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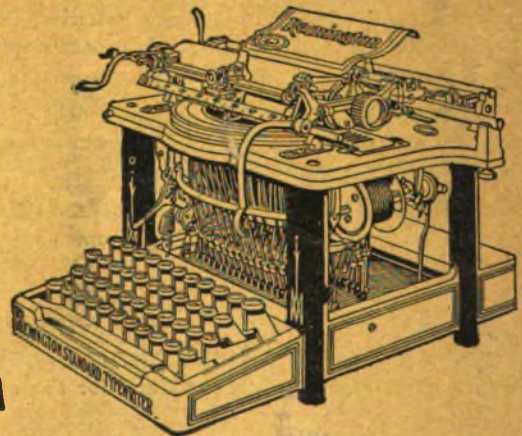
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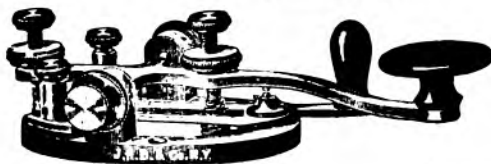
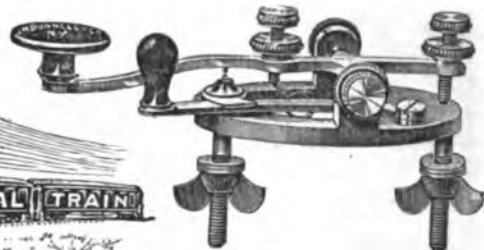
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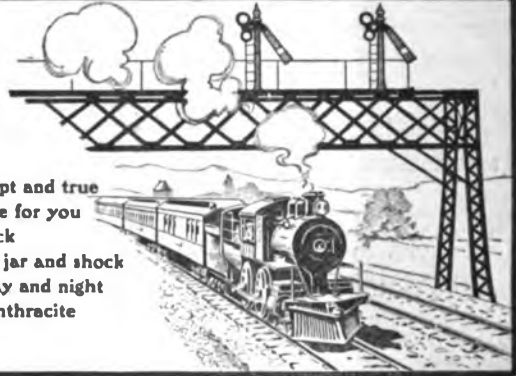
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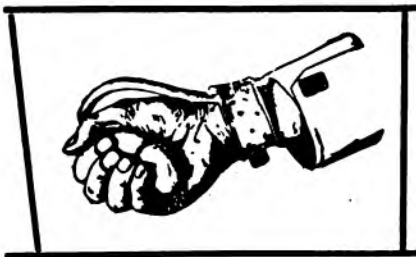
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THE TELEGRAPH AGE

No. 23.

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SOME POINTS ON ELECTRICITY.

BY WILLIS H. JONES.

A Point on Wire Testing.

On wet and foggy days one naturally expects to find more or less "escape" on a wire opened at a distant point, due to that portion of the current from the home battery which finds a path to the earth via the various poles along the route. Should a wire chief, however, depend solely upon that method of testing to determine, by the volume of current shown, whether the wire is workable or not on a multiplex circuit, he would probably have it returned to him shortly by the quadruplex attendant for another test.

The fact that an ammeter may show a deflection of the needle representing, say, but ten milliamperes of current, through which the wire chief works clearly with the testing station, is no indication that the conductor is suitable for a quadruplex circuit. Not that ten milliamperes of current in itself bars the service, (a quadruplex will work satisfactorily through a much greater volume) but because of the possible source of the escape, and its distance from the testing station. It should be borne in mind that all of the current shown by the meter is not necessarily part of the home battery. A portion of it may be due to a leak into the wire from another circuit. If it is all from the home battery it is not always harmful to any great extent, but, if, with the wire open at the distant end and grounded at the home station the meter shows, say, ten milliamperes of current,

it is comparatively harmless, or actually fatal according to the location of the fault causing it.

To make this point clear let us assume that a wire has been reported to the board as unworkable on a quadruplex circuit on account of what appears to be an "escape." The usual method of testing is to "single" the wire and after having it opened at the distant end note the volume of current indicated by the meter or a relay, first with the home battery on, and then to the "ground" at the switchboard.

If there is no cross or leak into the conductor both polarities of the home battery should show practically an equal volume of escape, and for this reason is not necessarily fatal to multiplex service so long as we can adjust above it. At the same time such a wire will show but little, if any, escape when grounded at the home station and open at the other end of the line. If, however, while the home end of the conductor is grounded the meter should show, for instance, ten milliamperes of current, it indicates that a foreign electromotive force is pressing the fluid into our conductor, and the wire chief must at once determine its location before passing judgment on its potency.

The current flowing in a conductor grounded at the home station and open at a distant point is caused by an electromotive force from some other circuit. If the fault is near the home station, and the escape but ten milliamperes, it indicates, according to ohm's law, that the difference of potential between your ground and the source of the trouble is comparatively feeble, and therefore cannot counteract the home battery to any great extent.

Should the fault be near the distant end of the circuit, however, it is evident that to fill so great a length of wire with that volume of current the foreign electromotive force at that point must be of considerable value.

Let us assume that it amounts to ten volts positive. The wire chief with his single line relay in circuit and one polarity of current to the line simply adjusts over the escape and can converse freely with the distant station because the total current then flowing will be a constant quantity; but should he restore the conductor in its present condition to the quadruplex attendant, the latter would find that where the requirements demand, for example, 18 milliamperes from each polarity of his battery as a short end current, he would be getting but eight from one pole and twenty-eight from the other, or at least something to that effect, because the ten foreign volts would

add that much to the positive pole of the quadruplex battery and decrease the value of the negative to the same extent, making an actual discrepancy of twenty volts between the two. No quadruplex will give satisfactory service under these conditions.

The point we wish to make is that the volume of an "escape" current, as indicated by a meter or a single line relay, is in itself no measure of the working value of a wire assigned to quadruplex service, and a wire chief should test the circuit intelligently from an electrical standpoint. He should realize the fact that a quadruplex attendant does not report a wire as useless merely for the fun of the thing. If he is a competent man his judgment should carry considerable weight. Bear in mind that a single line relay of 150 ohms actuated by a constant value current flowing in one direction only, is not nearly so sensitive as a 400 ohm multiplex relay actuated upon an entirely different principle.

Barclay's new small box relay, now the standard pattern for the Western Union Telegraph Company, has been further simplified by doing away with the extra set of binding posts formerly used for connecting a local battery and sounder in the combination when so desired. Mr. Barclay's argument in favor of the omission is that if a box relay is efficient it will do the work expected of it. If the circuit is too long for that instrument an ordinary relay should be called for in the first place.

Personal Mention.

Mr. George F. Porter, who was for ten years secretary and treasurer of the National Electric Light Association, has accepted the office of manager of sales for the Atlantic Insulated Wire and Cable Company, of Stamford, Conn. His headquarters will be at 120 Liberty street, New York city. Mr. Porter had been associated with Mr. W. R. Brixey, manufacturer of Kerite wires and cables, for several years past.

Resignations and Appointments.

Mr. F. C. Beck has been appointed manager of the Western Union Telegraph Company at Austin, Minn., vice R. T. Gorman resigned.

Mr. E. B. Brooks, messenger boy at Ponca City, O. T., has been appointed manager of the office at that point, vice A. E. Peck, promoted.

Mr. A. Bover has been appointed superintendent of the Dominion Government telegraph and cable lines in Quebec and the Maritime Provinces.

Mr. Charles Mahoney has been appointed manager of the Postal Telegraph-Cable Company of Texas, at Denison, Tex., vice J. G. Ambrose, resigned.

Mr. A. E. Peck, manager of the Western Union Telegraph office, Ponca City, O. T., has been pro-

moted to the Winfield, Kan., management, vice F. W. Heindel, promoted.

Mr. J. J. Grant, manager of the Western Union Telegraph Company, Covington, Ky., has been made inspector of the district presided over by Mr. J. M. Stevens at Atlanta, Ga.

The services of Mr. J. J. O'Connor, cashier of the Western Union Telegraph Company, Albany, New York, have been dispensed with on account of a reduction made in the service.

Mr. F. W. Heindel, manager of the Winfield, Kan., office, has been promoted to be manager of the Western Union Telegraph Company at Hutchinson, Kan., vice W. C. Carswell, promoted.

Mr. John J. Kearins has been appointed manager of the Western Union Telegraph Company at Danbury, Conn., vice Mrs. C. W. Benjamin, who has been transferred to Meriden, that State.

Mr. J. R. Cobourne, manager of the Western Union Telegraph Company, Paducah, Ky., for the past thirty years, has resigned, and he is succeeded by Mr. Samuel Quisenderry, of Memphis, Tenn.

Mr. W. C. Carswell, manager of the Western Union Telegraph Company, Hutchinson, Kan., has been promoted to be manager of the same interests at Topeka, Kan., vice C. O. Blandin, promoted.

Mr. John Gilliam, delivery clerk of the Postal Telegraph-Cable Company of Texas, Dallas, Tex., has been promoted to the managership of the Fort Smith, Ark., office, vice W. H. Herring transferred to Waco, Tex.

Mr. R. E. Winn, chief clerk in the district superintendent's office, St. Louis, Mo., has been appointed assistant superintendent of the Western Union Telegraph Company at Boston, Mass., vice Charles C. Bedlow, resigned.

Mr. J. A. Prentice has been appointed manager of the Western Union Telegraph office at Pittsfield, Mass., vice J. R. Powers, resigned. Mr. Prentice was up to a few months ago manager at Pittsfield, since which time he has been located at Newport R. I.

Mr. J. D. Flynn, who up to three months ago was superintendent of the Western Union Telegraph Company, at Pittsburg, Pa., is now general manager of the Pittsburg Stock Quotation Company, with headquarters in the Keystone Bank Building, Pittsburg, Pa.

Mr. L. F. Wise, of the Western Union Telegraph Company, St. Paul, Minn., has been appointed manager of the Chamber of Commerce office at Minneapolis, vice W. G. Lloyd, who goes to the North American Telegraph Company, Minneapolis, as manager on the Exchange floor.

Mr. C. W. Benjamin has been appointed manager of the Western Union Telegraph Company at Meriden, Conn., vice W. S. Peacock, who has returned to his old position at Bridgehampton,

Long Island. Mrs. Benjamin, formerly Miss E. Bailey, manager of the Danbury office, had been appointed operator at Meriden.

Death of R. B. Woolsey.

Robert B. Woolsey, for fifty years a prominent telegrapher and railroad official and a former president of the Train Dispatcher's Association of America, died at Terre Haute, Ind., on November 15, aged sixty-four years. Mr. Woolsey was born at Seneca Falls, N. Y., December 26, 1837, and learned telegraphy at Geneva, N. Y., in 1853. Early in his career he became a railroad operator, and after a short experience in his native state went to Chicago in 1859, there engaging as an operator with the Illinois Central Railroad. He was soon promoted to be a train dispatcher, in



THE LATE ROBERT B. WOOLSEY.

which capacity he served until 1873, when he was appointed to the dual position of superintendent of telegraph and chief train dispatcher, to which was soon after added the further duties of train master on the Indianapolis and St. Louis railroad at Mattoon, Ill. In 1881 he resigned to accept the position of superintendent of telegraph and chief train dispatcher of the Vandalia line at Terre Haute, a road with which he has since been connected. Mr. Woolsey was always a prominent figure in telegraph and railroad circles.

Obituary Notes.

Elizabeth F. Laney, an operator at Augusta, Ga., died at Washington, Ga., November 9.

Frank C. Hill, aged thirty-two years, a well known New York operator, who has been employed in newspaper offices for several years past, died at Albany, N. Y., on November 25.

Col. Tom P. Ochiltree, who was a particular friend of the late John W. Mackay, and who was well known to the telegraph officials of New York, died at Hot Springs, Va., on November 25.

New York Visitors.

Mr. Morris W. Mead, chief of the bureau of electricity, Pittsburg, Pa.

Mr. J. M. Creamer, manager, Western Union Telegraph Company, Baltimore, Md.

Mr. J. W. McLean, cashier, Western Union Telegraph Company, Baltimore, Md.

Mr. S. D. De Shazor, manager Postal Telegraph Cable Company, Petersburg, Va.

Mr. W. B. Eddy, manager of the Western Union Telegraph Company, Whitehall, N. Y.

Mr. F. C. Hackett, chief operator, of the Western Union Telegraph Company, Cleveland, O.

Mr. Edward P. Wright, former superintendent of the Western Union Telegraph Company, Cleveland, O.

Mr. A. R. Lingafelt, formerly assistant superintendent of telegraph of the Chicago, Rock Island and Pacific Railroad Company, Topeka, Kan.

The Cable.

The cable to be laid between Anticosti island and the Magdalen islands, has been delivered at Halifax, N. S., and will be laid this fall.

The statement of the German Atlantic Cable Company shows a considerable increase in receipts in consequence of the large traffic with America. General progress is being made in the company's plants, which are being fitted with the newest machines, to assure the making of perfect cables for undersea use. A thousand kilometres of the second German Atlantic cable have already been manufactured.

The twin-screw cable repairing steamer "Lady Laurier," built in England to the order of the Canadian Government for service on the Atlantic coast, was launched on October 24. The vessel is intended for cable laying and repairing, and is furnished with the latest type of picking-up and paying-out gear. The speed of the vessel is fourteen knots. The "Lady Laurier" has been constructed to the design and built under the personal superintendence of Capt. M. P. M'Elhinney, nautical adviser to the Government of Canada. Capt. P. C. Johnson has been appointed captain of the new vessel, which takes the place of the cable steamer "Newfield," wrecked in 1900 off Newfoundland.

PACIFIC COMMERCIAL CABLE.

Satisfactory arrangements between the United States Government and the Pacific Commercial Cable Company—which means the completion of a cable from San Francisco to Manila and the

coast of China—were practically concluded on November 20 at a conference in the Department of Justice, at Washington, D. C. Attorney-General Knox, Clarence H. Mackay, president of the Pacific Commercial-Cable Company; George G. Ward, general manager, and Mr. W. W. Cook, counsel for the company, were present. Only one point was left unsettled and on this another conference was held the day following, when a new agreement was drawn up to be submitted to the President. This refers to a stipulation by the United States which the cable officials interpret as preventing any business connection between their company and other telegraph lines. Should this be imposed according to the letter it is thought the Commercial Company would be unable to make any arrangements by which cable messages could be transmitted to the interior of China. The Attorney-General agreed to revise this stipulation and submit it to the President for approval.

Another stipulation required that the company should complete an American cable from Manila to Hongkong. The company, in lieu of this has agreed to extend the American line from Manila to Shanghai, a distance of 1,200 miles, and have the work completed within one year from this time. This was satisfactory to the Attorney-General.

By reasons of the satisfactory adjustment of these matters the deep sea soundings and surveys made by the Nero, under the direction of the Navy department, have been turned over to the Commercial Pacific Cable officials. Duplicate sets of the charts have been prepared, and will be turned over to the company as soon as the contract prepared by the Attorney General is signed. This will be in a few days.

At half past ten o'clock in the morning of November 3, the Pacific cable connecting the Market street office in San Francisco with the oceanable terminus near the Cliff House, was installed. A few men who drew the cable into the duct attracted little attention but the incident is of an extraordinary and national character as it marked the beginning of the laying of an all-American Pacific cable.

Wireless Telegraphy.

It has been decided to establish Marconi wireless telegraphy apparatus at all stations, and on all passenger trains on Italian railroads.

Wireless telegraphy, if it can be perfected, will undoubtedly be useful in regulating trains on railroads and the Grand Trunk Railroad seems to have taken the initiative in this respect.

Government control of all wireless telegraph stations along the coasts of the United States is recommended by Rear Admiral Royal B. Bradford, chief of the Bureau of Equipment, in his annual report.

The United Fruit Company has made arrangements to use the wireless telegraph system in con-

nection with the operation of its fruit vessels in Central America. The company will establish two stations, one at Bocas del Toro, Colombia, and the other at Port Limon, Costa Rica. These are 100 miles apart.

It is again announced that space-telegraph messages have been transmitted across the Atlantic Ocean with the Marconi apparatus. This time the news comes from Commander Martin of the Italian warship Carlo Alberto, which is now lying in Sydney Harbor, Nova Scotia. The information given out by Commander Martin was neither affirmed nor denied by Mr. Marconi in a recent interview.

Wireless telegraphy has been carried on unidirectionally over a distance of 750 miles, with both land and sea intervening, says the "London Electrician," and Mr. Marconi is to be congratulated in having succeeded in transmitting a message between two stations so far apart. The records on the tape were not perfect, but they were perfectly intelligible. Mr. Marconi has demonstrated that messages can possibly be transmitted over considerable distances of land and sea, but the report also shows that these long-distance feats are tantalizing in their uncertainty. Messages might be received on one day, and the next day for no apparent reason might fail to have any accurate effect on the receiving apparatus. This uncertainty is inseparable, however, from a process which is still in its incipient stages of development, and with regard to which theory at present furnishes no very accurate explanation; but continual experiment and painstaking records such as those of Lieut. Solari should help towards an ultimate solution of the difficulty.

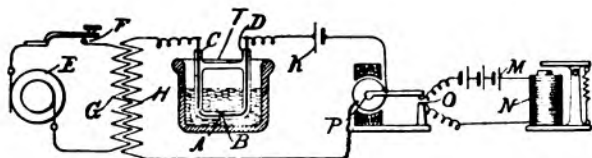
The Life of Telegraph Poles.

In a recent interview, according to the "Railway Shipping World," J. Wilson, superintendent of the Canadian Pacific Railroad telegraph department at Vancouver, B. C., stated that telegraph poles lasted longer in a wet climate than in a dry one. Poles on the Vancouver island lines would last ten years, while similar poles on the line between North Bend and Sicamous were destroyed in three years by the alkali. In Ontario where a superior cedar was used and the conditions favorable, poles would last for twenty to twenty-five years, and in New Brunswick a still longer period. Mr. Wilson mentioned having seen a pole in New Brunswick that was still sound and good after having been in service for thirty years.

T. M. B. ASSOCIATION.—Assessment No. 401 has been levied by the Telegraphers' Mutual Benefit Association to cover the claims arising from the deaths of Thomas Tyrrell, at Syracuse, N. Y.; Edward W. Duval, at Washington, D. C.; John R. Gillis, at Bartlett, N. H.; N. C. Harris, at Fredericks Hall, Va., and John S. Lowe, at Philadelphia, Pa.

Pupin's Asymmetrical-current Device for Telegraph Circuits.

An apparatus that is especially applicable for use with alternating-current telegraphy and has also other practical applications, has been invented by Dr. Michael I. Pupin of Yonkers, N. Y. The device is designed to produce asymmetrical currents from symmetrical alternating electromotive forces, and is covered by two patents, Nos. 713,044 and 713,045, dated November 4th. Dr. Pupin describes an asymmetrical current as a periodic current in which the total number of coulombs flowing in one direction is greater than the total number flowing in the opposite direction. Such a current will deflect a permanent magnet and be deflected by it and will produce electrolysis. It is equivalent to periodic unidirectional impulses equal to the difference between the number of coulombs transmitted in opposite directions.



PUPIN'S ASYMMETRICAL-CURRENT DEVICE.

The inventor's improved method for producing an asymmetrical current in a circuit is to impress an alternating electromotive force upon the circuit and oppose thereto an electromotive reaction which is greater in one direction than in the other. He thus constructs a circuit which will offer an asymmetrical impedance to a simple harmonic electromotive force. This electromotive reaction can be produced by placing in the circuit, as shown in the diagram, a direct-current generator (K) and a reversible, preferably non-cumulative, electrolytic polarization cell (T), the capacity reactance of which for the frequency of the electromotive force to be employed is as large as, or preferably greater than, the other reactances of the circuit. To get rectification of high efficiency, the capacity reactance should be about 100 times as large as any other reactance of the circuit. Upon this circuit is superimposed an alternating electromotive force. The direct-current generator—say a voltaic cell—and a polarization cell, which he calls a simple "electrolytic" cell—say, two platinum electrodes in dilute sulphuric acid—taken together constitute an asymmetrical electrolytic element which possesses an alternating electromotive reaction that is greater in one direction than in the other. Such an element is the equivalent of a cell which has the property of developing a higher counter-electromotive force when traversed by a current in one direction than when the current is reversed.

This invention is of considerable value in its application to telegraphy by alternating currents, and more particularly to multiplex telegraphy by resonance-receiving circuits. The chief difficulty

in using alternating currents for telegraphy is that the magnetizing force of the current transmitted must, generally speaking, be relied on to produce the entire magnetic effect in the receiving instruments, and this magnetizing force, being proportional to the square of the magnetizing current, falls off rapidly when the current is diminished, as it always is in transmission over long lines. With direct currents, however, the currents transmitted can be acted upon at the receiver by strong magnetic fields produced independently of these currents, as by powerful permanent magnets or electromagnets. Hence, by the aid of this invention much stronger effects can be produced in the receiving apparatus with a given impressed alternating electromotive force than is possible without the aid of the invention.

The application of the invention to telegraphy without employing resonance effects is illustrated in the diagram. In this figure the armature (P), which is placed between the poles of a powerful permanent magnet, operates a circuit-closer (O), which closes a local circuit in which is a battery (M) and a sounder (N).

Dr. Pupin has practiced the invention successfully in rectifying Hertzian oscillation, as well as oscillations of the frequencies produced in ordinary commercial practice. When a circuit is properly adjusted for a given frequency, it will effect even better rectification with all lower frequencies.—Western Electrician.

A Telegraph Transmitting Device.

The telegraphic transmitter device which is being exploited by the inventor, Charles E. Yetman, of 220 Broadway, New York, is being extensively introduced in The Associated Press offices in New York and Chicago. This device is also beginning to find its way into Western Union, Postal and broker offices, mainly in New York city. This ingenious invention which, briefly described, consists of the mechanical arrangement for transmitting Morse characters by merely touching the typewriter keys, appears to be well received and is meeting with much success. Operators who have used the machine speak in the highest terms of the ease with which they are enabled to transmit dispatches. Mr. Yetman's office is in charge of Dr. S. W. Churchill, an old time telegrapher of New York, as manager, while Mr. G. W. Conkling, another well known old timer, holds the position of assistant manager and gives instruction on the transmitting machine.

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Disturbances to Telegraph Lines by Three-Phase Railway.

BY CESARE PIO.

The Lecco-Colico-Chiavenna-Sondrio Railway, recently inaugurated in the North of Italy, is, as is well known, operated with three-phase currents at 3,000 volts, the primary voltage being 20,000 volts. The transmission lines are three wires, situated in a vertical plane, and the secondary lines are constituted by two over-head trolley wires and by the rails for the return. When the first test of trains was made, the disturbances to telegraph were so great that communication had to be suspended, even that relating to the railroad service. In order to avoid these troubles the return circuit of the telegraph line was changed in direction by utilizing the stream of the Adda River. Later, some inductive coils with closed magnetic circuit were connected in series with the telegraph lines, and finally a return circuit was added to all these lines. The latter was the only remedy which proved successful and gave good results.

It was also demonstrated that all the troubles were caused by the secondary current of 3,000 volts, the primary current of 20,000 volts having no influence in telegraphic communications. As a consequence of the good results obtained, the telegraph engineers of the Italian Government conceived the idea of combining all the returns in a single wire; but this idea was soon abandoned, as the return of the different telegraph lines would have to be of very large cross-section. The number of wires was then doubled for all the telegraph circuits running along the railway lines. Over 400 miles of wire was laid, with all the necessary special work at crossing points, the poles were strengthened, and the whole work was accomplished in sixteen days under direction of an inspector of the Government telegraphs.

Some advantages resulted also from the adoption of inductive coils with closed magnetic circuit, but it was noted that the advantage was inversely proportional to the speed of telegraphic communication. Therefore, the use of such coils is not advisable with Wheatstone or Baudot machine telegraphic apparatus. The remedy just described cannot, however, be considered a complete solution of the problem, for while the change from single to double line has been possible in the present case, it would not be an easy matter with respect to the main railway lines where the number of wires is enormous, and where often there are two sets of poles, one on each side of the track. Besides economical objections, there are also technical objections with respect to through lines, owing to loss of time, as was demonstrated in Lecco. The only practical solution of the problem seems to be to put underground all telegraph lines.—*Electrical World and Engineer.*

Operators will find a fund of practical information in every issue of TELEGRAPH AGE.

North Borneo Telegraphs.

Mr. C. Bradbury, who has recently resigned as assistant superintendent of telegraphs of British North Borneo, writes regarding the telegraph in that far-away part of the world as follows:

"Briefly, our main line runs from Mempakul on the West Coast, opposite the island of Labuan, to Sandakan, the capital, on the East Coast, a distance of about 304 miles. The line runs for the whole distance through dense tropical jungle, over hill and dale, swamps and morasses; there is no attempt at a road along it, and the route was not surveyed before the line was constructed. The insulation is so bad (bad is a mild term) that, using the open circuit system, polar relays, it is impossible to work more than about fifty or sixty miles, so that the little business there is necessarily repeated from office to office. The great trouble is the fearfully difficult nature of the country through which the wire runs, and the almost total absence of supervision, with the result that the lazy Malay coolies do nothing to keep the line in order and the wire insulated. A favorite trick of theirs when a pole falls is to put a forked stick in the ground and support the wire in that.

"Mempakul on the West Coast is connected by a short cable (six miles) with Labuan, from which place the Eastern Extension Telegraph Company has cables to Singapore and Hong Kong. The offices on the line are Labuan, Beaufort, Keningau, Penungah, Tangkulap, Lomag and Sandakan. The system of telegraphy used is the English open circuit—Leclanche or Obach dry cells, Siemens polar relays or English post office pattern polar relays—and sounders. Incidentally, I may remark that these English telegraph instruments are, in my opinion (and I have used both), infinitely inferior to American instruments, as regards results and make; they are also about four or five times the price of American instruments, and the latter are neater, lighter and more up-to-date in every respect.

"On the West Coast of North Borneo there is a new telegraph line running from Beaufort, on the main line, along the coast to Kudat, in the northern part of the territory. The distance is about 170 miles, and this wire gives much better results than the overland, as the greater part of it runs through a comparatively open country. There is a railroad from Beaufort to Jesselton, the first town on this line, a distance of fifty-eight miles; the other offices north of Jesselton are Kotabelud, Langkom and Kudat, all of which I have opened for telegraph communication within the last few months.

"I shall try to give you a better description of the telegraph later on, when I hope to be able to find time to write an article which, I think, will interest your readers and also astonish them.

"Owing to ill-health, caused by the bad climate here, and the impossibility of making a success of the telegraphs in this country (due to want of skilled, able and intelligent assist-

ance) I have resigned, and expect to leave shortly for my old home, Canada, or the United States."

The New Western Union Branch Office In The Financial District.

The Broad street, or Central Cable office, as it is more familiarly known, of the Western Union Telegraph Company, New York, will, it is expected, occupy its new quarters in the Stock Exchange Building, now nearing completion, on or about January 1, next. This important office, which will occupy space both on the ground and basement floors at the south end of the magnificent structure in which it will be housed, will be a spacious one, in accordance with its present and growing needs, and will extend, 40x160 feet, through from Broad to New streets. This will afford the telegraph company ample space for its present accommodations together with that of the American District Telegraph Company, and its army of 200 messenger boys, and the Gold and Stock Telegraph Company with its up-to-date ticker service. And it is believed also, that room sufficient has been obtained to meet all probable requirements of the several interests concerned during the next ten years.

The new office will be handsomely finished throughout, the trim, operating tables, desks, etc., being of quartered oak, highly polished. The tables, which will furnish accommodations for ninety operators, will be built with a convenient arrangement for the placing of typewriters, besides a cupboard for their storage.

The telegraph equipment will be of an elaborate character, in every particular embodying the latest modern devices. In fact Mr. J. C. Barclay, the electrical engineer of the company, has, it is understood, determined that this important office shall be fitted up in a manner that shall make it at once the finest and most complete telegraph plant of its size in the United States.

The switchboard, which will be new and of the latest pattern, will be superior to any of its size ever made.

In the basement will be located the Gold and Stock transmitter board with its storage battery plant. And here will be found also the general wire distribution for use in the financial district. The wardrobes and toilet rooms will be on this floor, and a large room will be here set aside and equipped with the latest devices for testing ocean cables, as this office will be the terminal of the two Western Union European cables.

In order to meet the enormous demands that will be made for telegraph facilities at this busy centre, it will be necessary to run between three and four thousand wires into the Stock Exchange Building. A modern dynamo plant will be arranged to supply this office and the entire lower section of the city with local battery current. The duplicate machines will be each of 230 volts primary, and 26 volts secondary. The idea is to

supply every down-town branch and broker office with 26 volts for local battery purposes, which will in turn be reduced by a fifty ohm sounder and a 250 ohm lamp connected in series to meet individual requirements. Over six hundred sounders will be supplied by this new method of delivering current. This dynamotor plant replaces a storage battery equipment.

There will be no lights placed on the operating tables, as is generally the custom. Instead, there will be clusters of incandescent lamps arranged around the ceiling with switches, to cut in groups of two, three or five lamps, as required. Porcelain reflectors will be used and it is expected that the lighting of the room will be as near perfect as man's ingenuity can devise.

\$30,000 A Year For Telling The Time.

Everyone looks to a public clock for the correct time, without a moment's thought as to how the time is so doled out that any clock in the remotest corner of the British Isles may be regulated from Greenwich once an hour, says an English paper. By a series of automatic electrical switches the many thousands of clocks in connection with the post office are placed under the control of the mean solar clock at Greenwich, which is kept regulated by the sun without erring even to the hundredth part of a second, and the time is thus flashed to all parts of the kingdom once every sixty minutes night and day.

It was in 1852 that a method of utilizing electricity for distributing time was first devised, and in that year a signal-ball was put on a staff in the Strand and made to drop at one o'clock daily by electric current from Greenwich. Although this method of signaling time is still preserved in many important centres on the coast, the automatic clock has become more popular, and is equally reliable.

The post office retails the time to some thousands of subscribers whose clocks are connected with the solar clock at the observatory, and should these timepieces have lost or gained during the sixty minutes they are put right again as soon as the hour is registered. To accomplish this a small slit is made in the face over the XII., and two needles controlled by electric magnets fitted into the opening. Directly the hour is reached the current is started by the Greenwich clock, and the needles in every clock in connection are closed by the magnets and bring the minute-hand directly in the centre of the XII., thus regulating it to the hundredth part of a second with the great time-keeper at Greenwich.

The mechanism which regulates Britain's time is a marvel of ingenuity, and is worked by switches on the same principle as the telegraph. When the current leaves the observatory it is flashed to all the chief towns in the kingdom, and re-transmitted automatically from thence to hundreds of smaller centres and private subscribers without any human assistance. Thus the time can be flashed from Greenwich to a sta-

tion 300 miles away, and from there transmitted to a second station 100 miles further on, without the clock at the latter place being a fraction of a second behind time.

Fifty officials are engaged in making meteorological observations all the year round at the observatory, for, although the great solar clock works automatically, its movements have to be checked and recorded. In spite of the fact that the time is kept and signaled from Greenwich, the post office is nominally the distributing agent, and nets an income of over \$30,000 a year from doling out the time to its subscribers.

A Promising Young Telegraph Manager.

Mr. Edward F. Hasson, who was recently appointed manager of the Western Union Telegraph Company, at Cambridge, Mass., enjoys the distinction of being, perhaps, the youngest telegraph manager in the United States of any office of that importance. He has just reached his twenty-first birthday. His entry into the telegraph field dates only from August, 1901, prior to which time, after leaving school, he had spent two years in the theatrical business. His first telegraphic position was that of clerk and operator in a branch office of the Postal Telegraph-Cable Company in Cincinnati, O. Displaying a natural aptitude for telegraphy, coupled with that of executive force, he gained a quick grasp of the business, a fact which soon attracted the attention of his superior officers, and he was



EDWARD F. HASSON.

Western Union Manager at Cambridge, Mass.

given charge of one of that company's most important branches in Cincinnati. He entered the service of the Western Union Telegraph Company and was assigned in October to the managership of the Cambridge office, where he now is.

The Secretary of the International Association of Municipal Electricians.

Francis Perry Foster, superintendent of fire telegraph at Corning, N. Y., was born in that place on September 21, 1867. When but five years of age his family removed to Alabama, and



FRANCIS PERRY FOSTER.

Superintendent of Fire Telegraph, Corning, N. Y.

shortly after, at a time when most boys should be at school, young Foster was compelled to earn his own living. His early years saw much diversity of occupation, employment in various electrical pursuits, in which he showed much aptitude, affording him the greatest satisfaction. He also had some experience in a printing office, in which he worked at the case. Returning to his native place on January 1, 1886, where he has since resided, dentistry engaged his attention, a profession which he has since followed in conjunction with other duties. When the fire alarm system was installed in Corning in 1893 Mr. Foster was a member of the Fire Board, and his knowledge of electrical matters enabling him to settle a disputed technical question, he was given the position of superintendent, which he has since held. Mr. Foster was active in promoting the formation of the International Association of Municipal Electricians, and is the secretary of that body. Mr. Foster is essentially a self-made man and is a close student.

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NEW YORK, December 1, 1902.

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

The query frequently comes to us how members of the profession can become financially successful in life. Well, that depends. Still, to answer this question in a general way and in a few words as possible, it is only necessary to remark in the first place that a person should live within his income. If operators would make it an imperative rule to save and invest from ten to twenty-five per cent of their earnings, in the course of years the results would show a comfortable balance on the credit side. The most profitable years of a telegrapher's life is the period covering his age ranging from about fifteen to forty-five years. During these thirty years of active life the savings ought to be sufficient to make him, if not independent, at least removed from the "ragged edge" of existence and relieve his later years from excessive worry and anxiety.

There is no profession like the telegraph that is so productive of the condition described as "getting into ruts." It is a common expression to hear a person say that manager so and so, or chief operator this or that was very clever in "his day" but is now in a "rut." Eternal vigilance, it is said, is the price of liberty. Eternal vigilance and bright ideas are certainly in demand if one is desirous of being saved from dry rot and the consequent falling into rut and routine, everywhere unfortunately found in the telegraph service, and so disastrous in their consequences. Get out of the ruts.

The recent advance made by the Pennsylvania Railroad Company of ten per cent. on all salaries of employees receiving \$200 or less, a month, together with the adoption of similar measures on the Vanderbilt, the Union Pacific and other roads, carries not only a notable and significant estimate of the general prosperity of the times, but a gratifying recognition as well of the inherent rights of labor. This increase of pay of course, general in its application, affects the telegraph operators. In the case of the Union Pacific road the granting to the telegraphers of a more liberal wage schedule and a reduction of working time, so far as the situation in the cities is concerned, from nine to eight and one-half hours per day, amicably settles a long disputed point.

Of late the attractions of the railroad telegraph service appear to be gaining in the estimation of the commercial men. For many years the drift among operators has been the other way, the commercial companies recruiting their forces largely from among the railroaders, but this apparently is no longer true. The question now arises. Will the railroad companies in the future draw upon the commercial telegraph ranks for their supply of telegraphers?

Civil Service Rules Should Govern.

It is a noticeable occurrence that within a comparatively late period many of the men who have been selected for promotion to important offices in the Western Union service elsewhere throughout the country, have been drawn from the district in the West presided over by Col. J. J. Dickey, of Omaha, Neb. This significant circumstance may be attributed to the fact that within the jurisdiction referred to the wholesome rules of civil service are closely adhered to, all promotions being governed in accordance therewith. The resultant effect is that merit there gains recognition, the best material comes to the top, so that as a rule the managing heads represent the pick of the force. This is as it should be, it is realizing the higher ideals incident to employment, and the working of the system, as might be expected, is bearing excellent results; for, under the conditions created the tendency is to assure the individual that he is being fairly treated, his worth recognized. This course naturally inspires enthu-

siam and establishes an esprit du corps among the men observable to a marked degree.

The recent resignation of the manager of the Western Union office at Denver, Col., resulted in the promotion of six other managers to more important offices on the step-up plan. This necessitated a little more book-keeping no doubt, and more or less trouble in checking out old and checking in new managers at the Omaha headquarters, but no one doubts that the telegraph service in general was not the gainer by this judicious series of advancement.

If the same civil service rules were followed as strictly in all other telegraph districts as are so happily pursued in the one in which Mr. Dickey has conspicuously made such a fine record, the conditions of the telegrapher everywhere would materially improve. This follows as a logical sequence.

It too frequently happens that a superintendent accepts a resignation and fills the vacancy thus created with as little personal trouble or thought as possible, and without a proper and just regard for those entitled to consideration in the line of promotion. If a superintendent by any process of reasoning imagines that the company's interests are being well served by any such method of procedure, he is woefully mistaken. On the contrary, he is failing in one of the first requisites of an equitable conception of duty.

A Better Understanding of Telegraph Book-keeping.

EDITOR TELEGRAPH AGE:

I observed with much interest a communication appearing in TELEGRAPH AGE of August 16, last, in which the hope was expressed that the system of book-keeping pursued by both the Western Union and Postal Telegraph companies might be taken up and explained to your readers in a series of articles.

I am disappointed that nothing further has appeared in relation to the matter, either in the manner suggested, or by contributed articles. The subject is a highly important one, and of almost vital import to many in the telegraph business who have aspirations. For in the event of operators being called upon to take charge of offices they manifestly should be proficient in the book-keeping branch of the service. Can you not give us the systems used in the New York offices? If published it would naturally be in order for those who could offer improvements upon the methods described to tender suggestions. Such a correspondence thus drawn out from clerks and others throughout the country who have practical ideas bearing on the topic would focus upon the subject a wide spread and much needed attention.

A general discussion in print along these lines could not fail to be of value to the fraternity, especially to those anxious to become masters of every branch of the service. I refer particularly to mode of entering business on receiving and delivering department sheets; how clerks account

for cash messages; how charged business is entered up against customers; how newspaper accounts are run; the best mode of booking business against the different offices for the check report, etc.

November 12. ONE WHO WISHES TO LEARN.

[There are many methods of book-keeping covering different telegraph requirements, and it would be difficult to explain a single method that would fit the service of the different localities. We understand from Mr. R. W. Chapman, chief of the book-keeping department, Western Union Telegraph Company, New York, that the system used in New York and in Chicago are similar but the methods of book-keeping adopted in these two cities are not adapted to smaller places.

Local conditions apparently require local treatment. Occasionally it happens that first class operators who are also experts at the switchboard, are frequently appointed to managements, and for the first six months of their management the experience in keeping their financial accounts straight is a laborious one. It is surprising how many first class men there are who have not the slightest conception of financial affairs, and it is the one thing that keeps very many otherwise efficient and capable men from accepting managements, or positions involving the handling of money.—Editor].

The Western Union and Pennsylvania Railroad.

The third of a series of suits brought by the Western Union Telegraph Company against the Pennsylvania Railroad Company, to restrain the latter by injunction from removing any poles, wires or fixtures of the plaintiff corporation from land owned by the railroad company, was entered November 20 in the United States Court, at Pittsburg, Pa. In this last suit the Erie and Pittsburg road is named as the defendant, the previous suits being filed against the Cleveland and Pittsburg and the Pittsburg, Ft. Wayne and Chicago roads.

Attorney A. M. Neepor, representing the Wabash in Pittsburg, will make the fight for the Western Union, and George W. Massey, general solicitor for the Pennsylvania, will handle the defense for that company. The move broadens the big legal battle between the Gould-Wabash interests and the Pennsylvania-Cassatt corporations.

The Western Union claims, under old post road rights, or general grants, given years ago, that it cannot be legally restricted from occupying the ground along the tracks of the Pennsylvania Railroad. These rights, the telegraph company maintains, are equally as important as the eminent domain rights of the railroad company.

Mr. S. B. Gifford, formerly superintendent of the Western Union Telegraph Company, Syracuse, N. Y., in renewing his subscription writes: "Although retired I take great interest in what is going on in the telegraph world."

Christmas Presents.

These will soon be the subject of consideration. Let us give you a suggestion. A good book is always suitable and welcome. For operators, what could be better than books treating on the telegraph in a manner fully explanatory and making simple and clear the technicalities of their own profession, often so difficult of mastery? To bring all this down to the level required for a quick understanding of perplexing problems, requires first, the work of a thoroughly practical man, and second, the gifts of a trained writer. First, then, standing easily at the head of the list is "Pocket Edition of Diagrams, and Complete Information for Telegraph Engineers and Students," by Willis H. Jones, electrical editor of TELEGRAPH AGE. The popularity of this book is indicated by its enormous sale, it being now in its second edition, although it is less than five months since it first came off the press. This splendid work is endorsed by all leading telegraph authorities, and no operator who desires to gain a comprehensive and practical knowledge of his calling, and so fit himself for promotion, should be without a copy. It certainly constitutes a magnificent gift and will do more for a telegrapher in the way of conveying desired information than any other publication of its kind we know of. It is advertised fully on another page of this issue. This volume is \$1.50 per copy.

Next to the above and sharing with it in popularity, is the old familiar Phillips' Code. This standard work which has lately been carefully revised, and brought up-to-date by Mr. A. P. Velie, is a thoroughly tested method of shorthand arranged for telegraphic purposes, and is simply indispensable to every telegrapher as an aid in the rapid sending of press reports. It is also intended to be used as an easily acquired method for general newspaper and court reporting. The book is of convenient pocket size, bound in red flexible leather. It is advertised in another column. The price is \$1.00 per copy.

The following series of books, considered from every point of view, constitute one of the best all around telegraph libraries extant. Not only are the technicalities of the great subject fully treated, but its storied literature as well, is told in sketches that will appeal strongly to every member of the profession. As will be noticed, in several instances the prices of the books of sketches have been sharply cut. This is done in order to make the sale doubly attractive for the holiday occasion. The prices are the lowest ever named and will be in force until December 31, only.

"Sketches Old and New," by Walter P. Phillips, elegantly printed and handsomely bound. A charming souvenir of Christmas time. Price, \$1.

"Lightning Flashes and Electric Dashes," 160 pages, illustrated. An original and sparkling collection of telegraph stories, quaintly descriptive of scenes and incidents that a telegrapher will appreciate and heartily enjoy; bound in cloth; a most acceptable holiday present. Price, \$1, reduced from \$1.50.

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"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 the well known telegrapher at Minneapolis, Minn; bound in cloth; will be a welcome holiday addition to any library. Price, \$1.00.

"The Quadruplex," by Wm. Maver, Jr., and Minor M. Davis, 128 pages, 63 diagrams and other illustrations; treats of the technical side of telegraphy in a manner at once simple, comprehensive and easily understood; bound in cloth. Price, \$1.50.

"Electricity Made Simple," by Clark Caryl Haskins, 229 pages, illustrated; contains information for those whose opportunities have been limited; cloth \$1.00, paper 50 cents.

"A. B. C. of the Telephone," by James E. Homan, A. M., 335 pages, illustrated, is a practical and useful treatise for students and workers in telephony. Price, \$1.00.

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"American Telegraphy", by William Maver, Jr., 563 pages, thoroughly illustrated. This fine work, of great intrinsic value, has long held a leading position as a work of authority in telegraphy, treating on system, apparatus and operation. Price, \$3.50.

"Commercial and Railway Telegraphy," by J. P. Abernethy, 424 pages, illustrated, discusses modern service of the same both in theory and practice, as well as that of railway station and express service, arranged in the form of question and answers. Price, \$2.

"Excelsior Webster Pocket Speller and Definer," by F. M. Payne. This careful and reliable compilation of about 22,000 words, 319 pages, is a splendid pocket companion of inestimable

value; marginal index, flexible morocco binding. Price only 50 cents.

"Wireless Telegraphy," by G. W. de Tunzelmann, 104 pages, illustrated. This is a popular exposition of wireless telegraphy, and treats the subject in all of its latest developments in a most interesting and comprehensive manner. Price, 75 cents.

Any of the above publications will be sent on receipt of price to any point in the United States or Canada, express charges prepaid. Address J. B. Taltavall, TELEGRAPH AGE, 253 Broadway, New York.

Mobile Manager of the Western Union Telegraph Company.

Mr. H. Van Devender, formerly traffic chief of the Atlanta, Ga., office of the Western Union Telegraph Company, was made manager of the office at Mobile, Ala., on October 27. He was born January 3d, 1870. He entered the telegraph



H. VAN DEVENDER.

New Western Union Manager at Mobile.

department of the Mobile and Ohio Railroad in 1884, from which he resigned in 1887 to accept employment with the Western Union Company in Mobile, going soon after to Pensacola, Fla., thence to Birmingham, Ala., and later in the same year to Atlanta. At this point he has since remained, for the past eight years occupying the position as traffic chief. Mr. Van Devender took a prominent part in the American Telegraphers' Tournament held in Atlanta in March last, filling the position of secretary-treasurer of the same, and to his efforts much credit was due to the success of the affair. Mr. Van Devender is a man of progressive ideas, popular, a faithful worker, and gained a host of friends at Atlanta.

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

Purchasing Associations.

The Loan and Purchasing Association established by telegraphers at Atlanta, Ga., has been dissolved because some one who borrowed money saw fit to bring suit against the association alleging violation of the usury laws. Similar associations established in a number of other cities had their attention called to possible like trouble from money borrowers and had accordingly eliminated from their by-laws all references to money lending; the business they transacted was exclusively of a merchandise character. In fact most of the purchasing associations never contemplated loaning money, the principle object being the purchasing of merchandise at retail by its members at wholesale prices, the saving in price being equally divided between the association and the purchaser.

The Central Purchasing and Savings Institution lately organized in New York, during the first month of its existence did a merchandise business of \$1,800. The concern did no advertising whatever, simply relied upon the members of the fraternity getting from one another whatever information they could concerning its operations for investors or purchasers. These results are remarkable and point to undoubted future prosperity. This association does not loan money.

New American District Telegraph.

The American District Telegraph Company, which has been incorporated under the laws of New Jersey with a capital stock of \$10,000,000, it is understood, will take over the management of all of the American District Companies in the leading cities. The controlling interest in the different American District Telegraph Companies, which companies operate a messenger service, was recently acquired by the Western Union Telegraph Company, and it is thought that the new American District Company is closely allied with the Western Union. Mr. C. F. Patterson is the general superintendent of the new company, and his headquarters are at 195 Broadway, New York.

Bogus Message Case.

Whether or not a telegraph company can be held liable for the consequences in transmitting a bogus message is a question involved in a case which is being tried before Judge Shiras at Fort Dodge, Ia.

E. S. Barnes, now serving a term in the penitentiary, forged the name of the bank of Britt to insure the negotiation of some paper, and the plaintiff sued for \$8,000. Barnes telephoned his message to the company. If Judge Shiras sustains the case it will probably result in a wholesale order forbidding the receipt of messages by telegraph operators over the telephone.

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

The Magnetic Club Dinner.

It was a notable gathering that sat down to the autumn dinner of the Magnetic Club at the St. Denis Hotel, New York, on the evening of Wednesday, November 19th. From the first the occasion was a most delightful one and will long be preserved as a most pleasant memory by those who were fortunate enough to be present. The atmosphere was redolent with the perfume of good fellowship. This reunion of telegraphers and friends was under the happiest of auspices and highly representative of the craft and creditable as well.

Beside the usual reception and entertainment of the Telegraphers' Mutual Benefit Association's delegates, which were collected in New York from various parts of the United States and Canada to attend the annual meeting of that association, the Magnetic Club was also giving a complimentary reception to the Western Union Telegraph Company's new officials who have recently arrived from the West to make their headquarters in New York.

Over the table of the President was suspended the motto of the Club "Are You Happy" and directly under, within the centre of a large permanent magnet, appeared the symbolic figures, "73".

All available space in the large dining room was fully taken up with the tables. With President Francis W. Jones at the long table at the head of the room were seated such prominent telegraphers as Thomas F. Clark, Col. A. B. Chandler, A. R. Brewer, Wm. H. Baker, B. Brooks, J. C. Barclay, James Merrihew, C. C. Adams, W. C. Humstone, W. J. Dealy, C. H. Bristol, G. W. E. Atkins, E. C. Platt, Minor M. Davis, G. H. Usher, E. B. Pillsbury, E. M. Mulford, Leona Lemon, A. C. Kaufman and H. E. Roberts. The Western Union officials were seated at the table alongside of the President while facing them on the opposite side of the table sat the Postal officials. The Western Union men were distinguished by boutonnières of violets and the Postal by white carnations, the combination forming the telegraph colors of white and blue which are also the colors of the club. Other members and guests wore boutonnières of pink carnations. Music was furnished by the Neapolitan mandolinists and during the evening there were introduced some highly entertaining features, consisting of monologue, recitation and song. The recitations and characterizations of Miss Martha Hicks Dey were distinctly pleasing and appreciated.

After coffee had been served President Jones, in behalf of the club, gave a most cordial welcome to the club's guests, including the Telegraphers' Mutual Benefit Association delegates, and took the occasion to briefly review the history of the formation and progress of the T. M. B. Association. He referred to the formation in December, 1867, of the association which was entirely composed of telegraphers, giving the names of most of the charter members at that time; also that up to the present time there had

been one million of dollars paid by the association to the widows and heirs of deceased members, doing an amount of good that no human mind could possibly grasp but an amount that should make the heart of every surviving contributor to this fund thrill with happiness. He also mentioned the generous donation of the late General Anson Stager of the amount of his policy (\$1000.00) to the association at the time he took out his policy, which sum was paid over to the association after his death.

The president also spoke in warm and glowing terms of the great self-denial and fraternal regard of the association's Executive Committees, exhibited during the past thirty-five years by their arduous, pains-taking labor in transacting the business of the association, holding weekly meetings, almost, for the scrutiny and disposition of applications and the settlement of claims, beside the care and safe investment of the reserve fund which at present reaches nearly \$200,000, and all this labor of thirty-five years performed without any cost for services rendered in a most faithful manner for the benefit of the telegraph fraternity. The president also alluded to the telegraph companies' assistance without which it would have been difficult, if not impossible, to have carried out such a noble, benevolent enterprise.

He read the following very interesting address which the late President Orton made at the annual meeting of the Telegraphers' Mutual Benefit Association on Nov. 5th, 1873:

Mr Chairman and Gentlemen: I need not, I trust, assure you how entirely I sympathize with the purposes you seek to accomplish by this meeting. Charity is one of the first and highest duties imposed upon us by God and by virtue of our own humanity. It ceases to become burdensome in proportion as it becomes universal.

That men engaged in a common occupation, united together by the ties which spring from daily association, should conceive for each other a warm attachment, is but natural. That men so engaged and so related to each other should feel inclined to stand together and contribute to each other's necessities, and especially seek to make provision for the helpless, the aged, and the young that are left behind us when we are taken away, is also but an instinct of humanity. When, therefore, the suggestion was first made to me some years ago, of the formation of a Universal Life Insurance Association for the profession, I gave it my hearty personal encouragement; at the same time it did not seem proper that, officially, I should seek to exert my influence in bringing it about.

I do not now remember how long ago it was that after submitting the matter of your organization to the attention of the Executive Committee of the Western Union Telegraph Company, and anxious that they should sympathize with it, I was authorized by them to make a proposition that if the membership should be so increased as to enable a payment of \$1,000 in the event of the death of a member of the association, and limit payment to that amount, that the company would contribute \$100 in addition thereto. My recollection is, that prior to that time, the amount the association was able to pay was only \$400 or \$500. Subsequently, under the active exertions of the gentlemen who took an interest in it, the membership was so far increased as to enable the association to make an appropriation of \$1,000 in every case of the death of a member. One thousand dollars seemed to me as much as an association of this kind was called upon to pay. To be able to do that was a sufficient success. In order to contribute to this result, I induced the action on the part of the Executive Committee. I had lost sight of the matter until, on inquiry, I was surprised and gratified to find that the membership

had become so large that the condition the Executive Committee had attached to the contribution of \$100 had become inoperative. Yet, while rejoicing at this prosperity, I apprehended a condition of things might ensue which would prove burdensome, and lead to such a decline in membership that the payment of \$1,000 could not be continued.

Now, I do not know whether there is any danger of such a result, and am not prepared, at this moment, in view of the fact that the term of the offer of the Executive Committee has expired, to make a renewal of that offer. I have no authority to do so. But I will say, that such influence as I possess will be promptly rendered to bring about the result, and bring the company in direct relations with the association, if deemed by you advisable.

I trust I shall be acquitted of any intention to make a matter of business out of this. No one realizes more fully than I do how much the prosperity of the company, over which I have the honor to preside, depends upon the loyalty and fidelity of its employees. No management would be entitled to the respect, loyalty and fidelity of such a body of men as, I am proud to say, compose the force of the Western Union Company, if it did not take some fitting opportunity to testify, not merely their respect for them individually, but their sympathy with them in the common affairs of life. So far as I can do so, I wish now to earnestly represent and express to you how much the company appreciate the integrity and fidelity of its men, and how much we attribute to them that great measure of success that has attended the progress of our business for the last few years. I have not come here officially to make any suggestions, but, in my capacity as a member of the association, to contribute, as far as I am able, by way of suggestion and advice, as I may be invited so to do, towards making the association a success. Yet, if I can do anything in my official capacity—anything on the part of the company—towards that end, I pledge to you to continue my earnest efforts and good offices in that behalf.

Secretary R. J. Murphy then read letters of regret from Col. R. C. Clowry, Geo. G. Ward, T. A. Edison, W. E. Gilmore, H. D. Estabrook, Herbert Smith Joseph Uhrig, W. J. Lloyd, U. J. Fry, P. W. Drew, F. V. Moffitt, J. B. Van Every, Wm. Cullen Bryant and Charles P. Bruch.

The following gentlemen were elected to membership: Col. R. C. Clowry, Clarence H. Mackay, Geo. G. Ward, Belvidere Brooks, J. C. Barclay, E. M. Mulford, C. H. Bristol, R. E. Bristol, G. F. Swartfger, Wm. N. Fashbaugh, F. J. Scherrer, E. Sawyer, W. G. McGurdy, F. E. Maize, W. H. Thompson, J. W. Ayden and J. M. Creamer.

Upon invitation Col. A. B. Chandler made some exceedingly happy and interesting remarks, referring to the late President Orton in glowing terms and assuring those present of his sincerity and genuine interest in all who were in the employ of his company.

Mr. B. Brooks, made felicitous reference to the Postal Telegraph officials whom he characterized as enemies, but that he "loved them still", and he expressed great pleasure at the cordial reception given him and his brother officers lately from the West.

Thomas F. Clark followed in some very appropriate remarks in which he praised the object of the club, and also pointed out the wide usefulness that was open to it.

Mr. J. C. Barclay, very briefly expressed himself as being gratified at the cordial reception that was given him.

Hon. Julius M. Mayer, Judge of the Juvenile Court in New York, made a most felicitous ad-

dress in which he highly praised the objects of the club and particularly the Telegraphers' Mutual Benefit Association, the work of which he said would go a great way towards diminishing the number of juvenile offenders all over the country such as those with whom he had particularly to deal in this city.

This most happy and impressive dinner and entertainment was brought to a close at 11.30 by the entire company joining hands and singing "Auld Lang Syne".

Among those present were: J. W. McLean, J. M. Creamer and B. H. Moore, Baltimore, Md.; F. d' Humy, J. W. Larish, S. A. D. Forristall, F. M. Ferrin, E. B. Pillsbury, J. P. O'Donohue and J. F. Chevalier, Boston, Mass.; E. Ryder, Hartford, Conn.; H. L. Waterbury, Saratoga, N. Y.; H. V. Shelly, Bridgeport, Conn.; W. E. Van arsdale, F. E. Maize, C. E. Stump, L. Lemon and S. S. Garwood, Philadelphia, Pa.; J. R. Sullivan, Chicago, Ill.; C. T. Sydnor, W. P. Cline, Richmond, Va.; F. C. Hackett, Cleveland, O.; A. C. Kaufman and J. J. O'Connor, Albany, N. Y.; J. B. Bertholf, Jersey City, N. J.; C. C. Adams, Atlanta, Ga.; and the following of New York: R. J. Murphy, Geo. F. Porter, Edward Sawyer, A. P. Eckert, A. S. De Voe, W. S. Eckert, D. W. McAnecny, F. D. Murphy, M. R. Cockey, J. B. Taltavall, F. C. Mason, D. J. Ludwig, Col. A. B. Chandler, S. F. Jones, J. H. Montgomery, J. J. Gantor, F. E. Gantor, J. H. Jones, W. H. Ten Broeck, A. Case, J. F. Cleverdon, Hon. Julius M. Mayer, Hon. Philip Bloch, C. D. Platt, H. C. Hunter, Thos. S. Cochrane, F. W. Jones, R. W. Sheffer, M. H. Kerner, C. E. Merritt, E. C. Platt, M. J. O'Leary, J. B. Korndorfer, F. Pearce, M. H. Collins, G. Irving, J. F. Skirrow, W. C. Humstone, J. Merrihew, E. Reynolds, W. Briggs, W. B. Van Size, M. M. Davis, Theodore L. Cuyler, Jr., G. H. Usher, H. G. Pierson, W. D. Francis, G. W. E. Atkins, W. S. Hallett, A. E. Chandler, J. W. English, J. F. Ahearn, E. J. Rankin, J. D. Underhill, A. G. Saylor, W. Marshall, Wm. Finn, C. B. Mears, W. H. McCormick, W. J. Hanigan, E. B. Wilse, W. A. Van Orden, D. E. Van Orden, George Rochm, John Leonard, George Clapperton, J. F. McGinn, M. Green, C. Shirley, E. S. Butterfield, H. J. Brewer, W. M. Hawes, M. W. Hamblin, H. E. Roberts, J. McKinzie, J. S. Berrett, W. O. Conover, W. J. Austin, E. M. Mulford, I. H. Hess, C. H. Bristol, C. A. Benton, A. E. Price, J. H. Sullivan, F. R. Shattuck, I. M. Post, W. H. Baker, T. F. Clark, J. R. Beard, Hon. W. C. Burton, T. G. Singleton, D. F. Mallin, F. E. McKiernan, M. Dunn, H. S. Young, A. E. Sink, A. R. Brewer, B. M. Downs, F. F. Downs, W. G. McGowan, Alfred E. Pearsall, E. B. Bruch, W. J. Murdell, W. H. Wilson, C. F. Pearce, J. T. Needham, R. J. Marrin, C. J. McGuinness, T. A. Brooks, C. H. Murphy, B. H. Hawley, Max S. Witt, J. J. Ghegan, W. J. Dealy, T. M. Brennan, T. C. Eipper, G. W. Bange, J. S. Raymond, Joseph Hardman, J. M. Phelan, T. S. Mahoney, T. J. Smith, O. J. Nourse, R. E. Fagan, T. E. Fleming.

B. Brooks, J. C. Barclay, W. D. Schram, E. J. Hart and James Kempster.

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 19. President Walter C. Humstone in the chair. Frank C. Coyle was elected secretary of the meeting.

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 4,659 in the full grade, and 531 in the half grade, an increase of 8 in full grade and 30 in half grade.

The sum of \$5,000 was carried to the reserve fund, which now amounts to \$193,213.82. The interest on the reserve fund not only pays the current expenses of the association, but also five assessments.

The following were then elected officers for the ensuing year: President, Belvidere Brooks; first vice-president, W. H. Young; second vice-president, Charles P. Bruch; secretary, M. J. O'Leary; treasurer, A. R. Brewer; executive committee, B. Brooks, 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; C. W. Hammond, St. Louis; auditing committee, E. B. Pillsbury, chairman, Boston; W. J. Dealy and Thomas E. Fleming, New York. Seventy-four full grade members and five half grade members died during the year, and \$74,000 in death claims was disbursed during the same period.

President Humstone in his report recommended that the Executive Committee revise the by-laws of the association to conform with new conditions, and bring the matter before the next annual meeting. The president also reported that he had received the sum of \$300 from a friend of the association to be added to the reserve fund, and he hoped that other similarly well-disposed persons would follow this handsome example.

Mr. Edwin F. Howell offered a resolution, which was referred to the Executive Committee, to the effect that it would be expedient for the association that under just regulations provision should be made for redemption of certificates or changing same to annuities and that it would be desirable to extend the membership by working in harmony and co-operation with all telegraph aid societies wherever existing.

When President Brooks took the chair he made a brief address in which he stated he hoped the officers and members of the association would assist him in his endeavors to increase the mem-

ship, which he thought ought to be doubled, at least.

A vote of thanks was given to W. C. Humstone, the retiring president, for his valuable aid and counsel given in behalf of the association at all times.

Mr. S. S. Garwood in commenting on the timeliness of the gift of \$300 to the reserve fund and expressing the thanks of the meeting for same, briefly referred to the valuable services which the retiring president had rendered to the association, and that he carried with him in his retirement not alone the hearty thanks of the members of the association, but the good will and esteem of all who came in contact with him during his long and successful career. He commended the association to the earnest attention of the incoming executive and voiced the belief that great as has been its record in the past its future would show still greater achievements for the benefit and welfare of the craft.

Among those present were: W. D. Schram, Frank C. Coyle, B. Brooks, J. H. Montgomery, C. S. Pike, Thomas E. Fleming, Charles P. Bruch, Walter C. Humstone, W. E. Conrad, W. J. Morrison, E. F. Howell, A. R. Brewer, J. L. Edwards, M. J. O'Leary, J. B. Taltavall, William Holmes, William L. Ives, R. W. Chapman, Lewis Dresdner, G. W. Logan, W. C. Burton, W. H. Baker, James Merrihew, W. J. Dealy, J. K. Calvert, E. M. Mulford, M. M. Davis, J. F. Skirrow, A. M. Guest, F. D. Murphy, Geo. Roehm, R. G. Page, J. D. Mason, C. Hicks, W. J. Austin, J. C. Willever, C. M. Holmes, T. A. Brooks, all of New York; W. H. Young, Washington, D. C.; J. J. O'Connor, Albany, N. Y.; W. E. Vanarsdale, S. S. Garwood and Frank E. Maize, of Philadelphia, Pa.; J. W. McLean and J. M. Creamer, 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 and C. T. Sydnor, Richmond, Va.; H. V. Shelly, Bridgeport, Conn.; J. B. Bertholf, Jersey City, N. J.; J. R. Sullivan, Chicago, Ill.; F. C. Hackett, Cleveland, O.; Chas. C. Adams, Atlanta, Ga.; J. E. Peacock, Jacksonville, Fla.

The Pension Fund Proposition.

A meeting of New York telegraphers was held in the parlors of the Press Club at 116 Nassau street, New York, at six o'clock on the evening of November 18th, to further consider the pension proposition, which has been before them for the past six months, and take such action as might be deemed necessary to further continue the work.

Mr. P. J. Tierney, the chairman of the previous meeting, presided and explained the object of the meeting. He stated that at the spring meeting a committee was appointed to further the work connected with the pension scheme and to consider plans that would make pensions feasible and attractive to the various telegraph interests. The report of the committee had been published

in full and it remained for the present meeting to decide what further could be accomplished to promote the work in hand. The report of the committee was adopted.

After a lengthy discussion which was taken part in by Mr. Tierney, the chairman; E. F. Howell, the secretary; J. K. Calvert, John Brant, F. D. Murphy, D. W. McAneeny, J. R. Heidmark, John Rathbone, J. B. Taltavall, W. C. Burton, Jos. Knittle, W. L. Ives, A. M. Guest and others, it was unanimously decided to continue the old committee in the hope that something might transpire to renew the interest in the pension project. All of the telegraph companies, it was stated, were examining the subject of pensions, and, no doubt in the course of time, each company would solve the pension problem for itself. It was also resolved that the committee which consisted of Francis W. Jones, P. J. Tierney, W. A. Van Orden, E. F. Howell, John Brant and W. C. Burton be authorized to co-operate with other bodies in carrying out their recommendations.

The thanks of the meeting were extended to the committee for its faithful work and to the Press Club for courtesies extended. An adjournment was taken subject to the call of the chair.

New Postal Office at Savannah.

The new main office of the Postal Telegraph-Cable Company, corner Bay and Drayton streets, Savannah, Ga., has been successfully opened for

business. The erection of new enamel signs, have been placed in position and are of the handsomest pattern and lettering.

The equipment is thorough and up-to-date in every particular and it is said the business office is one of the best arranged of any in the country. The space allowed the public is ample and conveniently arranged and bears a striking resemblance to a banking institution. The basement adjoining the office contains the dynamos. The second floor will be used for the delivery department and messengers.

Manager P. H. Hughes is a popular and energetic man, a live canvasser, and thoroughly understands the business. There are few men who have served the company more faithfully or zealously than has Mr. Hughes.

Proceedings were begun by the Western Union Telegraph Company in the New Jersey District of the United States Circuit Court November 22, to enjoin the Pennsylvania Railroad Company from removing from its lines in that State the present telegraph equipment operated by the Western Union, and Judge Andrew Kirkpatrick, sitting in chambers in the Federal Building, granted a rule to show cause why a restraining order should not be granted issue.

TELEGRAPH AGE is the only telegraphic paper published in America. It is up to date, covering its field thoroughly, and no telegrapher, official or operator, can afford to be without it.

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LETTERS FROM OUR AGENTS.

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

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

JACKSONVILLE, FLA., WESTERN UNION.

There have been very few changes since our last letter. Mr. Carroll has resigned and for the present is working nights for the Terminal Company here. Mr. Jay, formerly of Nashville, is a recent addition to our force, and Mr. Maske has departed. Mr. Thos. F. Wallace is our all night chief. The New York Cable office and Havana, Cuba were cut through recently and work very well. Mr. P. R. Wiggs, who has been chief clerk to Superintendent Dillon for the last fifteen years has resigned and goes into business for himself. He carries with him the hearty good wishes of all his associates. Mr. Wm. Brenner of Augusta takes Mr. Wiggs' place.

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.

ST. LOUIS, MO., WESTERN UNION.

Mr. Robert E. Winn, for the past six years chief clerk in the superintendent's office, has been promoted to the position of assistant superintendent, with headquarters at Boston, Mass. Several days ago Mr. Winn received orders to go to Boston. Arriving there, the position of assistant superintendent was offered to and accepted by him. He began his duties November 13. Mr. Winn is 32 years of age, and was born in Chillicothe, Ohio, where he received his education, graduating from the Chillicothe high school. He learned telegraphy at the age of 18, and a short time later went to Texas, where he worked at Palastin and Tyler. He afterwards became chief clerk for T. P. Cook at Dallas. When Mr. Cook

was made superintendent of this district, Mr. Winn accompanied him here. When Mr. Cook went to Chicago Mr. Winn remained here as chief clerk to Mr. Geo. J. Frankel, Mr. Cook's successor. Mr. Winn is popular and competent and has a pleasant personality, and his many St. Louis friends rejoice in his deserved promotion. The force which has been stationed at the different St. Louis race tracks were re-called October 31. W. L. Roberts was race correspondent, Charles Jost being his assistant. Geo. Goehringer was manager with an operating force comprising Thomas Phelan, Joseph Barry, Marcus Crain, Jr., and E. H. Sladock.

The wife and daughter of E. L. Parmelee, force chief, have returned from a prolonged visit to New Orleans.

Mrs. A. F. Haralson and daughter will spend the winter in Chicago and Miss May Michaels will go South for the same period.

A quartet of St. Louis' fast senders were sent to Columbia, Md., to report the Butler boodler trial. The party consisted of Messrs. Daly, Jacobson, Clark and Jenkins.

Mr. Ed. Linden, an old time operator, who spent many years in this office, was compelled to go to the Southwest owing to the condition of his health which has failed rapidly of late.

Mr. John Lane, loop chief, has the sympathy of his many friends in the death of his wife which occurred November 4.

Mr. W. H. Spencer, chief operator, who has been sick for the past five months, is reported improving slowly.

Miss O. B. Murray spent Thanksgiving in Kansas City.

DALLAS, TEX., POSTAL.

The personnel of this office is as follows: W. Y. Nolley, manager; I. D. Hough, chief operator; W. L. Jones, traffic chief; V. W. Keister, repeater and Morsegraph chief; E. E. Taylor, night chief. Operators: R. H. York, W. H. Ocker, A. Lucas, F. E. Wells, J. H. Ward, E. Dunlap, E. E. Jackson, C. F. Avery, H. Hopkins, J. H. Barnwell, W. D. Reams, W. L. Somerville, F. H. Bradley, J. F. Gallagher, E. M. Lewis, T. J. Ryan, W. S. Nelson, E. V. Rogers, F. A. Marcy, A. L. Englehart, C. E. Spencer, H. L. Peoples, A. B. Grantham, C. G. Allen, V. C. Mayhew, W. Craighead. Clerks: Harry Rinker, W. H. Young, Miss Conboy, Will Friedman. Book-keeper, S. H. Hart.

Manager W. I. Church resigned on Nov. 1 to accept a position with the Houston and Texas Central Railway. Mr. Church had filled the position of manager of this office for five years. Before his departure he was presented with a beautiful water-set which was the gift of the employees and bore an appropriate inscription. The presentation was made in the operating room where the dynamos were stopped for five minutes. Mr. Charles F. Avery, who acted as spokesman, made a very graceful little speech.

In response Mr. Church thanked the employees and said the occasion was one that would be long

remembered by him; that there was nothing he valued more highly than the good-will of the men with whom he had been associated so long, and that the beautiful present would ever be a pleasant reminder of the agreeable relations that had so long existed between other employees of the Postal Company and himself.

Mr. Nolley, our newly-appointed manager, found many familiar faces in the Dallas office. He has been a resident of Texas for more than ten years, and is well known in telegraph and business circles throughout the Southwest. During the past five years Mr. Nolley has filled successively the positions of manager at Austin, Texas, Shreveport, La., and Fort Worth, Texas, and his promotion to the managership of the largest and most important office of the Texas Postal is a deserved one.

CLEVELAND, O., POSTAL.

The Postal Telegraph Literary Association gave their first entertainment and social Monday evening, November 17, at the Memorial Post Hall. Although the weather was inclement there were one hundred and fifty members and their families and friends present, all of whom pronounced the affair a grand success and congratulated the Misses E. R. Whitelaw, M. E. Aspell and Messrs. A. R. McGrath and H. J. Grady, composing the committee, to whose efforts the success was largely due.

A. R. McGrath has been appointed cashier vice J. H. Matthias, resigned. J. T. Owen has also resigned.

CLEVELAND, O., WESTERN UNION.

Mr. Charles W. Douglass, who recently resigned the position of chief clerk to Superintendent C. Corbett, upon his retirement, was made the recipient of a beautiful diamond signet ring by his associates and friends in both the superintendent's and operating departments.

Ex-Superintendent E. P. Wright, under whom Mr. Douglass served as chief clerk for twenty-six years, fittingly made the presentation speech in his own inimitable way combining humor and pathos. Mr. Douglass, evidently much overcome, feelingly expressed his sorrow in severing the ties of so many years, thanking his many friends for the beautiful remembrance.

MONTREAL, QUE., GREAT NORTH WESTERN.

Mr. R. E. McCord, our traffic chief, has just completed a new pattern of pole changer. It closely resembles an ordinary relay. The "McCord Pole Changer" was tried on the Toronto quadruplex and worked to the entire satisfaction of all concerned. No breaking over on the second side was experienced, no arcing, and the receiving operator stated that this new pole changing relay with a sounder, enabled him to make far greater speed than with the old style of walking beam pattern now in use.

Clifford Byrd has replaced Herbert Keating, resigned, on the fast Boston stock wire at the Stock Exchange.

Assistant Chief W. D. Scott, is spending his vacation in Oshawa, Niagara Falls and Buffalo.

Miss Louise MacNulty has been promoted from the ticker department to the telegraph department as operator; Miss G. Egli replaces her in the ticker department.

A. B. Smith, the superintendent of construction, was a recent visitor.

Michael Sheridan, Canadian Pacific Railroad, this city, and Geo. Mathews an Ottawa operator, were also recent visitors.

Miss O. Peeples, Shelburne, N. S., is the latest addition to the force.

General Superintendent B. Brooks, Electrical Engineer J. C. Barclay, of the Western Union Telegraph Company, New York, accompanied by Geo. D. Perry, Toronto, secretary of this company, visited our office recently and were shown through the several departments by Manager W. B. Powell, and Circuit Manager Thomas Rodger.

Herbert Keating has accepted a position with a broker as operator.

David Barclay has accepted a position with the Canadian Pacific in British Columbia.

CHICAGO, ILL., WESTERN UNION.

President R. C. Clowry, accompanied by F. J. Sherrer, paid this office a visit on November 19.

Miss Haughwont of Dallas, Tex., was recently added to the force.

Messrs Rullman and Mix of the St. Louis local are a pair of interesting hustlers, as well as first rate fellows; the every day bunch of business melts away under the lightning-like manipulation of their fingers. Competition is out of the question.

Mr. E. W. Clowes, recently of the Keokuk local, is watching repeaters in the east end.

E. W. McMahon works the Des Moines local, regular, a fitting man for the wire.

Mr. E. G. Herman's close resemblance to W. J. Bryan, is striking. Would not Mr. Herman make a successful candidate for some office as well? His fine disposition alone would merit success.

Frank L. Titus of Fort Madison, Ia., wire chief of a division of the Santa Fe lines, promptly sends in a subscription to TELEGRAPH AGE. Mr. Titus is well known in this office where he formerly served in the capacity of assistant loop chief.

Wire Chief A. J. Mereness, who has been working on some repeaters at Fort Dodge, returns with an order for three of the Jones' diagrams. Mr. Mereness says this book is the best educator he can recommend and takes great pleasure in expounding its qualities whenever he has occasion to make an outside trip. A good recommendation from one so well posted.

Arthur Galey still continues to improve, and begins to look like himself again.

It is rumored that Alfred Dickson will soon enter the clergy, a calling he is well fitted for.

Morse Council commences the social season for the winter with a dance on the evening of November 22.

CHICAGO, ILL.

Mills on easy terms; lowest prices. Renting and repairing. Agency "AGE." Word-counters, Phillips' Codes and all electrical works. Dept. II, Telegraphers' Typewriter Co., 122 La Salle street, Chicago; O. T. Anderson, Manager.

POSTAL.

John Ward has been working for the city lines during the past few months.

Mr. David Duff has just returned from a trip to Montreal.

Our main office has been undergoing alterations, partitions being moved so as to make room for more tables to take care of the increasing volume of business.

Mr. Al. Faden, manager of a branch office, in renewing his subscription for TELEGRAPH AGE says: "The Age is fine business."

Louis Konefsky is now working regular, days.

The Chicago Div. 104, Railroad Telegraphers, will give its first annual reception and ball on December 6, at Garfield Hall, 55th and Wentworth streets.

NEW YORK CITY.

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

WESTERN UNION.

The Aid Society will hold its annual entertainment and ball at Terrace Garden, 58th street and Lexington avenue, on the evening of December 5, for the benefit of the "Relief Fund." T. A. Brooks is Chairman of the Entertainment Committee, and it is said he stakes his reputation as a purveyor of entertainment on this being the best show of any that has preceded it. The talent engaged is wholly professional and of high grade.

New York has now direct communication with Havana, Cuba, and the Morse characters from the Cuban capital reach New York in sledge hammer fashion through four direct repeaters. This circuit is a great success and no trouble whatever was experienced in working it through.

The operating room on the seventh floor occupied by the quadruplex department, the wheatstone system, commercial news department and the race bureau, is being painted and otherwise improved.

Mr. M. J. Kenna, of the race service, who has been located in Cincinnati during the recent racing season, has gone to New Orleans, La., to take care of the racing interests of the company at that point.

Estella, the daughter of Mr. J. B. Sabine, the well known old timer, for many years of this office, now a practicing lawyer, was married to Oscar Marvin, on November 19, at the home of the bride's parents in Brooklyn, New York. The telegraphic fraternity was represented at the

wedding by Mr. and Mrs. E. F. Howell, Mr. and Mrs. H. A. Moody and Mr. E. F. Cummings, and the Misses Kitty and Julia Cummings.

There's no doubt that the best way to get a job is to ask for it. That's how Bertram Roloson happened to be hired as the telegraph operator in "The Ninety and Nine." One day after a rehearsal of the locomotive thriller at the Academy of Music, Frank McKee and Ramsay Morris were riding uptown on the platform of a Broadway car. They were discussing the "telegraph scene," and speculating on the easiest way to get an operator, when a young man standing beside them applied for the position. The result was an engagement. It is an interesting fact that young Roloson's father, John W. Roloson, who died twelve years ago, held the record as the fastest "sender" in the world. He won that distinction and a gold medal at a competitive meeting of telegraphers in New York in 1885. The record established was the sending of 500 words in 10 minutes and 32 seconds.

Mr. H. R. Clarke, chief operator of The Associated Press, New York, has been in Chicago for the past week or two installing transmitting typewriting machines in the Chicago bureau.

Mr. L. B. Tobin, has been appointed to a position in the telegraph department of The Associated Press.

The stork seems to be fond of flying around the City of Churches. This time it stopped at the house of R. C. McDonald, on November 23.

Senator-elect Walter C. Burton was recently given a rousing reception by the Men's Bible Class of the First Presbyterian Church, Brooklyn, of which Mr. Burton is the teacher. A reception by the telegraphers of this city will be given in Mr. Burton's honor early in December.

Herbert T. Tomlinson was married to Miss Minerva Farmer at Ozone Park, L. I., November 15. Hearty congratulations are extended.

By a recent sale of a number of lots in Long Island City the Serial Building Loan and Savings Institution realized a profit of \$6,000. Other properties it has on hand have considerably advanced of late, and the condition of the Institution is now very strong.

The sympathy of all old timers is extended to Mr. A. G. Safford, who is now confined in a hospital at St. Albans, Vt., on account of the death of his wife which occurred November 17. Mr. Safford served with General Grant as an operator during the rebellion. He has been an invalid for the past few years.

Robert B. Lown, a star operator of the long ago in this office, and now connected with the Lown Cooperage works at Poughkeepsie, N. Y., was lately made the recipient of a valuable gift presented by his employees for his kindness shown to them on many occasions. Mr. Lown was always known here as one of the best of men.

POSTAL.

Mr. Thomas V. Flynn of this office and Miss A. E. Lynch of Harrison, N. J., were married at

Harrison, on November 19. There was a large attendance of their many friends at the wedding and numerous presents were received.

G. W. Barrett, formerly of this office, but more recently at Norfolk, Va., paid us a visit a few days ago.

Mr. R. F. McCune has been assigned to the first, and Mr. L. W. Corper to the second, Philadelphia bonus wires.

Mr. Daniel F. Mallen, assistant night manager is absent on a two weeks' vacation.

Mr. J. B. Roloson has returned after an absence of several weeks on private business.

C. J. Fowler, H. M. Van Horne and Miss Hogan have resigned.

Mrs. Snow and Mrs. F. M. Wilson have returned after a short illness.

R. Rutherford, formerly of this office, who has been ill with consumption for a year, died at his home in Brooklyn, on November 24.

E. Olmstead and M. E. McKittrick have been transferred from the city to the eastern division.

PHILADELPHIA PA.

My Motto—Honorable Dealing.

D. A. Mahoney, Special Representative, Main Office, Western Union Tel. Co., Philadelphia, Pa. Send for booklet, **special price** and terms in "Telegraphers Club" now forming, for sale of The World's Champion **Fay-Sholes** No. 6 typewriter.

Smiths and Remingtons positively guaranteed \$45.00 and upwards, easy monthly payments. All makes rented \$3.00 month.

WESTERN UNION.

Mr. John Mortland has been promoted from operator to manager at Chester, Pa., vice C. Troeller, resigned, to accept a position with the District Company of this city.

M. J. Brannon, a well known operator, has been appointed manager at Reedy Island, Del., for the Maritime Exchange, vice Richard Carter, who has been transferred to the Marcus Hook office.

F. E. Ramsey's proud and happy looking countenance is due to the arrival of a son and heir. The stork has also paid a visit to the home of Robert Stoddard; we congratulate both gentlemen heartily.

Miss Sadie Arthur has again returned to duty after several months' absence by reason of illness.

Miss Annie Dennis is taking a prolonged vacation which will last till after the holidays.

The Pennsylvania Railroad and Philadelphia Reading and Pottsville Telegraph Company's operators in this city are jubilant over their good fortune in having their salaries increased. While not a general increase, quite a number of the boys and girls in this office have been made happy by an increase in pay, and the promise is, that this good work is to continue. The wave of prosperity seems to have pervaded the country over.

POSTAL.

As the guests of the New York chiefs the Messrs. Miles Dunn and Charles E. Stump spent an enjoyable trip in attendance upon the annual dinner of the Magetic Club.

Traffic Chief Geo. W. Dunn, finds himself becoming busier as the preliminary calls on his time, due to his election as a representative in the State Legislature, are piling in upon him.

After having overhauled the office at Pottstown, Mr. Jos. M. Eder was hurried off to perform a similar service at Altoona, Pa.

Mr. J. F. Skirrow, of New York, electrician of the eastern division, accompanied by Chief Carpenter Beggs, were in Philadelphia recently on a business trip.

Since the permanent transfer of Mr. Leo Miller to the management of the Broad Street Station office, Mr. C. A. Currier has been put on the floor to assist with the traffic work; he takes up the new responsibility quite readily.

Our sincere sympathy is extended to Manager Joseph Brittner of the Broad and Columbia avenue American District Telegraph office, whose son was killed at the Baldwin's Locomotive Works on the 24th ult.

The Railroad.

Mr. Asa R. Swift, the retiring superintendent of telegraph of the Chicago, Rock Island and Pacific Railroad, Chicago, Ill., was presented with a diamond stud, sleeve buttons with a diamond and emerald setting, as a token of the esteem in which he was held by the telegraph employees of the Rock Island system.

The sixth annual meeting of the Railway Signaling Club took place at Pittsburg, Pa., on November 11 and 12. Much time was given up to the discussion of iron and copper line wire for railway signaling purposes. Mr. H. C. Hope, superintendent of telegraph of the Chicago, St. Paul, Minneapolis and Omaha Railroad, St. Paul, was elected president, and B. B. Adams, of the "Railroad Gazette," New York, was elected secretary and treasurer.

Experiments were made a few days ago between Springfield, Ill., and Decatur with a device which makes it possible for telegraph lines to be used for telephonic purposes, while they are being used for transmitting telegraphic messages. The Wabash wires between the points named, were placed at the disposal of the experimenters. Telephones were attached at Decatur, Springfield and Buffalo, to a wire that was busy with telegraph messages and a number of tests were made. The tests as a whole were very satisfactory.

Organization.

The National Convention of telegraphers which was to have taken place at Pittsburg, Pa., on November 26, was postponed for two weeks.

Eight Western Union operators employed in the Atlanta, Ga., office were recently discharged, it is alleged, because they were active members of the Brotherhood recently organized at that point.

As a result of the dismissal at Philadelphia, Pa., by the Western Union Telegraph Company of eight of the oldest operators because of their membership in the Brotherhood of Commercial Telegraphers, it was decided on November 16, to dissolve the local union.

Some twenty-five operators employed by the Western Union Telegraph Company at Pittsburg, Pa., were discharged recently. All of the discharged men are members of the Brotherhood of Commercial Telegraphers, a branch of which was recently organized in that city. Many of the men found employment in the Postal service.

Some excitement has been caused among the employees of the Western Union Telegraph Company, in St. Louis, by the discharge of a number of employees without apparent reason. The notices which are received by the discharged men simply state that the company no longer requires their services, as it is reducing its force. The Postal Telegraph-Cable Company is said to be employing men as fast as the Western Union discharges them. The only reason, the discharged men state, they know for their dismissal is that they have been connected with telegraphers' unions.

The First Typewriter in Telegraph Service.

EDITOR TELEGRAPH AGE:

The following extract from the "Journal of the Telegraph," July 1st, 1868, may be of interest.

FRANCIS M. JONES.

"THE AMERICAN TYPE WRITING MACHINE.

"Heretofore, the very first requisite of the Telegraph Operator, has been *rapid penmanship*, but by a recent and novel invention, called the American Type Writing Machine, the operator is enabled to produce "copy" more rapidly, compact and legible than the very best penman. By the use of this instrument, the students of Porter's Telegraph College may become first class Telegraph Operators, without regard to their capability as penmen. This machine has been perfected, and is now being introduced on Telegraph lines, solely through the agency of the Principal of this Institution, a separate department having been fitted up for this especial purpose.

"I remain, very truly and respectfully your,
"E. PAYSON PORTER.

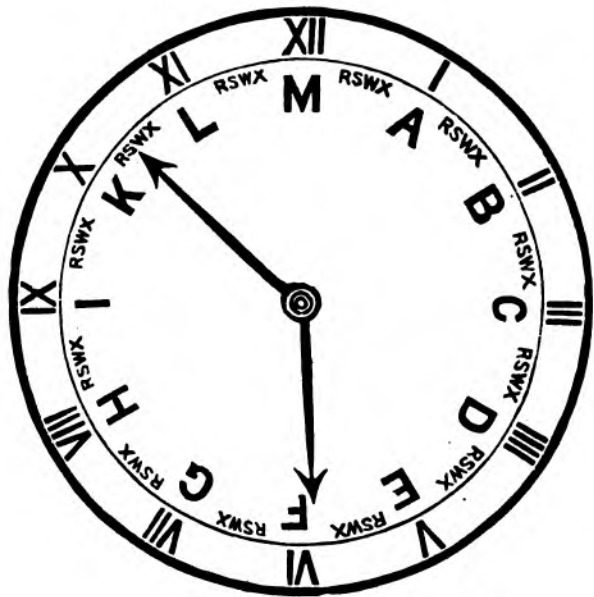
"Principal Porter's Telegraph College."

[Mr. Porter who is now employed by the Western Union Telegraph Company at 195 Broadway, New York, has used a typewriter since the date above referred to, thirty-four and one-half years ago.—Editor.]

Sample copies of TELEGRAPH AGE will be sent free to all intending subscribers.

The British System of Timing Messages.

We are indebted to Mr. J. Gennings, editor of "The Telegraph Chronicle," London, Eng., for the following information regarding the system of transmitting the filing time of messages handled in England. The code time follows the first prefix, or operator's sign. In press messages the time handed in appears at the top left-hand corner in the code, as all newspaper men are supposed to know the code. In ordinary private messages, however, the filing time is translated by the receiving operator into ordinary figures for the information of the addressee.



The above illustration shows the time, for example, that a message is filed and the following code letters would be attached to the message by the receiving clerk.—E. K. S.

The hours from 1 o'clock to 12 o'clock—both night and day—are denoted by the first twelve letters of the alphabet (J being omitted), thus:

Letter.	Time. P. M. or A. M.	Letter	Time. P. M. or A. M.
A	denotes 1	G	denotes 7
B	" 2	H	" 8
C	" 3	I	" 9
D	" 4	K	" 10
E	" 5	L	" 11
F	" 6	M	" 12

The fact that M is the initial letter of mid-night and mid-day will help one to remember that M is the code letter for twelve o'clock.

The twelve letters stand not only for the twelve hours but for the twelve periods of five minutes each, of which each hour is composed. Thus, A stands for one o'clock, and for one period of five minutes; B stands for two o'clock, and for ten minutes; F stands for six o'clock and for thirty minutes.

If the letters be used singly, they show the hours only.

If they be used in combination they show the

hours, and some number of periods of five minutes in addition to the hour.

Thus, M by itself denotes 12h., and M A denotes 12h. 5m.; A by itself denotes 1h., and A A denotes 1h. 5m.; C by itself denotes 3h., and C H, 3h. 40m.

In order to denote the four intermediate minutes in every complete period of five minutes, the letters R, S, W, X, are employed, R denoting the first, S the second, W the third, and X the fourth minute after each hour or after each complete period of five minutes.

Thus, M R means 12h. 1m., or one minute past twelve; M S means 12h. 2m., or two minutes past twelve; M W means 12h. 3m., or three minutes past twelve; and M X means 12h. 4m., or four minutes past twelve. So again, M A R means 12h. 6m., or six minutes past twelve; F F S means 6h. 32m., or thirty-two minutes past 6; and so on.

At 1 p. m. exactly the code becomes A, and it remains A until a complete minute has expired, that is, until one minute past 1, when it becomes A R.

Col. R. C. Clowry, president and general manager of the Western Union Telegraph Company, accompanied by his secretary, Frank J. Scherrer, has returned from Chicago.

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

Those who contemplate subscribing for TELEGRAPH AGE, and who would first like to inspect a sample copy, should not fail to write for the next issue.

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

Information wanted, for his own advantage, of the present whereabouts of John B. Lane, who was a telegrapher at Orange, Cal., in 1887. Harvey Spalding & Sons, Pacific Building, Washington, D. C.

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The Modern Service of Commercial and Railway Telegraphy [8th edition, revised and enlarged,] by J. P. Abernethy. The theory and practice, including railway station and express service. Arranged in questions and answers. 426 pages, 44 illustrations. Price \$2.00, expressage prepaid. Address John B. Taltavall. The Telegraph Age, 253 Broadway, New York.

Pierce & Sivewright's Telegraphy.—A description of the English Telegraphs. 412 pages fully illustrated. Price, \$2.00, expressage prepaid. Address J. B. Taltavall, 253 Broadway, New York.

Wanted.—Party with some money to help develop bed of India mica in Virginia. Particulars from M. M. Prescott, Old-Time Telegrapher, Elizabeth, Allegheny County, Penna.

The whereabouts of Mr. and Mrs. Rolla D. Welsh, either or both, is desired by her brother. They are operators and were last known to be employed by the Postal Telegraph-Cable Co. at Camden and Little Rock, Ark. Address J. S. Barnard, care McIntosh, Terrio & Co., 36 Water street, New York.

Gold and Stock Life Insurance Association.

At the special meeting of the Gold and Stock Life Insurance Association, New York, June 23rd, adjourned to July 21st, the amendments to the by-laws, including graded rates, as follows, for new members,

Between 18 and 30, 50 cents per month,

Between 30 and 35, 60 cents per month,

Between 35 and 40, 75 cents per month,

Between 40 and 45, \$1 per month,


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It is a remarkable thing that I do in return—something that nobody else ever offered. And I do it for a stranger.

Won't you do that little—and to-day—if I will do the rest?

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That month's test will tell. It is true that my Restorative may fail. There is sometimes a cause—like cancer—which medicine cannot cure. But the very fact of my offer must prove that failures are rare, for if they were common the offer would ruin me.

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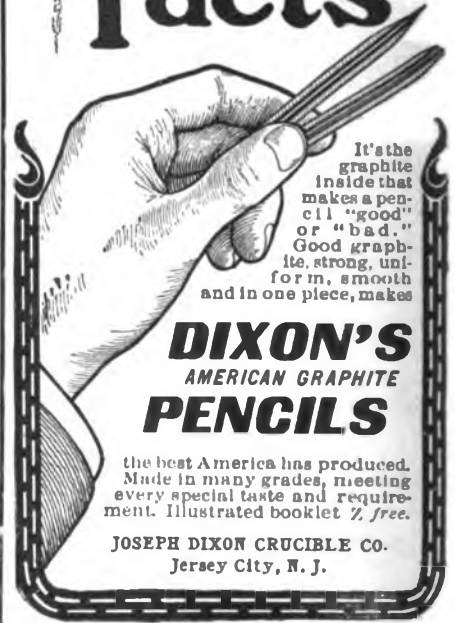
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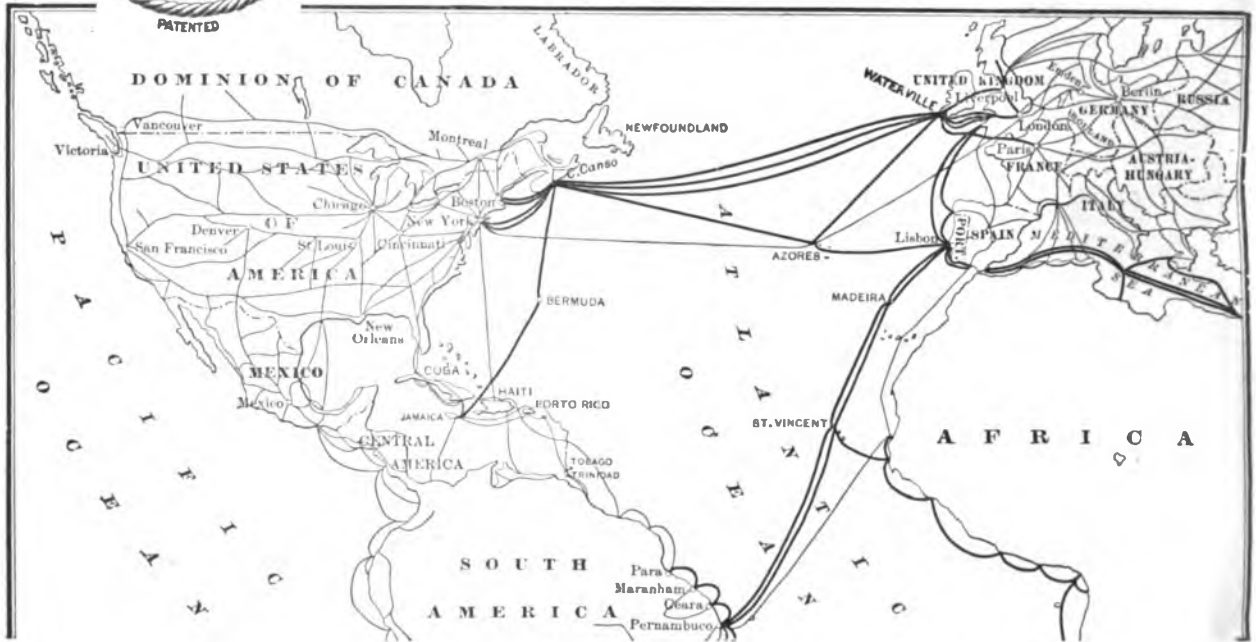
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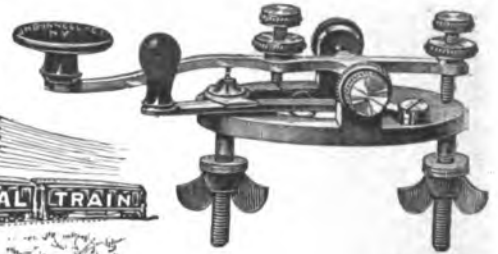
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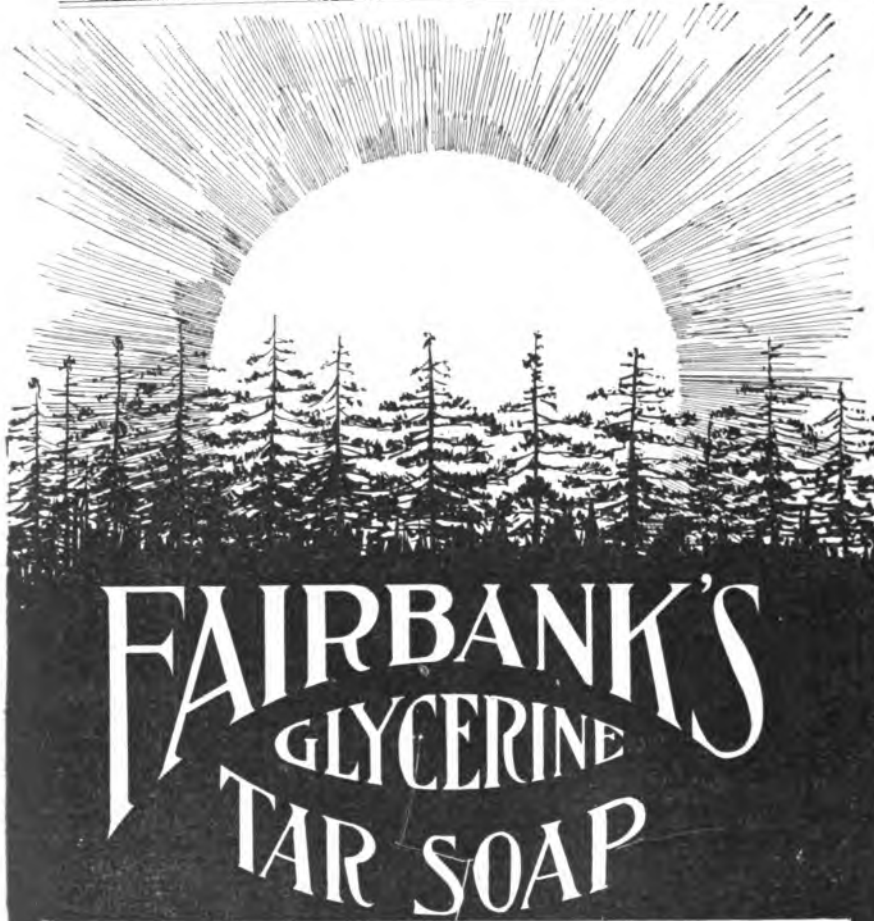
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THE TELEGRAPH AGE

No. 24

NEW YORK, DECEMBER 16, 1902.

Vol. XIX.

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SOME POINTS ON ELECTRICITY.

BY WILLIS H. JONES.

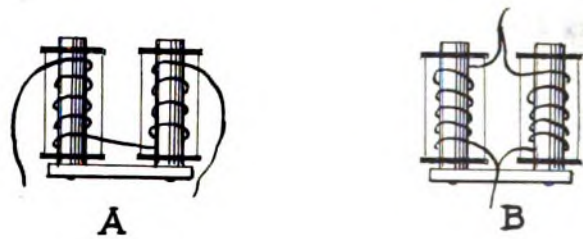
How to Connect the Coils of an Ordinary Single Line Relay in Multiple, and Why it is Sometimes Done.

In most text books it is stated that when a current of electricity traverses the coils of a relay magnet the pull on the armature, or attractive force of the iron core, will be represented by the product of the current in amperes flowing and the total number of convolutions of wire in the two spools. This statement, however, needs qualification. It is only true on constantly closed circuits, or at least where the current is permitted to flow continuously long enough to fully build up the magnetism in the iron. In other words, the time constant of the magnet must be taken into consideration in connection with this law.

When two currents of electricity flow side by side in close proximity to each other, and in the same direction, the reaction between them causes a separate electromotive force to be developed in the coils, the strength of which is invariably directed against the legitimate voltage of the battery urging the current through the relay. It not only opposes the current while filling the coils, but also checks its exit during the emptying process, thus retarding the operation of both magnetizing and demagnetizing the iron core.

Now, it has been found that while the magnetizing strength of a magnet is equal to the current

in amperes multiplied by the number of convolutions of wire in the coils, this counter electromotive force, or self-induction of the relay, as it is called, is equal to the current multiplied by the square of the convolutions. It is evident, therefore, that a method which reduces the number of turns of wire around the iron spools, while still maintaining practically the same total volume of current is the ideal means of killing self-induction. Even though we lose in magnetizing force, by this plan for the reason that for each unit loss in ampere turns we suffer, we eliminate four units of self-induction, and it has been proven that a relay will act quicker, under these conditions, than when hampered by so much counter electromotive force. The reader must not be misled in-



to the belief that we can reduce the ampere turns with impunity, however. A relay demands a certain amount of magnetizing force, and we must reduce the number of turns of wire in series without materially decreasing the total volume of current flowing around the iron core.

The method of decreasing the self-induction of a relay, therefore, is to so wind the coils that there will not be so great a number of turns of wire in series, yet at the same time, will carry practically the original volume of current through the spools. This is accomplished by connecting the two coils of the relay in multiple. If the reader will study the figures A, B, and C, in the accompanying diagram carefully, he will understand both why and how it is done.

A shows the two coils of an ordinary 150 ohm single line relay connected in series, B shows

the theoretical arrangement when connected in multiple. C gives the actual end view connections of the two coils, while D illustrates the manner in which the coil windings are split and joined in multiple. If we connect the coils as shown in B, and double the strength of the current, the latter would double equally between the two routes; that is to say, one ampere would flow through each spool of 50 turns and the magnetizing force would remain the same as before for the reason that there are still 50×50 convolutions of wire = 100. The self-induction, however, in this case would be halved. Thus $50^2 \times 1 = 2500$ in each spool. Total 5000. On a long telegraph circuit while connecting the coils in multiple decreases the resistance of each 150 ohm relay to $37\frac{1}{2}$ ohms, the actual resistance of the wire itself remains the same, but where there are a great many relays connected in the circuit, such as we find on railroad and way wires, their combined resistances is usually much greater than that of the wire itself. Hence, by connecting all of the relays in multiple the actual resistance of the circuit is frequently decreased more than half. Under these conditions the same battery power will furnish double the original volume of current, and in that way supply each relay with a proper magnetizing force, without developing nearly so much self-induction.

Another advantage in connecting the coils in multiple is that it not only gives the line a greater carrying capacity, but the method increases the working margin by creating a more correct ratio between the line and the insulation resistance. It also lessens the tendency of the current to escape and thus enables a greater volume to reach the distant relays. There is no advantage gained by employing a multiple connected relay in a circuit arranged for series connected instruments. In fact it would be foolish to have attempted such a thing because the current would not be sufficient to operate it. There is a safe rule to follow when about to install electro magnets of any description, and it is: Connect in one circuit apparatus of like winding only.

Business Notice.

The Standard Underground Cable Company have about completed the erection of the largest and most modern plant in this country for rolling copper rods, drawing all sizes and shapes of bare wire, and insulating weatherproof wires and cables. This plant is an addition to their large underground cable factory and rubber insulated wire and cable factory at Perth Amboy, N. J.

The 20th Century Key has proved itself to be such a good friend of the operators, curing and preventing loss of grip and making fast sending easy, that it recommends itself as a suitable form of present among the fraternity for the holiday season now at hand. A letter addressed to E. S. Russell, 253 Broadway, New York, will secure prompt information on the subject by return mail.

In another column is advertised a highly ingenious device known as the "Locke Adder", manufactured by the K. F. Dunlap Company, 214 North 21 street, Birmingham, Ala. In many a telegraph office it has proved its usefulness, for not only among the accountants in the larger offices has it found friends and favor, but among managers of smaller offices, who often in addition to regular telegraph duties have frequently a lot of railroad work to do as well. It is said that all the man "behind the books" has to do is to "touch the button, the adder does the rest." Unlike many other adding machines this one is small and compact, being but $4\frac{1}{2} \times 11\frac{1}{2} \times \frac{3}{4}$ inches in size, and it is claimed to be as true in its operation as any of the higher priced machines. The price of this article is but the modest sum of \$5. The company is desirous to correspond with telegraphers and will gladly send any information regarding the machine that may be required. First read the advertisement and then write to the company, and among other things ask for a printed list of testimonials.

Personal Mention.

Col. R. C. Clowry, president of the Western Union Telegraph Company, has been elected a director of the Seventh National Bank, New York.

Mr. J. C. Barclay, electrical engineer of the Western Union Telegraph Company, is absent on a business trip in the interest of his company, to Havana, Cuba.

Mr. Clarence H. Mackay, president of the Commercial Cable Company, has been elected a director of the United States Mortgage and Trust Company, of New York City.

Dr. Alexander Muirhead, of London, Eng., the inventor of the Muirhead duplex, which is extensively used in submarine cable service, and the inventor of a wireless telegraph system, was in New York last week on business connected with wireless telegraphy.

Superintendent John F. Wallick, of the Western Union Telegraph Company, Indianapolis, left that city November 25, accompanied by his wife and daughter for a short trip to England, where he goes to visit his sons, who are assistants to a prominent English architect.

A fire in the home of Col. A. B. Chandler, chairman of the board of directors, of the Postal Telegraph-Cable Company, in Brooklyn, early in the morning of December 2, caused slight damage to the property, but Col. Chandler was painfully but not seriously burned in his attempts to extinguish the flames.

In the Fourth Estate of December 6 appears a large half-tone engraving of Mr. Melville E. Stone, general manager of The Associated Press, New York, surrounded by a group of smaller engravings of some of the chief lieutenants in

various parts of the world. Almost all of those represented are familiar faces in telegraph circles.

Mr. Henry W. Pope, an old time telegrapher, and for the past three years acting general manager of the Bell Telephone Company, Buffalo, N. Y., has been assigned to duty with the parent company at New York. During his administration at Buffalo, he instituted many improvements in his district, extending the service and increasing the plant from some 8,000 to 22,000 stations, bringing the whole up to a high state of efficiency. Prior to Mr. Pope's departure from Buffalo a luncheon was given him by department officials and he was presented with a silver loving cup. He also received a gift of a gold headed cane, tendered by the clerical force of the general manager's office.

Resignations and Appointments.

Miss Fannie Tuttle, formerly manager of the Western Union Telegraph office at Windsor, Conn., has again resumed the management at that point, vice Miss Alice Hayden, resigned.

Mr. W. B. Eddy, manager of the Western Union Telegraph Company, at Whitehall, N. Y., has resigned, and he has been succeeded by Mr. C. Ray Cole, transferred from New Rochelle, N. Y.

Mr. P. T. Brady, of Red Bank, N. J., has been promoted to the Western Union managership, at Yonkers, N. Y., vice Mrs. Beatty, resigned. Mr. Brady is succeeded at Red Bank, by his daughter.

Mr. Ralph A. Roberts, an operator of the Postal Telegraph-Cable Company, of Buffalo, N. Y., has been appointed manager of the Lockport, N. Y., office of the same company, vice W. J. Madden, resigned.

Mr. J. B. Twiford, manager of the Western Union Telegraph Company, at Salt Lake City, Utah, has resigned to enter other business. He was succeeded by E. T. Moore, manager at Boise City, Idaho.

Mr. J. D. McDonald, quad chief in the Boston, Mass., office of the Postal Telegraph-Cable Company, has been appointed manager of the same interests at New Haven, Conn., vice W. H. Fairchild, resigned.

Mr. A. B. Clark, of Cincinnati, has been appointed cashier of the Boston, Mass., office of the Western Union Telegraph Company, vice J. H. Wentworth, transferred to the position of chief book-keeper.

Mr. Charles E. Huntzberry, manager of the Postal Telegraph-Cable Company, at Frederick, Md., has been appointed manager of the same interests at Hagerstown, to succeed Paul S. Maisack, resigned. Mr. Huntzberry will be succeeded by E. M. Motts, an operator in the Cumberland office.

Mr. J. G. Davies, manager of the Western Union Telegraph Company, Anaconda, Mont., has been transferred to the managership of the same interests in the Fulton Market office, New York City.

Mr. H. E. Hesse, manager of the Postal Telegraph-Cable Company, at Reading, Pa., has resigned his position to enter other business. He is succeeded by W. T. Phillips, who was chief operator at that point.

Mr. Phil. G. Kern, superintendent of the American District Telegraph Company, Louisville, Ky., has been appointed manager of the Western Union Telegraph Company, at Memphis, Tenn., vice Emmet Howard, resigned.

Mr. W. H. Fairchild, whose resignation as manager of the Postal Telegraph-Cable Company, at New Haven, Conn., was recorded in a previous issue, has accepted a position with the Western Union Telegraph Company, at that point.

Mr. L. N. Boone, who has been acting chief operator of the Western Union Telegraph Company, St. Louis, Mo., during the illness of chief operator Spencer, has been regularly appointed to that position. This appointment gives general satisfaction to all concerned.

Mr. William Fellowes, chief operator of the Western Union Telegraph Company, Cincinnati, Ohio, has resigned to accept a similar position in the same service at Boston, Mass. Mr. Fellowes will be succeeded at Cincinnati by Mr. J. P. McCabe, assistant chief operator.

Mr. W. N. Munro, manager of the Postal Telegraph-Cable Company, Providence, R. I., has resigned. Mr. Geo. A. Deal, manager of the Springfield, Mass., office, has been appointed manager at Providence, and the Springfield vacancy has been filled by the appointment of Mr. G. H. Mills, now chief clerk in the superintendent's office at Boston, Mass.

Mr. G. A. Clark, who has been chief operator of the Western Union Telegraph Company, Galveston, Tex., has resigned to accept a position as manager of the local telegraph office of the Santa Fe road. Mr. Clark has been connected with the Western Union at Galveston 17 years. Fred Cole, night chief, has been promoted to the position of chief operator, and T. A. Irwin will succeed Mr. Cole as night chief. S. R. Klettenger succeeds Mr. Irwin and is himself succeeded by W. I. Herron.

Mr. T. E. Russell, formerly manager of the Western Union Telegraph Company, at Meriden, Conn., and recently assistant manager at New Haven, has been appointed assistant superintendent of the American District Telegraph Company, and inspector of the Western Union Telegraph Company for the State of Connecticut. This is a new office just created. Mr. Russell's duties will be to visit the various offices in the state, note their efficiency and make recommendations as they may be deemed proper from time to time.

Death of William H. Spencer.

William Henry Spencer, for the past fifteen years chief operator of the Western Union Telegraph Company, at St. Louis, Mo., died in that city on November 28, after a long illness. He was born at Gowanda, N. Y. in 1844, and began his telegraph career at the age of 13 years, as messenger for the New York Central Railroad at Buffalo, N. Y. Two years later he engaged with the Lake Shore and Michigan Southern Railroad, then known as the Buffalo and Erie, as operator.



THE LATE WILLIAM H. SPENCER.

He was promoted successively to dispatcher, superintendent of telegraph and assistant superintendent of the road. In 1863, he resigned to serve as chief dispatcher at Chattanooga, Tenn., for the government. At the close of the war, he returned north and entered the commercial telegraph service. Mr. Spencer had charge of the construction of the American Union lines in Illinois, and remained with that company at St. Louis, Mo., as chief clerk and manager, until it merged with the Western Union Telegraph Company, when he was made assistant night chief, and soon afterwards promoted to the position he lately occupied.

The funeral was largely attended by telegraphers, officials and operators, many coming from distant points. The pallbearers were J. M. Maddox, G. A. Putnam, J. R. Magill, G. A. Riber, E. L. Parmelee and M. Tulley. The honorary pallbearers were: R. H. Bohlé, G. J. Frankel, E. A. Chenery, C. W. Hammond, A. L. Chapman, L. N. Boone, George Gudgeon, S. B. Fairchild, L. K. Whitcomb, chief operator of the Chicago Western Union office; F. Richardson, traffic chief, Chicago; M. D. Crain, A. E. Van Tyne, T. P. Wheeler, J. M. Allyn, J. I. Linchan, Thomas Dunn, B. J. Frauenthal, Charles McNeil, George McGann, L. P. Custer, C. H. Shell, S. W. Atkin-

son of Kansas City, T. P. Cook, general superintendent, Chicago.

The interment was at Fee Fee Cemetery, near Pattonville, Mo.

Obituary Notes.

George L. Hawn, aged 42 years, an operator at Bancroft, Ia., died on December 6.

George C. Sperry, formerly superintendent of telegraph of the Mexican Central Railroad, with headquarters at the city of Mexico, died at Kansas City, on November 26. See Kansas Postal notes under "Letters from our Agents," for details.

Thomas Orton, formerly manager of the supply department of the Western Union Telegraph Company in Chicago, died on November 25th at Evanston, Ill., of cancer of the stomach. Mr. Orton was born in North Cuba, N. Y., in 1846, and went to Chicago in 1869, becoming at once connected with the Western Union Telegraph Company, of which his brother, the late William Orton, was then president. Mr. Orton remained with the company for twenty-four years, rising to the position of manager of the supply department and retiring from active business in the year 1893. He is survived by a widow and four daughters.

Cherrick Westbrook, aged 84 years, died at Harrisburg, Pa., on December 5, of old age. Mr. Westbrook was a forty-niner of the telegraph, having mastered the art of telegraphy while Professor Morse was putting the finishing touches on his telegraph system. Mr. Westbrook invented many improvements in telegraph apparatus, including a repeater, automatic sending and receiving apparatus and modernizing existing telegraphic apparatus. He was general superintendent of the Baltimore and Ohio Telegraph Company, at Baltimore, Md., during the Civil War, and performed meritorious service during those exciting times. He is survived by two sons and a daughter.

New York Visitors.

Col J. R. McIntosh, counsel of the Postal Telegraph-Cable Company, Atlanta, Ga.

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

Municipal Electrician.

Mr. Frank C. Mason, superintendent of the Police telegraph of Brooklyn, N. Y., spent Thanksgiving week on his farm near Utica, N. Y.

Mr. Edward B. Ellicott, city electrician of Chicago, read a paper on "Transmission of Fire Alarms" before the Western Society of Engineers in Chicago recently.

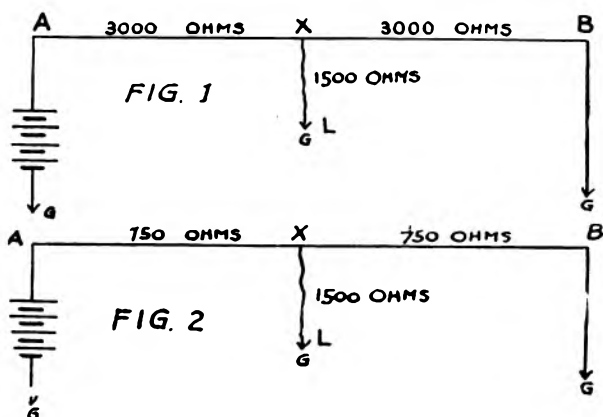
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Low Line Insulation and Low Resistance Relays.

BY WILLIAM MAVER, JR.

In common with others I have been interested in the recent renewed discussion on low resistance relays in your columns. My view has been that the main incentive to the use of low resistance relays by the railway companies, with whom I think the more extensive use of such relays began, was the poor service obtained on their long way wires in bad weather; the difficulty in raising offices, etc. For, high speed in signaling on such circuits is not usual, although of course a large number of relays with high inductance would tend to sluggishness in signaling.

At the Detroit meeting of the Association of Railway Telegraph Superintendents I gave a black-board explanation in accordance with the well known law of current flow in divided circuits as to why the use of low resistance relays might be expected to conduce to improved service in bad weather on the lines referred to, and as this explanation did not get into the transactions of the association it may be of some interest to repeat it here.



Let us assume a line having forty 150 ohm relays, equally distributed in the circuit, with the battery at A, Fig. 1, and the line to ground at B, with an escape at X of 1500 ohms. Ignoring the resistance of the line itself to simplify the illustration, let there be a resistance of 3000 ohms between A and X and 3000 ohms between X and B made up in each case of twenty 150 ohm relays. Assume a current strength of 45 milliamperes between A and X. This will divide between X and B and X and L according to the respective resistances of the two paths; X L taking 30 milliamperes and X B 15 milliamperes. Let the 150 ohm relays now be replaced by 37.5 ohm relays; the resistance of escape remaining as before. The resistance between X and B will now be 750 ohms. Again assuming the current flowing between A and X to be 45 milliamperes, it will divide as before in proportion to the resistance of the respective circuits, and X B will now take 30 milliamperes, while X L will take but 15 milliamperes.

Of course in actual practice the disparity may not be so pronounced as this, the figures given having been chosen and the leak placed at one point for purposes of illustration, but the difference in favor of the low resistance relays must be, as experience has shown, very marked under more or less similar practical conditions, and the more so the greater the number of relays in the circuit. In other words, with a given escape due to low insulation on the line, the higher the insulation of the relays, the more current will be diverted from the line proper, and the relays, and vice versa.

LOW RESISTANCE RELAYS.

BY R. J. HEWETT, ST. LOUIS.

In Mr. Francis W. Jones' article on high and low resistance relays in TELEGRAPH AGE of November 16, he gives a table showing the ampere feet for relays of various windings from 362 feet upwards. The table is based on the law of maximum magnetic effect and shows a high ampere-feet rating, —48.4 for the 150 ohm relay and a low ampere feet rating,—38.2 for the 37.5 ohm relay. The same basis has been used in calculating the ampere-feet in all relay data in Mr. Jones' articles in TELEGRAPH AGE of October 16 and November 1. In all of this data the 37.5 ohm relay makes a bad showing. No other results can be expected from calculations made according to the law of maximum magnetic effect.

A casual observer in reading the ampere-feet column may conclude that as the 37.5 ohm relay has a magnetizing force of only 38.2 ampere-feet, that it is not a suitable relay for any purpose. This however, is not the case, and I think Mr. Jones did not intend the table to have any such meaning.

As all relays in the list down to the 5866 feet winding contain the same amount of iron and copper wire, .443 pounds, all are capable of developing the same magnetizing force by the application of the proper voltage. The 37.5 ohm relay should be worked at the same magnetizing rate as the 150 ohm relay, that is, at the 48.4 ampere-feet rate. In order to do this the current should be double that of the 150 ohm relay, and as the current required for the 150 ohm relay is about .033 ampere the 37.5 ohm relay should have about .066 ampere and in order to supply this current the voltage should be increased to about 247 volts.

In order to realize the full magnetizing effect in any relay the voltage must be arranged so as to produce that effect. In using the law of maximum magnetizing effect in calculating all of the data referred to, the voltage has remained a constant value. While it is true that it may be inconvenient to provide the proper voltage in all cases, still many cases will occur where it can be done at least approximately.

In the 3000 ohm line circuit equipped with 20 37.5 ohm relays the total relay resistance is only 750 ohms, which is far below the allowance,—3000

ohms according to the law of maximum magnetizing effect. The total line resistance is, therefore, only 3750 ohms which gives a higher wet weather insulation efficiency than the 150-relay equipment, where the total line resistance is 6000 ohms. Therefore, all that is lost by not complying with the law of maximum magnetizing effect is a gain for the law of maximum insulation efficiency.

On reviewing the subject matter and analysis of my two articles which appear in TELEGRAPH AGE of October 16, and November 1, I see that I have been in error in questioning the accuracy of the law of maximum electromagnetic effect. The law is strictly true. I regret that I allowed myself to fall into such an error. Fortunately, however, this error is confined to the first and third paragraphs of my first article and does not effect the analysis or results in either article.

The President and the Pacific Cable.

President Roosevelt in his annual message has the following to say regarding the Pacific cable:

"During the fall of 1901 a communication was addressed to the Secretary of State, asking whether permission would be granted by the President to a corporation to lay a cable from a point on the California coast to the Philippine Islands by way of Hawaii. A statement of conditions or terms upon which such corporation would undertake to lay and operate a cable was volunteered.

"Inasmuch as the Congress was shortly to convene, and Pacific cable legislation had been the subject of consideration by the Congress for several years, it seemed to me wise to defer action upon the application until the Congress had first an opportunity to act. The Congress adjourned without taking any action, leaving the matter in exactly the same condition in which it stood when the Congress convened.

"Meanwhile it appears that the Commercial Pacific Cable Company had promptly proceeded with preparations for laying its cable. It also made application to the President for access to and use of soundings taken by the U. S. S. Nero for the purpose of discovering a practicable route for a transpacific cable, the company urging that with access to these soundings it could complete its cable much sooner than if it were required to take soundings upon its own account. Pending consideration of this subject, it appeared important and desirable to attach certain conditions to the permission to examine and use the soundings, if it should be granted.

"In consequence of this solicitation of the cable company, certain conditions were formulated, upon which the President was willing to allow access to those soundings and to consent to the landing and laying of the cable, subject to any alterations or additions thereto imposed by the Congress. This was deemed proper, especially as it was clear that a cable connection of some kind with China, a foreign country, was a part of the company's plan. This course was, moreover, in accordance with a line of precedents, including

President Grant's action in the case of the first French cable, explained to the Congress in his annual message of December, 1875, and the instance occurring in 1879 of the second French cable from Brest to St. Pierre, with a branch to Cape Cod.

"These conditions prescribed, among other things, a maximum rate for commercial messages, and that the company should construct a line from the Philippine Islands to China, there being at present, as it is well known, a British line from Manila to Hong Kong.

"The representatives of the cable company kept these conditions long under consideration, continuing, in the mean time, to prepare for laying the cable. They have, however, at length acceded to them, and an all-American line between our Pacific Coast and the Chinese Empire, by way of Honolulu and the Philippine Islands, is thus provided for, and is expected within a few months to be ready for business.

"Among the conditions is one reserving the power of the Congress to modify or repeal any or all of them."

The Western Union and Pennsylvania Railroad.

The application of the Western Union Telegraph Company for an injunction to restrain the Pennsylvania Railroad Company from compelling the plaintiff company to remove its poles and wires from the right of way of the railway company, by reason of the alleged expiration of the contract between the companies, came up for argument in the United States Circuit Court at Pittsburg, Pa., before Judge Buffington on November 26. Judge Buffington ruled that the Pennsylvania should not attempt to remove the poles and wires of the Western Union until he rendered a decision on the application for an injunction. This averted the trouble that was expected on December 1, the date of the expiration of the notice given the Western Union.

Buenos Ayres has just approved the project for a telegraphic convention with Chili, and will shortly submit the plan to Congress. The cost of the construction of the lines, to join with the Chilian lines, will be about \$200,000. This project is mainly a consequence of the understanding recently reached between Chili and Argentina in regard to the international politics of South America.

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

The Speed of Transmission in Telegraphy.

By the speed is meant the number of signals which can be received at the end of a line in a given time. This number is intimately connected with the study of different effects, and is of interest in rapid telegraphy. A theoretical consideration of the matter, which considers only the electrical properties of the line, would give results far from true, although these constants play a considerable part in the operation and transmission of signals. Considering the various effects separately, an article in *L'Electricien*, Paris, shows that it is well known from Hertz's work that the speed of the transmission of electricity is about 300,000 kilometres per second, so that the time required to transmit an electrical impulse over a wire 1,000 kilometres long would be about 0.003 of a second. Although this time is small, it can not be neglected in rapid working. The capacity of the line retards the passage of a wave, as it becomes necessary to charge the conductor. Furthermore, although the circuit is broken quickly, it does not die out as rapidly. The time required to bring the current to its maximum value depends upon the product of the capacity of the line and its resistance. Although the line would require an infinite time theoretically to assume its final charge, practically, the current will reach nine-tenths of its value in a time represented by one-third of the product of its capacity into its resistance. This product is called the constant of the line. Considering a signal sent out from a source of constant potential at the transmitting end of the line, it is seen that this will be delayed at the receiving end by the time required for the propagation of the current. The establishment of the maximum value of the current will be further delayed by the capacity and resistance of the line, these causing the current to rise gradually to its final value. There will be a further delay, caused by the inductance of the receiving apparatus. The speed of the propagation of a signal, therefore, depends upon four effects—the time required for the passage of the electrical wave over the line; the retardation due to the receiver; the time required for the current to attain a value sufficient to operate the receiver, and the time required for the mechanical operation of the receiving apparatus. Applying these considerations to a practical example, with a line of copper wire having a length of 1,000 kilometres and a diameter of three millimetres, the time required for the propagation of the wave will be 0.003 of a second. The retardation due to self-induction is taken from experience as 0.008 of a second. The time required to establish a current sufficient to operate a receiver will be 0.005 of a second, while practice has shown that another 0.005 of a second will be required for the mechanical movement of the receiver. This gives a total of 0.021 of a second. The speed of transmission will not be affected by certain of these effects under ordinary conditions, because after the first signal has been received all succeeding signals will be retarded by the same time. If, on the contrary, the line is

used alternately for sending messages to different stations, all these effects must be considered. To check these theoretical considerations, two practical cases are examined, where the messages are sent by the Baudot sextuple system. It has been found that the maximum speed at which these lines could be operated corresponds to 105 distinct signals per second. Applying the formula to these lines, it is found that a time of about 0.005 of a second is required for a mechanical movement of the receiving apparatus. This figure agrees very well with that found by an experiment. The time required to transmit the wave over the wire, and the delay caused by the inductance of the receiving apparatus, do not affect the speed of transmission. The results of these considerations may be summed up in a formula consisting of two factors, one of which depends upon the time required to operate the receiving apparatus, and the other upon the capacity and resistance of the line. In the case of a Paris-Marseilles line, it is shown that 0.22 of a second is required for each signal. This figure has been confirmed in practice.—*Electrical Review*.

Revised Army Code Saves Money.

The employment of the telegraphic code in transmitting messages between the United States and the Philippines has resulted in a substantial saving under the war department of the public funds. This may be appreciated when it is known that the rate of official cablegrams is \$1.65 for each word, including address and signature.

A good deal of expert labor has been bestowed upon the department code with the result that some 25,000 sentences of frequent use in military correspondence have been embraced in the code book. The code has been devised with special reference to military necessities. In connection with certain classes of business a single word acknowledges the messages and conveys to the sender the action taken thereon.

Nearly every officer in the army has a single code word assigned to him, and the same course is followed with each separate military organization. For instance, the code word "nettastome" means "company B, Twenty-fifth regiment United States Infantry;" the word "novellarem" means "your requisition of the 26th received and will be filled at the earliest opportunity;" the code word "kredies" means "with reference to your telegram of 23d, your recommendation disapproved," and the word "kredict" means "with reference to your telegram of 23d, favorable action will be taken thereon at earliest possible date." A further saving of expenditures along this line would be possible by the revision of the code which is now contemplated. In the revision every officer in the army will be given a code word, and special duty will be made of frequently recurring phrases. Much has already been done in this direction, but the revision could not be perfected until the personnel of the commissioned force of the army was definitely known.

The New American District Telegraph Company.

The new \$10,000,000 American District Telegraph Company, whose organization was mentioned in our previous issue, will be as far-reaching in its operation as is the Western Union Telegraph Company itself, and it means the placing of the control of these various delivery companies immediately under the supervision of the Western Union Telegraph Company.

The officials of the Western Union have been at work on the matter for more than a year, and they have just carried their negotiations to a successful conclusion. The new company has been incorporated under the laws of New Jersey as the American District Telegraph Company, the details of the company being practically the same as those of the big railroad security holding companies recently organized. The new company began its official existence on December 1.

The combine has taken up the controlling stock of the various delivery companies which are now in existence, and have contracts with the Western Union Telegraph Company to deliver and gather its messages. These companies exist in every city and town of consequence in the country, almost all of them are separate corporations, the stock of which, as a rule, is owned and held by local officials of the Western Union Company. The stock of these various companies will be taken up by the new securities company, and its own paper will be given in exchange for it.

Colonel R. C. Clowry, president of the Western Union Telegraph Company, is president of the new company, and M. T. Wilbur, of New York, treasurer of the Western Union Telegraph Company, is also treasurer of the new company, G. R. Johnson, secretary, S. M. Taylor, auditor, and C. F. Patterson, general superintendent.

The object of the combination, so those interested say, is for the double purpose of economy and to effect a closer alliance of the interests of the two companies. As many of the delivery companies have a public call-box service for the calling of messengers for errand purposes, it is stated that there will be no change in the present ruling rates. Another feature of the combine is that the stock will be listed on the New York Stock Exchange.

An order has just been sent out appointing all Western Union managers to be managers of the new company in their respective territories. Similar appointments have also been made relative to Western Union superintendents, they becoming superintendents of the new company in their districts.

International Telegraph Conference.

The date for the holding of the International Telegraph Conference in London has been definitely fixed for May 26, 1903. Some additions have been made to the "Propositions" originally published by the Berne Bureau for the use of the delegates.

Our Book Table.

From the press of Theo. Audel & Company, New York, has just been published a handsome volume entitled "Self-Help Mechanical Drawing," of which N. Hawkins, M. E., is the author. Its dedication is unique inasmuch as it is addressed to "The Coming Man," who, it is stated, "at the present time is undoubtedly devoting a goodly share of his spare time to the study of drawing." It has been said by an eminent writer that "one workman is superior to another—other circumstances being the same—directly in proportion to his knowledge in drawing, and those who are ignorant of it must in many respects be subservient to others who have obtained that knowledge." Assuming this to be true, this volume should be of distinct value to many for it treats its subject in a very clear, full and comprehensive manner, and easily takes rank as being one of the very best works of the kind that has ever reached our table. The illustrations, of which there are 314, well interpret the text and afford the reader thoroughly competent aid in his studies. The volume is bound in dark green cloth, has gilt edges, and contains over 300 large well printed pages. The price is \$2, including prepayment of express charges. Address orders to J. B. Taltavall, TELEGRAPH AGE, 253 Broadway, New York.

Picture Telegraphy.

A patent granted November 11 to Herbert R. Palmer describes improvements relating to that system of picture telegraphy in which the details of the copy to be transmitted are represented by insulating surfaces, says the "Electrical World and Engineer." The picture is first photographed on a half-tone plate with the use of a mesh so coarse that when etched the picture is represented by depressions in the plate of varying widths of considerable size. These depressions are then filled in with an insulating compound, the plate then being used for transmitting. The picture received is reduced by photography, thereby bringing the dots close enough to give the proper appearance to the eye.

WIRE STEALING:—Wire thieves stole eight miles of copper wire, valued at several hundred dollars, from Western Union Telegraph poles, near West Chester, Pa., on November 29. Dozens of similar thefts have taken place in this same locality and the several arrests and convictions do not appear to deter further depredations of the kind. Telegraph, telephone, electric light and trolley lines, are all sufferers alike.

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

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NEW YORK, December 16, 1902.

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

The history of every great undertaking is the history of patient effort by energetic and far seeing men faithfully fighting the obstacles of dulness, apathy and vested interests.

No Higher Telegraph Rates Possible.

Comment, written and pictured, is freely offered by the newspaper press on the recent advance of pay accorded by many railroad companies to their employees, an act made possible, it is claimed, at the expense of the unlucky shipper against whom freight charges have been increased, on the familiar theory of "robbing Peter to pay Paul."

To what extent this may be true we will not undertake at this time to say, but the wide spread references thereto have led numerous telegraph operators, on the lookout for the main chance, to advance the argument that they, too, ought to

come in for a share of the financial perquisites that this era of business prosperity is said to be generously bestowing elsewhere. A way to reach this elysian state in all of the wide reaches of the telegraph field, is glibly pointed out as being made easy of accomplishment by the adoption of the simple and readily applied railroad method—that of increasing the telegraph tariffs. It is suggested that an advance of about five cents a message would do the trick and enable the companies to put extra dollars in the waiting pockets of their employees.

It is a blissful and infantile imagination that seeks comfort in the manner proposed. Extra compensation will never be derived from a fund raised in the way named. It is well to remind those who entertain such ideas that the conditions which control the telegraphs differ materially from those governing the railroads. The former are subjected to continually increasing expenses in one form or another which they are unable to offset and overcome by added charges for any service rendered. For the companies to name higher telegraph rates would be an act of folly, it would indeed, "kill the goose that lays the golden egg," By whatever means the telegrapher may secure a higher rate of compensation for his services in the future he cannot expect to derive it from the adoption of the plan proposed.

Telegraph Prodigies.

We are in frequent receipt from well meaning friends of glowing descriptive accounts of youthful phenomenal operators who, at abnormally early years, have grasped the entire theory and practice of telegraphy. It has not yet been shown, we believe, that the first uttered words of these infant prodigies were shaped into the lisping accents of "key," or "sounder" or "wire," or that of "telegraph" itself, was articulated, thus indicating the early bent of mind, but we are expectantly waiting for this claim to be made.

The headings of some of the newspaper reports describing these wonderfully expert baby operators are often unique, sometimes startling. When a head line appears such as "A boy wonder of seven years manipulates the telegraph keys with the dexterity of an old timer," we must confess to a certain amount of incredulity regarding the absolute truth of the statement; and when big type announces with unblushing prominence that "The youngest operator in the world, seven years of age, daily handles train orders which regulate the movements of one hundred and fifty trains per day," we simply stand aghast at this evidence of the developing intelligence of a new age. Yet, being of mature years, and with some knowledge of telegraphy, although it may be of the old-fashioned sort, we secretly resolved, and it must be confessed with a shudder, never to travel over the line of road over which such a youthful modern genius held such important sway.

The latest account of a baby wonderful eman-

ates with all seriousness from a St. Louis paper, which without reserve illustrates and describes a youth of eleven years, who was born and grew up on a railroad right of way in Illinois, and is, therefore, naturally a born railroad telegraph operator, doing all the work, so the newspaper says, that a veteran knight of the key can accomplish. A little woolly perhaps, smacking of the prairie of the wild west, but— Next!

Messenger's Fidelity Rewarded.

The messenger boys of the Western Union Telegraph Company, Memphis, Tenn., went out on strike recently with the single exception of one boy—Robert Ford who remained at his post of duty in spite of the fact that the other boys did their utmost to make him join the strikers.

An interesting aftermath to this strike has come in the shape of a letter from Manager Emmett Howard to Robert Ford, in which he commends him for sticking to his work, and in which he enclosed \$10 as a further evidence of his appreciation. The letter follows:

My Dear Robert—When our messengers quit work Saturday I found you the only boy out of thirty on duty.

When the boys pelted you with stones and chased you through the streets, you came to me and placing your hand on your pocket filled with rocks, said, with a manly determination, "Mr. Howard, I am not afraid. I will stay with you or die," I answered that I would protect you, my dear boy, and that you possessed that innate principle that produced our Dewey and our Hobson, but cautioned you that brain, not brawn, diplomacy, not rocks, must win in every battle; that the possibilities of the messenger boy are limitless, for some of the foremost men of our times were once only little messenger boys.

I have many friends in Memphis and most of my life has been cast along pleasant lines, all of which I appreciate, but the greatest satisfaction of my life is the reflection that out of about 4,500 boys who have worked for the Western Union Telegraph Company under my management in Memphis the past twenty-one years is that a large number who went out into the world and made a great success, have returned to thank me for what I did to help them up the ladder.

As an evidence in part of our appreciation of your noble devotion, I enclose \$10 with the assurance that you will always have my best wishes and sincere friendship. Yours truly,

EMMETT HOWARD,

Manager Western Union Telegraph Co.

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

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

The Retiring Manager at Memphis.

Mr. Emmet Howard who, on December 1, retired from the managership of the Western Union telegraph office at Memphis, Tenn., held that position for over twenty-one years, his appointment thereto dating from April, 1881. His has been an honorable career, and during all that long term of consecutive and faithful service he has gained



EMMETT HOWARD.

Who Has Retired from the Western Union Management at Memphis.

many friends in Memphis and elsewhere who, now in his severance of official relations, are saying many pleasant and complimentary things about him. His future home will continue to be in Memphis where he will engage in other business. In a farewell letter to the employes of his office he concludes by saying: "Although I will not be on a wire, I shall ever be ready to respond to the key of friendship."

Mr. Howard is a Confederate war veteran, for at the early age of fourteen he was a telegraph operator in the Southern army where he performed much daring and excellent service.

General Mention.

Mr. P. H. Hughes, manager of the Postal Telegraph-Cable Company, Savannah, Ga., in renewing his subscription writes: "Herewith check to cover subscription; would be lost without TELEGRAPH AGE."

W. C. Burrows, manager of the Postal office at Leavenworth, Kas., in renewing his subscription to TELEGRAPH AGE, says: "Please allow it to keep on coming, because I don't see how I can get along without it now."

The "American Elevator and Grain Trade" for December, published in Chicago, gives a full column biographical sketch with a fine engraving of Samuel P. Parke, the well known telegrapher who is now representing the Weare Commission Company, at Creston, Ia.

Gifts Suitable for the Holidays.

These will soon be the subject of consideration. Let us give you a suggestion. A good book is always suitable and welcome. For operators, what could be better than books treating on the telegraph in a manner fully explanatory and making simple and clear the technicalities of their own profession, often so difficult of mastery? To bring all this down to the level required for a quick understanding of perplexing problems, requires first, the work of a thoroughly practical man, and second, the gifts of a trained writer. First, then, standing easily at the head of the list is "Pocket Edition of Diagrams, and Complete Information for Telegraph Engineers and Students," by Willis H. Jones, electrical editor of TELEGRAPH AGE. The popularity of this book is indicated by its enormous sale, it being now in its second edition, although it is less than five months since it first came off the press. This splendid work is endorsed by all leading telegraph authorities, and no operator who desires to gain a comprehensive and practical knowledge of his calling, and so fit himself for promotion, should be without a copy. It certainly constitutes a magnificent gift and will do more for a telegrapher in the way of conveying desired information than any other publication of its kind we know of. It is advertised fully on another page of this issue. This volume is \$1.50 per copy.

Next to the above and sharing with it in popularity, is the old familiar Phillips' Code. This standard work which has lately been carefully revised, and brought up-to-date by Mr. A. P. Velie, is a thoroughly tested method of shorthand arranged for telegraphic purposes, and is simply indispensable to every telegrapher as an aid in the rapid sending of press reports. It is also intended to be used as an easily acquired method for general newspaper and court reporting. The book is of convenient pocket size, bound in red flexible leather. It is advertised in another column. The price is \$1.00 per copy.

The following series of books, considered from every point of view, constitute one of the best all around telegraph libraries extant. Not only are the technicalities of the great subject fully treated, but its storied literature as well, is told in sketches that will appeal strongly to every member of the profession. As will be noticed, in several instances the prices of the books of sketches have been sharply cut. This is done in order to make the sale doubly attractive for the holiday occasion. The prices are the lowest ever named and will be in force until December 31, only.

"Sketches Old and New," by Walter P. Phillips, elegantly printed and handsomely bound. A charming souvenir of Christmas time. Price, \$1.

"Lightning Flashes and Electric Dashes," 160 pages, illustrated. An original and sparkling collection of telegraph stories, quaintly descriptive of scenes and incidents that a telegrapher will appreciate and heartily enjoy; bound in cloth; a most acceptable holiday present. Price, \$1, reduced from \$1.50.

"Telegraphers of To-day," 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, \$2.50, reduced from \$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 the well known telegrapher at Minneapolis, Minn; bound in cloth; will be a welcome holiday addition to any library. Price, \$1.00.

"The Quadruplex," by Wm. Maver, Jr., and Minor M. Davis, 128 pages, 63 diagrams and other illustrations; treats of the technical side of telegraphy in a manner at once simple, comprehensive and easily understood; bound in cloth. Price, \$1.50.

"Electricity Made Simple," by Clark Caryl Haskins, 229 pages, illustrated; contains information for those whose opportunities have been limited; cloth \$1.00, paper 50 cents.

"A. B. C. of the Telephone," by James E. Homan, A. M., 335 pages, illustrated, is a practical and useful treatise for students and workers in telephony. Price, \$1.00.

"A. B. C. of Electrical Experiments," by W. J. Clark, 146 pages, illustrated; an elementary book adapted to beginners. Price, \$1.00.

"A. B. C. of Electricity," by W. H. Meadowcraft, revised edition, a brief outline, clearly stated of the simplest rudiments of electricity. Price, 50 cents.

"American Telegraphy", by William Maver, Jr., 563 pages, thoroughly illustrated. This fine work, of great intrinsic value, has long held a leading position as a work of authority in telegraphy, treating on system, apparatus and operation. Price, \$3.50.

"Commercial and Railway Telegraphy," by J. P. Abernethy, 424 pages, illustrated, discusses modern service of the same both in theory and practice, as well as that of railway station and express service, arranged in the form of question and answers. Price, \$2.

"Excelsior Webster Pocket Speller and Definer," by F. M. Payne. This careful and reliable compilation of about 22,000 words, 319 pages, is a splendid pocket companion of inestimable

value; marginal index, flexible morocco binding. Price only 50 cents.

"Wireless Telegraphy," by G. W. de Tunzelmann, 104 pages, illustrated. This is a popular exposition of wireless telegraphy, and treats the subject in all of its latest developments in a most interesting and comprehensive manner. Price, 75 cents.

Any of the above publications will be sent on receipt of price to any point in the United States or Canada, express charges prepaid. Address J. B. Taltavall, TELEGRAPH AGE, 253 Broadway,

Queer Quirks of the Quad.

BY HENRY BURNS GEER.

The theorist theorizes, the inventor invents, but it rests with the workman to apply the practical test. That's where the whole thing simmers at last.

It's the quadruplex I have in mind now, and the way it works through sunshine and shower—through summer's heat and winter's cold—the blustering days of spring, and the calm, clear delight of the autumn that gradually merges into the frosty season that draws the tension, snaps the wire, leaving the quad or what-not that may be at the end of it strung up, as it were, in mid-air, with no connection to mother earth—a lifeless, useless thing.

It's a see-saw is the quad—a regular "teeter" game. It's a thing with a middle and two sides, or, if you prefer it, two ends—the long end and the short end. And then again, it's a sort of Doctor Jekyll and Mr. Hyde, because it's dual in its character, being both positive and negative—it and the battery that feeds it. The long end is the negative or common end, while the short end is the positive part of its character, or the polar end of it.

When it is in good trim it will carry double on both the common and the negative side (operators generally say "polar side" and "common side"). By "carrying double" is meant that two operators may work on either side, a sender and a receiver, respectively, thus enabling the one wire to which the quadruplex apparatus is attached to carry four messages at the same instant. That's where the value of the thing comes in; it makes, practically, four wires out of one.

But, alas! It is a thing of vexation and a worry forever. It falls wofully short of perfection, but it can be worked, provided you know how to work it, or some other fellow does, who will keep it in "balance" for you. Now, in balancing, the "see-saw" qualities of the combination crop out and its mulish characteristics are revealed, for it has a way of "breaking over" and "kicking" equal to any other quadruped on four legs. It develops "resistance," too, that none but a skilled hand can overcome or equalize. The amount of resistance depends very largely on the condition of the wire to which it is attached and the state of the weather along the route the wire traverses.

In overcoming the "resistance" rheostats, static coils and spark-arresters are brought into play. In playing this part of the game, the quadruplex apparatus is first detached from the main-line circuit and balanced locally; that's what we call it—"balancing the quad." Then the rheostat is brought into play, and the resistance coils boxed up in it are used to offset the resistance in the wire until that, too, balances. Then, to further clear the situation, a "static balance" is taken through the condensers attached for that purpose, and then the grind of messages is resumed.

As to how long a "balance" will last depends entirely on conditions out on the line and the amount of foreign "resistance" playing hide-and-seek out there, in the way of bad connections, poor insulation, induction from other circuits caused by rain, melting snow, fogs, or any form of dampness that is likely to develop "leaks" of different nature. Sometimes the trickling rain-drops conduct a part of the current to the earth, causing the circuit to "work heavy," in common parlance. Oftentimes the "road is so rocky," so to speak, that it is impossible for the most expert electricians to make a wire "quad;" it will only "duplex." Then the next best thing is done; the common side is closed, and the polar side, otherwise the "short end" of the battery, is utilized in working the wire as a duplex only—utilizing only two men at each end—the wire then having a capacity of but two messages at a time in transmission.

Some wires, on bad, rainy days, are so heavy with leaks and escapes of current from poor insulation, that they will neither work as a quadruplex or a duplex, and even work poorly as single circuits, with the ordinary sounders and instruments attached. On long lines that are "quaded," the circuit frequently changes so greatly and so often as to require a dozen or more balances a day.

The transmission of two or more messages over the same wire simultaneously is possible only by careful adjustment, for the sounds going and coming, as it were, frequently break over into confused sounds; hence the great necessity of properly balancing the "see-saw" qualities of the quadruplex or the duplex. On a circuit that is working nicely as a quad, a slight movement of the relay spring up or down, as the need may be, will develop the same sounds on both sides. Success depends on each fellow holding his end level—just like we used to when we "see-sawed" on a "teeter-board."

This is the way it looks to the man at the key, who is putting to practical test and bringing to the great active world of utility the creation of our master inventors.—Western Electrician.

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

The Cable.

The cable steamer *Silvertown*, with the San Francisco-Honolulu section of the cable arrived at San Francisco from London, Eng., on December 4, after a voyage of seventy-three days, one day ahead of schedule time.

The Pacific Commercial Cable Company on December 8 filed an amended certificate of incorporation with the Secretary of State, at Albany, N. Y., to cover an extension of its cable system from Manila, P. I., to Shanghai, China.

To the Okonite Company of New York, belongs the credit of constructing the underground cable, which connects the San Francisco office of the company with the submarine section of the cable in a cable hut on the shore of the Pacific Ocean near the Cliff House, a distance of about seven miles. The Okonite Company also furnished the underground cable which connected the main office at Honolulu with the ocean end of the submarine cable. Captain Willard L. Candee, manager of the Okonite Company, assisted by a competent staff, is examining the work done by his company, both in San Francisco and Honolulu.

The attempt to land the cable on December 12 was not successful owing to the heavy surf and strong tide. It being dark at the time it was concluded to delay further operations until Monday, December 15 when it is expected the shore end will be landed and the *Silvertown* will at once proceed to Honolulu.

Mr. Clarence H. Mackay, president, and George G. Ward, vice-president and general manager of the Commercial Cable Company, and W. H. Baker, vice-president and general manager, and E. C. Bradley, vice-president of the Postal Telegraph-Cable Company, New York, left for San Francisco on December 3, to witness the beginning of the laying of the new Pacific cable to connect this country with the Hawaiian and Philippine Islands.

The commercial bodies of San Francisco gave a reception at the Palace Hotel on December 11 in honor of Clarence H. Mackay, G. G. Ward, vice-president and general manager of the Pacific Commercial Cable Company, and William H. Baker and Edgar C. Bradley, of the Postal Telegraph-Cable Company, of New York. They went to San Francisco to see the beginning of the laying of the cable between that city and Honolulu. Governor Gage represented the State, and Mayor Schmidt was present on behalf of the city. Governor-elect Pardee, Mayor Barstow of Oakland, presidents of the universities, foreign consuls, Collector Stratton, the Harbor Commissioners, presidents of the improvement clubs of the other cities of the State, and representatives of the railroads and telegraph companies were also among those present. Mr. Ward, in an address, said:

"You can form some opinion of the extent of

this great work when I tell you that the length of this cable will be three and one-half times greater than any Atlantic cable. When this shall be completed our system will reach from England and France to China, three-fourths of the distance around the globe. And I venture to predict that we shall be able to beat Puck's prophecy of girdling the earth in forty minutes by sending a message from San Francisco to San Francisco in one-fourth of that time.

"The first section, now about to be started, probably will be completed about Christmas or by January 1. The remaining sections of the cable, starting from Honolulu, touching at Midway, Guam and Manila, three thousand miles of which have already been manufactured, will be laid and in operation, I hope, by the first of June next. The whole length of the line will be about ten thousand nautical miles."

Replying to welcoming speeches by Governor Gage and Mayor Schmidt, Mr. Mackay said:

"Apart from the commercial aspect, it was the height of my father's ambition, and, as he had hoped, the crowning achievement of his life, to see this cable laid from the Pacific Coast to our Far Eastern possessions, an all-American cable; its object, the advancement of commerce through this artery of trade; its goal, the Far East and its cradle, the Golden Gate. It has fallen upon me to carry out this work, and I can assure you, gentlemen, that I will spare no pains to see that it is consummated. Time only can tell if our efforts will be successful, and, if so, let this cable be a monument to my father's memory; and then, gentlemen, myself and my associates will be satisfied."

Mr. J. D. Gaines, superintendent of the Pacific Commercial Cable Company of Honolulu, has selected as his staff of operators at that point, P. J. Harnard and S. McMichael, both from the Commercial Cable Company's cable station at Canso, N. S.

Mr. H. F. Harrington, assistant electrical engineer of the Commercial Cable Company, New York, has been appointed superintendent of the Pacific Commercial Cable Company, at San Francisco, Cal. The operating staff consists of P. McKenna and Wilfred K. Ward, both of New York.

Mr. Arthur L. Dearlove, the electrical engineer of London, Eng., who has for the past month been engaged in the work of testing the section of the British Pacific Cable connecting Vancouver, B. C., with Fanning Island, was in New York a few days since en route to London. His report as to the merits of the new Pacific cable, which will be submitted to the Pacific Cable Board in London, within a few days, it is understood will be satisfactory to all concerned.

The new British Pacific Cable was opened for public business on December 8. The rate from Vancouver, B. C., to Fanning Island, is forty-two cents per word; to Norfolk Island, to Fiji Island, to Australia, to Tasmania and to New Zealand,

the rate is fifty cents per word. The rate for New York State and the New England States is sixteen cents per word to Vancouver.

A section of the submarine cable between Cienfuegos and Santiago, in the Caribbean Sea, has recently been raised, with some very interesting results. The cable was manufactured in 1873, and laid off Cienfuegos, Cuba, in 1881. Some few months ago a question arose as to the durability of cables covered with india-rubber, as in this case, and it was decided to raise the Cienfuegos cable and subject it to tests. The line was picked up in 1,350 fathoms of water in April last, and received at the works of Messrs. Hoopers, at Millwall, England, in June. The tests of this core showed that after twenty years' submersion it was still in perfect electrical condition. An examination of a good specimen proved that the insulation was in good mechanical condition, and that the copper conductor had not suffered from the attacks of any sulphur in the rubber.—*Electrical Review*, New York.

The Red Headlight Understood Morse.

A story about a party of telegraph operators of the gentler sex and a man who was the possessor of a very red nose is worth repeating. This man was an inspector for a railroad company, and his duty was to travel from place to place and see that everything went well with the signal system, and, of course, he was thoroughly conversant with the entire business. One day, while on a trip to a remote station, he was compelled to wait an hour at a place where he had to change to another train. He thought it a good opportunity to get some dinner, and, going to a hotel in the town, was given a seat at table with a party of young ladies.

On seating himself at the table, one of the girls placed her knife between the tines of her fork and ticked off: "Girls, get on to the old fellow with the red headlight!" Of course the "old fellow" with the "red headlight" understood the message as well as any of them, but he gave no sign until he felt that all eyes were centred on his nose, when, without looking up he, calmly took his knife and fork and ticked off: "Are you all on to him, girls?" He was soon in sole possession of the place, for the girls did not stop for dessert.

Notice of Meeting.

The regular meeting of the Shareholders of the Serial Building Loan and Savings Institution, 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, on Tuesday, December 16, at 5 P. M.

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

Preserve Your Papers.

By taking a little trouble, when TELEGRAPH AGE first comes to hand, it may be preserved to form a permanent and valuable addition to the reading matter with which all individuals should be supplied. We furnish a neat and attractive cloth board binder, which will be sent by mail, prepaid, for \$1.00. It has good, strong covers, on which the name TELEGRAPH AGE is stamped in gold, and means by which each issue may be securely held as in a bound book. One binder may thus be made serviceable for several years, and when the successive volumes, as they are completed, are bound in permanent form, the subscriber ultimately finds himself, for a moderate cost, in possession of a most valuable addition to any library, embracing a wide variety of telegraph, electrical and general information, and timely and original illustrations. Save your papers.

Books on Wireless Telegraphy.

"A History of Wireless Telegraphy," third edition, revised, by J. J. Fahie, the eminent English author, constitutes one of the most popular accounts yet published of the origin and progress of wireless telegraphy, showing fully what has been attempted and what accomplished in that fascinating field of operations and research up to the present time. All systems are reviewed, as well as many guesses considered. Marconi's method is treated with great thoroughness and this inventor's particular development of the science is brought down to the present time. For convenience of the general reader the contents of the volume are divided under three distinctive heads, or periods, so called, namely: First period—The Possible. Second period—The Practicable. Third period—The Practical. The revised work will prove a welcome addition to the literature of the matter discussed. Under the respective headings the classification observed will be of especial aid in tracing with logical sequence the development of wireless telegraphy. The price of the book is \$2.50, express charges prepaid to any address in the world. Address J. B. Taltavall, TELEGRAPH AGE, 253 Broadway, New York.

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

LETTERS FROM OUR AGENTS.

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

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

BIRMINGHAM, ALA., WESTERN UNION.

There has been a great many items published at different times in TELEGRAPH AGE in reference to fast circuits, but Birmingham seems to have escaped mention. Probably the fastest circuit in the United States is worked out of this office—considering its length, 550 miles, and very few, if any, of the shorter circuits can equal it.

The Birmingham-New Orleans bonus circuit, worked by Messrs. B. B. Pierce and Chas. H. Ward, averaged for the month of November over 600 messages each way between 8 A. M. and 5 P. M. On November 5th Mr. Ward's record was 7.20, and Mr. Pierce's 669, a total of 1,389 for the nine hours. On November 21st Mr. Ward handled 703 and Mr. Pierce 710, a total of 1,413 for the nine hours. The New Orleans end was handled by Messrs. Paxton and Ward.

INDIANAPOLIS, IND., WESTERN UNION.

J. O. Barnes and F. W. Spooner of the extra list resigned to accept permanent positions at Lafayette, this state. N. M. Kent has also resigned to take the management of a manufacturing establishment in Milwaukee.

Assistant Chief Operator G. F. Coit, recently installed a quadruplex set in the general offices of the Big Four Railroad at this point.

CHICAGO, ILL.

Mills on easy terms; lowest prices. Renting and repairing. Agency "AGE." Word-counters, Phillips' Codes and all electrical works. Dept. 11, Telegraphers' Typewriter Co., 122 La Salle street, Chicago; O. T. Anderson, Manager.

WESTERN UNION.

C. D. McDermott one of our brightest telegraphers has returned from a short vacation.

Charles White, formerly assistant to James Cummings of the St. Paul Division, (resigned), has been appointed as chief of that division. Al-

though Mr. White is young in years, he is old in experience, and is one of the most promising of young officials. His quiet and cool judgment and gentle disposition has already won the hearts of his co-workers.

Chief Operator L. K. Whitcomb and Traffic Chief Frank Richardson went to St. Louis, November 30, to attend the funeral of Chief Operator W. H. Spencer, of that city.

Mr. Seymour Standish, formerly a check boy, was a recent visitor here.

Thanksgiving eve a telegrapher's ball was held at Milwaukee. Among the Chicago people present were Mr. and Mrs. Wright, Miss Hahn, Charles White and wife, and James Cummins and wife. A very pleasant and successful affair was reported.

A. J. Swan, who at one time worked in Chicago, and for the past twenty years of New York, is reported dying at Wichita, Kansas.

James Farley of the city line department, died November 30. He was a promising young man, and his decease will be mourned by many friends.

A son was recently born to Charles J. Anderson.

Harry Werntz, of the 10th floor, is taking day report at Rockford, Ill.

Although good for the extra men the recent storm played havoc with the wires in the northwest and for a few days in consequence every one was busy.

Mr. O. W. Montague, of the bookkeeping department, was elected December 1, secretary for 1903 of the General Meagher Council of the National Union. Mr. Montague has been an employe of the bookkeeping department for twenty years and is well qualified to fill the position, and the Council is to be congratulated on its selection.

ST. PAUL, MINN., WESTERN UNION.

Mr. Louis F. Wise, for twenty years in the employ of this company in this city, and a traffic chief for nine years past, whose appointment as manager of the branch office at the Board of Trade, was announced in the December 1 issue of TELEGRAPH AGE, before his departure, was presented by his associates with a gold watch chain and charm (the latter in the shape of a cigar cutter), and a diamond studded locket. The presentation was made by John H. Fleming in a neat speech at Mr. Wise's home, whither a delegation, headed by Chief Operator C. A. Patterson and Night Chief E. G. McConnell, took him by surprise. In accepting the gift Mr. Wise expressed himself in a few felicitous remarks. Refreshments were served, and so closed a most delightful incident.

Mr. W. H. Strang has been appointed to succeed Mr. Wise as traffic chief.

A half dozen or more operators from this city attended a ball given by the Milwaukee operators on Thanksgiving eve.

A number of wires have been cut through to this office, adding to the work here, but relieving it at other points.

NEWPORT, R. I., WESTERN UNION.

It is understood that Manager H. J. Lockrow will have the American District Telegraph established in Newport, which will take up the messenger service and the delivery of telegrams.

Before spring arrives it is planned to change and greatly improve the interior of the office, particularly as to the arrangement of tables, more room being needed.

A. C. Noonan is the night operator, and John Sweeney the day operator.

Dennis P. O'Brien is the operator at the Perry House.

KANSAS CITY, MO., POSTAL.

Manager A. B. Richards was recently called to Bowling Green, Mo., by the death of his aged mother.

George C. Sperry, repeater chief on the overland wires, died of heart disease on November 26. Mr. Sperry had been employed in this office for nearly two years past, coming here from El Paso, Tex., where he was for some time manager of that office. He was for many years superintendent of telegraph of the Mexican Central Railroad, with headquarters in the City of Mexico. Prior to that time he was chief clerk to the superintendent of telegraph of the Santa Fe Railroad system, at Topeka, Kas. Mr. Sperry was a thirty-third degree Mason and was a deputy grand master and organizer in Mexico. His funeral was held under the auspices of Siloam Lodge at Topeka, Kas., the employes of this office contributing a handsome floral wreath. Mr. Sperry was about 43 years of age and leaves a wife and four children. He spoke the Spanish language fluently and until his health failed, a few months ago, conducted a class in Spanish in this city. He had only been absent from duty a few days and his death was entirely unexpected. Mr. Sperry's is the third death within a month of former employes of this office. The others were Thomas Costello, an operator, and Vinton McNulty, night check boy.

George S. Palmer, formerly repeater chief, has been appointed wire chief at the main board, from 7 A. M. to 4 P. M. This is a newly created position.

Managers W. C. Burrows, of Leavenworth, Kas., and R. Hicks, of Hiawatha, Kas., were recent visitors.

Washington Summers, of the St. Louis bonus wire, has been appointed traffic chief, succeeding T. W. Ingram, who succeeds George C. Sperry, deceased, as "rider" on the Logan leased wire. R. Stover succeeds Mr. Summers on St. Louis bonus wire. The appointment of Mr. Summers to be traffic chief is a deserved promotion. He is well liked by all and has grown up in this office.

ST. LOUIS, MO., WESTERN UNION.

Mr. J. C. Langley, who has been serving in the capacity of cashier and assistant chief clerk since last March, has been appointed to fill the position made vacant by the promotion of Mr. R. W. Winn to be assistant superintendent at Bos-

ton, Mass. Mr. Langley began his telegraphic career as messenger, clerk and operator successively for the Kentucky Central Railroad, at Falmouth, Ky. This was from 1882 to 1884. He then moved to Texas and entered the service of the Western Union in 1885. He afterward became manager at Paris and Sherman, Texas; chief operator at Fort Worth; assistant chief operator at Dallas; clerk to Assistant Superintendent T. P. Cook, Dallas, and manager at Beaumont. He entered this office in 1901, and was assigned to the claim desk in August, 1901. Mr. Langley has shown decided capacity for work and was deserving of his recent appointment.

Mr. F. D. Nash, formerly manager at Fort Scott, Kansas, who has been filling the position at the claim desk in the superintendent's office since last April, has been promoted to the position of cashier.

Thomas Phelan left for Hot Springs where he will work for a pool room, remaining there until late in the spring.

R. W. Smolik, who has worked at a branch office for the past two years, has returned to the main office.

Miss Barnett will spend the Holidays with her family in McLeansboro, Ill.

A quartet has been organized at this office under the direction of Frank Garosky. The members are: Charles Barber, tenor; Mosco McCrudden, second tenor; Feros Bagot, baritone, and Charles Lambert, basso.

Andrew Steinbach an assistant chief was compelled to leave his post owing to a severe attack of pneumonia. He has, however, recovered entirely and is back at his desk.

PHILADELPHIA, PA., POSTAL.

A few days ago we were informed of the arrival of the first child, a daughter, that gladdened the hearts of Mr. and Mrs. Walter A. Houghtaling, both former employes of this office, now of New York. We hasten to extend our hearty congratulations.

By the resignation of Mr. Horace Holtzinger, whom we are pleased to learn, has been satisfactorily placed in the Dallas, Tex., office, Mr. Jay A. Thomas has been appointed to the all-night trick with the additional responsibility of caring for the early traffic.

Miss Dorothy Robinson, lately with the Western Union at Overbrook, Pa., has been added to the working staff at the Broad Street station office, where, also, John Hardy, the efficient day-clerk, has been transferred to a new trick, which includes night duty.

PHILADELPHIA, PA., WESTERN UNION.

C. F. Happersett, a well known operator, who for several years past has been in San Juan, Porto Rico, for the United States Signal Service and Insular Telegraph Company, has returned to Philadelphia, where he was heartily welcomed by many friends. Mr. Happersett will probably locate in New York, a position having been offered him by the Marconi company.

The sympathy of many friends is hereby extended to Miss Effie Leishman in the recent death of her mother.

A. P. Jones and Al. Zindl have resigned, the former going to Pittsburg, and the latter to the Postal Company.

Is your name on the floor boys Christmas list? They save us many steps and are worthy of a contribution. It will make Christmas brighter for them as well as the donors.

Mr. Harry Wobensmith has been appointed chief clerk, vice H. B. Davis resigned. We congratulate Mr. Wobensmith in his well merited promotion. He started from the bottom of the ladder and is well qualified to fill this responsible position.

W. B. Ray and John F. Helm have been added to the Philadelphia, Reading and Pottsville Telegraph Company staff of operators here.

Frank G. McCaulley is the new Western Union manager at Chambersburg, Pa.

Merry Christmas to you all my co-laborers and readers of the AGE!

NEW YORK CITY.

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

WESTERN UNION.

The Western Union Telegraph Company is greatly improving its service by giving the larger cities and towns direct wires with all of the great commercial centres. This does away with the relaying of telegrams which has been considered unnecessary, and which not only delays the business but increases the liability of error.

The rear portion of the large operating room on the seventh floor is rapidly assuming shape to accommodate the city line department now occupying space in the general operating room on the eighth floor. A new switchboard to hold four hundred city wires has been installed and up-to-date instrument tables are now being placed in position.

Mr. C. R. Clappitt, eastern traffic chief, nights, has been appointed chief operator of the Central Cable office, embracing both the Western Union land lines as well as the European submarine cables, vice D. B. Case, transferred to other duties.

H. C. Worthen, night traffic chief on the Jerseys has taken the place of Mr. Clappitt and J. H. Masden has been appointed to the place of Mr. Worthen.

A complimentary dinner will be tendered to Hon. Walter C. Burton, of this office, Senator-elect, at the St. Denis Hotel, Broadway and 11th streets, on Saturday evening, December 20, by telegraph friends.

The officials of this company contributed \$5 and \$10 each towards the relief fund of the New York Telegraphers' Aid Society, the aggregate sum thus given reaching \$90.

Mr. Thomas F. Cleary, a well known operator, who has been identified with the race bureau for the past twelve years, died of pneumonia on December 10, after an illness of one day.

Miss Tessie M., daughter of Mr. Conrad Meyer, Eastern division wire chief operator, was married on December 2, to Mr. J. H. Nance, of Atlanta, Ga. The young couple are very popular and expert operators. The best wishes of all go with them.

Miss Eleanor Ohlandt, who has been for some months at Liberty, N. Y., on account of illness, has returned to her home in Brooklyn.

Eugene Turner, an operator, son of C. E. Turner of this office, died recently at Liberty, N. Y., where he had been for some time suffering from consumption.

John S. Fleming of South Forks, Pa., a train dispatcher on the Pennsylvania R. R., was a visitor on Dec. 4th.

A son was born to W. H. Mayer of this office on December 8th. This makes a family of seven boys.

POSTAL.

Mr. Charles P. Bruch, assistant general manager of the company, is acting general manager during the absence of Mr. W. H. Baker, who will be away on the Pacific Coast almost the entire month. Mr. Bruch will have entire charge of these vast interests, but he possesses the necessary capacity to properly perform the duties of his office. It will be interesting to note that Mr. Bruch, twenty years ago, was an operator in the Western Union main office, this city. He has been an officer of the Postal Company for the past twelve years. Merit, not favoritism, was the basis of his promotion.

Miss Edith Hunter Platt, only daughter of Mr. and Mrs. Edward C. Platt, died suddenly on Saturday morning, December 6th, of heart failure. Miss Platt had been in delicate health for several years past. The funeral services were held at her home in Brooklyn on Monday, December 8th. The house was crowded with friends of the family, including many of the officers and employees of the Postal Telegraph-Cable and Commercial Cable Companies, of both of which Mr. Platt is treasurer and a director.

The Postal Telegraph-Cable Company has donated one hundred dollars to the Relief Fund of the New York Telegraphers' Aid Society.

Assistant Night Manager Daniel Mallen has returned from a two weeks' vacation; also Chief J. H. Twyford from a vacation spent in the south.

Miss Hattie Ford is back again from a visit of three weeks at Whitestone, Long Island.

John Paul of the night force met with a severe accident a few nights ago. He fell in a subway excavation breaking his collar bone and was taken to a hospital. He is improving as rapidly as possible under the circumstances.

Mr. Edward LeSeur has resigned the managership of the 274 Columbus Avenue branch, and has been assigned to duty in the main office.

Mr. F. W. Inden is on the waiting list; Mr. D. Warner has resigned.

Mr. Jones and Mr. F. M. Wilson are absent on sick leave.

MONTREAL, QUE., CANADIAN PACIFIC.

Mr. J. N. Jamieson, who was here for a short time, has left for his home in Halifax, N. S., owing to ill-health.

Mr. A. E. McLaren has returned from North Bay, Ont., where he had been relieving for the past two weeks.

Mr. W. Chisholm, has accepted a position at Bamfield, B. C., the new Pacific cable station.

Mr. A. O'Leary has accepted a position with the Grand Trunk Railway at Island Pond, Vt. Mr. J. Pare has also left for Island Pond.

Mr. W. A. Dier, Ottawa, Ont., and Mr. T. Longmore of the Windsor street station, were recent visitors.

Mr. A. Jarvis, who has returned from a successful hunting expedition up the country, treated a number of the boys to a large slice of venison. Mr. Jarvis, who accompanied a party of five, had quite an eventful trip. Each of the party succeeded in securing his deer. Mr. Jarvis was more fortunate, however, having secured two, hence it was that his many friends were not forgotten.

Mr. J. F. Richardson, who was also one of the party, took some snap shots of the different positions of the party as they proceeded on their journey.

A meeting of the Telegraphers' Hockey Club was held on Friday evening, November 28th, and officers elected as follows: Patron, Mayor Cochrane; honorary president, James Kent; honorary vice-presidents, Thos. Rodger, W. J. Camp, W. B. Powell, A. Walsh, F. T. Jennings and G. H. Ferguson; president, W. Currie; vice-president, H. J. Keating; secretary-treasurer, H. W. Forsyth; assistant secretary-treasurer, H. H. Lyle; committee, G. Gittus (chairman), W. J. Barclay, Bert Baker, J. Tucker, W. H. Brunini.

Mr. James Wilson, superintendent at Vancouver, B. C., who had been visiting Montreal, has returned to his home.

Mr. M. McDonald, of the business department, has been receiving congratulations on the birth of a son.

MINNEAPOLIS, MINN., NORTH AMERICAN TELEGRAPH COMPANY.

All difficulties being settled, the force is now established on the "floor" of the new Chamber of Commerce, but in space more restricted than at first expected.

Mr. G. E. Fletcher, manager of this company, has resigned to enter the employ of a brokerage firm. As previously announced, Mr. G. W. Lloyd succeeds him.

Mr. C. O. Johnson, who has been manager of the Guaranty Loan office for a number of years, resigned to accept a position with brokers, his successor being J. R. Brown, transferred from the Chamber of Commerce office.

The clerical department at the main office will

soon have more commodious apartments on the second floor, now being arranged for them.

Mr. C. H. Ryder spent a week lately in Chicago visiting associates, and renewing old acquaintanceship.

WASHINGTON, D. C., POSTAL.

During this season, with the House and Senate in session, we are receiving a heavy file of press work, and taking it all around our business is good. There has been added to our force a few new arrivals, among whom are: Miss Nellie G. Strong, from Saratoga Springs, N. Y., Wm. J. Radigan, from the Western Union, Baltimore, Md.; Wm. H. Payne formerly of the Western Union, Philadelphia, Pa.

Mr. H. C. Wooden has resumed his duties at the Howard House, but his health has not yet been fully restored. Mr. Wooden is receiving congratulations from his many friends, upon the birth of a daughter on November 18.

THE ASSOCIATED PRESS.

Mr. Geo. Gilbert, of the Binghamton, N. Y., bureau, has appendicitis.

There are now four Yetman transmitters in constant use in the New York office and there are two in the Washington, D. C., bureau. Those who manipulate the transmitters in the New York office and who are experts at the work are: G. R. Allhands, on the West; J. Uncles, on the State circuit; Wm. J. O'Neil on the Eastern circuit, days; F. M. Laughlin, Eastern circuit, nights; P. Bishop and F. VanValkenburg, on the Washington and Southern circuits.

Two or three Sundays ago there met in the Chicago bureau on the invitation of Mr. A. C. Thomas, superintendent of leased lines, a gathering of press experts to witness a test of the Yetman transmitter. The party consisted of John A. Payne, a well known press expert; Charles Christie, managing editor "Cincinnati Enquirer," ex-chief operator of The Associated Press at that point; F. Vanderhoof and F. Olds, St. Paul; M. Doyle, St. Louis; C. Hopper, Nashville, Charles Dean, Milwaukee; H. S. Class, chief operator at Denver; P. C. Greenwell, ex-chief operator at Cleveland; F. Johnson, Detroit, and others. Mr. H. R. Clark, chief operator of the New York bureau, transmitted press matter to these gentlemen from the latter city for some four hours, giving the Yetman machine a very rigid and highly satisfactory test.

On the occasion of the recent visit of Mr. H. R. Clark, of New York to Chicago, where he gave a demonstration of the utility of the Yetman transmitter, before A. C. Thomas, superintendent of leased lines; F. B. Williams and W. H. Plunkitt, of Louisville; W. U. Leed, Kansas City; F. Hamlin, Indianapolis; D. J. Duey and C. Powell of Chicago, and others, a circuit over eight thousand miles in length was arranged for the test. It extended from Chicago to San Francisco, over a northern route, back to Chicago, over a southern route, thence to New York, and returned over different routes. There were fourteen repeaters

in the circuit. Hand sending passed over the circuit very faintly, while the characters from the Yetman transmitter seemed to push through the tremendous stretch of wire and the fourteen repeaters in much better form. The inventor, Mr. C. E. Yetman, was also a witness of this long distance test.

Mr. E. Wells, of the New York bureau, has been assigned to Philadelphia, where he will operate one of the Yetman transmitters.

Mrs. Jessie C. Sinclair, mother of G. A. Sinclair, with The Associated Press, at Richmond, Va., died December 5, at her home in Montreal, Que. She was 73 years of age.

New York Aid Society Entertainment.

The New York Telegraphers' Aid Society held its annual entertainment and reception for the benefit of the Relief Fund at Terrace Garden, 58th street and Lexington avenue, on Friday evening, December 5th. A splendid audience that filled every seat in the house greeted the first number on the programme when the curtain rose at half past eight. The entertainment consisted of seven numbers drawn from the best acts in the leading Vaudeville theatres of the city and was highly enjoyed by the enthusiastic audience. The excellence of the entertainment annually provided by the committee, has made this event a popular fixture in the hearts of New York telegraphers.

Just before the last number was announced a short address on the purposes of the relief fund was made by Senator-elect Walter C. Burton. At the conclusion of the entertainment dancing was indulged in by large numbers until a late hour. Much credit is due to T. A. Brooks, Chairman of the Entertainment Committee; George Levene, stage manager, and other members of the respective committees. A substantial sum was added to the treasury of the relief fund.

[To those who do not know what the relief fund means, we would state that it is a fund of money available to members of the telegraph profession who are not affiliated with any of the relief or beneficial societies. The New York operators for the past fifteen or twenty years have liberally contributed to this fund, which has been drawn upon to meet the burial and sick expenses of indigent operators, no matter what the cause of their sickness or death may have been.—Editor.]

Recent Telegraph Patents.

A patent, No. 713,904, for a telegraph insulator, has been awarded to J. E. Murray, of Washington, Pa.

A patent, No. 714,299, for a button for telegraph keys, has been granted to H. J. Greule, Mason City, Iowa.

A patent, No. 714,577, for a telegraphic or telautographic apparatus, has been taken out by E. K. Gruhn, of Dresden, Germany.

New Western Union Inspector at Atlanta.

Mr. John James Grant the new inspector of the fourth district of the Southern Division of the Western Union Telegraph Company, of which J. M. Stephens is the superintendent, with headquarters at Atlanta, Ga., was recently promoted to this position from that of manager of the Covington, Ky., office. Mr. Grant was born at Mays-



JOHN JAMES GRANT.

New Western Union Inspector at Atlanta, Ga.

ville, Ky., October 4, 1858, and in 1873 was made manager of the Ashland office, in his native State. Later he became manager of the Mutual Union Telegraph Company at Washington, D. C., a post he surrendered to accept that of assistant wire chief of the Western Union Company at Cincinnati, Ohio. For the past eleven years he has been manager at Covington, Ky., and has also acted as turf correspondent. Mr. Grant has always exhibited a degree of activity and care of details in the several positions he has held that has won commendation from his superior officers and served to carry him steadily upward in his career.

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

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

Wireless Telegraphy.

Persistent reports are heard that Signor Marconi is in distress with his wireless telegraphy experiments at Table Head. A despatch from Sydney states that a greater portion of the wires connecting the towers with the operating room in the station have been removed. Marconi declines to make any statement beyond saying that everything will be all right soon.

Marconi, it is predicted by some enthusiasts, will girdle the world with his wireless telegraph system. He recently stated: "I do not think our system will be a serious rival to either ocean or land telegraphy. I would say that it will eventually become an auxiliary to them, and that the successful transaction of business over sea will tend to stimulate cable business under the sea.

Richard Pfund and H. C. Welby, the engineers in charge of the execution of the contract of the Marconi Wireless Telegraph Company with the United States Government for installing wireless telegraph system in the Yukon and Tanana districts, arrived in Seattle, Wash., on the 29th of November. The mission upon which the party was engaged was that of establishing the Marconi service for the use of the signal corps of the United States army between Fort Gibbon, which is situated at the junction of the Yukon and Tanana Rivers, and two points on the Tanana, one 100 miles and the other 200 miles away. The station at Fort Gibbon was entirely completed and the other two would have been but for an inconsistency in the wording of the contract which necessitated an interpretation from Washington and a resulting delay. The station at Fort Gibbon is the first to be completed in the system which the Government has planned for use in the far North.

"In equipping a station," said Mr. Pfund, who is a New York telegrapher, "we use a pole 212 feet high. The electrical apparatus all came from London and was shipped from New York to Seattle by express, fifteen tons of it. That was no small item of expense in itself. The poles are of Washington fir, and are shipped in four sections. I am convinced that the wireless system will prove a great success in the North. When wires are strung the heavy snows tend to weight down and break both wires and poles; and in the Summer the extremely boggy character of the country makes it very difficult to plant the poles securely. The result is that under even the best of management interruptions of the service would be frequently caused by natural conditions that could not be controlled."

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.

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

Organization.

Four Western Union operators at Baltimore, Md., were discharged on November 25, it is alleged, because they were members of the Brotherhood.

The telegraphers of Omaha, Neb., and Council Bluffs, Ia., have organized a branch of the International Union of Commercial Telegraphers, with a membership of fifty.

The fraternity of New Orleans, La., have organized a local branch of the order of Commercial Telegraphers, and it will affiliate with the organization agreed upon at the Pittsburg convention.

Operators Lowe, McCutcheon and Davis, and Miss Florence Kerr, who were recently discharged by the Western Union at Pittsburg, Pa., for, it is alleged, being members of the Brotherhood, have all found employment with the Postal Telegraph-Cable Company at that point.

The convention of commercial telegraphers which met at Pittsburg, Pa., on December 1 for the purpose of amalgamating the different organizations ended its work on the 3d inst., after having accomplished its purpose. Representatives of the Brotherhood of Commercial Telegraphers, the International Union of Commercial Telegraphers and the various American Federation organizations consolidated under the name of the Order of Commercial Telegraphers. A charter of affiliation with the American Federation of Labor was issued on December 6.

The following national officers were elected: President, Percy Thomas, of New York, president of the New York local; vice-president, W. F. Craig, Jr., of Pittsburg, and secretary and treasurer, J. M. Perkins, of San Francisco. An executive board consisting of M. H. Weber, of Washington; A. E. Rose, of Cincinnati; W. O. Rowley, of Detroit; W. A. Daley, of Kansas City, and B. A. Riley, of Philadelphia, was chosen. It was decided to hold the next national convention in New York on the second Tuesday in October, 1903.

Changes Among T. M. B. Agents.

Mr. J. J. O'Connor, for many years agent of the Telegraphers' Mutual Benefit Association at Albany, N. Y., has resigned. He is succeeded by E. J. Kerwin.

Other recent appointments among T. M. B. A. agents, are as follows: H. Vandevender, at Mobile, Ala., vice P. R. Garner; I. D. Hough, at Dallas, Tex., vice W. I. Church; J. A. Kilcourse, at Lexington, Ky., vice V. M. Fritter; J. E. Peacock, at Jacksonville, Fla., vice P. R. Wiggs; C. E. Morris, at Montgomery, Ala., vice E. Winter; W. H. Mathews, at Postal Telegraph-Cable Company, main office, New York, vice J. J. Fredricks; E. Johnson, at Charleston, S. C., vice D. M. O'Driscoll; W. J. Dodge, at Pittsburg, Pa., vice Lee Patterson; J. P. McCabe, at Cincinnati, O., vice W. Fellowes.

The Railway.

The telegraph operators on the Wisconsin Central Railroad have had their wages increased five dollars per month.

A bill has been introduced in the Senate of Virginia to allow telegraph companies to construct their lines along any railroad chartered in Virginia, without having to secure the consent of the railroad, thus placing the railroad lands on the same footing as private lands for the purposes indicated.

Mr. F. L. Blendinger, superintendent of telegraph of the Erie and New York, Susquehanna and Western railroads and district superintendent of the Western Union Telegraph Company, along these lines, has resigned to accept the presidency of a manufacturing concern at Woburn, Mass. Mr. Blendinger has been connected with the Erie railroad 23 years.

The Buffalo, Rochester and Pittsburg Railway Company will install along its entire system telegraphones instead of telegraph. This new and peculiar system permits the sending of telegraph messages and of talking both ways at the same time over the same wire. Instruments will be placed in cabooses, freight engines, stations and blind sidings. In case of accident connections can be made within one minute, at least, so the contractor claim.

Write Marriage Proposals on Telegraph Blanks.

Abraham Hummel, New York's greatest divorce lawyer, has discovered that if bachelors who wish to avoid breach of promise suits will use telegraph blanks in doing their proposing they will always keep on the safe side.

This discovery came with an incident in a Westchester County, N. Y., breach of promise case, which Mr. Hummel has just won, and in the trial of which he appeared for the defendant, who had written his proposal to the young woman who was suing him on a telegraph blank.

The plaintiff's lawyer began to read the alleged proposal of the defendant to the jury as it appeared on the message blank. He began with "My dearest Louisa."

Mr. Hummel interrupted: "If the court please, this document is partly printed and partly written. By all the rules of evidence the plaintiff can not offer parts of that instrument. He must read it all.

The opposing lawyer protested that the printed matter had nothing to do with the case, and that the fact that the proposal was written on the blank was an accident. The court ruled that everything on the blank should be read. Reluctantly the plaintiff's counsel read the printed conditions that appear on every telegraph blank, as follows:

"There is no liability on account of this message until the same is repeated and then only on condition that the claim is made within thirty

days in writing." And then after the signature, "Yours lovingly, John," followed, "N. B.—Read carefully the conditions at the top."

It did not take the jury long to render a verdict.

Heard on the Wire.

Rural Operator at "K":—"Fm Lerms, 28."

Ch: "Ga, fm."

K: "Fm Lerms, 28."

Ch looks at the call list, and sees that "K" is the call for "Lee, Ills."

City Lines Operator: "To John Brown, Jodet, Ills."

Receiving Operator: "Wr going?"

C. L. O. "To Jodet, Ills."

R. O. "Don't you mean, J. O. L. I. E. T. Ills?"

C. L. O.: "Tt's wt I sed, u ham."

"Found a lion under the bridge weak," should have been, "Foundation under the bridge weak."

The operator had trouble in reading the incoming signal, and the distant operator chief tried to have the receiver "lifted." The home-chief operator sent the following message: "I have my best man copying your receiver." The distant chief operator replied: "Well, God help the rest."

"Lightning Flashes and Electric Dashes," always bright and entertaining, never loses its interest, and has maintained a strong hold on telegraphers as being one of the best books published of telegraphic literature, depicting with genial force and attractive circumstance, the humor, fun, wit and wisdom attributable to the fraternity. The sketches are the contributions of well known writers, the illustrations are well drawn and comical, and altogether the volume, which is bound in cloth, with gold lettering on the front cover, is well worth a place in the library collection of every telegrapher. There are but a few copies left of this excellent book, and in a short time this first work containing telegraph stories will be out of print. Those who desire a copy should lose no time therefore, but send \$1.50 at once to J. B. Taltavall, TELEGRAPH AGE, 253 Broadway, who will send the volume postpaid, to any part of the United States.

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.

Death of John Van Horne.

John Van Horne, a former vice-president of the Western Union Telegraph Company, died at his home in Pewee Valley, Ky., a suburb of Louisville, on December 13, aged seventy-five years. Mr. Van Horne was one of the best known telegraphers of his day. He was a native of New Jersey and had held positions in the telegraph service from that of messenger boy up. In the fifties he was manager of the offices at Ashtabula, Milan and Sandusky, Ohio; at Adrian, Mich. and at Tuscomb, Ala. During the Civil War he was president of the Southwestern Telegraph Company. In 1866 he was appointed general superintendent of the Southern Division of the Western Union Telegraph Company, when his company had consolidated with the latter, of which he later became a vice-president and director. He retired two years ago.

"A B C of Electrical Experiments," by Prof. W. J. Clark, has just been published. As the initial letters of the title indicate this is an elementary book adapted to the needs of beginners and students. It is written in simple language, free from all technical terms, has 146 illustrations and gives plain instructions for the making of batteries, magnets, electric bells, induction coils, X-rays, dynamos, motors, static machines, and the telegraph, telephone and wireless telegraphy, the latter written from an American standpoint. As any student can procure for himself the materials mentioned therein and can make for himself the instruments, or work out any of the experiments given in this book, its value will be apparent. The price is \$1 and it will be sent post paid upon receipt of this amount. Address orders to J. B. Taltavall, TELEGRAPH AGE, 253 Broadway, New York.

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

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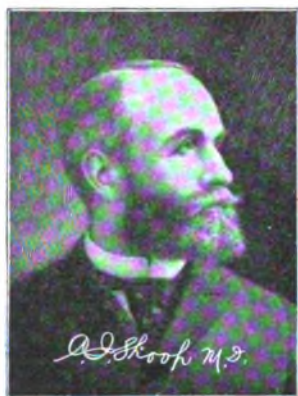
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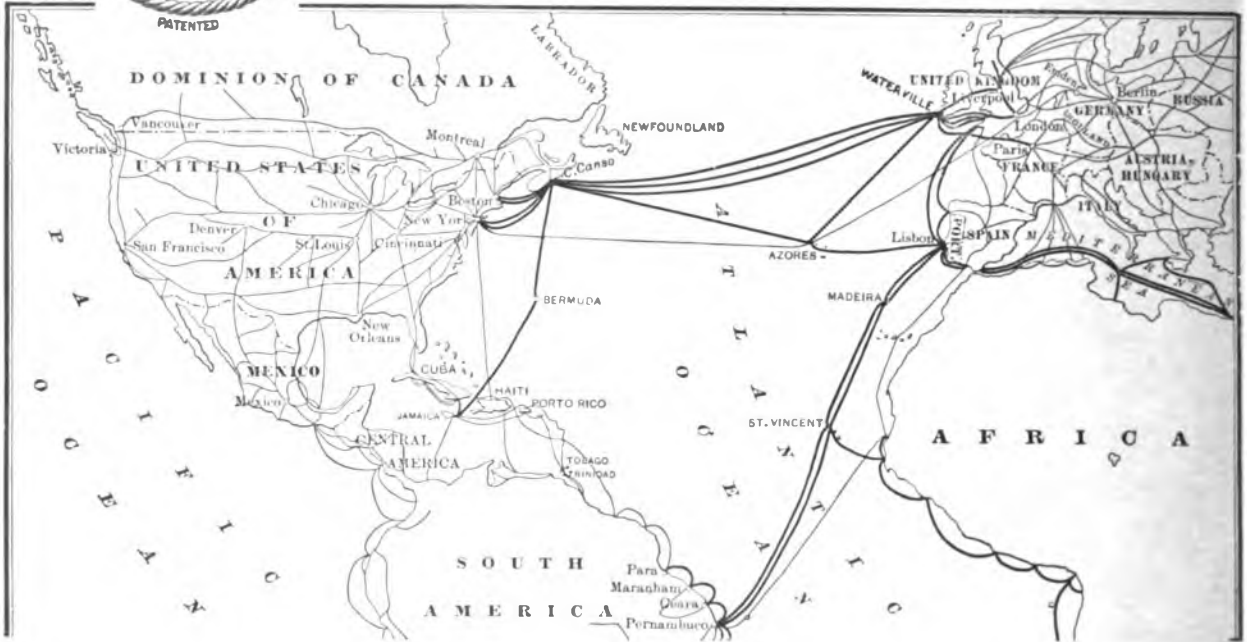
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