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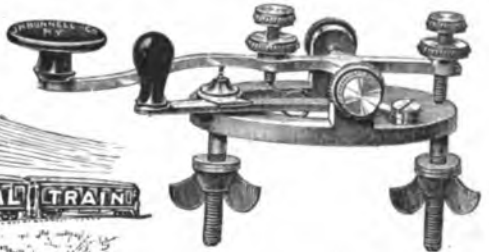
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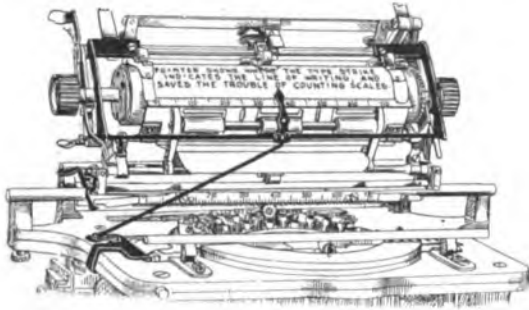
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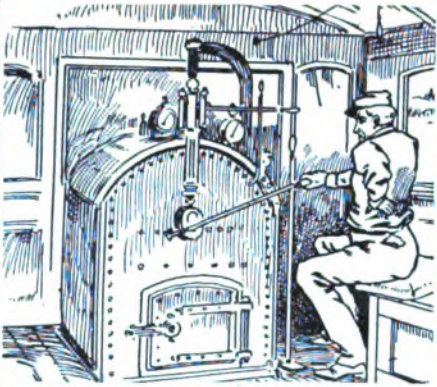


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THE TELEGRAPH AGE

No. 3.

NEW YORK, FEBRUARY, 1, 1902.

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other telegraph matters, which have appeared in this journal during the past three years under the caption of "Some Points on Electricity," will be published, and the book substituted for "Pocket Editions of Diagrams," by Willis H. Jones. Those desiring a copy of the new book should send in their names at once.—Editor.]

Another type of automatic repeater quite favorably known, and until recently, adopted as the standard for Western Union service, is the Neilson. Its chief advantage lies in the fact that but one local battery is required for the two local magnets; in other words the same local battery that actuates the transmitter suffices for the repeating sounder also.

A study of the accompanying theoretical diagram, will show the reader the manner in which the manipulations of the transmitter diverts the current either through the coils or the lever of the repeating sounder, according to the closed or open position of the former's contact points.

A and B are common 150 ohm relays; C and D are ordinary quadruplex transmitters of 4 to 6 ohms; E and F are 40 ohm repeating sounders; G and H are 4 point button switches.

The object in having the repeating sounder wound so highly is to produce sufficient magnetism in its core when the weak current, due to the small local battery, is shunted through the many turns of fine wire, to hold its armature lever closed.

SOME POINTS ON ELECTRICITY.

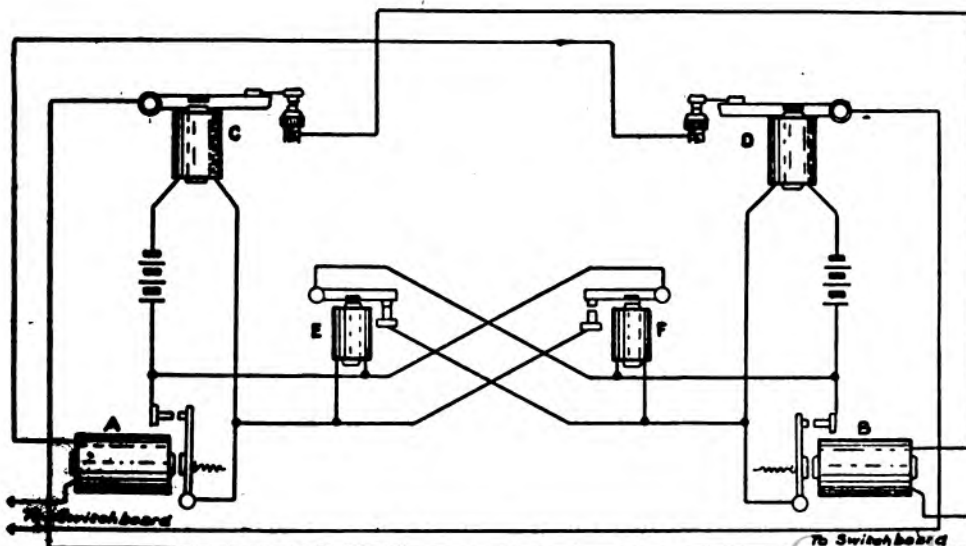
The Equipment of a Modern Telegraph Office.

(Continued.)

BY WILLIS H. JONES.

[In a few weeks hence this series, together with the most valuable of the articles appertaining to the duplex, the quadruplex, storage battery and

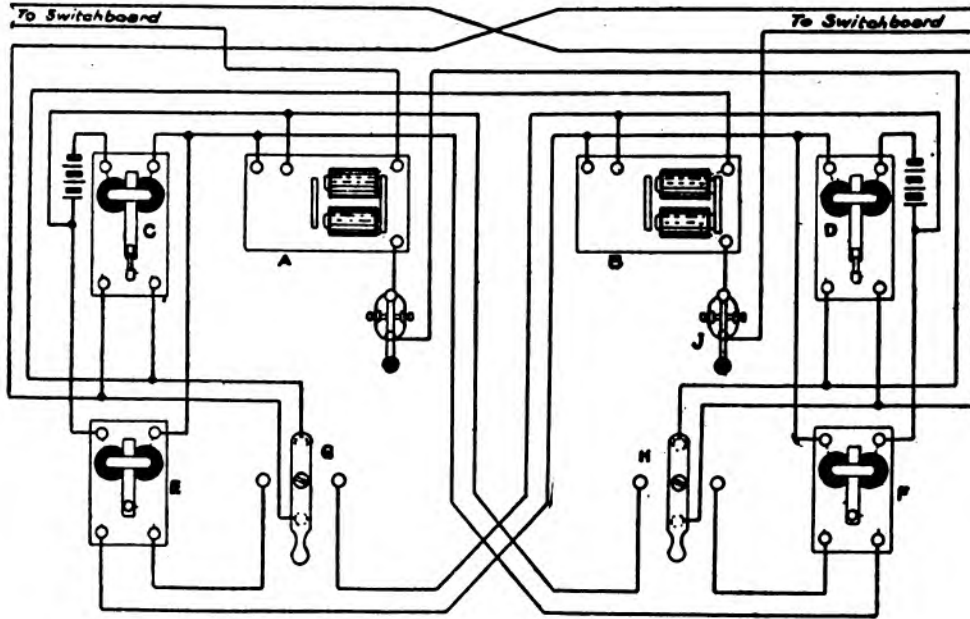
THE NEILSON REPEATER ~ THEORETICAL.



A weak current encircling an iron core a great many times will magnetize it to as great a degree as a stronger current would flowing around it a proportionately lesser number of times.

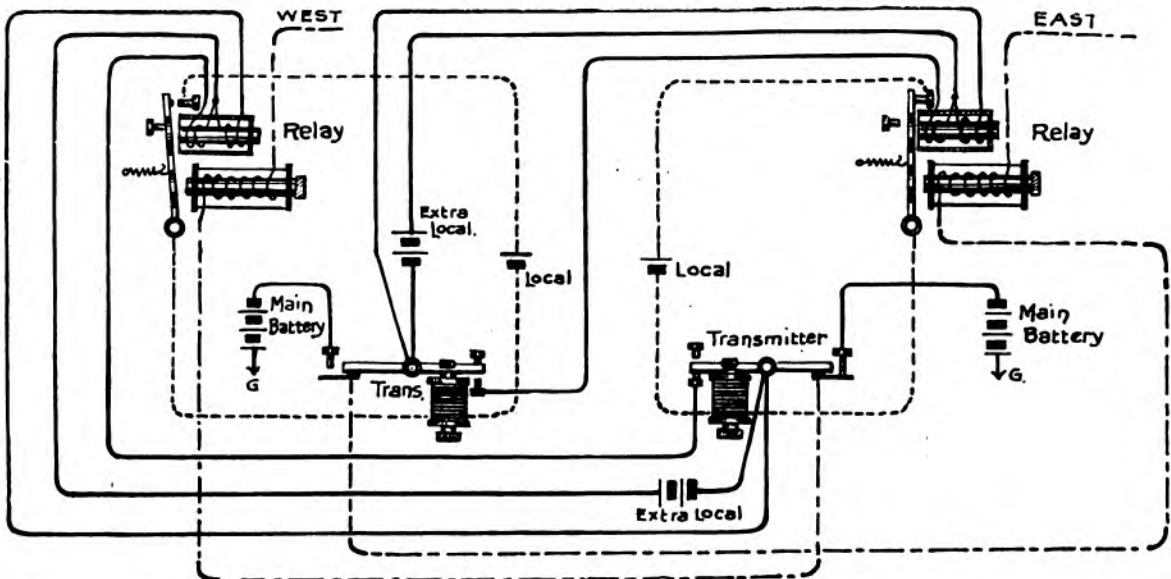
to the circuit that the current becomes too weak to effectively magnetize core C with the comparatively few turns of wire in its 4 ohm coil, hence the latter's retractile spring being stronger than

THE NEILSON REPEATER- ACTUAL CONNECTIONS.



This point is nicely demonstrated in the present arrangement. When the contact points of relay

the magnetic pull of core C, under these conditions, causes the lever to stand "open."



THE WEINEY-PHILLIPS REPEATER.

A opens, it does not actually open the local battery, but it does open the points of the 4 ohm transmitter C, because the action of the relay lever in placing the coils of transmitter C and repeating sounder E in series adds so much resistance

Where gravity battery is employed for the local circuits of this repeater, there should be four cells in series for each half of the apparatus.

For dynamo local circuits, sufficient artificial resistances must be inserted in the latter to re-

duce the strength of the current flowing therein to a proper value.

For illustration: In the Western Union Telegraph office, New York, where all local circuits are fed by a 6 volt machine, the resistance of the transmitter circuit in the Neilsen arrangement is increased by inserting a 12 ohm noninductive coil of wire in series with that instrument, while a 75 ohm repeating sounder is substituted for the 40 ohm pattern. When other electrical pressures are employed Ohm's law will determine the value of artificial resistance to be inserted in the usual way.

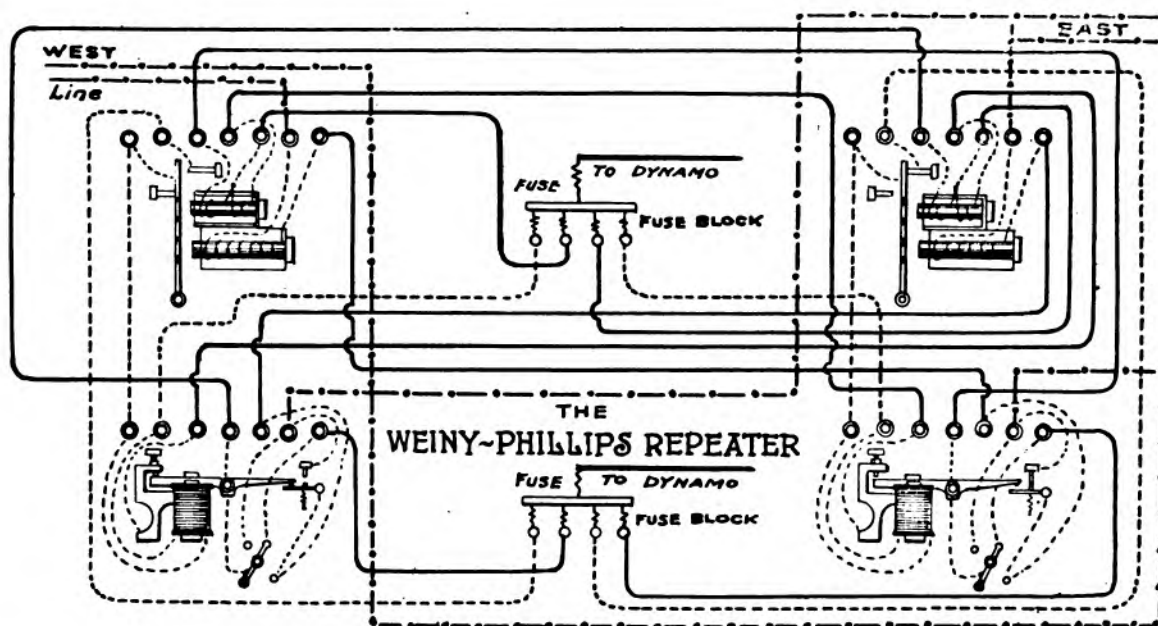
Another type of repeater quite extensively employed by the Postal Telegraph-Cable Company is the Weiny-Phillips device, diagrams of which, showing both the theoretical and the actual wire

lent of the return leg of a horseshoe, carries the lines of force forward where they can also exert their strength on the lever.

The feature of the Weiny-Phillips repeater lies in the winding of the above described extra magnets.

By referring to the theoretical illustration it will be seen that the convolutions of wire around the core of the extra magnet are equally divided, and the two halves wound in opposite directions.

When two equal coils of wire encircle a common iron core in this manner the magnet is said to be differentially wound, and a current of electricity dividing between the two routes can exert no magnetic influence on the iron core, but should either of the coils be "opened," the core at once becomes a full-fledged magnet.



connections, are here given. Like other repeaters, its aim is to maintain the continuity of a circuit through the repeating apparatus by means of the effect of local batteries on the cores of extra magnets. Unlike other types, however, the extra magnets of this repeater possess no individual lever armature of their own, but exert their magnetic strength directly upon the levers of the single line relays over the coils of which latter they are situated.

The construction of this upper coil and core differs radically from the conventional horseshoe form of magnets, not because the pattern is more efficient, but for convenience and mechanical reasons.

To avoid bending the core into a horseshoe, the wire is wound upon a straight bar, and in order to get a pull from both poles, and also to shorten the magnetic path, the straight bar is encased in a tubular iron shell, the rear end of which is attached to that pole of the bar which is farthest from the lever. This practically extends the original core, and forming, as it does, the equiva-

Taking advantage of this fact, the inventors have attached their local batteries to the respective transmitters in such a manner that the motion of the lever of the latter will cut off one division of the current by opening one coil of the extra magnet at the proper moment, and thereby hold the relay armature "closed" during the period which the relay itself is demagnetized.

(To be continued.)

Being a telegrapher, I took charge of our own railroad telegraph wire when it was constructed, and I believe that I placed the first young woman telegraph student at work on a railroad; so I see it stated. In those days the superintendent had to do everything; there was no division of responsibilities. It was supposed that no subordinate could be trusted to run trains by telegraph or attend to a wreck, and Mr. Scott and I, his successor, were two of the most foolish men I have ever known in this respect.—Andrew Carnegie.

Personal Mention.

The marriage engagement between Josephine Holman, of Indiana, and William Marconi, the inventor of wireless telegraphy, has been broken at the request of the lady. Mr. Marconi sailed for England on January 22.

Mr. Thomas Ahearn, of Ottawa, Ont., a well known old-time telegrapher and capitalist, although having only recently returned home from a trip around the world with his family, has gone to southern France for a few month sojourn.

Lord Kelvin (Sir William Thomson) the celebrated physicist of London, England, the inventor of the syphon recorder which is so generally used in the operation of submarine cables, it is reported will visit the United States in April. He will be accompanied by Lady Kelvin.

Mr. W. J. Johnston, an old-time telegrapher, publisher of "The Operator" previous to twenty years ago, and up to about two years ago proprietor of the "Electrical World," has purchased the "Engineering and Mining Journal," with offices located at 253 Broadway, New York.

Mr. George F. Porter, of New York, general sales agent of W. R. Brixey, the well-known cable manufacturer of Seymour, Conn., has just returned from Alaska, where he has been engaged for the past three months in laying a cable for the United States Government, connecting Skagway and Juneau.

Mr. W. R. Brixey, the well-known cable manufacturer of Seymour, Conn., was seriously injured by the dynamite explosion in the subway in Forty-second street, New York, on January 27. Mr. Brixey was sitting in the parlor of the Murray Hill Hotel, when the explosion took place. His wife, who sat along side of him, escaped without injury.

Mr. H. P. Dwight, president and general manager of the Great North Western Telegraph Company, Toronto, Ont., while conferring with Government officials on January 21 in the Parliament Building, wrenched and broke his leg. He will be in consequence confined to his home for at least five weeks. This is the first time in Mr. Dwight's more than fifty years' telegraphic service that he has been confined to his home for more than a day or two at a time.

Mr. Charles P. Bruch, assistant general manager of the Postal Telegraph-Cable Company, New York, has been elected secretary of the Indian Harbor Yacht Club. This club has recently purchased Rocky Neck Point at Greenwich, Conn., (the site of the present club house), and is arranging to still further enlarge its handsome building. The club has about four hundred members, among whom are a number of prominent electrical men; and a large fleet of yachts.

The "Chicago Inter Ocean" has within the past few days become the property of a company of which George W. Hinman is the president, and

Albert C. Phillips the vice-president and business manager. Mr. Hinman is an old Associated Press employee, having had charge of the foreign desk in the New York bureau of that concern for several years. Mr. Phillips is the son of Mr. Walter P. Phillips, general manager of the late United Press, and has been brought up in newspaper work.

Business Notices.

E. L. King & Co., of 218 Sansome street, San Francisco, Cal., advertise elsewhere in this issue the Remington Pointer and Line Indicator. This is a highly ingenious device and when applied to the No. 6 or 7 Remington typewriter for which it is especially adapted, serves excellent purposes in showing where the type strike, the line of writing and making the counting of scales unnecessary. The contrivance is at once simple, easily applied and materially lessens the work of the operator.

W. Atlee, Burpee & Co., the Philadelphia seedmen, whose advertisement appears on another page, offer to mail free to any reader of this paper who will write for it, a copy of their catalogue, the current issue being the twenty-sixth annual edition. It is a handsome book of 132 pages. Besides hundreds of illustrations, mostly engraved from photographs, it shows six superb vegetables and five of the finest new flowers, in colors, painted from nature. The new "Bull's Eye System" will be especially useful to inexperienced planters, while all can rely upon getting upon direct mail orders, only the best seeds that can be grown.

In Place of Wireless Telegraphy.

"Syntograph" has been recommended as a substitute for the word "wireless" as commonly used in the expression "wireless telegraphy." While this is a coined word it has the advantage of being properly derived, as all its elements come from the Greek.

From syntograph will follow naturally such words as syntogram and syntography.—Electrical Review.

The army signal corps has officially rejected the phrase "wireless telegraphy" and has adopted the term "aerography." A person who sends wireless messages will be an "aerographer," and the message itself will be an "aerogram."

What all should strive for is a competence. No man should be happy without it, if it be within reach, and I urge all to save part of their earnings these prosperous days, and put in savings bank at interest, or better still, buy a home with it.—Andrew Carnegie.

If you are idle you are on the road to ruin, and there are few stopping places upon it. It is rather a precipice than a road—H. W. Beecher.

Serial Building Loan and Savings Institution.

The annual meeting of the Serial Building Loan and Savings Institution, of New York, was held on January 21, at 195 Broadway. The old officers were re-elected as follows: D. B. Mitchell, president; John Brant, vice-president; Thomas M. Brennan, treasurer; Edwin F. Howell, secretary; J. B. Sabine and A. A. Rich, attorneys. The board of directors are W. J. Quinn, F. W. Jones, E. S. Butterfield, A. E. Chandler, F. W. Gregory, W. C. Burton, T. A. Brooks, M. J. O'Leary, E. F. Cummins, H. G. King, T. E. Fleming, G. H. Schnitgen, G. W. Blanchard, M. F. Gaffney and A. P. Sterling. Auditors: R. M. Nesbitt, James R. Beard and George H. Murphy. Bankers, the Mercantile Trust Company, New York.

The following is the semi-annual statement for the six months, ending December 31, 1901:

ASSETS.	
Cash on hand	\$9,204 59
Mortgages	458,109 69
Loans on shares	30,032 00
Installments unpaid	16,678 00
Interest unpaid	5,409 60
Premium unpaid.....	1,044 23
Real estate	58,460 33
Real estate sold on contract.....	14,348 84
Due from members	648 00
Total	\$593,935 19
LIABILITIES.	
Installments	\$382,005 00
Credited earnings	67,792 29
Matured shares	54,300 00
Full paid shares	27,800 00
Borrowed money	24,661 17
Due on loans	7,904 70
Assumed mortgages	3,000 00
Surplus	26,472 03
Total	\$593,935 19

The auditing committee, comprising Robert M. Nesbitt, James R. Beard and George H. Murphy, have examined the books and accounts of the secretary and treasurer and certify to their correctness.

ELECTRIC BUILDING LOAN AND SAVINGS ASSOCIATION OF NEW YORK.

The Electric Building Loan and Savings Association of New York, held its annual meeting at 195 Broadway, on January 21, the first under the new management since consolidation with the Serial Building Loan and Savings Institution, the board of management of the two now being identical.

The semi-annual statement for the six months ending December 31, 1901, is as follows:

ASSETS.	
Loans on bond and mortgage.....	\$68,220 85
Loans on shares	125 00
Real Estate	6,690 97
Real Estate sold on contract	3,918 30

Interest and premium due	318 74
Cash on hand	4,827 47
Total	\$84,101 33

LIABILITIES.

Due shareholders	\$81,440 89
Dividends due on paid-up stock.....	517 71
Suspense account	417 00
Contingent fund	1,725 73
Total	\$84,101 33

The auditing committee, composed of E. Reynolds and John Doran, examined the books of this association and found them correct.

Gold and Stock Life Insurance Association.

The twenty-fourth annual meeting of the Gold and Stock Life Insurance Association was held in New York, on the evening of January 20th. The old officers were re-elected as follows:

Charles P. Bruch, president; George W. E. Atkins, vice-president; William J. Dealy, secretary; Lewis Dresdner, treasurer; Charles P. Bruch, George W. E. Atkins, Frederick O. Nourse, Lewis Dresdner, Michael Breslin, Charles Shirley, David B. Mitchell, Albert J. Driver, William J. Dealy, executive committee; Frank H. Nicholls, Michael J. O'Leary, William Shone, auditing committee.

The treasurer's report showed: Receipts during the year, \$8,184.86; disbursements during the year, \$5,792.75. There were eleven deaths during the year, the membership at the close of the year being 1,101. The surplus at the end of the year was \$17,485.47, a gain over the previous year of \$2,392.11.

The executive committee reported on the recommendation made by the president, at the annual meeting in 1901, that graded rates should apply in the case of members admitted after July 1st, 1902, namely, between 18 and 30 years of age, 50 cents per month; between 30 and 35 years of age, 60 cents per month; between 35 and 40 years of age, 75 cents per month; between 40 and 45 years of age, \$1 per month. There will be no change made in the rates for present members, or for any who may be admitted up to, and including June 30th, next.

T. M. B. Association.—Assessments numbers 388 and 389 have been levied by the Telegraphers' Mutual Benefit Association to meet the claims arising from the deaths of Jonas F. Hare, at Jersey City, N. J.; Arthur W. Warner, at Webster, Mass.; Charles Newton, at Frankfort, Ky.; Miller W. Bissell, at Sharon, S. C.; Elias W. Fish, at Toledo, O.; John W. McRoy, at Mobile, Ala.; Richard S. Gough, at West Chicago, Ill.; Edward E. Schults, at Louisville, Ky.; Charles W. Thornton, at Napoleonville, La., and Joseph Bradley, at Philadelphia, Pa.

Despatch is the soul of business.—Chesterfield.

Atlanta Telegraph Tournament.

Editor TELEGRAPH AGE :

A meeting of all classes of telegraphers was held at Atlanta, Ga., January 24, for the purpose of organizing a telegraphers' tournament to be held in this city the latter part of February; also to arrange for an annual tournament. After considerable discussion, the meeting took definite action, an organization was effected, and the following gentlemen and well-known telegraphers were unanimously elected officers: J. M. Stephens, president; S. A. Duncan, vice-president; the former being superintendent of the Western Union and the latter assistant general superintendent of the Postal company. With such excellent men at the head assure the outside world of a thorough success in every detail of the tournament and an impartial and fair result for those participating in the contest.

H. Van Devender was elected secretary-treasurer. The Executive Committee are as follows: W. B. Stuart, chairman, and also chairman of the Western Union Committee; J. E. Scofield, chairman of the Postal Committee; O. L. Harrison, chairman Committee on Railways; J. H. Smythe, chairman The Associated Press Committee; A. V. Curran, chairman Private Wire Committee; B. F. Wyly, Jr., chairman Reception and Entertainment Committee. These gentlemen are well-known telegraphers, the latter named being now General Passenger Agent of the Atlanta and West Point Railroad Company. The committee at once set to work to make the occasion one that the telegraph fraternity may feel proud of. The name given the new organization is "The American Telegraphers' Tournament" and the constitution and by-laws as adopted calls for an election of officers at the conclusion of each annual contest and shall be as representative as possible. There will be about ten gold medals awarded the winners in the various contests at each tournament, beside a cash prize accompanying them. There will be a judge from each department of the telegraph service and they together will agree on the winners, thereby assuring the utmost fairness.

Prominent among the honorary members elected are such men as Andrew Carnegie, Thomas Edison, Signor Marconi, J. W. Mackay, M. E. Stone, General Thomas T. Eckert and John B. Taltavall. The operators are much enthused over the new organization and feel that its perpetuity will fill a long felt want and greatly improve the telegraph service. The various cash prizes to be awarded will be furnished later. The tournament will be open to all telegraphers in the United States.

E. WALDRON.

Atlanta, Ga., Jan. 25.

Every telegrapher who loves his profession, who is determined to master its technicalities, and thus insure for himself the confidence and respect of his official superiors and place himself in the direct line of promotion, should subscribe for TELEGRAPH AGE.

Annual Meeting of the Montreal Telegraph Co.

The annual meeting of the Montreal Telegraph Company was held at Montreal, Que., on January 9.

It was decided that the board of directors would in future be composed of six members, instead of eight as formerly, the places made vacant by the deaths of Mr. Andrew Allan and Mr. Hector Mackenzie not being filled.

The old board of directors were all re-elected. Mr. Hugh A. Allan was re-elected president and Mr. A. T. Paterson vice-president.

The annual report showed the following assets:

Telegraph lines in Canada and the United States	\$1,625,890.00
Telegraph cables in Canada and the United States	33,487.39
Telegraph offices and equipment of offices in Canada and the United States	212,500.00
Real estate in Montreal, Ottawa, Quebec and Toronto	279,946.46
	<hr/>
	\$2,151,823.85

Cash, real estate (Old Telegraph Building, St. Sacramento street), accounts receivable, etc.....	134,075.31
	<hr/>

Total	\$2,285,899.16
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The company's property is operated and maintained by the Great North-Western Telegraph Company of Canada. Its operation and maintenance is also guaranteed by the Western Union Telegraph Company of New York, under agreement with this company for 97 years from the 1st July, 1881.

Four quarterly dividends of 8 per cent. per annum have been made.

American District Telegraph Company Election.

The annual meeting of the stockholders of the American District Telegraph Company, at New York, was held January 23, at the Western Union Building. Only two changes were made in the board of directors, William H. Taylor taking the place of the late Marcellus Hartley, and Charles A. Missing being elected as successor to A. B. Hepburn, who retired. Immediately after the stockholders' meeting the directors held their meeting and elected the following officers: President, Thomas T. Eckert; vice-president, Charles A. Tinker; secretary and treasurer, Charles S. Snivler. Mr. M. W. Rayens is superintendent.

The question of reducing the capital stock of the company to \$2,000,000 was taken up by mail with the stockholders, and the owners of about three-fourths of the stock manifested their disapproval of the plan. The capital stock of the company will therefore remain \$4,000,000.

An American patent for a telegraph system has been granted to P. Picard, of Paris, France.

International Correspondence Schools.

To form an idea of the magnitude of the International Correspondence Schools of Scranton, Pa., it is only necessary to state that the schools celebrated their tenth anniversary on October 16, 1901. On that day it had enrolled 341,500 students, which necessitated the employment of a staff of 2,500 persons to take care of the interests of this vast army of students, scattered as they are throughout the entire world.

Thousands of these students are filling important positions in every line of industry in every quarter of the civilized world. A great number of telegraph operators have become expert electrical engineers through the instrumentality of this institution, and the amount of practical knowledge gained is beyond estimate.

The idea of teaching by mail was at first coldly received and even opposed and condemned by men of brilliant educational attainments and broad practical experience. Scepticism concerning the correspondence system of teaching was met with on all sides, but as people became acquainted with the work of the schools and were brought face to face with the practical results as shown by the advancement of International Correspondence Schools students, the doubt as to the ability to study and learn in this way gradually disappeared, and many of the doubting ones became students and enthusiastic advocates of the schools.

Conductivity Measurements.

Editor TELEGRAPH AGE:

In your issue of January 16th, on page 27, there is described a method I have developed for locating crosses upon telegraph wires. The use of the following formula in connection therewith will involve less calculation when measurements are made for locating swinging grounds and swinging crosses as well as solid crosses and grounds, than the one submitted.

$$\text{Calling } M=1000 \text{ then } Y = \frac{BDR}{(C-A)M}$$

ROBERT C. LORD.

Missouri Valley, Ia., January 21.

There is no room for antagonism between employer and employe, for presidents and superintendents do not own railway and telegraph property any more than operators do; therefore operators are members of the same corps—all are equally the servants of the company. There is another feature of cheering import in the positions of employees. The road to promotion is clear and direct. All can certify to that, for I doubt not many of those now in authority began in subordinate positions, and have won their way by merit, not by favor.—Andrew Carnegie.

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

Old Time Telegraphers' Association.

Mr. John Brant of New York, secretary of the Old Time Telegraphers' and Historical Association, has recently distributed among the members the printed proceedings of the twenty-first annual reunion of that organization which took place at Montreal, Que., on September 11-12-13, 1901.

The book consists of 130 pages of valuable and interesting telegraphic literature including half-tone engravings of the officers and prominent members who took an active part in the Canadian reunion. We are pleased to observe that the lady members of the reception and other committees were not overlooked. Their excellent work of entertainment well merits the praise given them, and the half-tone engravings of these ladies which appear in the book will be appreciated by all members who were fortunate in being able to attend the Montreal reunion.

Accompanying the book is a circular asking for subscriptions to a bound volume of the proceedings of the ten annual reunions, embracing the years from 1885, to 1894. One dollar per copy will be the charge for this work which will consist of about 250 pages.

The Montreal reunion ordered the printing of these proceedings providing the members thought enough of this matter to pay \$1 per copy to cover the cost of production.

Books on Wireless Telegraphy.

"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.

"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.

Some temptations come to the industrious; but all temptations attack the idle.—C. H. Spurgeon.

The Heads of the Order of Railroad Telegraphers.

H. B. PERHAM.

H. B. Perham, president of the Order of Railroad Telegraphers' and Brotherhood of Commercial Telegraphers', was born on British soil March 13, 1856. He commenced his railroad and telegraph career as messenger for the Grand Trunk Railway in Toronto, Ont., in 1872, and soon learned the telegraph business. Since then he has been employed principally by the old Montreal Telegraph Company, the Dominion Telegraph Company, Western Union Telegraph Company, Grand Trunk Railway, Chicago and Milwaukee and St. Paul Railway, Southern Pacific Railway and Denver and Rio Grande Railway. In 1892 he was elected general chairman by the



H. B. PERHAM, PRESIDENT
ORDER OF RAILROAD TELEGRAPHERS.

telegraphers of the Denver and Rio Grande Railway and was instrumental in obtaining recognition, a schedule, a large increase in pay and many other valuable considerations for them without having to strike for them. After being re-elected general chairman five years in succession he was in May, 1897, elected grand secretary and treasurer of the Order of Railroad Telegraphers and editor of the "Railroad Telegrapher." He held this position until October, 1901, when he was again promoted by being elected president of the Order of Railroad Telegraphers and Brotherhood of Commercial Telegraphers, the highest office within the gift of the organized telegraphers. Mr. Perham is popular with the craft and conservative in his business methods, being a firm believer in the efficacy of arbitration.

L. W. QUICK.

L. W. Quick, grand secretary and treasurer of the Order of Railroad Telegraphers and the Brotherhood of Commercial Telegraphers, was born in Delaware County, Iowa, June 1st, 1872.

At the age of eleven years he, with his parents, removed to Cherry Vale, Kansas, where two years later he learned telegraphy and secured his first position as a telegraph operator in that city with the Southern Kansas Railroad (now a part of the Santa Fe System). He was later made manager of the Western Union office at that point. During his thirteen years at the key he has been employed in nearly every branch of the telegraph service, among others having been manager for the Postal Telegraph-Cable Company at Atchison, and at Wichita, Kansas, and operator for The Associated and The United Press in different cities. His last work at the key was that of operator for The Associated Press in Washington, D. C., which position he filled for a year and a half, resigning in April, 1898, to return to the headquarters of



L. W. QUICK, GRAND SECRETARY AND TREASURER
ORDER OF RAILROAD TELEGRAPHERS.

the Order of Railroad Telegraphers as chief clerk in the office of the grand secretary and treasurer. At the late convention of that organization he was elected as grand secretary and treasurer, and by virtue of such office he is also editor and manager of "The Railroad Telegrapher."

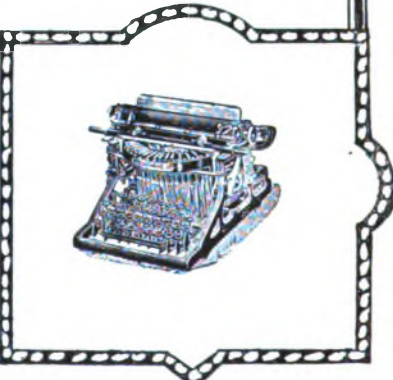
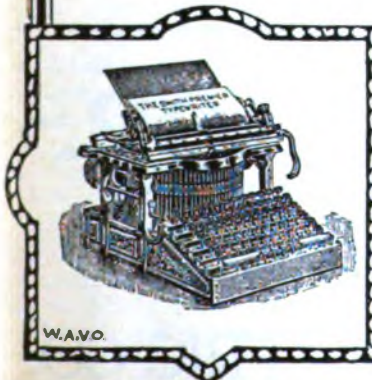
It gives me great satisfaction to think that I began life in the railroad service as a telegraph operator. When I had the honor to become a member of the craft, the Pennsylvania Railroad was not finished to Pittsburg. The rails on the mountains were iron, fourteen-foot lengths, imported from England, lying on huge hewn blocks of stone, although ties would have cost little. Mr. Thomas A. Scott was the superintendent. He received \$125 a month. My salary as telegrapher was \$25 a month. Mr. Scott made me his private secretary at \$35 a month. I used to wonder what a man could find to do with such an enormous sum of money as \$125 a month.—Andrew Carnegie.

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NEW YORK, February 1, 1902.

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.

Business Methods.

Mr. Andrew Carnegie in a recent address delivered before several hundred railroad and telegraph employees in New York city, gave utterance to the following sentence:

"When you see a president or a superintendent or a treasurer loaded down with his duties, with a countenance as serious as a judge uttering a death sentence, be sure he has more responsibility than he is fit for."

Mr. Carnegie's excellent point is well taken so far at least as it applies to the telegrapher. We could readily make up a list embracing hundreds of names of chief operators, managers and even higher officials who, forsooth, imagine themselves overworked when it happens that from six to ten letters per day make an onerous demand upon their time for consideration and answer.

We have in mind the case of one official who

needlessly consumed much more time in explaining to us the arduous duties that devolved upon him, than it would have required to answer the three letters that demanded his attention, and which he no doubt read a dozen times before he could summon resolution sufficient to reply to them.

The trouble too often is that the average man does not make the best use of his time during his office hours; that he is lacking in proper business discipline. Frequently, after reading a letter, instead of promptly answering it as he should do, if, from the nature of its contents it were possible to reply at once, he carelessly permits it to lie on his desk all day, perhaps for several days, until finally it dawns upon the procrastinating delinquent that the letter must be answered and so gotten out of the way. A promptness in reply was due the correspondent from every consideration of courtesy and business requirement, and delay only tended to lower the offender in the estimation of the other.

Following this line of thought we recall what Mr. Edward C. Cockey, of the Western Union Telegraph Company, New York, wrote for this *Journal* some three years ago. Mr. Cockey, himself, is a very busy man; in fact it is said that he does the work of four men. Literally, thousands of papers are placed on his desk each day for his attention. If he permitted them to accumulate the genial superintendent of supplies would soon meet his Waterloo. Mr. Cockey wrote:

"While I am talking of the advantages of stenography and typewriting, it appears to me proper to decry what is the ugly habit on the part of some people who are employers of stenographers and typewriters, who lounge around in their offices all the morning after their mail has been opened, who go out and get big lunches in mid-day, and who drink wine, smoke cigars and loaf and doze in the afternoon, then, all at once, get a fit of industry on them as the day wanes and tumble into the work of dictation with a zeal that would have done them credit if started at 9 o'clock in the morning instead of 4 o'clock in the afternoon, thereby keeping poor stenographers and typewriters until 6 and 7 o'clock in the afternoon with an injunction, as they leave their offices, hurrying home to their comforts and pleasures, that the stenographers and typewriters should not go home until every single letter is finished, enveloped and put in the mail. There are thousands of these people who are practising these little dodges on inoffensive stenographers and typewriters every day of their lives, and who go home to their families and boast of the immense amount of work they have done.

"I would like to do away with these delinquents. If this should come within their knowledge, and they have consciences, it might bring them to a sense of the injustice of their actions towards their stenographers and typewriters, whose time is just as valuable as that of the employer, and whose efforts to please ought to be appreciated to such an extent that their regular hours of business shall not be exceeded."

Advice of Mr. Carnegie.

Andrew Carnegie was the chief speaker recently at the celebration of the twenty-sixth anniversary of the Railroad Branch of the Young Men's Christian Association, 361 Madison Avenue, New York City. Edward V. W. Rossiter presided. The place was literally packed.

Mr. Rossiter made a few remarks appropriate to the anniversary, and then Mr. Carnegie spoke. He was frequently interrupted by applause.

He spoke with the greatest earnestness when he came to the part of his address dealing with pensions for the men, and was rewarded with a storm of approval.

Mr. Carnegie, after paying tribute to the late Cornelius Vanderbilt, continued:

"The Pennsylvania, the Baltimore and Ohio, the Reading and other systems have a way of pensioning their old employees that some of the rest of the roads do not observe. This great principle ought to be followed by all the great roads of the country."

Mr. Carnegie fairly shouted this last sentence and gesticulated vigorously, pointing at Chairman Rossiter, of the New York Central, which has no pension system. Mr. Rossiter flushed as the eyes of the audience became fixed on him. A general laugh went around at his expense. He looked much relieved when Mr. Carnegie ceased pointing and continued:

"It is in the care of railroad employees, their position, their advantages, their earnings, and in the pension system which the leading railroads of this country feel themselves obligated to establish, that you who labor year after year at staid salaries and have no prospect of making great gains should at least have this consolation in view, that in your old age you will be able to live in comfortable independence, not as a matter of charity, but by virtue of your own exertions, and what you are entitled to as a bonus for faithful service rendered."

The Carnegie Pension Fund Proposition.

Editor TELEGRAPH AGE:

In regard to the Carnegie matter, does it not seem to you that the greatest thing Mr. Carnegie could do for operators would be to assist them in making themselves better operators; make it possible for them to acquire knowledge of the scientific side of their profession, and to study electricity while they are still employed as operators. This would be quite feasible by supplying each large telegraph office with a couple of dozen standard works on telegraphy and electricity. It is probable that the telegraph companies would be willing to furnish a suitable case for the books, and they could be used by the operators on the circulation plan. It seems to me that this idea would appeal more strongly to Mr. Carnegie than any other. And the benefit to operators throughout the United States would be very great, as it would help those who deserve help; those who wish to become better operators and better men.

The suggestion of "L. C. M." of Los Angeles, Cal., in your issue of January 16, is a good one. I fully believe that access to an up-to-date technical library, or the gift of a paid-up scholarship with a good correspondence school would place deserving operators where they would not be in need of pensions. I consider that an operator who would not take advantage of such privileges would not be worthy of a pension.

D. McNICOL.

Minneapolis, Minn., January 20.

The New Postmaster-General's Idea.

Henry C. Payne, the new Postmaster-General, denies that he is in favor of reducing letter postage to one cent. His policy will be rather to extend the free delivery service into the rural districts and gradually grant the farmers the same postal advantages as the residents of cities. This would seem to be wise, as two-cent letter postage is not a burden to anyone, and the educational effect of giving the farmers and country residents, generally, a daily free delivery system will be incalculable. It will keep them posted on what is happening in the world and bring them into closer touch with their more aggressive, if, upon the whole, less scrupulous, fellow-citizens in towns and cities.

Referring to the report that he would favor a postal telegraph system, owned and operated by the Government, the Postmaster-General declared it was not true. "I believe," he said, "in leaving something in the industrial line for the people themselves to attend to. I do not believe in the Government engaging in all kinds of business. It has been through the individual enterprise of the people that this country has grown and flourished and become great and I can see no reason for a change."

The Telegraph in Iowa.

The State Executive Council of Iowa has requested the telegraph companies to submit statements to them showing the amount of telegraph business transacted in that State so that it may agree upon a message rate which telegraph companies may hereafter charge. It not only will require the companies to report the details of their receipts and expenditures on Iowa business in intelligible form to the State, but it will specifically require that the reports be verified and sworn to by residents of that State. This in itself, is significant, for it makes the officer who swears amenable to the criminal laws of the State, in case he perjures himself.

"I see that 'homes' for aged and disabled telegraphers are being discussed."

"Why, what's the matter with the present arrangement, making a home of the office, with 'extra' for staying there?"

Operating tables are in these days found everywhere—even in the hospitals.

The Public's Ignorance of the Telegraph.

BY MARY E. DE GINTHER.

Operators in a large relay office find much that creates laughter in the illogical arrangement of sentences or the use of superfluous words in the messages passing through their hands, but for the receiving clerk alone is reserved the pleasure of correcting, as far as possible, and enlightening the public against ludicrous mistakes in the preparation of a message for transmission.

Ignorance at this late day of telegraphic ways and means is a subject of wonder and surprise, and all the more striking when mistakes are made at an office situated in the current of all that is progressive and up to date.

When the ignorant colored girl, in her first attempt to use the telegraph, asks one to send a ticket to a stranded friend and obligingly folds it up in a blank, a smile must be suppressed while an explanation of our inability to perform the easy task is thankfully received.

Not so with the society belle, however, who comes with her message enclosed in an envelope addressed plainly so that it may be read in Chicago, for one fearfully attempts to describe to her what may be sent for forty cents and that the envelope cannot be addressed by the sender.

The excited mother of a sick child rushing into the office with the request that we at once rush to Pottstown the label off a bottle containing the prescription number with direction for taking, is disgusted when she finds we can only send a request for the all powerful remedy and that the precious label cannot be sent over the wires so as to hasten the druggist's answer.

A feeble-minded person with a desire to gain our ruler's help expecting to send "collect" to the President a message of one hundred and sixty rambling words describing imaginary wrongs, excites our pity, although one present, foolishly inclined, cannot help suggesting that she try the telephone.

Ofttimes one is able to save for some poor soul quite a few cents by cutting down, without altering the sense of a precious message, but when a girl with the love for her sweetheart brimming over till it must express itself, writes the name and address and then bravely launches out with "My own dear Tom" as an introductory, one sighs but dares not suggest that in a message such terms are entirely too dear and that, perhaps, Tom would be able to read between the lines and appropriate to himself some such endearing remark.

When the aged gent with a satisfied air hands over his message signed "Pop" inquiring "Will you kindly hold my answer for me?" expecting us to know what "Pop's" name will be when his answer comes, another smile may serve to keep one young and forgetful of the trials in a telegraph office.

The signature which an ordinary looking colored man affixes and which seems to express the opposite of his real condition provokes a smile at "Ready Money George."

How the sender of a message reading "From Susie to Lizzie" expects it to reach the desired destination serves as palatable food for the funny side of one's nature to ponder over when business is dull.

A tempting chance for one to put into use all the damnatory invectives of the times when one is busy and the request comes—"Will you write a message for me?"—"I have a sore finger;" "Am paralyzed," or, "Have forgotten my glasses," following as an excuse, one's impatience must be hid under a genial smile and the question is asked—"To whom, please?" "To my sister out in Johnstown." A request for more definite address is answered with—"To my sister Bridget in Johnstown; just tell her—" (uttered loud enough to attract the notice of passers-by) and while forty messages are delayed one must stand there extracting each item for the message and each time receive such irrelevant replies.

Many of the messages sent by the colored folk are sad ones—death notices—but sometimes even such a message as written by them is humorous, when worded thus: "Sister Florence is dead and will be on the 8.40 train."

So much for the ignorance which causes time to be forgotten, but that which prompts some to make one realize that we are but the servants of those whose messages we handle is to be deplored.

Of the ignorance shown by the young man who sneers when one must look up the rate for an out-of-the-way nook and remark, loud enough for all to hear: "Its a wonder they do not put competent people here," is not then thought of, we only feel the pang of reproach.

Then there are those distrustful ones worst of all to treat civilly, who challenge one on the number of words charged for and then dispute the rate seemingly believing we are only here to cheat. But, the public generally is kind and a few cheering words, with the funny incidents, buoy one up for further efforts to do one's best.

Telegraphy in Arabia.

Reports are published of the strenuous opposition offered by the wild tribesmen in Arabia to the construction of the telegraph line the Turkish authorities are carrying to Hodeida, on the Yemen littoral of the Red Sea. A gunboat was sent from that port to put a stop to the interference of the Arabs with the work of the engineers, but it had only a temporary effect, for, on its departure, the wires were again cut and the work otherwise impeded.

In the case of every great invention some one of the claimants finally gets his name stamped upon it. Bell's is identified with the telephone, Edison's with the incandescent light and Tesla's with the transmission of electrical power. Is Marconi, or some other, to be the name of wireless telegraphy? The world will watch the determination of this absorbing question with intense interest.

Stop the Small Leaks.

A writer states that it is no hard matter to impress upon the mind of the average telegraph employe the fact that every dollar he saves for the company in the performance of his respective duties is just that much upon the credit side of the company's ledger. He can readily see, if he saves a dollar for the company, that the company will be a dollar ahead, but in urging upon him to make this saving wherever he can, it is not always easy to convince him that he will indirectly share in his own savings. No. "You have to show him!"

The prosperity of each individual employe of a telegraph company depends on the prosperity of the company as a whole. Every employe has opportunities to save a dollar for the company occasionally. Every department has its leaks. The stoppage of these leaks is sometimes all that is necessary to put a company on a paying basis. A prosperous company can afford better pay and better facilities than the one whose revenues barely meet the expenses. No argument is necessary to convince any one with up to date facilities that he can make more money and make it easier for his employer than he can working dilapidated instruments streaked with rust. The money all can save to the company will go far toward obtaining better facilities, etc., and in that way it is plain that all will be benefited thereby.

The little leaks incidental to the operation of a company—just because they are little and not so forcibly brought to the attention of the higher officials—are sometimes passed by without receiving the attention they deserve, while their effect on the revenues may occasionally be something enormous.

Benefits by Alaska Telegraph Line

The Dominion Telegraph Line, the recent completion of which brought the Klondike country into immediate communication with the outside world, will have a material effect in developing the country along its route. In order for the company operating the line to keep it in repair it has been found necessary to maintain a trail along the route and this will contribute greatly to the ease of traveling through the country. This, together with the attention attracted to the country tributary to the trail by the construction of the line, will attract a great many people to the territory who will develop its mines and other industries.

The consciousness of duty performed gives us music at midnight.—George Herbert.

General Greely on Wireless Telegraph Matters.

With regard to the adoption of wireless telegraphy by the United States Government services, General Greely says: "The system has its limitations, which are not entirely dependent on distance. For example, we wanted to lay a cable between a point on the Connecticut coast and

Gardiners Island. I was asked by the members of the appropriations committee whether it would not be cheaper to establish a wireless system between these two points. I showed that as far as simply establishing that plant was concerned it would be cheaper to put up the wireless systems than to lay the cable, but when it came to operating the system, I showed that the cable was the cheaper of the two. In wireless telegraphy you have to have two experienced electricians, one at each station, and they must have assistants. With the cable you can put in two long-distance telephones, and anybody can use them who is able to turn the magneto crank. While it costs more to lay the cable, yet in this case we found that it would be cheaper in the end than the wireless system."

General Greely has received recently a very interesting report from Signal Corps Sergeant F. E. Peters at San Francisco, as follows, on the plant in the harbor there:

"The stations in operation in this harbor have been working uniformly and satisfactorily each day, thus proving that so far as the transmissions of messages is concerned, the system is an absolute success. It lacks speed as compared with wire lines and is only capable of dispatching accurately 15 words per minute. There seems to be no limit in sending, but the speed is lost in the receiving instrument. There are many conditions under which it could be used, but in nearly every case it would merely intrude upon a field which could be easily covered by telephone or telegraph lines. The following defects have come under my notice: First, the apparatus needs condensing and simplifying; second, a lack of speed, compared with land lines; third, the inability of an operator to break or interrupt another; fourth, the lack of secrecy in regard to matter being handled; fifth, the impossibility of operating more than one set of instruments in an office; sixth, the impossibility of operating more than one system within the limits of its range.

"The first three defects seem entirely within our ability to overcome. The fourth is that we cannot prevent our system from being tapped, except by the adoption of a secret code. The fifth and sixth objections, as far as I can see, must remain with us unless our knowledge of syntonizing arrangements be advanced materially."—*Electrical World.*

I know of nothing which lifts and improves the service of a great company and adds so much to its safety as a staff which can rest in the knowledge that after they have grown old in the service their old age is made comfortable through the system of pensions. Before long no company will rank as in the front rank which has not this invaluable, I might almost say necessary, element, in securing a staff of trustworthy, intelligent and loyal men filled with esprit de corps for the company they serve. The Pennsylvania, Baltimore and Ohio, Reading, and other railroads already have this system.—Andrew Carnegie.

Marconi's Telegraphy.

BY FRANCIS W. JONES.

It is not definitely known just what are the limitations of the Marconi wireless system. The maximum distance ethergrams can be transmitted has not yet been determined. There does not appear from the records any definite number of miles within which a ship must approach a sister ship or a shore signal-station fitted with etheric telegraph apparatus in order to establish decipherable signals. The distances of securing and holding communication do not appear to be twice alike.

During the first week of January the *Lucania* and the *Kaiser Wilhelm der Grosse* (both east-bound) were en rapport by etheric telegraph for three days, minimum distance twenty-five miles, maximum 100 miles.

The French steamer *Savoie* which reached New York on January 18, held communication with the *Lizard Light* as she passed it within 100 miles, sending via that wireless station six messages for Paris and one for Brussels, and on arrival within range of the "Herald's" Nantucket station (distance not given) eight messages were despatched for New York. On January 22, the *Cunarder Umbria* (west-bound) held etheric communication for three hours and a half with her sister ship the *Etruria* (east-bound) in midocean for a minimum distance of thirty-eight miles and a maximum of 125 miles. Five messages were sent to the *Etruria* to be relayed at Crookhaven.

Whether the limits are decided by lack of sensitiveness of the coherer, want of wave exciting power in the transmitting apparatus, change of atmospheric conditions or by the intervention of the convexity of the ocean's surface, no one seems to know.

What is probably causing the most anxiety is the earth's curvature, as it is well known that the speed of all such waves is retarded by dispersion when passing through gross matter.

At the American Institute of Electrical Engineer's dinner in New York on January 13, Signor Marconi explained that he had transmitting apparatus set up on the West Cornwall coast of England, and by sending up some kites in St. John's, Newfoundland, that (with a telephone receiver, in connection with his coherer) he heard many times unmistakably the letter S which he had previously arranged to be transmitted at stated intervals from Cornwall.

The distance between the two places is 2,130 miles. Drawing a straight line or chord through the earth from St. John's to Cornwall would show the summit of the ocean about 142 miles high, midway between the two places. So that Signor Marconi would have had to go up in a balloon 142 miles in St. John's to see his operator in Cornwall elevated in the sky the same distance. Or, if the earth and the ocean were opaque to the transmitted ether waves, and if the ether waves were only capable of affecting the coherer in St. John's above the surface of the ocean, the coherer there would have to be elevated about 650 miles to catch

the lowest waves arriving over the ocean's crest. Even supposing the ocean to be perfectly transparent to electromagnetic waves, the bed of the ocean between St. John's and Cornwall rises like a mountain whose summit midway is over 139 miles above the transmitting and receiving apparatus, so that what is puzzling scientists is to know in what way the elevation of a kite a few hundred feet in St. John's could possibly intercept or attract the Cornwall ether waves.

Marconi says the north pole will have to give up its long cherished exclusiveness after wireless telegraphy is in full operation.

One of the chief sources of peril and failure in Arctic exploration has been lack of communication with a base of supply. With money enough and men enough it would be a simple matter to reach the north pole with wireless telegraphy as an aid, says Marconi. Let the explorers push on as far as they can, establishing depots of supplies and leaving reserve parties to follow when called upon. Each depot being a wireless telegraph station and the northernmost one in constant communication with the advance guard, what is to prevent pushing the men and the provisions to the pole?

To St. Petersburg Via Alaska.

John T. Flynn, the representative of the Russian-American Commercial Co., recently addressed the Seattle (Wash.) Chamber of Commerce committee on national affairs in regard to the construction of a transpacific cable.

The Russian-American Commercial Co. is said to be building a telegraph line from Vladivostock to East Cape in Siberia. Mr. Flynn wishes to incorporate a company at Seattle under the laws of that State to lay a cable along the Alaskan coast to connect with the Russian line, the capital to be furnished by the same people who are backing the Russian company. Concerning his plans Mr. Flynn said:

"The purpose of this Seattle company is to build a submarine cable and telegraph line from Seattle to Behring Strait, there to connect with a line being constructed by the Russian-American Commercial Co., from Vladivostock to East Cape in Siberia, a distance of 1,800 miles. The union of these systems and the use of the telegraph lines of Russia would form a through service from Seattle to St. Petersburg. This would afford an Oriental and European cable, besides furnishing a local service to all points in Alaska. The first stretch of 700 or 800 miles would be a submarine cable from Cape Flattery or some other convenient point in Washington to Juneau or Skagway. From there another stretch of submarine cable would probably be used to Valdes. The rest of the route to Behring Strait would be a land system. The entire distance to be covered would be about 4,500 miles; that is, to Vladivostock. The cost has been estimated at \$4,000,000. There is enough business in sight at this time to pay 3 per cent. upon the cost of the enterprise."

Samuel Hay Kauffmann.

HE TAUGHT GEN. THOMAS T. ECKERT TELEGRAPHY.

Samuel Hay Kauffmann, of Washington, D. C., an old-time telegrapher, was born in Wayne County, O., in 1829. He commenced telegraphing in 1848, on the Wade and Speed lines, first at Wooster and then at Zanesville, O., as chief operator and manager, respectively, remaining in the service for six years.

Before being transferred from Wooster to Zanesville, he taught the "science of dots and dashes" to Gen. Thomas T. Eckert, now president of the Western Union Telegraph Company, who succeeded Mr. Kauffmann in the office at Wooster.

When Mr. Kauffmann gave up telegraphing, as above indicated, he returned to the newspaper business in Zanesville. Except for a time in the Civil Service of the United States Government, he has ever since been connected with journalism—



SAMUEL HAY KAUFFMANN.

for the past thirty-four years with the "Evening Star," of Washington, D. C., and nearly all that time he has been and still is president of the company that publishes it. He is also president of the American Newspaper Publishers Association (incorporated in New York) and of the Corcoran Gallery of Art, in Washington. He has been an extensive traveler, and is regarded as something of a patron of literature and art. He is a member of the National Geographic Society, the Philosophical Society, the Anthropological Society, the Old Time Telegraphers' and Historical Society, the Literary Society, and the Cosmos and Chevy Chase Clubs, of Washington, and the National Sculpture Society, and the Grolier and the Arts Clubs, of New York. Mr. Kauffmann was the first person to suggest and urge the establishment of the National Museum at Wash-

ington, which institution as is known, now comprises one of the most important and interesting collections of its class in existence anywhere.

Delivery of Telegrams.

No subject is more often litigated, apparently, than that of the liability of telegraph companies for negligent delivery of messages, says an exchange. The rule is that in all cases delivery must be made to the addressee or his authorized agent. The difficulty is not, however, in the rule itself as in its application. In the recent case of *Western Union vs. Hendricks*, the Supreme Court of Texas held that where a telegraph message is addressed to a person residing in the country in care of a resident of the town, both of whom are temporarily in another town, and a special price is paid to secure its delivery, the delivery to the partner of the latter is insufficient, but it should be delivered at the residence of the addressee.

In the case of *Western Union vs. Tressall*, however, it was held that there was an implied authority on the part of a hotel clerk to receive a telegram for a guest, and the company cannot be held responsible for the clerk in failing to deliver it. On the other hand, in the case of *Western Union vs. Jackson*, it was held that though a telegram is directed in care of a certain person, the company must use diligence to deliver to the addressee. So also in the case of *Telegraph Co. vs. Mitchell*, it was held that a charge that, in the absence of the husband, it was the duty of the company, if his wife was at the residence, to deliver to her a message addressed to him, was error, she not being the general agent of her husband.

Wiggins Will Sue Marconi.

Prof. E. Stone Wiggins, the Canadian astronomer and weather prophet, says he will take legal action to upset Signor Marconi's patents on wireless telegraphy, alleging that Marconi stole Wiggins's ideas. The latter says he announced in a Brooklyn newspaper in 1884 that the world is enveloped in electricity and he planned to use this current of electricity, which he says was east and west, to telegraph around the world, using the summit of the Rockies as a sending station. The professor says:

"Mr. Marconi took advantage of this and other discoveries of mine for a wireless system of telegraphy, which is not his but mine. He puts up steel wires by means of balloons and with this upper current and the earth gets his electric circuit. Mr. Marconi does not even know this, for he says he does not know how his messages are sent. You see I built the railway and Mr. Marconi put on his engine without my leave and then apologizes by saying that he thought it travelled through the air. He must not be surprised if I ask him to pay at least for the right of way."

"Hertzography" has been suggested as a fit and proper substitute for the term "Wireless Telegraphy."

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.]

MONTREAL, QUE., GREAT NORTH WESTERN.

Miss Malvina St. Pierre has left Montreal General Hospital restored to health. The invaluable service this noble institution has rendered to the telegraphers in a time of need, should be appreciated by them, when the time comes to aid the hospital materially.

Benjamin Crevier is ill at his residence.

Owen O'Neill, one of our oldest telegraphers, is reported dangerously ill at his home in Lachine, Que.

Alexander Caisse spent a vacation in St. Jerome, Terrebonne.

Miss Quesnel, of Lachine, Que., is the latest addition to our staff.

CINCINNATI, O., NOTES.

The twelfth annual meeting of the Morse Mutual Benefit Association was held in the parlors of the Palace Hotel Saturday evening, January 11th, following a delightful spread to its members served in the dining room of that well-known hostelry. There were upward of fifty members present. The meeting was a memorable one, inasmuch as a great number of important and perplexing questions were brought up for consideration and satisfactorily passed upon. The election of officers developed quite a lively contest and resulted in the choice of the following: J. E. Neville, president; J. F. Colligan, secretary (re-elected, making his twelfth consecutive year in that position); Frank Minning, treasurer; J. N. Jacobs, L. D. Johnson, A. L. Buchanan, W. H. Keer, Hiram Bryant, W. S. Slover, W. F. Othling, executive committee.

The annual meeting of the Telegraphers' Savings' and Purchasing Association was held at the Palace Hotel on January 12th. The reports of the various officers indicated a very prosperous condition of the society. In recognition of valuable services in the past, the old officers were re-elected, almost as an entirety as follows: A. A. Montgomery, president; E. F. Randolph, vice-president; A. L. Buchanan, secretary; W. E. Dunham, treasurer; H. J. Lindeman, J. H. Hohnsted and L. E. Moores auditing committee.

ST. LOUIS, MO., WESTERN UNION.

T. J. McCarty recently enjoyed a vacation of a month, visiting several of the near-by cities.

J. R. T. Auston, an old timer, well known to the fraternity, is now on the waiting list at this place. M. M. O'Neill and family lately visited

friends and relatives at Brookfield and St. Catharines, Mo.

Joseph P. Mulroy has returned from the Philippine Islands, after having served as a soldier in Co. M., 12th Infantry, for the past three years.

H. C. Hornaday has been very ill with pneumonia, for some time past, but at last report was recovering slowly.

E. L. Parmelee, force chief, has just returned from New Orleans, whether he went to attend the marriage of his daughter, Miss Ida, to Mr. Amedee Bourgoise, a young sugar planter and merchant of Point Coupee, La.

Mr. and Mrs. George H. Shore are the proud parents of a daughter.

Lloyd Lankford has resigned and gone South for the winter.

FORT WORTH, TEX., POSTAL.

The New Year finds us domiciled in our new quarters, the change having taken place Jan. 1. We now have one of the prettiest and most up to date telegraph offices in Texas. The new office is located in The Wheat Office Building, a modern six story granite structure, situated on the corner of Main and 8th streets. The interior wiring was completed under the supervision of general foreman M. B. Wyrick, ably assisted by Edgar Bennett. The office is equipped with modern fixtures, the counter and tables being of mahogany. The old instruments were replaced with an entire new outfit. The woodwork is finished in cherry, the walls are calsomined and tinted a sky blue. The floor is of white tiling, inlaid with blue, the word "Postal" appearing between the counter and the front entrance. A brass foot rail protects the counter. The Postal trademark finished in silver and blue adorns one of the plate glass doors.

Both the Armour and Swift companies recently broke ground for the erection of two immense packing houses here, which will probably be in operation by September next. As these concerns use the telegraph extensively, we hope to be benefited.

The personnel of the office is: W. Y. Nolley, manager; C. C. Meigs, J. C. Martin and J. A. Livingston, operators, the latter on report. Grace Nolley is cashier. There are five branch offices and a core of energetic messengers.

Recent visitors: Clinton P. Russell, general manager, and S. M. English, assistant general manager, Dallas.

LOS ANGELES, CAL., POSTAL.

Mr. Charles L. Lewis, formerly night chief operator, has been appointed assistant manager. His many friends wish him much success in the new position.

Mr. F. H. Merrill succeeds Mr. Lewis as night chief operator. Mr. Horace Chase, a first class man from the Western Union, this city, has been added to the operating force.

THE ASSOCIATED PRESS.

E. A. Goshert, transferred from the Philadelphia to New York, night; J. A. MacLeod, from

Waterbury, Conn., to Philadelphia, nights, succeeding Goshert.

W. H. Gomery, transferred from Albany "Journal" office to the New York bureau, days; S. C. Dermott being appointed at the "Journal."

W. F. A. Hasson, of New York bureau, has been assigned to the Maryland Legislature at Annapolis as reporter.

D. Hennessey, transferred from New London, Conn., nights, to Waterbury, days; D. Kellen taking the night vacancy at New London.

J. J. Newcomb, formerly employed in the New York office, as manifold, has been promoted to night operator at Norwich, Conn.

W. S. Campbell, resigned.

J. R. Powers appointed day operator at Schenectady.

CHICAGO, ILL.

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

"THAT YELLOW TAG" on your message and everybody telling you to "Get 'em right," when it is only a case of blurred type, prevented by sending 50 cents to Eacutt & Cawthorn, 2704 North Lincoln St., Chicago, for one of those new brushes. Positively cleans type between messages. B. & O. Ry Co. recently adopted them as a standard. Large commission to Agents.

POSTAL.

Messrs. George Burmeister and Frank Yule formerly with the Western Union, Chicago, but now with the Postal of New York, were recent visitors. All of their many friends were pleased to see them and they had a good time while here.

Mr. C. G. Simpson of New York bonus wire, nights, recently received 91 messages in one hour from Mr. Whitaker.

Mr. Samuel F. Moster, formerly wire chief and chief operator, has been appointed manager of Postal Union Stock Yards office. His many friends are pleased at his well-merited promotion.

J. M. Strong has resigned to go with a brokerage firm.

Edward Carroll has resigned and accepted a position with the Postal at Cedar Rapids, Iowa.

Mr. Thomas Walsh of the Rookery wire has accepted a position with the Postal at Omaha, Neb.

This company has been experimenting with a quadruplex wire, Chicago to New York, without repeaters. It has worked successfully so far.

Carlin F. Ellis and W. Bowman have been appointed to a new trick, 10 a. m. to 7.30 p. m.

Mr. John Brosnan recently made 28 cents bonus in one hour on the third San Francisco wire. This is considered remarkable as all the messages are unusually long.

Annie Kelly was a recent visitor.

Miss Dolly King, formerly at the Grand Pacific Hotel Postal office, is now with a broker.

Mr. Gradgke has returned to the main office

from the Rookery where he has been subbing for the past few months.

Miss Gallagher is subbing at the Woman's Temple, Miss Plummer, whose place she takes, being ill.

Mr. John Holub has returned after an extended vacation.

WESTERN UNION.

Sympathy is extended to Chief Operator George Dunning, whose sister-in-law, Mrs. Thomas Walker, died on January 11.

John Foster is spending a vacation of a month, at Carlton, Ont., his old home.

A. C. Schwartz has been detailed to the day job at Burlington, Ia., and is making a reputation on that busy circuit. Mr. Schwartz is one of our youngest and most successful operators.

Mr. H. D. Whitcomb, father of Chief Operator L. K. Whitcomb, lately spent a few days with his son.

Manager E. R. Jones and Operator M. E. Chapman, of the Kankakee, Ill., Western Union office are doing good work, any one who has ever worked with them can vouch for their ability as expert telegraphers.

Miss Dot McCracken of the Cedar Rapids quadruplex acted as timekeeper during the absence of Miss Thompson, who has been away on a short vacation.

Mrs. Kane is back again, much to the gratification of her numerous friends.

"Doc" Collier, formerly chief of the St. Paul division, nights, has returned from the Klondike, where he has spent over two years. All are glad to see his cheery face again.

Our esteemed chief of the St. Paul Division H. A. Johnson, has gone to St. Paul with the Long Distance Telephone Company, where we all know his valuable and able services will be highly appreciated. All were sorry to lose him as he has been with the Chicago office as division chief for many years. The position has been filled by the return of Mr. James Gummins.

Edward Lavery took a trip to Milwaukee lately.

BUFFALO, N. Y., WESTERN UNION.

The fourteenth annual meeting of the Buffalo Electrical Aid Association was held on January 13. President William Walker called the meeting to order and after reading a very able address and complete report of the condition and proceedings generally of the association during his administration, referred to the reports of Secretary G. W. McCoppen and Treasurer R. B. Ferguson, which showed a membership of three hundred and seventy-nine, and cash on deposit of \$3,103.37. The association has paid out \$16,827.09 for benefits during the fourteen years of its existence.

The following officers were elected for the year 1902: John G. McNerny, president; Edward A. Sawken, vice-president; George W. McCoppen, secretary; Robert B. Ferguson, treasurer; V. E. Pitman, C. J. Sheridan, F. E. Krettnner, Joseph T.

McNerny, Miss T. G. Toner, Miss E. G. Fitzpatrick, Miss R. A. Cheney, executive committee; Frank J. Hickler, William J. Savage, Herbert B. Swindell, auditing committee; James W. Tillinghast, Tracy W. Niles, George A. Burnett, trustees.

E. N. Wright, formerly of the pool room service, has returned to duty on the night force.

John Barber, formerly of this office, but now with the Publishers Press at Dunkirk, N. Y., paid us a visit recently.

Miss Belle MacGillis is spending her vacation in New York.

Samuel Stewart, Jr., who won seven prizes at the athletic games at the Pan-American Stadium, has added another victory and received a diamond ring for his successful 100-yard dash at the 74th Regiment Armory recently.

Nelson Appleby, owing to the death of his brother, has returned after one week's absence at Niagara Falls.

D. Warner has been appointed manager of the branch office at 943 Main street, vice Harry Johnson, the latter having accepted a position with the Erie Railway.

Miss Helen Gallagher was suddenly called to her home at Geneva, N. Y., on account of the death of an aunt.

G. R. Benjamin has successfully completed the installation of the Buckingham printing telegraph system and has returned to New York.

INDIANAPOLIS, IND., WESTERN UNION.

Wire Chief M. S. Allen was detailed to Mattoon, Ill., to install a set of repeaters.

Miss Pearl Hilsabeck of the bookkeeping department was married to Mr. Frank Leslie, of this city. All join in wishing them a happy and prosperous future.

Miss Lizzie Cooper who has for a long time served as stenographer in the superintendent's office was recently united in marriage to Mr. Walters, of Burr Oak, Ind.

William Hogeland, operator at Kingan & Co., branch, is ill at his home. E. A. Bradbury of this office is filling his place.

Charles Slemmer of United States yards office is also on the sick list. G. P. Lee, formerly of English Hotel, is filling his place during his absence.

The "Indianapolis News" has now a loop connection with this office. John Brundage is the regular operator for this service.

Arrivals: S. T. Gilbert, C. E. Ott, R. W. Penzler.

Joseph Smith, resigned, is now working for a broker.

Charles G. Laskev, formerly of this office, who came home to spend the holidays, has decided to remain in this city and has accepted a position with a broker.

J. F. Broden, of the Indianapolis Brewing Company branch, is now working in the main office.

Dennis Griffin is on the extra list.

Just recently 2,263 messages were handled be-

tween Indianapolis and Chicago for a single day. This is said to be almost, if not a record breaker.

MONTREAL QUE.—CANADIAN PACIFIC.

An invitation having been extended to attend a lecture on wireless telegraphy by Professor Rutherford, at the McGill University on January 20, quite a number of the knights of the key were present.

Mr. Robert Dow, late of this office, has accepted the night Associated Press work in the Toronto office. His departure was greatly regretted.

J. Grace has recovered from his injuries sustained while playing hockey recently, and has resumed his duties.

A large sleigh, attached to which were six horses conveyed the messengers to Lachine on the evening of January 18, where a repast was held. All enjoyed the drive immensely.

Mr. M. Fanning of the Ottawa office was in the city recently and called to see the boys.

Mr. A. Malcolm has returned from his vacation.

Arrivals:—Miss E. Maude Farr, Mr. W. Jackson, Sault Ste Marie, Mich.

Mr. J. D. Girard has returned from a brief trip to Trois Rivières.

PITTSBURG, PA.—POSTAL.

Mr. A. W. Rinehart, who succeeds Manager Kimmey lately promoted to be superintendent, has been identified with the Postal at this point since September, 1887, with the exception of three months in 1890, when he resigned to go with the Westinghouse Electrical Co. In the Fall of 1890, he was appointed assistant chief operator. In February, 1897, he was appointed night chief operator, a position he has held up to the present time.

Mr. H. J. Colebrook, who has the past ten years served as day traffic and day wire chief succeeds Mr. Rinehart as night chief operator.

After a sojourn with his home folks at Eric, Pa., Mr. C. R. Page is back again.

Arrivals: R. R. Gallagher and H. C. Gilchrist.

Mr. R. C. Lees, who has been laid up with fever the past month resumed his duties on January 20.

Chief Operator A. M. Smith has conceived a device which will aid the operator, prevent, or reduce to a minimum, the possibility of lost messages, and during the warm weather permit the opening of windows without the fear of scattering the blanks over the tables. It is a box, one inch shorter, and half an inch wider than a message blank. It has three compartments which holds about fifty blanks each for pinks, through and cities. The box is placed endways against and clamped to the resonator post.

The American Sheet Steel and American Tin Plate Company located in the Empire Building, is a very busy point. They handle on an average of 15,000 messages a month. Their New York wire, especially, is kept very active, the numbers running as high as 500 a day on this circuit. The office force consists of E. W. Camp

bell, manager; A. W. Naylor, New York wire; Charles F. Gallagher, Chicago way wire; Daniel Morgan city wires; John McCullough and Frank Brown messengers.

NEW YORK CITY.

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

POSTAL.

The force was very much shocked Monday morning, Jan. 27, when news came that the genial veteran telegrapher, James L. Mingle, died of paralysis in the Jersey City Hospital Sunday afternoon, Jan. 26. He was stricken on a trolley car while on his way to work and was at once removed to the Jersey City Hospital. Mr. Mingle was 72 years of age and well known in railroad and commercial telegraph circles. In his early manhood he was superintendent of the telegraph system of the Central Railroad of New Jersey. Later he received the appointment of postmaster at Easton, Pa., a position he held a number of years. From there he embarked in the publishing business in Philadelphia, afterwards drifting back into the telegraph profession, and for a number of years has been employed in our operating department. Mr. Mingle was of a lovable disposition and had many friends both inside and outside of telegraphic circles and he will be very much missed by all. He has been failing somewhat in health ever since the death of his daughter last summer, the well-known actress, Miss Belle Archer.

W. S. Metzler, of the night force, has resigned on account of ill health and has gone east to recuperate.

Mr. G. O. Heath, of the St. Louis bonus wire, is absent on account of severe illness.

Mr. A. E. Whitaker has accepted a position with the Publishers' Press at Lima, Ohio.

The veteran of the force, William Clum, has been absent for the last four weeks on account of illness.

Mr. Thomas J. Donovan has assumed charge of the 104 Hudson street office, but still looks after his other offices, 154 West street, 76 Park Place and 74 Cortlandt street.

WESTERN UNION.

Resigned: J. Gibbons, P. Collins, C. L. Hollywood, J. R. Shannon, A. J. Olsen, W. V. Hill, J. H. McMahon and G. W. Stevens.

Appointments: E. F. Dougherty, Commercial News Department; R. I. Courtenay, J. S. Patterson, J. H. Murphy, H. W. Pace, H. Fraser, J. A. Winter, J. C. Powers, P. J. Ryan, F. H. Gihuley, R. D. Dickinson, B. A. Metzger, J. M. Sapp.

Alfred E. Robinson, formerly of this office, and chronicled as a recent visitor, died on January 20 at North Sydney, C. B., where he has been employed in the cable service for the past twenty years.

On sick leave: Henry J. Dunn and James T. Collins.

H. W. Sauer is on a prolonged leave of absence.

J. T. McCormack, who has been ill, has returned.

W. N. Sperry, an old-time operator, now in charge of the Telephone Exchange at Waterbury, Conn., has the sympathy of his friends in the death of his wife which occurred at Derby, that State, on January 24.

The discussion in this office regarding the pension project continues and the desirability of calling a meeting of the employees for the purpose of considering the subject largely prevails.

Nominations for officers of the Telegraphers' Aid Society for the coming year will soon be in order, and the usual excitement may be looked for.

A beautiful specimen from the skilled hand of John L. Cassidy, the well known old-timer and artist, came through the post recently. The poetic superscription and the characteristic delineations on the envelope showed that the Minneapolis artist has not lost any of his brilliancy.

Mr. C. L. Hollywood of this force was recently appointed manager at Long Branch, N. J., to fill the position made vacant by the death of Manager Page.

Mr. Charles L. Chase, chief operator of the commercial news department, will be married on February 17 to Miss G. E. Connor, of Philadelphia. Miss Connor is also a member of the telegraphic profession. Congratulations and best wishes are extended to the happy couple.

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.

RENO, NEV., WESTERN UNION.

A Phonoplex system has been established between this point and Sacramento, Cala., for use during emergencies, in case of failure of wires across the Sierra Nevada mountains, frequently occasioned by snow. There is absolutely no snow on these mountains, at the present time, however, something almost without precedent.

On January 1, over the entire Pacific system of the Southern Pacific Railroad, the railroad com-

pany assumed charge of the maintenance and repairs of all Western Union and railroad wires, and the linemen were transferred to the railroad payroll.

All trouble is now reported by the Telegraph Company to the various Division Superintendents of the road, and they, in turn, notify the men to clear wires, etc.

LAKE CHARLES, LA., NOTES.


A. O. Boudreaux is manager of the Postal Telegraph-Cable Company; Miss Gussie Olsen, operator, and Walter Favorite and George Boudreaux, messengers.

J. C. Witt, the special Postal agent, and also manager of the Houston office, has paid all Postal offices along this line a visit.

At the Western Union Telegraph office the force is made up of J. A. Owens, manager; C. M. Laurendine, operator, and two messenger boys.

A. O. Boudreaux, Postal manager, and C. M. Laurendine, of the Western Union, are on the sick list.

PHILADELPHIA, PA.



My Motto—Honorable Dealing. To prove that my challenge on behalf of Mr. Emanuel in issue of AGE, Dec. 16th last, was not bluff or brazen I desire to state that I have deposited \$50.00 with the proprietor of this Journal as a forfeit to bind said challenge.

All make typewriters rented \$3.00 per month. Agent for Alexander Word Register. Special terms to members of O. R. T. D. A. Mahoney, Main Office, W. U. T. Co., Philadelphia.

The No. 6 FAY SHO the FASTEST and SIMPLEST of them all.

WESTERN UNION.

The fourteenth annual business meeting of the Electrical Aid Society of this city, which was held January 13, was the most successful from every point of view in the history of the organization. It was called to order by President Frank E. Maize who delivered an able address in which he reviewed the past and present condition of the society, the contrast showing steady gain both financially and numerically. He also predicted great things for the future, the success of which, however, did not rest entirely upon the president but on the active co-operation of every officer and member of the society. He referred feelingly to the death of five members during the past year. President Maize in closing his address, which was listened to very attentively, recommended that an entertainment, such as given last April and which proved such a success, be given at least once a year in order to bring the members closer together, thereby creating a permanent bond of good fellowship and sociability. The membership and financial statement is as follows: Number of members January 1, 1901, 320; number of members admitted since January 1, 1901, 70; re-

instated, 9; total, 390. Members suspended during year, 14; resigned, 2; deceased, 5; total, 21. Total net membership January 1, 1902, 378. Sick benefits paid during year, \$1,350; death benefits paid during year, \$250; total, \$1,600. Cash on hand December 31, 1900, \$2,290.92; cash on hand December 31, 1901, \$2,669.79.

Notwithstanding the unusually heavy sick and death benefits paid out during the year the cash on hand is \$378.87 greater than last year and the membership shows an increase of fifty-eight.

The following officers were elected for the ensuing year: Frank E. Maize, president; James H. Wilson, vice-president; W. E. Vanardsdall, recording secretary; J. E. Janney, financial secretary; H. W. Hetzel, treasurer; John A. Sisk, Miss Clara J. Grimley and J. W. Fitzpatrick trustees.

After adjournment the members enjoyed an excellent entertainment rendered by the Levensong Trio (Professor N. Rudy Heller, manager), composed of H. Wilson Levensong and Wesley N. Rohrer, mandolin, and H. Gerald Molson, guitar. The "Two Elsie's" (Miss Elsie Maize and Miss Elsie Densmore) gave several fine piano selections. Mr. Edward Morton favored the company with humorous songs, and after C. M. Christine sang the members repaired to the banquet room and partook of a sumptuous feast. The festivities lasted until after midnight.

J. H. McGrooty, who has been with us for a number of years, has resigned to accept a position with The Associated Press at Lancaster, Pa.

Robert Stokely, well known here, but now of New York, was called to this city owing to the critical and probably fatal illness of his grandfather, ex-Mayor William S. Stokely, who was recently stricken with paralysis.

POSTAL.

Absentees at branch offices have made a few changes necessary. Mr. H. T. Wright's place at the dry goods district office is being filled by Mr. Dowdell, from the Fifth and Market streets office, while Robert Sterling has been taken from

STATE OF OHIO, CITY OF TOLEDO, | ss.
LUCAS COUNTY,

FRANK J. CHENEY makes oath that he is senior partner of the firm of F. J. CHENEY & Co., doing business in the City of Toledo, County and State aforesaid, and that said firm will pay the sum of ONE HUNDRED DOLLARS for each and every case of CATARRH that cannot be cured by the use of HALL'S CATARRH CURE.

FRANK J. CHENEY.

Sworn to before me and subscribed in my presence, this 6th day of December, A. D., 1886.

[SEAL.]

A. W. GLEASON.

Notary Public.

Hall's Catarrh Cure is taken internally and acts directly on the blood and mucous surfaces of the system. Send for testimonials, free.

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

Sold by druggists, 75c.

Hall's Family Pills are the best.

the Pittsburg local to act as manager in the office just vacated by Mr. Dowdell. The continued illness of Mr. Pedrick, of the North Second street office, is keeping Mr. Benjamin Crawford at that place much longer than was originally anticipated. Mr. Crawford's position on the Wilmington local is being looked after by Mr. J. A. McKain.

Mr. W. V. Compton, an extra, and Miss M. C. Moran from Canada are new arrivals.

Recent visitors from New York were Manager Ruffer, of the Greenwich street office, accompanied by Mr. Pullum, who paid their respects to Manager Stump in the fish district.

By the application of the bonus system to the Pittsburg wire Mr. William Cornell is invited to work harder and increase his salary.

Mr. W. J. Murray has been filling in time for Mr. Mecredy at the Commercial Exchange office during the latter's detention at home consequent to a sprained ankle.

Important Postal Telegraph-Cable Changes.

It having been deemed advisable for geographical reasons to locate the headquarters of the Southern Division of the Postal Telegraph-Cable Company at Atlanta, Georgia, Mr. J. W. Kates has requested that he be relieved of his duties as General Superintendent, for the reason that he does not desire to remove his residence from Richmond, Va., and that the duties have become laborious and exacting owing to the large territory and the steady increase of the company's business in the division. The Executive Committee has complied with Mr. Kates' request. He will retain charge of the First District, Southern Division, as Superintendent, with headquarters at Richmond as heretofore.

Mr. Charles C. Adams, now Superintendent at Philadelphia, Pa., and the oldest superintendent in years of service in the company's employ, has been appointed General Superintendent of the Southern Division with headquarters at Atlanta, Georgia, to take effect March 1.

Mr. Leona Lemon, Superintendent at Pittsburg, Pa., will be transferred to Philadelphia on March 1.

Mr. E. Kimmey, now manager, has been appointed Superintendent at Pittsburg, Pa., to take effect March 1.

General Mention.

The cable steamer Mackay-Bennett was in New York harbor on January 14, repairing the harbor cable of the Commercial Cable Company.

Mr. George Stanfield, manager of the Western Union Telegraph office at Americus, Ga., for the past fifteen years, has resigned on account of poor health.

An exhibition plant of the Delany rapid automatic telegraph system has been installed at 20 Broad street, New York, where it is in daily operation for the benefit of those interested in this class of telegraphic work.

The apartments of Mr. Glendenin Eckert, the elder son of General Thomas T. Eckert, a resident at the Murray Hill Hotel, were completely demolished by the explosion.

The Commercial Pacific Cable Co. has issued a pamphlet of forty pages explaining its status on the Pacific cable question, which is occupying so much of the time of both branches of Congress.

Mr. J. T. Wood, a telegrapher of Johannesburg, South Africa, in a recent letter writes: "I always look forward with pleasure to the receipt of TELEGRAPH AGE, with its bright, newsy articles on things appertaining to our profession."

The Chicago Typewriter and Supply Company of Chicago, Ill., recently distributed among its friends a morocco vest pocket calendar, stamp holder, match scratcher, etc., which is one of the most useful presents that has come to our notice.

A bill has been introduced in the Ontario, Canada, House of Parliament, taxing railroad, telegraph and telephone property. It is proposed to follow a system that has been adopted by Connecticut, Indiana and some other States of the Union.

The revised tariff book of the Postal Telegraph-Cable Company, which has just been issued by Mr. Isaac Smith, superintendent of tariffs, makes up a work of four hundred pages of valuable information, tariffs and rules governing the management of the company.

Mr. J. H. Masden, one of Denver, Col., finest operators, has taken up his residence in New York city. The transfer was made necessary on account of the health of his wife. Mr. Masden joins the New York fraternity bringing with him the best wishes of his old colleagues at Denver.

Mr. Rufus R. Wade, chief of the Massachusetts district police, and an old time telegrapher, after twenty-four years' service in his present position, has declined a reappointment by the Governor of the State. Mr. Wade is well known to the older members of the telegraph profession, he being a member of the Old Time Telegraphers' and Historical Association.

Mr. George H. Imbrie, an Associated Press operator, of St. Joseph, Mo., who was examined lately upon an application for admission to the bar, was pronounced by Judge James, before whom the examination was conducted, as being one of the best posted applicants that he has ever examined. Mr. Imbrie was admitted to the bar upon the highest grade of any young man that has made application before the Buchanan County bar for years.

Mr. S. M. English, assistant general manager of the Postal Telegraph-Cable Company of Texas, at Dallas, Texas, who himself began his telegraph career as an operator, writes us that he is making an effort to interest the operators in the electrical end of their business with a view to preparing themselves for promotion by the establishment of

an electrical library in the Dallas, Texas, operating room. "It is my intention," he says, "to give the operators what I have gained by experience, providing they are sufficiently interested to ask for it."

Obituary.

W. O. Harris, with the Central Railroad of Georgia at Macon, Ga., died on January 16.

J. F. McKinley, operator for the Postal Telegraph-Cable Company, at Birmingham, Ala., died on January 13.

H. D. Bennett, president of the American District Telegraph Companies in Ohio and Pennsylvania, died at Columbus, O., on January 26.

Milo Pulcifer, manager of the Western Union Telegraph Company at Ann Arbor, Mich., for the past 33 years, died on January 9. He leaves a widow and four daughters.

Michael Sweeney, railroad operator at Sharon, Pa., after receiving his salary on January 27 was attacked by robbers, who murdered him and then set fire to his office to hide the evidence of their crime.

S. J. MacDonald, the assistant superintendent of the United States Pipe Line Company at Titusville, Pa., an expert telegrapher, was murdered in Buffalo, N. Y., on January 15. He was about 38 years of age and was well known throughout the oil regions.

William MacKenzie, a member of the Montreal, Que., Stock Exchange, a well known broker of that city, and formerly a telegraph operator, died in Montreal on January 21, in the 62d year of his age. As an operator he was employed by the Old Montreal Telegraph Company. It was Mr. MacKenzie who received the message at Montreal conveying the information that President Lincoln had been shot.

New York Visitors.

Mr. C. A. Stimpson, chief operator of the Postal Telegraph-Cable Company, Philadelphia, Pa.

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

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

Mr. Robert A. Millar, representative of the Crehore-Squier Intelligence Transmission Company of Tarrytown, N. Y.

Mr. Walter P. Phillips of the American Graphophone Company, Bridgeport, Conn., and former general manager of the late United Press.

Colonel J. J. Dickey, superintendent of the Western Union Telegraph Company, Omaha, Neb. Colonel Dickey was accompanied by his wife.

Subscribe to TELEGRAPH AGE, \$1.50 a year.

The Mistake Was One of Nature.

A woman's Morse is as feminine as her voice or her handwriting, writes L. C. Hall, of Norfolk, Va., in McClure's Magazine for January. I have often put to the test my ability to distinguish between the Morse of a man and that of a woman, and only once have I been deceived.

On this same Washington "circuit" I one day encountered a sender at the other end, a stranger, who for hours "roasted" me as I seldom had been in my telegraphic experience. The dots and dashes poured from the sounder in a bewildering torrent, and I had the hardest kind of work to keep up in copying. With all its fearful swiftness the Morse was clean-clipped and musical, though it had a harsh, staccato ring which indicated a lack of sentiment and feeling in the transmitter. From this and from a certain dash and swagger I gathered, before the day was out, a pretty distinct impression of the personality of the transmitter. I conceived him to be of a well-kept, aggressively clean appearance, with a shining red complexion and close-cropped hair; one, in brief, whose whole manner and make-up bespoke the self-satisfied sport. That he wore a diamond in his loudly striped shirt-front I considered extremely likely, and that he carried a toothpick between his lips was morally certain.

Next day I took occasion to make some enquiries of my fellow operator at Washington.

"Oh, you mean TY," he said, laughing. "Yes, for a girl, she is a fly sender."

It was mortifying to find that I had mistaken the sex of the sender, but I was consoled when I met the young woman. The high coloring was there, and the self-satisfied air; so also were the masculine ties, the man's vest and the striped shirt-front. Nor were the diamond pin and the toothpick wanting. When she introduced herself by her sign, called me "Cully," and said I was "a crack-a-jack receiver," I was convinced that it was nature, and not I, that had made the mistake as to here sex.

Rowland Multiplex Printing-Telegraph Patents.

In the issue of United States patents dated December 24th were three patents granted to the late Professor Henry A. Rowland, of Baltimore, Md. One of the patents, No. 689,415, is entitled "Electric Telegraph" and was applied for on March 11, 1901, shortly before Professor Rowland's death. It relates to an improvement in the art of telegraphy which consists in transmitting periodically varying electromotive forces having alternate impulses of opposite polarity and changing the polarity of the impulses to represent signals. Nos. 689,753 and 689,754 relate to "Multiplex Printing Telegraph" and a "Page-printing Machine" and cover the essential features of the Rowland telegraphic printer. The applications for these two patents were filed on July 26, 1897, and December 29, 1899, respectively. All of the patents are assigned to the Rowland Telegraphic Company of Baltimore.—Western Electrician.

The Metric System of Weights and Measures.

Two bills have been introduced within the last few weeks in the House of Representatives, for the adoption of the metric system of weights and measures in the United States. These bills have been referred to the Committee on Coinage, Weights and Measures. The bills are alike remarkable both for their brevity and for their comprehensiveness. Both propose (1) that after a certain date all the Government departments of the United States shall be required to employ the metric system of weights and measures exclusively in all departmental work, except in the survey of public lands; (2) that after a certain date the metric system of weights and measures shall be the legal standard of weights and measures in the United States. The only essential difference between the two bills is as regards the dates involved. One calls for the 1st of January, 1903, as the date of Government adoption, and the 1st of January, 1904, as the date of universal legalization. The other bill makes both these dates the 1st of July, 1902.

It is impossible to compare the barbarous and incoherent assortment of heterogeneous weights and measures in force in this country with the simple and connected system of metric weights and measures in force on the continent of Europe, without being impressed with the immense aggregate amount of unnecessary labor which is imposed upon the American people in learning to weigh, to measure, and to compare quantities; as well as the large amount of impediment that the existing ridiculous system introduces in the way of attaining all quantitative knowledge. Every reasonable person will admit the great advantage which the money decimal system of this country possesses over the money non-decimal system of Great Britain. The advantages of the metric system of measures over the non-metric system of measures is, however, still greater than that which exists in the case of moneys. It is a scandal that this country, in establishing good government in Cuba, Porto Rico and the Philippines, should be instrumental in so far subverting the cause of education as comes through replacing in those countries the pre-existing simple metric system by the ponderous system still existing here.—Electrical World and Engineer.

It took me some time to learn, but I did learn, that the supremely great managers, such as we have these days, never do any work themselves worth speaking about; their point is to make others work while they think. I applied this lesson in after life, so that business with me has never been a care.—Andrew Carnegie.

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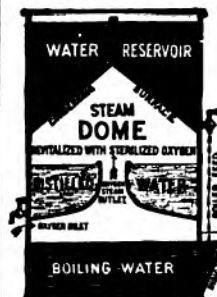
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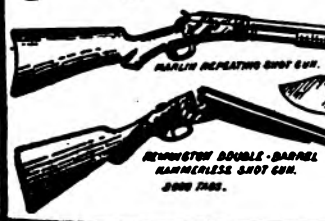
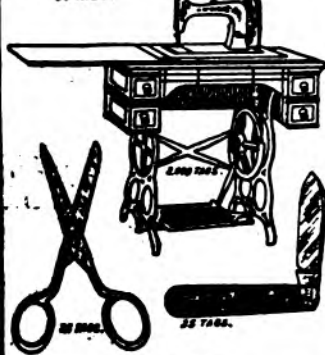
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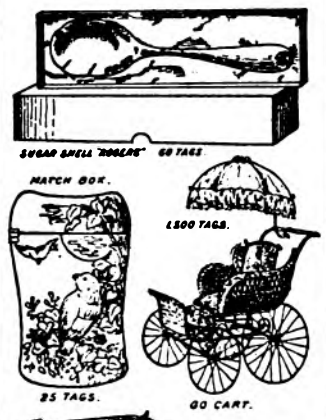
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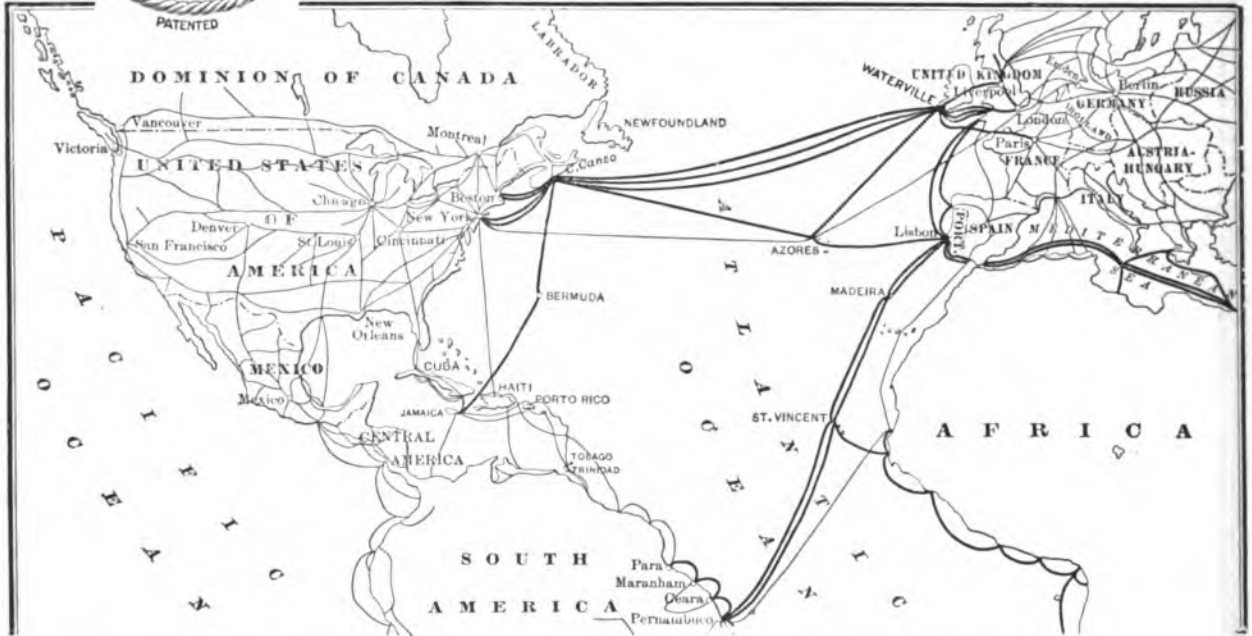


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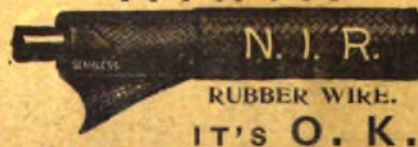


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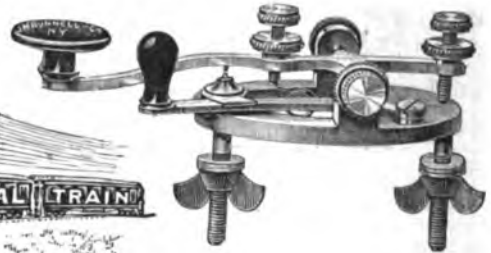
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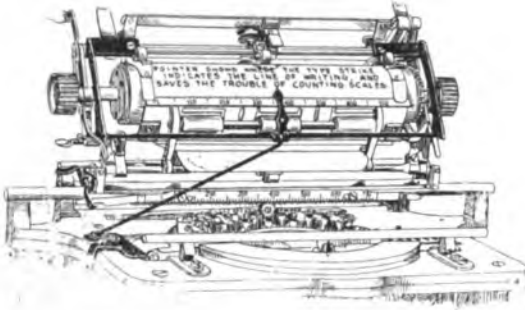
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Ft. Atkinson, Wis., July 18, '05.

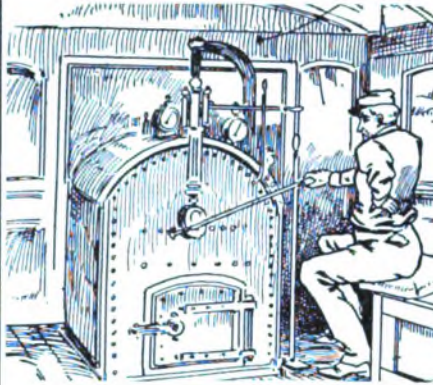
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Hempstead, Waller County, Texas, May 23,
Dear Sirs:—I am a passenger engineer on the H. & T. C. R. R. and have been for twenty years. I have suffered with Kidney and Liver trouble for fifteen years. Before I commenced to take your remedy I had to lay off, and was not able to turn in bed or get up in the morning, but since taking Kava-Kava have not suffered with my Kidneys or Rheumatism, nor have I lost a day. Before taking your medicine I made application to join insurance orders, but was rejected on account of kidney trouble, but six months after taking I was examined again and passed O. K.
CHAS. B. BRADY.

Mr. W. H. Doolittle, Jr., of Wellshoro, Pa., a rail road man, writes that his back and Kidneys became affected through constant jar of train, that his doctor found Albumen in his Urine, and said he had Bright's disease. Kava-Kava cured him, also cured his wife, and cured Mr. Archie McKinley, a section foreman, far gone with Bright's Disease and Dropsy.

Mr. H. W. Winchester, B. of L. E. Penn. R'y., Sunbury, Pa., permanently cured, after his case pronounced incurable by physicians; was troubled for years with Diabetes.

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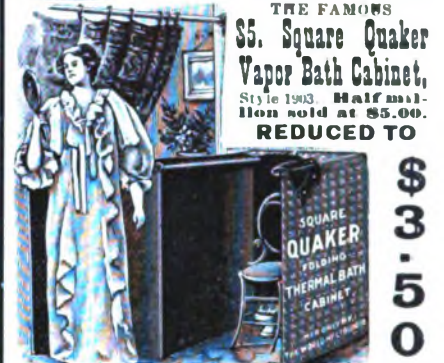
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THE TELEGRAPH AGE

No. 4.

NEW YORK, FEBRUARY, 16, 1902.

VOL. XIX.

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SOME POINTS ON ELECTRICITY.

The Equipment of a Modern Telegraph Office.

(Continued.)

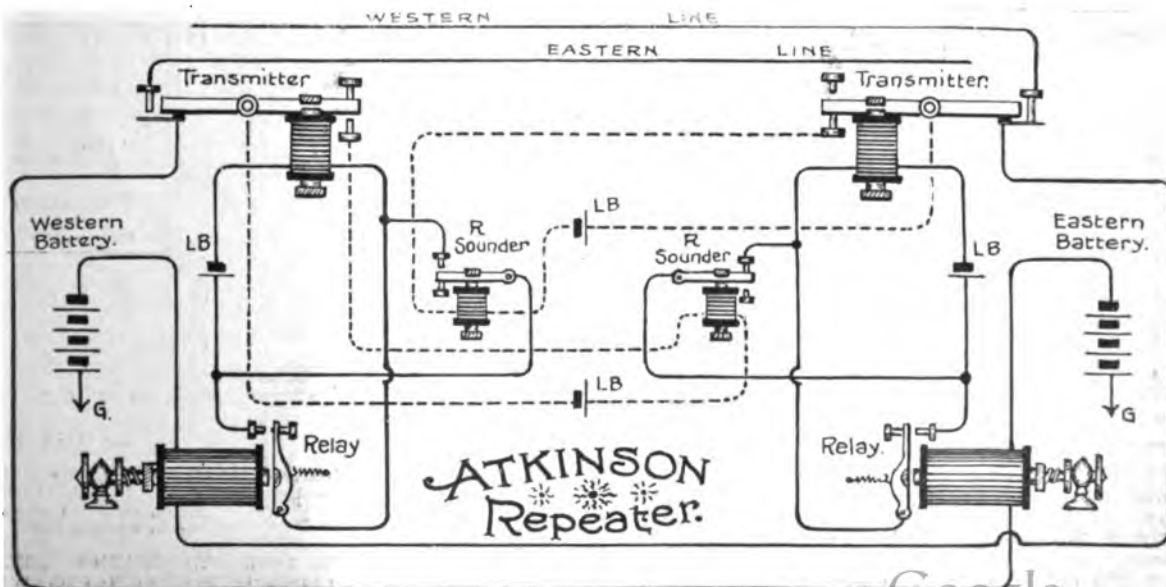
BY WILLIS H. JONES.

[In a few weeks hence this series, together with the most valuable of the articles appertaining to the duplex, the quadruplex, storage battery and other telegraph matters, which have appeared in

this journal during the past three years under the caption of "Some Points on Electricity," will be published, and the book substituted for "Pocket Editions of Diagrams," by Willis H. Jones. Those desiring a copy of the new book should send in their names at once.—Editor.]

THE ATKINSON REPEATER.

The first two accompanying diagrams show, respectively, the theoretical and actual connections of the Atkinson repeater, an arrangement which seems to give universal satisfaction wherever used. Any operator who can adjust an ordinary single line relay can handle this repeater, for that is practically all the attention the device requires after the points of the repeating sounder have once been nicely adjusted and fastened permanently in position. An inspection of the diagram will show that the contact points of each single-line relay control, simultaneously, one transmitter and one repeating sounder. In other words, those two instruments move in unison. The feature of the Atkinson repeater lies in taking advantage of the upward motion of the repeating sounder lever and thus securing a temporary path around the contact points of the relay to the transmitter coil. This end is attained by tapping the local circuit of the transmitter just beyond the contact points of the relay and connecting that point with the upper backstop of the repeating sounder. The extra path maintains the sending operator's circuit intact at the repeating station, except when the receiving operator on the other wire breaks. The moment the latter opens his

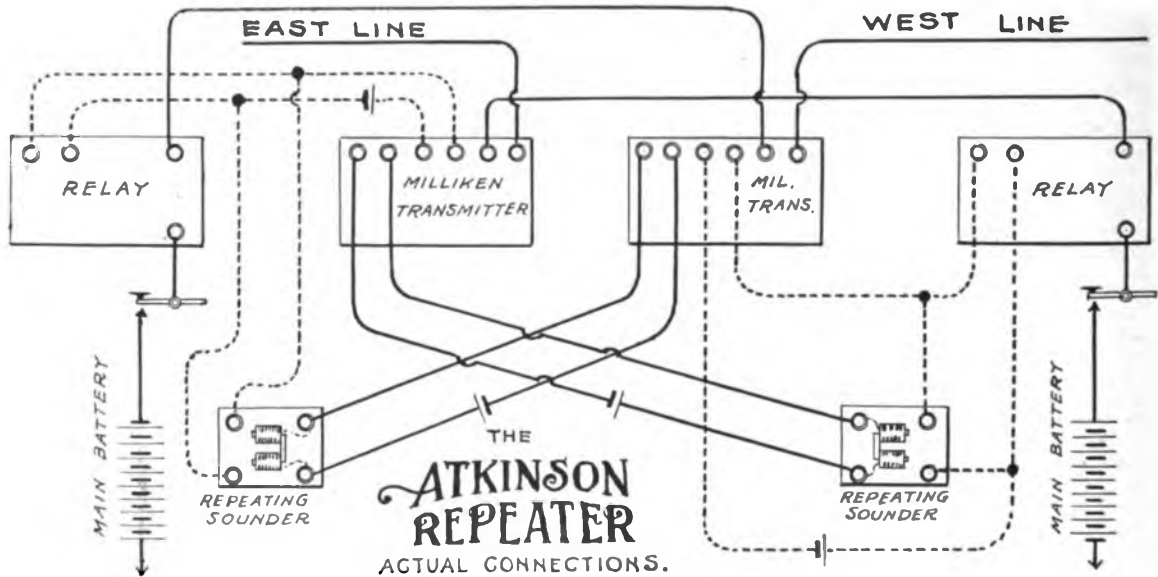


key the action of the contact points of the single-line relay which he controls at the repeating station immediately destroys the shunt route and causes the transmitter points to cut off the sender's battery. Thus by the interruptive and protective possibilities of the repeating sounder's le-

Half-Milliken, the Half-Weiny, the Half-Atkinson, etc., according to the type they represent.

THE HALF-MILLIKEN REPEATER.

The accompanying diagram, showing the theoretical connections of a Half-Milliken repeater, illustrates the principle upon which

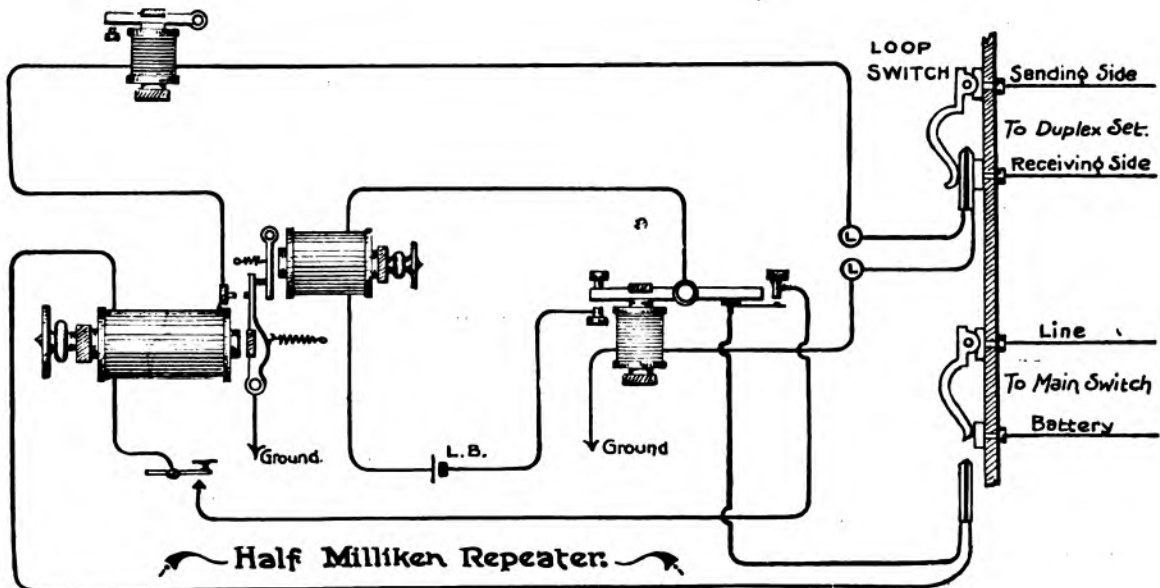


ver, practically direct communication is established over two separate circuits.

HALF REPEATERS.

When a single line and a duplex circuit are ex-

all "half" repeaters operate. The function of this repeater is very simple indeed. The local circuit of the multiplex apparatus containing the polechanger or the transmitter,



pected to repeat into each other, one-half of the apparatus of any of the previously described types of single-line repeaters, slightly modified, may be employed. In order to avoid confusion with the full set, however, they are called, respectively, the

as the case may be, is extended through the contact points of the single-line relay of the repeating apparatus, hence every signal that is made on the single wire is repeated into the multiplex circuit by means of the single-line relay lever, which

actuates the said polechanger or transmitter by the opening and closing of the local circuit at those points. The multiplex repeats into the single line as follows:

The magnet coils of the repeater's transmitter is in a local circuit controlled by the contact points of the multiplex receiving apparatus. The single wire traverses the contact points of the said transmitter, hence every incoming signal received on the multiplex relay is repeated into the single wire through the action of the transmitter contact points which open and close the single wire at that point. The usual means of maintaining the circuit intact through the repeater obtains here, as with repeaters already described.

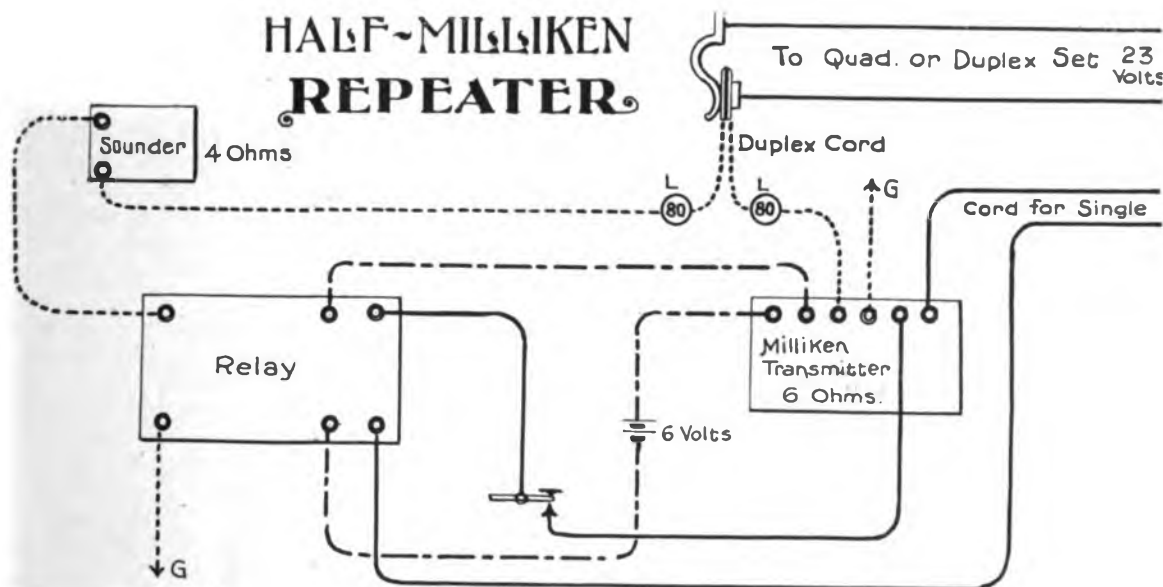
A 4-ohm sounder should be inserted in the sending leg of the local circuit in order that the attendant may hear how the signals are passing

finished their work of constructing a new main office at Savannah, Ga. The Western Union office at that point is now declared to be the most thoroughly up-to-date of any in the South.

Mr. C. L. Hallett, wire chief of the Canadian Pacific Telegraph Co., Fort William, Ont., has the sympathy of his friends in the death of both his father and mother, which occurred within the past three months.

The Printing Telegraph Company has been organized under the laws of the State of New Jersey to manufacture printing telegraph instruments. The incorporators are Henry G. Stephens, Benjamin Rosenthal and Herman Lewis.

Mr. Fred G. Mason, assignee of the late United Press, of New York, has obtained a judgment for \$36,631.46 for damages and costs, granted to the



through the relay points. The two flexible cords belonging to "half" repeaters should be of different color, in order to distinguish between the single and the multiplex sides of the apparatus. The usual order is, green for the multiplex and red for the single circuit.

(To be continued.)

General Mention.

It is reported that the French Minister of telegraph has recommended the purchase of Rowland's printing telegraph system for use in France.

The Roberson quadruplex system will shortly be installed by the Western Union Telegraph Company between New York and Washington, New York and Boston and Chicago and Memphis.

Mr. J. W. Brown, manager of the Western Union Telegraph Co., at Augusta, Ga., assisted by Mr. S. R. Crowder, of Richmond, Va., have

United Press by the Supreme Court after a trial against the Baltimore American for breach of contract.

The public is worrying over the question of entertaining Prince Henry of Germany when he arrives in America. The telegraph profession is also pondering as to what the Prince ought to "sign" while grinding out telegraph copy in this country. A Phillips code authority proposes to have "Pxy" stand for Prince Henry.

Obituary Notes.

John Gannon, an operator of Gray's Ferry, Pa., was killed by a train February 7.

James Milliken, aged 77 years, a former director of the Western Union Telegraph Company, died in New York, on February 4.

John M. Edwards, formerly of the Pittsburg, Pa., Western Union office, and who went to Redlands, Cal., about a year ago for his health, died

at that place on February 2. He was about 35 years of age, and leaves a wife and son.

Miss Charlens Dunham, eldest daughter of C. B. Dunham, manager of the Western Union cable station at Canso, Nova Scotia, died on January 18. In December last Mr. Dunham lost a son, and this second bereavement has caused many expressions of sympathy to be tendered to him.

Edward M. Pierson, the father of Henry G. Pierson, of the electrical firm of Foote, Pierson & Co., died at his home in Newark, N. J., on January 8. Mr. Pierson was one of the pioneers in the electrical field, particularly in the manufacture of telegraph and telephone apparatus. He entered the service of the Western Union Telegraph Company in 1863 at Cleveland, O., remaining with them two or three years, when he came to New York at the request of the late Mr. L. G. Tillottson to organize the manufacturing department of that well known concern, L. G. Tillottson & Co. He was associated with this concern and its successors, E. S. Greeley & Co., up to 1894, at which time owing to ill health he was compelled to give up active business.

David McCargo a forty-niner of the telegraph, for many years past general superintendent of the Allegheny Valley Railroad, at Pittsburg, Pa., died at Atlantic City, N. J., where he was sojourning for the benefit of his health, having been an invalid for several years. The death of Mr. McCargo removes another of the old time telegraphers who began as messenger boys and graduated from the key to a railroad position, finally reaching the top notch. When 14 years old he became a messenger boy for the Atlantic and Ohio Telegraph Company, having for co-workers Andrew Carnegie and Robert Pitcairn. Three years later he was working a key for the company. Mr. McCargo in 1858 was appointed superintendent of telegraph of the Pennsylvania Railroad with headquarters at Altoona. Shortly after the breaking out of the Civil War he organized a corps of telegraphers for military duty and sent them to Washington. In 1864 Mr. McCargo became assistant superintendent of the Pittsburg division of the Pennsylvania Railroad.

Personal Mention.

Mr. S. Fenn has been appointed superintendent of the Direct United States Cable Company, at Halifax, N. S., filling the vacancy caused by the death of Charles W. Lundy.

Mr. Francis W. Jones, of the electrical engineer's department of the Postal Telegraph-Cable Company, New York, has returned from a Western and Southern business trip.

Mr. George L. Lang, superintendent of telegraph of the Queen-Crescent route, with headquarters at Lexington, Ky., has had his jurisdiction extended to include the Alabama & Great Southern Railroad, which extends from Chattanooga, Tenn., to Meridian, Miss., a distance of

three hundred miles. Mr. Lang's headquarters will hereafter be at Chattanooga, Tenn.

Mr. Jacob Greatsinger, the president of the Brooklyn Rapid Transit Railroad Company, which controls all the trolley lines and elevated railroad systems of the City of Churches, is an old operator.

Mr. A. M. Schoyer for many years superintendent of the Pennsylvania Railroad at Altoona, Pa., has been promoted to be general superintendent of the Northwestern division of that road with headquarters at Pittsburg, Pa.

Mr. Garritt Smith, of the electrical engineers office of the Western Union Telegraph Company, New York, who has been confined to his home by blood poisoning for several weeks past, is now reported to be almost entirely well.

Mr. A. B. Taylor, superintendent of telegraph of the West Shore Railroad for the past four years, has in addition to his present duties been appointed superintendent of telegraph of the New York Central and Hudson River Railroad system.

Mr. E. B. Baker, of New Haven, an old time telegrapher, and for many years past general superintendent of the Southern New England Telephone Company, who has resigned his position to take effect May 1, was given a dinner by associates and friends at Hartford, Conn., on January 31.

Mr. James Cochrane, a prominent member of the telegraph profession in Canada, was recently elected Mayor of Montreal, Que. Mr. Cochrane is 51 years of age and began his career as an operator in the Montreal Telegraph Company, with which company he remained for many years. His subsequent record has been a successful one. He is also a member of the Quebec Legislature Assembly. Mr. Cochrane took a prominent part in the entertainment of the Old Time Telegraphers in Montreal last September. All of his American friends feel rejoiced at his election and heartily congratulate him.

Atlanta Telegraph Tournament.

The telegraphers of Atlanta, Ga., have decided that the tournament which they are arranging for March 1 shall be national in scope, instead of being limited to the country south of the Ohio River. The President of the United States has been asked to furnish the subject matter for the contest. This will require a composition of nearly 350 words, as it is the intention to have the test continue for five minutes. The prizes, so far decided upon, will be a gold medal and \$50 cash to the winner; \$35 as a second prize and \$15 to the third best man. The contest will include prizes for the correct and rapid handling of messages, both by pen and typewriter, the transmission of press news in full and by Phillips code and a prize for the lady operator handling the most messages. It will be open to railroad operators as well as those engaged in commercial and press work and it is expected that the entry list will be a large one.

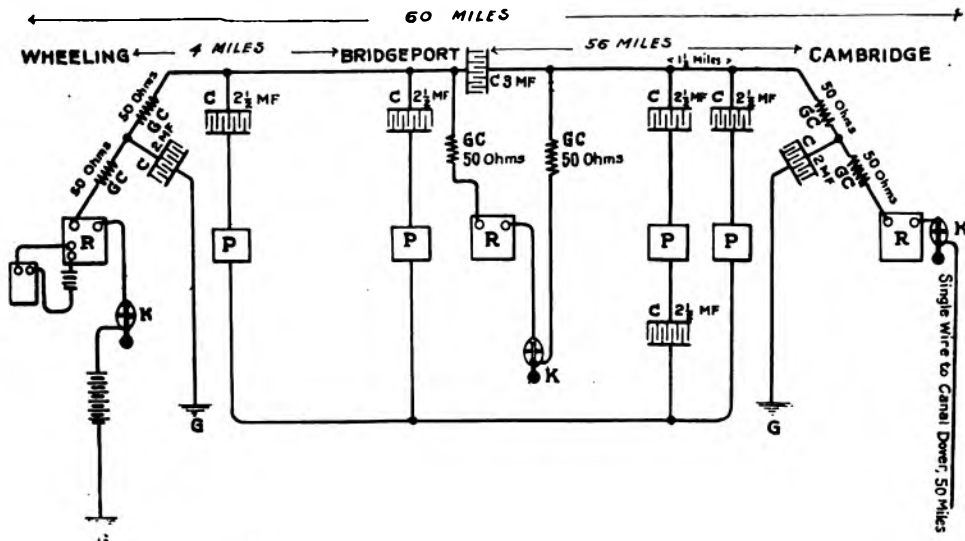
Simultaneous Telegraphy and Telephony.

The accompanying diagram represents a unique arrangement of a metallic telephone circuit now in operation by the American Tin Plate Company between Wheeling, W. Va., and Cambridge, Ohio, with telephones at Wheeling, Bridgeport and Cambridge. Bridgeport is four miles from Wheeling and Cambridge is 56 miles from Bridgeport. This arrangement is very much like that of the Van Reysselberghe system in principle, except for the intermediate stations, and has thus far given general satisfaction. At the intermediate station, Bridgeport, a 50-ohm coil is placed on each side of the Morse relay, as shown in the cut, and a condenser bridged across the circuit. These accessories seem to eliminate all foreign noises from the telephone, such as those arising from the clicking of instruments in

Brazil's Telegraphs.

In response to several inquiries for information, Thomas C. Dawson, secretary of the United States Legation in Brazil, has forwarded to the State Department an interesting report on the government ownership of telegraphs in that country. With the exception of the cables along the coast and a few lines owned by railroads between points not served by the federal lines the entire telegraph system of Brazil is owned by the government. The first line was established in 1861, and from that year until the republic succeeded the empire in 1889, the service was extended over 6,538 miles. Under the republic this has been increased to 12,769 miles, besides 25,318 miles of conductors.

The rates charged are high, amounting in 1899, the last year for which there are available statis-



K, KEY. R, RELAY. P, PHONE. C, CONDENSER. G, GROUND. G C, GRADUATING COILS.

the Morse circuit, while at the same time they do not prevent the operating of the magneto telephone call bells in the least.

This arrangement gives practically two circuits between the stations mentioned, one Morse and the other telephone.

From Cambridge there is a single wire extending to Canal Dover, Ohio, 50 miles distant. A gravity battery of 60 cells at Canal Dover and one of 60 cells at Wheeling gives the required voltage for working the circuit successfully.

The success of this system of simultaneous telegraphy and telephony is due to the personal investigation of the subject by Mr. Charles C. Duvall, of New York, superintendent of telegraph of this company's system, assisted by Mr. E. W. Campbell manager of their interests in Pittsburg, Pa.

No pain, no palm; no thorns, no thrones; no gall, no glory; no cross, no crown.—William Penn.

tics, to an average of 4.4 cents a word. Two years earlier, when the rate was just half that amount, nearly ten million more words were sent over the wires and the revenues were much increased. The experience of the Brazilian Government during a series of years has been that the lower the rates the greater the traffic, and the amount of revenue produced. The annual deficit has been from six to seven per cent. of the operating expenses.

"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 Carnegie Pension Fund Proposition.

Editor TELEGRAPH AGE:

Out of the great abundance of material that you have published on the subject, some practical solution of the pension problem should be—and probably will be—evolved. In the hope of contributing something to that end permit me to offer a few suggestions.

In the first place, the records show that various pension schemes have been put in operation by manufacturers and corporations and by other extensive employers of skilled and unskilled labor during the last twenty years, all of which schemes have shown a serious, if not vital, defect. That defect, to put it as concisely as possible, has been a lack of national scope. This can be illustrated simply.

A railway company in Massachusetts, it may be assumed, has adopted a pension system, under the operation of which all employees who have been in its service twenty, twenty-five or thirty years, continuously, may be retired upon a pension of fifty, seventy-five or one hundred per cent respectively of the wages received at the time of retirement. This seems to be an excellent proposition, but suppose an employee who has served the company for fifteen, eighteen or twenty years, finds it desirable to transfer his services to another corporation in some other part of the country, is it not apparent that he must sacrifice all the advantage he has gained, so far as the pension is concerned?

If, however, a similar pension plan was in operation on all other railways, his certificate of record from the original company would give him his proper standing in the corporation to which he transferred his services.

Following out this line, but without attempting to go into minute details at this time, it seems to me that it would be possible to form a national organization for the pension of telegraphers whose economic efficiency has become impaired by age, by incurable disease or by accident. This organization should be composed of all employers of operators—railroads, commercial companies, news associations, pipe lines and brokers. The brokers are included because the telegraphers employed by them would thus get the benefit of a record of tenure of service which would be applied to their standing as to the pension should they join some other branch of the work.

As to the operation of such an organization, it is not to be supposed that each railroad corporation commercial company, news association, pipe line or firm of brokers could be represented on a general board of governors or managers of the pension fund. Such a board would be unwieldy and therefore impracticable, but each of the corporations or firms could subscribe to an agreement to abide by the terms of any plan that might be adopted by a convention of representatives chosen by the leading corporations and their employees.

It is evident, I think, that a mutual system would be the only one feasible. Each operator

should contribute something from his monthly earnings to the fund, and the employers should add thereto such an amount as might be considered a fair proportion. Then, if Mr. Carnegie or any other philanthropist desired to augment the fund, such contributions would serve to increase and insure substantiability.

The operation of such a system as has been suggested need not be so very complicated. Each corporation employing telegraphers would keep, of course, a complete record of the service of each operator. As a matter of fact that is done at the present time. Thus, when an operator left the service of one employer to enter that of another, he would carry with him a certificate signed by the manager or chief operator, or both.

Some one better qualified than I may suggest the manner in which the national board should be formed. It is purely a matter of detail.

Cincinnati, O., Feb. 1.

I. V. C. J.

Editor TELEGRAPH AGE:

I have read with considerable interest the various ideas that have been advanced relative to a pension fund, but fail to note any practical solution of the problem. The nearest to the desired end was that described by "Justice" in your issue of January 16, but I do not understand that he advances that as a plan for the telegraphers. In the case of the Baltimore & Ohio Railroad, and other railway lines that have the pension system, it was a matter of compulsion brought about by the numerous suits for damages instituted by the employees who were injured in the company's service. There is no ground for compulsion in telegraph circles, and I believe that if the fraternity would get together, some good would come from it. I would suggest that a society to be called "The Telegraphers Pension Association" be inaugurated, and that each member thereof shall pay fifty cents, or a dollar per month, one-half each pay day. This money to be forwarded to some central point for investment, and to be drawn against when a case of retirement presents itself. I would fix the pension at \$50 per month regardless of what the pensioner's salary was while on the rolls of the company. This sum seems small to the average telegrapher of to-day, but when he arrives at that age when he must leave the service, I am thinking that he will be satisfied with the "half loaf of bread." I would, also, make it very clear in the laws of the association, that none but men of good standing in the company's service should be accepted for membership. Too many are given to carouse and drink, and their earnings are soon scattered. Old age comes quick enough without being hastened by habitual drinking and carousing. Furthermore, should a member of the association become incapacitated for his occupation by accident he is not to look to the association for relief. In other words, the association is clearly for the benefit of employees who have, from age, become incapacitated for further duty.

I believe the telegraph companies would unite with the telegraphers in this laudable purpose in more ways than one. Their managers could act as agents for the collection and forwarding the money to some central point (New York, presumably), where it could be placed at interest for the benefit of the association. Mr. Carnegie could then have no objections to assist a good cause. If he wished to assist there should be no objections raised on the part of the fraternity.

As TELEGRAPH AGE has a wide circulation, I would suggest the practicability of its getting up a paper embodying the essential points herein given, and submit it to the fraternity for its views and adoption. After its adoption the plan of forming and officering the association can be worked out. The idea now is to get the matter before the fraternity in some tangible shape. I believe the laws of New York are rather peculiar in regard to associations and for that reason suggest the officering. The monthly receipts and disbursements of the association could be published in TELEGRAPH AGE and "Journal of Telegraph," so that every member could keep well informed of its doings.

As to the ladies, I do not mean to ignore them in this provision. They, too, are to be asked to join hands in this.

A. CARY.

Cincinnati, O., Feb. 8.

McKinley Memorial Fund.

Mr. George E. Hawkins, manager of the Postal Telegraph-Cable Co., Canton, Ohio, has issued the following circular, which is being distributed among the telegraph profession:

"I take pride in announcing to my brother and sister telegraphers, that I have been appointed by the McKinley National Memorial Association as a committee of one to solicit funds from my fellow workmen, for the noble purpose of helping to build and maintain a monument over the grave of our martyred President, who so dearly loved the working man and woman. As such committee, I hereby ask that you will solicit a contribution of fifty cents from each of the employes of your office and send the same in with your own and the enclosed blank. I am sure every telegrapher now working in America will be glad to do this much toward this great enterprise, and if I am able to have their subscriptions go to the association through this office, as one contribution from our craft, it will make a showing of which we will all be proud. In due time each contributor will receive a souvenir certifying that the holder was a contributor to the McKinley monument fund."

Opposes Federal Telegraph.

Ex-Postmaster-General Wilson S. Bissell in an address at Lockport, N. Y., on January 25, roundly scored the plan for the Government ownership of the telegraph. He said there are many reasons why the Government should not own the wire. The expense of management, he said, would be

enormously increased, because it would hardly be any time before the telegraph service would be extended to every little hamlet in the country. Every Congressman would want every corner of his district connected up by wire with the whole world. It would also throw into the employ of the Government many thousand more skilled workmen, which he said the Government should steer clear of. Mr. Bissell said that the Government made a great mistake by beginning rural free delivery, as the expense will far exceed the estimates and the service will isolate the farmers by cutting them off from social intercourse with their fellow-men at the country store and post-offices. "What we want is postal savings banks, and not postal telegraph and rural delivery," Mr. Bissell declared.

Denver's Chinese Telegraph Operator.

The Western Union Telegraph Company has added a new operator to its force in Denver, Colo., the 74th operator required to keep that city in touch with the outside world. The new operator is Louie Hong, a Chinaman, employed a few weeks ago as janitor. Like messenger boys and others who work continually around the clicking little instruments the sounds soon became familiar to Hong and he soon was able to form the dots and dashes into words. Hong has attended Sunday school in Denver until he has learned the English alphabet and can read small words without much more effort than a small boy who has passed from his spelling book to his first reader. The other evening while Louie was dusting off a table he turned to an idle operator and said:

"Why don't you answer Klokomo. He got rush message. Wants send bad." And sure enough Kokomo was "calling" Denver "with both feet," as the operators put it when one office has to exert itself a little to "raise" another.

A few minutes later Hong was dusting off the dynamo and accidentally touched the business end of a 400-volt machine. After "Farmer" Lawton had picked his limp form up from the floor and dashed a few buckets of water into his face to bring back the color he asked Hong if he were trying to read what the dynamo said too. But all Louie said was "Helle, damee dameno, damee telmgraph, him not callee Denber, me through him asleep."

Our esteemed contemporary, "The Katipo," a telegraph journal published at Dunedin, New Zealand, has the following:

"Welcome rams are falling throughout Australia" isn't bad as a slip for "Welcome rains," etc., but "Box perch £7 Ford" for "Box per Chelmsford" beats it.

Our readers will note that the operators of America are not the only persons in the world who can distort the English language when the opportunity is given them.

The Standard Telephone Company.

A recent visitor to the Standard Telephone and Electric Company, of Madison, Wis., who was shown through the factory, saw in different stages of completion the manufacture of switchboards of various sizes and kinds, and large numbers of telephones of the latest types and designs intended for use of independent exchanges, toll-lines, railroads and farmers' lines. To those interested in electrical appliances and especially telephone apparatus, a visit of that kind is highly instructive.

The Standard was one of the earliest independent manufacturing companies in the United States to enter the field, in competition with the Bell Company, and furnish telephone apparatus to the independents, and with years of experience and with much experiment in telephone manufacturing, its apparatus to-day stands foremost in line with other competing companies, and is used in every section of the United States. Switchboards made by the Standard Company are considered mechanically and electrically as near perfect as skilled labor and selected material can produce. They are simple in construction, have no complicated parts, and are positive and quick in operation. Standard telephones have a world-wide reputation for their efficiency and many good points of excellence, nearly half a million now being in use. Each instrument is equipped with the celebrated Milde transmitter, one of a very few upon the market giving a perfect service. This transmitter is considered by experts and telephone users to be one of the best in use. It never "packs" or "falls down," always giving a uniformly good service, and for volume of voice transmission and good lasting qualities it has no superior.

Starting from a small beginning the Standard has increased its output of apparatus each year until it now enjoys having one of the largest lists of telephone customers in the United States. This is largely due to the increase of farmers' lines in all sections of the country, together with the organization of many new independent telephone and toll-line companies. Our readers will find this an excellent company to deal with and a written request for an illustrated poster of switchboards, telephones and parts will be mailed by the Standard Company to any part of the country.

Mental Telepathy.

There are many intellectual persons who possess no firmer conviction than their belief that the time is coming when mental telepathy will be so far perfected that the thoughts of one's fellow man can be read as the brain conceives them. It is probable that the consummation of this must be long delayed, says an exchange, yet should it happen the effect will be revolutionary and the very character of human life would be subverted in its very fundamentals.

When one's motives and most secret thoughts are evident to the intelligence of others the stand-

ard of morals and the purity of intention will rise exceedingly. The hypocrite will receive his due execration, while crime of many sorts will be almost impossible of execution. In fact, conditions would parallel the Biblical expression of seeing clearly, and "not as now, through a glass darkly."

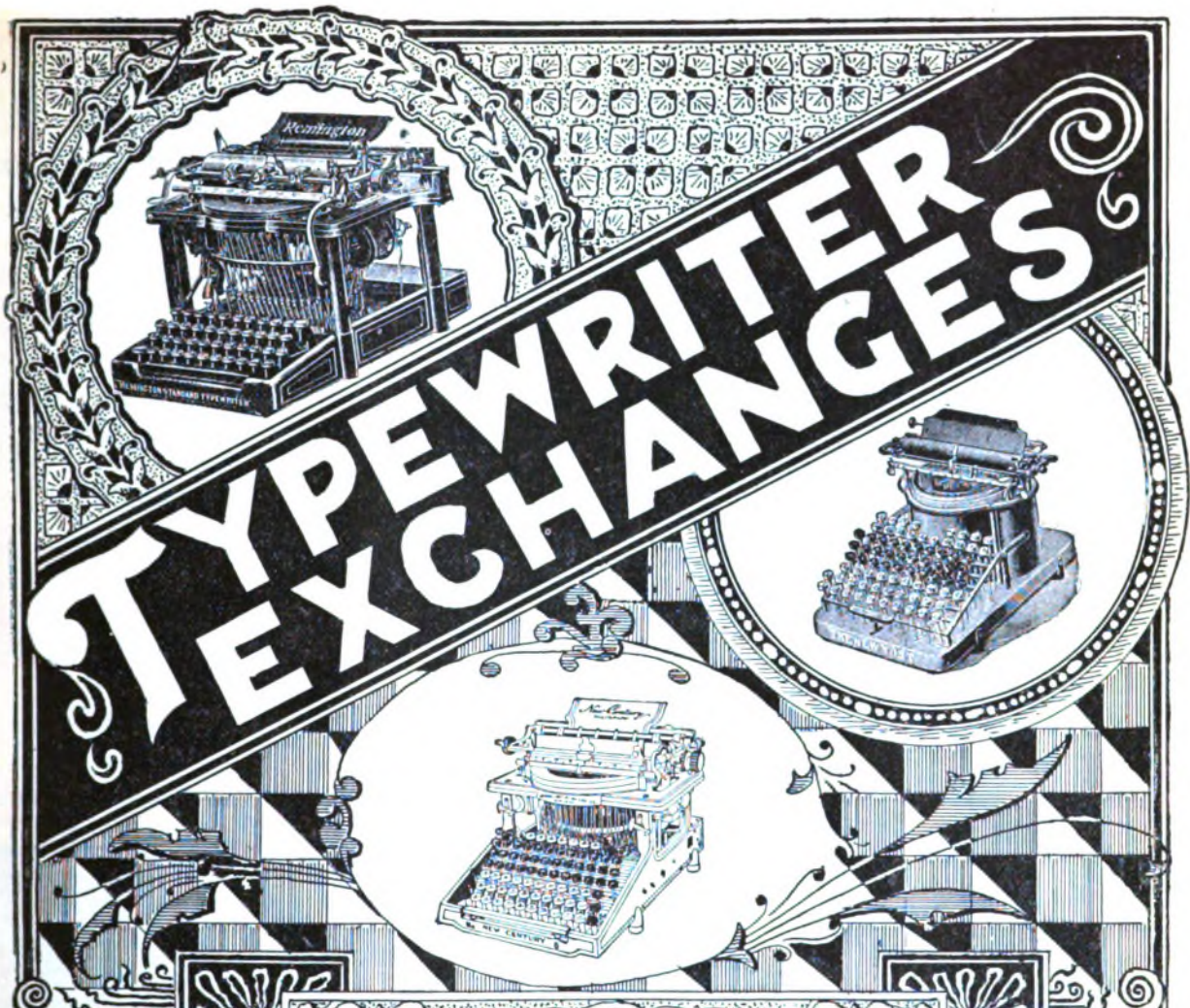

This is, perhaps, merely misplaced speculation concerning the effects of an event difficult of attainment and undoubtedly far distant of realization. Yet a scrutiny of what is claimed by legitimate students of psychology will reveal that much is being accomplished by hard work and deep thinking.

Thought-reading is no longer an occult art that smacks of fire and brimstone. It is a recognized science in the minds of various universities, and there is nothing in human knowledge that puts an impassable barrier between two human brains.



It is an accomplishment but little more elusive than material telegraphy was one short hundred years since, and in view of the quality of the brains now being devoted to its development it is an achievement that is possible. Then, when one considers the purifying influence it will have on human life and the almost divine simplicity and frankness needed to measure up to the requirements of such a condition, it looms broadly up as a consummation earnestly to be desired.

The Symbols "I" and "C."

The announcement made last month in this column concerning the adoption of *I* instead of *C* to represent current strength having called forth a number of inquiries concerning the origin of this use of the symbol *I*, it is thought that there may be many readers who may desire that information and yet feel diffident about requesting it. We therefore give it here. The International Electrical Congress held at Chicago in 1893 recognizing the desirability of uniformity in the use of electrical symbols throughout the scientific world, undertook the task of providing a code of symbols that would be most generally acceptable in all countries. Upon careful consideration of the subject it became evident that the two symbols, *I* and *C*, had been so generally employed to represent, respectively, current and capacity, by scientists and pioneer investigators as to render it inadvisable to recommend any change in them. They had been used in much of the fundamental and permanently valuable literature extant, and it was considered impracticable to disregard the usage there observed, notwithstanding the very widespread use of *C* and *K* by other writers. The use of *I* was derived naturally from the word "intensity" (French, *intensité*; German, *intensität*), which had been employed by many eminent scientific writers from Ampere's time down to the prescription of *C* as the symbol for capacity (French, *capacité*; German, *capazität*), is obvious.—American Electrician, for January.

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NEW YORK, February 16, 1902.

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

The Successful Man.

When things go hard with you, says a writer in "Success"; when everything seems to go against you; when you are thwarted on every side; when the sky is dark and you can see no light, that is just the time to exhibit your mettle, to show what you are made of. If there is anything in you, adversity will bring it to light. What a man does in spite of circumstances, rather than because of them, the measure of his success ability.

The successful man, he who brings things to pass, grows stronger and more determined when the way looks darkest. Instead of becoming discouraged as the obstacles which bar his progress grow more and more formidable, he arouses himself like a lion to meet, and finally overcome them. He does not waste his energies and time in trying

to evade or go around obstructions; he plows his way through them.

When you have a disagreeable, perplexing thing to do, don't put off the doing. Anticipation will clothe it with new difficulties, and fear of what, after all, may be more imaginary than real, will steal from you your peace of mind, and perhaps destroy your strength and ability to do the thing required. Prompt, vigorous action robs a dreaded task of half its terrors. Grasp the nettle firmly and quickly if you would avoid its sting.

The writer knows a man who makes every hard, disagreeable experience a stepping-stone to something higher. When he finds himself in a particularly difficult place, and hardly knows how to take the next step, he musters up all the energy within him, and resolves to make the obstacle a round in the ladder by which he ascends. By adhering to this rule under all circumstances, he has built

When you get up in the morning feeling "blue" and discouraged because disagreeable things confront you, make up your mind firmly, that come what may, you will make that particular day a "red-letter" day in your life. Then, instead of a probable failure, and the loss of a day, you will, at least, accomplish infinitely more than you would if you had given way to a depressing mood.

It will do you a great deal more good to do everything you touch just as well as it can be done, to a complete finish, when you do not like it, than to accomplish the same thing when you are at your best and feel like working, because in the former case you are disciplining yourself in a way that will surely make a strong character. The man who works only when he feels like it, and has no power to compel himself to do a thing when he is averse to do it, will never get very high up in the world.

Be your own taskmaker. When you do not like to work, provided your health is good and there is no reason why you should not, put yourself under special training, and perform your duty, your appointed task, faithfully—as well as it can be done. If you have been in the habit of half doing things, of putting everything off until the last moment, resolve now, from this hour, that you will compel yourself to do whatever you undertake promptly and efficiently.

Training under pressure is the finest discipline in the world. You know what is right and what you ought to do, even when you do not feel like doing it. That is the time to get a firm grip of yourself, to hold yourself steadily to the task, no matter how disagreeable or difficult it may be. Keep up this rigid discipline day after day and week after week, and you will soon learn the art of arts—perfect self-mastery.

No rule that a man can adopt will bring greater reward than this, to abstain from the use of alcohol as a beverage. A drinking man has no place in the railway or telegraph systems. Indeed, he should have no place anywhere.—Andrew Carnegie.

Telegraphy of Olden Times.

Marconi's wireless telegraphy had its forerunner long before the Christian era dawned for the peoples of ancient times had ways of communicating intelligence to a distant—not electric telegraphs, it is true, but wireless nevertheless. Polybius the Greek historian, describes a telegraph system employed for military purposes, 300 B. C., in which torches were placed on high walls in prearranged positions to correspond to letters of the Greek alphabet, and by a suitable manipulation of the torches messages were thus transmitted to a distance. The Gauls, too, were wont to transmit important intelligence to a distance by a cruder but simpler method. A messenger was sent to the top of a hill, where he shouted his message, apparently to the winds. Soon from afar a remote voice answered him, and this voice repeated the message to another listener further on, and thus, from one to another, a message sped, and it is recorded that in three days a message calling all the tribes of the Gauls to arms traveled in this way from Auvergne to the forests of Amorica in one direction and to the banks of the Rhine in another.

Later on came another wireless telegraph system—the semaphore telegraph—and this was in operation all over Europe prior to and for some time after the introduction of the electric telegraph. This semaphore telegraph employed arms on posts akin to those seen to-day along every railway in the world, and a certain position of the arms, like the torches in the Polybius system, corresponded to certain letters of the alphabet, and by varying the position of the arms as required experts were able to transmit messages from one station to the other at the rate of two or three words per minute. The towers on the top of which the semaphores were erected were often fifty to sixty feet high and were placed on eminences about six or eight miles apart. In Russia alone there was a string of these towers from the Prussian frontier to St. Petersburg.

Marvellous Telephone Growth.

There are some extremely interesting figures in the report recently issued by the American Telephone & Telegraph Company, showing as they do the wonderful growth of the telephone service in the United States. In a quarter of a century this service has grown from small and not too cordially encouraged beginnings to 1,952,412 instruments in actual use and controlled by but one company to-day. Outside of this company, data concerning the business of independent concerns indicate that there are slightly over 700,000 telephones in use by their subscribers, so that the total number of instruments by means of which we Americans talk to one another reaches the extraordinary proportions approximating nearly 2,675,000. The wire mileage required for the operation of these instruments at the beginning of 1901 was 2,000,000 miles. It has been a marvellous growth.

A Plea for Postal Telegraphy.

Editor TELEGRAPH AGE:

In your issue of January 16 appears an article under the title of "Congressman Jackson's Ideas," discussing the question of Government control of the telegraphs. This is such an important subject, and a matter of such deep interest to the telegraphic profession, that I think it should be thoroughly discussed and considered by the operators at large. Permit me, therefore, to make a few observations. In the item mentioned, you say: "The profit now on a message is less than one cent after all expenses are paid." The Western Union's annual report for the year ending 1901 shows 65,657,049 messages handled and profits (including leased lines, etc.) of \$6,685,248.17, or a profit of over ten cents for each message transmitted. This is, of course, without making any allowance for interest on money invested, the figuring up of which is a difficult matter. But, take the capital stock, bonded debt and surplus account at \$120,000,000. Suppose the Government had the same receipts and borrowed this much money at 2½ per cent., which would mean \$3,000,000 for interest, there would still be left profits of \$3,700,000, or almost six cents on each message handled. Should not the business, then, stand a reduction to this extent and still pay expenses? Looking at the question from purely the operators' point of view, would not Government control be better for us in every way? It would certainly increase the demand for operators, which would mean higher salaries and more officials (chiefs, etc.). In comparing ours with the British telegraphs, due allowance must, of course, be made for the greater distances in the United States, but is not the English operators' position far, far, in advance of that of his American confrere? In Great Britain the operation of the telegraphs by the Government has proved a wonderful success. A telegram may be sent between any two points in the United Kingdom for twelve cents for twelve words (address and signature counted), while their press rate is four cents per hundred words. It is this preposterously low press rate that is responsible for the deficits which are held up to us as an awful warning of Government control.

In an article in the Century Magazine for April, 1900, on the success of the Government telegraph in Great Britain, the result of the business for the year 1899 is given in the following paragraph:

"After allowing for a deficit of at least a million dollars in the department devoted to the daily newspapers, the system cleared above all cost of maintenance eight hundred and fifty thousand dollars."

I think, Mr. Editor, it would prove a valuable contribution to the discussion, if you could reprint this excellent article, or a summary of it, in TELEGRAPH AGE.

Sir William H. Preece, until lately engineer-in-chief to the English post office, in an article in the November, 1901, issue of "St. Martin's Le Grand,"

the semi-official organ of the British post office, writes as follows:

"It is amusing after this length of time to read the arguments that were adduced against the absorption of the telegraphs by the state. Every reason has been proved wrong, every prophesy has remained unfilled. I can say this with a good grace, for I was one of the prophets. The advantages of a state-controlled telegraph system have been amply shown. There has been established a cheaper, more widely extended, and more expeditious system of telegraphy; the wires have been erected in districts that private companies could not reach; the cost of telegrams has been reduced, not only in their transmission, but in their delivery; the number of offices opened has been quadrupled; a provincial and an evening press has been virtually created."

Then compare the treatment of the British operators with ours; in the former, operators are divided in five classes and paid accordingly. They receive extra pay at the rate of time and a half for all Sunday, Christmas Day and Good Friday duty; also extra pay for bank holidays and all overtime on week days, and full pay for sick leave, with free medical attendance.

Twenty-one working days, holidays (just think nearly a month's holidays) each year confined to the eight months March to October. And when the operator is too old for service he may retire on a pension varying according to the length of time he has been employed, but large enough in any case to keep the wolf from the door to the end.

What would be the feelings of the average Western Union or Postal operators, were he dropped into a position where the above-mentioned conditions were thrust upon him?

Yours truly,

OPERATOR.

Early Help to Marconi.

With regard to wireless telegraphy the New York Tribune has the following: There was something rather exceptional in the encouragement given by Sir William Preece to Signor Marconi when the latter first arrived in England, his adopted home, in 1896. The young Italian had only attained his majority at that time, and was practically without friends. The experiments which he had previously tried on his father's estate near Bologna had satisfied him that the principle involved was sound, but they were of a rudimentary character. In order to develop the system sufficiently to interest capital, more elaborate and costly tests were requisite. Sir William, then at the head of the British telegraph service, soon heard of the newcomer. But he had himself been working for ten years on another scheme which dispensed with wires, and with a moderate degree of success. Under the circumstances it would have been only human to ignore Marconi, if not to put obstacles in his way. Instead, he offered a helping hand, though he quickly discov-

ered that the new system was superior to his own. Before the close of 1897 Marconi had shown that Hertz waves would penetrate the solid masonry of city buildings, and on an open plain like that of Salisbury travel for miles. A year later communication was opened up between the mainland and the East Goodwin Lightship, and also between the Isle of Wight and Bournemouth, and early in 1899 the English channel was crossed. But it is doubtful whether any of these achievements would have been recorded so soon, if at all, had it not been for Sir William Preece's generosity.

Books on Wireless Telegraphy.

"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.

"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.

New Book.

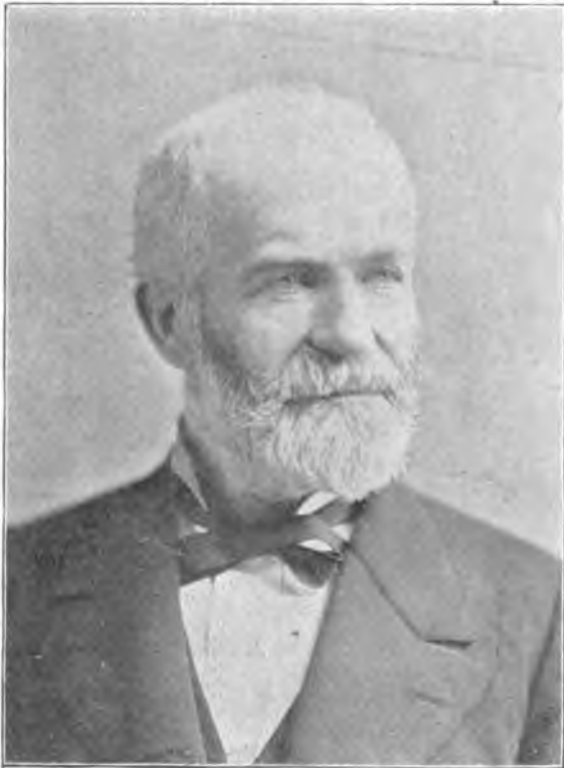
Mrs. S. Louise Patteson, of Cleveland, O., for many years one of the most prominent official court reporters of that city, and a well known expert telegrapher, has joined the ranks of story-writers. "Pussy Meow," lately off the press, is the autobiography of a cat, and is a story which its author hopes, certainly not without good reason, will do for the cat what "Black Beauty" has done for the horse, and "Beautiful Joe" for the dog. The story is well written, and details, in a most interesting manner, the various ups and downs which fell to the lot of a kitten. It contains much of humor as well as of pathos, and will please the grown folks as well as the children. By mail seventy cents. George W. Jacobs & Co., Philadelphia, publishers.

Education is a better safeguard of liberty than a standing army.—Edward Everett.

The First Telegraph to Portland, Oregon.

Almost 38 years ago Portland, Oregon, was given telegraphic communication with the outside world. On March 5, 1864, the line of the California State Telegraph Company was formally opened to the public, and for months following one operator and a man of all work were sufficient to attend to the business of a community which now requires the services of about 300 operators, train dispatchers, linemen and messengers.

The first attempt to establish a through telegraph line was made in 1857 or 1858, and resulted in a flat failure. Two men named Johnson and Robinson had swung wires from tree to tree between Portland and Dayton, and waited patiently for the business that never came. In a short time the line was abandoned, and the pioneer project lives now only in the memory of old inhabitants. During the succeeding few years, Portland's commerce had grown extensively and a line to San Francisco became an imperative necessity. Con-



DR. O. P. S. PLUMMER, PIONEER TELEGRAPH OPERATOR.

vinced that such an enterprise would be profitable, J. E. Strong, of Salem, placed himself at the head of a company, which strung wires as far south as Eugene City. The work of construction was performed under great difficulties. Wagon roads were few, and not of the best, and the company's employees were often compelled to carry the necessary materials on their backs for miles. Then expense was an item that had to be looked after carefully, and all means resorted to in order to keep it down to the lowest possible figure. As the erection of poles meant what, in the eyes of

the company, was the waste of so much money, they were set only where the tall firs had been felled by the woodman's ax. The timber belt was followed closely, and fully one-third of the insulators were on trees. A submarine cable across the Willamette would have been costly, so Portland was connected by an overhead wire, stretched from a tall pine on the bank on the Portland side of the White House to another on the opposite shore. Naturally, the best service could not be given with such a primitive equipment, but all things considered, it gave cause for little or no complaint.

When Eugene City was reached, Mr. Strong became involved in financial difficulties which were increased by the loss of a ship on which was a consignment of wire. Prospects for the completion of the line to California were not of the brightest then, but affairs changed for the better when the California State Telegraph Company came to the rescue and agreed to extend the line to Yreka, to which point it had built several years previously. The work was taken up where Mr. Strong left off. Colonel R. R. Haines, now manager of the Postal Telegraph Company's office at Los Angeles, came to Portland as superintendent, and was assisted by J. M. Lyons, now and for many years a prominent citizen of Seattle. Under their able supervision, work was pushed, and on March 5, 1864, citizens of Portland and San Francisco "talked" to each other.

Telegraphic communication with the outside world was to the Portland of 1864 what through railroad communication was to the Portland of nearly 20 years later. The stringing of the last wire was just as great an event to the residents of the growing town as the driving of the last spike on the Northern Pacific was to the inhabitants of the bustling city. So, looking back to the days immediately preceding the formal opening of the line which made Portland a next-door neighbor of San Francisco and a speaking acquaintance of distant New York, one need not be surprised at the manifestations of joy with which news of the progress of the work was received, or at the hearty greeting given the following message from Mr. Whittlesey, one of Colonel Haines' lieutenants:

"Telegraph Camp, in Hon. Joseph Lane's barn, near, Roseburg, Feb. 29, 7 P. M.—To the Portland office. I am now in the camp on the premises of ex-Senator Lane. I have but two miles of wire to stretch to complete the connection with California. Shall complete it to-morrow."

March 1 the citizens of Portland and Roseburg exchanged greetings. From the latter city, Stephen Fowler Chadwick, afterwards Secretary of State and Governor, telegraphed David Logan, then Mayor of Portland as follows:

"The residents of Roseburg send their compliments through you to the citizens of Portland, and congratulate you and them upon the final completion of the telegraph from Portland to the Eastern States. Favored as we are by a bright and sunny day, as pleasant as May can produce,

and feeling exhilarated by the occurrences of the day, we have as a testimonial of our thanks fired 100 guns and 'smiled' generally."

Mayor Logan answered with characteristic brevity:

"The citizens of Portland fully reciprocate the pleasure expressed by you at the consummation of the great work connecting us with distant parts of the State and our great Union."

Saturday, March 5 the line was ready for operation, and at 4.30 P. M. on that day the first through dispatch was flashed to Portland. It was addressed to Ladd & Tilton, bankers, and was of a private nature. An hour later Superintendent Gamble, at San Francisco, clicked to Superintendent Haines at Portland: "Glad to hear from you." Then came the press dispatches, which were hurried to "The Oregonian" office and there edited and given to the printers. As there was no Sunday "Oregonian" in those days, an extra was issued, and at 6.30 o'clock newsboys were crying it in the streets, and the purchasers knew of the operations of the Federal Army in the vicinity of Richmond within 20 hours or so after the people of New York had read the news. Previously, "The Oregonian" had obtained its dispatches via Eugene City and Jacksonville, the matter being forwarded by stage from the northern terminus of the California line to the southern terminus of the Oregon, and also between breaks wherever they occurred. Such matter was received and published about a week or ten days after the happenings chronicled. To the pioneer, long removed from his native State, it was as fresh news as the columns or month-old occurrences which, in the early days of the Klondike, were so eagerly devoured by Portland and the country at large in the year 1897. Still, it served to remind him of the distance between him and his old home—a bar to his pleasures which was partly removed by the through telegraph and altogether, at a later day, by the through railroad.

(To be Continued.)

Robert Howell.

BY WALTER P. PHILLIPS.

"I reckon I'll have to squeeze in thar alongside o' you, while they make up them bunks."

The speaker made this observation while he was taking his seat. He was a long, lank specimen of humanity with an abundance of yellowish brown chin whiskers which he stroked caressingly when he was speaking. I had been traveling for two days and had made the acquaintance of several marked types of character, and I discerned in the new comer still another who would no doubt contribute his share to my entertainment. The train was just pulling away from the depot at Dayton, Ohio, and I was seated in one of the sections which had not yet been arranged for the night. I gave the gentleman a gracious reception and as soon as he was settled comfortably

in his seat and had surveyed me to his satisfaction, he inquired:

"Been travlin' fur?"

Learning that I had come through from Denver he spoke of the journey as a "right smart jaunt" and volunteered the information that he had never been west of Dayton.

"I am from South," he explained. "I went down thar from York State when I was a boy. I am now in the saw mill business in Floridy. I used to be in the telegraph business, at Key West, where they relay business between New York and Havana, but I grew kinder tired of it and branched eout. But saw mills is durn poor property in Floridy after the first of February and I've some notion o' stopping over in New York and trying my hand at the old biz for a spell."

"Are you an operator?" I inquired, cherishing a vague suspicion that I might be addressing an lineman.

"Be I? Well I guess."

Experiencing a fellow-feeling, at once, I remarked that I, too, was an operator, and very likely we had heard of each other. Then I gave him my name.

"Why, Walter, old man," he replied, with fervency, "your name is a household word among the boys. Yes siree we are old timers, you and me. I see Andy Carnegie has got rich: that Homer Bates, Albert Chandler and a lot of the Union military telegraph men are getting up in the world all right, and in the meantime we aint no chickens, be we? Of the comparatively new regimmy I don't know many—Fred Catlin, Eddie Welch, Denny Harmon, Willis Jones, Court Cunningham and a few other old-time stars. They are shiners all right even now, though I haint seen any of 'em in years. 'Praps you've heard of me. My name is Bob Howell. It must be fifteen years ago I gave up the business. I used to be an old paster—reg'lar greased chain lightning—and yesterday I got a string put through from Dayton to New York to yawp with Al Sink—of course you know Al?—about giving me a job. It come ies as natural as ever. I suppose I was the fastest sender—maniperlatur they call 'em now, I reckon—in the South, one time, and I can snatch 'em right smart now. What they payin' for salaries now, d'ye know?"

"All sorts," I replied. "It depends a good deal on what one received when he left the service, what his record was, and the character of the work he can do now."

"Well, you bet my work was A-1. Yes, cully, it was prime mess. I left on a salary of \$118 and thar want no better operators than me—thar aint none now."

To this I could not, of course, offer any objection and presently my companion went on meditatively:

'I guess I'll strike 'em fur a hundred anyhow and I hear they pay extra after seven hours' work. I ain't going to stay fur long, say four or five months. Sawing will be good by that time, and I must get back to old Floridy. What I want,"

he continued confidentially, "is to save a hundred dollars a month *and*," he added vigorously, "I'll do it or bust. I'm on the U. S.—unmitigated scoop—and I don't mind working sixteen hours a day. I don't want no loafing around the boarding place in mine. All I want is a bunk for about six hours and to put in my loafing time right in the W. U. operating room, at 195 Broadway, at forty-seven cents an hour. Oh, I know the ropes and I'm pizen on the work when it's thar to be done. But, he concluded decisively, "I've got to get money to live on and save a hundred dollars a month; think I can do it?"

I assented.

"Well I'll show 'em a thing or two when I get thar. I used to send sixty-five messages an hour, and the longer I send, the pizener I get. I've heerd about their big receivers down to Duxbury and round but they want to get their shirts off when I shake myself into position, you hear me."

"You won't get the Duxbury men unless you work in the Cable Department, down in Broad Street, and if you should, I fancy you will find them a marvelous set of receivers. They—"

"Oh, 'taint no use," interrupted Mr. Howell; "they can't catch *me*. They *might* for an hour, but when I get on my feathers, thar ain't no living man that can follow me;" and he drew from his pantaloons pocket a narrow strip of tobacco about fourteen inches long, and biting off a goodly quid, he continued.

"I'm a J. R.—Johnny Reb. Say Walter! I've got to have that hundred a month, clean mun, for a special purpose. A little woman is sick. Well, sir, I was at Atlanta mostly during the war. I worked in that office night and day for fourteen days. Thar was no one left thar but me, and General Joe Johnston had gin an order not to close office. When the necessity for my presence on deck had passed, his orderly forgot to revoke the order, and so your friend Robert H., was 'stuck.' I've often sent six hundred messages in ten hours. I used to get so wore out that I had to hang 'em up and take a nap in my chair. Then I would take a lot from the South, get Richmond and go for 'em again. I never saw but one man—Old Dad Sullivan—that could take me without a break. *Maybe* them Duxbury roosters can do it."

Then, after a long and vigorous working upon the tobacco in his mouth he added in an undertone:

"Dern my skin, but I *would* like to give 'em a pull, just for fun, on seven or nine hundred cables."

"Do you purpose to bring your wife on to New York, or—"

"Go easy, old man," said Mr. Howell interrupting me again. "*That* is my one weak point, just now. I ain't got none." Then after a pause he observed abruptly: "See here, you are one of my kind, I'll tell you how I am fixed."

At this juncture the porter drove us out of our seat and we repaired to the rear of the car where, perching himself upon the sink in a comfortable position, my friend chewed his tobacco and talked

while I leaned up against the door and smoked a cigar.

"It was this way," observed Mr. Howell. "In '62 I was with the army as a telegraph operator—sort of on Johnston's staff like. One day a fellow named Joe Jacques came through the lines bringing his wife. She was a mighty pretty woman and uncommonly smart. Jacques was from Ohio, here, but his wife was a Virginian. They had lived South a good deal and Jacques being of no account and his wife a strong secession sympathizer, they naturally got identified with our side. Jacques went for a sojer pretty soon and his wife kept along with us as a sort of nurse to the sick and hurt. She was pretty hard put most of the time, poor girl, Jacques being a good deal of a drinker and quarrelsome when drunk. Yet, he contrived with all his faults to make quite a reputation as a scout. But he was precious little use or comfort to 'Min' as he called his wife, and if it hadn't been for General Johnston and his officers, she would have died of hunger and neglect. You remember how we caught it at Jackson in '63, don't ye? U. S. G. had got his galinippers on Vicksburg and General Johnston allowed to tackle him in the rear and make him raise the siege. While Johnston was thinking about it, what does the old man do but send Tecump Sherman with the Thirteenth and Fifteenth army corps down in our direction and inside a week with Sherman straddling the Pearl River we found it sociable to light out for Brandon. Three days before we went—this was the second time Jackson was taken, you know—our fellows made a sortie and under cover of a big fog, advanced a brigade of infantry and several batteries of artillery against Sherman's right line with a hope of breaking it, but it was of no use. The suddenness of the movement and the skill with which it was executed was O. K., but Sherman wouldn't hist a foot. When we got over to Brandon Jacques was missing. We all supposed he was dead and planted all comfortable, and we didn't much care if he was. We hadn't trusted him for some time, and he would have went over to the enemy any time he got a chance. Anyhow, not hearing anything from him in three years, his wife and me, who was pretty fond of each other by this time, considered him dead, sure enough, and we married. In 1867, we went to Floridy and for thirty years we was mighty happy. I got me a small place and what with our two boys and a girl growing up and getting married, everything was as smooth and pleasant as we could ask. I got so happy that I even thought of Jacques in a kindly way, when the anniversaries of the final evacuation of Jackson came around, and if I had known where his grave was, I believe I should have decorated it up every year, just as a bit of gratitude for the happiness his supposed death had brought to me."

The speaker stopped here and brushed his coat-sleeve across his eyes. He then renewed his acquaintance with the long, narrow strip of tobacco and proceeded:

"Last Christmas who comes to the surface but Joe Jacques. He'd been in the Regular Army, he said, and made some money as a sutler. Then, thinking his wife was dead, he'd married a Mississippi girl and been running a plantation for the last twenty-five years. Lately his Mississippi wife had died, and simultaneous he heard that Minnie was married to me; that accounted for his appearance. The situation was rather awkward. I allowed since he had married again, Mrs. Howell was free; but Minnie had her doubts. It wore on her terrible, until him and me got to swapping threats, and finally I gin Mr. Josephus Jacques twelve hours to hump himself out of Floridy, or I would blow a hole in him as big as a hoe-cake. Well, he went out here to Dayton and there he begins writing letters to Minnie. Then, to cap the whole dog-goned climax, he goes out gunning one day, blows his ugly mug full of powder and gets stone blind. That settled it. My wife just said it was Fate, and she must go do her duty by her first husband. So she goes out there and she is there now."

Then the honest fellow gasped with tears in his voice: "And she is dying, too, old man." After a pause, he resumed:

"She wrote down to me for to come out and bring the children. I've done it, and I've left them thar temporary to comfort my poor girl in her great trouble. There's five on 'em and we love 'em even more'n we did our own children. I reckon it is often so with the grand-children. It cost me a heap o' money to get us all from Floridy out to Dayton, and it's put me in the hole terrible. That's what I'm going a brass pounding for, to catch up again. It's tough now, ain't it, the way things turn out? But I don't complain: I only wish she was happier, for Jacques ain't using her right, and then she can't stand it long in this climate, for her lungs is weak. I don't reckon she'll ever live to see the flowers blossom another year."

I had thrown away my cigar as the speaker concluded his narrative, and was gazing out of the window in no mood for speech, when I was aroused by the porter's announcement, "Berths ready for you, now, gemmens." and turning, I beheld my friend still sitting on the marble sink chewing as he caressed his tawny whiskers, and pondering. I gave him my hand and said "good-night," whereupon he ejaculated, as if a new thought had struck him: "Say, you read a good deal, I reckon. Now, ain't thar a book called 'Married for Both Worlds?'"

I answered that I believed there was.

"So she told me, and she wants me to read it: but I never read a book through in all my life. I'll have to get it though, and do the best I can with it. Good-night, old man."

As I was tumbling into my berth, cogitating over this pathetic story, Howell approached and whispered: "I'll read that book; there's a good deal in it, I expect; and up there," pointing toward the thoughtful stars, "I reckon Joe Jacques is going to get most awfully left."

Portable Quadruplexes at the International Yacht Races.

BY JOHN F. SKIRROW.

In making preparations for handling the volume of press matter consequent upon the recent international yacht races, it developed upon the writer to design and install an outfit of quadruplexes to increase the Postal Telegraph Company's telegraph facilities at the Highlands of Navesink, New Jersey, the marine observation tower at that point being the principal station from which the newspaper bulletins describing the races were transmitted. This tower is regularly used in connection with the marine service reports of the arrival of vessels at the port of New York.

It has been common practice where an emergency necessitated the installation of temporary quadruplex equipment to set up gravity battery, or to connect motor transformers with some available power circuit to obtain the required voltage and the grounded battery currents necessary in the operation of quadruplex telegraphy, and to wire up such multiplex apparatus as was required on the spot.



PORTABLE QUADRUPLEX OUTFIT READY FOR SHIPMENT.

The large number of cells requisite for the desired pressure and the lack of the necessary space for its erection, precluded the use of the former method in this case, while the entire absence of any source of electrical supply or available prime mover, at or conveniently near to the Highlands, prohibited the latter plan. It was decided, therefore, to install an "explosive" engine, dynamo and transformers in the room at the base of the observation tower to operate the quadruplexes. This part of the outfit consisting of a 1-hp Mietz & Weiss kerosene engine, belted to a 1-kw generator which in turn operated three Perret motor transformers, converting from 110-volt primary to 360-volt secondary, furnished the necessary currents very satisfactorily.

In developing the plans for the operation of the outfit it was deemed advisable to do all possible wiring and construction at headquarters in New York prior to shipment, on account of the somewhat inconvenient location at which the plant was to be operated, the observation tower being located near the crest of the Highlands, close to the famous Twin Lights and some distance from

a roadway. The result was the construction of a somewhat unique portable telegraph plant.

Instead of wiring up the instruments at the Highlands, therefore, the quadruplex sets, three in number, were placed in specially designed cases. These cases when closed present an appearance somewhat similar to an ordinary packing case with a handle upon each end. When opened by raising two of the lids and lowering the two others that form the sides of the case, a complete quadruplex operating table and outfit is disclosed. This is placed upon a collapsible framework, which takes the place of table legs.

All of the numerous switches, transmitting and receiving instruments, adjustable rheostats, condensers, resistance coils, etc., etc., that are used in connection with a quadruplex, including those ordinarily placed behind the switchboard in a telegraph office, are secured firmly in the case with permanently wired connections. This arrangement requires but six terminal binding posts for the connection of extraneous wires to the case, viz., the line wire, ground wire, two local current and two main line current feed wires, the quadruplexes being operated upon the "Field" system, which requires but two main line dynamo pressures.

The local 20 ohm sounder circuits are fed through 500 ohm resistances from the main 110-volt generator, each circuit thus receiving about .2 of an ampere. These sounders are placed in resonators, which are swiveled upon arms so that they may be drawn out close to the operator's ear, or placed in any desired position. Each case is illuminated by six small series incandescent lamps, connected across the local current leads, using a total of .4 of an ampere of current. A clock for use in recording the time of transmission and receipt of messages is provided, as also are filing hooks for the unsent and sent business, and a closet which holds a supply of message blanks. Upon occasion these units have been changed from their closed "ready to ship" form and placed in active operation as full quadruplexes within five minutes, and have been taken out of service and made ready to ship, within the same brief space of time.

A set of repeaters and half-repeaters, known to telegraphers as "jiggers," is encased in a similar manner, and forms part of the outfit, their purpose being to automatically repeater single "Morse" circuits into the quadruplexes, where such service is required. The motor transformers are encased in stout pine boxes, each machine being secured to the inside of the lid of its box, in such manner that when this lid is swung open and back against the side of the box, the box forms a supporting bench for the transformer while in service.

The switchboard upon which is mounted an ammeter, a voltmeter with radial switch to all machines, the starting boxes of the transformers, and all the controlling switches, is fitted to slide snugly into an oak case. All connections on this board are brought to binding posts upon the

sides and bottom of the board, and are numbered. The transformers are also permanently wired to posts upon their lid bases, which are numbered to correspond with the switchboard posts.

Each transformer case contains a set of wires with connection tips soldered upon each end, so that it is a matter of but a few minutes to connect up the transformer and switchboard outfit, ready for operation. The main dynamo is mounted upon a substantial pine base, and has its field rheostat secured upon one side of the frame. A heavy pine box cover, which may be removed or attached in a minute, encloses the entire machine and is secured to the base. The engine is fitted snugly into a box made of 2-inch pine, the upper part of this box forming a chest in which is carried a complete outfit of such tools and supplies required in connecting up and running the engine. This engine case is mounted upon truck casters, and can be readily handled by two men. The exhaust and other pipes are coupled in short lengths and are also boxed. The water cooling tank is crated, and carries a reel of 150 ft. of hose for use in filling the tank, etc. Folding chairs are also provided and shipped with the outfit.

This plant had been shipped to the Highlands and connected ready for operation when the McKinley tragedy at Buffalo occurred. At 4.30 on the following Saturday afternoon it was decided that the Canton (Ohio) office of the Postal Telegraph Company needed the outfit less the engine. At 6 o'clock the outfit left the Highlands by express, arriving at the Canton office on Monday morning. The outfit was put in operation, giving an equipment of 12 circuits upon three wires in less than an hour's time, and was withdrawn from service at midnight the following Thursday after the late President's interment. Thirty minutes later it was ready for shipment, and left by express for the Highlands before 10 A. M. on that (Friday) morning. The following Tuesday the plant was again in service at the Highlands, and was continued until the conclusion of the series of yacht races, being re-shipped to headquarters the day following the final race. One of the quadruplex and repeater units is in an Eastern city in emergency use at the time of this writing, having been placed in service within an hour after its receipt at the office in that city.

The complete plant ready for shipment weighs about 2,200 pounds, the engine alone 800 pounds, and the quadruplex units 160 pounds each. The consumption of fuel used (kerosene) averages 4 gallons per day of 10 hours' service. The load carried at 110 volts on the main dynamo averages 700 watts. Of this the lights take $1\frac{1}{4}$ amperes and the local circuits 3 amperes, the transformers, of which but two are operated the third being an emergency spare, using up the balance. The outfit is held at headquarters ready to ship immediately to any point. It is particularly adapted to use in quickly establishing emergency offices, such as are required in the event of fire, floods, political conventions, athletic and sporting events

and for military camps. Such an equipment would have been invaluable at the time of the Johnstown and Galveston disasters, or during the Spanish-American war.—Electrical World and Engineer.

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.]

WINNIPEG, MAN., CANADIAN PACIFIC RAILWAY.

Now that the grain rush is over, until the opening of navigation, a limited number of the staff have been permitted to take a well earned vacation.

Miss M. McMillan returned recently from an extended trip through eastern Ontario.

H. C. Howard and wife, who have been touring southern California and the Pacific coast, are also back again.

D. O'Connor left recently for Montreal.

W. J. Saunders, a member of the force for many years resigned recently to engage in business for himself. He was made the recipient of a handsome gold locket, suitably inscribed, from the staff.

Miss Steenberg and Messrs. Smith and Martyn are late arrivals.

At the recent hockey games between the Wellington's of Toronto, and the Victoria's of this place in which our local team successfully defended the world's championship, J. W. Baker, our popular wire chief, gave an excellent report of the play from observation at the rink side. Direct wire communication with the "Globe" office, Toronto, was maintained and W. Smart did the work at that point.

CHICAGO, ILL.

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

"THAT YELLOW TAG" on your message and everybody telling you to "Get 'em right," when it is only a case of blurred type, prevented by sending 5¢ cents to Eacutt & Cawthorn, 2704 North Lincoln St., Chicago, for one of those new brushes. Postively cleans type between messages. B. & O. Ry Co. recently adopted them as a standard. Large commission to Agents.

POSTAL.

Traffic Manager M. M. Davis, of New York,

spent the last week of January here on business.

Mr. Elder our popular night wire chief has the distinction of placing the first order for Jones' Pocket Edition, book of Diagrams.

Mr. Maddock is now working the afternoon trick, 3 to 11.

George Durand chief of the New York division has resigned, and it is stated has gone into business for himself. We are sorry to lose him, but wish him success in his new venture. He has been succeeded by Mr. Wilder. Mr. Frank Otto has been appointed chief of the St. Louis division.

Mr. Seaman is helping out Dr. Kinney nights in the New York division. While Mr. Swift, the musical genius of this office, is assisting Samuel Thomas in the St. Louis division.

Mr. Paxton is working the late night trick.

Mr. Seward has been relieving at the Glucose office.

Mr. F. E. Lowe has resigned and accepted a position with the Postal at Bloomington, Ill.

G. A. Larson, formerly of this office, died suddenly February 1, at Champaign, Ill.

W. E. Griffiths, manager of the Board of Trade office, has been appointed manager of the main office, being succeeded at the former by E. S. Williams.

Other appointments are: C. A. Hawkins, chief operator; Edward Hearn, assistant chief operator; H. Mead, timekeeper, assistant division chief New York division; Mr. Ebbs, timekeeper.

WESTERN UNION.

Morse Council gave an informal dance on the evening of Saturday, January 25, and their hall was tested up to its full capacity by members and friends and a very enjoyable time was experienced by all.

Richard Willerton, formerly check at this office, died on January 30.

Among the arrivals from the Postal is Albert Fox a young and expert telegrapher.

John H. Sheckler has invented a typewriter feed attachment and has sold the same to a New York firm.

Both the ninth and tenth floors and the corridors are receiving a beautiful tint of green and brown paint.

John Foster has returned from Toronto, Ont., his former home, where he spent a month.

DENVER, COLO., WESTERN UNION.

Superintendent B. Brooks has returned from a trip through Texas.

Mr. Raleigh made a trip to Chicago recently to meet his children from New York.

Harry Blakeney left us to work for a broker in this city. Mr. Blakeney is one of the stars of the profession and will be greatly missed.

Frederick Touhy has accepted a position with the Union Pacific in their local freight office here, and carries with him the best wishes of his associates.

James Ryan is relieving Miss Hammond at the Stock Yards, temporarily.

General Brooks and Ralph Rowles have been appointed operators on the regular list.

During the recent visit of William Cody (Buffalo Bill) to our city, Mr. Cody after registering at the St. James Hotel rang for messengers to notify old Farmer Lawton, our night chief, and a few more of his old-time newspaper and telegraphic friends, of his arrival.

William Wootton of The Associated Press is absent on a vacation of a month, during which he will visit Salt Lake City and San Francisco. Jerry Pearson and Mr. Cooper are doing the extra at The Associated Press.

Mr. McConaha recently made a trip up Pikes Peak.

Ray Gould has been out with J. C. Osgood at his summer ranch near Redstone.

Samuel Smith recently returned from his mine near Leadville where he has been working all summer.

Mr. Estes has accepted an Associated Press position at Leadville.

Harry Thomas is helping Wire Chief Beatty on the board between 5 and 6 o'clock.

Hurlbert Dodge recently returned from Santa Fe, N. M., where he relieved Miss Zimmer for a month.

Mr. Faller, formerly of The Associated Press, but of late in business for himself, has accepted a position in this office and has been assigned to the first Chicago wire with Everett Goodell.

Frederick Hutchins has been appointed assistant Sunday chief.

F. L. Carswell has accepted a position with the Santa Fe Railway at Raton, N. M.

Joseph White recently visited old friends in Omaha.

C. G. Sholes, superintendent of telegraph of the Santa Fe system, recently inspected our office.

O. R. Lake, manager at Boulder, was a recent visitor.

H. G. Robinson, manager of the Equitable Building office, was married on Christmas to a Nebraska lady.

Mr. Bush, one of the old-timers, has recently purchased a new typewriter and his work now shows up to the best advantage.

Superintendent McClintock, of the Mountain Telephone Co., has been installing a new telephone system at the new steel works at Minnequa, Colo.

Harry Boulter, formerly of Salt Lake City, is on the extra list.

VANCOUVER, B. C., CANADIAN PACIFIC.

Following is a list of the operating staff: J. Fletcher, chief; A. C. Fraser, assistant; W. Fraser, night chief; I. Field, all night chief. Operators: Harry Allingham, Mrs. Allingham, Frederick Swift, W. A. Decow, T. Masters, J. C. Gill, E. Burchell, G. C. Hatt, W. Calder, Miss Urouhart, W. Jamison, W. McLean, D. McLean, F. Larsen, G. H. Smith, J. O. Ward, J. Collins, W. Neele and Mr. Eller.

M. T. Ougley, our local manager, leaves shortly on a pleasure trip to Baltimore, Md.

Mr. Fletcher returned recently after spending several weeks with his family in San Jose, Cal.

Superintendent Wilson lately took a trip South to meet Mrs. Wilson who has spent the winter in California.

This office is quite up to date, with all the latest improvements, including dynamos, storage battery, well ventilated rooms and in fact everything excepting the old, noisy resonators.

Work is going ahead at the new cable station, on the west coast of Vancouver Island. It is situated about five miles from Cape Beale, on the southeast side of Barclay Sound. That part of the country is very sparsely settled, but there is no doubt but that the cable station will be a very important point within a few years. The surrounding country is heavily timbered, \$40,000 being spent in clearing the land for and installing the water works system alone.

The Dawson City wire is worked direct from this office, through three sets of repeaters.

Mr. M. W. Crean who has been appointed general superintendent of the Government telegraph lines is an old-time operator, and well known through eastern Canada.

Charles E. Gooding is manager at Ashcroft, assisted by Miss I. J. Paul, late of Ft. William, and by R. L. Coombs.

The repeater office at Donald is to be moved to Golden, B. C., shortly. John McMillan is the circuit manager.

Al. Douglas has left for the Kootenay to accept a position on the Nelson division.

LOS ANGELES, CAL., POSTAL.

Mr. Horace Chase, a late addition to our operating force, was presented with a diamond ring as a token of remembrance and esteem by the operators of the Western Union telegraph office, this city, where he has been employed for a number of years. The presentation was made at his home by Miss Emma Tarelton, who accompanied it with a fitting speech. A number of the force were present and a very pleasant evening followed.

TOLEDO, O., WESTERN UNION.

Peter W. Kelley was married on January 17 to Miss Marguerite Dougheny. A beautiful porcelain clock was the wedding gift of Mr. Kelley's office associates.

BALTIMORE, MD., WESTERN UNION.

The eleventh annual meeting and banquet of the Telegraphers' Mutual Aid Association, of Baltimore City, was held the night of February 8. About sixty members were present, comprising employees of the Western Union, Postal, American District Telegraph Company, several railroads and leased wires.

All of the old officers were re-elected as follows: A. K. V. Hull, president; George W. Spillman, vice-president; Adrian Grape, treasurer; H. F. Meister, secretary. Board of directors: S. T. Shutt, Ferd. Miller, A. S. Gentry, J. C. Hawkins and E. S. Anderson.

The president appointed as examiners F. W. Ganger and H. C. Greene; auditing committee J. C. Wagner, William J. Taylor and S. T. Shutt. The association has 123 members, a net gain of thirteen the past year. The surplus amounts to \$1,480.29. Only two slight changes were made in the laws, as follows: To increase the sick benefits the second week from \$5 to \$10, and to pay \$25 death benefits.

The meeting and banquet partook of the nature of a re-union, everyone enjoying himself heartily, and praising the good work of the association, and its conservative and successful management.

Mr. Edward T. Ward is receiving congratulations because of the birth of a son to him.

BOSTON, MASS.

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

POSTAL.

G. H. Boothby, who has been acting manager at New Bedford for a time, is back again, and working a split trick.

F. C. Bradbury and D. J. Sullivan have been transferred from the main office to 38 Broad street, and 26 Merchants Row, respectively, vice H. Connell and G. W. Downey, transferred to the main office.

The many friends of C. G. LeCras, formerly of this office, learn with regret of his serious illness at his home in Sydney, C. B. He has recently undergone a very critical operation.

A. E. Mason, after two weeks illness, has returned to work.

W. S. Metzler is a new arrival from New York.

Resignations: A. M. Levenson and J. F. Cronin.

Extensive alterations and improvements have recently been made in the branch office at 180 Atlantic avenue, by which the rather delapidated old quarters have been transformed into one of the neatest and roomiest branch offices in the city. The floor has been raised and relaid in hard wood, and a new counter put in, with convenient wickets, giving the receiving and delivery clerks easy access to the public and the messenger department. The space under the counter is utilized for supply closets and typewriter cabinets. An operating shelf running almost entirely around two sides of the room, and affixed to the walls, gives sitting accommodation for a dozen operators, and leaves plenty of floor space in which to move around. The wiring is thoroughly up to date, connections being made between the underground leads and the instruments by means of cords and wedges, and springjacks of the latest type, all plainly marked, and enclosed in a dust-

proof glass case. Ample accommodation is also provided for the district messenger department. This office is situated in the fish district, and has direct connection with the fish markets of New York, Philadelphia, Gloucester and Portland, and handles in the busy season as high as 1,000 messages a day. The personnel of the office is as follows: P. J. Molloy, manager; P. J. Bell, W. S. Chapman and W. A. Ayer, operators; C. A. Curley, receiver; E. J. Feeley, delivery clerk.

WESTERN UNION.

The annual ball of the Telegraphers' Mutual Aid Association was held in Mechanics Hall, on the evening of February 6. From 8 until 9.30 the guests were entertained by an orchestral concert, followed by the grand march and dancing. The affair was more like a family party than a dance, for everybody seemed to know everybody else, and the familiar telegraphic greeting, "73," was heard on all sides. About five hundred couples were present, and a jollier party has never been held under the auspices of the Telegraphers' Mutual Aid Association.

The dancing was lead by floor director P. J. Beasty and Mrs. Beasty followed by J. J. Benelisha and wife, Frank McVey and Miss F. McGiren, William T. Sheridan and wife, A. E. Mason and Mrs. Margaret Kiley, A. V. Mann and wife, Mr. and Mrs. P. J. Moloy, Louis J. Gordon and Miss Bessie Goldberg, and about 200 other couples.

Among the invited guests present were: J. W. Larish and wife, C. C. Bedlow and wife, H. C. Sherman and wife, C. T. Thompson, C. E. Lyman and wife, D. J. Hern and wife, Thomas W. Flood, C. E. Bagley, J. C. Shaw, Mr. and Mrs. M. C. Harrington and Thomas C. Devine.

George R. Kirkpatrick for many years in the employ of the Western Union Telegraph Company, was given a delightful surprise on this occasion. Mr. Kirkpatrick is to leave shortly for Pasadena, Cal., and his friends and fellow telegraphers wished to testify to the esteem in which he is held by them. He was called into the recep-

Catarrh Cannot be Cured.

with LOCAL APPLICATIONS, as they cannot reach the seat of the disease. Catarrh is a blood or constitutional disease, and in order to cure it you must take internal remedies. Hall's Catarrh Cure is taken internally, and acts directly on the blood and mucous surfaces. Hall's Catarrh Cure is not a quack medicine. It was prescribed by one of the best physicians in this country for years, and is a regular prescription. It is composed of the best tonics known, combined with the best blood purifiers, acting directly on the mucous surfaces. The perfect combination of the two ingredients is what produces such wonderful results in curing Catarrh. Send for testimonials, free.

F. J. CHENEY & CO., Props., Toledo, O.
Sold by druggists, price 75c.
Hall's Family Pills are the best.

tion room and in the presence of a large number of friends was presented with a diamond studded watch charm, and set of gold sleeve and collar buttons. The presentation was made by Mr. J. W. Larish and the recipient gracefully responded.

Mr. Harry Tate has been appointed on the night force and assigned to White River Junction wire, left vacant by Nathaniel Goodwin.

Mr. Hancock, of Duxbury cable station, has resigned, to accept a position at Galveston, Tex., with a railroad. Mr. Byrnes, of Boston, succeeds him.

Mr. Edward Gliddon, of Haverhill, Mass., Western Union, and J. J. Bell, of Postal Telegraph, Boston, are the late arrivals.

WACO, TEX., WESTERN UNION.

Mrs. Eva Buntz who has been visiting at Beaumont has returned and resumed her duties in this office.

Mr. L. G. Hamilton who has been working extra has been added to the regular operating force.

Mr. W. D. Lessing who has been in charge at night for the last year has resigned to accept a position as Associated Press operator at the "Times-Herald" in this city.

PHILADELPHIA, PA.

My Motto—Honorable
my challenge on behalf of



The No. 6 FAY SHO the
FASTEST and SIMPLEST
of them all.

Mr. Harry C. Emanuel, of Philadelphia, will use a Fay-sho No. 6 in the Message class at the Great Tournament to be held in Atlanta, Ga., March 1st, and (pin right here) WE WILL WIN IT.

Dealing. To prove that Mr. Emanuel in issue of AGE, Dec. 16th last, was not bluff or brag I desire to state that I have deposited \$50.00 with the proprietor of this Journal as a forfeit to bind said challenge.

All make typewriters rented \$3.00 per month. Agent for Alexander Word Register. Special terms to members of O. R. T. D. A. Mahoney, Main Office, W. U. T. Co., Philadelphia.

WESTERN UNION.

Mr. C. B. Wood of this office was recently elected Most Excellent Master Artisan of the Artisan's Order of Mutual Protection of the State of Pennsylvania. As a number of our employees are members of this society they will no doubt be glad to learn that the proposed plan of increased rates which has been agitated for some time and finally ratified by the most excellent assembly to become a law after April 1 applies to new members only.

H. R. Mattson, of the "Inquirer" office, has resigned to accept a position with the Carnegie Steel Company, this city.

W. F. Sherer is confined to his home with a severe case of typhoid fever.

Charles E. Mapes, who has been absent for ten days on account of illness, has again returned to duty.

A. R. Barlieb, who has been substituting for several months at Freehold, N. J., has been released and is with us again.

Manager Hudgins, of 307 Walnut street office, had the misfortune to slip on the ice and break his arm. The injured member is healing rapidly and Mr. Hudgins is attending to his duties as usual.

H. H. Pressler, late of the United States Signal Service at Cebu, P. I., is a new arrival.

Messrs. Brenckman, McBride and Butland were sent to Clearfield, Pa., to handle press matter during the Meek-Harris libel trial. They speak very highly of the courteous treatment accorded by the manager, Miss Lillie Lobb.

Messrs. Pennypacker and Daly handled the press matter for Manager Reynolds at Westchester, Pa., during a recent murder trial at that place.

PHILADELPHIA, PA., POSTAL.

The announcement of Superintendent Adams' departure and promotion to the general superintendency of the Southern division, with headquarters at Atlanta, Ga., was given much prominence in the local daily papers. Mr. Adams certainly deserves all the credit and praise attributed to him as the wonderful growth of this division has been accomplished solely through his sagacious leadership.

We view his departure with mingled feelings of regret and pleasure. Regret in that the close friendly relationship of many years existence is about to be severed, and pleasure because merit is recognized and rewarded.

With our congratulations we also extend our heartiest well wishes and bespeak for Mr. Adams a career of prosperity in his new field of labor.

Up to a few days ago the position of secretary to the superintendent has remained vacant, since the advancement of Mr. B. H. Moore, the former incumbent, to the managership of the Baltimore, Md. office. Mr. Harry W. Hetzel, assistant to Cashier George G. Glenn, is now secretary to the superintendent. Mr. George Lawrence, from the bookkeeping department, assumes Mr. Hetzel's former duties and Mr. Howard Wright fills the place vacated in the bookkeeping department.

In addition to being the proprietor of a successful stationery and supplies store, Mr. Wm. V. Madden, of Mahoney City, formerly employed in this office, is also the local manager for the Philadelphia, Reading and Pottsville Telegraph Company, the Pennsylvania Telephone Co. and the Adams Express Company. Mr. Thomas R. Poppert, of the night force was a recent guest of Mr. Madden.

Mr. Richard Ziegler, manager of the Third and Chestnut Streets branch office has just buried an aged mother.

While on a visit to his folks in this city, Mr. J. Lemish, of Richmond, Va., paid us a friendly call.

Poor little Johnnie Kramer one the most obliging check boys that ever walked this floor, is now doubly bereaved. His father's death which occurred a few years ago has just been followed by that of his mother.

Mr. J. K. Hagan has resigned to go with The Associated Press.

NEW YORK CITY.

"My Old Virginia Home Upon the Farm," one of the sweetest songs published; "God's Will Not Ours be Done," (McKinley's last words) strong descriptive song with martial music; "Left on the Battlefield;" "Down Where the Cotton Blossoms Grow;" "I'll be With You When the Roses Bloom Again;" "Any Old Place I Can Hang My Hat is Home Sweet Home to Me;" "Heirloom Waltzes;" Zenda Waltzes;" "Utopian Waltzes;" "Metropolitan March and Two Step;" 18 cents each. If you want any other sheet music write to me about it. I can save you money. PIANOS SOLD ONE DOLLAR PER WEEK. Address, B. L. Brannan, 195 Broadway, New York.

WESTERN UNION.

Seawanhaka Camp, No. 19, Woodmen of the World, seems to be doing a thriving business among the operators at 195. Twenty-nine of them have already joined, and applications from eighteen more are pending. Mr. Robert Morton, of this office is the clerk.

R. E. Chapman has gone on a month's vacation at his home at Deseronto, Ontario.

Appointments: E. S. Kelly and J. H. Murphy, as junior operators; and J. S. Masden.

Resigned: F. G. Evans, J. S. Patterson, C. F. Kirschbaum, S. M. Thurston and A. P. Ainsworth. An old time operator of New England, and for the past twelve years agent and operator at River Falls, Wis., has bought out the First National Bank of Glenwood, Wis., and assumed the management of it February 1st.

Henry G. Dunn, who had quite a serious surgical operation performed on him, and James T. Collins, who had a slight attack of pneumonia have resumed work. Considering the great amount of sickness generally prevailing there is very little in this department.

George A. Newton has been appointed inspector of business and report delays.

POSTAL.

Various members of the staff connected with the executive offices organized themselves into a temporary club, calling it The Postal Club, and gave a dinner on Saturday night, February 1, at the Cafe Boulevard.

The dinner was well appointed, being served in one of the spacious rooms of the cafe. The first attempt of bringing the employees into closer relationship resulted in what could justly be called a pronounced success and exceeded the most liberal expectations of any of the members. Great jollification and merriment was in evidence at all times.

Mr. A. H. Clark, the chosen toastmaster, wittily commented on the remarks made by the speakers.

Every member was called upon to either make an address, recite or render a song and each one responded with great willingness.

The success of the dinner has made several of the members desirous of forming a permanent organization and arrangements are being made to hold a meeting for that purpose. Should they do so, with earnest co-operation, the ultimate success of the club is almost assured.

Those present were: A. H. Clark, J. J. Cardona, J. I. Spear, F. J. Kernan, G. W. Fleming, W. Mathews, W. J. Hallett, C. H. Seymour, C. Bissett, W. F. Cahill, A. Wintraecken, C. A. Rhodes, R. J. Hall, W. J. Tenny, E. M. Underhill, H. Scrivens, B. L. Squires, T. J. Sefton, W. H. Ten Broeck, W. Davids, C. F. Mason, A. W. Castellanos, W. Daviett and C. A. Good.

Mr. J. F. Skirow, assistant manager of this office, has returned from a business trip to Pittsburg and Meadville, Pa.

Mr. G. O. Heath of St. Louis bonus wire who has been absent for the last three weeks on account of severe illness is improving and hopes to be back with us soon.

The veteran William Clum is still absent on account of a long and severe illness.

Some of the force residing in Paterson, N. J., lost all of their possessions in the late large fire but considered themselves fortunate in escaping with their lives.

Mr. J. G. Good has returned to duty after a vacation of about two months.

The Telephone for Railroad Work.

The Illinois Central Railroad is to make extensive use of the telephone, beginning at principal points on the line, such as Chicago, St. Louis, Louisville, Memphis, New Orleans and other places. The work of installing a two-wire copper telephone circuit will begin within a short time, and these lines will be gradually extended to cover the whole system. The object immediately in view is to establish means of communication between the principal terminal points on the road and division headquarters. The first use to which the line will be put will be the transmission of the ordinary messages of the traffic and other departments, but the use of the telephone will be gradually developed to convey all messages of both the business and operating departments.

In the Argentine Republic, spiders, it is reported, destroy the efficiency of the telegraph lines by connecting the wires with their heavy webs, which, during wet weather or heavy dews, cause crosses.

The main offices of the Western Union Telegraph Company and the Postal Telegraph-Cable Company at Paterson, N. J., together with their contents and equipment, were destroyed in the great fire which occurred in that city on February 9.

Edison Kimmey.

Mr. Edson Kimmey, manager of the Postal Telegraph-Cable Company, at Pittsburg, Pa., who has been appointed superintendent, with headquarters at that point to take effect on March 1, was born at Albany, N. Y., in 1867. He entered the telegraph profession with the Bankers, and Merchants' Telegraph Company at Albany, N. Y., in 1885. When the Commercial Union Telegraph Company was incorporated, shortly after the above date, he was engaged by that company to establish numerous offices throughout the northern part of the State of New York. In 1886 he cast his lot with the Baltimore and Ohio Telegraph Company, and was sent to their Long



EDSON KIMMEY.

Branch, N. J., office for the summer of that year. At the close of the season he was transferred to the Superintendents' office at New York, in the Mahattan district service, which at the time was affiliated with the Baltimore and Ohio. Here he remained until the merging of the Baltimore and Ohio and with the Western Union. A few months later he was placed in charge, temporarily, of the Postal Telegraph-Cable office at Far Rockaway, L. I., going from there to the main office of the company at New York, as a night chief. In 1891 he was appointed manager of the branch office, at Broadway and 14th street.

In the spring of 1893 he received his appointment as manager of the Postal office at Albany, N. Y., and in January, 1900, became manager of the Pittsburg office.

To Iceland by Wireless Telegraphy.

Some well-known Icelanders, says a dispatch from Copenhagen to the London "Times," have applied to Signor Marconi requesting him to calculate the possibility of instituting wireless telegraphy between Iceland and the Shetland Isles, via the Faroe Islands. Such a means of communication would be of great value for correspondence between Denmark's arctic possessions, including Greenland, and for the British and French ships engaged in fishing off the coast of Iceland, as well as for meteorological purposes. There has been some talk of laying a cable to connect these islands but nothing definite has ever been decided upon.

"See here, you endorsed your average slip 'Trouble,' your wire was O K all day. Where does the trouble come in?"

"The trouble comes in when the manager sees my average!"

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WANTED.—A good electrician and operator capable of taking charge of the telegraph interests of a railroad. Address "Position Wanted", care TELEGRAPH AGE, New York.

INFORMATION WANTED.

Any information furnishing clue to whereabouts of G. W. Patteson since 1895, living or dead, is desired by his family. Age about 45, weight about 150, tall, fair, light curly hair, right hand partially paralyzed, writes mostly with left, a native of Virginia, but worked in Cleveland 1872-1886. Last heard from in West, McLennon Co., Texas, in 1895. Address "Information Wanted," care TELEGRAPH AGE, New York.

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New York, New Haven & Hartford R. R. Co.	Central of Georgia R. R. Co.
Lehigh Valley R. R. Co.	Chicago & Grand Trunk Railway.
Central Railroad of New Jersey.	Standard Oil Co.
Baltimore & Ohio R. R. Co.	Tide Water Pipe Line.
Baltimore & Ohio & Southwestern R. R. Co.	Atchison, Topeka & Santa Fe R. R. Co.
Pennsylvania R. R. Co.	Southern California Railway Division.
Union Pacific R. R. Co.	Atlantic & Pacific Division.

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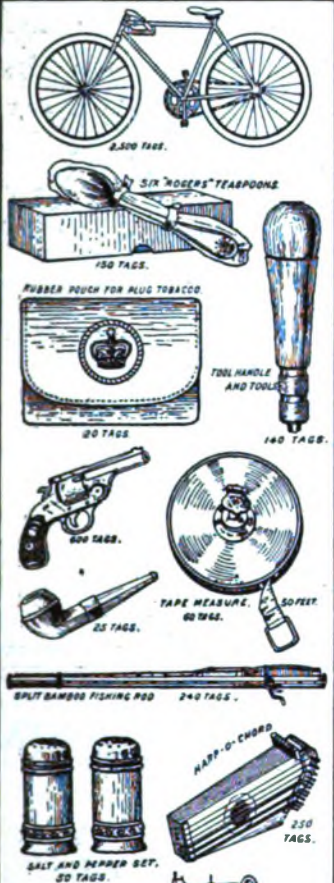
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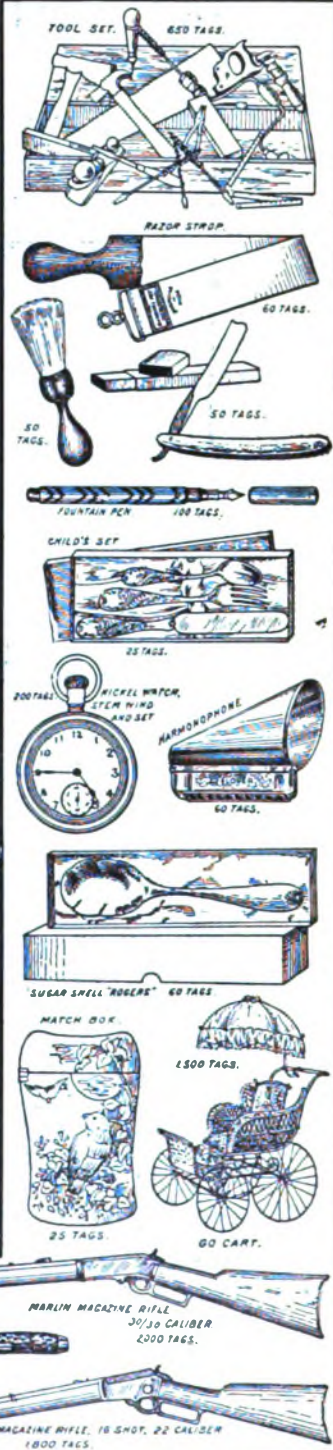
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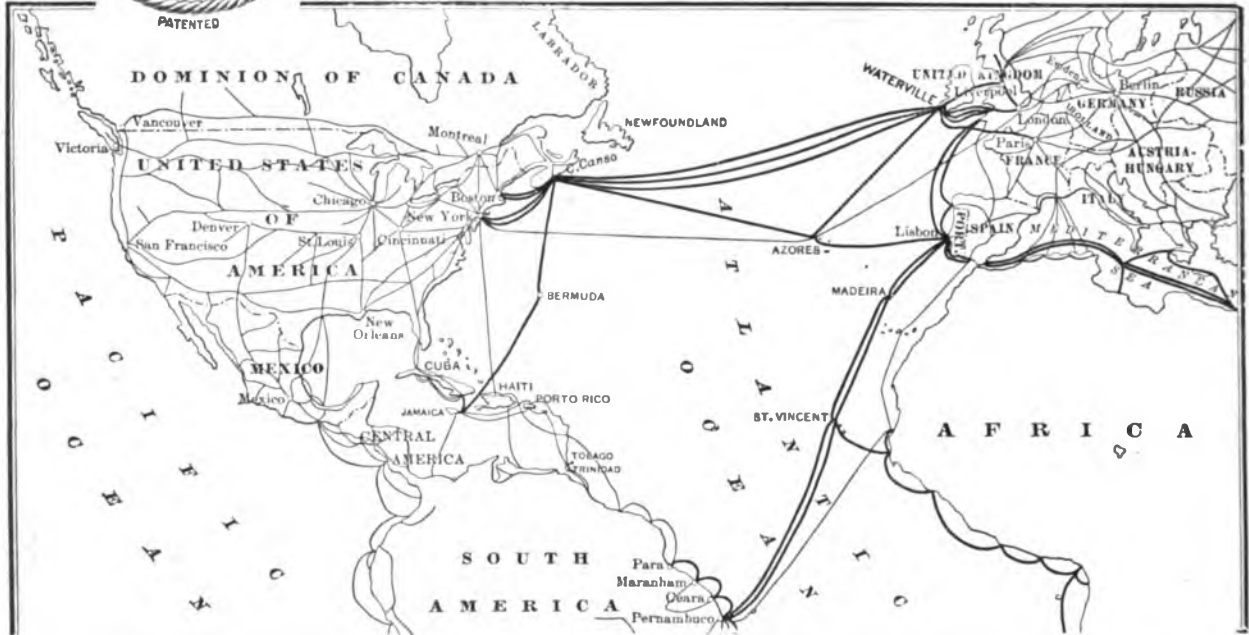


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