

THE ELECTRIC AGE

TELEGRAPH EDITION.

VOL. VII—No. 22.

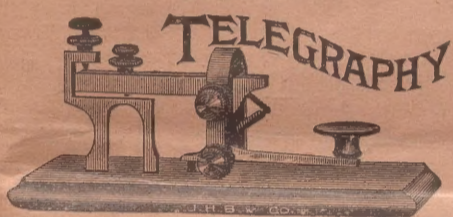
NEW YORK, APRIL 16, 1890.

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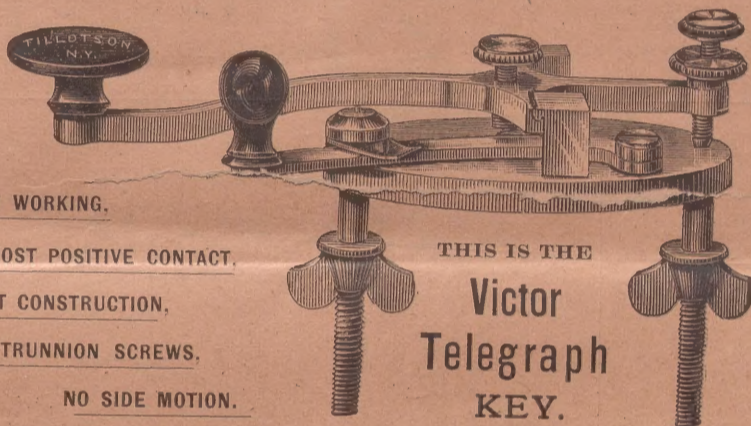
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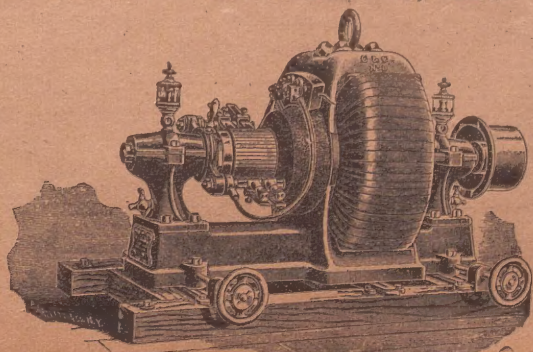
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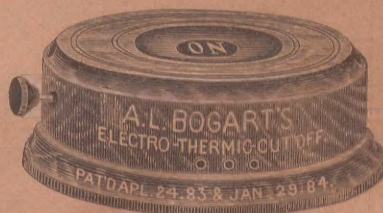
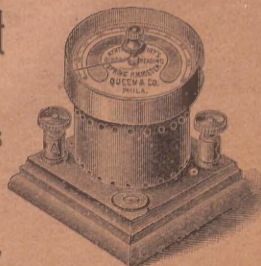
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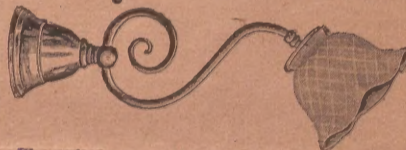
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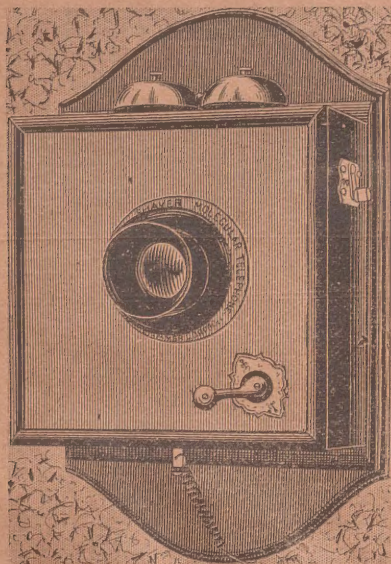
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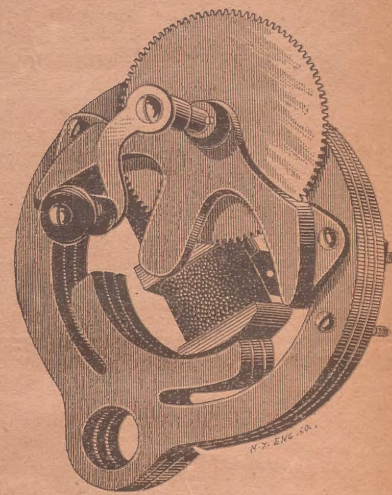
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We are prepared to erect plants in any part of the United States or Canada SUBJECT TO APPROVAL, and will arrange with responsible parties to control our system in distant sections.

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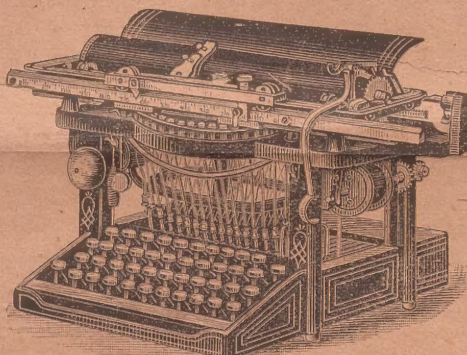
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Pittsburgh, Pa., March 29, 1890.
Messrs. Wyckoff, Seamans & Benedict:
Dear Sirs:—I am using to-day a Remington No. 2 which has not known a day's idleness for nearly five years. During that period it has been used for the Associated Press work at this point for both the "Regular" and "Early" service, doing between 16,000 and 18,000 words nightly. It has cost but \$3.60 for legitimate repairs, and is now in very good condition. This is, without doubt, a good record.
The Remington certainly fills every requirement of our business. The compact and convenient keyboard I regard one of its greatest advantages over other machines—one does not require to be an athlete to work it.
Yours truly,
H. W. ORR, Associated Press Operator.

Pittsburgh, Pa., March 26, 1890.
Messrs. Wyckoff, Seamans & Benedict, New York:
Gentlemen:—It gives me pleasure to inform you of the perfect satisfaction the Remington typewriter has given me in my "press report" work. I have used it for four years, and consider it especially adapted to telegraphers' use by reason of its lack of noise, durability and ease of manipulation.
Yours very truly,
OWEN A. CONNER, Associated Press Operator.

The REMINGTON TYPEWRITER is used exclusively in this office. Its usefulness in connection with telegraphy cannot be too highly praised. It is of much benefit to an operator, rendering "receiving" an easy task when the machine is once mastered.
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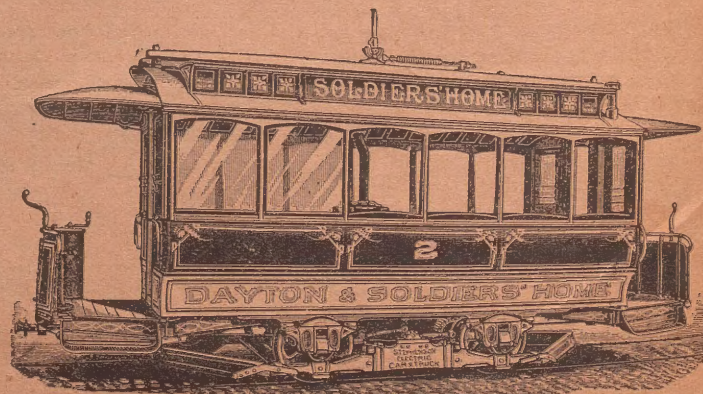
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TELEGRAPH EDITION.

Published on the 1st and 16th of Every Month.

BY THE ELECTRIC AGE PUBLISHING CO.

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NEW YORK, APRIL 16, 1890.

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STANDARD MATTER FOR SENDING CONTESTS.—

The decision of Mr. Catlin, the manager of the Fast Sending Tournament, to have the contestants use the same matter that was sent at the previous contest was a wise one. It was a wise decision for the reason that comparisons can be made with previous records, which could not well be done if entirely new matter had been used. It is quite natural for the promoter of an enterprise of this sort to desire to have everything pertaining to it original, but in this one particular, we are of the opinion that it would be wise to accept the matter used in the last and previous contest as the standard, and use it in all future contests. If one man can send 250 words of this matter, he might not succeed in doing so well with other matter, or he might do better, but how could his speed be compared with that of others if different matter were used? This is an important point,

and should not be overlooked in future plans for sending contests. Let the matter used in their last contest be the standard by all means, then we will have a reliable basis for comparison.

CONTESTS IN TELEGRAPHY.

We presume sending contests will be the order of the day for some time to come. The success and interest attending the one just held seems to have paved the way for others, for we hear that the southwestern section of the country is soon to have one in New Orleans, and Canada will be represented in one to be held at Montreal.

There is no doubt that much good will result from these exhibitions of skill. The tendency will be to elevate the standard of efficiency, which in the end will redound to the benefit of both the participant operators themselves as well as to the companies employing them. The fact that a contest of this sort brings together many shining lights in the telegraph ranks might seem to indicate that strictly first-class operators were in the majority. But such is not the case. They are a small minority when compared with the vast army of operators, and there is a constant demand for first-class help. Hence, we say these contests are promotive of much good, both to employer and employé, and should be encouraged.

As there will likely be numerous contests in telegraphy in the near future we would request that the managers of these affairs send to THE ELECTRIC AGE full details of the same, with official reports of the records made, etc., for general information. There is much that is interesting in these contests, and there is no reason why the best records cannot be reduced by some one else. There is always a better man than the best, but it takes an extraordinary occasion to bring him to the front. These friendly contests will do it.

While the number of fast senders is rapidly augmenting, what about receivers? Is the art of fast receiving keeping apace with the development of fast sending? Fast receiving ought to be developed and encouraged as much as sending. Greater skill and ability is required to receive fast sending and put it all down on paper in a legible hand than is required for sending. All the telegraphic contests in the past have been for fast sending, and receiving has been a secondary consideration. There is, however, a growing disposition to attach as much importance to the ability to copy fast sending as to fast transmission itself. There are many who can copy such matter but the question of penmanship enters largely into the problem. A finished and expert receiver should be able to write well enough at high speed for any one to read his copy without difficulty. A great help in this direction is the type-writing machines, which are so extensively used in telegraph offices these days, particularly for press service. By abbreviating, a skilled operator can transmit fifty or more words per minute continuously, and the receiving operator can put it down on the type-writer with great ease. The type-writing machine is destined to become an essential part of the great telegraph systems, and it will be to the infinite advantage of all operators to cultivate its acquaintance. All press associations already have reached the point where they employ typewriter operators in preference to those who do not use the machine, and the tendency is to make such selection in employing operators in large commercial offices. Operators cannot afford to belittle or ignore the fact that typewriters are very rapidly coming into general use, and he who assumes an air of indifference in the face of these facts is going to be left behind in the rapid march of progress.

Mr. R. E. Watson, formerly of Omaha, is now located at Stoddard, Neb.

A TELEGRAPHER'S CONTEST AT NEW ORLEANS.

Great interest in the coming sending contest, to be held in New York, is taken by the operators at this point, especially by the widely known telegrapher and champion long distance sender of the South, Mr. Ed. J. Davis, night chief operator of Western Union, this city. The distance to New York and the heavy business at this season of the year will prevent New Orleans sending a representative to the contest, but Mr. Davis has arranged a local contest to take place Sunday, April 20, and has invited all operators to attend and contest for valuable prizes, which will be offered. Mr. Davis' record as a telegrapher is well-known, and he is outdoing all previous efforts to make the contest a success. He has secured subscriptions from a number of merchants and operators and the list continues to swell, and he will be enabled to offer larger prizes than at first intended. There are to be three classes, with quite a number of entries from various points throughout the South. The entrance fee is \$1.

All communications addressed to Mr. Ed. J. Davis, manager fast sending contest, New Orleans, will receive prompt attention. Mr. Summers, of Schriever, La., who has challenged the winner of the New York contest, has expressed his intention to enter here.

Mr. Davis will not contest for the prizes. The winner here will challenge the winner of the New York contest.

RULES AND REGULATIONS.

That will govern the Fast Sending Contest to be held in the City of New Orleans, La., Sunday, April 20th, 1890, between the hours of 11 A. M. and 3 P. M.

Rule 1. This contest shall be known as the First Southwestern Fast Sending Tournament.

Rule 2. There will be three classes, to be known as Class A, Class B and Class C.

Rule 3. Class A, open to all operators in the Southwest who have an authentic record of at least thirty-five words per minute. Prize, gold medal, suitably inscribed, value, \$25.00.

Class B, open to all New Orleans operators, with an authentic record of twenty-five words per minute. Prize, silver medal, suitably inscribed.

Class C, open to all New Orleans operators other than above mentioned. Prize, silk umbrella.

Rule 4. Three judges and one time-keeper, who have been selected on account of their judicial fitness, shall decide who is entitled to respective prizes. In case of a disagreement between the judges the majority shall rule and their decision will be final.

Rule 5. Five minutes shall be given the contestants to prepare. At the call of "Time" the contestant must be ready or forfeit his privilege.

Rule 6. The same matter as used in New York will be transmitted.

Rule 7. Entries close April 15th.

E. J. DAVIS,
Manager First Southwestern Fast Sending Tournament.

The Postal Office, at 271 Broadway, has for its manager Mr. Dugan, with one assistant. The office at 302 Greenwich is presided over by Manager Ruffer with two assistants. The office at 59 Murray street, Manager Sherwin and assistant; 207 Church street, Manager DeCosta; 353 Broadway, Miss McIntee.

MAGNETIC CLUB.—The spring meeting of the Magnetic Club will be held at Martinelli's restaurant, 136 Fifth avenue, on Tuesday evening, April 22d. Dinner will be served at 6.30 o'clock.

MISSING.—E. E. Sands, formerly of Dresden Junction, Ohio, missing since Sept. 17. Address his wife, Mrs. E. E. Sands, Point Pleasant, W. Va.

LOUISVILLE NOTES.—A tornado from the southwest passed through this city Thursday night, March 27th, doing great damage and destroying telegraphic communication in all directions, the notations in the wire log being "8 p. m., lost everything." After much skirmishing one wire was found OK at 11 p. m. from the J. M. & L. Railway Department to Indianapolis, and an office opened there, with Charles Thomas as the artist, with a large stack before him. This was the only wire worked until daylight, when three more wires to Indianapolis, were cut outside the tornado's path and ran into the same depot. One of these wires was given to the Associated Press. With the coming of daylight four men were also sent to Jeffersonville, Ind., right across the Ohio River, where three wires were worked to Indianapolis and one to Cincinnati. Business was handled in this manner until 3.30 Friday evening, when three southern wires were brought OK to the main office, but worked very imperfectly, when quadded, for several hours. At 3 a. m. Saturday, three Cincinnati circuits were established from the main office via Nashville, Memphis and Atlanta, and business commenced in earnest in the main office. By 3 o'clock the same afternoon three of our direct Cincinnati wires were OK, and at 6 p. m. all branch office men were ordered to main office and business once more resumed at the old stand. Within one hour after the passage of the tornado the down-stairs office was crowded with people, some anxious to notify their friends of their safety, and others to notify some distant friend of the death or injury of a relative, and newspaper men anxious to get to the out-of-town papers a good account of the disaster. This steady stream of people were kept up for the succeeding three days and the volume of business was the largest ever handled in this office. Some idea of the number of messages received may be had from the fact that at two cents per message several of the messengers made \$8 per day on Saturday and Sunday succeeding the tornado, some of them taking out as high as a hundred messages at a time. In addition to the large number of messages about 150,000 words of special matter was sent during the three days' rush. Considering the disadvantages, business was carried on as promptly, and an entire resumption of business accomplished as quickly as it had ever been done anywhere in a similar disaster. Much credit is due to the operators as well as to the management for bringing about this result, and of course the linemen are to be considered also. The prompt attention of chief operators Moore and Fuller, of Indianapolis, and Gould and Fellows of Cincinnati and their assistants, are also to be commended. The nearest point to the office at which the tornado did any damage was at the Union depot, three squares west, which was almost totally destroyed. The New York delegation, to the "Old Timers" Convention, will remember this as the depot at which they embarked when leaving the city. Phil. G. Kern, of the day force, was attending dancing-school at the Falls City Hall, and was waltzing with a young lady when the tornado struck that building. In the wreck they were thrown in the vicinity of a table, which kept the heavy timbers from crushing them, and after being in the ruins about an hour, Mr. Kern worked his way out, sustaining only a few painful bruises. After getting out he procured a saw and succeeded in sawing out the young lady, who was also, only slightly injured. Assistant delivery clerk Sutterlin and his brother, who was formerly employed in this office, were also in this hall and escaped with a few bruises. This hall was completely wrecked and thirty-five people lost their lives in the ruins, with nearly as many more severely injured. Lineman Galbreath was in the Odd Fellows Hall, which collapsed, but escaped unhurt. No telegraph employees were seriously injured either in person or property by the tornado. Among the visitors during the storm rush were Superinten-

dants Wallick, of Indianapolis, and Miller, of Cincinnati. J. S. Carnachan and Wilbur Adkins looked after the interests of the United Press, and saw that their Association received good accounts of the catastrophe. Messrs. Allhands and Huest attended to the wants of the Associated Press. The latter gentlemen were assisted by Mr. Stanley, of Indianapolis, who came here on the special train chartered by the Associated Press to get their men promptly on the ground. Mr. and Mrs. Norvin Green celebrated their golden wedding at their residence in this city, April 1. Vice-President Van Horne visited the operating room last week. Among the late arrivals are: La Place, New Orleans; Bastable and Coleman, Kansas City; Vandevere, Frankfort, Ky.; P. J. Hurley. Departures: Lynch, to Memphis; Kidder, to Nashville. Miss Laura Landrum has been appointed manager of the branch office at Bourbon Stock Yards. Vice Ed. Sleiger transferred to main office. Miss May Morris has been transferred from Galt House to main office.

KANSAS CITY W. U. NOTES.—The Messrs. Evers, Hannon, Craddock and Moore have returned from Deming, and were assigned their old tricks. The Kansas City Electrical Society meets regularly, the 1st and 3d Saturdays of each month, at their hall 5th and Main streets. W. H. Woodring, formerly chief operator here, was re-elected to the Vice-Presidency, of the Kansas City Branch, of U. S. Military Telegraphers. D. A. Williams, an old time telegrapher, was also re-elected to the position of Secretary and Treasurer of the same organization. During the next month there will be three marriages from this office. Mr. A. A. Hatch, former chief of Wheatstone here, was in town during the present week, he has gone to Deming to take charge of that office. Misses Forbes and Elsten are on the sick list. Messrs. Grass and Dickey have returned after a week's illness. Miss Florence Roper has returned after an absence of two months. It is estimated that the force will be reduced six first-class men, upon the completion of the Los Angeles Wheatstone. Arrivals since last issue are: Miss Bessie Rodgers, from St. Louis; Mr. J. Hughes, Minneapolis; Mr. G. W. Flowers, Hutchinson, Kan. Departures are: Miss Minnie Sharon, to Terre Haute, Ind. and Louis Bader, to St. Louis.

WIRES ORDERED CUT.

CHICAGO, April 1.—The officials of the Board of Trade notified the Western Union Telegraph Company to-day that it would not be permitted to do any business on the Board hereafter. The announcement of the fact occasioned a sensation in telegraphic and business circles.

"This is part of the Board's plan of campaign against the bucket-shops," said W. J. Lloyd, superintendent of the Western Union. "We were greatly surprised at it, for we had expected to retain our fifty-eight operators on the floor. I was much astonished when President Baker gave me what he announced to be official notice not to do further operating there."

The action of the Board of Trade in Chicago will affect every board of trade or commercial exchange in the country. They have heretofore been connected so closely as to get quotations almost instantaneously, Chicago being the controlling power of a great circuit of business centres. The stoppage of telegraphic intercourse relative to trades and deals will occasion havoc among dealers in other cities, as it will seriously affect non-members of the Board here.

SAN FRANCISCO POSTAL NOTES.—The Pacific Postal Telegraph Company is making rapid progress through the State. The wires are now stretched as far South as Los Angeles, Colton, San Bernardino and Riverside. The company has a live superintendent in L. W. Storrer, ably

assisted by John Leatch, an old timer, and a force of skilled and reliable type writing operators. We have the most complete operating room in the Union. Quartelle tables, designed by Superintendent Storrer, are in use, with drops that can be changed in a moment for the use of the pen, the machines being dropped out of sight. For the benefit of our Eastern friends I will give you the present force of this office: L. W. Storrer, superintendent; John Leatch, assistant; W. C. Swain, chief operator; Frank M. Medina, night chief; Operators: Geo. Parsons, J. H. Jones, B. H. Durkee, H. H. Thibut, D. W. Kearney, F. J. Kelly, Wm. Galvin, N. F. Harrison, J. L. Lilles, the Misses Grace Worn, Mollie Burroughs, Fanny Hoffman and Skelton; Frank Kingsbury, cashier; Miss Anna Koster, receiver, and Jack Dennis, delivery clerk; W. G. Jonas, Postal Press Association.

HELENA NOTES.—On March 20, the operating force were transferred to their new quarters on the third floor of the First National Bank building. The new office is heated by steam and furnished with incandescent lights, and is a great improvement over their former cramped quarters in the basement, but at the present increase of business it will be but two or three years before a larger office will have to be secured. The rear of the basement is used for a battery room, and in front are Manager Swan's office, the bookkeeping and delivery departments, which are connected with the operating room by pneumatic tubes. Several operators were added to the force, when the new copper wire was completed to St. Paul. One side of this is worked through to Chicago all day, and both sides after 4:30 in the evening. This is probably the longest quadruplex wire in the United States, being nearly 2,000 miles in length, and has repeaters at St. Paul and Bismarck. The large volume of business from the East is promptly moved Westward over a quad. and duplex to Portland, and duplex to Spokane Falls. W. S. Ranier has gone to Portland. The latest arrivals are: S. Goodfellow and W. Peach, from Chicago. Several of the boys have become interested in baseball and when the season opens we will have organized the strongest "nine" in Montana. A branch office has been opened in the new hotel "Helena," with Miss Mattie Terry in charge. We are glad to note the success of James McEvily, who has been cashier in the W. U. Office here, for the past five years, to an appointment at West Point. He being Congressman Carter's choice.

THE POSTAL TELEGRAPH AT WICHITA.—Wichita, Kan., March 4. The Postal telegraph company's wires reached Newton to-day and will be in this city inside of two weeks. The local managers to-day leased spacious offices and the district headquarters will be located here. The line will at once be pushed through to Texas and to Galveston.

Paradoxical as it may seem the proudest and at the same time one of the most modest appearing operators in the room is J. Clayton Watts. He is the happy father of a bouncing baby boy and the smile he wears is contagious. Both mother and son are doing well.

Fangle—Jaysmith is getting very profane. What caused it? Telephone?

Cumso—No; a fast sender and a fountain pen.

Manager E. J. Davis, of the New Orleans sending tournament, will use the same matter as selected for the New York tournament.

W. M. Gibson, of the United Press, is the proud father of a 13½ pound daughter, born to him March 12.

Mr. J. M. Hanley, formerly of the Columbia, is now in Charleston, S. C., for the Postal.

Mr. E. E. Strickland is with the Postal, at Greensburg, Pa.

THE FAST SENDING TOURNAMENT.

Fast telegraph operators to the number of over fifty, from all parts of the country, gathered in Hardman Hall, corner 5th avenue and 19th street, Thursday afternoon, April 11th, to take part in the first fast telegraphing tournament that has been in the country for several years. Prize money, aggregating \$720, had been made up by the Western Union and Postal Companies, the Associated Press and United Press, Thomas A. Edison, Andrew Carnegie and a half dozen other individuals and corporations. This was to be divided between the operators in four different classes who should send in five minutes the most words from a certain speech made by Chauncey M. Depew. The prizes were for quantity only. Quality didn't count, except that the matter sent had to be readable. There was a special prize of \$25 offered by the United Press to the best sender in each class, and other special prizes of \$10 for the best pen and ink copy taken by a receiver, and of \$20 for the clearest transmission, regardless of speed.

A small table at the front of the stage had a half dozen different sorts of telegraphic keys upon it, to suit the tastes of the different contestants. The wires ran to a dozen different sounders scattered through the hall, so that every one who was an operator could tell whether the contestant was sending fairly or not. The official awards based upon the actual number of words sent. Beside this, there was a speed-indicating machine that recorded on a dial the exact number of impulses sent over the wire by each contestant. It numbered the ticks. This was not official, however.

Besides the contestant at the table there were upon the platform C. W. Price of the *Electrical Review*, master of ceremonies; W. J. Johnston, of the *Electrical World*, timer; Walter P. Phillips, of the United Press; Thomas R. Taltavall, of the *ELECTRIC AGE*; George H. Usher, of the Postal Telegraph Company; E. F. Howell, of the Western Union, and George E. Holbrook, of the *World*, judges, and Fred Catlin, manager of the whole affair. The hall was filled, at least half with women, when Mr. Catlin sat down at the table and began to rattle the keys. In a minute most of the audience was laughing heartily. The uninitiated were mystified, but all the operators knew that the manager was making the opening address by wire. He pegged away patiently for fifteen minutes, with occasional interruptions for laughing and applause. The following is his address in full:

MEMBERS OF THE FRATERNITY, LADIES AND GENTLEMEN: As a distinctly Morse audience perhaps you will agree with me that it is not altogether inappropriate, in view of the occasion, that I should make my bow before you this evening in the language created by the Father of our Profession.

I depend upon the poetic license of the circumstances to justify and approve the strangeness of the method.

With your permission, then, I will tender my respects and my observations in the language most familiar to our ears, as a craft, the tongue of Father Morse. I am well aware that this decision closes to me the opportunity of pleading in extenuation of my shortcomings the trite excuse of a heavy cold or a sore throat, and as it would be simply stultification for me to enter a plea of "loss of grip," I throw myself upon your indulgence.

Before proceeding further I desire to extend here my sincere thanks, without special mention of names, to the kind interests that have in their individual and collective capacity so heartily seconded with golden words of encouragement, having a substantial silver lining, my efforts to bring this tournament to the consummation that you witness to-night.

The name of these friends is legion, Telegraph Corporations, Electrical Supply Houses, News Associations, the technical and the lay press and leading and individual spirits pertinent

to and identified with the profession at the present time or in the past. Men who have made their bread-getting effort on the key, but who now, emancipated by their talents are to-day shining lights in the respective firmament of their election, embracing science, art, literature and commerce.

These "battles of the keys," ever growing more important and dignified, exert a wider influence for the general good than is apparent to the lay observer. The telegraph has frequently been called the right arm of the press, and I venture to christen the press the "Photograph of the Telegraph." What the telegraph once breathes into existence the press perpetuates to posterity—to eternity.

Abreast with the marvels of the telescope which elongates the human vision till the eye scrapes the very dome of heaven itself in the search of man after knowledge, so it is an equally important part played by the telegraph key with its hardened platinum larynx, meshing the entire world in a net of living, vibrating intelligence, keeping in unison the metaphysical circumference of the globe.

The power which for 20 years past has maintained the substantial status quo of Europe is not the Bismarck of diplomacy; it is the telegraph key. Without it and the political synchronism it makes possible the North Pole would, figuratively speaking, gyrate at a rate so different from the South Pole that one would twist the other up until either broke off short at the stump, or unbelted the equator of the universe.

Now these contests that bring us together to-night develop the merits of special patterns of telegraph keys and intensifies among manufacturers a rivalry to produce the best pattern of this article irrespective of any reasonable cost.

Every improvement in the key makes better work possible on the part of the knight who manipulates it, and this better work, when brought into due prominence, leavens the entire mass and heightens the standard of what is recognized as good telegraphic work, both with regard to speed and perfection of manipulation.

These judicial, dignified tournaments engrave that standard on ever visible and everlasting tablets, high in the sight, a pattern, a model for the emulation of the whole craft.

This results in the advancement, the progress of a professional community, and that progress is unquestionably a spoke in the public weal.

The tournament of to-day eclipses anything ever before attempted in a similar vein and already an immediate effect has been the propagation of local tournaments of the same character all over the country. We now have the Southwestern Tourney, the Northwestern Tourney, and in 1892 or '3, at a place to be selected, we will have an International Tournament that will, in reality, match the old world's skill in this line against that of the new, and do incalculable good in exploding theories and fructifying facts, and in establishing new bonds of interest and fellowship between the two hemispheres.

This tournament is a stepping-stone to that event and not daring to risk wearing you further I will now step aside to give place to the nervous force present, that is now at tensions bent, eager for the fray.

Kind friends, thanking you one and all for your indulgence, I beg to express my sense of obligation to you and repeat my "73"'s.

At the conclusion of Mr. Catlin's address the real business of the day was at once proceeded with.

The matter transmitted by each contestant in all classes will be found elsewhere in this issue.

THE MATTER TRANSMITTED.

The friendship of France for the American colonies in their struggle for independence and the gratitude which her timely intervention and succor have evoked are the source and ground of this truly international effort to give a suitable and permanent expression to both these senti-

ments. Below the crust and craft of diplomacy there exists a genuine sympathy on the part of every people toward every other people suffering under burdens too grievous to be borne. The cry of want or of cruel bondage, or of unequal strife, whether for conscience sake or for the inalienable rights of man, has often stirred the heart of a whole people as the heart of one man to a generosity and self-sacrifice which have commanded the homage of the world. Such was the friendship of the people of France to the American colonists. In the extremity of their struggle for national independence its opportunity was found. The contest was a revolt of the colonists against the Crown of Great Britain. In substance it was the effort of the English speaking race in this western continent to establish the right of self-government by the people. The king and court of France at the outset looked at the form in which the great issue between the contending parties were cast, and was naturally on the side of the king and cabinet of England. The people of France looked at the substance and reality of the struggle and saw in the firm and resolute patriotism of the colonists the promise of a liberty for which under their own insupportable political burdens as under a bondage of corruption they were groaning and travailing in pain together.

ENTRIES.

LADIES CLASS	CLASS A
1 Miss Millie Moss	SECOND DIVISION
2 T V Froschel	1 J W Roloson
3 B M Dennis	2 B R Pollock, Jr
4 K B Stephenson	3 W M Gibson
5 Annie M Schaffer	4 H Peters
6 J Schlesinger	5 F J Kihm
7 E V N Garthwaite	6 G W Simmonds
8 M C White	
9 L Wagner	
10 A E Findley	
11 A Erbeling	
12 M A Daley	CLASS B
13 E R Vanselow	1 W B Upperman
14 S C Barry	2 W L Waugh
15 Mrs M E Randolph	3 Ed Bishop
	4 W D Chandler
	5 J G McCloskey
	6 A J Swan
	7 Frank English
	8 H S Wright
	9 D Wark
	10 H D Paulhamus
	11 C G Millard
	12 M J Doran
	13 M H Toomey
	14 F L Catlin
	15 R C Mecredy
	16 W A Jones
	17 O Hart
	18 J P Bradt
	19 C W White
	20 A S Patterson
	21 J D Hinnant
	22 F F Norton
	23 E A Sprong
	24 W Davis

CLASS A

FIRST DIVISION

OLD TIMERS

The first event on the programme was the Ladies' Class contest open to all. All the ladies entered, answered to the call of their names, and with one exception, stuck to their keys their full allotted time, with commendable grit. There was one absentee—Mrs. M. E. Randolph.

The following is the official record of the names of the senders in the Ladies' Class, and the number of words sent by each, arranged in numerical order, beginning first with the highest number:

Miss K. B. Stephenson,	217 words.
" B. M. Dennis,	212 " 4 characters.
" E. R. Vanselow,	210 " 4 " "

The following were the winners of the first, second and third prizes, respectively, in the Ladies' Class, and the number of words sent by each.

FIRST PRIZE, \$50

Miss K. B. Stephenson, 217 words.

SECOND PRIZE, \$40.

Miss B. M. Dennis, 212 words, 4 characters.

THIRD PRIZE, \$20.

Miss E. R. Vanselow, 210 words, 4 characters.

Miss T. V. Froschel sent 200 words and four characters and was awarded the United Press prize of \$25 for excellence combined with speed. Miss Erbelding retired after making three starts.

The sending of the ladies, on the whole, was very good, and the records compared favorably with those of the sterner sex. Fourteen, out of the sixteen entries, sent for the entire five minutes.

The next event, and one which evoked considerable interest and enthusiasm, was the Old Timers' Class, open to all who were in the service prior to 1865. Mr. J. H. Dwight was the first name on the list. He was on deck promptly when his name was called, and before he started in on his task of sending as many words as possible in five minutes, he addressed a few telegraphic remarks to the audience. He at once put every one in good humor, and provoked considerable laughter by his speech. He said:



1. MISS S. C. BARRY. 2. MISS KITTY STEPHENSON.
3. MISS L. A. WAGNER. 4. MISS JENNIE SCHLESSINGER.
5. MISS M. C. WHITE.

To all: I have done no real work at a key for near twenty years, but I thought I'd come up and let you have some fun with me. But I think Catlin ought to have put up some placards around the hall similar to those posted by the manager of a theatre in Deadwood. "Don't shoot at the orchestra; they are doing the best they can."

Mr. Dwight was then started, and when Mr. Johnston cut him off at the end of five minutes he had transmitted 138 words and seven letters of the next word—and good Morse it was, too. Mr. Fred Catlin came next, and after getting hold of the key *a la* Catlin, he started off in the style of sending for which he is justly celebrated. It was not as fast as he sent in days gone by, but it was quite as faultless. He was shut off after having transmitted 217 words. When the name of A. S. Ayres was announced as the next sender the applause was tumultuous. "Patsy" was everybody's favorite, and their feelings were uncontrollable when he appeared at the sending table. After the applause had sufficiently subsided, he created great amusement by remarking on the instrument, "You break me all up." Mr. Ayres sent 229 words and one character in his five minutes, and his style of sending was of the same high order for which he is famed.

The once celebrated Eitemiller, now of Pittsburgh, was the next contestant, and he succeeded in covering 197 words and four characters in very good Morse. Mr. Gogel, one of the Old Timers entered, was absent.

Mr. Ayres was awarded the first prize of \$50, and Fred Catlin the second, \$40. Mr. Ayres was also awarded the United Press prize of \$25 for excellence combined with speed.

Class A, open for all, was the next event, and the one in which the greatest interest centered, as all the stars were entered under this head. The history of this event will go down in the annals of fast sending as one of the most remarkable. There was something in store that no one dreamed of, and one of the greatest surprises imaginable was the result. There was a "dark horse" that was a "dark horse." Among the entries was the name of B. R. Pollock, Jr. No serious thought was given to the name by any one. He was a comparatively unknown contestant, and so little was known of him that there was no inquiry as to his identity until it came to his turn to send. Then it was made known that he was the representative from Hartford, Conn. His appearance at the desk attracted no particular attention, and there was

ing the noise did not know themselves what it was for. After the starter announced the result Mr. Pollock received a hearty, vigorous and noisy recognition of his wonderful achievement, and he retired with a record never before equalled.

Before Mr. Pollock's turn came nine contestants had taken theirs. A. J. Swan was first on the list, and sent 215 words and two characters. F. L. Catlin came next. There was a good deal of interest taken in Catlin's case, as he was looked upon by many as a possible victor. He sent 241 words and one character. H. S. Wright and H. D. Paulhamus next took their turns and delivered some good Morse, sending 203 2 and 218.7 respectively. The next contestant was W. L. Waugh, familiarly known as "Fatty" Waugh. Fat usually is dead and useless weight, but it is not so in the case of Waugh. It seems to be useful to him when he gets hold of the key. He sent 229 words of faultless Morse. James P. Bradt came next with as faultless Morse, but a little different in style, and rattled off 224 words. Both these gentlemen received hearty applause. W. Davis came next and, by an error, sent for six minutes. He was given a re-trial in the evening.



THE WORLD'S LADIES' PIN.



THE WORLD'S MEDAL.

M. H. Toomey was last on the afternoon programme, and when he had finished his 230 words and 4 characters in 5 minutes the meeting was adjourned until 8 p. m.

EVENING SESSION.

At eight o'clock Hardman Hall was packed with people. In the gallery were Gen. T. T. Eckert, A. S. Brown and other prominent ones, and on the floor were seen many prominent faces. The evening's work began with the second division of class A, and the first name on the list was that of the champion, J. W. Roloson. The appearance of this rusher was the signal for tremendous applause, and when he sat down to the key the impression seemed to be general that he would likely retain the title. At the end of 5 minutes he had sent 248 words and three characters in an excellent manner. Mr. Pollock came next in the manner and with the result above stated. After Pollock came Mr. Gibson. He was heartily welcomed by the audience, and he at once started in on what proved to be a five-minute sample of the most perfect Morse that was ever listened to. It was absolutely faultless, and if there is such a quality in Morse sending as a musical quality then Mr. Gibson certainly

brought it out in perfection. He finished with 239 words to his credit, and the admiration of the large audience for the perfection of his work was expressed in tremendous applause. H. Peters followed next with 217.2, then came F. J. Kihm, another prize winner. He sent 238 words of excellent Morse. G. W. Simmonds then sent 221.1, and Mr. W. Davis, who, by an error, had sent *six* minutes during the afternoon, was given a re-trial and he sent 194 words in 5 minutes. This closed A, and when the judges put their heads together it was discovered that their was a wide difference of opinion as to who was entitled to the first prize. The judges then retired to a private room to discuss the matter, and after an absence of a few minutes returned and announced that their decision would be reserved. It was subsequently announced that the judges had decided to ask the four leaders in Class A to send again in order to facilitate the settlement of the question, which was still the cause of a wide difference of opinion.

Class B. was then opened, Mr. W. L. Waugh was the first one to respond. There were four entries to copy, with pen and ink, the matter transmitted by Waugh, for the best copy of which Mr. A. B. Chandler, President of the Postal Telegraph-Cable Company had offered \$10 to which Mr. Catlin added \$10, making \$20 in all. Only one of the four came to the scratch—Mr. Taltavall, Editor of THE ELECTRIC AGE. Mr. Waugh was then started, and sent in a superb manner 229 words, all of which was put down by Mr. Taltavall in a good legible hand. He kept close up to Mr. Waugh all the way through, and when Waugh had finished his last word Mr. Taltavall had begun writing it down. After Waugh came Ed. Bishop with 193.3; J. G. McCloskey 209 and A. J. Swan with 212.8. Mr. Pollock, one of the four leaders in class A followed Swan. The audience then became transfixed, and Pollock once more made the sparks fly from between the key points, and the sounders rattled in a way that was really wonderful. When his five minutes were up he had sent 260 words, being at the rate of 52 words per minute. The announcement of this wonderful performance was received with an earthquake-like applause, and the young man from Hartford retired with a record that will keep thousands of tongues wagging for many days to come. Frank English followed Pollock with 225 words of first-class Morse, and then another of the "Big Four"—F. L. Catlin—came forward to run off. He sent 237 words, 4 words less than his afternoon spurt. Herbert Wright of Washington, then sent 211.1, and was followed by the third one of the four leaders of Class A, Mr. Gibson. Gibson sent 238 words and 4 characters in his usual faultless manner. Davis, Millard, Waugh, Paulhamus and M. J. Doran next took their turn, in the order named and all but Millard made good records, Millard was compelled to stop two or three times to read copy—(which was large print) and amid the applause of the audience he gracefully retired, after several ineffectual attempts to get the stickiness out of his key. Mr. Roloson the last of the four giants came next, and rattled off 246 words and 2 characters. Then the order of entries in Class B was continued without interruption. Mr. F. L. Catlin astonished the audience by sending 251 words and 1 character, and Mr. J. P. Bradt sent 220.2 in excellent style.

The prizes in class B were awarded as follows:

	FIRST PRIZE, \$85.
F. L. Catlin,	251 words, 1 character.
	SECOND PRIZE, \$65.
W. L. Waugh,	229 words.
	THIRD PRIZE, \$30.
Frank English,	225 words.

The United Press prize of \$25 was awarded to Bradt for excellence, combined with speed.

This concluded the tournament proper, and the Judges retired to consider the Class A matter. In a few minutes they returned and announced the awards as follows:

	FIRST PRIZE, \$100.
B. R. Pollock, Jr.,	260 words.
	SECOND PRIZE, \$70.
W. M. Gibson,	238 words, 4 characters.

THIRD PRIZE, \$30.

F. J. Kihm, 238 words.

Waugh was awarded the United Press prize of \$25 for excellence, combined with speed.

After this announcement, the greatest and most successful fast telegraphing tournament on record passed into history.

The matter sent, conditions of the contest by classes, names of entries, etc., will be found elsewhere in this issue.

Mr. Wm. B. Upperman, of the Associated Press office, New York, took most of the matter on the Caligraph, which was placed on the stage, and the ease with which the work was performed was a revelation to many of those who were present. There is no doubt that many of these went away with the conviction that the Caligraph was the thing to make their work light and easy.

Mr. T. A. Edison sent a phonograph for the purpose of taking a record of the sending.

In a back room one of Mr. W. P. Phillips' recording instruments made a record on tape of the sending to be used for future reference and study.

In the evening there were fully six hundred people present, the hall being packed like the traditional sardine box. The ladies in attendance in the afternoon were far in excess of the male sex, and the hall was crowded.

Telegrams were read from several persons, including one from an old-timer in San Francisco—J. I. Sabin—offering \$100 towards the prize fund. This was distributed between the four classes, \$25 each, and awarded on the same grounds that The United Press prizes were awarded.

The split-watch used by Mr. W. J. Johnston, the official timer, was made by the well known Newark house of J. Kendall Smith. It was an elegant piece of workmanship. Mr. P. B. Delany, the well-known electrician, was present with his word recorder, which made a reliable record of the number of characters sent by each contestant.

The New York *World* prize of a beautiful badge was awarded to F. L. Catlin, and the same paper's Ladies' Prize—a handsome lace pin—went to Miss K. B. Stephenson. Both of these prizes are shown in accompanying illustrations.

Mr. C. W. Price, the starter, in a letter to Mr. Catlin, enclosed a check for \$10 which he desired to be presented to Miss A. Erbeling as an expression of his appreciation of her plucky endeavors to acquire control of her nerves under the trying circumstances. Miss Erbeling was unfortunate, and after the third attempt failed to get control of herself and gave up the task. Mr. Catlin has presented Miss A. E. Findley with a check for \$10, for her meritorious work. She might have attained the first place had she not broken down a couple of times and went back to do her work over again correctly.

Mr. Catlin received the unanimous thanks of the entire profession for his able and satisfactory management of the tournament.

Mr. James D. Reid did not forget the ladies. A cablegram from that estimable gentleman announced that he had forwarded a brooch to be awarded to the winner of the ladies' class.

Several of the contestants in the fast-sending tournament are dissatisfied with the judges' decisions, and claim that it is not a fair test of a man's ability to sit down and rattle off 250 or more words in five minutes' time.

The sending of Mr. Pollock, while without doubt the most remarkable as far as the number of "pulsations" in a minute is concerned, would be of no practical use in handling press or any other matter, as most of it would be unreadable to the average operator, were he not familiar with it beforehand.

The sending done by Messrs. Waugh, Ayres, Bradt, Kihm, Gibson and several others was only a sample of the work done every day on the United and Associated Press circuits, and could have been recorded by any first-class operator on the typewriter.

To this end W. L. Waugh, F. J. Kihm of the United Press and W. M. Gibson, will arrange a

sweepstakes of \$100. each, open to the world (Messrs. Pollock, Roloson and Catlin preferred), to send 1,000 words of regular press matter, to be selected by some disinterested party and not to be seen by the contestants until the start, which must be copied by a receiver on the typewriter, the sender finishing the matter first, and who shall have been adjudged by capable judges to have done the best work, to be awarded the prize.

Among the many hundreds present were all the shining lights of the profession, including General T. T. Eckert, A. S. Brown, E. H. Johnson, W. D. Sargent, H. H. Ward, Ira C. Bellows, C. C. Hine, J. H. Bunnell, Captain J. R. Dennis, John Mitchell, Newburg, N. Y.; Miss Beda Arnold, Bridgeport, Conn.; A. L. Suesman, Chicago; P. V. DeGraw, Washington; C. A. Stimpson, Chief Postal, Philadelphia; General Greeley, E. A. Leslie, H. W. Storey, who gave \$5 in gold to the lady winner; P. B. Delaney, E. A. Callahan, Mr. Doran, the broker; C. R. Williams, W. H. Hargrave, Philadelphia.

President Brannin, of the Telegraph Club, invited the visiting members to make themselves at home at the club while in the city.

The prizes were distributed at the Telegraph Club rooms on the following day, when a large crowd was present.

A LONG DISTANCE TELEGRAPH TOURNAMENT.

The Editor of this paper is authorized to announce that the Hon. Wm. Henry Smith, General Manager of the Associated Press, will offer three prizes for long distance sending, open to all, and to be contested for some time in the Fall, the date to be arranged later.

The test is to be a practical one, and the prizes are to be awarded on the basis of speed, excellence, and ability to send long distances. The Associated Press western circuit will be used, and the sending will be from New York. The circuit will be the same as that used every day, and extends to Minneapolis, Minn. Each contestant will send fifteen minutes, or half an hour, according to the number of entries, and the matter to be sent will be from manuscript or typewritten copy, such as used in the ordinary course of business. The first prize will be \$100; the second, \$75, and the third \$50. Prizes for receiving the same matter, under proper conditions, at all points on the circuit will likely be offered. The plans are not yet matured, but as soon as they are we will give full details of this contest, which will probably be the most interesting on record and of the greatest practical value. The contest will be held in New York.

New Central Opera House, 207 to 215 East 67th street, 67th street and Third avenue "L" station. Grand testimonial performance and reception tendered to Martin J. Dixon, under the patronage of the New York Telegraph Operators, on Wednesday evening, April 16th, with a purely telegraphic cast, presenting the ever welcome society play in five acts, "East Lynne or, the Elopement." Characters: Lady Isabelle and Mme. Vine, Miss Florence Miller; Barbara Hare, Miss Jessie Wallack; Miss Corney, Miss Mamie C. White; Joyce, Miss Nellie Reeves; Wilson, Miss Emma Miller; Willie, Little Ella Loraine; Sir Francis Levison, Mr. Fred T. Meyer; Archibald Carlisle, Mr. Martin J. Dixon; Lord Mount Severn, Mr. Herbert Stoddard; Mr. Dill, Mr. Wm. Eling; Richard Hare, Mr. Eugene W. Adamson; Officer, Oliver Benson. Synopsis of scenery: Act 1st—United arrival of the bride and groom; act 2d—Tempted—the elopement; act 3d—Awakening deserted; act 4th—Detected—the arrest; act 5th—The end—farewell until eternity. Special attractions: Mr. Thomas Ballantyne, mimics; Miss Susie Stephenson, soprano solos; Mr. Ed. Delaney, versatile recitations; Miss Jennie Sheridan and Master Chas. McDermott, piano duet. Tickets, admitting gentleman and ladies, 50 cents. Private boxes holding seven persons, \$3. Come early; curtain 8 p.m. sharp, dancing, 10.30.

EMIL M. SHAPE.

The subject of the above sketch was born in Saxony, Germany, Dec. 25th, 1842. Together with his parents he came to this country when twelve years of age, residing in New York City until 1857, when he removed to Milwaukee. In the beginning of '58 he began to study telegraphy at a small station named Richfield, twenty-five miles west of Milwaukee on the La Crosse R. R. now the Chicago, Milwaukee & St. Paul Railway, where after having mastered the details of railroad operator's position, he acted as "extra operator and agent" until 1860. Having become quite proficient, he was called to the general manager's office, Milwaukee, where he held the position of assistant dispatcher for a time, when he left the railroad service and entered that of the Western Union Telegraph Co., at the main office, Milwaukee, as operator. Early in 1864, he went South and entered the "Corps of Military Telegraphers," at first being employed in Nashville city office under Captain Van Duzer, but after two months was transferred to the headquarters of General George H. Thomas, commanding the Department of the Cumberland, where he remained as operator



EMIL M. SHAPE, CHIEF OPERATOR, WESTERN UNION, MILWAUKEE, WIS.

and confidential cipher clerk until the close of the war, when he returned to Milwaukee and again entered the employ of the Western Union. In '67 he was appointed chief operator and holds that position at the present day. When he first entered the Milwaukee office it contained in all four wires and employed three operators; now it contains over 100 important circuits, with a force of 45 operators. Many tempting offers of responsible and lucrative positions, outside of Milwaukee, have been rejected by Mr. Shape, from time to time, he not wishing to leave that beautiful city. Mr. Shape's name is at present being prominently mentioned for the position of city electrician of Milwaukee, and that city will indeed be fortunate should they secure his services.

His leisure moments are chiefly spent in writing for German periodicals, among them the *Progress of the Age* (German), published in Milwaukee, articles on electrical matters being the main subject. Among others he has for some time past furnished translations of scientific articles from the pen of Prof. Henry Raymond Rogers, on the "New Philosophy of the Sun," "Gravity," "Nebular Hypothesis," etc.

As the telegraphers' tournament will be held shortly in New York, I take the following from the *Journal of Telegraph*. It may possibly encourage the "youngsters" who intend participating in the tournament: "The greatest number of words sent with a Morse instrument, in one hour, of which we find record, is 2,631. This was done by Mr. E. M. Shape, in Feb., 1868, sending from Milwaukee to St. Paul, a distance of 450 miles. Mr. Edward Curry copied Mr. Shape and his work was perfect." Mr. Shape, according to the *Chicago Herald*, was during his early telegraphic days the most rapid Morse transmitter in the country.

Jason N. Crittenton, familiarly known as "Pap" Crittenton, at present in Chicago, was years ago the "star" all-round telegrapher known to the profession. It is stated by the *Herald* "that Crittenton used to take Shape's sending from Milwaukee, at the rate of sixty messages an hour taking them as they came."

The subject of this sketch is very popular with his force of operators, which is evinced by the manner in which all remain with him.

A CHAPTER ON BULLS.

Where is the operator who cannot relate some funny stories of bulls that have come within his observation during his telegraphic career? Printers make many bulls, but telegraphers can excel these, both in numbers and quality. Many bulls are traceable to poor handwriting, and ninety-nine per cent. are avoidable by the exercise of proper care and judgment. But most operators perform their work in a mechanical way, and cannot tell at any time anything about the last despatch they sent or received. Some very ludicrous mistakes have occurred even by the best operators, showing that no class of telegraphers is bull-proof. We have collected at random, here and there, a few choice specimens of such perversities. Some, no doubt, are perhaps somewhat antique, but a good story will bear repetition, if a good long interval is allowed to lapse between times. Most of the mistakes are made in press despatches; in business messages they are not so noticeable.

Some time ago a despatch was sent to the chief of police at Albany to arrest a man on a certain train. As a clue to his identity it was mentioned in the despatch that he had a cylindrical trunk. The chief of police, however, was thrown off the scent by an error in the despatch, and on the arrival of the train looked around for a man with a "cylindrical drunk."

A happy couple, just married, sent word to expectant friends in a distant city to meet them at the depot with a horse and carriage. Imagine their consternation when they arrived at their destination to find a *hearse* and carriage in waiting.

A peculiar bull was made in a press despatch reporting the result of a horse-race. The despatch stated that the race was won by a certain horse with "Side fence" second, etc. Such a horse as "Side fence" was unknown, and on investigation revealed the fact that "Defence" was the second horse and the "si" (semi-colon) was run too close to the word "Defence."

A real papal bull was perpetrated by some operator in handling a press despatch concerning the health of the Pope. The Pope had been ill for some days when the startling announcement came to the effect that the "Pope has had another child." When it was remembered that His Holiness had suffered from a "chill" the day previous the explanation was obvious.

It is not often that a bull gets beyond the telegraph editor of a newspaper, but, when one does it is a good one. Two or three winters ago when St. Paul was reveling in ice-palace carnivals, etc., very voluminous reports of the festivities were sent to the New York dailies. On the great day, when the Ice King arrived there was a grand time, and as if to emphasize the great importance of the event, one of the great dailies announced to its readers next day, in great head lines, "Arrival of Yo King." It was a persistent bull too, as the same paper talked about Yo King for two or three days.

"Jags is not 100," was the information that caused some misgivings in the mind of an old lady, but she felt easier when she learned that it was no worse than that "James is not well."

Mistakes are frequently made by the writers of despatches who are in a hurry, and errors of this kind are sometimes awkward and embarrassing. A despatch of this order described an accident to "one of William Jones' colored children," etc. What was meant was, "one of the children of Wm. Jones, colored," etc.

A car load of "cats," for "oats," "whew" for "wheat," and many such bulls, are very common, and to enumerate them would fill a volume. Such reading would be good to pick up to dispel mental gloom.

GUYING THE PROFESSOR.

Since Prof. Steele closed his telegraph college at Raleigh, N. C., that town has been free from these institutions until recently, when Prof. G. Millman, of the business college of Raleigh, introduced this branch of study into his college. His first teacher of telegraphy was Mr. E. T. Suggs, of Kinston, N. C., who came to the W. U. office here shortly after his arrival and asked permission to speak to one of his friends down the road. He was granted permission to do so. He called, and as he sup-



FRED. CATLIN, MANAGER RECENT TOURNAMENT.

posed succeeded in raising his friend, but it was not his friend, but one of the force who, discovering his identity, switched him off on a side track, and, after guying him for some time, persuaded him to attempt to receive a bogus message which read as follows: "The weather is very warm here, and we have decided to utilize all the old egg crates and cattle pens along the line of the road for fall and save the coal for colder weather. The two blind mules engaged in hauling stone with which to fill up the ocean at Newbern backed over the dump and were drowned. The company will likely have a lawsuit on its hands very soon. Particulars by special messenger. Secure, if possible, seven or eight broad-gauged operators for a narrow-gauged railroad to be built from Kinston to Raleigh." He (Professor Suggs) never tumbled but bulled the bogus telegram from beginning to end. He soon left for parts unknown as the cat was let out of the bag and the pressure was too much for the would-be professor of telegraphy. Since his departure the following note was addressed to one of the members of the O. R. T. in this city: "This will be handed you by G. Millman, President of the Raleigh Business College, who is wanting to secure a teacher of telegraphy for four nights each week, and it occurred to me it might suit you to take the place. The college has pros-

pects, etc." The following is the answer of the O. R. T. man: "Your note regarding my services as teacher of telegraphy for Raleigh Business College received. In reply, will say I am a member of the order of O. R. T., a telegraphic organization whose first principle and most binding obligations prohibit teaching the art of telegraphy. Besides this, the country is overflowing with poor men with large families, wholly dependent on their knowledge of telegraphy for sustenance, and, on account of the overwhelming supply of operators, can't demand a decent living salary. Thanking you for your kindness, and wishing the collegé all success possible to attain in its other branches."

OLD TIME REMINISCENCE.

BY AN OLD TIMER.

There are very few of the old "Magnetic Telegraph" Company force now living. The office was at the corner of Hanover and Beaver streets. The receiving office was at this place in 1846. No wires of that company being in the city of New York at that time, but the Albany and Buffalo line, 16 Wall street; Ned Gordon was our receiver and the messages were sent by boys to Jersey City, where we had an office in a two-story building on Montgomery street, occupying two rooms—front for operating room, rear for clerk and a half dozen boys who delivered the messages in New York for 2½ cents—their ferrage of course, was commuted. In fact the force had commutation tickets provided by the company. If I remember right the force over there consisted of: J. H. Gregory, chief operator; A. H. Cummings, Jno. McRae, W. H. Beebe, Oscar Willis, as operators, and myself as copyist to the operator, Edmund Clashback, clerk. We had but two wires from Jersey City to Washington. Mr. W. P. Westervelt was Superintendent, and Hon. B. B. French, President. The two wires were designated "upper" and "lower," extending from Jersey City to Washington, with intermediate offices at Newark, New Brunswick, Elizabethtown, Trenton, Philadelphia, Wilmington, and Baltimore. Contrast this with the present network of wires out of the city of New York and the immense force required to work them! and I wish I could show you the picture (group) we had taken when the office was in Jauncey Court, cor. Wall, in '53. The full force at this place, superintendent and all numbered ten persons.

PITTSBURGH PIPE LINE NOTES.—W. H. Keegher, of Glade Run, sent fifty-three words per minute for eleven successive minutes; he was also handicapped somewhat, having a swollen hand. He was unable to secure a leave of absence to attend fast sending contest at N. Y. W. H. Hartman has been transferred to Hookstown, Pa., and Sam'l Camp to Johnson. W. S. Wilkinson has been appointed operator for N. T. Co., at Jersey City. J. P. Barret has been appointed day man at Butler, Pa.

RALEIGH, N. C., NOTES.—The force at this point has again been increased; the new man is Mr. W. J. McLaughlin, formerly with the B. and O. Telegraph Company, who came to handle the United Press report. Mr. N. R. Young, manager, has gone to Washington on a visit to his family. Everything in good shape here and we have one of the best equipped offices in the district. Business is booming.

NEW BRUNSWICK, N. J., NOTES.—R. M. Cummings, formerly operator at Bridgeport, Conn., is now stationed at W. U. Depot Office, as test operator, vice Harry F. Ettinger, who was transferred to main office, Philadelphia. Charles F. Dilks, who for many years was chief operator for Penn. R. R. Co. at Jersey City, is the worthy and efficient superintendent of the Edison Electric Light plant in this city.

Mr. S. J. Pryor, recently of Kingston, Jamaica, has returned to New York.

ALBANY, N. Y. POSTAL NOTES.—Ever since the advent of the dynamo current last November in place of the gravity battery, our office has been the scene of a series of improvements, all of which have tended to make it the model office which it now is. A generous enlargement of the operating space has given us breathing room, and facilitates the handling of an ever-increasing business. We all like THE AGE, but our genial manager says "when THE AGE arrives, business stops." This shows the amount of interest that the boys take in their favorite fraternal journal. With Mr. A. J. Voyer as manager, and Mr. C. C. King, chief operator, the heavy roasts of press and commercial business are handled with surprising smoothness. The present working force consists of Messrs. P. D. Shultis, F. H. Darnell, Frank A. Hoag and Harry C. Murray, with Mr. A. G. Cole, night chief and manager; Mr. P. F. Farnan, clerk; Daniel Griffin, assistant clerk. Miss Minnie B. Bradley is manager of a cosy office in the lumber district. George H. Macdonald manages the office in the State Capitol, Mr. Lewis, formerly of Fair Haven, Vt., has charge of the branch in Armour & Co.'s office.

"The Commercial Cable Company, working in connection with the Canadian Pacific Telegraph, did some really magnificent work yesterday in reporting the University boatrace. Not only was the result known in this city within a few seconds after the finish of the race, but bulletins announcing the positions of the crews as the race progressed were received. The interest felt in the Oxford-Cambridge race was probably never greater than that of yesterday, and consequently the enterprise of the two companies mentioned, in giving such early news of the result was much appreciated."—*Montreal Gazette*, March 27, 1890.

TELEGRAPHIC COMMUNICATION BETWEEN INDIA AND CHINA.—There is every probability, says *Indian Engineering*, that in the future a through land line of telegraph from India and China will be opened. Our wires now stretch as far eastwards as Bhamo, and the China Government some time ago had extended their western lines as far as Yung Chang, thirty miles east of Momein in the Yunan Province, and not more than 130 miles from the northeastern frontier of Upper Burma.

INFORMATION WANTED.—Will any one knowing the present address of Harry G. Whallon, late of the United Press, New York, please communicate with me. When last heard from was on Illinois Central R. R., near Chicago. His father is ill and wishes to know his whereabouts. G. F. Jones, W. U. Tel. Co., 195 Broadway, New York.

TELEGRAPH EXTENSIONS ON THE NORTHWEST FRONTIER.—A telegraph line is to be constructed between Quetta and Apozai, the headquarters of the new Zhob Valley district, and in time there will be direct communication between Dera Ismail Khan and Apozai through the Gomal Pass.

Mr. George Carlisle, lately appointed night manager of the C. P. R. Telegraph Office, Toronto, Ont., was presented with a bronze vase by the Empire staff. Until he obtained the present appointment he was the operator of the Empire's special wire.

DIED.—Arthur T. Ludwig died at Allenwood, Pa., March 26th, aged 78 years. He was the father of E. F., D. J. and L. A. Ludwig, all well known and prominent telegraph people of this city. He was for 45 years Justice of the Peace at Dessart, Pa., where he was well and favorably known in political and social circles.

Miss Emma E. Fitch was transferred from Mitchell to Redfield, S. Dako., for the W. U.

Mr. Chas. F. Whitney, formerly of Boston, is now with the *Times*, Lowell, Mass.

F. S. Stewart, formerly of Auburn, N. Y. is now with the *Bulletin*, Providence, R. I.

PHILADELPHIA NOTES.—Mr. E. A. Walker, of the W. U., is now stationed at the fourth district for the A. D. T. Co., as day operator, vice Mr. Ed. Kearns, resigned to go with the Penna. R. R. Co. at 32d street; Mr. John Sheehan, night operator at the fifth, has accepted a position at the B. and O. depot; Mr. Mecke has been transferred from the eighth to the fifth in Mr. Sheehan's place. John Murray has been promoted from day sergeant, at the fifth, to night operator at the eighth. An extensive ticker service has been established here by the Postal Company, the system used being that of the New York Stock Quotation Telegraph Co., who have stationed Mr. August A. Wilson, an expert key board operator at this point, to transmit the matter. Mr. Wilson is initiating Ernest Truitt into the mysteries of the system, and will return to New York when Mr. Truitt becomes competent to do the work. There are already about forty instruments in circuit and more to be supplied. Mr. J. J. Brady has gone back to New York. Mrs. A. V. Walker has resigned. Mr. Samuel Etris, who for a number of years has been connected with Cyrus Moffett's commission office on North 3d street, is now a member of the main office staff. Mr. J. A. Barber, recently from New Mexico, is also a new arrival. Mr. Jack McDonald now reports for duty at the *Inquirer* office, vice E. C. Abrams, who has accepted the management of a new score card company.

GOLD & STOCK LIFE INSURANCE ASSOCIATION.—The Auditing Committee of this Association, consisting of F. W. Baldwin, W. H. Jackson and J. M. Moffatt submit the quarterly report, ending March 31, as follows:

Balance on hand Jan. 1, 1890,	-	\$4,805.59
RECEIPTS:		
For Fees,	- - - -	\$ 27.00
For Dues,	- - - -	987.00
For Interest,	- - - -	135.14
Total,	- - - -	\$5,954.73
DISBURSEMENTS:		
Death Claims,	- - - -	\$1,000.00
Expenses,	- - - -	97.80
Balance on hand, March 31,	- - - -	4,856.93
Gain,	- - - -	\$ 51.34

GOVERNMENT TELEGRAPHS.—Mr. Edward Rosewater, editor of the *Omaha Bee*, and a practical telegrapher, was before the House Committee on Post-Offices and Post-Roads, on March 18, and made an argument in behalf of the establishment of a postal telegraph. Mr. Rosewater said he had been for some years manager of the Western Union Telegraph Company, at Omaha, Neb. He was convinced that the time had arrived for the government to endeavor to secure control of the telegraph. He discussed the manner in which, he said, the telegraph companies manipulated the wires during the war, to the disadvantage and injury of the Government. He also made statements concerning the workings of the Pacific Telegraph companies, that had been aided by the Government, to show their arbitrary power without general governmental regulation. He presented figures showing the expenses and profits on a given wire, and said he thought a ten or fifteen cent rate for messages ought to be remunerative.

THE PARIS TELEPHONE SERVICE.—The complaints in regard to the Paris telephone system have induced the Minister of Posts and Telegraphs to decide upon the erection of a large telephone exchange in the centre of Paris, with accommodation for 30,000 subscribers.

C. P. R. WESTERN DIVISION NOTES.—F. D. Briggs, West Fort, resigned and gone to Tacoma to join his brother; J. Jackson, promoted Kaministiquia to West Fort, nights; Mr. Wright, new arrival from Dakota, to Kaministiquia, nights.

POSTAL TELEGRAPHY.

MR. HUBBARD FAVORS A BETTER SERVICE AT LOWER RATES.

Gardiner G. Hubbard, of Washington, was present by invitation at the meeting of the House Committee on Post-Office and Post Roads. He declared that he was in favor of a cheap telegraph. In the use of the telegraph by speculators, tradesmen and bankers the United States was far ahead of other countries of the world, but in the matter of social business it was behind. The business interests of the country had, by means of private wires, better and cheaper facilities than the general public. An increase in facilities would be followed by an increase of business, just as it followed a reduction of rates.

Mr. Hubbard said he was in favor of the Government taking charge of the telegraph and doing the business in the same way as it made contracts with the railroad companies for carrying the mails. He did not believe in the Government taking absolute control of the telegraph. He then quoted extensively from statistics of the Western Union Company with reference to its receipts, expenditures, etc. He differed widely from Dr. Green concerning the cost of construction and maintenance of the lines. The Western Union had more lines, he said, than were absolutely needed, and it was thus unable to run its service as economically as might be.

In answer to a question by Representative Candler, Mr. Hubbard said that he thought a ten-cent rate for messages was too low. He favored rates of 15, 25 and 50 cents, according to distance, for the day, and a uniform night rate of 25 cents.

The following is contributed:

WASHINGTON, D. C.

MR. EDITOR: The arguments before the House Post-Offices and Railroads Committee, in favor of the government assuming control of and maintaining the telegraphic system of the country, is becoming quite interesting. A number of gentlemen *who know it all* have had hearings. Among the large batch of testimony taken, none is more startling, and at the same time absurd, than that given by Mr. Edward Rosewater, part owner and Washington correspondent of the *Omaha Bee*. The capacity and elasticity of his imagination is vividly portrayed throughout his argument. He poses as an expert on telegraphy, and asserts that he was for seven years manager of the Omaha Western Union office. If he is correct, the reader will wonder where his phenomenal artists came from, and whence they vanished. Mr. Rosewater is an ardent advocate of cheap telegraphy. He is one of Mr. Wanamker's staunchest backers, whose scheme is a novel one. He proposed to run the telegraph the same as the mail; that is, to have the carriers deliver the messages with their regular mail delivery. He proposes to do away with clerical and messenger service. The sender of each message will be expected to count and stamp his own message, when he can drop it in the letter-box, or similar receptacles, to await collection by the carrier. Under this system, should a telegram for New York be filed late in the evening after the last delivery, that message would necessarily remain in the New York office until the following morning's early delivery. Mr. Rosewater, after giving some ancient history of the telegraph, wherein he marks off the part he played, makes statements that will no doubt cause broad smiles to creep over many countenances. Of the ability and expense connected with what he claims first-class work, he says:

"I have been asked here whether or not a telegraph toll of less than the present rate would be remunerative. I have compiled an estimate of the expense and earnings of a wire operated at a MODERATE speed. A FIRST-CLASS operator

can transmit by the Morse instrument FORTY WORDS PER MINUTE. At an average of thirty words per minute he would transmit eighteen hundred words in an hour, or SIXTEEN THOUSAND TWO HUNDRED words in a day of nine hours. Computing each message at thirty words, and the rate per message to be 15 cents, he would earn for the company \$53.10 a day."

MR. BINGHAM: "That presupposes continuous work?"

MR. ROSEWATER: "Yes, sir; but I have discounted that. A first-class operator can send forty words a minute, but I have only calculated it at thirty."

From what firmament does the gentleman expect to pluck such scintillating stars? Did he, while manager at Omaha, discover many? These assertions look very good, and under the guidance of a masterly hand could be made to appear quite plausible—that is, to the outside world. To those on the inside with a correct knowledge of the capacity of an operator, FIRST-CLASS or any other class, they are absurd.

After several interrogations by Mr. Cheadle, of the committee, Mr. Rosewater launches forth as follows: "At the rate of THIRTY-THREE words a MINUTE, or TWO THOUSAND words per HOUR, a Morse line, operated with duplex instruments, for ten hours per day, would earn \$200 per day. Operated as a quadruplex, its earning capacity would be \$400 per day of ten hours; or, \$600 per day of fifteen hours, manned by two sets of operators, working an average of seven and a half hours each per day. The expense would be: eight operators at \$3 a day; sixteen messengers, \$1 a day each; four office clerks, \$2 a day each; blanks and envelopes, \$8. Total, \$56."

The supposition inferred is, that Mr. Rosewater's operators perform their work like so much machinery. No let up to quench the thirst; no let up to partake of food to sustain the body and brain during all this severe strain. No trouble whatever is allowed for; that wire must work as clear as a bell the entire day. Bosh! An expert, of what? Surely the gentleman cannot for a moment imagine that the committee before whom he gave this testimony will be gulled into such belief!

The arduous labors of the railroad operator is well known. It is also well known that from their ranks have sprung some of the finest in the profession. Many operators along the different railroads and in small country towns fill positions of trust and honor among their fellow-citizens. They are known as an industrious, hard-working portion of our profession, and deserve praise rather than censure. Here is what Mr. Rosewater thinks of them:

"I claim, in the first place, that the eighteen thousand offices that are now reported to exist in this country for public service are not in condition to transmit the business of the people living at these stations; that they are merely adjuncts, making a LITTLE INCOME for the telegraph company without any special facility to do the business of the public. All of you are aware that in most of these small railroad stations the railroad company maintain a VERY CHEAP operator. Sometimes they pay them from \$20 to \$25 or \$30 per month. They are what professionals call plugs or unskilled operators. They are not competent to do commercial business. They are competent in the vocabulary which they have, which is a very limited one, to handle railroad business, because the same words occur all the time to the railroad operator—such as baggage, checks, conductor, car, station, etc.

"These words, perhaps five hundred in all, are all this operator readily receives. When he gets any other part of the English language, he generally breaks down. Now, you come to one of these stations and you want to transmit a message. The operator will receive it, but he is bound to do his railroad work; he gets no extra pay from the telegraph company, and it is no interest to him whether he does the other

work or not. The message is put on a hook, and it may be there a day or only a few hours. But at any rate, ten chances to one, you will reach your destination before the message gets there. That service is practically worthless."

Admitting this state of affairs, under the present tariff, for argument sake, what would it be should Mr. Rosewater's idea of cheap telegraphy be accepted and inaugurated? With the uniform rate of ten or fifteen cents per twenty or thirty words, the wires would be so crowded that it would be a week before a telegram could reach its destination. For every one message sent at the present tariff five would be sent at the reduced rates. Instead of creating an increased profit, it would cause an outlay for five times the service of the present system. In short, it would not be two years before the service would be utterly worthless and the government appealed to for a deficiency. Millions of dollars would be necessary to build sufficient wires and man them with the GILT EDGES alluded to by the gentleman.

In speaking of the messenger service he says: "The messages are delivered by little boys from eight to ten years old—waifs who are picked up and who can scarcely read. They are employed at a very low rate of \$2 and \$3 a week. But you take the government and with its carrier delivery and the carrier is a man."

Yes; the carrier is a man and receives a man's salary. Will it not take as many men to perform this service as it would boys? You hand one of these boys a telegram telling him it is a rush; away he goes at his greatest speed, delivers his telegram, and saves the broker thousands of dollars by its timely delivery. You take the man, he starts out, but not to run, oh, no! he is in the service of the government, and the dignity of his position will not permit this sudden outburst of speed. The telegram is delivered, the market has reversed, the broker is frantic, he rushes to the office, there is a complaint made, there is no redress. Figure out this additional item in the cost of delivery, what effect would it have upon the anticipated profit and expense of this new scheme of government telegraphy, if it will increase the compensation and reduce the labor of the operator? But it is far preferable to remain in the hands of a corporation than to be made machines of and work for a mere pittance.

SALUDA,

CATARRH,

CATARRHAL DEAFNESS—HAY FEVER.

A NEW HOME TREATMENT.

Sufferers are not generally aware that these diseases are contagious, or that they are due to the presence of living parasites in the lining membrane of the nose and eustachian tubes. Microscopic research, however, has proved this to be a fact, and the result of this discovery is that a simple remedy has been formulated whereby catarrh, catarrhal deafness and hay fever are permanently cured in from one to three simple applications made at home by the patient once in two weeks.

N. B.—This treatment is not a snuff or an ointment; both have been discarded by reputable physicians as injurious. A pamphlet explaining this new treatment is sent free on receipt of stamp to pay postage, by A. H. Dixon & Son, 337 and 339 West King St., Toronto, Canada.—*Christian Advocate*.

Sufferers from Catarrhal troubles should carefully read the above.

AN OPPORTUNITY

For Some Railroad Man to get a HOWARD WATCH Free of Cost to him.

I propose to furnish one of the well-known **Howard Movements**, of their best quality Gilt, fully adjusted to Heat, Cold and Position, and cased in a specially made Filled Case, Open Face, or Hunting, as may be desired, to **some railroad man** who will send me his full name, giving his address and classification of employment. Each letter received will be assigned a number, and that number will be registered against the name of the writer, and the lucky number gets the **Howard Watch**, which is universally acknowledged to be the best Railroad Watch manufactured. A **2-cent stamp**, enclosed with the letter, will insure the return of a certificate bearing the registered number of the name, and for **25c.** will include our 230-page catalogue, illustrating movement and case to be given. **My object** in making this extraordinary offer, is to get the correct **name and address** of all Railroad Men. The number drawing the watch, and the name of the party holding the same, will be published in this journal. **Drawing to take place** Sept. 1, 1890, and to be under the supervision of responsible parties. Send your full name and address to J. S. TOWNSEND, 1554 Wabash Avenue, Chicago, Ills.

\$175.00 IN PRIZES.

\$100 first; \$50 second, and \$25 third. Prizes to be awarded to the three persons sending us the most business from February 16th to Nov. 16th, 1890.

ONE HUNDRED DOLLARS will be given to the person who sends us the most business during the ten months named.

FIFTY DOLLARS will be given to the person sending us the second largest amount of business.

TWENTY-FIVE DOLLARS will be given to the person sending us the third largest amount of business.

These prizes are given exclusive of the usual commissions allowed; therefore those who work for one of these prizes will also be liberally compensated for the trouble with increased commissions. The first prize amounts to \$10 per month—a handsome sum of money for so small an effort.

Any person, except a regular employé of the paper, is qualified. This, of course, includes all agents and correspondents.

All remittances will be acknowledged in each issue of the paper.

Remittances only are acknowledged in this contest.

Up to the present time the list of those interested stands:

B. C. Elder, Kansas City, Mo.	\$8 70
W. E. Burns, Pittsburgh, Pa.	49 00
E. A. Coney, Newark, N. J.	3 00
L. E. Moores, Cincinnati, O.	4 65
B. F. Hartz, Helena, Montana,	8 90
A. M. Butler, Omaha, Neb.	10 00
C. D. Lee, St. Louis, Mo.	21 00
C. J. App, Knoxville, Tenn.	4 80
F. B. Holcomb, Watertown, N. Y.	2 00
C. S. Loewenthal, Chicago, Ill.	18 51
H. I. Jolley, 195 Broadway, N. Y.	30 75
S. H. Riker, Syracuse, N. Y.	10 64
H. C. Wooden, Baltimore, Md.	1 80
B. J. Meising, Oil City, Pa.	5 00
J. F. Slack, Sioux City, Iowa,	3 70
K. W. Starbird, Portland, Me.	1 20
J. W. Thompson, Nashville, Tenn.	7 25
G. W. Spaid, Savannah, Ga.	6 00
W. Hazelboom, Boston, Mass.	13 60
John J. Seitz, Hamilton, Ont.	15 00
W. J. Anderson, Toronto, Ont.	1 20
F. L. Saunders, Dallas, Tex.	8 00
G. W. Hickey, Plattsburg, N. Y.	6 50
R. Satchwell, Ashland, Or.	6 00

DIED.—Samuel B. Roberts, a widely known telegrapher, died at the City Hospital, Friday, March 28th, of pneumonia, aged forty-five. The deceased was at one time manager of the B. and O. in St. Louis, and later connected with the United Lines at Kansas City. The remains were taken in charge by friends in this office, and by them forwarded to his home at Mansfield, O., where the interment took place, April 1, under the auspices of the G. A. R.

Mr. William M. Allison, the well-known operator and journalist, has been appointed special correspondent and agent for the *Panama Star and Herald* and *La Estrella de Panama*, for the district embracing Pittsburgh, Cincinnati, St. Louis and Chicago, with headquarters at Pittsburgh, Pa. Mr. Allison possesses the knack of discernment as to what constitutes a live newspaper, and his ability to provide the necessary matter is remarkable. We wish him every success.

The many friends of Mr. Peter Adams, will regret to learn of the death of his father which occurred April 1, at London, Ontario.

FIRE.—An accidental fire at the New York Telegraph Club Rooms a few days ago caused slight damage.

Mr. D. L. Kaine, late of Deming, N. M., has retired from the telegraph business on account of ill health. He is now located at Fulton, Ill.

THE DIRECT UNITED STATES CABLE COMPANY GOT NEWS IN VERY QUICK ORDER.

Three thousand miles in one minute and thirty seconds!

This, the most remarkable feat of telegraphy yet accomplished, was performed by the Direct United States Cable Company.

The annual boat race between the crews of the Oxford and Cambridge Universities took place March 27th. The aquatic struggle finished at Mortlake at exactly 5.06½ p. m. At 5.07¼ the news of the result was filed at the English end of the Direct Cable, and at 5.08 the white flashes in the dark room at the American end were telling the story to the people of New York.

In just forty-five seconds the news had been borne from shore to shore.

MILWAUKEE NOTES.—Among the changes to record since last you heard from the Cream City, are the following: Western Union departures: Messrs. Patt, Barr, Grosh and Hegerty, to W. U., Chicago; Crotty, to C. & M., City; McRavey and Knochenhauer to Lake Shore R. R. Arrivals: Messrs. Hamilton, Chase, Johann, Snyder, Fish, Lass and Miss Hathaway. Edward Lucas, late manager W. U., Fondulac, is also a recent arrival. Peter McGill, a gentleman well known to the profession, holds an important position with Cudahy Bros., successors to Jno. Plankinton & Co. Peter spends his evenings speech-making, political or social, either suits Pete, but the "Single Tax" question strikes nearest to the heart. Peter Williams, late of W. U., has deserted the business and now adds the title of "drummer" to his many degrees. As Mr. Peck has been elected mayor of the city, Pete is happy. So is Peck. Miss Edgerton has been working temporarily for W. U., Chicago. She returned to Milwaukee last week. Messrs. Dunk and Cook hold down broker tricks. Messrs. Daffy and Hickey are at Associated Press offices nights, and Chas. Dean, days. At the United Press we find Velie, days, and Williner, nights; all good men. Mr. Saefke is manager at East Water street branch; Mr. Butler at the Plankinton House, and Mr. Hobdy at Cudahy Bros. Mr. Walsh, for several years an operator at the Plankinton, is now assistant chief clerk of that large establishment. At the Postal office we find Alderman Ramsey as manager; Jno. Rowe, chief operator; W. Bogus, cashier, and Messrs. Farley, Smith and Joe Ramsey able assistants. James Marlett, for several years with Associated Press, is now engaged in the grocery business here, and is doing a rushing business. Much interest was taken in the fast sending tournament.

NEW YORK WESTERN UNION NOTES.—Mr. Louis Meleche, of the State Press, has been confined to his bed for two weeks with congestion of the brain. Resigned, to go to pool rooms: M. J. Fitzpatrick, Wm. Rath, C. T. Thompson, Thos. Delehanty A. J. Tierney; also B. A. Palmer, M. A. Delaney, Geo. Cromwell, Miss Ida Dealing, Miss Maggie Glover. Appointments: Wm. E. Athearn, as wire chief, nights; trick transfers: C. P. Heyl, H. R. Swivel, J. B. Moore, C. F. Leonard, J. A. Henneberry, R. W. Perin, J. H. Gibbons, W. Christian, G. J. Withey, A. J. Hutton, J. J. Carroll, E. J. Hamilton, E. L. Kinney, C. J. Fallon, H. W. Roberts and H. W. Dutcher. Those added to the waiting list are: Wm. E. Bagwall, Wm. J. Moran, Wm. H. Foley, E. S. Brewster, H. G. Montgomery, D. B. Baldwin, Theo. Alcan, Ambrose Dolan, Geo. E. Seitz and C. L. Williams. The leading topic of conversation has been the great sending contest, which has attracted such widespread attention everywhere. The ladies are well pleased with the results; of course every one could not win a prize. It was demonstrated beyond a doubt that the lady operators can handle their share of the business in a most satisfactory manner. The ladies extend their congratulations to Miss Ida Dealing, who recently resigned and will be married to Mr. James Seeley, an expert

and popular operator in 195. Great interest is taken in Mr. Dixon's benefit as to how the young lady operators will acquit themselves in their respective parts. Mr. Dixon says they are all perfect in rehearsal and he expects them all to be heartily applauded for their good work. Miss Laura Greene, formerly of this office, late of Roebling's & Co., Trenton, N. J. was married, April 9, to W. Divine, of Philadelphia. The second annual summernights festival of the New York Telegraph Club will be held at Washington Park, Avenue A and 69th St., July 2. The committees will be announced later.

SAVANNAH, GA., NOTES.—The personnel of the office is as follows: G. W. Spaid, chief operator, having succeeded E. W. Wood, who has accepted a more remunerative position with the Equitable Assurance Co., with headquarters at Atlanta; F. P. Hernandez, night chief; Harry Zeigler, J. D. Wooten, J. Lawson, P. V. Reich, T. J. Mafoney, H. W. Chambers, L. W. McCormick, J. L. Mounce, C. R. Mounce, J. D. Conoway, E. H. Strickland, J. F. Weissinger, M. J. Powers and W. J. O'Neill. The latest arrivals are: Chambers, C. R. Mounce, O'Neill. Recent departures: Jimmie McCurdy, for Nashville; Young Hackett, for Boston. J. S. Persons is at the Cotton Exchange. The facilities have been increased by an additional "quad," which is used for Cincinnati. For the last year improvements have been made until at present this is one of the neatest offices in the South, and also about the busiest.

The Postal opened here the first part of Feb. with James S. Seabrook, formerly manager of the W. U. Cotton Exchange office, but later connected with a cotton house, as manager. They are doing a very fair business, with Mr. B. G. Brown and Thomas, of Boston, as operators.

THOMASVILLE, GA., NOTES.—This has been an exceptionally busy season for the favorite winter resort of Southern Georgia, necessitating increase of the force, which now is as follows: Miss Deitscher, manager; Miss Kate Clifton, of Marianne, Fla.; and Miss Bessie Randall, of New Iberia, La., as operators. Miss Deitscher is away on a two months' vacation in Florida. She will return about May 1st. Miss Clifton has charge during her absence. At Brunswick, Miss M. Cleminson is manager, with E. J. Casey and E. B. Lacey, operators. Northern travel to this point has been as heavy as usual, and this in connection with the rapid increase in all kinds of business keeps all very busy. Mr. Lacey leaves on April 1st.

NEW TELEGRAPH WIRE TO LONDON.—The erection of a new telegraph wire between Aberdeen and London has just been sanctioned by the post-office authorities. At present there are two duplex Wheatstone circuits for private messages from London to Aberdeen, and two wires devoted exclusively to the transmission of news. The new wire is to be used for private messages, and will be fitted up as a duplex Wheatstone circuit.

C. P. R. EASTERN DIVISION NOTES.—J. Fraser, Trudeau, has resigned and gone East. J. Timmins has been appointed agent at Trudeau in his stead.

A copy of "Nellie Harland," an excellent telegraphic story, will be mailed, postage prepaid, with each new yearly subscription sent in accompanied by \$1.50. The book is highly spoken of by all critics.

C. P. R. WESTERN DIVISION NOTES.—J. A. Crawford, Vermillion Bay, has been sick but is again attending to his duties.

Mr. Geo. F. Weidman, formerly of New York, is now located at Spokane Falls, Wash., for the S. F. & N. Ry. Co. Mr. Weidman's numerous friends will be pleased to learn of his success.

I have retired from the profession but I cannot do without THE ELECTRIC AGE.—H. B. Cerveney, Hubbell, Neb.

THE ELECTRIC AGE'S ILLUSTRATED ELECTRICAL PATENT RECORD.

ELECTRICAL PATENTS ISSUED APRIL 8TH.

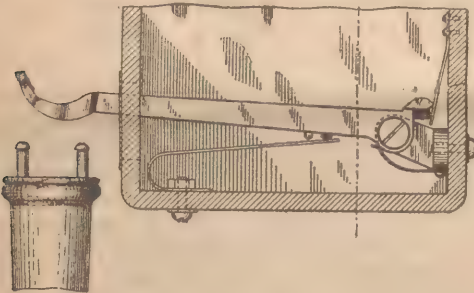
424,778. Ventilating System for Electric Subways. William Gee, New York, N. Y. Filed Nov. 26, 1889. This is a method of ventilation by the use of two pipes, one at the top and at the bottom of the manhole, one pipe being partially, or wholly enclosed within the other, each opening at different levels above the surface of the street.

424,809. Electrode for Secondary Batteries. James F. McLaughlin, Philadelphia, Pa. Filed Dec. 19, 1889.

424,810. Electric locomotive. James F. McLaughlin, Philadelphia, Pa. Filed Jan. 21, 1890. In this locomotive a storage battery is used, and the mechanism includes a clutch adapted to connect the motor armature with the driving wheels and a switch and lever for controlling the current.

424,818. Electric Railway Motor. Frank A. Perret, Brooklyn, N. Y., assignor to the Elektron Manufacturing Company, of New York. Filed Sept. 2, 1889. The armature and field-magnets of this motor are adapted to rotate in opposite directions, and each are independently connected with the running gear of the car.

424,845. Electric Railway. Edward M. Bentley, New York, N. Y. Filed July 30, 1887. In this invention means are provided for laying the electric conductors in an underground conduit.



NO. 425,058.—TELEPHONE SWITCH.

424,848. Electric Railway. Francis O. Blackwell, New York, N. Y., assignor to the Thomson-Houston Electric Company, of Connecticut. Filed Aug. 31, 1889. This invention contemplates the use of elevated railroad structures as the supports for the conducting wires.

424,860. Automatic Fire Alarm. Charles A. Cox and Joseph F. Cox, Louisville, Ky. Filed Oct. 11, 1889.

424,866. Arc Light. Julius Dulait, Charleroi, Belgium. Filed April 10, 1889.

424,887. Electric Railway. Walter H. Knight, New York, N. Y. Filed July 10, 1885.

424,888. Electric Railway. Walter H. Knight, New York, N. Y. Original application filed March 13, 1886. Divided and this application filed Dec. 17, 1888. Both of these railways are of the underground class, and means are provided for carrying the currents in underground conduits.

424,891. Method of and Apparatus for Measuring Alternating Currents of Electricity. William Lowrie, Charles J. Hall and Harold W. Kolle, London, County of Middlesex, England. Filed June 12, 1888. Patented in England, France, Belgium and in Italy. This method consists of differentiating the current in opposite directions and utilizing the differentiation to operate an electric motor.

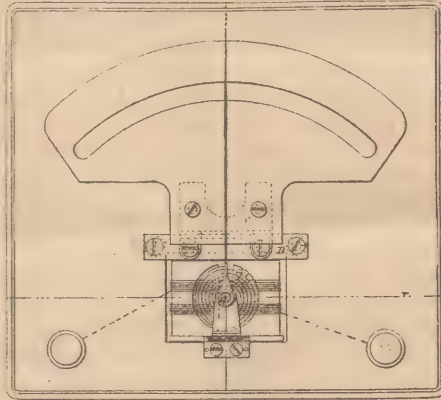
424,910. Contact Device and Switch for Electric Railways. Charles J. Van Depoele, Lynn, Mass. Original application filed Mar. 12, 1887. Divided and this application filed Mar. 21, 1889.

424,911. Electric Railway Motor. Charles

J. Van Depoele, Lynn, Mass. Filed Oct. 25, 1889.

424,914. Graphophone. John H. White, Washington, D. C. Filed June 29, 1889. The recording of this instrument is done on aluminum.

424,921. Electrical Heater. John V. Capek, New York, N. Y., assignor to himself, and Edward H. Johnson, Greenwich, Conn. Filed Oct. 26, 1889.



NO. 425,068.—VOLTMETER.

424,922. Electrical Cooking Stove. John V. Capek, New York, N. Y., assignor to himself and Edward H. Johnson, Greenwich, Conn. Filed Oct. 26, 1889.

424,928. Electric Railway. Rudolph M. Hunter, Philadelphia, Pa., assignor to the Thomson-Houston Electric Company, of Connecticut. Original application filed July 14, 1885. Divided and another application filed Mar. 12, 1889. Again divided and this application filed Jan. 10, 1890.

424,929. Double-Faced Electric Clock. Erick W. Lindenau, Joliet, Ill., assignor to the Joliet Clock Manufacturing Company, same place. Filed Nov. 2, 1889.

424,956. Graphophony. David W. Brown, Washington, D. C. Filed July 3, 1889. This is a method of recording sounds for reproduction.

424,993. Telephone Toll Box and Connection Register. Chas. E. McCluer, Richmond, Va. Filed May 28, 1889.

424,997. Electric Stop Motion for Warping Machines. John E. Prest, Northbridge, Mass. Filed Feb. 20, 1889.

425,004. Electric Alarm Device for Clocks. Robert Schmitz, Cleveland, Ohio. Filed May 20, 1889.

425,038. System of Telpherage. James E. Maynadier, Taunton, Mass. Filed August 10, 1889.

425,058. Telephone Switch. Ernest P. Warner, Chicago, Ill., assignor to the Western Electric Company, same place. Filed February 1, 1888.

425,061. Lightning Arrester. Jas. D. Bishop, Chicago, Ill., assignor to the Western Electric Company, same place. Filed February 3, 1890.

425,066. Balanced Pen for Autographic Telegraphs. Harry Etheridge, Pittsburg, Pa., assignor to the Writing Telegraph Company, New York, N. Y. Filed Oct. 11, 1888.

425,068. Voltmeter. Madison M. Garver, Newark, N. J. Filed December 14, 1889. Claim—1. In an electrical measuring instrument, a coil of wire and a magnet rotary on an axis perpendicular to the periphery of said coil and having its polar extremities in proximity to and facing said periphery.

425,069. Ammeter. Madison M. Garver, Newark, N. J. Filed Dec. 14, 1889.

425,071. Pole for Electric Wires. Levi R. Greene, Boston, Mass. Filed November 25, 1889.

425,076. Electrically Propelled Vehicle. Rudolph M. Hunter, Philadelphia, Pa., assignor, by mesne assignments, to the Thomson-Houston Electric Company, Boston, Mass. Filed Mar. 18, 1886.

425,077. Electric Railway Car. Rudolph M. Hunter, Philadelphia, Pa. Filed April 19, 1888.

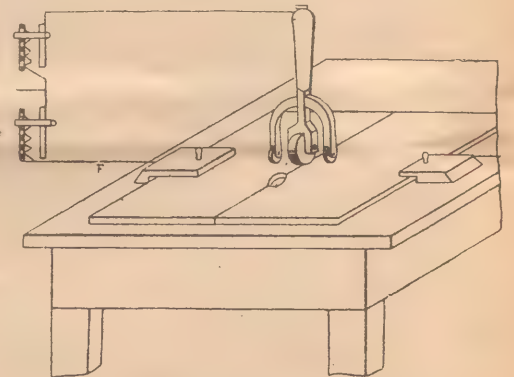
425,078. Electrical Annunciator Drop. Martin Hynes, Boston, Mass. Filed December 14, 1882.

425,086. Central Office System for Autographic Telegraphs. James H. Robinson, Rutherford, N. J., assignor to the Writing Telegraph Company, New York, N. Y. Filed Aug. 30, 1886.

425,089. Thermostat. William F. Singer, Carthage, assignor of one-half to Gilbert L. Haviland, Syracuse, N. Y. Filed December 19, 1889.

425,101. Support for Electric Railway Conductors. Conrad J. Kilian, Milwaukee Wis., assignor of one-half to Dustin Atwood, same place. Filed December 21, 1889.

425,106. Electric Rotary Pump. Emory I. Nichols, San Francisco, Cal., assignor by mesne assignments, to Irvine Stewart and Frank E. Tremper, same place. Filed March 13, 1889. This is an improved rotary pump comprising a fixed hollow shaft having an inlet and outlet port, said shaft having also an eccentric centre with encircling port communicating with the inlet



NO. 425,164.—ELECTRIC WELDING.

and outlet ports, a rim formed with the revoluble shell, and a wrapping of wire upon the rim to form of said shell an electric motor armature.

425,114. Thermostatic Coil. David W. Thompson, Chicago, Ill. Filed July 25, 1889.

425,125. Electric Lighting and Advertising System. Arthur Douglass, Danes Inn, Strand, County of Middlesex, England. Filed Dec. 26, 1889.

425,135. Electrode for Galvanic Batteries. William P. Kookogey, Brooklyn, N. Y., assignor to the Kookogey Chemical Light & Power Company. Filed December 11, 1889. This is a negative element for primary galvanic batteries, consisting of a number of short sections of fine wires or filaments, so as to present a number of points to the electrolyte, said wires or filaments being placed in a vertical position in the battery.

425,143. Burglar Alarm. John Moran, Adair, Mo. Filed December 5, 1889.

425,161. Telephone Toll Box. Harry L. Cassard, Baltimore, Md. Filed October 19, 1889.

425,164. Method of Electric Welding. Chas. L. Coffin, Detroit, Mich. Filed November 6, 1889. The feature in this invention is in traversing the joints to be welded with a roller which acts as a conductor, and is connected with one pole of the generator, while the joint is connected with the opposite pole. The weld is completed by pressure.

SUCCESS AND FAILURE.

BY ARTHUR E. HARRIS.

"I have come to believe that one cannot fervently desire to be what one can never become." Are we, as operators, always to be plodding along the narrow rut into which we have formed our daily work and habits? Are we always to be operators? Have we nothing else in view to which we can press forward in our efforts to achieve success? Do you say you have not had the chance of this one, and that one, who have had riches and influence at their command, while you have had nothing but poverty to fight against? I could give you numbers of instances where young men have emerged out of the ruins of their earthly patrimony to supremacy of power and influence. It has been the experience of many; it will be the experience of as many more. If we would achieve success, why not make our profession a stepping-stone to something higher. Others have done it. There are not a few men who stand pre-eminently higher to-day than they did five, ten, or fifteen years ago—men whose faces were once familiar in the operating-room, who have worked with us, perhaps, side by side, but who, through persistent energy and constant application, have succeeded in climbing the ladder of fame and fortune.

I do not intend to talk temperance here but I do advocate it, and I say emphatically that temperance is an absolute necessity to lasting success. We all know how many failures can be traced directly or indirectly to the social glass?

There are thousands of young men to-day who owe the success and splendor of their achievements to their personal efforts and persistent and unwearied application to something higher, and the position they now hold on the platform of success is only the position they have pressed forward to. So let us strive to reach a higher goal, and may we influence others also in this direction, and may our influence be, ever and always, mighty for the right and true.

Mr. Elmer E. Vance, the well-known member of the profession, of Columbus, Ohio, whose success in literature has been gratifying, when it is remembered that he has made literature a pastime, will this fall put upon the road a comedy drama that promises to become famous for its mechanical and scenic stage effects, to say nothing at present about its literary merit. The production is entitled "The Limited Mail," a name that suggests in some degree the character of the play. Mr. Vance has developed some wonderful mechanical effects after weeks of patient study and experiment, and it is asserted from a personal knowledge, and an observation extending through several years, that "The Limited Mail" will be the most realistic production ever seen here. The limited mail is sought to be wrecked by a brace of villains for plunder, and the incidents that surround the rescue are thrillingly illustrated by a series of mechanical effects heretofore wholly unknown on the stage. The plot to wreck the train is discovered and a message is being sent "For your life stop the limited mail," when one of the villains climbs the telegraph pole and cuts the wire just as the last word is commenced. A wonderful electrical effect is produced; the wires are made to talk the message to the audience; the words being spelled in letters of fire by the aid of a dynamo. It is an effect never before produced on any stage. The telegraph pole, a real hand car, and a splendid imitation of a limited mail train rushing at lightning speed across the stage are among the scenic effects. A feature is a vetibule train that is used in one of the scenes.

Postmaster General Wanamaker desires a Postal Telegraph scheme to add to the attractions of his "bargain counter" in his Philadelphia emporium.

Mr. F. C. Slagle, formerly of Kansas City, Mo., is now in East Brady, Pa.

WHAT TELEGRAPH BOYS NEED.

NO PROVISION YET FOR A FREE DIME-NOVEL LIBRARY.

Dooney Dagen, a junior member of Dr. Norvin Green's Telegraph Company, is a bright, promising young lad, with a face even striking in repose. Mr. Dagen stated yesterday to a *Times* commissioner that he had but few objections to make to the present run of things in Philadelphia. One thing, however, he freely admitted. "It pains me deeply," he said, "to observe that the Philadelphians who have died recently have made no provision in their wills for an important philanthropic institution which this city needs more than any other. I allude, of course, to a free dime novel library for the benefit of messenger boys and office boys. There are at present no less than ninety thousand such boys living in Philadelphia, and, if it must be acknowledged, most of them in straightened circumstances. Now, these boys must be supplied with pirate stories, wild west romances and the like. At present there is no way but by the exchange of the cold, unpoetical nickel for these literary masterpieces. Why don't some of these blokes get up a free library for us boys with a big statue of Captain Kidd on the roof? That's the stuff we want and don't you forget it."

Mr. Dagen then disappeared to attend to an important business engagement.

WANTS TELEPHONE FACILITIES.—The Postal Telegraph Cable Co. has applied to the Superior Court, at Wilmington, Del., for a writ of mandamus, returnable at the May term, to compel the Delaware and Atlantic Telephone Company to furnish the former corporation, in Delaware, with telephonic facilities. The Baltimore and Ohio Telegraph Company entered a similar suit here three years ago, but the case was ignored by the Court owing to the relator not being incorporated. The Postal Company thinks it has good grounds for winning the suit, although neither it nor the Telephone Company are corporate bodies in this State.

The Serial Building Loan & Saving's Institution have issued cards inviting an increase in their business, information and particulars of which can be secured from any of the following: Thomas E. Fleming, Room 29, 195 Broadway, N. Y.; W. J. Morrison, Ridgely Park, N. J.; Alexander Ray, 128 Rogers Ave., Brooklyn; John J. Barry, Cottage Place, 170th Street, N. Y.

An accident on the Western New York & Philadelphia Railroad was caused recently by the error of a train despatcher. Will the time ever come in the future of railroading when a train despatcher will not be a passenger despatcher?

TELEGRAPHISTS' GRIEVANCES.—English Government telegraphists are combining to bring their grievances before Parliament and the public, having failed in their attempts to obtain redress from the official quarter.

A LOSS IN TELEGRAPHS.—The revenue of the British Post-Office telegraphs is returned at £2,129,000, the expenditure being £88,604 above the receipts.

The Wheatstone Club, of Kansas City, is a social organization composed of the lady telegraph operators of that city. They were recently entertained by their gentlemen friends.

A line of four wires from Cleveland to Chicago, owned by the United Lines Telegraph Co., has recently been transferred to the Western Union Co.

Mr. George Erbelding, Mr. Jay Gould's private operator, who has been spending the winter in San Antonio, Texas, for his health, will return about April 15.

\$10.00 AND \$5.00 FOR ORIGINAL STORIES FROM LADY SUBSCRIBERS.

THE ELECTRIC AGE will give \$10.00 to the lady telegrapher who composes and sends us for publication the best original telegraph story. A second prize of \$5.00 will also be given to the lady telegrapher sending the second best story.

The conditions are: 1st. The lady must be a subscriber to the paper; 2d. The story must not exceed 500 words in length, and one side of the paper only should be written on.

A *nom de plume* may be used if preferred.

Two stories from the same author will not be admitted in the same contest. The prizes will be awarded when not less than ten stories have been printed, and at least two of the stories will appear in each issue until that number has been reached.

Mr. George E. Holbrook, ex-President of the New York Telegraph Club, has kindly consented to act as referee. Mr. Holbrook possesses well-known literary ability, and any decision he might render is certain to give general satisfaction. Now, let the ladies contribute.

ENLARGING ITS PLANT AND CAPITAL.—At a meeting of stockholders of the Postal Telegraph-Cable Company, on March 20th, the capital stock of the company was increased from \$5,000,000 to \$10,000,000. Fully 70 per cent. of the stockholders were present and voted for the increase without a dissenting voice. The \$5,000,000 additional capital is to be used for extensions and for the purchase of local telegraph companies. Among these is the Bankers and Merchants' Telegraph Company, which has been operated by the Postal for more than three years. Nearly all the smaller companies embraced in the proposed acquisition are the individual property of John W. Mackay.

THE LATEST.—"A mosquito ill to-day. Can't come down," was the information contained in a telegram received by a firm in this city a few days ago. Such a thing as a member of the firm staying at home on account of the illness of a mosquito did not seem plausible to his co-partners, so they had the telegram repeated. It came back in a more intelligible shape, and read, "Amos quite ill to-day. Can't come down."

"Yes, I said to him: 'You're a scoundrel,' and I said it bravely."

"Why, it's a wonder he didn't break your neck."

"He might have, perhaps, but I took the precaution to tell it to him over the wire."

At a uniform charge of one dollar THE ELECTRIC AGE is now prepared to answer any subject, or furnish diagrams to illustrate any electrical problem that seems difficult. If the subject is an extensive one, and requires the attention of an expert for over two hours, of course the charge will be higher, in proportion to the time occupied.

"Say, Pop, what is meant by 'dead sea fruit'?"

"I don't know, my boy, unless it is electric currents passing over the cables."

"'Never strike a man below the belt,' is my motto," said a split trick man.

"You don't live up to it. You struck me on the pocket for a quarter one day after pay day."

First Messenger Boy—I hear Cully is goin' to be expelled from the Messenger Boys' Labor Union.

Second M. B.—What's he done?

F. M. B.—He was caught runnin'.

E. H. Sargent, of Windsor, Vt., is now at Clinton, Mass.

Mr. J. P. Barrett, of Pittsburg, Pa., is now with W. & A. Pipe Line, at Butler, Pa.

— THE —

EDISON LALANDE

BATTERY.

~~~~~

Manufactured by the

**Edison Manufacturing Co.,**

**ORANGE, N. J.**



THE BEGINNING OF THE END.

Edison Company Sustained. Westinghouse Company Defeated.

Sawyer-Man Patent Decided by the Court to be a Fraud and Absolutely Valueless. Extracts from the Decision of Justice Bradley, Oct. 5, 1889.

Circuit Court of the United States for the Western District of Pennsylvania.

THE CONSOLIDATED ELECTRIC LIGHT COMPANY (WESTINGHOUSE COMPANY) versus MCKEESPORT LIGHT COMPANY (EDISON COMPANY).

No. 5, May Term 1888. On Bill and Final Hearing.

EXTRACTS FROM OPINION OF THE COURT.

"The great question in this suit is whether the patent sued on is valid, so far as involves a general claim for the use in electric lamps of incandescing carbon conductors made of fibrous or textile substances. If it is, the complainant must prevail. If it is not, the bill must be dismissed"

"Is the patent valid for such a broad claim? The defendants contend that it is not; first, because no such invention was set forth in the original application, but was introduced more than four years after it was filed, and after the same material had been used by Edison, and claimed by him in application for a patent; secondly, because Edison, and not Sawyer-Man, was really the original and first inventor of an incandescent conductor made of fibrous or textile material for an electric lamp."

"It is very clear to us that in the original application for the patent sued on the applicants had no such object in view as that of claiming all carbon made from fibrous and textile substances as a conductor for an incandescing electric lamp. Nothing on which to base any such claim is disclosed in the original application. We have carefully compared it with the amended application, on which the patent was issued, and are fully satisfied that after Edison's inventions on this subject had been published to the world there was an entire change of base on the part of Sawyer & Man, and that the application was amended to give it an entirely different direction and purpose from what it had in its original form."

"By an adroit amendment made in 1885, they say: 'Our improvement relates more especially to the incandescing conductor, its substance, its form and its combination with the other elements composing the lamp.' The purpose of this amendment is obvious, and needs no comment."

"The fact is that Sawyer & Man were unconscious that the arc was not new, and supposed that they could get a patent for it; but, as their eyes were opened, they changed about and amended their application, and made the material of the conductor the great object—carbon made from fibrous or textile material. Compare the original with the amended application, as first stated in this opinion, and this purpose most obviously appears."

"The fact that the whole object of the application was changed is evinced by the correspondence of the parties."

"This testimony of Mr. Broadnax, which is undoubtedly to be relied on, in connection with the letter just quoted, shows that the idea of claiming carbons made from fibrous and textile materials was an afterthought, and was no part of the purpose of the original application. The amendments relating to this new and broad claim were made afterward, in February and March, 1885."

"We are of the opinion that the changes made in the application in this regard were not justifiable, and that the claim in question cannot be sustained."

"We are not at all satisfied that Sawyer and Man ever made and reduced to practical operation any such invention as is set forth and claimed in the patent in suit. Their principal experiments were made in 1878, and perhaps the beginning of 1879. The evidence as to what they accomplished in the construction of electric lamps is so contradictory and suspicious that we can with difficulty give credence to the conclusions sought to be drawn from it. We are not satisfied that they ever produced an electric lamp with a burner of carbon made from fibrous material, or any other material, which was a success."

"The application for the patent in suit was not made until January, 1880, nearly or quite a year after all their experiments had ceased, and after the inventions of Edison had been published to the world."

"The explanations made by the complainants for the delay in applying for the patent in suit fail to satisfy our minds that Sawyer & Man, or their assignees for them, have not sought to obtain a patent to which they were not legitimately entitled."

"But, suppose it to be true, as the supposed inventors and some of the other witnesses testify, that they did in 1878 construct some lamps with burners of carbon made of fibrous material, and of an arched shape, which continued to give light for days or weeks or months; still, were they a successful invention? Would any one purchase or touch them now? Did they not lack an essential ingredient which was necessary to their adoption and use? Did they go any farther in principle, if they did in degree, than did other lamps which had been constructed before? It seems to us that they were following a wrong principle—the principle of small resistance in an incandescing conductor, and a strong current of electricity—and that the great discovery in the art was that of adopting high resistance in the conductor with a small illuminating surface, and a corresponding diminution in the strength of the current. This was accomplished by Edison in his filamental thread-like conductors, rendered practicable by the perfection of the vacuum in the globe of the lamp. He abandoned the old method of making the globe in separate pieces, cemented together, and adopted a globe of one entire piece of glass, into which he introduced small platinum conductors, fastened by fusion of the glass around them, thus being able to procure and maintain perhaps the most perfect vacuum known in the arts. In such a vacuum the slender filaments of carbon, attenuated to the last degree of fineness, may be maintained in a state of incandescence without deterioration for an indefinite time, and with a small expenditure of electric force. This was really the grand discovery in the art of electric lighting, without which it could not have become a practical art for the purposes of general use in houses and cities."

"The principle and great thing described is the attenuated filament and its enclosure in a perfect vacuum."

"We think we are not mistaken in saying that but for this discovery electric lighting would never have become a fact. We have supposed it to be the discovery of Edison because he has a patent for it. This may not be the case. It may be the discovery of some other person; but, whoever discovered it, it is undoubtedly the great discovery in the art of practical lighting by electricity."

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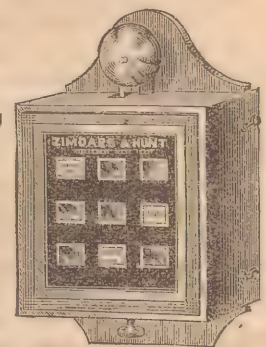
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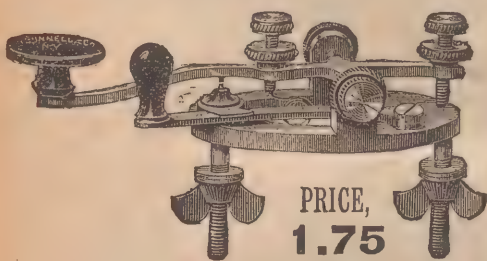
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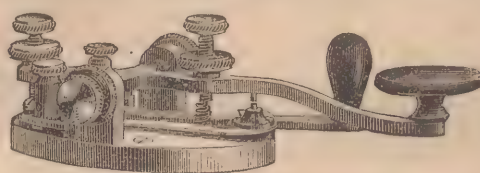


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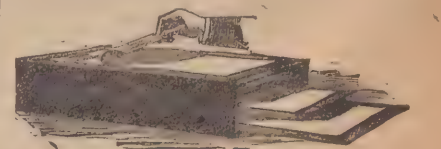
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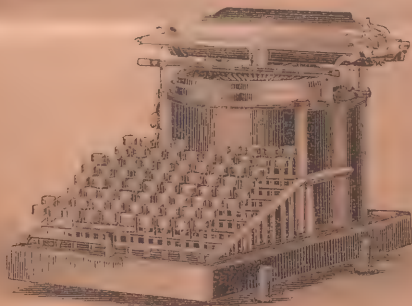
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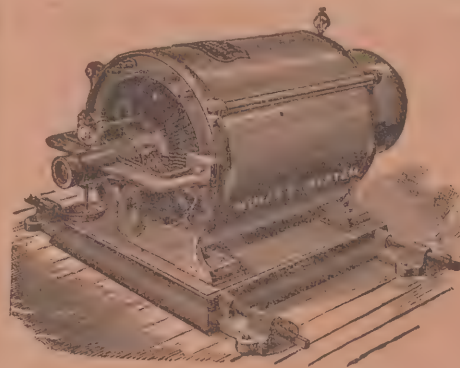
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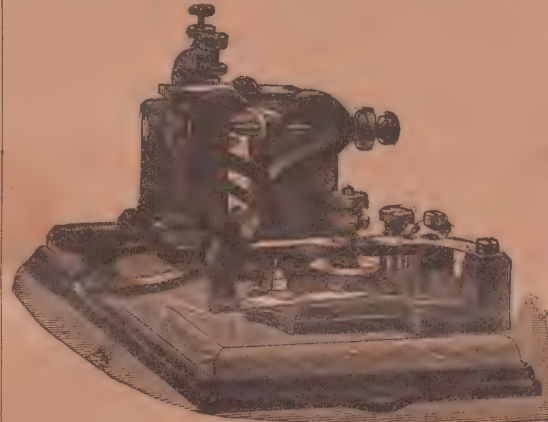
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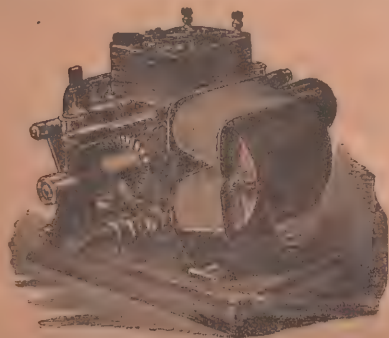
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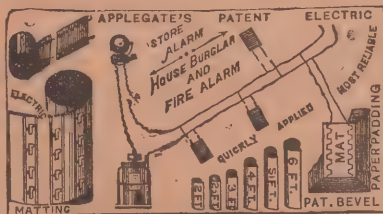
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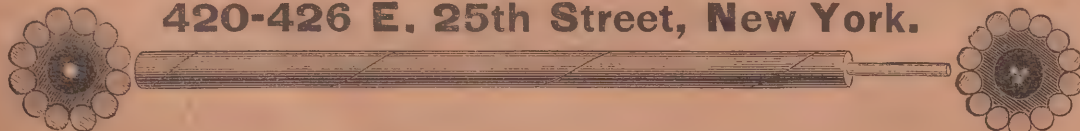
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# THE ELECTRIC AGE

## TELEGRAPH EDITION.

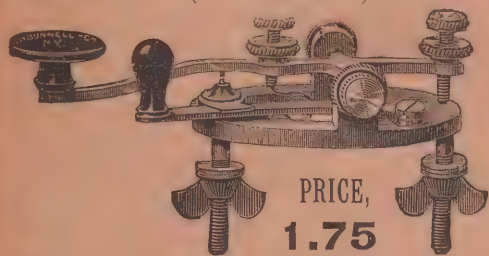
VOL. VII—No. 23.

NEW YORK, MAY 1, 1890.

PRICE 10 CENTS.

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#### STEEL LEVER KEYS. (SOLID TRUNNION).



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Over 73,000 now in use.  
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J. H. Bunnell's Patent. Feb. 15th, 1881.

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#### A CARD TO TELEGRAPHERS.

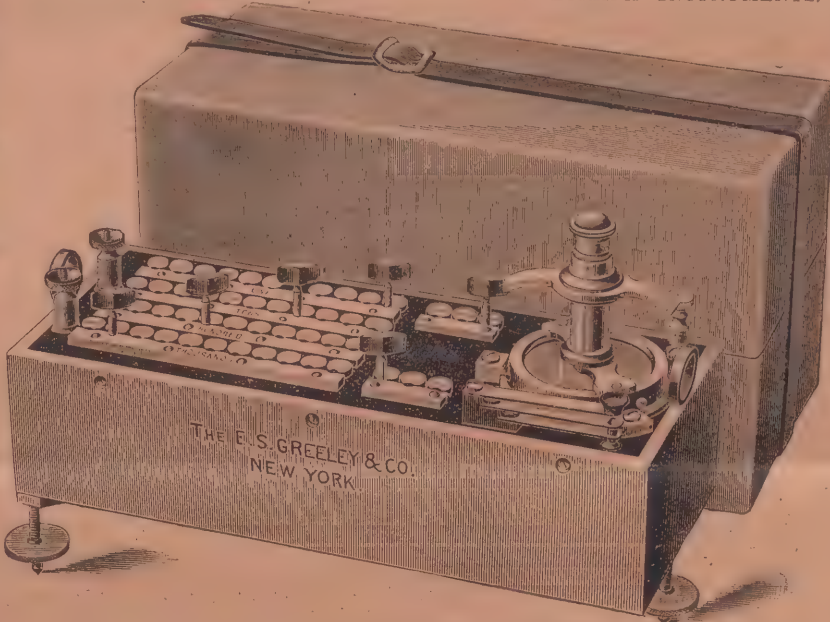
IMITATION IS THE SINICEREST PRAISE.  
After many futile attempts to break down the well deserved prestige of the Bunnell Steel Lever Key, of which about 75,000 are in use in the United States, our envious competitors do not hesitate to resort even to deliberately copying its appearance and presenting their productions as "improvements."  
We are much gratified to be able to point out to telegraphers the plain fact, beyond dispute, that every key made in this country to-day for which excellence is claimed and loudly advertised, is simply more or less a copy in general appearance or parts (but not merits) of the original "Bunnell Steel Lever Key." Without commenting further upon the discreditable lack of principle and pitiful lack of originality, which these efforts at imitation indicate, we have only to say that the finest experts in New York and other cities prefer the Bunnell Key above all others for great sending, and that in the late tournament, the imitation Bunnell Keys were used in several important cases where the sender in the haste and excitement of the moment mistook the imitation for the genuine, so closely was the appearance copied, and that the finest work was done on the genuine Bunnell Key. We shall continue to lead all others in keys suitable for the operator's most perfect work, and we shall expect as matter of course that the imitators will follow somewhere at our rear as closely as they can.

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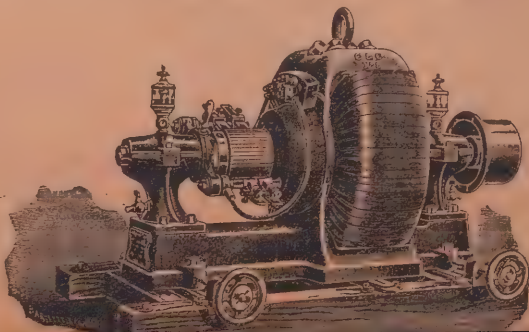
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(CHICAGO) March 16<sup>th</sup> 1890

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(W. W. McKimlock)

City, Dear Sir; Referring to conversation in which I stated the satisfaction I have had in the use of Okonite Wire in Mining Service, will say that on one occasion, I have used an Okonite stranded conductor for conducting 60 Amperes under pressure of 220 Volts, to a Mining Machine situated 100 feet distant from the main conductors, in a Coal Mine, these wires are laying on the ground in the mud and are being daily trampled upon by Miners and mules - It is useless to say that such treatment received my very decided protest, but they will not hang them up as long as they are so satisfactory in their present position - They have been in use nearly one year

Yours Truly  
F. Jones

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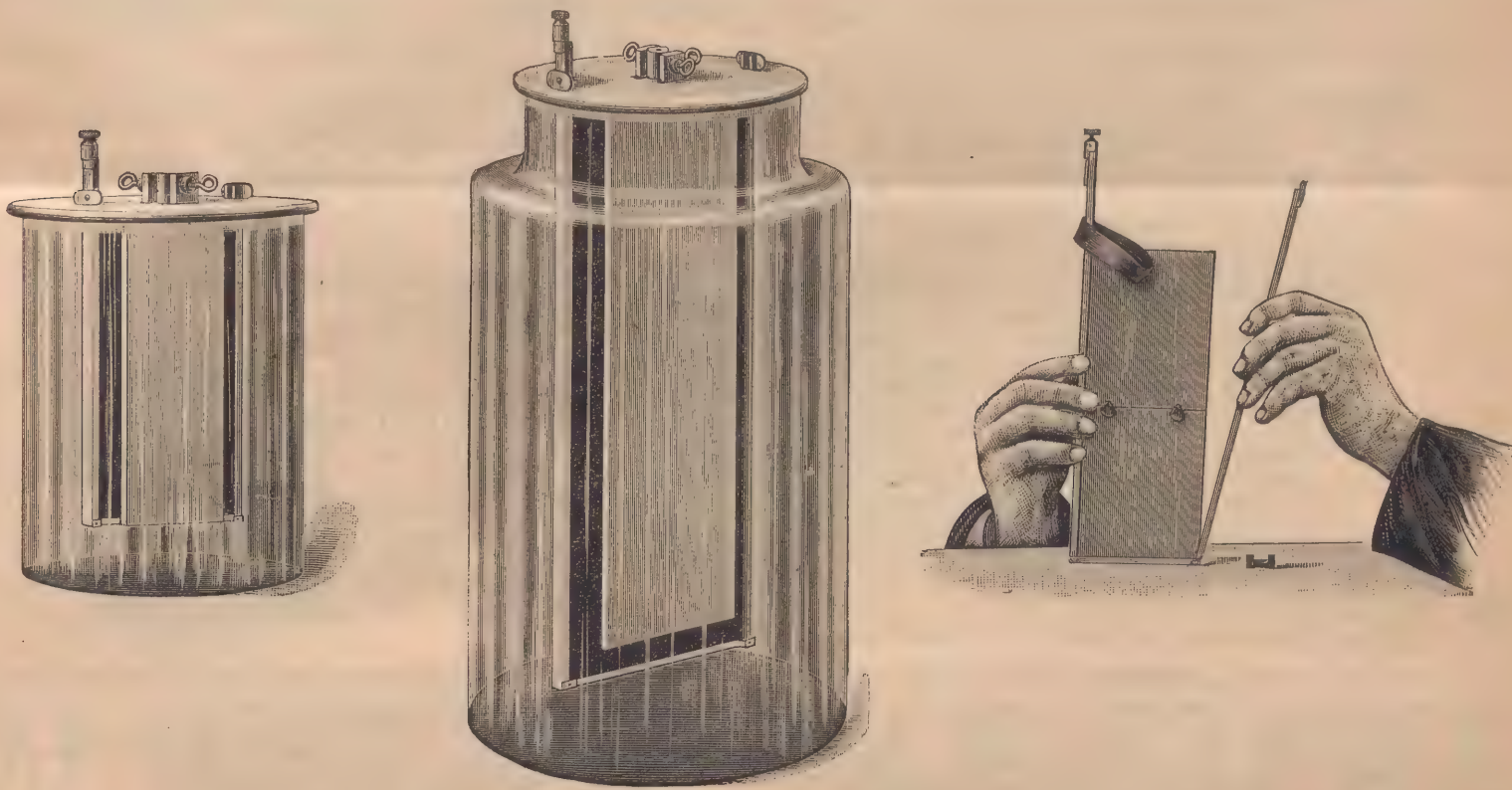


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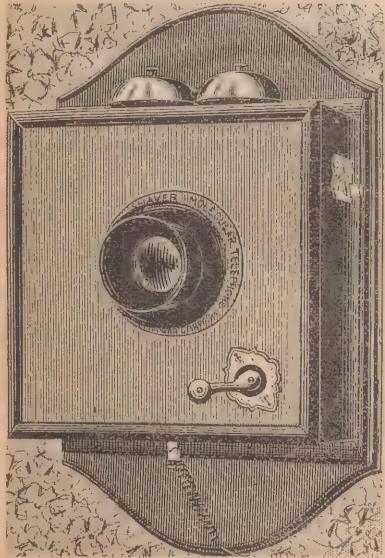
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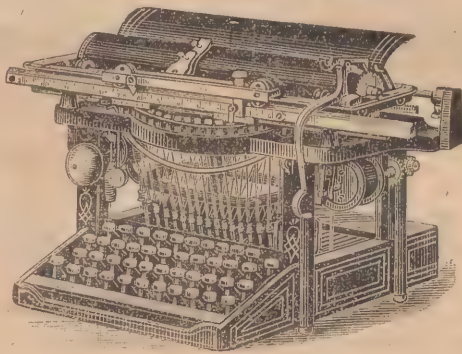
**Remington Standard Typewriter.**

Read what some of the Foremost Telegraphers in the United States say of the Remington Standard Typewriter.

*Messrs. Wyckoff, Seamans & Benedict:*  
Pittsburgh, Pa., March 29, 1890.  
Dear Sirs:—I am using to-day a Remington No. 2 which has not known a day's idleness for nearly five years. During that period it has been used for the Associated Press work at this point, for both the "Regular" and "Early" service, doing between 15,000 and 18,000 words nightly. It has cost but \$3.50 for legitimate repairs, and is now in very good condition. This is, without doubt, a good record.  
The Remington certainly fills every requirement of our business. The compact and convenient keyboard I regard one of its greatest advantages over other machines—one does not require to be an athlete to work.  
Yours truly,  
H. W. ORR, Associated Press Operator.

The REMINGTON TYPEWRITER is used exclusively in this Office. Its usefulness in connection with telegraphy cannot be too highly praised. It is of much benefit to an operator, rendering "receiving" an easy task when the machine is once mastered.  
P. T. BRADY, G. H. SICKLES, New York Associated Press.  
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For fifteen years the Standard, and is the Leader in Improvements.



*Messrs. Wyckoff, Seamans & Benedict, New York:*  
Pittsburgh, Pa., March 26, 1890.  
Gentlemen:—It gives me pleasure to inform you of the perfect satisfaction the Remington typewriter has given me in my "press report" work. I have used it for four years, and consider it especially adapted to telegraphers' use by reason of its lack of noise, durability and ease of manipulation.  
Yours very truly,  
OWEN A. CONNER, Associated Press Operator.

The REMINGTON TYPEWRITER is, without a doubt, the best machine of its kind extant. A thorough test has convinced us of this fact, and it is only a matter of time when it will be used exclusively in connection with the telegraph. The "REMINGTON" is in use in the New York office of The United Press, as well as throughout the United States.

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NEW YORK, MAY 1, 1890.

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### AS TO THE JUDGES' DECISION.

The action of the judges in the late Fast Sending Tournament in awarding the first prize to Mr. Pollock has been criticised in some quarters. We are not surprised at that. The discontent we think, however, has no substantial basis. The circumstances were extraordinary and peculiar, and it would have, indeed, been remarkable had the judges rendered a decision satisfactory to every one. There is no doubt that the judges acted to the best of their ability under the circumstances. A very peculiar condition of affairs confronted them. The whole matter hinged on the question, "Was Pollock readable?" A large number of those who listened to his sending claim that it was not readable, while a considerable number claim that it was. The judges decided that he was readable,

so there was no other alternative but to award the prize to Pollock.

There is such a wide difference of opinion on this point, however, that the question naturally arises: "Is it possible for the average human ear to read such high speed transmission?" We are inclined to answer this question in the negative. Pollock's manipulation of the key was phenomenal, and it required an extraordinarily acute ear to catch all of the sounds and give to them their proper value. It has been asserted that seventy words per minute on the Wheatstone can be easily read. We do not doubt that it can, but by very few persons, indeed. Sixty words per minute has been considered about the utmost limit of the ability of the human ear to translate the sounds to the brain. At such a speed the effect of the sounds on the ear is similar to the effect produced on the eye by a rapidly revolving wheel. The spokes become a blur, and it is impossible for the eye to single them out. So it is with the ear in the rapid succession of sounds. They are too close to be singled out.

Leaving out of the question the judge's decision, we have met several gentlemen who acknowledged frankly their ability to read Pollock's sending, and believe the judges' award was fair and just. Therefore, the fact that the sending was readable has been established beyond peradventure.

The story printed in a morning paper several days ago purporting to be the inside history of the proceedings in the judges' room attaches a good deal of unwarrantable mystery and secrecy to the case. There was nothing done in secret, that is, in the sense that the judges would not care to have divulged. Everything was done fairly and honestly, and everyone of the judges, we are sure, feels that he acted to the best of his ability under the circumstances.

The same article tends to throw the responsibility for the decision on to the shoulders of one of the judges. No fair-minded person could suppose for an instant that one man's opinions could outweigh those of four others on the opposite side. But this is what the writer of the article, in effect, says. The responsibility for the judge's decision rests with the judges collectively, and not with any one of them. Therefore, we think the article in question was unjust and misleading, and was inspired by some one who evidently was not acquainted with all of the facts and circumstances.

Pollock's sending will be the subject of discussion among operators for a long time to come, and a good deal will be said for and against it, but the fact remains that if even only one reputable person could read it that was sufficient to class it as readable.

OPERATORS GOING TO AUBURN.—The eyes of the civilized world are turned toward Auburn, N. Y., this week, owing to the fact that the first execution by electricity is to take place there, some time during the week beginning with April 28th. The newspapers have made extraordinary arrangements to obtain detailed reports of the affair, and a large number of reporters will be present. The press matter from Auburn will be enormous in consequence, and to meet the rush a large force of operators was sent from New York and other places to reinforce the regular staff at Auburn.

THE CALIGRAPH AT THE RECENT TOURNAMENT.—The American Writing Machine Company of Hartford, Conn., the manufacturers of the Caligraph have presented Mr. W. B. Upperman, of the Associated Press office, in this city, with a handsome gold badge. This is in token of their appreciation of the excellent work done on the Caligraph at the recent fast-sending tournament. Mr. Upperman copied most of the sending, and did it with so much ease and accuracy that it attracted a good deal of attention. The Caligraph made a very favorable impression, no surer proof of which can be given than reference to the inquiries concerning this ma-

chine since the tournament. Interest in it is growing rapidly. In our issue of April 1st we gave two illustrations of the Caligraph as used in the San Francisco office of the Postal Telegraph Cable Company. In referring to these machines, a prominent official of that company in San Francisco writes: "The typewriter is not an experiment here. All of the business of this office is done on the machine, and it is only our modesty that prevents me from saying that it is turned out in a better shape than any telegraph office in the world. I will venture to say that within two years every first-class office in the country will be equipped with typewriting machines."

ECHOES OF THE LATE TOURNAMENT.—Mr. Fred. Catlin writes as follows: I received the following in answer to a notice of C. W. Summers challenge, which I forwarded to Mr. Pollock:

"In reply to your letter of 12th inst., would say that the object of my entering the National Tournament was merely a matter of skill and promotion of telegraph interest, and cannot consider the papers from Louisiana. The first part of this may seem inconsistent unless I state, the premium was changed from "accuracy" to "readable" after I had entered.

Yours very truly,  
B. R. POLLOCK, Jr."

(signed),

Yours, etc.,

FRED. CATLIN.

B. R. Pollock, Jr., the lightning telegraph operator who won first prize in New York, in Class A, telegraphers' tournament, is a resident of Hartford and lives in apartments at 34 Belden street.

He is chief train despatcher in that city of the New York and New England railroad. Mr. Pollock learned to telegraph in Mauch Chunk, Penn., at the age of 13, eleven years ago. For two years he was an operator in the office at Long Branch on the Central railroad of New Jersey, and during the rest of his life he has been with the New England road. He came to Hartford as an operator, and has worked himself up to the important position he now holds and to which he was appointed several months ago.

Mr. Pollock has been known and recognized as the fastest transmitter that was ever in the offices at Hartford, and besides being rapid is said to be accurate. Superintendent Phelps speaks in the highest terms of praise of Mr. Pollock's ability, and says it is a victory of which any operator might feel proud.

B. R. Pollock, jr., the telegraphic champion from Hartford, is a striking figure when at the telegraph key. He is slim and wiry, as nervous as a high-spirited horse, and when he is sending rapidly he quivers all over like a locomotive. There is scarcely a muscle, from his eyelids to the tips of his toes that is not in motion and he appears to throw his whole heart into his task. In striking contrast is the appearance of J. W. Rolson, his nearest competitor in the late tournament, who was as cool and self-possessed as if in his own home, and who apparently depended upon the wrist muscles alone to accomplish the task, his whole body being perfectly immovable.

KILLED.—Miss Myrtle Knott, for some time operator in the Midland Hotel, Kansas City, for the Postal, but for the past three months a member of the "Pearl of Pekin" Company was killed April 27, in a railroad accident at Staunton, Va. Her remains were forwarded to Kansas City for interment, where she was well and favorably known.

A Special Delivery.—"I delivered a lecture last night," said the messenger boy.

"How did you come to do that?"

"The feller that wrote it forgot to take it along with him when he went to the Academy and sent me after it."

Brevity may be the soul of wit, but eminent telegraphers say that it has nothing to do with the "dinner relief" placing the long messages at the bottom of the pile. Oh! no.

Mr. A. McLennan has accepted a position with the United Press at Auburn, N. Y.



## THE SOUTH-WESTERN FAST SENDING TOURNAMENT.

A GREAT SUCCESS IN EVERY PARTICULAR.

The first South-western telegraph tournament took place in New Orleans, April 20th, at the rooms of the Board of Trade. The attendance was large, especially of ladies, and although it required considerable technical knowledge to appreciate what took place, all present caught the infection of excitement, and watched the races with interest. Besides, the excellent arrangements made by the telegraphers enabled the audience to follow every detail of the contest and obtain more enjoyment from the affair than it would otherwise have done. Another feature of the entertainment of guests was the lavish distribution of refreshments by an efficient committee. The Board of Trade rooms were surrendered to the wizards of the wire and knights of the key the night before.

The E. S. Greeley & Co., of New York, sent six of their improved "Victor" keys especially for the tournament. Mr. Brewer, Mr. Griffin and Mr. Moake, all used the "Victor" key, which speaks well for the manufacturers.

There was not only an excellent list of entries, but handsome prizes were provided in each class, the awards aggregating in value to about \$220.

The last prize offered is contained in the following letter from the son of the manager of the late national contest:

NEW YORK, April 16, 1890.

Mr. E. J. DAVIS, Etc.: *Dear Sir*—I will give \$20 to the contestant in the tournament to be held in New Orleans on the 20th inst., who makes the best record, provided the record of B. R. Pollock, Jr., made in the contest just held in this city, is beaten. The same matter to be used there as was used in the national tournament, and the transmission to be judged readable.

Father sends best regards, and joins me in the wish that your tourney may be very successful. Fraternal yours,

FRANK L. CATLIN.

Manager Davis hardly expected that the New York record would be beaten. The practice which the operators here had was inadequate in comparison to that obtained by the New York contestants. Besides that the operators who competed in the national tourney were nearly all senders of "press matter," handling 8,000 or 9,000 words a night. The New Orleans men have more training over long circuits and less at speedy telegraphing over a short distance. In New York speed alone governed, and some of the matter was not over-readable. Here the rules provide that the contestants be judged for speed, accuracy for reading copy, and "good Morse."

The lockers were filled with batteries, wires were strung all around the room, and twelve sounders were distributed in various portions of the hall, so that all persons present could obtain an idea of the senders' work. Toby Hart furnished the decorations with his compliments. They consisted of a drapery of bunting with the inscription "1st S. W. T. T., 73," in large gold letters. "73" is the telegraphers' short way of saying "accept our compliments." Suspended from a wire below the flags was a picture of Prof. Morse, the inventor of the telegraph, kindly loaned by Mr. A. B. Griswold, a relative of the great inventor. The auctioneers' stand was converted into a senders' stand and provided with nine keys, a sounder and a quadruplex transmitter, which repeated the messages into the twelve sounders around the hall.

In the inclosure were stationed two timekeepers and two starters, with Mr. Davis as the master of ceremonies. The starters sounded the signal of three gongs at hand. Three minutes were given to each contestant in the

sending tournament for adjustment and selection of keys. At the expiration of that time the starters sounded the gong, and each contestant then sent for five minutes. Two blackboards were used in connection with the contest. On one was written the matter used by senders, and the master of ceremonies followed each operator, and at the end of each showed exactly how many words had been transmitted.

In front of the senders' stand there was a large table which was used by judges and reporters. At each end of this was a "receiver," and a Remington typewriter, furnished especially for the contest, was beside each instrument. Mr. Henry H. Hodgson, the Remington representative here, prepared a batch of "copy" to test a typewriter's art, which was handed to a fast operator, who "sent" it as fast as possible, using all recognized abbreviations. The receivers wrote the messages on the typewriters, and the judges decided as to the relative merit of the work, as to correctness in receiving and transmitting, skill in manifoldings, etc. On the side of the wall was arranged a set of instruments to demonstrate the Wheatstone system of rapid telegraphy.

The local operators were over Saturday night testing the keys and made fair time. There were two entries from outside the city. J. C. Pincombe, of Vicksburg, arrived April 19th. He is a young man, a little below the medium height, with a blond mustache, and was very confident. He was looked upon as one of the dangerous elements in the race. He has had considerable practice sending crevasse news lately, and operators here have credited him with some remarkable speed. He has been in the business eleven years, and has filled positions in the offices at Louisville and Chicago before coming to Vicksburg. Another stranger expected was Thomas P. Cummings, of Jackson, Miss. Several years ago when a lad of 18 he handled the immense amount of matter filed by the correspondents in the famous Hamilton trial. He has improved since and his chances are excellent. The plucky youngster traveled half the night and reached Meridian all right, being compelled to go by that route on account of the washout on the Illinois Central. At Meridian he snatched a few hours' sleep, and woke up fifteen minutes before the time when he was told the train would leave. His informant got the schedules slightly mixed, and the New Orleans train had left five minutes before.

Manager D. R. Sims, of the Western Union office at Mobile; Mr. B. P. Shreve, secretary to Superintendent Merriweather, at Mobile; C. E. Hogshead, of Vicksburg, and others came down especially to witness the tournament.

Manager J. T. Alleyn remained throughout and was satisfied with the efficiency displayed by his senders. Manager E. J. Davis, of the tournament, exercised a general supervision and took a prominent part in making the affair a success. The full staff on duty in an official capacity was as follows:

Judges—W. D. West, W. J. Cummings, H. H. Smith, T. Westerfield, J. J. Fowler.

Timekeepers—Henry Baldwin, J. E. McDaniel.

Starters—R. G. Straley, J. R. Maynard.

Reception Committee—J. A. Anderson, chairman; E. V. West, J. A. Jefferson, E. J. Russel, S. W. Capers, K. E. Norman, A. G. Alexander, J. W. Gordon, J. T. Elliott, G. E. Lindsay, J. H. Holthouse, G. H. Wilkinson, M. Molony, C. Cormier, W. A. Porteous, T. G. Griffin.

Floor Committee—P. Leloup, chairman; E. J. Flynn, R. B. Stewart, C. R. Weidman, Wm. M. Allen, Charles Pelaez, E. S. Colins, W. G. Scheible, D. B. Jones, P. Vidal, J. D. Wire.

Refreshments Committee—H. F. Farmer, chairman; W. C. Hudnall, J. M. Whann, J. W. Feely, Phil Moake, E. A. Friedman, E. A. Denet, Joseph J. Keating, G. C. Wendorf, J. B. French.

Wheatstone Manager—A. F. Wark.

Quadruplex—S. M. English.

The tournament opened with the Colts at the key. Class C was up for operators not yet two years in the business. There were four entries—R. L. Dyer, J. H. Holthouse, W. A. Porteous, P. Moake. Dyer sent quite distinctly; Holthouse was faster, but did not leave much space between words. Porteous went in for speed without too much attention to "Morse." Moake did not attain the same speed, but his sending was perfection as to accuracy and clearness. By this time the audience had an opportunity to judge of the difficulty of the task assigned the operators. The first sentence of Mr. Depew's speech contained such words as friendship, colonies, independence, gratitude, international, suitable, permanent, expression and sentiments. Mr. Moake was awarded first prize, a silk umbrella.

The demonstration of the quadruplex system workings followed. The general principle upon which the system is operated is based upon the fact that two series of signals can be sent in the same direction over one wire by combining reverse currents and single current working in such a manner as to cause one instrument to be operated by the reversal of currents only, irrespective of their strength, whilst another instrument will respond to changes only in the strength of the current regardless of its polarity. It was invented by Edison in 1874. By the system four messages can be sent over one wire at the same time, and numerous witty telegrams were passed to and fro between "New York" and "New Orleans," as the tables were called, and read to the audience by the general master of ceremonies.

The senders' stand was then cleared for Class B, open to all New Orleans operators with an authentic record of 25 words per minute or better. A silver medal was the first prize, and a box of cigars from James McGowan the second. The entries were: J. A. Anderson, T. G. Griffin, C. Cormier, J. W. Gordon, J. M. Whann, T. H. Kelly.

Anderson sent perfect Morse, but was a little slow, getting off 178 words in the five minutes. Gordon was a little speedier, but not quite as perfect as Anderson. He stopped at 197 words, but skipped a line of 12 words, making his real score 185 words. Griffin was quite nervous, but stuck steadily to the key and did some fine sending. At the same time he showed considerable speed and transmitted 194 words. It was a very creditable record, considering the fact that he has not been an operator more than two years. Whann was a little wavering but his characters were all completed. Cormier made little haste, but sent superior Morse, and was applauded for his work, although he only sounded 156 words on the key.

At the request of their confreres, W. G. Scheibel and J. A. Alexander, described a race received by telegraph just as it is done in the poolrooms. Alexander invented the story of the future Suburban handicap, placing the Dwyers one, two, while Scheibel called out odds and description and marked the results.

Then came the event of the day; the Class A contest, opened to all operators in the Southwest who have an authentic record of at least 35 words per minute. The prizes were a gold medal, a box of cigars from James McGowan and a silk hat from Wm. Sparr. The contestants were J. C. Borden, S. W. Capers, G. H. Wilkinson, J. C. Pinscombe, L. S. Reed, W. C. Hudnall, S. Menzer, R. E. Norman, A. G. Alexander, W. S. Brewer, J. T. Marsh, J. A. Jefferson, J. D. Wire.

Capers led off and sent 194 words in beautiful style without a break. Wilkinson sent very good "Morse," but was very slow. Borden was the boys' hope. He came right from work, took his place at the key and sent 195 words in superior style. He started off with 40 words in the first minute, but grew nervous



and could not stay the gait. Pinscombe, the Vicksburg man, was given an ovation, but it only made him nervous and he broke after sending 25 words. Nevertheless he made 38 words the first minute and kept up the same speed, stumbling several times. Reed sent pretty "Morse" without a break, but his speed was not equal to that of his competitors. Hudnall did fairly well and stopped at 182 words. Jones also seemed to be rattled by the ovation given him, and made a break and changed his key all in the first minute so that he only sent 36 words. After that he fairly flew and improved as he went along doing his best work in the last minute. He was given another ovation as the score showed 210 words, making his average for four minutes better than 43 per minute. Norman sent in good style but was lacking in extra speed. Alexander proved a surprise. He grew nervous early but nevertheless stuck to the key and sent 209 words in excellent style and with only one break. Mentzer was one of the dark horses and sat gracefully at the key, starting at forty to the minute, increasing his speed as he went along and sending readable matter although the words were crowded together rather close sometimes. Nevertheless the youngster gave a brilliant exhibition and stopped at 211 words, the best performance up to that time. Brewer ascended the stand in a determined manner and early showed that he was a factor in the race. He sat easy and graceful, one hand on the copy close to the other at the key, sent 41 words the first minute, and would have increased that rate considerably had he not stumbled several times in reading copy and repeating words. While paying due attention to speed, he made his characters distinct and punctuated carefully. When he stopped at 211 words it was clear that he was the winner, for his "Morse" was superior to Mentzer's. Marsh, although he did not win the medal sent 172 words in perfect style. The judges decided his performance the best of the day as to accuracy and distinctness. Jefferson, the wire chief, did fairly well and Wire was not in the race.

Scheibe and Anderson gave a description of a base ball game, by way of diversion. Another interesting feature was an exhibition of the Wheatstone system. It is used principally during storms when wires are scarce and time is precious. The mechanism is of the clock-work order, and finer than the works of any watch. A perforator prepares the message by punching holes in a strip of paper, the strip is placed in a transmitter, and needles trace the holes punched, printing the Morse characters on slips at the receiving end. A speed of 250 words a minute can be attained through these instruments, so that a mass of business can be thrown into an office in a short space of time, and in case the wires break down the messages are at their destination and can be written out at leisure.

The receivers' contest closed the affair. The entries were W. S. Brewer, W. R. Willis and L. S. Reed. The latter was the favorite. The first prize was a Remington typewriter; the Remington Company also furnished the machines used in the tourney. Mr. Harry H. Hodgson, the company's agent, prepared a history of the typewriter, which was sent over the wire, and the contestants received the message on the typewriter, manifolded ten copies at the same time. Brewer received correctly enough, but failed to adjust his machine in advance, so that his typewriting was not as regular or perfect as it should have been. Reed did beautiful work, but complained that he could not hear the message distinctly, and erred in certain parts of it. Willis' work was perfect in every direction.

That concluded the evening's entertainment, and Manager Davis announced "30."

The judges met shortly afterward and made up their score.

The following is the official report of the judges:

CLASS "A."  
Official Result of the First Southwestern Fast-Sending Tournament.

| Names.      | Num'r  | Per    | Er's. | Remarks.          |
|-------------|--------|--------|-------|-------------------|
|             | Words. | Min.   |       |                   |
| Capers..... | 194    | 38 4-5 | 0     | Excellent Morse   |
| Wilkinson.. | 166    | 33 1-5 | 2     | Excellent Morse   |
| Bordon....  | 195    | 39     | 0     | Good Morse        |
| Pinscombe.  | 190    | 38     | 5     | Very good Morse   |
| Reed.....   | 176    | 35     | 0     | Excellent Morse   |
| Hudnall...  | 182    | 36 2-5 | 3     | Fairly good Morse |
| Jones.....  | 210    | 42     | 2     | Good Morse        |
| Mentzer...  | 211    | 42 1-5 | 2     | Good Morse        |
| Norman...   | 185    | 37     | 2     | Excellent Morse   |
| Alexander.. | 208    | 41 3-5 | 1     | Excellent Morse   |
| Brewer....  | 211    | 42 1-5 | 1     | Superior Morse    |
| Marsh.....  | 192    | 38 2-5 | 0     | Superior Morse    |
| Jefferson.. | 187    | 37 2-5 | 0     | Excellent Morse   |
| Wire.....   | 169    | 33 1-5 | 4     | Fair Morse        |
| Total...    | 2,675  |        | 22    |                   |

Winners of Prizes, Class "A"—W. S. Brewer, first prize, gold medal; L. S. Mentzer, second prize, box of cigars; D. D. Jones, third prize, silk hat.

OFFICIAL SCORE FOR CLASS "B."

| Names.       | Num'r  | Per    | Er's. | Remarks.       |
|--------------|--------|--------|-------|----------------|
|              | Words. | Min.   |       |                |
| Anderson.... | 178    | 35 3-5 | 1     | Good Morse     |
| Gordon.....  | 185    | 37     | 3     | Fair Morse     |
| Griffin..... | 194    | 38 4-5 | 2     | Superior Morse |
| Whann.....   | 182    | 36 2-5 | 3     | Good Morse     |
| Cormier....  | 156    | 31 1-5 | 0     | Superior Morse |
| Total....    | 895    |        | 9     |                |

Winners of Prizes—T. G. Griffin, first prize, silver medal; J. W. Gordon, second prize, box of cigars.

CLASS "C."

| Names.      | Num'r  | Per    | Er's. | Remarks.       |
|-------------|--------|--------|-------|----------------|
|             | Words. | Min.   |       |                |
| Dyer.....   | 158    | 31 3-5 | 10    | Fair Morse     |
| Holthouse.. | 184    | 36 4-5 | 9     | Poor Morse     |
| Porteous..  | 194    | 38 4-5 | 6     | Poor Morse     |
| Moake....   | 182    | 36 2-5 | 2     | Superior Morse |
| Total....   | 718    |        | 27    |                |

Winner of Prize—P. A. Moake, silk umbrella, silver head.

The medals were presented the following Sunday.

Mr. Harry H. Hodgson came to the front as soon as the typewriting contest was announced, and offered a gold medal to the winner. The Remington Company kindly presented a typewriter as a prize, and Mr. Hodgson offered his medal to the second man.

There is talk of several matches growing out of the contests. The effect of such tournaments can only serve to encourage excellence and improve the service.

A number of amusing messages were sent over the improvised circuits operated by the Wheatstone and quadruplex systems. Manager Alleyn sent one to the Wheatstone staff. "Keep bulls out of your pastures. They come high."

Several messages came from Dunn, asking if the city is under water yet, and other such questions. Some leading produce men sent startling market reports.

Among the visitors were J. W. Westerfield and J. H. Lafaye. Both were operators during the war. Mr. Westerfield was at Fort Jackson when Farragut's fleet passed, and telegraphed the news to New Orleans at once. Mr. Lafaye was at the other end of the line, at the office No. 3 Carondelet street, and received the intelligence of such importance here.

Philadelphia's fire-alarm service requires 900 miles of electric wires.

THE FAST TELEGRAPHING TOURNAMENT IN AMERICA.

The fast telegraphing contest just held in New York was a great success in every respect. Universal interest was taken in the proceedings, and noted telegraphists from all parts of the United States took part in the competition. The chief feature of the contest was the success achieved by the United Press Agency, whose operators won eight of the twelve prizes. The United Press men, it should be stated, are first-class journalists as well as telegraph operators, and their reputation for speed and accuracy is national. The United Press serves a great number of newspapers by wires running from its New York office straight into the various editorial rooms, an arrangement which has proved of enormous benefit to all concerned in the collection and rapid distribution of news. They have, therefore, a very large number of expert telegraphists, among them Mr. W. M. Gibson and Mr. A. S. Ayres, the fastest in the United States. Mr. Ayres who took four prizes and received \$120, is universally known as "A Sender Ayres," and is chief operator of the United Press. James P. Bradt, winner of the \$85 prize, works daily on the New York State wire, which is 400 miles long, and takes in 18 newspaper offices along its route, while W. M. Gibson is by general consent the most finished of all known senders of equal rapidity. Mr. W. L. Waugh and Mr. Frank J. Kihm, who took prizes of \$50 each, preside over the New York and Washington line of the United Press, and the *Brooklyn Eagle* office, respectively.—*Pall Mall Gazette*, London.

PHILADELPHIA NOTES.—T. P. O'Sullivan, a well known and popular operator, died from the effects of hemorrhage on the 13th inst. The "Postal" office in the Dry-Goods District has been moved from the N. E. to the N. W. corner of 7th and Market sts. Elbow room in the new location is at a premium, but as the facilities remain the same, Mr. H. T. Wright and his clever assistant, Joe Crawford, will continue to rush and "scoop" the business as heretofore. Messrs. Frank Lowry, Theo. Koening and D. F. Stair, from the Western Union, are three recent arrivals at the Main office. Mr. Ben Johnson, for many years a member of the Stock Exchange force, has resigned to accept the Philadelphia agency for a New York electrical house; Mr. Jack McDonald has been returned to the Exchange to fill the vacancy; Mr. Jno. L. Parker, also a member of the Exchange staff, will alternate with Mr. McDonald at the *Inquirer* office at night. Supt. A. J. Whittingham of the American District has been very ill for about three weeks, but is now improving. Mr. J. R. Landis, operator for the A. D. T., at the P. & R. main office, has resigned to go with the "Penney" at 32d street; he is relieved by Mr. Corson, night operator at the 4th; Mr. Ed. Miller has been appointed in Mr. Corson's place. Sylvester S. Garwood, a former manager of the Western Union in this city, holds the position of Secretary of the Grand Lodge of the Order of Home-Builders. Our friends, interested in home-building, will do well to communicate with Mr. Garwood and learn something of this order. At a recent meeting of the Telegraphers' Aid Society the proceedings were continued till nearly midnight, with the work occasioned by the adoption of a new constitution. Many improvements have been made over the old constitution, and the society will continue its prosperous way rejoicing.

POLLOCK.—B. R. Pollock, jr., the winner of the first prize at the recent Fast Sending Tournament in this city, is chief train despatcher on the New York and New England Railroad, at Hartford, Conn.

STANDARD TIME.—The Western Union is rapidly extending its business of selling standard time in all parts of the country. The success of this enterprise is another striking proof of the adage that "time is money."



## THE MAGNETIC CLUB BANQUET.

The spring meeting of the Magnetic Club was held at Martinelli's restaurant on Fifth avenue, on the evening of April 22d. This meeting was one of the most brilliant and successful in the history of the organization, and the entertainment was thoroughly enjoyed by all present. At seven o'clock, sixty-five persons sat down to a ten-course dinner, the disposition of which consumed nearly two hours. After coffee the programme was varied, and took on the form of intellectual entertainment. The President, Mr. W. J. Dealy opened the post-prandial programme with a few appropriate remarks, which had the effect, in conjunction with the dinner, of making every one feel happy and at home. At the conclusion of Mr. Dealy's remarks, some instrumental music was rendered with fine effect. This was followed by some well chosen words by General Wager Swayne, one of the invited guests. General Swayne spoke in a free and easy manner, as though he felt perfectly at home. His stories were very funny, and evoked considerable merriment and laughter. He told of his being in Boston at noon and how the magnetic influence of the club drew him to the railroad depot, and the first thing he knew he was enjoying the hospitality of the Magnetic Club. His remarks throughout were appropriate to the occasion, and he concluded with a story about the wonderful control an old lady had over her husband and children. The secret of it was that she fed them well. After more instrumental music by the New York Telegraph Club Orchestra, Superintendent A. S. Brown made a few remarks, complimenting the club on its success in sociability and hospitality. Instrumental and vocal music alternated with speech making throughout the evening. Mr. Tom Ballantyne gave some of his humorous recitations, which kept everyone in a roar.

Among the others who contributed to the enjoyment were Manager G. H. Usher, of the Postal; E. E. Brannin, President of the New York Telegraph Club; C. P. Bruch, Edward Delaney, M. J. Dixon and J. C. Van Cura.

One of the features of the evening was reserved for the wind-up. It was a speech by Senator Ives. As a speech his was unique. Whenever the Senator paused for breath the band came to his assistance, and played a few selections of the "Down went McGinty," and "Razzle Dazzle" class, all of which was uproariously enjoyed by those present. The Senator, however, faced the music and finished his little speech in triumph.

The invited guests of the evening were Gen. Wager Swayne, Supt. A. S. Brown and George H. Usher, manager of the Postal Telegraph office. The following is a full list of those present:

Wager Swayne, A. S. Brown, William J. Dealy, George H. Usher, Louis Bell, W. J. Johnston, E. C. Cockey, M. R. Cockey, George B. Speer, George Roehm, Charles P. Bruch, E. E. Brannin, T. P. Scully, J. B. Taltavall, Fred Catlin, Thos. R. Taltavall, Jas. McParlan, C. A. Meyer, P. Sheehan, J. R. Heidemark, J. M. Moffatt, John Brant, Jos. Knittle, John K. Calvert, Wm. L. Ives, T. Brennan, E. F. Cummings, G. N. Howlett, G. A. Newton, H. A. Moody, M. J. Dixon, R. Ferguson, J. W. Doyle, J. McKenzie, R. C. McDonald, Chas. E. Orr, Geo. J. Davison, T. A. Brooks, S. S. Barrett, A. Beatty, G. A. Bloedon, Oscar Lang, Willis H. Jones, R. G. Stephenson, A. G. Hummel, M. Durivan, Thos. Hamilton, Geo. F. Fagan, E. M. Tomlinson, Lank S. Jones, T. B. Fulton, Wm. H. Baker, Wm. Weiss, A. Henning, T. A. Ballantyne, J. C. Van Cura, Edward Delaney, G. E. Holbrook, H. I. Jolly, R. J. Marrin, F. C. Halstead, Walter Brown, F. J. Scherrer, T. W. Greene.

Mr. Dealy spoke as follows:

GENTLEMEN: Adjust—We have cut into our circuit to-night, the loop to Bonnie Scotland,

and with the speed of a Pollock or a Stephenson, let us send along the line the cheer and joy of this happy meeting with our "73" to James D. Reid. And what a happy meeting it is. Every thought pleasant. Every eye bright. Every cheek aglow. Every heart warm. Every hand extended. Every word charged with the one and only object of the club. Magnetic sociability—precisely what we are here for, and what we are organized for, to light up with the sparks of gladness the fires of fraternal friendship. What if some of us are "Old Timers." We must lay aside the weight of years, and, in the spirit of THE ELECTRIC AGE, join with those who are growing up around us, to Review in a social way, the wonders of *The Electrical World*, so that *The Message* from *The Operator* of yesterday and *The Telegrapher* of to-day may be noted in *The Journal* as record of our enjoyment, and wherever we meet and whenever we meet, let there be a ring of sincerity with the merry "Hello!"

It is well that we occasionally compare the past with the present, that in the synchronism of time, with eyes uplifted to the clock, and hands clasped, we may reflect on the evolutions between *The Plug* and *The Electrical Engineer*. Now, go ahead, tell graphically the stories of the wire and the tournament. Transmit by the current of sociability the good will that removes the crosses of care and illuminates the mind where it meets with resistance, and in the arc of our lives, let us blend with wisdom and wit flashes of poetry, art and song. Press the keys in unison. Test the tones for harmony. Sound the praise. Enlarge the field and develop in every way you can, the attractive power of the Magnetic Club. I know of no better way to spread its influence than to hear from the gentleman on my right, whose fame is national in war and peace, General Wager Swayne.

MR. E. E. BRANNIN SPOKE AS FOLLOWS: Mr. Chairman: When I tendered to the Magnetic Club, for this meeting, the Band of the New York Telegraph Club, I had in view that it would be an excellent idea to have the Band play while I was endeavoring to make a speech; and if you will kindly start it up now, I think our friends will be better entertained than by listening to me alone.

Whoever conceived the idea of organizing and having since maintained the Magnetic Club are deserving of great credit. These quarterly meetings, occurring as they do, in the Spring, Summer, Fall and Winter months, do us all a great deal of good, and as a social institution the Magnetic Club is a grand success. Most of you are aware of the fact, that the Magnetic Club has a sister—I refer to the New York Telegraph Club, which also aids to promote sociability, and do a little more. In its new quarters now being fitted up, we will have a reception room and parlor, piano, etc., library and reading rooms, billiard rooms, also apartments for chess, checkers and other light games, and a gymnasium; we already have a Band, and we hope soon to inaugurate a series of lectures and debates. We propose to permanently maintain and in the near future to own a home for the telegraphers of New York and vicinity. The formal opening of the new quarters will take place about May 15, and I extend a cordial invitation to you, and also to your wives or sweethearts, and friends, to meet with us on that occasion; we will reserve the best seats in the house for the Magnetic Club.

SUMMER NIGHT FESTIVAL.—The second annual summer night festival of the New York Telegraph Club will be held at Washington Park, Avenue A and 69th street, Wednesday, July 2d, 1890.

"He an operator? Bosh!"

"Why do you say bosh? He writes a good fist."

"So he does—but operators have no middle names."

SYRACUSE NOTES.—W. R. Jillson, who formerly worked for the Western Union in this city and more recently at 195 Broadway, is filling the place on the *Standard* recently made vacant by the death of Charles Cheseboro. No better selection could have been made, as Mr. Jillson is a first-class operator and is particularly adapted to the arduous duties of the office. H. W. Cleveland of the Postal, who, some months since underwent a painful surgical operation, is able to be about again, much improved. The wires which lead under the tables in the W. U. operating room, some of which, owing to age, were in a poor state of insulation, were recently replaced with new cables by Messrs. Ferris and Pardee. Advantage was taken of the opportunity to make a few needed changes in the instruments, etc. The repeaters were all placed on shelves in one corner of the room, and one quadruplex and two duplex sets, besides several single wire sets were connected up for reserves.

COLUMBUS, GA., NOTES.—This office (Western Union) is getting to be of considerable importance. It is under the able management of Mr. O. C. Harrell, who has held the same position since the war. The operating force consists of the following gentlemen: Messrs. R. K. Munn, chief, and J. McLearn, operator, on day; Mr. J. E. Munn, split trick, and Messrs. E. F. Buchanan and J. H. Baxter, on night. Mr. Buchanan is Associated Press man; Mr. C. F. Mann left us on the 1st, to accept a position with Central Railroad at Barnesville, Ga. Messrs. Ed. Blan and H. L. Abbott, former employes of this office, are now with the Cotton Exchange. We have wires to Atlanta, Montgomery, Macon and Augusta, besides a good many way wires. Business is steadily on the increase. In fact, an extra man was added to the force on February 15th last. It is said that the Postal will soon make its appearance here. Not positively known yet, though. Success to THE AGE.

RALEIGH, N. C., NOTES.—Departures: P. H. Atkinson, to Spartanburg, S. C., as train master. Ed. S. Swift from Ashland, Ore. T. A. Class is manager of the Postal Telegraph and Cable Co. at this point.

Tailor to check boy—Is Tom — in?

Check boy, posted—If you are de feller he wurked for de odder night, you'll find him holding up the "Sy" duplex, but if you are de feller he owes \$25, he's off for de night.

Night man to split trick—What chief are you under most?

Split trick—They all sit on me when they get a chance.

Why do certain Jersey circuits resemble the gallant 69th regiment?

Because there are good fighters all along the line.

Operator to chief—It is true that I was fighting last night on the first Chicago, but I can explain if you will give me a little time?

Chief Operator—All right, ten days.

Mr. Samuel B. Lambdin will soon take his annual trip down to Virginia, to see the old folks and his "old homestead." He will also spend a few days in Washington.

Fred. M. Linson, of Reading, Pa., is now located at Bethel, N. Y.

The Second Grand Annual Masquerade and Reception of Newark Division, No. 118, Order of Railway Telegraphers, of North America, was held at the Veteran Zouaves' Armory, Elizabeth, N. J., April 23, 1890, and a very enjoyable time was had by the enthusiastic members of this prosperous branch of the O. R. T. Mr. Jos. Russell has our hearty thanks for his kind invitation.

A chief operator of a large office recently informed us that he always made it a point to learn the routes over which his lines passed. No doubt this knowledge is invaluable at times.



UNITED STATES MILITARY TELEGRAPHERS.

Mr. McKelvey offered the following in the Ohio Assembly, April 15th, which was adopted:

WHEREAS, Except commissioned officers, those persons engaged in the military corps of the United States during the war of the rebellion, although performing strictly military duties, whereby some lost their lives and others were wounded or imprisoned, have received no official recognition for their fidelity, intelligence, bravery and efficiency; and whereas, as an integral part of the army, they ought to have been accorded a military status corresponding in rank to the service so meritoriously performed; and whereas, by reason of the death of many army telegraphers, and other difficulties developed by the lapse of time, it is at this time inexpedient to confer actual military rank upon members of said corps; therefore, be it

Resolved, That it is the sense of this general assembly that Congress should at an early day pass the bill now pending in Congress providing for the relief of the military telegraphers during the rebellion.

Resolved, That the Governor be requested to forward a copy of these resolutions to each of our Senators and Representatives in Congress with the request that they give the aforesaid bill their hearty support.

The resolution was offered at the request of W. J. Dealy, chairman of the committee on congressional action, Society of the United States Military Telegraph Corps. General Grant, in the second volume of his Memoirs, General Sheridan, General Stager's report to the Secretary of War in 1863, Comte de Paris of General McClellan's staff, General Burnside, General Palmer, McPherson, and others testify to the bravery and efficiency of the telegraph men, and the Grand Army at the Milwaukee encampment and the Society of the Army of the Tennessee adopted strong resolutions favoring the bill.

Mr. McKelvey's speech, in presenting to the Ohio Legislature the resolutions in behalf of U. S. military telegraph operators, was as follows:

"MR. SPEAKER: Of the men now living, who rendered invaluable service to the nation in its hour of peril, every surviving soldier and sailor of the late war has been recognized and rewarded save and except the few surviving members of the old Military Telegraph Corps. Yet, Mr. Speaker, from the outbreak of hostilities in the mountains of West Virginia in 1861, until the surrender at Appomattox in 1864, the military telegrapher participated in every campaign—on the march or in the camp, he was ever found at his post, performing his duty with an intelligence, a zeal and a loyalty exceeded by none. Sometimes, as with Grant at Spottsylvania C. H., he was found in the fore front of the battle, sending and receiving messages in a storm of shot and shell. Sometimes, as with McClellan, in the seven days' battle in front of Richmond, he was found perched upon a telegraph pole, a conspicuous target for the sharpshooters of the enemy; there he sat during the live long day, heedless of the whistling bullets and bursting shells that were falling about him, and telegraphed reports of the battle far into the night. Sometimes he was found with the bold raiders of Sheridan and Stoneman, dashing through the enemy's country, tapping the wires and furnishing the commanding officer with information of the enemy's movements. Sometimes, as with Sherman in his march to the sea, he was found building and reconstructing lines in order to keep open communication with Headquarters in Washington. But everywhere and always, he was found faithful, fearless and true.

To say that the war could not have been successfully prosecuted without the aid of the military telegrapher would, perhaps, be an unwarrantable assumption, but, sir, the Commanding General of the army and every great civil and military leader who participated in the struggle for national exist-

ence, has borne testimony to the invaluable aid, aye, to the indispensable services, of these patriotic men.

The valor and courage which they displayed in battle, the sublime fidelity and good faith with which they treated the important secrets intrusted to their keeping, and the diligence and devotion with which they performed their duties under the most trying ordeals, few have equaled and none have surpassed.

Notwithstanding the valuable services I have recited, by reason of the fact that the military telegrapher was not a regularly enlisted soldier, his services have never been officially recognized or rewarded.

And thus it is, Gentlemen of the House, I stand before you as an humble member of that old telegraph corps, and plead for your aid and co-operation in obtaining from the government a long-deferred but simple act of justice to as deserving and loyal a corps of defenders as ever imperiled their lives in the defense of the nation.

The bill now pending in Congress for the relief of the military telegrapher provides that every operator who is known to have served the country in the military telegraph service shall, upon application, be entitled to an honorable discharge. We ask for nothing more, we will be content with nothing less. For twenty-eight years this boon has been withheld, until to-day less than one-fourth of the old telegraph corps yet survive, and these surviving members are animated by the laudable desire to transmit as a precious legacy to their children a certificate of honorable service in their country's defense."

Mr. McKelvey has not forgotten his telegraph comrades of the war, nor their services to the country, and 50,000 telegraphers to-day thank him for his efforts in behalf of their brothers of the U. S. M. T.—*Columbus, O., Journal.*

"HASN'T A BIG HEAD.—What kind of a chief does M— make?"

"The strangest you ever heard of."

"In what way?"

"Why, he talked with his men from the day of his appointment."

The numerous friends of Miss Katie R. Flanigan will be glad to learn that she has been appointed amanuensis to Mr. M. J. O'Leary in cable bureau room 58. Miss Flanigan ranked first in skill and rapidity on the typewriter in Wheatstone department, and is an expert stenographer, having acquired the art in a marvelously short period.

TELEGRAPHIC POSTAL CARDS.—The telegraphic postal card is a great convenience in Paris. Open cards of this kind are delivered anywhere in Paris within an hour after they are mailed for six cents; closed ones, giving as much room as an ordinary letter, for ten cents.

Mr. E. F. Howell, one of the judges in the recent tournament, in discussing the subject, used the following language: "Speed, unless it be useful speed, is clearly detrimental to the work of a contestant as an operator. By the introduction of typewriting machines in the receiving of telegraphic signals, the question of speed in receiving is eliminated from the discussion of efficiency in the operator. Interest, therefore, centers solely on increasing the useful speed of senders.

"These contests, therefore, should not be allowed to degenerate into a demoralization of our business, nor to destroy the benefits that may be derived from them, by actually making them a means of educating ourselves into a useless and reprehensible style, and, unless their object is to benefit telegraphic interests, should not receive financial support from those to whom real skill and efficiency in operators are all important. Good operators, who have valuable merit in their fast manipulation, cannot be expected to enter a contest wherein they must sacrifice everything to a vicious competition in speed alone."

\$175.00 IN PRIZES.

\$100 first; \$50 second, and \$25 third. Prizes to be awarded to the three persons sending us the most business from February 16th to Nov. 16th, 1890.

ONE HUNDRED DOLLARS will be given to the person who sends us the most business during the ten months named.

FIFTY DOLLARS will be given to the person sending us the second largest amount of business.

TWENTY FIVE DOLLARS will be given to the person sending us the third largest amount of business.

These prizes are given exclusive of the usual commissions allowed; therefore those who work for one of these prizes will also be liberally compensated for the trouble with increased commissions. The first prize amounts to \$10 per month—a handsome sum of money for so small an effort.

Any person, except a regular employé of the paper, is qualified. This, of course, includes all agents and correspondents.

All remittances will be acknowledged in each issue of the paper.

Remittances only are acknowledged in this contest.

Up to the present time the list of those interested stands:

|                                             |         |
|---------------------------------------------|---------|
| B. C. Elder, Kansas City, Mo. . . . .       | \$14 57 |
| W. E. Burns, Pittsburgh, Pa. . . . .        | 49 00   |
| E. A. Coney, Newark, N. J. . . . .          | 3 00    |
| L. E. Moores, Cincinnati, O. . . . .        | 4 65    |
| B. F. Hartz, Helena, Montana, . . . . .     | 8 90    |
| A. M. Butler, Omaha, Neb. . . . .           | 10 00   |
| C. D. Lee, St. Louis, Mo. . . . .           | 37 15   |
| C. J. App, Knoxville, Tenn. . . . .         | 4 80    |
| F. B. Holcomb, Watertown, N. Y. . . . .     | 2 00    |
| C. S. Loewenthal, Chicago, Ill. . . . .     | 18 51   |
| H. I. Jolley, 195 Broadway, N. Y. . . . .   | 30 75   |
| S. H. Riker, Syracuse, N. Y. . . . .        | 10 64   |
| H. C. Wooden, Baltimore, Md. . . . .        | 1 80    |
| B. J. Meising, Oil City, Pa. . . . .        | 5 00    |
| J. F. Slack, Sioux City, Iowa, . . . . .    | 3 70    |
| K. W. Starbird, Portland, Me. . . . .       | 1 20    |
| J. W. Thompson, Nashville, Tenn. . . . .    | 7 25    |
| G. W. Spaid, Savannah, Ga. . . . .          | 6 00    |
| W. Hazelboom, Boston, Mass. . . . .         | 19 60   |
| John J. Seitz, Hamilton, Ont. . . . .       | 15 00   |
| W. J. Anderson, Toronto, Ont. . . . .       | 1 20    |
| F. L. Saunders, Dallas, Tex. . . . .        | 8 00    |
| G. W. Hickey, Plattsburg, N. Y. . . . .     | 6 50    |
| R. Satchwell, Ashland, Or. . . . .          | 9 00    |
| F. M. Thompson, Vancouver, B. C., . . . . . | 10 00   |
| J. C. Smith, Tyler, Tex., . . . . .         | 6 00    |
| A. Wilson, Milwaukee, . . . . .             | 7 80    |

PHILADELPHIA TELEGRAPHERS' BALL.—The Philadelphia Telegraph Club, an organization composed chiefly of the employés of the P. and R. Tel. Co., gave their first annual ball on the 21st inst. About one hundred couple participated, prominent among whom were:

|                                            |                              |
|--------------------------------------------|------------------------------|
| Messrs. J. W. Maley                        | and wife, Trenton, N. J.     |
| Jno. Miller                                | " Miss Corson.               |
| C. H. Sterner                              | " lady.                      |
| C. T. S. Focht                             | " lady.                      |
| Jno. W. Miller                             | " Miss Josephine Strobel.    |
| Geo. J. Smith                              | " Miss Minnie Jones.         |
| Geo. Hauer                                 | " Miss Osmond.               |
| E. J. Hughes                               | " Miss Annie Lanighan.       |
| Jos. Locuson                               | " Miss H. Crawson.           |
| John L. Parker                             | " wife.                      |
| T. M. Parker                               | " Miss McCloskey.            |
| Joseph Summers                             | " Miss Ollie Jones.          |
| M McDonald                                 | " Miss M. Lanihan.           |
| C. M. Jones                                | " Miss Lizzie Feeney.        |
| L. Eisenhart                               | " Miss M. Lanegan.           |
| J. M. Kelly                                | " Miss Osmond.               |
| Wm. Foley                                  | " Miss Mary Gaul.            |
| Wm. J. Calnan, Daniel Calnan, Rid. Ritter, | Wm. Schildt and many others. |

The whole affair, which was a decided success, was admirably managed by Mr. C. H. Sterner, as Grand Conductor, with Mr. C. T. S. Focht as his assistant, and Messrs. J. W. Miller, Geo. J. Hauer, Jos. Locuson, E. J. Hughes and Geo. J. Smith as Floor Managers.



**NEW YORK WESTERN UNION NOTES.**—Madame Albani was a recent visitor. The ladies were disappointed at the escorts omitting to have the distinguished visitor pass through the ladies' department. All were, however, much pleased to see her sweet countenance even at a distance. Mr. Chas. Fallon has set a good example by leading to the altar Miss Nellie S. Stack. Both have returned to their desks after a brief honeymoon. The summer season is fast approaching. With it come the tests of our young office girls, now fast approaching their advent into young ladies, among whom are the Misses Harris, Julia Houghton, Clara Ayres, Ada Douglass and Carrie Moran. There are several more to follow. Among the new comers are Miss Jennie Mulford from Northport, L. I.; Miss Jennie McManus from Cooper Union, Miss Goldey from Hotel Brunswick, transferred. Miss L. J. Calver has returned after a three months' tour in Scotland feeling very much better in health. Miss Kittie Stephenson, the prize winner for fast sending, has had her salary increased \$10 per month and has been transferred to the East. Miss Tillie Froschel, the winner of the \$50, for the two prizes for the best Morse, is delighting the operators at the Produce Exchange with her fine "Morse;" she expects to receive a raise. Martin J. Dixon's benefit went off with a grand success. The operators did well in their parts and all were successful. One and all received plenty of encores and flowers by the basket. Miss Nellie Gelan has returned to the office after an absence of three weeks.

The good work accomplished on the typewriter for commercial business, in the San Francisco office of the Pacific Postal Co., is stirring up the management at all points on the subject of introducing machines into their respective offices. There is not another telegraph office in the world, outside of that of San Francisco, where such beautiful work is turned over to the public, and strange to say it is not an experiment there. The machine is used on every wire in the office and pen and ink are things of the past. Mr. L. W. Storrer, the enterprising superintendent of the Pacific Postal, recently advanced as his opinion the assertion that within two years every first-class office in the country will be equipped with typewriting machines. It certainly looks that way.

**LEADVILLE, COLO., NOTES.**—Recent arrivals: Ed. Rogan from Omaha and Matt. Goff from Idaho Territory. Departures: F. G. Lamb and Mr. Blakeny for California. The *personnel* of the office is now: E. B. Rogan, manager; B. Kellerhouse, days; M. J. Goff, night report and Miss Dottie Spencer receiving clerk. Business is improving, and an addition to the force will be essential in the near future. The floating element is somewhat seldom in this locality. We are still enjoying winter weather. The "beautiful" falls every other day, and at this writing it is snowing as hard as at any time during the season.

Judge Joyce, the Governor's pardon clerk, was walking through one of the corridors of the Albany Capitol the other day, when a messenger boy asked him: "Say, mister, d'you know anyone in this buildin' named Hill—D. B. Hill?" "Well, yes, rather. What of him?" "Why, I've got 'er despatch for him, an' nobody knows who he is."

The blotter at the New York Telegraph Club bears the following names recently entered by their owners: G. H. Bailey, Brooklyn, N. Y.; Dick Bedell, New Haven; F. J. Scherrer, Chicago; C. E. Gooding, Winnipeg; W. A. Kenna, Boston; A. S. Patterson, Providence; R. C. Mecredy, Philadelphia; G. M. Eitemiller and Ed. C. Bishop, Pittsburgh; C. W. White, Richmond.

**THE PRIZE STORY CONTEST.**—Mr. Geo. E. Holbrook, the referee in the prize story contest, will not finish his report in time for the present issue. He will, however, decide within a few days now as to who is entitled to the prizes.

Mr. W. Terrell, a well-known operator has been appointed superintendent of telegraph of the Alabama Midland Railway with headquarters at Montgomery, Ala.

Mr. T. A. Brady, of Knoxville, Tenn., has located in New York city.

B. E. Kelly, of Quinnimont, W. Va., is now located at Greenville, S. C.

Mr. P. A. Cook, formerly of Tacoma, is now with the Puget Sound Telegraph, at Port Townsend, Washington.

Mr. H. A. Jackson, for many years located at Salamanca, N. Y., is now with the Bradford National Bank at Bradford, Pa.

Mr. F. N. Bassett, general eastern manager of The United Press, New York, is enjoying a well-earned vacation of one week in Washington. Mr. A. S. Ayres will fill Mr. Bassett's place during his absence.

The Washington *Evening Star*, of April 19, published a three-column article giving twenty pictures of the prominent telegraphers of that city. The likenesses are very good, while the compliments paid each are well earned. The following well-known telegraphers are shown: Morrel Marean, Wm. H. Young, D. F. Brown, L. M. Smith, Frank Kane, P. E. Brown, W. W. Kelsner, H. S. Wright, J. B. Austin, W. A. Dyer, C. W. Thayer, H. McKeldin, L. Fisher, W. F. A. Hasson, J. M. Field, J. A. Hutchinson, S. A. Gallatin, G. W. Hann and L. K. Miller.

**PHILADELPHIA NOTES.**—W. U. arrivals: Miss Clara Grimley, city; Dan'l Creary, Grafton, W. Va.; James H. Dougherty, New York; C. Muth, Mexico. Departures: J. K. Ritz, Messrs. D. F. Stair, Theo. Koenig and F. T. Lowry have gone to the Postal. Miss Bessie Cook, of City department is lying very ill at her home. After a lingering illness Miss W. Wallace died, on the 26th, of consumption, at her home in Camden. Mr. Frank Kane, of Washington, paid us a visit on the 16th. There is an inclination among the members of the Aid Society to increase the death benefits to \$100, and it seems to meet with general approval. It is to be regretted that the members do not take interest enough in the society to attend the meetings more regularly and in greater numbers. Had this been the case at last meeting, the new By-Laws could have been adopted, and the recent beneficiary would have received \$100 instead of \$50, which she was so much in need of. The Postal Company are extending their lines to the seashore and expect to reach Atlantic City by June 25th.

A well-known chief operator remarked recently: "Different offices require different styles of chief operators. A large office with its wire chief, traffic chief, quad. chief, etc., requires men of skill of a high order, but of less diversified talent. An office of this kind has centered in one man many responsibilities, but each one of secondary importance to the corresponding duty in the large office. The wire chief must be content with his theoretical location of trouble and trust to his lineman to find it. The man of all duties mixes less theory, less electrical attainment and more common-place practice in his tests. I tell my linemen: "You will find ground on No. 4 district, between such and such streets, or, between Mr. Blank's box and so and so." The wire chief in the large office doesn't have anything to do with "district trouble," as a rule, and if he starts a lineman over a city wire he expects him to follow it till he finds the trouble. His "bridge test" tells him fairly well where his main line trouble is. The lines are left to the care of the foreman, and perhaps the inspector. The local electrician puts up the quad, and duplex sets and plans the arrangement of battery supply. The man-of-all-work does this also. In a large city where overhead wires are almost indiscriminately warred on and "lawed" against, some one about the office has to know the "lay of the land" pretty well or depend entirely upon a company (perhaps unwilling) lineman.

The Postal Telegraph put into operation its new dynamo system in Pittsburg. The apparatus worked very nicely, and Superintendent Campbell was pleased with the change and the result. There are twelve dynamos altogether, and two seven horse-power engines to drive them, one of the engines being reserved in case of accidents.

The dynamos will replace 4,500 jars, and besides will have ten times the strength, and will cost about half as much per year to maintain as the jars. They are of the F. W. Jones patent, and made by the Westinghouse people. In replacing the old system the company had to put in new switch boards, and to make all the connections in the office required 3,000 miles of wire. It cost about \$5,000 to put in the new system.

Superintendent Campbell said that the jars would be removed and sent out to country offices where it wouldn't pay to locate a dynamo. Pittsburg is a sort of half way station of the Postal Telegraph, and for this reason is one of their most important points. Mr. Campbell stated that as many as 5,000 messages are re sent in Pittsburg in a day.

**M. J. DIXON'S BENEFIT.**—The testimonial performance and reception tendered M. J. Dixon, was held at the new Central Opera House, this city, on April 16. The fact that a number of lady members of the craft were to participate in the play drew a large audience, principally lady members of the profession and their friends. The whole affair was a success. Mr. Fred. T. Meyer carried off the honors for good acting. The play was "East Lynne," and Mr. Meyer's "Sir Francis Levison" was excellent. Miss Florence Miller won the well-merited praise of her numerous friends by her faithful rendition of "Lady Isabelle" and "Mme. Vine." Others who participated were Misses Jessie Wallack, Mamie White, Amelia Gebhard, Nellie Reeves, Emma Miller, Little Ella Loraine, Messrs. Martin J. Dixon, Edmund Stodart, William Elling, Thomas Ballantyne and Oliver Benson, all of whom admirably filled the requirements of the piece.

**POSTAL NOTES.**—Miss B. Starin has been transferred from 5 Beekman street, to the Main office and is relieved by Miss F. Hicks. A new office has been opened at 85 Reade street; no appointment as yet. The office at 59 Murray street has been moved to 35 Murray street, with Henry Sherwin as manager. Thos. Golden, of 88 Gold street, has moved his office to No. 73 the same street. The Long Island Telegraph Company, which is owned by J. W. Rolson, Chas. Shirley, T. F. Jennings and one or two others, has opened an office at the 34th street Ferry. The Long Island summer resorts are by these lines connected with the Postal system.

**UNDERGROUND TELEGRAPH WIRES.**—It is pretty generally known that partly for military reasons and partly to prevent breakdowns when storms take place, Germany has established a net work of underground wires, which connect the leading commercial centres, sea port towns, and fortresses. Up to the present, however, Bavaria has not taken part in this arrangement, but a bill is about to be presented to the Diet, providing for a very complete system, which will connect Munich, Hof, Dresden and Berlin.

Samuel McKibben, a well known and popular member of the Pittsburgh, Pa., craft, graduated with honors as a physician and surgeon at the Pennsylvania Medical College of that city, on March 27th. We are all sorry to lose "Sam," but wish him success in his new profession.

The Postal Company will have opened offices in Chattanooga, Nashville, Louisville, Memphis, and Denver, in addition to the principal points in the State of Texas within the next sixty days.

The great question of the day—Could you read Pollock?



## NEW YORK TELEGRAPH CLUB.

Things are booming at the New York Telegraph Club since March 1st. Over 120 applications for membership have been received and favorably acknowledged.

At the new quarters, 32 Cortlandt street, where the Club will take possession about May 1st, the carpenters, decorators, plumbers and gas fitters are busy at work. The parlor and reception-room will be 10 by 40 feet. The committee room, that connects with the parlor, will be 7 by 20; back of these rooms are the billiard rooms and gymnasium, covering a space 25 by 70—also four apartments for checkers, chess and other light games, each seven feet square. New furniture, billiard tables and gymnasium outfit, are being contracted for. The formal opening of the new quarters will take place about May 15th. A string and brass band, composed of members of the Club, has been organized, and the music produced by them would do credit to professionals. The New York Telegraph Club Band furnished the music at the quarterly dinner of the Magnetic Club at Martinielli's, on April 22d.

President Brannin says as soon as the Club is comfortably settled in their new quarters he intends to inaugurate a series of semi-monthly lectures, debates, etc. The Club has issued bonds to the extent of \$5,000, and the funds realized are being used to fit up the new quarters, and to purchase new furniture, billiard tables, gymnasium outfit, etc. Permission to issue these bonds has been granted by the Supreme Court, and a chattel mortgage covering all the effects now owned, or that may hereafter become the property of the Club during the life of the bonds, has been duly executed and recorded in the county clerk's office, and filed with the Register. Messrs. E. T. Cummings and M. J. O'Leary are the trustees under the mortgage. The bonds are of the denominations of five dollars each, payable in ten years, but are redeemed at the option of the Club after the expiration of one year from date, and bear interest at the rate of 6 per cent. These bonds are a decidedly good investment, and there should not be the slightest difficulty in disposing of them among the honorary and active members of the Club.

President Brannin says there is not the least doubt but the bonds will be redeemed inside of two years, and the income to the Club from all sources fully warrants these assertions.

ST. LOUIS NOTES.—Mr. Frank O'Brien, of the United Press, has been transferred to Chicago. Mr. L. H. Laplace, of Louisville, Ky., relieves Mr. O'Brien. Mr. E. C. Taylor, lately with the Missouri Pacific, has resigned, and will retire from the telegraphic arena. Mr. D. F. Kyle is a recent arrival at the Missouri Pacific from the Postal, Omaha. The all-absorbing topic of conversation in telegraphic circles here is the proposed local telegraph tournament, calculated to develop and bring to light many hitherto unknown stars. Mr. D. B. Grandy is the projector of the contest, which will probably take place within a week, but as the arrangements are not fully complete the time and main features are as yet undetermined. A number of local telegraph artists, including Western Union, Press Association and railroad operators have signified their intention of participating, and as this list comprises, among others, the well-known lightning slingers, Hogan, of the Associated Press; Ellis, of the Postal; Kyle and Gannen of the Missouri Pacific; Harry Eckert, Garrene, McIlvaine, Carberry, Spencer, Groves, Touchy and Tremain, of the Western Union, the interest in the event is not likely to wane. A neat little sum will be given for prizes, and the winners will be well repaid for any effort they may put forth. Mr. Grandy will supply further information in regard to the contest. The entrance fee is \$1, and all St. Louisans are eligible. Night Chief Spencer, of the Western Union, has been confined to his home for some days owing to a severe illness, but has now returned to his duties.

Mr. M. A. Russell, multiplex chief, and Mr. Ed. Githens, day chief, have also been on the sick list. The latter is now convalescing. Mr. Russell is still unable to take up his work at the office, but we hope to see him recovered soon. The illness of the night chiefs has necessitated extra duty on the part of the day chiefs, who have been alternating in performing these duties. Mr. Tom Goodwin has gone to Atlanta to work for the Western Union. E. P. Foley has resigned to accept a position at Burlington, Vt., his home. Mr. Tom Goodwin, to base ball exchange. Among the arrivals are: Mr. G. E. Clark, from Pueblo, Col.; L. C. Baden, from Kansas City; J. W. Rowland, from Texas; V. Schuler, from Hot Springs; E. P. Fisher, Dallas; D. Minnehan, Galveston; J. F. Robinson, L. D. Hamilton, T. A. Rent, O. B. Chapman, Miss Mary Thierbach and J. M. McLain.

Geo. F. King, formerly of Anaconda, Mont., is now at Papillon, Neb.

SIoux CITY NOTES.—Chief Operator B. W. Stoddard has resigned to open a broker's office, Mr. J. P. O'Donnell, night chief, relieving, and Mr. J. F. Slack officiating in the latter position. M. O'Heron has resigned to go with S. C. and N. Ry., master mechanics' office, city. Frank Pugh has been temporarily appointed to fill the vacancy. Among the late arrivals are S. L. Wright, lately with A. S. Hanford, produce commission merchant; S. A. Winch, from the C. F. P. M. and O. Ry., city; J. J. Lyon, from W. M., Dubuque, Iowa. The base ball season having opened, the night force is hustling for a few side snaps in pool rooms and brokers' offices. Those having secured places are Messrs. Wright, Palmer, C. H. Morris and B. O'Donnell, to base ball park for season. H. M. Waters has gone to Omaha for the W. U. S. A. Larson, of the stock yards, is laid up and F. Heitman, relieving. Mr. Hayward, one of the eight men let out at Deming, N. Mex., on the introduction of the Wheatstone system passed through here a few days ago en route to St. Paul. Mr. C. B. McClurg also paid us a visit. The work of constructing the Pacific Short Line telegraph wire is progressing rapidly, and in a few short weeks we shall have connections as far as O'Neill, Neb., 110 miles west. Our new Chicago circuits via the Illinois Central Road, will be completed about August 1st. This will give us ample facilities for the prompt handling of our largely increasing business. Our office then will consist of four quad. sets, one duplex, one blind repeater and one set of Milliken repeaters, and one forty strap spring jack switch board, one sixteen wire loop board, and still we are not happy, but happy to say that we are steadily growing. THE AGE is always welcome at our sanctum. The night force will hereafter wear button hole bouquets, *a la Slack*.

A FORTHCOMING AND VALUABLE BOOK.—Mr. William Maver, Jr., of this city, the well-known electrical expert and writer on electrical subjects, is preparing a very complete work on the "Telegraph of the United States," and has it nearly ready for press. It will include very practical and thorough descriptions in Mr. Maver's well-known clear manner of expression. The work will contain diagrams and detailed descriptions of all kinds of apparatus, batteries, instruments and connections; and will show important points in their construction. The valuable points in the quadruplex, duplex, Wheatstone, fire alarms, district telegraph, etc., will be fully illustrated. The book will place in the possession of the reader a most thorough and plain description of everything telegraphic, pertaining to the service. It is intended to be within the comprehension of all and not for mathematicians. It is well in this connection to state that everyone abroad looks to America, which is the leading country in electrical industries, for just such a work as this, and the fact that such a book will fill a great want at home warrants the prediction that it will have a very

large sale in all English-speaking countries. Its title will be "American Telegraphs and Telegraphic Apparatus," and it will be published by J. H. Bunnell & Co., the well-known electrical supply house of this city.

"Talk about telegraph colleges," said a well-known telegraph man recently, "the London, Ont., office of the G. N. W. takes the palm. The manager believes in students first, last and all the time, for the revenue there is in the business. One of the present lady operators in the London office paid the manager \$50 to learn the business and secure a position, and he has on an average two or three students practicing nights in the office. The services of the chief operator have been dispensed with simply because of shrinkage in business, which has gone to the opposition. The public will not trust its affairs to students. The office is practically reduced to a 'plug factory' of the first magnitude, and the G. N. W. Tel. affair is simply an annex, perhaps for the amusement of those desiring practice on real long circuits."

## GEORGE KENNAN.

AN EARLY FRIEND RELATES SOME INTERESTING REMINISCENCES.

In conversation with a representative of the Brooklyn Times a few days ago a friend of Mr. George Kennan, who has become famous as the friend of the Russian political exiles, gave the following description of some of the traits of character of the well-known lecturer:

"In what I say of Mr. Kennan it should be understood that I speak from the standpoint of an old telegrapher, a craft of which that gentleman is an honored ex-member, and from that of a man whose privilege it has been to have served on a news staff over which he presided ably and well.

"In 1878 Mr. Walter P. Phillips, now General Manager of the United Press, was appointed by the New York Associated Press to the management of the Washington bureau of the latter concern. It is enough to say that Mr. Phillips' administration of the affairs of the bureau was such as to make it the most perfectly equipped and successful news agency in the country. It continued to enjoy that reputation up to 1882, when Mr. Phillips entered a wider sphere of operations. In 1882 Mr. Phillips took charge of the United Press and has since established its reputation as a news gathering and distributing association unrivaled for brilliant and conscientious service to the public. Mr. Phillips' strength as a man of large affairs, and his success as an executive officer is in no way better illustrated than in his accurate 'sizing up,' so to speak, of men whom he intends to employ for important work. It is quite natural, therefore, that Mr. Phillips should have taken Mr. Kennan, as he did in 1878, from the office of the Mutual Insurance Company in New York, and placed him in, what must have been to such a man, the more congenial paths of Washington journalism.

"I first met Mr. Kennan in 1882. I had been appointed by Mr. Phillips to a minor position on his reportorial force, and was assigned to duty under Mr. Kennan, at that time night editor in charge.

"It was while Mr. Kennan was my superior officer and kindly instructor, and before he had become famous as one of the noblest of the friends of humanity, that I learned to admire his character as typical of what is best in American moral and intellectual manhood. He was already becoming a busy man, the more so as he was scrupulously conscientious in the discharge of every duty. Yet I have never known him so preoccupied that he could not spare time to give a word of advice to a colleague or stop to condone and correct the innocent, if sometimes stupid, errors of a subordinate. In the handling of news he possessed to a marked degree those powers of a sharp analysis, clear



condensation and incisive application so essential in the make up of the perfect news man.

"He impressed me almost immediately as being one of those courteous, self-contained and self-reliant men to whom the contemporary generation involuntarily looks for the accomplishment of great things.

"At the time of which I speak Mr. Kennan, in addition to performing the exacting duties of his responsible position, and delivering flying courses of lectures was assiduously pushing forward his preparations for the serious work of a near future. It was the regular thing for him to remain at the bureau until, at 2 A. M., the telegraph instrument clicked out the welcome 'Good night.' After that, as I have heard, he would go home to books and study, and yet at 10 or 11 o'clock of the same morning he would be found hard at work blazing the way for the successful accomplishment of his labor of love.

"About this time his ample and peculiar knowledge of the extreme northern latitudes, his mental nerve and physical courage and endurance suggested to some observant minds in the capital the propriety of his being placed in charge of the Government rescue party, then about setting forth for the polar regions. It was soon found, however, that military and naval influence was too great to permit of a citizen, however able, being considered in such a connection.

"Mr. Kennan himself took no part in the matter. Indeed, it is doubtful if he was at the time cognizant of the interest manifested in the movement by his admirers.

"It was not long after this that the name of George Kennan became a talisman of hope in the huts and pens of the heaven-forsaken exiles of Siberia, and a household word with the friends of freedom the world over."

#### TWO VALUABLE BOOKS.

Every operator should thoroughly understand the instruments he works with and be able to locate faults on the wires. It is needless to say that such operators are of more value to a telegraph company than those who know nothing about such matters. Many operators are willing to study up on electrical matters and fit themselves for more desirable positions, but hardly know how and where to begin. The quadruplex is a familiar instrument these days, but how many operators understand it? Very few! Every operator ought to understand it, and there is no better instructor than Maver and Davis' "Quadruplex." This book has had a deservedly large sale. The language used is as plain as it was possible to state it, and very little more mathematical knowledge than addition, subtraction, multiplication, and division is necessary to understand the few problems set forth. These are purposely made simple and clear, in order to avoid any confusion or discouragement in the minds of those who are not versed in the higher mathematics. Any person can read the book through and understand every word of it. Its contents are the "Development of the Quadruplex," "Introduction and Explanatory," "The Transmitter, Rheostat and Condenser," "Stearns' Duplex," "Instruments of the Polar Duplex," "The Quadruplex," "The Dynamo-Electric Machine in Relation to the Quadruplex," "The Practical Working of the Quadruplex," "Telegraph Repeaters," and "The Wheatstone Automatic."

The other book is "Pope's Modern Practice of the Electric Telegraph." Its title is a very appropriate and comprehensive one, and indicates clearly the character of the book. Its contents by chapters are, "Origin of Electric Current," "Galvanic Batteries," "Electro-Magnetism," "Telegraphic Circuits," "The Morse or American Telegraph System" (including description of all the principal repeaters), "Insu-

lation," "Testing Telegraph Lines," "Notes on Telegraphic Construction," "Hints to Learners," "Recent Improvements in Telegraphic Practice," and "Appendix and Notes." It will be seen that the scope of the work is large, and every word in it is interesting as well as valuable. The two books named form a complete electrical library, and every operator who has any ambition at all to acquaint himself in an easy way with the wonderful force he manipulates every day, should possess a copy of both books if he has no others.

The price of each is \$1.50, and \$3 for these two books is money well invested.

Send for our catalogue of books.

ELECTRIC AGE PUBLISHING CO.,  
5 Dey street, New York.

"Come, when are you going to get a move on yourself?" said the chief operator to a member of the force.

Operator, thinking of his new home, "May 1st."

Frank Nicolls, formerly of London and Toronto offices, is now in the rubber stamp business in London, Ont.

"My daughter," remarked a grave and reverend United States Senator to his child, "didn't that young telegraph operator who called on you last night remain very late?"

"Quite late, papa," was the dutiful reply.

"Well, my child, I should like to know what was going on that required so much time?"

"It wasn't that kind of an executive session, papa," she said, with wise precaution.

"We never tell."

The Associated Press ball nine has reorganized with the following players: W. Jones, p.; J. Kearns, c.; E. Graham, 1 b.; P. Brady, 2 b.; P. Leahan, s.s.; M. McKenzie, 3 b.; T. Halpin, r.f.; D. Grennen, c. f., and F. Collins, l. f. Clubs desiring dates should address H. G. McKenzie, Associated Press, City.

Government telegraph operators in England have complained to the postmaster-general of inadequate pay, irregularity of promotion, long hours of duty, poor pay for over-time, vexatious and unfair duties, the performance by operators of assistant superintendents' duties without extra remuneration, compulsory work on national holidays, without extra pay, insufficient annual vacations, the present allowance being three weeks with pay.

A new portfolio, comprising the Departments of Education, Post-Office and Telegraph, heretofore administered by the Interior Department, has been created in Brazil.

Householder—"What's all that racket at the front door?"

Servant—"Please, sir, it's the new telegraph company as wants to know if they can remove the water-fountain in the door-yard."

"Remove the fountain? What for?"

"To put up a telegraph pole."

Omitting the Sentimental.—The following telegram is handed in at a station in Paris:

"Monsieur X., Romeo—Overwhelmed with grief; uncle dead; come at once; division next Thursday."

Operator—"Makes two francs and forty."

Stranger, (after fumbling in his pockets) "I have only two francs."

Operator—"You can omit a few words."

Stranger—"Very well, omit 'overwhelmed with grief.'"

David Adams, for the past fifteen years employed by the Montreal and G. N. W. Companies, at London, Ont., was notified on the 1st of April, that on account of falling off in business his services would be no longer required after the end of the month. Cheap labor is in demand.

NEWARK DIV. 118, ORDER RAILWAY TELEGRAPHERS has been at it again. After the flattering success of their ball given in Newark in '89. This division concluded to give another one this year, believing their friends would again sustain them in their worthy cause; April 23, was the date settled upon, though rather late in the season, especially for a masquerade. The ball was held with the most gratifying results, both socially and financially. Zouave Armory, Elizabeth, N. J., was the scene of the jollity this year. The Division having moved to that city, to give their brethren of the Central and Long Branch Roads greater facilities to attend the meeting. While those en masque were not large in number, on account of the warm weather, there were many very pretty, elaborate and expensive costumes displayed. The general attendance was quite large, there being between 250 and 300 persons in the spacious hall. It was a presentative gathering of the "Knights of the Key" for Jersey. Telegraphers, their wives (some of the latter being ex-telegraphers,) their best girls and sisters being present from all parts of the State, and from several States. Dancing was kept up till "peep o' day" when thoroughly tired out they "broke circuit" and quit.

LA CROSSE, WIS., NOTES.—The fraternity is well represented in this City by some twenty-five members, including following: W. U. Office—W. R. Chapman, manager, Miss Sadie McHugh, F. D. Terrell, C. H. Connors, H. H. Dengler. Business is booming. North American Office—J. J. Kavanaugh, manager. C. B. & N. Office—P. H. Hough, chief, F. C. Biessel, A. C. Millington, Fred. Rogers, Jas. O'Neil, A. C. Becker, L. P. Raley, R. W. Keyes, dispatchers: H. A. Worthington, commercial manager. C. M. & St. P. Office—Tim Welch, J. C. Hickey. N. W. Office—F. L. Page. G. B. W. & St. P. Office—P. C. Curran.

THE ELECTRIC LIGHT IN MILITARY OPERATIONS.—In a recent paper, read before the Société d'Encouragement, M. Lemonnier stated that when beams of light from the Mangin projectors on the top of the Eiffel Tower were thrown in the direction of the Sèvres Valley, observers placed at a distance of 2,000 metres from the spots illuminated by the rays were able to clearly distinguish small objects, such as animals and human beings; even when the illuminated region was 10,000 to 11 metres (6¼ to 6¾ miles) from the source of light. M. Lemonnier then pointed out the great importance of these facts in connection with the defence of entrenched positions, and fortified towns, and said it was the opinion of many military officers that the use of noiseless and smokeless powders would increase the tendency to night attacks. The Parsons turbo-dynamo had, he said, made available very suitable means of generating electricity for military purposes.

VERONA.—According to *l'Electricita*, the people of Verona are greatly in favor of the electrical scheme of Signor Enrico Carlo, who proposes to obtain the power necessary for electric lighting of the town from the River Adda, near Lecco, a distance of about 100 miles. The power available is estimated at between 7,000 and 11,000 horse-power.

AS TO PATENTS.—In a recent decision of the United States Supreme Court, in a patent case, the court ruled that a dealer residing in the United States cannot purchase in another country articles patented there, from a person authorized to sell them, and import them to and sell them in the United States without the license of the owners of the United States patent.

ELECTRIC TRACTION IN GERMANY.—From the *Elektrotechnische Echo* we learn that the Deutsche Strassenbahn-Gesellschaft intend to introduce electric traction on their lines, but have not yet decided upon the system to be adopted.

M. J. Fraser, formerly of Trudeauan, is now in Toronto for the C. P. R.



MAINTAINING TELEGRAPHIC COMMUNICATION UNDER DIFFICULTIES.

PORTLAND, Ore., Feb. 6, 1890.

The cut shown below is a scene in and around the offices of the Pacific Postal Telegraph and the Commercial Cable Companies at Portland, Oregon, during the recent flood in that city, the Columbia River having risen and inundated the entire country. Portland was isolated from the railway world and would have been deprived of wire connection but for the lines of the Pacific Postal Telegraph Company, which managed, by almost superhuman efforts, to maintain its lines. For nearly a week the only means of telegraphic communication with the outside community was by the lines of this Company in conjunction

Perhaps the longest repeating ever accomplished was that on San Francisco business which had to go via British Columbia, through Canada, via New York City to Omaha, thence to San Francisco via the Central Pacific routes. That the efforts to maintain communication during this trying ordeal was fully appreciated by the management, is fully evidenced by the following copy of a telegram sent to Manager J. W. Hayes, of the Portland office:

"SAN FRANCISCO, Feb. 8.

"J. W. Hayes and staff, Portland, Ore.: I have seen your message of last night, and wish to say to yourself and staff that your efforts to restore and keep up communication are fully appreciated.  
JOHN W. MACKAY."



THE PORTLAND, OREGON, POSTAL OFFICE DURING THE FLOOD.

with those of the Canadian Railway Company. The operating-room at Portland was flooded, the water passing through it from rear to front at the rate of about five miles an hour, and a horse and buggy had to be pressed into service to permit of the delivery of messages. A remarkable circumstance, necessitated by this state of things, was that the Union Pacific Railway, desiring to communicate with their head office in Omaha, Nebraska, were obliged to send their telegrams via Vancouver, B. C., and by the Canadian Pacific Railway Telegraphs to Montreal, thence by the Postal Telegraph Company to Chicago and Omaha. During the flood Portland was in constant communication with the East via the Pacific Postal and Canadian Pacific telegraphs, and over the Commercial Cables with Europe.

ST. LOUIS POSTAL NOTES.—Business continues to show a steady increase. Mr. Charles D. Hughes, of the Logan & Co.'s private wire, resigned to go with the Standard Oil Company. Charles E. Smith succeeds Mr. Hughes, and Mr. Charles Stolz, late of Cincinnati, takes Mr. Smith's place on the night force. Walter Anderson resigned, accepting a position with I. M. R. R., Beebe, Ark. On the 1st of April the "Postal" acquired exclusive right in the "Laclede Building," and placed the handsome and popular Miss Alice Gleitz, of the "Commercial" Building, in charge. Miss Belle Odlum succeeds her. Miss Mollie Landrigan, Messrs. W. A. Bruggernan, R. Little and Mr. McGrath, were made the happy recipients of an increase in salary April 1st.

MR. WANAMAKER'S NEW POSTAL TELEGRAPH BILL.

A new postal telegraph bill has been prepared by Postmaster-General Wanamaker and submitted to the House Committee on Post Offices and Post-Roads. The first bill offered by the Postmaster-General contained eight sections. It proposed to contract for a period not exceeding ten years, with one or more telegraph companies for the transmission of postal telegrams between free delivery stations. The charges in any one State were not to exceed ten cents for messages of twenty words or less, counting address and signature, and not over twenty-five cents for any distance under 1,500 miles, and not more than fifty cents for any greater distance.

The new bill contains eighteen sections. The charges are increased as follows: For the first twenty words or less, counting address and signature, between postal stations in any one State or Territory, and for distances less than 300 miles, fifteen cents, and five cents additional for each ten words or fraction thereof. For distances more than 300 miles and east of the Mississippi River, including St. Louis and Minneapolis, twenty-five cents, and 5 cents additional for each five words or less extra. For station more than 300 miles apart and west of the Mississippi River, twenty-five cents and 5 extra, between all other postal stations not provided for as above, fifty cents for the first twenty words and ten cents additional. The rates for Government despatches are to be fixed annually by the Postmaster-General, as under existing law. The additional sections, commencing with section 9, provide that the telegraph companies shall equip and maintain the lines needed, and shall employ all operators and other employes required, except those who collect and deliver postal telegrams, postmasters who act as operators to receive a percentage on the tolls of telegrams handled by them, to be paid by the company.

Section 12 permits the telegraph companies to perform business for the public as at present, but provides that they shall not engage directly or indirectly in the sale of press or election reports, markets or general news, or be interested by the ownership of stock as a company in such sales, or by any arrangement beyond the service of transmission "at rates which shall be uniform to all who may send such telegrams." All postal telegraph employes are to be sworn in such form as the Postmaster-General may prescribe.

THE FOUNTAIN PEN.—J. Ullrich & Co., the well-known manufacturers of fountain pens, 106 Liberty street, New York, furnished the fountain pen which was used in receiving the matter from Mr. W. L. Waugh, the fast sender, by Mr. T. R. Taltavall, the editor of this paper, at the recent tournament. Considerable time was certainly saved by not being required to find ink bottles.

The readings of the speed indicator at the recent tournament, by Mr. P. B. Delany, were erroneous. The instrument was put together only a few minutes before the trial commenced, and was not properly regulated. In the results given, the impulses were considerably in excess of the actual number. The indicator is capable of recording a speed of thirty impulses per second for hours at a time without a single error.

VERY DRUNK INDEED.—Magistrate (to police officer)—Are you sure that the prisoner was drunk? Officer—Is it drunk, your Honor? Shure af he ud sphoke through the tiliphone the brith uv'im ud av made the poles shtagger.

On the Pennsylvania lines west of Pittsburg there are three gangs of men, numbering sixteen each, who are kept busy putting up new telegraph wires and keeping existing lines in repair.



BOSTON NOTES.—The night force has recently had under discussion the advisability of asking the management for half an hour off for lunch, and staying half an hour later in the morning instead; as yet, no definite action has been taken in the matter, but in order to give all a chance to pass an opinion on it, we put the matter before them through the medium of the AGE. At present the hours are from 5:30 P. M. to 1 A. M., without intermission. It is the opinion, of at least some, that if the hours were made 5:30 P. M. to 1:30 A. M., it would be a better arrangement both for the operators and for the interests of the company. Under the present system operators coming from the suburbs, and in fact all the night force have their dinner about 4:30 P. M. They are then obliged to fast till 1 A. M. and as long thereafter as the business and their position on the list warrants; or else resort to the unsatisfactory method of sending a boy after dyspeptic and unpalatable lunches, but the best that can be done under the circumstances. There are some, but few, who are fortunate enough to live at home, and who bring lunches with them, but even then it is unsatisfactory, partaking of a cold lunch, in a very limited and uncertain time. There are always a number of men retained on extra after 1 o'clock, according as the business demands it, and sometimes from 1 A. M. to 1:30 A. M. is a very busy time, as many "rush" specials come in at that time. Had the full force been on, such emergencies could be handled with ease and promptitude, and as the rush is generally over at 1:30 A. M. the company would gain this half hour for which they now pay extra. The change, we think, would be of material benefit to the operators, for by inhaling the fresh air, and supplying the wants of the inner man with a hot, palatable lunch, they would return with renewed vigor and exhilarated spirits, and the company would obtain better service than it could from hungry and tired operators. This system works admirably on Sunday nights, we think it would be equally as good a success other nights; it is, we understand, the system in New York; why not try it in Boston? We pride ourselves much as modern Athenians, not alone from an intellectual but also from a physical point of view. Besides aspirants for the various professions, we have among us many athletes of no small repute. It is understood that at the coming indoor athletic games to be held at the Mechanics Institute, the Western Union will be represented by a number of well-known operators. Our ladies, too, are no mean adepts in calisthenics, and there are some quite proficient with the dumb-bells and Indian clubs.

Those desirous of becoming members of the Western Union baseball nine, for the season of '90 should apply immediately to R. W. Nason, the veteran first baseman, who, we understand, will captain the nine the coming season. Franklin Park will be the trysting place, and doubtless many well contested games may be gratuitously witnessed there between the Western Unions and the "Franklin Park Sparrows" the coming as has been the case in past seasons.

The following conversation was recently heard between two operators in the vicinity of the Providence duplex:

"I didn't know Churchill drank."

"He doesn't drink, Mr. Churchill is a very exemplary gentleman."

"But he always has a bottle on his table."

"Oh, that only contains water, for his ink."

Mr. J. H. McGlinchy, is once more with us, having resigned his position in a broker's office. Mr. A. W. Austin has also returned to the W. U. force. Among the late arrivals is an eight pound boy at the residence of E. B. Elliot, of the New York quad.

ST. LOUIS WESTERN UNION NOTES.—In compiling a list of the day force for the AGE, we inadvertently omitted the names of the lady check

clerks for which we offer our most humble apology. Among those to be named are the following: Misses Clara Pippitt, Mary Gillis, Lulu Thompson, Mary Hoffman, Edith Seeger, and Miss Tessie Dolan, service clerk. The night operating force comprises the following: Wm. Henry Spencer, night chief operator; M. W. Russell, chief of multiplex division; S. B. Fairchild, wire chief; Geo. A. Riber, loop chief; Jno. J. Lane, assistant loop chief; Edw. R. Githens, way chief; H. C. Smith, city and assistant wire chief; O. J. Covington, assistant city chief. Fred. J. Krumling is manager at the *Globe Democrat*; Edw. F. Burke at the *Republic*, and E. H. Johnson at the *Post Dispatch*. Operators: Messrs. Burroughs, Bell, Bierman, Clark, Carter, Downer, Dye, Dolson, Earhart, Ferguson, Foley, Flowers, Groves, Gates, Hamilton, Hanley, Kaine, Lucking, Lied, W. E. Lane, Lowry, Lee, Geo. Morgan, Miller, Magill, Mitchell, Malone, Martin, McCarty, McDonald, Powell, Touhey, Tator, and Miss Minnie McLaughlin. David S. Ryan, all night chief; operators: Messrs. Bohannon, Butterfield, McGeery and Tallis; W. H. Offer, service clerk; Wm. Schroeder, chief check, and Adolphus Meyer, file clerk. Mr. I. N. Sharpnack works the leased wire at the *Republic*. Mr. Henry Gosting, late service clerk, has been appointed to the managership at Camden, Ark. Mr. M. A. Hawley left for the Windy City Sunday, the 6th inst., for a short visit. While he is away we will say that Mr. Hawley, as chief of the Wheatstone, is a hustler, and that as a gentleman—well, he's a dandy. Henry Horstman, of the Wheatstone, has gone to Chicago. Mr. J. Guerdan, of New York, takes his place. Miss Ehlich, of the Wheatstone, leaves the service on the 15th. Mr. David S. Ryan, all night chief, was recently united in marriage to Miss Margaret Arndt, a member of the faculty of Brownhall Episcopal School, at Omaha, Neb. and an estimable lady. The wedding was not previously announced and many were surprised to hear of the event. However, congratulations are still in order. Mr. Frank O'Brien has accepted the position with the United Press, formerly held by Mr. Shaw (resigned). Mr. O'Brien takes the report at the *Republic*.

From the number of matrimonial alliances effected by persons in this office one would imagine that all the young men and maidens were about to assume the wedded state, whereof we are glad, and to all such we would say, that these events are always a source of gratification to the AGE, which rejoices in the welfare of the telegraphers in every department of life. It is authentically stated that Mr. T. B. Goodwin is numbered among the victims of Cupids arrows, and that he will shortly lead to the altar one of our brightest and most popular young ladies. Of course, Tom, has our congratulations. The marriage of Miss Lalla Straat to Fred. M. Schreiner is also announced. Both are well known in this office and are the recipients of well wishes on every hand. Miss Tessie Dolan has resigned her position in this office, and, we think, the sequel will be—married. Mr. C. H. Palmer has taken charge of the opposition interests at this point and we wish him and his paper, which is a bright one, success.

ADEN.—On the 7th of March, a severe rain-storm, lasting over three hours, visited Aden, and in less than an hour all the government tanks, with a total capacity of eight million gallons, were filled and overflowed to the sea in a destructive torrent. All the roofs of the Eastern Telegraph Company's station leaked, and the instrument room suffered terribly. The wires and instruments were all wet and all the circuits were in contact, and it was found necessary to run new temporary connections. On the 14th Aden was visited by another tremendous rain-storm, accompanied by much thunder and lightning. On the 15th there were again heavy showers of rain. While the lightning lasted all the cables were put to earth.

The leased wires at the *Sun* bureau are manned as follows: St. Louis *Republic*, Houlder Hudgins; Pittsburgh *Dispatch*, Roland Massman; and Philadelphia *Press*, P. A. Adams. The Western Union department is under the care of Alexander Morrison, who is assisted by Robert B. Hayes, Charles Gray, Frank Griffith and John Morrison. The force is filled up from the Western Union waiting list, and usually comprises ten men. The Western Union alone handle from 35,000 to 40,000 words a night, the largest part of which is transmitted to the Boston *Herald*, Chicago *Herald*, and other papers.

THE TELEGRAPH AND TELEPHONE IN CHILI.—In a report from Santiago, just issued from the Foreign Office, the British Minister states that, beside State lines, private lines are developing considerably in Chili. The interior of the country is crossed in all directions with a vast network of telegraphic wires. Telephonic communication connects the different suburbs to the principal towns, and even the near villages, and is especially used for communication between offices, factories and warehouses, and for police service.

Caligraphs are now in daily use at 71 Wall street Postal Office, where excellent work is accomplished. Mr. J. A. McClary, the able manager, is the recipient of many congratulations for his enterprise. Mr. McClary knows a good thing when he sees it, and is not slow to adopt it.

He—What would you have done if I had not married you?

She—Picked up some other operator, I suppose.

He—But you told me you could never love anybody but me?

She—That was before you were put on the split trick.

Mr. L. Horton, Jr., well-known in New York City, where he was at one time night manager of the B. and O., was, on April 15, appointed assistant superintendent of telegraph, eastern divisions, including the Wisconsin Central Lines, of the Northern Pacific Railroad system, with headquarters at St. Paul, Minn. Mr. R. H. Weiny was made electrician and chief operator of the same road.

An Indian waited for a train at a Northern Pacific station in Idaho, and while there saw the agent talking into a telephone box.

"Umph," said the Indian. "Who you talk to?"

"I'm talking to a man," said the agent.

"Heap little man if him live in there," said the buck.

President Walter C. Burton, of the Brooklyn Literary Society of the Young Men's Christian Association, is a well-known light at 195, as well as, being one of the rising orators of the day. His ability as a speaker is remarkable, and is attracting widespread attention. A bright future awaits him.

Mr. James P. Bradt, the well-known New York telegrapher, has been appointed agent of the United Press at Baltimore, *vice* James Doyle who has accepted the business management of the *American*.

DIED.—W. E. Yacklev, a well known and brilliant telegrapher and writer of New York City, died at his home in Jersey City on April 8, of consumption. Much regret is expressed at his untimely demise. Mr. Yacklev was a member of the 195 Broadway force. He was one of the best writers of telegraph literature. A child of Mrs. Yacklev died of marasmus three days before his father's death.

EXCHANGE.—Will exchange a complete file of ELECTRIC AGE of year 1887, for one copy of August 1, 1883. Answer M. G., ELECTRIC AGE office.



**THE TELEGRAPHONE.**—The telegraphone, recently patented, enables the sender to record his message on a cylinder attached to the receiving instrument in the absence of any one to hear it, and even to repeat the message back to himself for correction.

**A SUGGESTION.**—Dr. Lowenberg suggested recently before the Polytechnic Society of London that, properly worked, it may be possible to insulate electric light wires by a coating of oxide. If wire could be insulated by oxidation, the problem of the dangerous wires would be forever solved, perhaps.

**LONG DISTANCE TELEPHONY.**—In Russia the extraordinary feat has been accomplished of telephoning from St. Petersburg to Bologne, a distance of 2,465 miles. The Russian engineers further state that they propose soon to converse over a distance of 4,665 miles.

**A GAS-METER DETECTIVE.**—An electric gas recorder now spies upon the gas company, and tells the hitherto defenceless consumer to what extent the gas company is robbing him.

**AN AUTOMATIC TELEPHONE PROTECTOR.**—The New England Telephone & Telegraph Company is understood to be about to introduce into its system a machine for the protection of telephone instruments from lightning and electric light currents. The instrument has stood very severe

tests and proved its ability absolutely to protect telephones and other electrical instruments against overcharges of electricity caused by lightning or other sources of current. The protector automatically grounds or shunts the excess of current so long as it exists. As soon as it ceases the protector readjusts itself automatically, and restores the circuit to its normal conditions.

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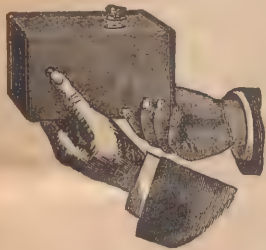
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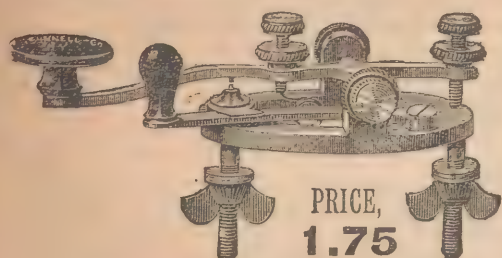
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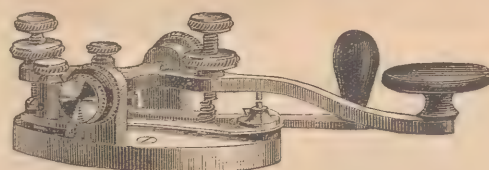


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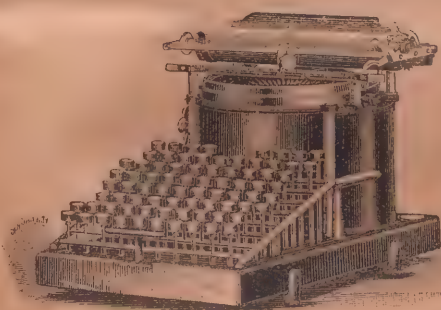
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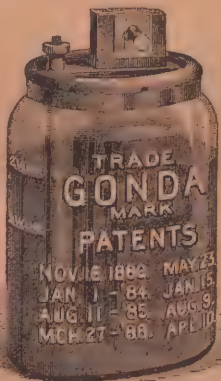


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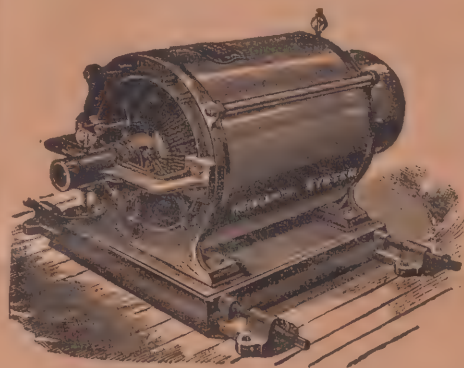
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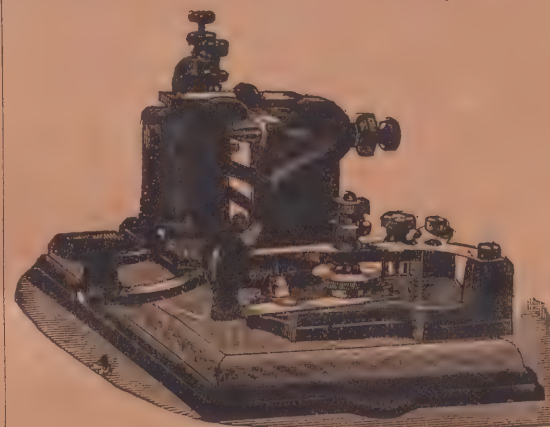
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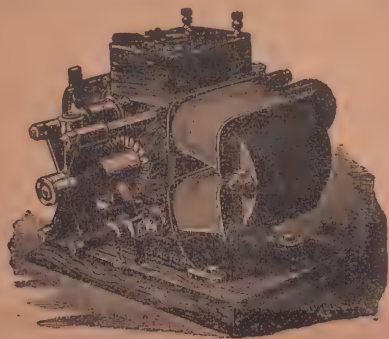
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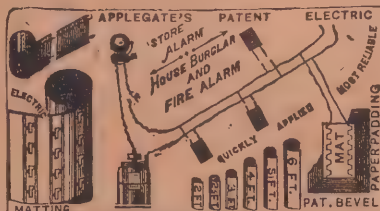
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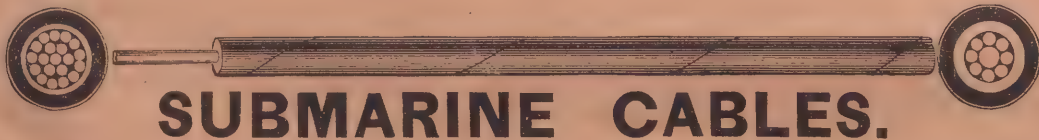
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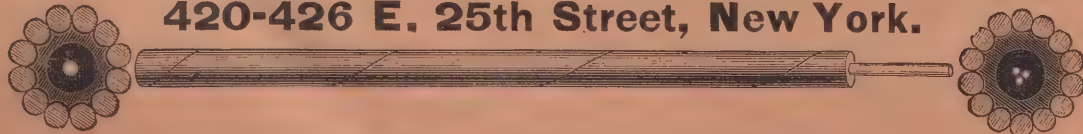
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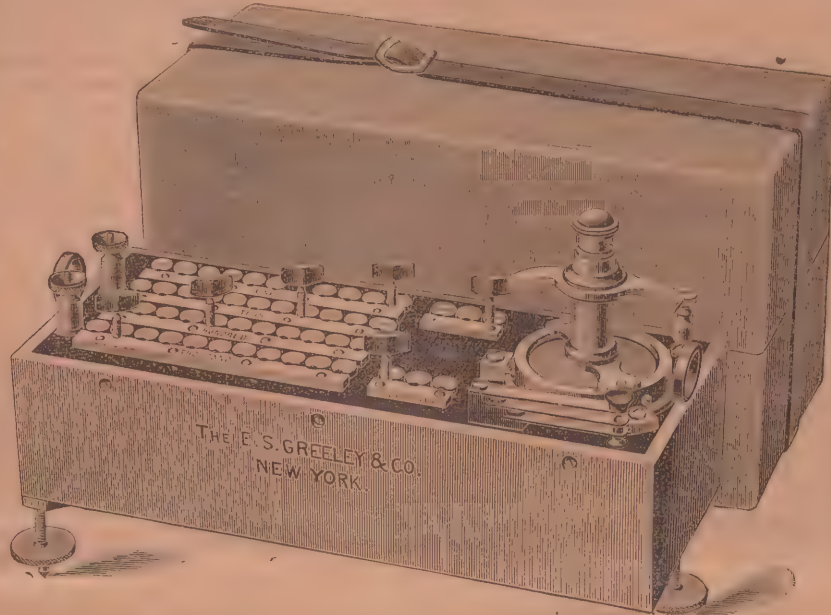
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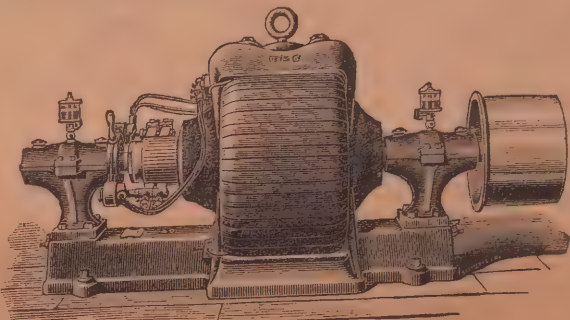
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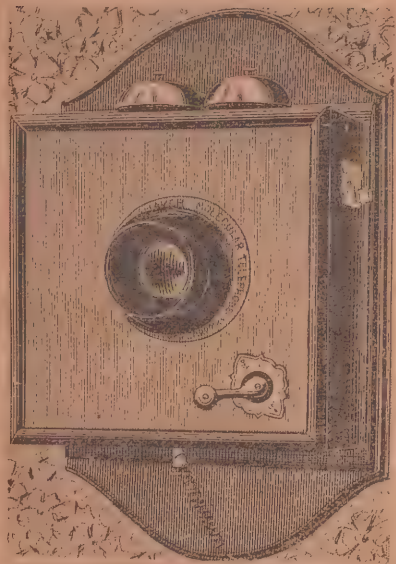
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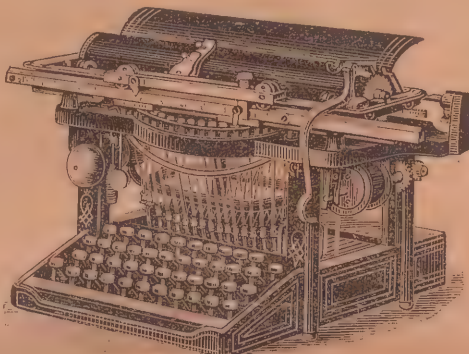
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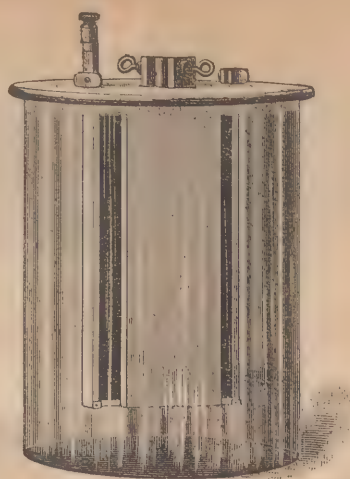
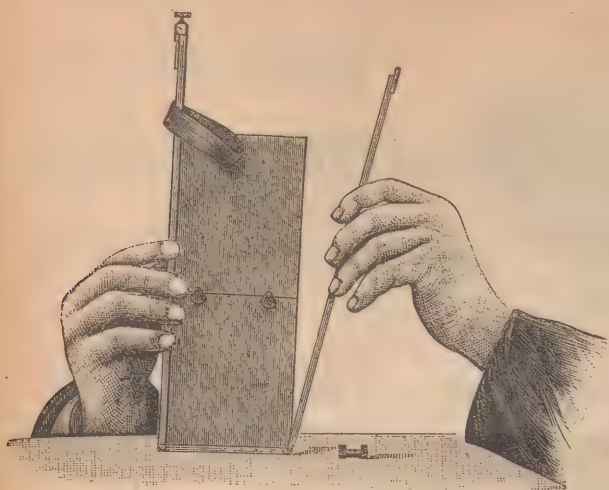
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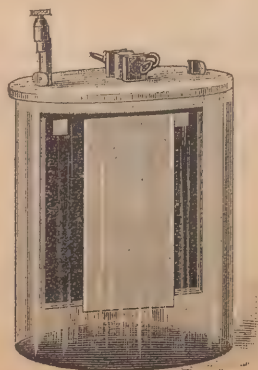
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THE BEGINNING OF THE END.

Edison Company Sustained. Westinghouse Company Defeated.

Sawyer-Man Patent Decided by the Court to be a Fraud and Absolutely Valueless. Extracts from the Decision of Justice Bradley, Oct. 5, 1889.

Circuit Court of the United States for the Western District of Pennsylvania.

THE CONSOLIDATED ELECTRIC LIGHT COMPANY (WESTINGHOUSE COMPANY) versus MCKEESPORT LIGHT COMPANY (EDISON COMPANY).

No. 5, May Term 1888. On Bill and Final Hearing.

EXTRACTS FROM OPINION OF THE COURT.

"The great question in this suit is whether the patent sued on is valid, so far as involves a general claim for the use in electric lamps of incandescing carbon conductors made of fibrous or textile substances. If it is, the complainant must prevail. If it is not, the bill must be dismissed"

"Is the patent valid for such a broad claim? The defendants contend that it is not; first, because no such invention was set forth in the original application, but was introduced more than four years after it was filed, and after the same material had been used by Edison, and claimed by him in application for a patent; secondly, because Edison, and not Sawyer-Man, was really the original and first inventor of an incandescent conductor made of fibrous or textile material for an electric lamp."

"It is very clear to us that in the original application for the patent sued on the applicants had no such object in view as that of claiming all carbon made from fibrous and textile substances as a conductor for an incandescing electric lamp. Nothing on which to base any such claim is disclosed in the original application. We have carefully compared it with the amended application, on which the patent was issued, and are fully satisfied that after Edison's inventions on this subject had been published to the world there was an entire change of base on the part of Sawyer & Man, and that the application was amended to give it an entirely different direction and purpose from what it had in its original form."

"By an adroit amendment made in 1885, they say: 'Our improvement relates more especially to the incandescing conductor, its substance, its form and its combination with the other elements composing the lamp.' The purpose of this amendment is obvious, and needs no comment."

"The fact is that Sawyer & Man were unconscious that the arc was not new, and supposed that they could get a patent for it; but, as their eyes were opened, they changed about and amended their application, and made the material of the conductor the great object—carbon made from fibrous or textile material. Compare the original with the amended application, as first stated in this opinion, and this purpose most obviously appears."

"The fact that the whole object of the application was changed is evinced by the correspondence of the parties."

"This testimony of Mr. Broadnax, which is undoubtedly to be relied on, in connection with the letter just quoted, shows that the idea of claiming carbons made from fibrous and textile materials was an afterthought, and was no part of the purpose of the original application. The amendments relating to this new and broad claim were made afterward, in February and March, 1885."

"We are of the opinion that the changes made in the application in this regard were not justifiable, and that the claim in question cannot be sustained."

"We are not at all satisfied that Sawyer and Man ever made and reduced to practical operation any such invention as is set forth and claimed in the patent in suit. Their principal experiments were made in 1878, and perhaps the beginning of 1879. The evidence as to what they accomplished in the construction of electric lamps is so contradictory and suspicious that we can with difficulty give credence to the conclusions sought to be drawn from it. We are not satisfied that they ever produced an electric lamp with a burner of carbon made from fibrous material, or any other material, which was a success."

"The application for the patent in suit was not made until January, 1880, nearly or quite a year after all their experiments had ceased, and after the inventions of Edison had been published to the world."

"The explanations made by the complainants for the delay in applying for the patent in suit fail to satisfy our minds that Sawyer & Man, or their assignees for them, have not sought to obtain a patent to which they were not legitimately entitled."

"But, suppose it to be true, as the supposed inventors and some of the other witnesses testify, that they did in 1878 construct some lamps with burners of carbon made of fibrous material, and of an arched shape, which continued to give light for days or weeks or months; still, were they a successful invention? Would any one purchase or touch them now? Did they not lack an essential ingredient which was necessary to their adoption and use? Did they go any farther in principle, if they did in degree, than did other lamps which had been constructed before? It seems to us that they were following a wrong principle—the principle of small resistance in an incandescing conductor, and a strong current of electricity—and that the great discovery in the art was that of adopting high resistance in the conductor with a small illuminating surface, and a corresponding diminution in the strength of the current. This was accomplished by Edison in his filamental thread-like conductors, rendered practicable by the perfection of the vacuum in the globe of the lamp. He abandoned the old method of making the globe in separate pieces, cemented together, and adopted a globe of one entire piece of glass, into which he introduced small platinum conductors, fastened by fusion of the glass around them, thus being able to procure and maintain perhaps the most perfect vacuum known in the arts. In such a vacuum the slender filaments of carbon, attenuated to the last degree of fineness, may be maintained in a state of incandescence without deterioration for an indefinite time, and with a small expenditure of electric force. This was really the grand discovery in the art of electric lighting, without which it could not have become a practical art for the purposes of general use in houses and cities."

"The principle and great thing described is the attenuated filament and its enclosure in a perfect vacuum."

"We think we are not mistaken in saying that but for this discovery electric lighting would never have become a fact. We have supposed it to be the discovery of Edison because he has a patent for it. This may not be the case. It may be the discovery of some other person; but, whoever discovered it, it is undoubtedly the great discovery in the art of practical lighting by electricity."

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NEW YORK, MAY 16, 1890.

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### THE TELEGRAPHIC SITUATION.

All reports indicate that there will likely be a scarcity of operators this summer—not enough to go round. It is a noticeable fact that very few are unemployed these days. In the large telegraph centers this is particularly the case. What has become of all of the operators? It is just as likely however the telegraph business grows faster than operators can be supplied to meet the demand. Probably the explanation can be found in both causes. Be that as it may it augurs well for the future of telegraph operators. The absence of the worthless class of operators which was found in every large telegraph city, is more pronounced than ever before. Telegraph operators, as a class, have a higher tone to-day than in the past, and this is an encouraging sign. It is good for employer and

employé alike and what benefits one will benefit the other. Taking a general view of the telegraphic situation things seem to point to general good feeling and prosperity everywhere. One thing we notice more and more, and which probably is apparent to the ordinary observer, and that is that the number of operators leaving the ranks to engage in more remunerative employment is growing larger and larger every year.

A good, wide-awake telegrapher has more general information stored away in his head than nine-tenths of the men who are not operators. Information and knowledge, such as operators are likely to possess, is of value to individual business concerns, and these are the very men such concerns are after. Hence it is easy to account for the partial depletion of telegraphic ranks. Increase of business, as we have already suggested, partly accounts for the present scarcity of operators. The telegraph business in this country is increasing at an enormous pace, and while this fact is apparent in all large offices, no conception of the magnitude of the business handled daily can be had except through the comparative figures given in the annual reports of the companies. The various companies doubtless are doing better now than ever before, and as far as they are concerned there does not seem to be any reason for complaint. We hear of no complaints anywhere; everybody seems to be satisfied, that is to say, on the whole. Operators are no different from any other class of mortals. They can always wish they were better off, but the fact is we hear of no dissatisfaction and peace reigns everywhere.

The telegraph companies are doing more to-day than ever before to make the lot of operators easier and happier. They encouraged tournaments, liberally subscribed to the prize fund of the same, and done many other things for their operators, which indicate good feeling towards their employés. The subscription by the Western Union Company for \$1,000 of the New York Telegraph Club's bonds is another indication of pleasant relations between employer and employé. This state of feeling is very natural. The operators themselves are doing better work than ever, and the general standard is higher. A better class of young men are coming into the ranks, and the worthless ones are being weeded out and crowded to the wall. Altogether we can see no reason for anything but general congratulation over the present state of affairs and the outlook for the future.

### AGITATION AMONG TELEGRAPH OPERATORS.

The dissatisfaction that has for some time past been rife among the employés in the British service culminated recently in the formation of a Postal Telegraph Clerks' Association. The chief grievances of these public servants are insufficiency of pay, overwork, and stagnation of promotion. Another grievance is the deduction of pay during sickness, which certainly seems somewhat hard when we remember the unhealthy condition under which most of the telegraph work is done in this country. As an instance of the vast amount of work that has to be dealt with, it may be interesting to note that on the night Mr. Gladstone introduced his Home Rule Bill no fewer than a million and a half words were flashed from the Central Telegraph office in London. Owing to the lack of encouragement, so dissatisfied are many telegraph operators with their present position and future prospects that of late large numbers have left the service and gone out to the colonies. Up to the present the agitation has not had much effect in improving the position of the operators, but it is hoped that the Treasury will see their way to make timely concessions. After the Easter recess the question is to be discussed in the House of Commons.

W. A. Billis, formerly of Bangor, Pa., is now at Plainfield, N. J.

### RIGHTS OF TELEGRAPH COMPANIES ON HIGHWAYS.

The Virginia Supreme Court recently delivered an opinion in the case of the Western Union Telegraph Company against Williams, on an appeal from the Circuit Court of New Kent county, affirming the judgment of the lower court.

The question involved was the right of a telegraph company to construct and maintain its line along the public road without compensation to the land owners on either side, provided the line did not obstruct the ordinary use of the road.

The main positions contended for by the telegraph company and held by the dissenting judges were that when the land was originally condemned for a public road, the landowner parted with as much of his rights therein as the public might need for purposes of "intercommunication," and that these purposes included not only the transfer of passengers and freights, but also of intelligence—e. g., the mails; that when this public right of user was thus created it at once passed under the control of the Legislature, who might authorize the use of it in furtherance of intercommunication, in any way, by any corporation, or by any means or mode which advancing civilization might invent or employ, provided the new mode did not interfere with the old mode of using the highway, and did not take any more of the soil than the landowner had originally devoted to the public use.

It is claimed that the majority opinion does not distinctly discriminate "between highways in the country and streets within the limits of cities or towns," and that the minority does distinctly repudiate any such distinction, saying: "As both the highway and the street are opened for the same general purpose—and a street is a highway—there would seem to be no such basis for such a distinction."

If this be true, is not every improvement of city street as well as country road in Virginia involved? Does not the decision give a *prima-facie* claim for damages for the erection of every gas lamp and electric light or power pole and the laying of every gas and water main and sewer in every city and town in the Commonwealth—at least where, as often occurs in Virginia, land originally dedicated as a country road has been changed imperceptibly into a town or city street?

ANOTHER TOURNAMENT.—Considerable interest is manifested West in the proposed fast tournament to be held in Omaha, Neb. The telegraphers in that section are determined to offer prizes which shall exceed in value those offered by their brothers in the metropolis, and which will undoubtedly attract lightning workers from all parts of that section of the country. The contest will be open to all operators west of Chicago. This will bring some of the best men in the country. The prizes will be awarded to the best workers in several classes, and among the latter will be that of old-timers, regular operators, classes A and B, and railroad men and ladies.

All entries must be recorded on or before May 15th, the intention being to hold the competition not later than May 20th. The undertaking is under the patronage of Superintendent Dickey, superintendent of the Western Union Telegraph Company; L. H. Korty, superintendent of the Union Pacific Telegraph; J. Levin, manager of the Western Union Telegraph Company; W. S. Dimmick, manager of the Postal Telegraph Company, and others.

The next issue of the AGE will contain an illustration and description of the Caligraph in active service, receiving commercial business from heavy wires, at the Postal Telegraph office, 91 Wall street; showing the new telegraph blank-roll attachment, the device of Mr. McClary, the manager of that office.

There is an operator in Jersey so mean that he will only work during the winter because the days are shorter during that time.



## THE TELEGRAM.

"Is this the tel'graph office?"  
 Asked a childish voice one day,  
 As I noted the click of my instrument  
 With its message from far away.  
 As it ceased, I turned; at my elbow  
 Stood the merest scrap of a boy,  
 Whose childish face was all aglow  
 With the light of a hidden joy.

The golden curls on his forehead  
 Shaded eyes of the deepest blue,  
 As if a bit of the summer sky  
 Had lost in them its hue.  
 They scanned my office rapidly,  
 From ceiling down to floor,  
 Then turned on mine their eager gaze,  
 As he asked the question o'er,

"Is this the tel'graph office?"  
 "It is, my little man."  
 I said, "pray tell me what you want,  
 And I'll help you if I can."  
 Then the blue eyes grew more eager,  
 And the breath came thick and fast;  
 And I saw within the chubby hands  
 A folded paper grasped.

"Nurse told me," he said, "that the lightning  
 Came down on the wires some day;  
 And my mamma has gone to heaven,  
 And I'm lonely since she is away.  
 For my papa is very busy,  
 And hasn't much time for me;  
 So I thought I'd write her a letter,  
 And I've brought it for you to see.

"I've printed it big, so the angels  
 Could read out quick the name,  
 And carry it straight to my mamma,  
 And tell her how it came;  
 And now, won't you please to take it,  
 And throw it up good and strong,  
 Against the wires in a funder shower,  
 And the lightning will take it along."

Ah! what could I tell the darling?  
 For my eyes were filling fast;  
 I turned away to hide the tears,  
 But I cheerfully spoke at last.  
 "I'll do the best I can, my child,"  
 'Twas all that I could say;  
 "Thank you," he said, then scanned the sky,  
 "Do you think it will funder to-day?"

But the blue sky smiled in answer,  
 And the sun shone dazzling bright,  
 And his face, as he slowly turned away,  
 Lost some of its glad some light.  
 "But nurse," he said, "if I stay so long,  
 Won't let me come any more;  
 So goodbye, I'll come and see you again  
 Right after a funder shower."  
 —Good Housekeeping.

**THE TELEGRAPH CLUB BONDS.**—The Western Union Telegraph Company, when it invested \$1000 in the New York Telegraph bonds it undoubtedly won more friends than any previous investment made. It showed that there existed a friendly feeling on the part of the company toward the employes and the latter were not slow in recognizing and appreciating this fact. It may be said, the club is a matter which concerns only the New York craft. This is true in a certain sense, but it cannot be denied by the fraternity at large, that it is possible to be the stepping stone leading to other kind acts. The friendly feeling of the general officers of the company was undoubtedly sincere. Almost every member of the executive department contributed liberally towards purchasing the bonds and it cannot be said of any one of them that he expected returns or favors of any kind for his individual action. It is evident from these facts, that the New York telegraphers have a duty now before them which will largely shape their future, whether for good or for evil. Those wh

have been so liberal (and we must not overlook the splendid manner in which Mr. Andrew Carnegie treated the president of the club when he called upon him to explain the object of raising so much money and immediately handed over his check for \$1000), expect with good reason to see the club redeem its pledges at the proper time. If the fraternity remains a solidified body and meets its obligations on these bonds the same as in any other of their business transactions it will have at once gained the good opinion of every one of the gentlemen who have been so liberal in this instance. When the bonds are due, it will be quite time to talk about a permanent home for the operators and their mode of transacting business between the present time and then will be watched very carefully, and the result will go far towards convincing the present friends of the club, whether or not it would be advisable for them to aid in the erection and ownership of permanent quarters. It would be impossible to provide clubs at all points. This is apparent to every reasonable man. The metropolis of the country is where a large body of operators is congregated at all times and where just such apartments can be of the greatest service. The managers of the various city offices must of necessity admit that the club has accomplished considerably more than its cost to maintain, as an excellent mission in keeping the employes while off duty in agreeable and healthful exercise and enjoyment. The New York Telegraphers' Club is the only one in the city which has not connected with it a bar. This is certainly much in its favor, and if the present judicious management of its affairs is maintained, it will become one of the prominent institutions of this city. We wish it that success.

**NEW YORK WESTERN UNION LATER NOTES.**—Miss Stack has changed her name to that of Mrs. C. J. Fallon. The following are the changes for May: L. L. Baker, 6 p. m. to 2 a. m., from day force; R. Powers, regular nights from day force; J. W. Doyle, 11.30 to 9, from day force; H. Reddick, 11.30 to 9, from day force; W. F. Kelly, 8 to 5.30, from split trick; T. F. Meyer, 8 to 5.30, vice R. J. Marrin, 5.30 regular; J. T. Horace, J. M. Lane, F. Fischer, J. F. Nolan and W. H. McElroy continue on the 11.30 force. Messrs. E. G. Wood, McGee, Schram, C. J. Doyle, L. Kirschbaum, Hepper and E. A. McElroy, 11.30 to 9, vice Davenport, Newman, J. Greene, Pearse, Kinsella and R. McKenzie. Misses K. Boyle, S. Stephenson, K. Brown, B. Burck, Clark, Fitch, Hawke, Murphy, L. Lee, Reeves, Shea, Lowern, Finn, Humphreys, A. Miller and L. Bowle have the split trick. A. Park has gone to Pool Room in Boston, and J. McGowan to one in Hartford. Misses K. McGill and Dela Remtrie have resigned to take charge of summer offices. J. J. Harrington has been transferred to 255 Church street office; H. McKim, Miss Mamie Leddy, A. B. Wynne, Geo. J. Withey, E. T. Moore, J. P. Moore and M. O. Hoffman have resigned. Messrs. Lee, Moran, Gregg, Heldman, Tierney and Courtney have returned from pool rooms. Misses M. Nolan, Duke, Lowery and Hegarty are new operators who were appointed May 1st. Misses C. Ayres, J. Houghton, M. Madden and F. Harris have been promoted from check girls to operators. W. H. McCormick has been appointed on the 11.30 to 9 force. Waiting list: Robt. A. Guy, Thad. M. Schnell, C. R. Mounce, John A. McGlinchy, H. T. Palmer, W. T. Healey, Geo. E. Sornberger, D. H. O'Brien and W. J. O'Neill.

Madge—Oh, isn't that a bull?

Charlie—Yes, but you needn't be afraid so long as I'm with you.

Madge—I'm afraid you won't be with me long if he comes this way.

Charlie (an operator)—I have taken care of hundreds of bulls in my days.

No wonder telegraphers are sickly, they never air their number sheets.

## GREAT TELEGRAPH FEAT 30 YEARS AGO.

(From the Cincinnati, Ohio, Gazette, Dec. 6, 1860.)

The greatest feat in telegraphing of which we have any knowledge, was accomplished on Tuesday in the transmission of the President's Message to this city. Two wires were used, one a through and the other a way wire. Of the eight columns and a half which the Message made in the Washington Constitution, five and a half columns were passed over the through wire *without a break in six hours*. This was sent by J. H. Bunnell (age seventeen years), of the Pittsburg office, and received by L. C. Weir, of the Cincinnati office.

The first column was transmitted in *fifty-five* minutes, and the second column in *forty-eight* minutes. One column contains as follows:

|               |        |
|---------------|--------|
| Lines .....   | 176    |
| Words .....   | 1,584  |
| Letters ..... | 12,672 |

It requires an average of three strokes of the key to a letter. There were therefore 37,986 strokes in 48 minutes, or 790.66 strokes to the minute. Mr. Weir the receiving operator, took the message by *sound*, and using a manifold writer made five copies from the instrument. From the manuscript thus furnished, the message as it appeared yesterday was put in type. In seven hours from the time it was made public in Washington, the whole document was in type in our office. The expeditious manner in which this business was performed, and the accuracy with which the message was transmitted, the feat being without a parallel in the history of telegraphing, place the Union Company in the front rank of the Telegraph Companies of the world.

To show the perfection to which this wonderful system has been brought, and the improvements that have been made within a few years, we will mention the fact that in 1845, forty-eight hours were consumed in telegraphing the message of President Polk to the press of this city, and then the errors were so numerous that some of the papers republished the document when it came to hand by mail.

[NOTE.—The figures above given are partially incorrect. The calculations made at the time at the Cincinnati office showed that the time made was nearly 39 words per minute for two hours continuous work. Evidently the 1584 words "is a misprint for 1884 inasmuch as 12672 letters would make over 2000 words at 6 letters per word. Considering the fact that this work was done over a 360 mile circuit, that the five manifolded copies were almost "copperplate" in their clearness, that not a single "break" was made and that the transmission was with one of the keys of 30 years ago the lever of which would weigh as much as three of the modern Bunnell key levers it becomes apparent that some of our first old timers used to shake up things at a pretty lively rate even way back in the sixties.]

The Brooklyn main office of the Western Union Telegraph Co. has been removed from No. 4 Court street to No. 369 Fulton street, which is about one block away from the old location. Splendidly appointed quarters have been fitted up on the ground floor to accommodate the various wires and the executive department of Superintendent W. G. Magowan. The additional room which the change has brought was badly needed to facilitate the handling of the rapidly increasing business. It is said that the business handled in Brooklyn is of a social nature. If that is the case there is certainly no lack of it.

**THE N. Y. TELEGRAPH CLUB OPENING.**—Cards of invitation are out for the formal opening of the new rooms of the New York Telegraph Club, 32 Cortlandt street, at 8 o'clock p. m., May 19th. No one will be admitted without tickets, but those who desire extra tickets can have them by applying to Mr. C. A. Meyer, Chairman Entertainment Committee.



## THE ELECTRIC AGE'S RECORD.

With this number the ELECTRIC AGE ends the seventh year of its existence, and they have to some extent been eventful years. It began, as all successful journals do, in a modest way, and gradually gained the confidence and support of telegraphers all over the land—from Maine to California, and from British North America to the Gulf. In foreign countries to-day it is as much sought after and as eagerly read and looked for as at home. The ELECTRIC AGE has not lived in vain. During the troublous days of 1883 it was the staunch advocate and champion of the operators' cause, giving them invaluable counsel and aid. That its course and efforts were fully appreciated is evidenced by its large number of subscribers. In a quiet way it has done incalculable good for the profession at large, and individuals have received much benefit through its agency. Honesty and justice have been its motto in the past, and will continue to be as long as the paper exists. All classes of workmen need an organ for inter-communication, and as far as the telegraph operators are concerned, they have never had such a staunch friend and champion as the ELECTRIC AGE. Its columns have always been devoted to subjects calculated to elevate the profession in every way, not only financially but morally, and we venture to say that there is not a single reader of the ELECTRIC AGE to-day who would not acknowledge that he or she has been benefitted by reading its columns. Through thick and thin it has stood by the operators, and, we are pleased to acknowledge, the operators have likewise stood by it. There are scores of operators in the land to-day, occupying lucrative and responsible positions outside of telegraph offices, who owe their prosperity to the ELECTRIC AGE. We could mention cases without number where the help of the ELECTRIC AGE has been of great benefit to individuals, but its record speaks for itself. Not only have individuals derived benefit through its counsel, but corporations, too. The latter have depended upon the ELECTRIC AGE for the record of happenings in the telegraphic field all over the land. They regard the paper as the pulse of the fraternity, and by reading its columns have been able to determine the state of feeling among the operators. Many reforms have been brought about in this way.

The ELECTRIC AGE to-day stands on a higher plane in the estimation of the profession than ever occupied by any of its predecessors or contemporaries, and will continue to merit this distinction. Nothing will be left undone that will contribute to that end. It is hardly necessary to give this assurance; all of our subscribers know what they can depend on in the ELECTRIC AGE and are willing and eager to stand by it. They know that it will always look after their interests, as it has done in the past, and that what it says may be depended on. There is not another journal in the land that can show such a record as that of the ELECTRIC AGE. Its correspondents are notably people of character and integrity, and what they write for its columns is of live interest to the fraternity at large. It is worthy of special remark that nothing of the least objectionable character ever gets into the columns of the ELECTRIC AGE. Moreover, everything that is published is always of intense interest to the craft. Everything in its columns has substance, and is devoid of anything that is valueless.

These are facts that are worth the consideration of our friends, and as the ELECTRIC AGE entered into the eighth year of its existence it has a greater power for good behind it than ever before enjoyed by a telegraph paper.

It will not stop, however, and rest on its well-earned reputation, but will continue to improve in every respect. As a paper, it will continue to develop, just as a human being does after having passed through the first seven years of

life; and while it has already made a great record, it will make a greater one in the future. Its greatest vigor is yet to come, and all of our readers may feel assured that their craft paper will henceforth be more valuable to them than ever before.

## A FASTIDIOUS OPERATOR.

While the concert given recently in Albany was in progress a telegram came from Theodore Thomas from one of the prima donne engaged for the various musical festivals he is to conduct next spring, asking for the names of the oratorios which are to be given. Mr. Thomas hurriedly wrote them on the reply slip as follows: "Messiah," "Creation," "Redemption," "Damnation." Later in the evening he was awakened from his peaceful slumbers, which were sweetened with the consciousness of good work accomplished by persistent rappings on the door. On opening it he found the messenger boy, who handed back the message, and said: "If you please, sir, the operator says you can't send such language." Thomas was indignant for a moment, but on reading it over he grasped the situation, and relieved the scruples of the conscientious operator by adding "De Faust" to the title of the last oratorio.

## IT IS IN THE MOVEMENT.

When it is said that the Pope Manufacturing Company are the oldest makers of high-grade bicycles in America, and have grown to do the largest business in them in the world, it means something worth noting. It is in the movement of their machines for thirteen years. It is in their careful and intelligent construction of machines, and in their reliable business methods, and in the alertness of their experience, and judgment and sympathy, kept in touch all the time with the riders themselves and their needs. And every purchaser of a Columbia cycle is buying along with his machine, and without additional price, his share of this thirteen years of accumulated wisdom and perfection.

EDITOR (TO ASSOCIATE).—Why did you accept this poem on the beautiful blonde who worked the Hoboken quadruplex?

Associate.—Well, sir, the blamed poet walked in here with that poem in one hand and a revolver in the other, and said I must take the poem or something worse. I told him I didn't wish anything worse than the poem and took that.

195ER STARTING A NEW PAPER SCHEME.—It's a splendid opportunity and remember we let you in on the ground floor at \$10 per share.

Wide-awake Operator.—Don't want it. Last time I was let in on the ground floor I dropped right through into a sub-cellar, and I've been there ever since. No, you'll have to let me off.

Mr. George E. Holbrook, who is to decide which stories are entitled to the prizes, as already published in these columns, desires us to state that he will in a few days render his opinion. He has been delayed attending to the matter by an unusual press of business.

FAST-SENDER.—I hear Hoopemup is a great mimic. They say he can take off anything.

Second-Side.—I should say he was. Yesterday he took off my office coat and umbrella.

Don't you think that titles of medical doctors are getting to be altogether too common nowadays in telegraph offices to be of any value?

Yes; they are getting to be mere M. D's.

An applicant who desired a position described his qualifications as follows: "I am an all wool and a yard wide sender and as a receiver I simply can't be washed."

He was heard to murmur: "Alone my lonely watch I keep. You see the fellow that just played the race department's straightest tip."

## A TELEGRAPHIC DECLARATION.

'Twas last summer, when vacation brought a blissful breathing spell,  
And the townsman sought the pleasures of the rural hill and dell,  
That I saw her at the station as her fingers white and small  
Moved with dextrous grace in answer to the telegraphic call,  
And now, down in my pocket, 'mongst papers worn and dry,  
Is a fragment upon which I often look with fondest eye;  
I found it on the floor one day, when all her work was through,  
And upon it was written simply:

How many times I've wondered who the happy soul could be  
Whose name was lingering in her thoughts and wished that I were he?  
She had a smile as winsome as the daisies that were bright  
In the moonlight by the roadside, when I saw her home one night.  
I had talked to her quite often as the days went swiftly by,  
And when I took the train at last, I did it with a sigh.  
I like to gaze upon it when I've nothing else to do—  
That little scrap of paper with its

—Washington Post.

## AMERICAN vs. ENGLISH OPERATORS.

The London *Electrician* of April 25th, referring to the recent fast tournament says:

"Our American correspondent reports that a recent telegraph tournament has resulted in the victory of a Morse operator, who signalled 260 words in five minutes—just 52 words a minute. What will our English telegraphists say to this? One of the conditions was that the sending should be 'fairly readable'—a rather vague definition; but, even with this allowance, we should not have thought that anything like 50 words a minute was possible on an ordinary Morse key, for that is a speed which only the swiftest sender on a Bell instrument, where dots and dashes are of equal length, could achieve. If the words were of average length there must be something more in the American version of the Morse code than ever we have given it credit for. As a rule, the keying in this country is, we believe, faster than in America; and we wish some of our British operators could have competed on equal terms at that New York tournament."

Our English friends will have an opportunity in 1892 to display their skill as telegraphers. The tournament of that year will be international, and we trust that England will be well represented. Whether the American or English are the better on the average is a question that remains to be settled, and we know of no better way of determining the question than by holding an international tournament. We in America think that our own operators are, on the whole, superior in skill to our English brethren; while English operators, very naturally of course, think that they themselves are our superiors.

The English delegation will receive a hearty welcome in America, and will receive every attention from their American brethren. There is no land on the face of the earth where more fair play and justice can be had in a contest of skill than in America, and we trust that our English friends will bear this fact in mind.

APPLICANT FOR POSITION.—Is the chief operator in?

Doorkeeper.—No.

When will he be in?

Doorkeeper.—I heard him say he would always be out to you.

Consumptive, in large office, to fresh air crank: "Can't you allow the window to remain down; don't you see my hair is blowing all over my head?"

Fresh air fiend: "Go get your hair cut."

The government telegraph service of Great Britain transmits it is said, on the average, 1,538,270 words a day to newspapers alone.

All things come to those who wait is not a consoling adage to those who have been on the "waiting list" all winter.

It cannot be said that an operator moves from city to city because it is cheaper to do so than pay rent.



\$175.00 IN PRIZES.

\$100 first; \$50 second, and \$25 third. Prizes to be awarded to the three persons sending us the most business from February 16th to Nov. 16th, 1890.

ONE HUNDRED DOLLARS will be given to the person who sends us the most business during the ten months named.

FIFTY DOLLARS will be given to the person sending us the second largest amount of business.

TWENTY-FIVE DOLLARS will be given to the person sending us the third largest amount of business.

These prizes are given exclusive of the usual commissions allowed; therefore those who work for one of these prizes will also be liberally compensated for the trouble with increased commissions. The first prize amounts to \$10 per month—a handsome sum of money for so small an effort.

Any person, except a regular employe of the paper, is qualified. This, of course, includes all agents and correspondents.

All remittances will be acknowledged in each issue of the paper.

Remittances only are acknowledged in this contest.

Up to the present time the list of those interested stands:

|                                   |         |
|-----------------------------------|---------|
| B. C. Elder, Kansas City, Mo.     | \$19 02 |
| W. E. Burns, Pittsburgh, Pa.      | 49 00   |
| E. A. Coney, Newark, N. J.        | 3 00    |
| L. E. Moores, Cincinnati, O.      | 4 65    |
| B. F. Hartz, Helena, Montana,     | 8 90    |
| A. M. Butler, Omaha, Neb.         | 10 00   |
| C. D. Lee, St. Louis, Mo.         | 37 15   |
| C. J. App, Knoxville, Tenn.       | 9 30    |
| F. B. Holcomb, Watertown, N. Y.   | 2 00    |
| C. S. Loewenthal, Chicago, Ill.   | 18 51   |
| H. I. Jolley, 195 Broadway, N. Y. | 39 75   |
| S. H. Riker, Syracuse, N. Y.      | 10 64   |
| H. C. Wooden, Baltimore, Md.      | 1 80    |
| B. J. Meising, Oil City, Pa.      | 5 00    |
| J. F. Slack, Sioux City, Iowa,    | 3 70    |
| K. W. Starbird, Portland, Me.     | 1 20    |
| J. W. Thompson, Nashville, Tenn.  | 7 25    |
| G. W. Spaid, Savannah, Ga.        | 6 00    |
| W. Hazelboom, Boston, Mass.       | 28 90   |
| John J. Seitz, Hamilton, Ont.     | 15 00   |
| W. J. Anderson, Toronto, Ont.     | 1 20    |
| F. L. Saunders, Dallas, Tex.      | 8 00    |
| G. W. Hickey, Plattsburg, N. Y.   | 6 50    |
| R. Satchwell, Ashland, Or.        | 11 10   |
| F. M. Thompson, Vancouver, B. C., | 10 00   |
| J. C. Smith, Tyler, Tex.,         | 11 25   |
| A. Wilson, Milwaukee,             | 7 80    |
| E. S. Rogers, Minneapolis, Minn., | 6 80    |
| C. L. Hallett, Pt. Arthur, Ont.,  | 9 40    |
| P. H. Hughes, Raleigh, N. C.,     | 3 00    |

Irate Subscriber to the ELECTRIC AGE, whose paper has just been stolen (in thunder tones)—Where's the editor of this sheet?

Smart Boy—He is jist stepped in next door. Come along an' I'll show you. (Leads the way to a building occupied by several dentists).

Irate Subscriber (stopping in hall-way) Eh? What's that yelling up stairs?

Boy—Guess the editor has caught the man he was after.

Subscriber (hurriedly)—I'll—I'll call again.

Telegrapher's Wife—Why were you so long at the front door last night, John? Why didn't you sing out?

Telegrapher (pay-day)—That was just the trouble, I couldn't strike the key.

Mr. W. W. Kughler, many years ago a well-known Cleveland, O., operator, is now the sole agent of Gould's Elastic and Fireproof paint, New York city.

WANTED.—The address of Frank C. Murdough, of Elmira, N. Y., who was a naval cadet, class of '88, at Annapolis Academy. Please address Van B. Dye, W. U. Tel. Co., St. Louis, Mo.

TELEPHONE WARS.—Gen. C. H. Barney, Secretary of the National Telephone Exchange Association, in his news-letter of April 30th, says: There are strong indications of impending "telephone wars" in Philadelphia, Chattanooga, and Salt Lake City. The local papers in each of these cities are filled with reports of the proceedings of subscribers' meetings, etc.

So far as is known, however, the district messenger boy is the only animal that sleeps while in motion.

Operator Kicking—There has got to be a change of some kind or I will resign!

Chief Operator—You ought to be contented with your position.

Operator Kicking—My position is all right, it's the building I object to.

Telegraph Clerk (reading message)—What's this? "Will marry you whenever you wish!"

Aged Spinster—Yes; do you think it too forward? It's my first offer, and I'm afraid he'll get way.

Lightning burned out all but three of the lines at the Quincy Telephone Exchanges last Sunday night.

A large factory for the manufacture of electrical insulation is being built by the Johns-Pratt Company at Hartford, Conn.

People were actually turned away from the telegraph offices last week.

How is that?

It was pay-day and they were creditors.

By the suspension of bucket shops in various cities, during the past two weeks, many operators have lost their positions.

NEW CATALOGUE.—Messrs. J. H. Bunnell & Co., the well-known manufacturers of, and dealers in electrical supplies, in this city, have just issued their new catalogue. It has 208 pages, and is more complete than ever.

NEW YORK AND GREYTOWN CONNECTED BY WIRE.—Through telegraphic communication has been established between New York and Greytown, Nicaragua.

The body of a man with both hands clasped across his stomach was found at Pompeii. He had probably just swallowed a piece of Western Union pie when the city was destroyed.

The Jordan Train Lighting Company have equipped a train on the Connecticut River R. R. with their couplers. It is understood that this is the only train that is now lighted by electricity in New England.

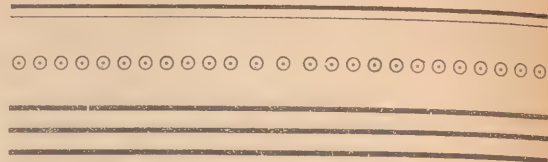
Subscribe for the ELECTRIC AGE now; next issue begins the new volume.

Mr. James H. Howard says the Inter-Continental Telephone Company has sold its telephonic rights government concession, good will and business in Venezuela to a strong syndicate of English, Amsterdam and Paris capitalists for about £30,000. The new company propose to extend the lines in Venezuela wherever they can be made to pay.

To quarrel with an operator at a distant point over the wire is certainly developing anarchistic tendencies.

JACKSONVILLE NOTES.—Departures: Messrs Bartholomew, Bergen, Cutaiar, Simmons for New York. W. A. King, Washington. Culver, Crestline, Ohio. McLearn for North Sydney. Miss Baker, Anderson, S. C. Mrs. Cornell, Gainesville, Fla. Mr. J. B. Neeham is subbing for Mr. J. R. Daniel. Mr. P. R. Wiggs, recently manager of the Ponce de Leon office St. Augustine, Fla., is with us once more as report man.

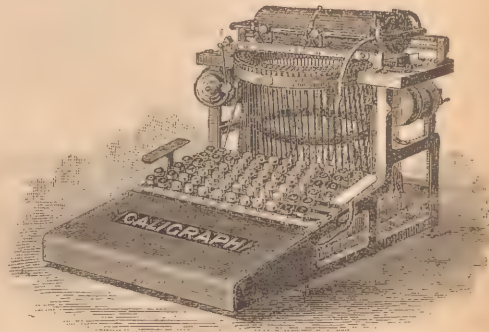
JUST FROM THE COUNTRY.—An operator gave away his experience a few days ago by telling a chief operator that there were potato bugs on his wire.



TYPEWRITERS

—FOR—

TELEGRAPHERS.



Mr. J. A. McClary, manager of the Postal Tel. Co., 91 Wall Street, New York, has made an arrangement with the American Writing Machine Co. for the sale of Caligraphs to telegraphers on special terms.

ENCLOSE 2-CENT STAMP FOR CATALOGUE AND TERMS.





## THE ST. LOUIS FAST-SENDING TOURNAMENT.

Interest in the proposed contest at St. Louis is increasing, and while the affair will not in all probability take on anything more than a local character, the ability of those who will participate will give to the event no small measure of importance. The number of local telegraphers who should take part in and support the tournament by their interest is large, and there is no reason why it cannot be made a brilliant success. It is desired to give prizes to the amount of \$200, \$100 of which is now assured, and by prompt and active work the entire amount can be raised. The success of the event does not depend so much upon the amount of prize money contributed as it does upon the spirit and interest that must necessarily characterize an undertaking of this kind.

The daily press and telegraph officials generally have manifested a desire to give the tournament such support as they can render, and the co-operation of the fraternity and the parties mentioned makes the outcome of the affair an assured success.

Mr. D. B. Grandy, the projector of the tournament is working hard to get matters in shape for the coming event in which St. Louis people are so much interested, and it is probable that the latter part of May will find everything in readiness for a display of nerve such as will surprise even the fast men themselves. The best talent has signified its intention to prepare for the tilt, and the suspense will only be broken by the formal announcement of the winners and the distribution of laurels. Railroad men, as well as commercial operators, are invited to take part, and as the entrance fee will be one dollar, the entries should be very numerous. A meeting of subscribers will be called soon and the election of judges, and other necessary arrangements will be completed.

A BOOK EVERY TELEGRAPHER SHOULD POSSESS.—“The Hand-Book of Electric Telegraphy,” by Mr. Thos. D. Lockwood, is an indispensable work, and should be in the possession of every telegrapher. The great point in its favor is the absence of mathematical formula. Any one who is capable of reading carefully and thinking on what he reads can, by studying this book, familiarize himself with the things that appear intricate and mysterious. It is very often the case that would-be students of the science of the art with which they are intimately identified with are frightened out of the idea by the appearance of the formidable array of formulae usually found in books on electrical science. Perceiving this state of feeling, Mr. Thomas D. Lockwood got up the book on the basis of simplicity, and he succeeded admirably. A prominent feature of the book is the manner in which the information is given. Questions are propounded, and the information sought given in answers. This feature is a very attractive one too. The book treats not only of telegraph subjects but the telephone as well. The storage battery receives some attention as also does the electric light and other applications of electricity. A chapter on “Odds and Ends” gives some facts well worth knowing, and at the back part of the book are found several valuable tables. Every operator should understand, to some degree at least, the apparatus he works daily and the nature of the wonderful force which he controls by his manipulations of the key and other instruments, and we know of no better book to aid him in acquiring this knowledge than the “Hand-Book of Electric Telegraphy.” The price of this book is \$2.50, postage prepaid.

ILLUSTRATIONS AND DESCRIPTIONS OF TELEGRAPHIC APPARATUS.—The second edition of Terry and Finn's book, giving illustrations and descriptions of telegraphic apparatus, is meeting with a large sale. The second edition is limited in number of copies, and it will soon be exhausted. The scope of the work is best described in the preface, which reads as follows: “In publishing this work the authors have sought to bring within the reach of all telegraphers a book illustrative and descriptive of the principal telegraph apparatus in practi-

cal use upon the lines of the different telegraph companies at the present day. \* \* \* \* An additional, and it is hoped valuable feature of the book will be found in the article explanatory of the elementary principles of ordinary circuit testing and of Wheatstone Bridge measurements.” The section devoted to the various methods of testing lines, etc., is a very valuable feature of the book, and any operator with a little mechanical ingenuity might construct apparatus to enable him to master the science with great facility. The special features of the second edition are the descriptions and illustrations of the methods of F. W. Jones, Gerritt Smith and Moffatt and Blakeney of increasing the efficiency of the quadruplex. The price of the book, which is very tastefully gotten up, is \$1.50. For sale by THE ELECTRIC AGE PUBLISHING CO., 5 Dey street, New York.

PHILADELPHIA W. U. NOTES.—The past two weeks has brought misfortune to two of our operators. One loses his savings through a bank failure, and the other “Printer” Meyer loses a child through death. They both have the sympathies of the office. Mr. Mills, of Pittsburg wire, and Mr. John McKeever, of the New York quad, have been transferred to press work at “X” office. The company has opened a new office at 30 S. Fifth street, in the neighborhood of the Stock Exchange, and will supply a long needed want to the bankers and brokers in the vicinity. Mr. Fred Mayer has resigned from the Stock Exchange force to accept a clerkship in a banking house. Arrivals: C. T. Eruine, A. S. Weir, C. E. Fogg, C. N. Harris, Fred Seymour. Miss M. M. Lynch has been added to the P. & R. force. Miss Cook is still on the sick list. Several of the boys have been recipients of glowing letters from a mining company, soliciting their subscriptions to new stocks, but they don't seem inclined to invest their hard earned money in this way. The continued rise in the stock market has caused several of the “bucket shops” to either close up or greatly reduce their force. One place employing fourteen operators has dispensed with ten of them.

RICHMOND, VA., NOTES.—Business is still on the increase. Mr. Wirt White, one of our fastest senders, and who participated in the late tournament, has been sent to Fredericksburg, to relieve Mr. Charley Preston, manager, former night chief at Charleston, S. C., who is critically ill. Mr. Preston is a well-known and exceedingly popular young man and has our deepest sympathy and sincerest wishes for a speedy and permanent restoration to health. W. N. Butt, formerly in broker office, Norfolk, is now permanently located in this office. Geo. Wallace, who has for the past two years been with the Chesapeake and Ohio Railroad at their general offices here has been appointed manager at Clifton Forge, Virginia, for that company. Miss M. W. Beall, manager, Hampton, Va., has just returned from a most pleasant trip to the West where she has been visiting relatives. The boys are all now on the lookout for subs. for summer vacation. They are exceedingly scarce and a good many of them will doubtless be left over for next season. Messrs. Routt and Hotz, who have been working the “Pet Splittys” have now gone on days permanently. Messrs. Roden and Empey are both working double tricks—W. U. and pool rooms. The Postal is getting its share of business and has recently augmented its force. Mr. Joe. Marshall, formerly of W. U., is now day chief of that office.

“Why don't you go to work?” said an operator to a lazy companion. “Because I don't want my heirs to fight over my will.”

Will F. Link has been transferred from Missanabie to Pogamasing, Ont.

Typewriters  
for  
Telegraphers  
See McClary's Adv.

## UP FROM THE RANKS.

RAILROAD MANAGERS WHO STARTED AS BRAKEMEN,  
TELEGRAPH OPERATORS OR RODMEN.

Among the officers of nearly every railroad in the country are to be found men who have risen from the very lowest round. A. M. Tucker, who is a division superintendent on the Erie under Murphy, started in as a track laborer, and his first promotion was to the position of rodman in the engineer corps. John N. Abbott, of the Western States Passenger Association, used to be a freight clerk on the Erie. C. W. Bradley, general superintendent of the West Shore, used to be a brakeman and conductor on the same road. General Supt. Bancroft, of the Denver and Rio Grande, learned the Morse alphabet in one of the small stations on the Erie, and counted himself lucky when he obtained a position as telegraph operator on the West Shore. President Caldwell, of the Nickel Plate, was once a clerk on the Pennsylvania. F. K. Hain, general manager of the New York elevated roads, began his career in his seventeenth year as a machinist's apprentice on the Philadelphia and Reading road at Pottsville.

The officers of the great Pennsylvania system, from the president down, have all come up from the bottom. President Roberts entered the service of the road in 1852 as rodman in the engineer corps. Later he had charge of the construction of small branch lines, and finally was made assistant to the president in 1862. He has been president of the road for eight years. A. J. Cassatt, formerly vice-president of the company, also began as a rodman. Second Vice-President Thomson used to be a machinist in the shops at Altoona. He invented the block signal inter-locking switch. Gen'l Manager Pugh commenced as brakeman, and Gen'l Passenger Agent Carpenter was once messenger boy in the Philadelphia office of the company. General Agent Geer used to be receiving clerk in the freight department.

James McCrea, general manager of the Pennsylvania lines west of Pittsburg, like President Roberts, began as rodman at \$40 a month. He now draws a salary of \$15,000 a year, and is still under forty. Robert Pitcairn, superintendent of the Pittsburg division of the Pennsylvania, and general agent for the company was once a messenger boy in the old Atlantic and Ohio Telegraph office in Pittsburg. Among the other messengers employed at that time was Anson Stager, afterwards general superintendent of the Western Union Telegraph Company. W. O. Hugart, now President of the Grand Rapids and Indiana Railroad Company. Andrew Carnegie, who a few years later laid the foundations of his wonderfully successful career as private secretary to Col. Tom Scott, and David McCargo, now general superintendent of the Allegheny Valley Railroad.

A SUCCESSFUL DENTIST.—Dr. B. B. Palmer, for many years a member of the New York Western Union force, after three months' leave of absence, severed his connection with the Western Union on April 1st, to devote his entire time to his practice, which has grown to be one of the best and most profitable in the city. Dr. Palmer's sign hangs out at 128 West 34th street, which is considered the best location in New York. He has a good practice among the telegraphers of the city, all of whom and his numerous friends unite in wishing him much prosperity.

Mr. George E. Holbrook, labor editor of the New York *World*, the well-known ex-telegrapher, was the recipient of a letter of thanks from the District Committee of the United Order of American Carpenters and Joiners, for the impartial manner in which he treated all sides during the recent eight-hour movement.

OPEN FOR PUBLIC INSPECTION.—The rooms of the New York Telegraph Club will be open for inspection during the afternoon of May 19.



## HOW SITTING BULL UTILIZED THE TELEGRAPH.

W. H. Mosher, of Ypsilanti, Mich., was formerly in charge of a store at Standing Rock Agency, Dak., and among his frequent visitors were Sitting Bull, Gall, Red Cloud, and others of the famous personages of the Sioux tribe. Mr. Mosher in discussing Sitting Bull's claim to honors in the Custer fight, said:

"Sitting Bull has become famous as the hero of the Custer battle on the Indian side, but the fact is that he was not in the fight at all. I can understand Sioux well and speak it fairly. One night Sitting Bull and Gall met in my store, and for over an hour discussed the details of the battle, and once or twice almost reached a fighting point. Gall was making an attack on Sitting Bull for attempting to steal his bravery.

"The fact is that Sitting Bull was the first Indian to reach a telegraph station with the news of the massacre, and he made the most of his opportunity. He pictured himself in the thickest of the fight, and had scalps with him to prove it, but they were all secured after the battle and not in it. Sitting Bull was not in the fight, but watched it from a bluff some distance off. At its close he rushed down and took three or four scalps and then rode away and painted himself a hero. At least this is what the Indians say. Gall was the actual leader, and is regarded a very brave warrior. Sitting Bull was merely a medicine man, and had the reputation of being a coward."

NEW YORK WESTERN UNION NOTES.—Since last issue we have to report the arrival of the following named young ladies at this office: Miss Hagerty from Unionville, L. I.; Miss Mary A. Barry, Miss Nellie Duke and Miss Boylan from outside city offices, and Miss Lowry from a broker office. The following named ladies have been assigned to split tricks: Miss Emily Finn, Miss Nellie Reeves, Miss Lizzie Boyle, Miss Crissie Hauke, Kijtie Boyle, Miss B. Burke, Miss Schlesinger. Miss Hattie Fox has been transferred to the Grand Central Depot wire. Miss Lena Allen has returned from "Claffins." Miss Nora Conklin is detained at home by the sickness of her mother. Miss Leslie, who has been absent from her desk on account of a severe cold and sore throat, has returned quite recovered. The ladies of 195 are taking quite an interest in the petitions to the Czar of Russia in relation to the unfortunate exiles in the Siberian Mines. The ladies are also greatly interested in the new benefit association, Fraternal Circle, Alpha Lodge, of Brooklyn. We regret to report the dangerous illness of Miss Stephenson, the winner of the first prize, in the ladies' class at the late National Fast Telegraphing Tournament, at her home. Her ailment is some affection of the heart.

Mr. T. C. Eipper is acting-manager of the W. U. Produce Exchange, vice H. W. Gilbert resigned. Mr. Gilbert has been manager at the Produce Exchange for upwards of twenty years. During the past few years, however, he has been in failing health and now relinquishes his duties to recuperate. Mr. Eipper is a well-known member of the craft. He was, up to 1883, one of Buffalo's chief operators. Since that time he has been actively engaged by the Mutual Union and Western Union on the floor of the Produce Exchange, this city. Mr. Perry Chamberlain, of the Produce Exchange office, it is rumored has resigned to engage as a commission broker on the floor of the Exchange. Mr. Chamberlain is well and favorably known and his future is assured.

Mr. J. R. McMillan, a well-known telegrapher, is visiting friends in this city, and is the guest of Dick Morris, of the United Press.

Typewriters  
for  
Telegraphers  
See McClary's Adv.

PHOTOGRAPHING INACCESSIBLE PLACES.—The use of electricity enabled a photograph to be taken recently under most exceptional and difficult conditions. A landslide occurred at a quarry in France, and a large number of workmen were buried in the subterranean gallery. It was supposed that the men were entombed in one of the galleries about 220 feet below the mouth of the mine; but nothing certain was known of their position, and for an attempt at rescue to have any chance of success an approximate idea of their whereabouts had to be gained. The difficulty was surmounted by sinking a shaft about a foot in diameter, in the direction of the gallery, and through it lowering, by means of a chain, a small camera, mounted in a metallic tube. The camera was pivoted within the tube at its upper end, so that it might be fixed at any angle by tightening or slackening the connecting cord. Above and below the camera were placed rows of incandescent lamps, and when the apparatus had been lowered the camera was made to incline outward from the case. In order to photograph the interior of the gallery all that was necessary was to turn on the current and light the incandescent lamps, the plate being exposed at the same time. In this manner excellent results were obtained from a photographic point of view, the time of exposure being five minutes.

THE POSTAL SYSTEM.—Mr. F. W. Jones, the assistant general manager and electrician of the Postal Telegraph Cable Company, New York, has been in Chicago some three weeks installing the electric plant in the basement of the Traders' building, to furnish current for the Postal system. The plant consists of 16 generators of the improved direct current type of the United States Company, driven from line shafting that is connected by clutch pulleys to two 10 h. p. United States (Weston) motors. The current for the latter is supplied from the central station of the Chicago Edison Company, and is fed through two independent sets of machinery, thus doing away with a possibility of failure in the supply requisite to drive the machinery. The 16 generators are wound for various potentials ranging from 35 volts to 375 volts, and yield in energy from 1,000 Watts up. The machines of lesser potential will be used on the wires known as "the locals," "the cities" and "the legs," the "main wires" and "the quadruplexes," taking the heavier currents. All the machines rest on a solid self-sustained oak frame, the posts of which are imbedded in the concrete floor and not connected to either the wall or the ceiling of the room, thus doing away with all possibility of vibration, a feature annoying in many buildings. Mr. Jones has given the installation the utmost care and has personally supervised every detail, besides adding several features that, while novel, aid largely in rendering the system automatic. The plant has been turned over in full operation to Mr. James E. Pettit, the manager of the Chicago office.

A NEW TELEGRAPH POLE has been constructed of tubular malleable iron, galvanized, 2½ inches at the top. The pole weighs but fifty pounds and will stand a much greater strain than ordinary poles. The bottom is set in a clam plate six inches square, which grips the ground. The pole has been tested and gives satisfactory results.

A NEW TELEGRAPH LINE has just been completed between Wilmington and Fayetteville, N. C., on the lately finished Cape Fear and Yadkin Valley Railroad.

NEW TELEGRAPH COMPANY.—A bill has been introduced in the Kentucky legislature, now in session, to incorporate the Big Sandy Telegraph Company.

Mr. R. C. Rattray, from Montreal and J. L. Mounce, from Savannah, are late arrivals in this city.

Luck is a good thing to have, but operators grow poor waiting for it to show up.

## ANSWERS TO INQUIRIES.

Editor of THE ELECTRIC AGE:—Can you inform me how much surface there is on one mile of No. 8 galvanized iron wire and on the same length of No. 6, and oblige. J. H.

ANSWER.—228.04 square feet on No. 8; 280.37 on No. 6.—Ed. ELECTRIC AGE.

"STUDENT," New Orleans. In the condenser the discharge is always opposite in polarity to the charging current. The static charge of a wire varies according to leakage and moisture. In damp or wet weather there is practically no static discharge from a wire for the reason that it is dissipated rapidly in the surrounding atmosphere. The drier the atmosphere the more pronounced is the static discharge. The resistance of a given wire changes but slightly with changes in temperature. You probably mean decided change in *insulation* when you say "decided change in *resistance*." It is a common error to say, in wet weather for instance, that the resistance of the wire has changed. The fact is the resistance does not perceptibly change but the *insulation* decreases. Under these circumstances the static discharge would vary.—Ed. ELECTRIC AGE.

A. D. H.—"Buckling" in storage batteries is caused by the formation of sulphate in discharging, which produces unequal expansion.—Ed. ELECTRIC AGE.

THEY ALL KNOW HIM.—One of the most even-tempered men in New York city to-day is Mr. Milton J. Adams, an old time telegrapher, who is now in the employ of the Edison companies. He is known the world over, and cannot walk a block in New York City without meeting at least a dozen acquaintances. Mr. Adams is the man who during the strike in 1870 mounted a box in a San Francisco street and sold patent medicine at large profit for the boys, who were just then very hard up. From San Francisco he went to South America, where he traveled with a lion show; crossing the Andes selling maps to the natives, who could not understand them, and made a fortune in the restaurant business in Rio Janeiro in six months. He lost the fortune on the Coffee Exchange in two days. He ran a newspaper in the Kimberly diamond fields in South Africa for a time. One evening a party of prominent citizens, who had been "celebrating" pretty freely, displayed their patriotism by singing, and insisted that Britannia was the boss of the whole mundane show. Mr. Adams' paper came out next day with an article in which he stated that, although Britannia might be under the impression that she ruled the wave she could not rule the Yankees, who had whipped her twice, and were ready to do it again on short notice. He also suggested that if the participators in the festivities of the previous night were as zealous in imbibing information as champagne they would be better citizens and more desirable neighbors. An animated mass meeting was promptly held, and the editor left before it was over.

DID NOT UNDERSTAND.—That the majority of the public is painfully ignorant of the terms used in the telegraph service was never better illustrated than by the following: A certain gentleman of Oil City sent a message to his brother in Leavenworth congratulating him on his marriage, about to be consummated there that day. As the brother had not yet arrived the usual office message ("G. B. A. etc.") was sent, reporting its non-delivery, which was delivered to the sender. In a few minutes a red-faced irate man rushed into the office and convulsed the force with: "D—n it; his initials ain't G. B. A., they're W. J. M. Tell 'em he's from Wichita getting married there to-day." The manager endeavored to explain, but the man went out, only half convinced, muttering something about "cussed telegraph bulls."

W. T. Budds, of Augusta, has gone to Savannah, Ga., for the Postal.



ST. LOUIS WESTERN UNION NOTES.—Rate chief C. V. Safford was on April 23d made happy by the advent in his home of a twelve-pound girl; although this is the initial number Mr. Safford declares that a boy would not have filled the bill, and we believe him. Superintendent L. C. Baker has been traveling in Texas on official business for the company. He is expected home now at an early date. Mr. Ben. Earhart, assistant city chief, has returned from Kentucky where he has been looking after private interests and having a general good time. Mr. Chas. N. McNeill has been appointed to act as multiplex chief in the absence of Mr. M. W. Russell, and from the way in which he keeps the boys and the business in motion one would infer that his capacity for business is inherited. We are very sorry to be obliged to announce the continued illness of Mr. Russell, but we hope that with rest and the contemplated change of climate he will soon be restored to health and will be able to resume his duties at the office. Mr. Russell is a favorite among the boys, and expressions of sympathy and solicitude are heard upon every hand. Mr. Githens and Mr. Masker also are still confined to their homes but with better prospects for recovery. We hope that both will be out soon, as is the wish of the entire office. Mr. Harry Roehle has resigned, and is now employed at the Baseball Exchange. The baseball fever has struck the office and a combination of lightning slingers and ball twisters are in order. The night force has developed a star nine and will soon be in readiness to challenge the world—that is, the telegraphic world of St. Louis. A match game between the night and day forces would be interesting. All contests of this kind will be fully reported in the AGE. Play ball! By changes and additions to the office restaurant, Mr. Chas. Schuler, the proprietor, has been enabled to render better service and to make his quarters much more attractive than before. Manager Bohle kindly consented to devote more room to this purpose, an act which is appreciated by the force as well as by Mr. Schuler. The new awnings which have just been placed on the windows of the office will prove their usefulness later and will do much to make the office comfortable during the heated term. Many thanks for the same. We are authorized to state that a decision in regard to the new office location will be ready in a few days. The return of Col. Baker from Texas will probably mark the first settlement of the matter, and the announcement of the same will no doubt be gladly received. The O. R. T. organization of East St. Louis will give a grand excursion on the river June 12th. The new steamer Oliver Beirne has been chartered for the occasion, and as the operators of both cities are expected to participate, a very enjoyable time is anticipated. Operator Gates is being initiated into the mysteries of an all-night trick. Mr. J. C. Flannigan is prospecting in the vicinity of El Paso, Tex. Mr. P. J. Kelly from the Mo. Pac. is a recent arrival. Misses Valle, Ebbert and Frazier are recent additions to the city department.

BALTIMORE POSTAL NOTES.—Since my last letter the following changes have taken place in this office: Appointments: S. D. Sprigg, manager; F. J. Connor, assistant manager; Wm. Sullivan, chief operator. New arrivals: Wm. R. Adams, Jr., from Western Union, Wilmington, Del.; H. Johnston, from Western Union; Edward Ryan, from Western Union. Miss Cox has been made manager of our "D I" office, Madison avenue, vice Geo. Sweatt, transferred to Coffee District; Harry Matthews, night manager of Eutaw House office, vice F. M. Savage, transferred to Produce and Fish District. W. C. Craig is our split trick man. Frank Cook, our midget operator, holds down the two important city wires and does it in first-class style. Mr. J. Coogan, of Newark Cotton Exchange, now a member of the Wilmington base ball club, paid the boys a visit recently. Johnny says he loves to hear the familiar sounds of the instruments. Thos. C. Callum, brother of R. J. Callum, Superintendent

of the Mutual Union Tel. Co., fell dead on the night of April 15th, at about 11 o'clock, on Madison avenue, from heart trouble. Mr. T. C. Callum belonged to Goldsborough, N. C., but has resided in Baltimore for the past six years, was employed by the Western Union Co. at the Corn and Flour Exchange, as operator. The deceased was unmarried and very popular among the fraternity. An electric light wire got across the Western Union wires running into the main office on Saturday, May 3d. The wires were burned out and the cupola on top of the building caught fire. The wires run into the cupola and from there down into the switch board. The wires were burned before they could carry the current to the board. The wood work of the cupola was damaged. Loss, \$200. The wires were again working in about three hours afterwards. Business is booming. Southern trade has increased 80 per cent. within the last month. J. B. Jaynes has resigned to accept position with B. & O. at Ellicott City, Md. H. H. Becker takes his place at Madison avenue office at night.

PHILADELPHIA NOTES.—"When you receive this note please accept my resignation; to take effect at once," is the way the young man apprised Chief Operator Stimpson of his intention. Is not "Brevity the soul of wit?" That the Postal Company seeks to make its employes comfortable, is shown by its action in making a second move in the location of its office in the dry goods district to No. 707 Market street. The office is better situated, and Mr. H. T. Wright and Joe Crawford are correspondingly happy. The night force in the main office, from the chief to the office boy, are enthusiastic ball players. Fair weather invariably finds them engaged in this exhilarating exercise. Since the introduction of the ticker, a regular commercial news department has been established. Mr. Aug. Wilson, key-board operator, has returned to New York, relieved by Mr. N. A. Killen. Departures: R. C. Toft to the P. & R. Arrivals: P. E. Eyster, from York, Pa. Owing to the recent suspensions of the bucket shops, many of our operators are "out."

MUNSEY'S WEEKLY has this to say of our old and esteemed friend, Mr. P. J. Casey, manager W. U., 23d street and 5th avenue: "Every now and then, at noon or at dusk, you may chance to encounter at 23d street and 5th avenue a slight man with a trim beard, twinkling eyes, a merry smile, and a modish attire! That's Casey! What! Not know P. J. Casey? That argues yourself unknown; while to know him is a liberal education. He probably has a larger list of acquaintances than any man you know, and likely as not you will see him arm-in-arm with some Union Club swell or bowing with Chesterfieldian grace to some belle of renown. Mr. Casey transfers himself, his ready wit and his popularity to Long Branch every season, and there he is as well known as in the metropolis. Despite his affability and unflagging courtesy, he manages to accomplish about three times the work of most busy men, and he is apparently never in a hurry."

SAVED HER LIFE.—In January last we recorded a case of transfusion of blood in which a telegraph lineman, under treatment at Bellevue Hospital, gave twenty-five ounces of his blood to save the life of a young girl whose life was almost smothered out of her by gas. The operation has been entirely successful, and the young woman is again as well as ever. She was literally snatched from the jaws of death.

I will send a diagram of the quadruplex or duplex, with instructions how to balance them, on receipt of 25 cents. These should be in the hands of every telegrapher. For 12 cents in postage I will answer any question on electricity or telegraph construction, also furnish diagrams of any kind of repeaters or telegraphic apparatus, or refund money. S. D. Smith, Electrician, Box 143, Milwaukee.

Mr. J. Tuck, from Atlanta, Ga., is a new arrival.

HIGH SPEED TELEGRAPHY.—A correspondent sends from Paris the following account of rapid telegraphy over a long distance. Some months ago there was arranged a direct telegraphic communication between London and Rome, working on the Hughes system, with relays at Paris, Lyons, Turin and Florence. Its operation since then has been very regular, although accidental disarrangements have been somewhat more frequent upon this line, 2,200 kilometres long, than upon shorter lines. Recently experiments have been tried on this line with Wheatstone apparatus, with relays at Paris, Lyons and Turin. It has been possible to secure 120 words a minute between London and Rome, and this speed evidently could be surpassed if the fourth relay was used at Florence so as to divide Turin-Rome section, which is about 840 kilometers long, into two parts. There is no doubt that a speed of transmission of 200 words a minute would be reached, since this speed has been attained upon the London-Paris section.

ELECTRIC COFFEE.—In a Berlin café the coffee is not only boiled by electricity but a small electric railway carries it to the various tables, so that the guests may help themselves to their liking. The establishment is also lighted and ventilated by electricity.

WHIST BY TELEPHONE.—A game of whist by telephone has been arranged by General Superintendent Hibbard of the American Telegraph and Telephone Company. The game will be played over the line between Morristown, N. J., and Easton, Pa.

Mr. A. J. Burton, for many years manager of the Western Union, Brooklyn, N. Y., now the oldest member of the city force at 195 Broadway, sailed for Europe May 5th. He will visit London, Paris and Edinburgh. His trip is one of pleasure.

ITALIAN TELEGRAPHY.—The Baudot multiple apparatus has been installed on the telegraph lines between Turin, Milan, and Naples.

Mr. W. P. Morgan, a well-known operator, recently located at Ontonagon, Mich., is now at Easton, W. Ty.

Stern Manager to Operator.—"Half an hour late—well sir!"  
Operator.—"No, sir."

CATARRH,

CATARRHAL DEAFNESS—HAY FEVER.

A NEW HOME TREATMENT.

Sufferers are not generally aware that these diseases are contagious, or that they are due to the presence of living parasites in the lining membrane of the nose and eustachian tubes. Microscopic research, however, has proved this to be a fact, and the result of this discovery is that a simple remedy has been formulated whereby catarrh, catarrhal deafness and hay fever are permanently cured in from one to three simple applications made at home by the patient once in two weeks.

N. B.—This treatment is not a snuff or an ointment; both have been discarded by reputable physicians as injurious. A pamphlet explaining this new treatment is sent free on receipt of stamp to pay postage, by A. H. Dixon & Son, 337 and 339 West King St., Toronto, Canada.—*Christian Advocate.*

Sufferers from Catarrhal troubles should carefully read the above.

AN OPPORTUNITY

For Some Railroad Man to get a HOWARD WATCH Free of Cost to him.

I propose to furnish one of the well-known Howard Movements, of their best quality Gilt, fully adjusted to Heat, Cold and Position, and cased in a specially made Filled Case, Open Face, or Hunting, as may be desired, to some railroad man who will send me his full name, giving his address and classification of employment. Each letter received will be assigned a number, and that number will be registered against the name of the writer, and the lucky number gets the Howard Watch, which is universally acknowledged to be the best Railroad Watch manufactured. A 2-cent stamp, enclosed with the letter, will insure the return of a certificate bearing the registered number of the name, and for 25c. will include our 230-page catalogue, illustrating movement and case to be given. My object in making this extraordinary offer, is to get the correct name and address of all Railroad Men. The number drawing the watch, and the name of the party holding the same, will be published in this journal. Drawing to take place Sept. 1, 1890, and to be under the supervision of responsible parties. Send your full name and address to J. S. TOWNSEND, 1554 Wabash Avenue, Chicago, Ills.



## NEW YORK TELEGRAPH CLUB.

The new rooms of the New York Telegraph Club are undoubtedly the prettiest and best appointed in the city. The parlor is about twenty feet wide by fifty feet deep, and the floor is covered with the most expensive Brussels carpet. The high walls are papered with red and gilt. Over twenty pictures of prominent telegraph people in heavy gilt or antique oak frames hang on the walls. Among the prominent faces may be mentioned Professor Morse, life size, with antique oak frame eight inches deep and a heavy white mat. The picture measures 3 x 5 feet. The large photograph of Mr. Thomas A. Edison, and bearing that distinguished member's autograph, hangs in a heavy gilt frame. Among the others are George E. Holbrook, the first president of the club, Cyrus W. Field, Chas. A. Tinker, Wm. Orton, D. Doren, W. P. Phillips, Thos. Finegan. The Winnipeg, Man., Canadian Pacific force, the Jacksonville, Fla., International Ocean Cable force, Jos. Merrihew, Dr. Norvin Green, the Cleveland, Ohio, W. U. force, The W. U. New York building, the New York Western Union chief operators, D. H. Bates, John Van Horne and those of four others. The furniture of the parlor consists of an elegant upright piano, a rosewood parlor set of ten pieces, twelve large, heavy antique oak easy rocking chairs, four elegantly finished antique oak settees and three dozen antique oak cane-bottomed chairs. Three chandeliers furnish the illumination of the parlor. The carpet is a very pretty brown pattern, with a wide handsome border to match. A fancy carved antique oak screen hides the secretary's desk. These two pieces of furniture, together with the additional three large tables, add greatly to the beautiful appearance of the room. Everything is of the most expensive character, at the same time it was selected for its substantial qualities. The governor's room, which adjoins the parlor, is also very prettily arranged. The billiard-room will contain three tables of the best make, when finished. Large sliding doors will permit of the entire floor being thrown into one room when occasion requires it.

The telegraphic fraternity of this city have certainly the finest quarters of any club in the metropolis. They are centrally located at No. 32 Cortlandt street, and are open at all hours both day and night, and members are at all times found within the comfortable walls profitably wasting their spare moments at the piano, library, billiard-room, reading table or writing desks.

The Western Union Telegraph Company on May 5 sent to the New York Telegraph Club its check for \$1,000 with its good wishes and regards. General Eckert also added \$100 as his personal subscription. These liberal subscriptions towards fitting up an excellent home for the craft are certainly the best compliments ever paid the telegraph profession. Mr. Andrew Carnegie, the iron king, headed the subscription with \$1,000.

The old time and sincere friendship for the profession by the old time telegraphers is cause for much felicity. The activity of President Brannin of the Club, is winning for that excellent institution friends in all directions.

The formal opening of the beautiful rooms, which will take place May 19th, promises to be a great event in the history of the telegraph profession of the Metropolis. The rooms will hold fully 500 people, and that number will, without doubt, be present.

In addition to the above-named subscriptions, the following named gentlemen have taken Club bonds in various amounts: John Van Horne, vice-president Western Union Telegraph; General Superintendent Merrihew, Superintendent W. C. Humstone, Assistant Superintendent C. H. Erwin and Manager W. J. Dealy. Mr. W. P. Phillips, general manager of the United Press and Mr. Edward H. Johnson, president Interior Conduit and Insulation Company, are also large subscribers. It is needless to say Thomas A. Edison has not forgotten the boys.

President Brannin says the amount already realized from the sale of bonds will enable the Club to meet the greater part of the expenses incurred in fitting up the new rooms, and he is sanguine that the friends and members of the Club, who have not already subscribed, will take up the balance of the issue, which will enable the Club to have a home worthy of the name.

KANSAS CITY, Mo., POSTAL NOTES.—The changes since last issue are: Arrivals—Mrs. Belmaine, from the city; Miss Lola Spear, from the Postal at Hiawatha, Kansas; W. Loughlin, from the "Globe" leased wires; Jno. Tracy, from the Postal, Chicago, and C. G. Keeler, from the U. P. Jno. Creegan, who formerly took United Press, days, has been transferred to the "Globe" on leased wires, his place being filled by Ben. Rommell, the "Caligraph" expert. Loughlin and Housam work 1st Chicago, days, with Keeler and Andrews, nights, on same wire. Miss Bessie Godecke has been transferred from the St. Louis wire, to Omaha quad, and sends the afternoon report to Omaha. C. H. Mallanee has been assigned to a day trick and now works St. Louis wire, days. Mrs. Belmaine has been assigned the "Kansas way," north, vice Andrews, transferred to the night force. Business is very heavy and the night men figure more on "making their escape," than they do on "scooping." They are ordered on regularly each forenoon; Ben. Rommell works a baseball pool room trick afternoons and gives good service. A number of new loops have been run to accommodate the increasing leased wire demands. A new quad, has been lately set up to accommodate Wichita, Kansas, business, which office was opened on the 10th of the present month. Kansas business has increased wonderfully and we will soon reach Colorado points. Departures—Mrs. B. C. Calder, resigned, account poor health, and H. R. McMicken gone to Canada. Manager Schell, of the Board of Trade office wears a 2 by 4 smile over the increasing business; he's a hustler, despite his avoirdupois, and can chase business with the lightest of them. The last edition of the AGE was pronounced by all to be a "hummer." The two embryo sheets lately advanced have no support in this office, not a paper being taken. Mr. H. Craig, former manager for this company at Beatrice, Neb., has been visiting in the city for some days. He will accept a position at St. Joseph, Mo., for this company. Mr. C. L. Pitts, manager for this company at Hutchinson, has been transferred to Wichita, Kansas, for the same company in a like capacity. The death of Miss Myrtle Knox, who was formerly operator at the Midland Hotel in this city, and who was killed in a railroad wreck recently, has caused much sorrow among her many friends here.

MILWAUKEE NOTES.—Mr. Cunningham, night operator at Oskosh, has resigned to accept a position with W. U. Milwaukee. Miss M. B. Edgerton has been appointed manager of W. U. at Escanaba, Mich. Mr. Henry Ramsey is confined to his room by sickness, nothing serious, however. Mr. Werle, of the night force, has been transferred to day force. The owls will miss "W. R." Mr. Ed. Lucas takes Mr. Werle's place nights. Mr. Dug. Smith, late chief operator of the Postal, has invented a very important safety device for overhead wires which will soon be put in general use. Among late arrivals are Messrs. Samis and Smead, to W. U. Business is booming and operators are being engaged right and left.

Miss Alice Kyle, of Henderson, N. C., when asked if she would like to subscribe for THE ELECTRIC AGE, replied as follows: "Yes, I will take it, and think all operators should support a paper like the AGE, pertaining to their interest. I am with you in elevating the fraternity in every possible way."

## TYPEWRITERS FOR TELEGRAPHERS.

Mr. J. A. McClary, Manager of the Postal Telegraph Office, 91 Wall street, New York, has concluded a special arrangement with the American Writing Machine Company, Hartford, Conn., for the sale of Caligraphs to telegraphers throughout the United States and Canada. The plan is so arranged that every telegrapher can own a machine. People usually have their choice of machines—either from experience or fancy—but where experience is the judge, the Caligraph, for practical work, is by all means the machine for the telegraphic field. It is especially adapted to manifold work on press wires, and is almost exclusively used by the Associated Press, the United Press, the Western Union, and all the large newspaper offices. The work of Mr. W. B. Upperman, of the Associated Press, demonstrated at the late fast-acting tournament, its wonderful powers. Expressions of praise come from California, Oregon and many other distant points, all of which name the Caligraph as their choice.

The fact that an operator can print on the typewriter four times as fast as he can write the same matter with a pen, proves beyond doubt its great value to the operator.

The use of the Caligraph on commercial and press wires is entirely practical, and its universal adoption is taking root with wonderful rapidity.

Mr. McClary for the past nine months has experimented with typewriters and various devices of feed guides, in order that messages might be taken direct from the wire without the loss of time incurred in changing blanks, and he has succeeded in getting it down to a minimum. The new attachment is now in practical and successful use at the Postal Telegraph Company's office, 91 Wall street, of which Mr. McClary is the able manager. The device is a simple one, the blanks being in roll form, neatly perforated, with from 200 to 1,000 blanks to a roll. Telegraph or letter-head blanks can be printed in roll form for Western Union, Postal, railroad or private broker messages, and operators capable of reading rapid Morse, operating this machine with the new attachment cannot be rushed.

Mr. McClary has the warm endorsement of officials of the Postal Telegraph Company, and Commercial Cable Company, as well as THE ELECTRIC AGE, as a man of the highest integrity, and communications to him on the subject will be cordially received.—Adv.

The Western Union sent twenty-four of its most expert operators to Auburn, N. Y., to handle the matter relating to the Kemmler electrocution. In addition to this large force the Associated Press, and the United Press added their quota of experts, which together with the regular force of that city, made quite a small army of men for manager Horton to take care of. Mr. Horton proved equal to the occasion, however, and gave general satisfaction. If the electrocution had taken place, a great rush of matter would have resulted. The stay of the proceedings, however, temporarily postponed the great rush. There were over seventy-five of the best newspaper writers on the ground, every one of them instructed to record the matter even to the minutest details.

NEW YORK POSTAL NOTES.—Arrivals—Moore, Gardner, Ardison, Flint, Tierney, Welch, Harden, Sherford, Ryan, Coleman, Bennet, Ellis, Crew, Wright, Newman, Regan, Gunning, Appleby, Parkinson, Bastable. Promoted to split trick: Bowtelle, Hoffman, Burger, Wall, Talmage, Price, Bokelman, Kelleher, Peckham, Hughes; to day force: Coney, Cooke, Kempf, Lawrence, Knerr, J. Wilson. Departures—P. Lynch, O'Keefe, Randall.

Mr. J. H. F. Walker has been transferred back to Norfolk, Va., from Pelham, N. C.



## GEN. ECKERT'S CIPHER.

AN ANECDOTE OF SECRETARY STANTON BEATEN FOR ONCE.

There is no person in the world who has been more intimately associated than Gen. Thomas T. Eckert with the development of the telegraph system. He was an operator in the early days of the Morse invention, and he was the man chosen under President Lincoln's administration to construct and conduct the telegraph corps of the War Department that was everywhere with the forces in the field.

As an executive officer—he was made an Assistant Secretary of War—he selected and commissioned the Government telegraphers and invented the cipher in which all important messages were transmitted between the department and commanders of armies, corps and divisions, and between the respective commanders. The cipher was a marvel. No man who did not possess the key ever interpreted it, and yet it did not appear at a first glance to be exceedingly complex. There is a story which runs that when it was first presented to Secretary Stanton he was inclined to despise it as a clumsy piece of work. "Look here, Eckert," he said, "anybody can read that."

"Try it yourself, Mr. Secretary," responded Gen. Eckert, as he laid the carefully prepared sheets before his superior officer.

"Pshaw, that's no trouble," Stanton said, as he cleared a space on his desk and went to work on them. After he had covered a dozen sheets of manuscript with his guesses at the meaning of the cipher, his persistent temper rose high. The perspiration came out on his face, he ran his fingers through his mop of iron-gray hair, he glared through his gold-bowed spectacles and stroked his beard into extreme fervor. Meanwhile Gen. Eckert sat by calmly waiting and expectant. If he felt any sense of triumph he permitted no symptom of it to escape him.

Mr. Stanton was not the man to abandon any task until he was sure that he was defeated, but at the end of an hour he tore up his own papers, handed Gen. Eckert's manuscript back to its author, and said: "I give it up, Eckert, and now you can tell me what does it all mean." Gen. Eckert gave him the explanation, and on the following day this ingenious cipher was put into use. The secret of it was never betrayed, and it was of inestimable value during the war.—*Philadelphia Inquirer*.

BOSTON NOTES.—The annual rumor looms up that the Western Union in this city are to have new quarters in the near future. This rumor has come and gone for the past ten years, but this time there are some indications that it will prove a reality. On the corner of Court and Washington streets there is a handsome 14 story structure in the course of erection, and as one of the directors of the Western Union is financially interested in it, it is argued that it is built for business purposes, the Western Union will be one of its occupants. We are fondly nursing this gleam of hope, inasmuch as the building we now occupy is an eyesore to the business community at large, and a consumption foundry for those who are forced to "sojourn" in it for their daily bread. Quite a number of well-known operators have recently resigned from this office, prominent among whom is Mr. H. W. Gillespie, who leaves us to go with a broker. Mr. Gillespie has been a member of the force here for a number of years and occupied the important position of manager of the W. U. Stock Exchange office. We wish him every success in his new field. Mr. J. P. Pendergast, of the Philadelphia quad, has been assigned to Mr. Gillespie's place. Mr. J. H. McGlinchy, who returned to this office from a broker establishment, has resigned and gone to 195 Broadway, New York. Mr. W. J. Ryan and G. S. Travis have resigned to accept more remunerative positions. Mr. Sam Nash, eastern chief, resigned April 29th

and May 1st commenced his duties as chief operator at the Postal. Up to the present writing Mr. Nash's successor has not yet been named. A rumor to the effect that Mr. A. B. Churchill, of the Providence duplex, was the chosen one, was current last week, but later indications seem to point in another direction. We can say for Mr. Churchill that besides keeping the neatest desk in the office, and the finest looking number sheet, he has a record of every message he ever sent or received, and the number is said to be way up in the millions. Mr. W. H. Murray, of the 7 A. M. trick, lately joined the Benedicts. When the event became known in the office a few days afterward, Mr. Murray was completely overwhelmed with congratulatory notes. Miss Mary Severance, a little over a year ago a check girl in the city department, and lately assistant at the post-office, has returned to the main office as an operator. Mr. Frank Starkey, from the Bay State Co., has relieved Mr. Finan on the cable quad, the latter returning to the Portland quad. Mr. J. J. Benelish is a late arrival from the South.

C. P. R. WESTERN DIV. NOTES.—Mr. Hodgson despatcher, Port Arthur, returned from Toronto a few days ago looking much improved in health; A. Allan, chief despatcher, Port Arthur, with his wife, has left for a couple weeks vacation, and will take in the eastern provinces, Mr. Carey Acting chief during his absence. J. Jackson, night operator at West Fort, has been promoted to agent's office days, Port Arthur, as operator and stenographer, Mr. Mc Nab, nights Rat Portage taking his place at the Fort; Mr. Hogle, Rat Portage having returned from a short vacation; Mr. Gignac, again takes his hand at the night trick; Mr. O'Callaghan, Port Arthur has resigned; Mr. S. Edwards, telegraph inspector, Winnipeg, has been down to Port Arthur putting in another set of duplex repeaters and a quadruplex; "X" office now contains a quad, two sets of Polar repeaters, two single repeaters and six sets of Bunnell instruments and is one of the finest, as well as one of the busiest, offices on the road; W. H. Hallett, Medicine Hat division, is visiting his brother at Port Arthur.

C. P. R. EASTERN DIV. NOTES.—A. Currie, Agent, Middleton, has returned from a five weeks' vacation; J. J. Macarron, transferred from Middleton to Heron Bay, nights and W. Taylor, formerly nights at Heron Bay resigned; H. R. Smith, agent Gravel River, has been suddenly called east to attend the funeral of his father who was suddenly attacked and killed a few days ago by a mad bull; S. Carson, nightman at Nepigon, relieves him and M. P. Morrow, new arrival, goes to Nepigon, nights. The first annual meeting of the Western Ont. division of the railway station agent's association of North America was held in the Algoma Hotel Port Arthur on the 23rd of April. The following members were present: President, J. H. Longworth, Port Arthur, in the chair; Secretary F. C. Saunders, "X" office; Treas., J. F. Hurley, Ignace; Messrs. Leitch, Schreiber, Elliott, West Fort; Shaver, Dexter, Campbell, Savanne; Crawford, Vermillion Bay; McCay, Hawk Lake; and F. R. Swan, Port Arthur; also Mr. J. McGillivray, Port Arthur, who was subsequently elected an honorary member of the association. Absent members were represented by proxy. The president, in his opening remarks, briefly reviewed the history of the association since its formation in March, 1885, and congratulated the members on the strength of the Western Ontario division. He also referred to the benefits to be derived from connection with the order, in proof of which he intimated that the Western Ontario division would shortly be augmented by the addition of about twenty new members. The treasurer's report showed that the association is in good financial condition. The chief business before the meeting was the election of officers for the ensuing year and the appointment of delegates to attend a grand convention to be held at Cleveland, Ohio, May 21st. The following new officers were elected: President, J. H. Elliott, West Fort William; 1st Vice-President, A. A. Leitch, Schreiber; 2d Vice-President, J. H. Campbell, Savanne; Secretary, F. R. Swan, Port

Arthur; Treasurer, A. R. McCay, Hawk Lake; Messrs. Leitch, Saunders and Elliott were unanimously elected delegates to attend the grand convention. After a vote of thanks had been accorded to the retiring officers the meeting adjourned.

SYRACUSE NOTES.—That "the death of one man is the life of another" did not prove true in the case of Wm. Kemmler, the Buffalo murderer, who was to have been executed by electricity, in the Auburn prison during the week of April 28th. Notwithstanding the fact that the new law prohibits the publication of the details of an execution, representatives of the metropolitan and other newspapers began to arrive in Auburn at an early date with the intention of telegraphing a full report of the execution to their respective journals. Some of the New York papers had a dozen representatives on the scene. To be enabled to handle expeditiously the vast amount of press matter that was expected would be sent, the Western Union fitted up a temporary office opposite the prison, which would accommodate a large force of operators, and their facilities for prompt service were excellent. The writ of *habeas corpus*, issued by Judge Wallace, of the United States Circuit Court, which gave the condemned man a new lease of life, was a sore disappointment to the reporters, as they were deprived of an opportunity of writing up the first electrical execution. The business handled by the telegraph company, therefore, was not as large as anticipated. The following operators were sent to Auburn for the occasion: J. L. Cobb, E. T. Pardee, S. H. Riker, M. J. Carey and J. F. Paddock, from Syracuse; Messrs. Butler, Blanchard and Kline, from Rochester; Wm. Spicer, D. Mason, A. Walker, M. Williams and W. R. Ansley, from Buffalo; W. M. Gibson, of New York, was present in the interests of the United Press; the *World* leased a wire of the Bell Telephone Company and established a temporary office opposite the prison. They also had an operator and instrument perched upon a telegraph pole in front and in view of the death chamber. H. W. Teed of New York, presided at the former place and Mr. Ryan, of Auburn, at the latter. Mr. F. H. Barth has the sympathy of his friends on the death of his sister. The Postal have moved into new quarters at No. 117 West Railroad street, where they have more room and are much more conveniently situated than they were at the old stand. They maintain a branch office in the Globe Hotel. Mr. and Mrs. D. V. Ferris celebrated the twenty-fifth anniversary of their marriage at their home on Friday evening, May 2d. As a token of esteem, the employes of the Syracuse office, including those in Superintendent Gifford's office, presented Mr. and Mrs. Ferris with an elegant silver tea set. Mr. Ferris has rendered long and faithful service for the Western Union as chief operator of this office. He came to Syracuse as an operator soon after the close of the war, and was shortly afterwards promoted to the position he now holds, succeeding Mr. S. B. Gifford, when the latter was appointed superintendent of the fifth eastern district.

KANSAS CITY W. U. NOTES.—Arrivals—W. Burns, Chas. Halleck, A. B. McClintic, M. Warden, O. R. Crooks and Miss Nora Litchfield. Departures—Miss Minnie Sharon, to Terre Haute, Ind.; C. E. Shinn, to Chicago; G. F. Lehr, to Denver; Miss Lizzie Lovelace, to Lawrence, Kansas; Mr. Sam. Davis, to St. Louis; W. H. Belmaine, to a railroad, city; Geo. Kent, of the Morse day force, and Miss Jennie Knox were married on April 8th; also L. E. Bedloe and Miss Cora Walker, on same date. The Wheatstone circuit to Deming and Los Angeles has dispensed with four first-class Morse men.

VISITOR TO OFFICE.—"Who is that miserable and forlorn looking being jerking at the key so?"

Escort.—"Oh! he writes jokes for our trade paper."

Mr. W. R. Mitchell has been transferred from Augusta, Ga., to Charlotte, N. C.



## THE TRAIN DISPATCHER.

The office clock ticked with a steady swing, the long pendulum oscillated between the ends of the arc with a monotonous regularity that made one sleepy. The air was damp and chilly outside, only to make the grate a dispenser of warmth and comfort. The constant clicking at my desk relieved the lonesomeness, as I sat with my thumb and two fingers on the key and my eyes on the clock dial sending the trains in security along the various lines of the road.

The comfort and happiness of men, women and children were intrusted to my vigilant care. The responsibility of the position can only be appreciated by one who is, or has been, placed in a similar position. I sat all alone with invisible glances fixed on the network of iron bands, where trains were sweeping over miles of space with lightning speed, while the far reaching throb of electric power came to me from distant stations to locate every movement that guided my unerring judgment.

Every delayed train became an object of concern as it sidetracked for the regular or made up the time between long runs, thus keeping my nerves up to the tension which made life a constant round of duty.

I looked drowsily at the clock, my eyes were heavy with sleep. Oh! for something to rouse me. I walked the narrow space in front of the railing. I opened the door; the cool air blew on my face to bring new life to the sluggish blood that was stealing all my senses. I involuntarily shivered, as the cool breath of night swept through me to make me draw nearer to the fire.

I peered into the glowing bank of coals only to relapse into deeper unconsciousness, when a rap at the door startled me. Glad to escape from the incubus that made me dull, I welcomed the intruder with a bluff:

"Come in."

A rough looking figure stood by my side. The broad brimmed slouch hat half concealed the fierce look that made me feel uncomfortable as his wild looking eyes stared steadily into mine. Was the man a lunatic just escaped from the asylum? Insanity was evidently stamped upon the neglected face.

"Are you the operator?"

"Yes; what do you want?"

"Here is a note for you. You dare not refuse the request contained in the letter. You recognize the handwriting?"

I hurriedly glanced along the lines to catch the import. My heart stood still.

"Go! I will be at the appointed place."

"I was instructed to see that you did come. I will show you the way."

I glanced at the face, upon which a frigid, determined look had settled with a savageness that made me tremble. The letter was before me. Without noticing the remark, I read every line that burned into my brain.

"Wait. I will come."

I arose from my seat, glanced sharply at the clock, noted the time, which was propitious, for I could spare an hour without danger; drew on my overcoat and followed the strange man, who seemed entirely oblivious to surroundings as he strode forward with an energy that made walking anything but a pleasure.

I halted and dropped behind a corner; in a moment his clammy, bony fingers were around my throat. I was powerless to resist. A choking sensation made me weak and timid. With a movement that he seemed to understand the strong grip on my neck was relaxed. Again we strode forward to turn into byways that were unknown to me.

I was betrayed; what was the terrible danger that made my duty a culpable neglect? Already the moments were flying, a chilly sensation swept through every nerve as I thought of the helpless lives intrusted to my keeping; but onward we strode. I could feel the basilisk

charm of the bloodshot eyes that resembled coals of fire as they cast watchful glances behind. We halted at a remote house on the suburbs; with a heavy rap he stood waiting for an entrance, while his inhuman expression was intensified by the sickly glare of a single tallow dip, whose dull rays struggled through the dingy panes.

A shuffling gait from within and a cautious turn of the key opened the door to reveal the outlines of a bent figure that shaded the candle with one hand, while a suspicious, cunning stare was fixed upon the newcomers.

Without a remonstrance I followed my guide through the rickety passage that ended at a low, wide portal, which was securely closed. Quietly the limping figure drew from the faded cloak a bunch of keys and with extreme deliberation pushed open the door.

The subdued hum of voices reached us faintly as we passed along a narrow, dark way to stand at the further end until a flood of light almost blinded our eyes. We entered, the door was closed. The low ceiled room was filled with rough looking men. Winchesters and pistols were the principal ornaments, as they hung from painted pegs or lay carelessly around within easy reach.

A look of astonishment that I could not conceal caused a roar of laughter as they handed my evil genius a flask of brandy and shoved him into one corner, where he was soon lost to the present, as he reclined in a drunken stupor.

"Come, young chap, you see we decoyed you; take a hand just for luck."

"I have no money."

"Here is a pile of chips, blue, red and white. You see we sorter thought as how you was lonesome up there and sent Dick to find you. We will treat you right if you behave yourself. Come, make your ante, you keep the game waiting."

I was fond of poker, but the game was as far from my thoughts as the stars from my present position. I played mechanically; luck smiled in every jack pot. I could not lose. I grew immensely in the estimation of my captors. Every moment was an agony, for I could see what the result of neglected duty would be. I continued to play, the stakes were in my hands.

Rough applause followed every lucky turn of the game. I called for four cards, my opponent did likewise; their hot whiskey breaths were on my face. I threw down my hand, four aces, and ended the game.

"Young chap, the money is yours by right, you cleaned us all out; but we will make a haul to-night that will be worth something."

I sat upright, the whole truth flashed upon me—a train robbery. I located the very spot; what a fearful sacrifice of life; oh, what horror numbed me.

"Young chap, you can find your way back the best you can; for the damage has been done by this time." As he spoke he drew a watch from his pocket and stared fixedly at the face. I stole a glance, his time was fast. I scarcely breathed; it might not be too late.

I stood alone in the deserted street, a hack moved slowly by, I sprang to the seat and thrust a five dollar bill into the driver's hand. "Drive for your life to the depot." He cast one glance at the money, the horses were in a mad gallop as we whirled by corners with a recklessness that was dangerous. The hack drew up at the entrance. I sprang from the seat and flew to my room.

The fire had gone down; the room was chilly; I awoke with a start, and with a horror-stricken face I noted the time, twenty minutes to 12.00 cold beads of perspiration stood upon my forehead. Just twenty minutes to avert a disastrous accident.

I staggered to the instrument; but one station between mangled limbs and safety. If I can hold No. 4—if I can hold No. 4. I sounded the

call with an eagerness that was startling; with my eyes on the clock I pressed the button down with a hopeless despair, and yet no answer. The time was almost up—five minutes more and it would be too late.

I closed my eyes to see visions of two trains that were masses of torn and shattered splinters. I could even hear the groans of the wounded and dying. My heart gave a fierce beat of joy—"Hello, what is the matter?" "Side track No. 4, quick, for God's sake," and none too soon, as the lightning express swept by like a whirlwind.

I looked into the glass, my hair was as white as a snow bank.

I never touched the key again.—JUNIUS L. HEMPSTEAD, IN *New Orleans Picayune*.

A FIGHT FOR BASEBALL NEWS.—The Western Union and Postal Telegraph Companies are having a little war at Pittsburg over the transmission of news from the Players' League Grounds. The Postal has the contract, but the Western Union has been beating it out on the news. It was found at first that the Postal wires had been tapped and that scheme was soon blocked. The next day the Western Union beat its rival again, this time by means of observations taken from a neighboring building. The information is wanted for pool-rooms, which pay \$50 to \$100 a week. The Western Union claims to have cut into its rival's revenues handsomely, but this the Postal people deny.

TELEGRAPHERS' TOURNAMENT.—A tournament of telegraph operators took place at Reading, Pa., a few days ago between Pennsylvania Railroad and Lehigh Valley Railroad operators. There were nineteen entries. The first prize was won by Joseph T. Cook, of No. 244 South Fourth street, Philadelphia, whose record was 202 words and 2 characters, perfect Morse, in five minutes. The second prize was won by George C. Williams, of Reading, whose record was 220 words and 5 characters, readable Morse. H. J. Brown, also of Reading, won the third prize, record 188 words and 4 characters.

SAVED BY TELEGRAPH WIRES.—While working on a railroad bridge near Hartford, Conn., a few days ago, Peter Murphy accidentally fell off the bridge. The distance to the river was forty feet. Murphy fell on some Western Union wires stretched below the bridge and was thus saved from sure death. He had the presence of mind to stretch his arms out to get a good hold on the wires. He was safely rescued from his perilous position.

ANALYSIS OF POLLOCK'S FAST SENDING.—The 260 words which Pollock, the winner of the rapid-sending telegraph match, transmitted in five minutes, called for 1234 letters altogether, for which 2834 impulses were required. There were nine impulses therefore to the second, and each impulse required two motions, one down, the other up, making nineteen movements per second for three hundred seconds.

Mr. Joseph Rippon, general manager of the Halifax and Bermuda Cable Company arrived at Bermuda and has selected a landing place for the company's cable about one mile from Hamilton, Bermuda, at which place the office will be located. The steamer "Westmeath," chartered to lay the cable, leaves London in about ten days, and it is expected that communication will be established between Halifax and Bermuda by the middle of June.

Mr. Sarbadhicary, the East Indian Morse Telegrapher, at one time employed by the Postal Company in this city, has passed the law examination in London, England, so says the *London Times* of April 16th. His numerous friends in this country will be glad to learn of his success. He has but one more examination before finishing his education, which will take place next December.

Mr. C. H. Kent is now with the W. U. at Mackinaw City.

Mr. David Adams is with the W. U., Chicago, Ill.



ANSWERS TO INQUIRIES.

J. C. W.—Yes, you are correct. Induction takes place only through an insulating medium, such as air, glass, rubber, etc. Such an insulating body or substance is termed a dielectric. The nature of induction is not well understood, but it is supposed that the insulating substance itself becomes the medium of electric influence.

EDITOR OF THE ELECTRIC AGE.—Is it absolutely necessary to have an iron core in the armature of a dynamo? Would not a simple coil of wire answer the purpose?  
J. H. W.  
Toledo, O.

ANSWER.—The effect in an iron core in a dynamo armature is the same as that of the core of an electro-magnet or of an induction coil, *i. e.*, it concentrates the lines of force around the wire of the coils and produces a stronger current than would be obtained were there no iron core. An armature constructed without a core would give a current, but it would be of comparatively low energy and valueless in dynamo practice.—Ed. ELECTRIC AGE.

R. G. L.—The so-called direct current from a dynamo is not a steady and invariable one. It is in reality composed of a very rapid succession of pulsations, which produce a wave-like effect. For practical purposes, however, it is

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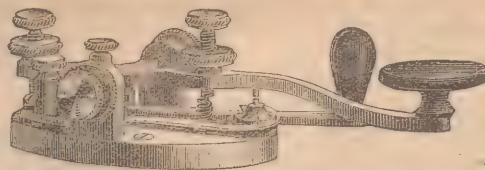


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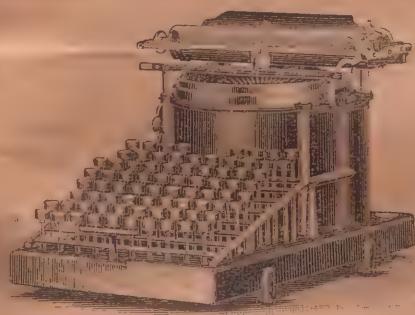
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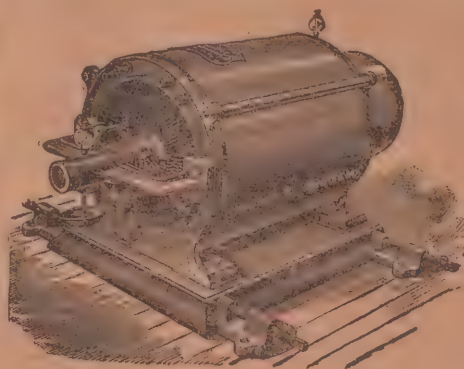
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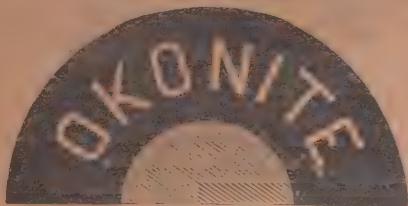
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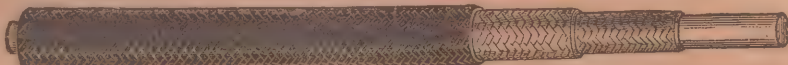
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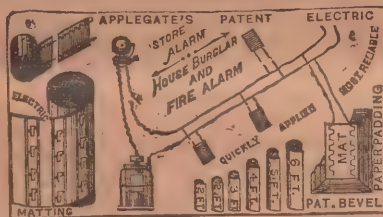
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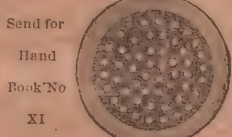
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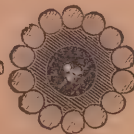
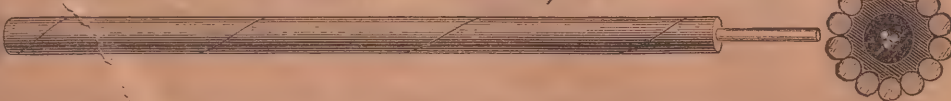
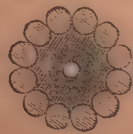
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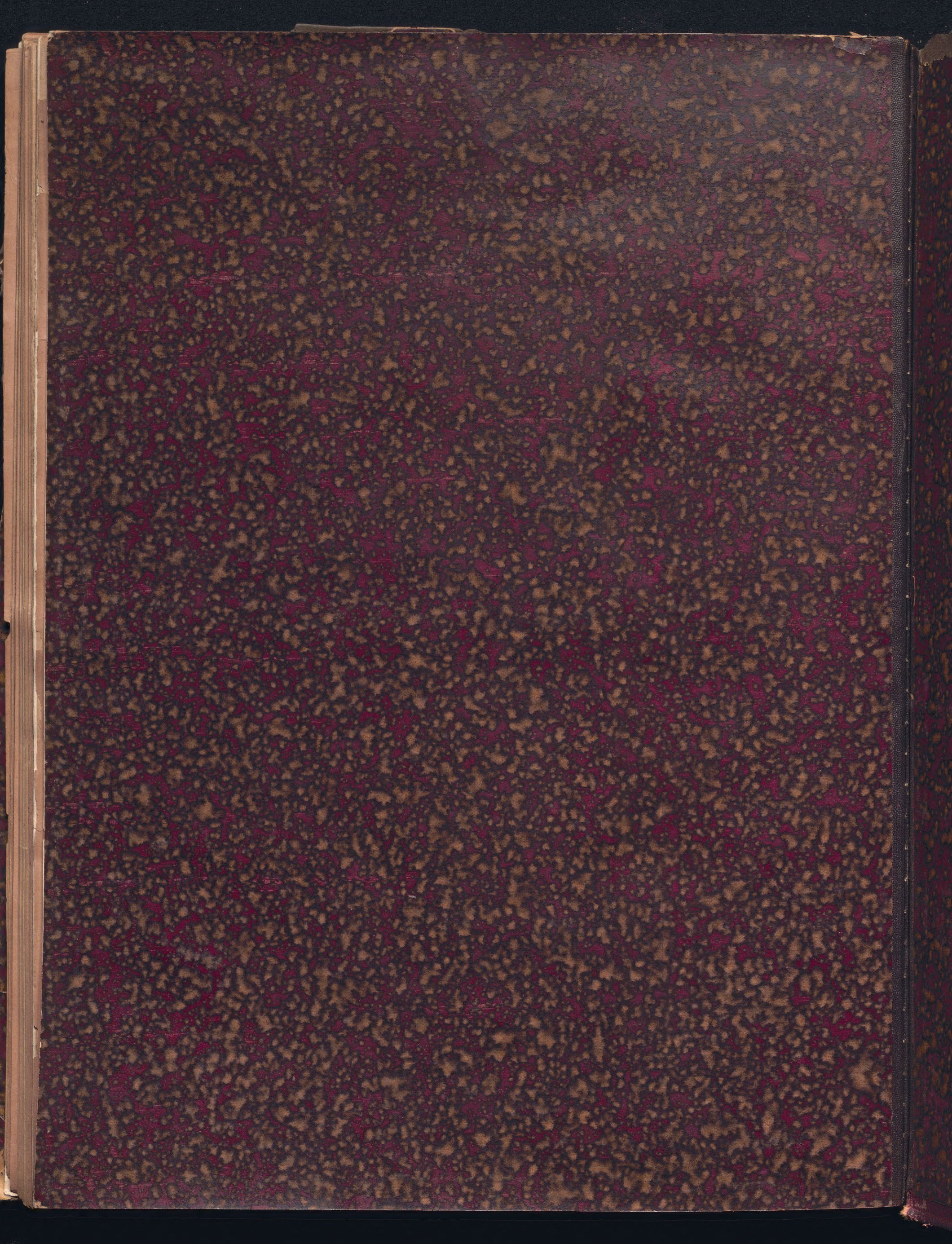




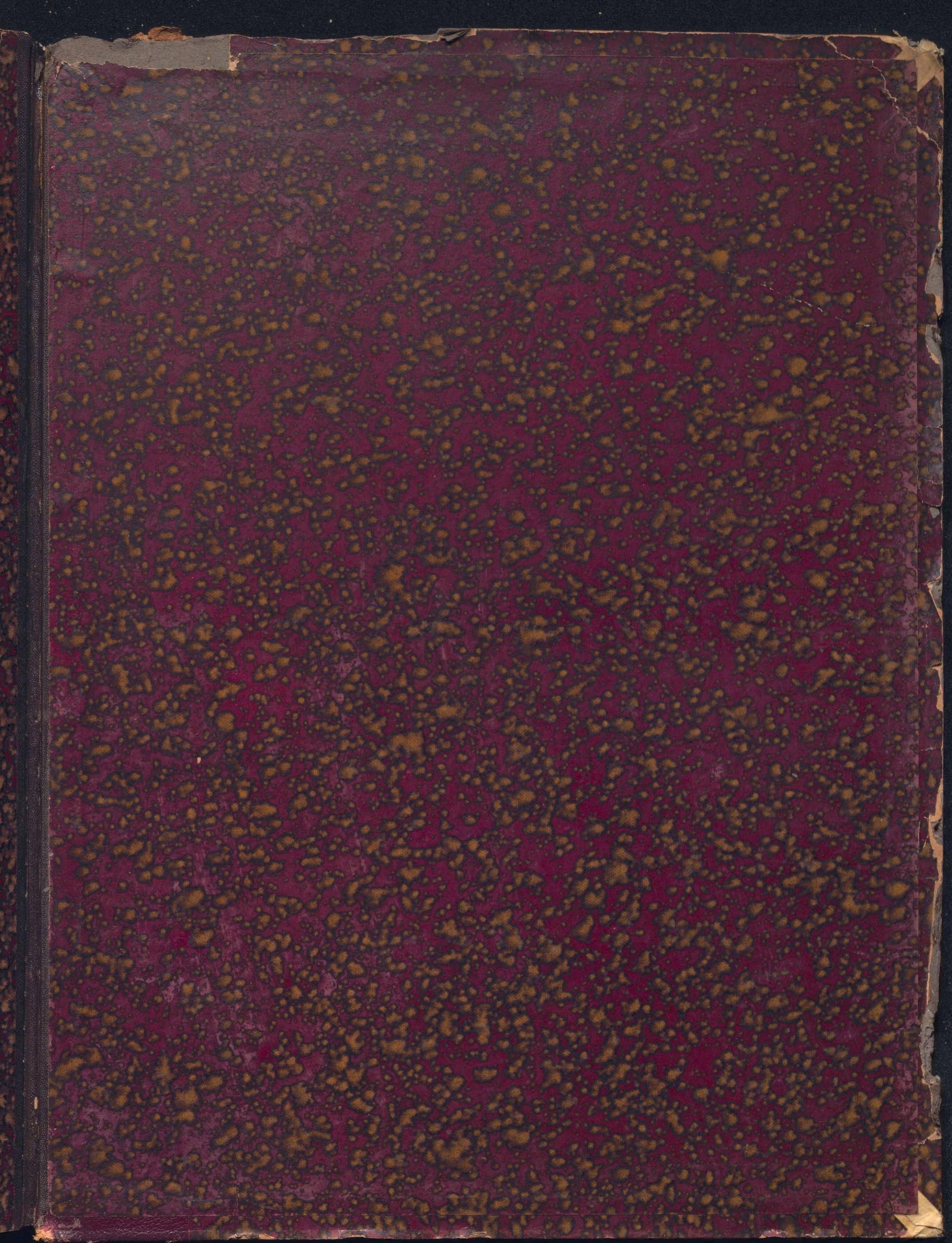


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