on the Heart.
- Book No. 3 on the Kidneys.
- Book No. 4 for Women.
- Book No. 5 for Men (sealed).
- Book No. 6 on Rheumatism.

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Mrs. J. Scovill.  
Gaines, Pa., Nov. 26, 1900. I can heartily recommend your Washer as being the best I have ever seen. Don't have to use much strength.  
Mrs. C. K. Dimmick.  
Columbus, O., Feb'y 18, 1901. I find your Washer exactly as represented. It is the most wonderful invention of modern times. It is perfect. It is certainly a labor saver and does not wear and tear the clothes. My wife would not part with it for fifty dollars if she could not get another.  
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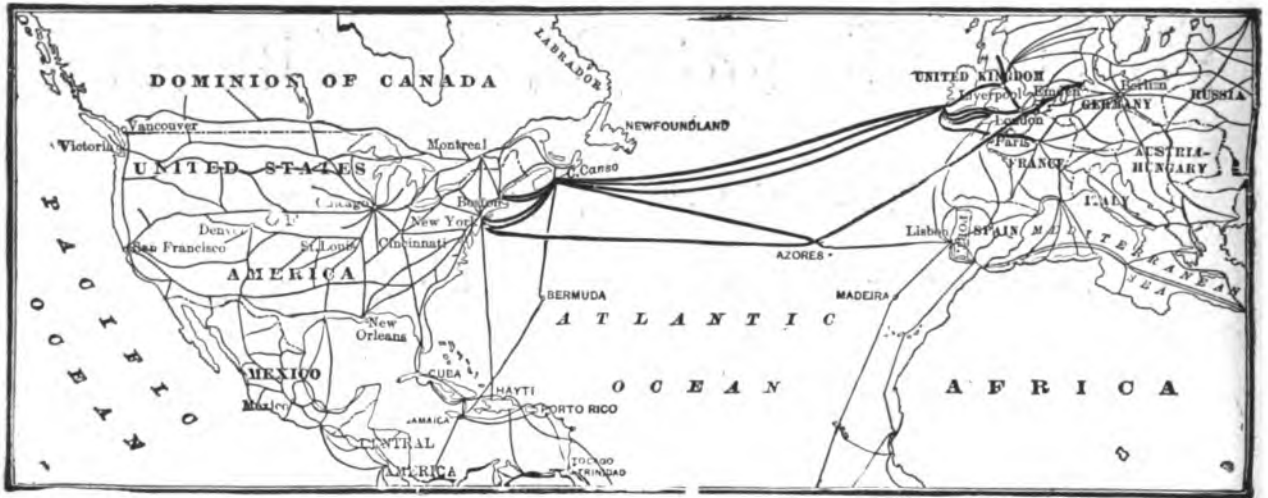


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