

MACHINE-MADE ELECTRICITY.

Its Test in the Western Union Main Office for Telegraph Purposes

From the New York Sun.

The substitution of dynamo-electric machines by the Western Union telegraph company in its New York main office for the chemical batteries has given such good satisfaction that the most of the old batteries, though still in place, have been cleaned up. None of these batteries have been in use for several months, except for short wires inside of the city. The last of the wires radiating from New York to be operated by machine-made electricity were the quadruplex lines, the longest of which are to New Orleans and to North Sydney, in Cape Breton, the terminus of the Anglo-American cable. The use of the machines, although there is little doubt it will be continued, is yet declared to be only in its experimental stages. All the electricity used on lines running out of New York comes from two banks of machines; each bank run by a small engine of about ten-horse power. There are five machines in each bank. One of the five machines merely furnishes electricity to convert the bent soft iron bars of the other four machines into magnets, so that, in fact, each bank has only four machines for the distribution of electricity to the country's wires. The machine in theme in principle those used for producing electric lights, that is to say, a bobbin wound from end to end with insulated wire is made to revolve near a magnet. A current is thus formed in the wire wound about the magnet. In one of the banks of machines the bobbins are turned one way, producing positive electricity, and in the other bank they are turned the other way to produce negative electricity. Both kinds are required to meet the requirements of different offices. The power of electricity to perform telegraphic work is called its potential, and the potential is reckoned in volts. The company gets from the first machine in the bank a potential of about seventy volts—that is to say, the equivalent of seventy cups of the Colloid battery formerly in use for main lines. A wire leads from this machine to convey electricity to those lines that require only seventy volts to operate them. There is a connection between the armature of the first machine and that of the second, at the further end of which a second wire leads to the switchboard. Its potential is about 140 volts, and it supplies lines acquiring so much potential. There is an increase of potential in each machine, but it is not necessarily doubled each time, since the potential depends not only upon the rapidity with which the bobbin is run, and the strength of the magnet, but on the amount of resistance. From the fourth machine is obtained a potential of about 340 volts, which is used only on the Chicago, New Orleans, and long quadruplex lines. In case either of the two banks mentioned needs repair a third bank, run by a separate engine, may be put in use to supply either positive or negative electricity. First the new bank is set in motion and its electricity is put upon the lines which carry a double supply for a moment until the other bank is stopped. The effect on the lines is not noticeable, because, although the quantity of electricity is increased, the potential is the same. The difference between quantity and potential is illustrated by electricians as follows: If a drop of water is closely confined and heated, it will develop a violently explosive force; but it would be instantly exhausted. On the other hand, the steam from a boiler, although by no means so hot, may be drawn off in a continuous jet. It is also said, by way of illustration, that there is not a sufficient quantity of electricity in a whole thunder storm to run a single line of telegraph, but what there is there has a terrific potential. Potential gives working power. Quantity enables the electrician to feed many lines. There is a very low resistance in these machines, or, in other words, the electricity produced finds an easy channel. For this reason the current is supplied on a line through a resistance coil of German silver wire wound around a chalk cylinder, which furnishes a definite amount of resistance. Otherwise an accidental short-circuiting on one line might divert from all the other wires the current necessary to use it. The company has put machines into its New York office only. In one sense they are not so much under control as the old batteries. In the case of the batteries just as many cups as might be desirable to work a line could be used. Now the electrician, if seventy volts is not enough to work a line, must tap the second machine and get double the number of volts. He can not get any intermediate number. The machines are found to be cheaper by nearly one-half than the chemical batteries were. They take less space, and are more easily taken care of.

AMERICAN PORK IN EUROPE.

New York Times.

In spite of the restrictions laid upon the importation of American pork in several countries of Europe, our export trade in hog products goes on increasing. During the three months ending March 31, bacon and hams were reported to the value of \$22,227,091, against \$14,093,407 in the first three months of 1880; the export of lard was \$10,914,630, against \$7,268,887 in the same period of the previous year, and of pork the shipments amounted to \$2,770,578, against \$1,493,793 in 1880. The export of bacon and hams for these three months was nearly half as great as for the entire year ending June 30, 1880, in which we sent out \$50,987,323 worth. The decree of President Grevy, issued on February 18, prohibiting the importation of American pork into France is still in force, and shuts us out from one of our largest markets, but similar decrees in several other countries have been withdrawn. In Spain the interdiction decreed in March, 1881, was canceled in the following August, and our pork now has free entry in Spanish ports. It is not at present sending some sal-

THE OJIBBEWAY WAR DANCE.

Washington, D. C., Aug. 12.—The following is a list of patents issued during the past week to Iowa and Nebraska inventors:

WASHINGTON, D. C., Aug. 12.—The following is a list of patents issued during the past week to Iowa and Nebraska inventors: IOWA. Mary R. Barhydt, Burlington, attachment for pants. William W. Burton, Shenandoah, snow-plow. George W. Campbell, Vinton, washing machine. Fay P. Farwell, Waverly, ruffling attachment for sewing machine. J. W. Hanghawont, Traer, snow-plow. J. M. Jacobson, Preston, corpse-lifter. George W. Nichols, Clinton, log rolling sorting machine. John Zbornik, Old Mission, sleigh. NEBRASKA. William Phillips, Ashland, combination tool. Popularity. Thomas' Eclectic Oil has obtained great popularity, from its intrinsic value as a reliable medicine, in curing hoarseness, and all irritations of the throat, diseases of the chest, etc. For these it is an incomparable pulmonary. codw. SHE'S COMING TO OMAHA. As Sure as the Sun Rises in the East. "Good morning, Charley." "Good morning, Sarah." "When did you get back from Chicago, Charley?" "Day before yesterday." "Did you have a pleasant time, and find your mother and sisters all well?" "Yes, quite well. I had a real good visit. They were right glad to see me, I assure you, and just postponed work and devoted their attention to me, and we went around almost everywhere; took in the Great Forepaugh show which was performing on Lake Front, and it is the biggest show I ever saw, and I came over to ask you to go with me to see it when it comes to Omaha, Saturday, August 27th." "Before I promise you, Charley, I want to ask you a few questions about that show." "All right, Sarah, I'll answer them." "First, did you see that ten thousand dollar beauty, that Forepaugh calls the handsomest woman in the land, and is she really handsome, Charley, any handsomer than I am, Charley?" "Hold on, Sarah, hold on. I can't answer all those questions at once. Give me time. My! what a flutter you are in about that handsome woman. Yes, I saw Miss Montague, the great beauty, and she is a beauty; she's the handsomest woman I ever saw." "Charley!" "Present company always excepted, Sarah." "But, Charley." "Now don't get excited, Sarah. If all the beauties in the world are as jealous as you, one is all I care to manage, and I don't blame Adam Forepaugh for not having any more than one." "Is she surely coming to Omaha with the Great Forepaugh Show, Charley?" "She surely will come Saturday, August 27th." "Charley, I don't believe there is a woman in Douglas county but has made up her mind she is coming to the Great Forepaugh Show just to see how that handsome woman looks." "Then you'll go with me, Sarah?" "Of course, I want to see the show and Forepaugh's beauty as well as the rest of the women of Douglas county." "All right, Sarah, I shall call for you Saturday, August 27th, 1881, sure."

HOSTETTER'S CELEBRATED BITTERS. Malaria is an Unseen, Vaporous Poison, spreading disease and death in many localities, for which quinine is no genuine antidote, but for the effects of which Hostetter's Stomach Bitters is not only a thorough remedy, but a reliable preventive. To this fact there is an overwhelming array of testimony, extending over a period of thirty years. All disorders of the liver, stomach and bowels are also conquered by the Bitters. For sale by all Druggists and Dealers generally.

BROWNELL HALL. YOUNG LADIES' SEMINARY. OMAHA, NEB. Rev. R. DOHERTY, M. A., Rector. Assisted by an able corps of teachers in English, Languages, Sciences and Fine Arts. THE NINETEENTH YEAR WILL BEGIN SEPT. 7, 1881. For particulars, apply to THE RECTOR.

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AND STILL THE LION. Roar for Moore's Harness and Saddlery. 404 South 13th Street, Omaha, Neb. I have adopted the Lion as a Trade Mark, and all my goods will be STAMPED with the LION and my NAME on the same. NO GOODS ARE OBTAINED WITHOUT THE ABOVE STAMPS. The best material is used and the most skillful workmen are employed, and at the lowest and most reasonable prices. Write for a catalogue of good will confer a favor by sending for one. DAVID SMITH MOORE. Dexter L. Thomas & Bro. WILL BUY AND SELL REAL ESTATE AND ALL TRANSACTION CONCERNED THEREWITH. Pay Taxes, Rent Houses, Etc. IF YOU WANT TO BUY OR SELL. Call at Office, Room 8, Creighton Block, Omaha, Neb.

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Nebraska Land Agency. DAVIS & SNYDER, 1505 Farnham St., Omaha, Nebraska. 400,000 ACRES. Carefully selected land in Eastern Nebraska for sale. Great Bargains in Improved Farms, and Omaha city property. WEBSTER SNYDER. O. F. DAVIS. Ledy Land Co's C. P. B. Neb.

DE VEAUX'S WASHING MACHINE. The Only Machine that Will Do just as is Advertised. It Will Wash Faster, It Will Wash Cleaner, It Will Wash Easier, It Will require no Rubbing, It will do a large family Washing in 30 Minutes. It Will Wash Equally well with Hard or Soft Water. It does away with wash boilers and wash boards, and will pay for itself in full and the wear of clothes in a year. No steam in the kitchen. A child 10 years of age can do the washing faster than any woman can write and hang out the clothes. CALL AT THE FACTORY. DAN SULLIVAN & SONS, 1110 Farnham Street, Agents. Established 11 Years. Assets Represented \$82,000,000.00. Active First Life Agents wanted. T. TAYLOR & CO., 14th & Douglas Sts.

LET IT BURN! My house and furniture is insured with C. T. TAYLOR & CO., Cor 14th and Douglas. \$25,000,000 APPROPRIATED For Pensions SPECIAL ATTENTION. If parties wanting how discharge papers or claiming pensions, increase of pensions, bounty, back pay, prize money, transportation money, commutation of railroads, lands, patents, etc., will send their claims addressed to me, I will see that their interests are cared for. Letters asking information should have stamp enclosed for reply. JAMES MORRIS, (Special Correspondent) 1804 "G" St. N. W., Wash. D. C. WISE'S Axle Grease NEVER GUMS! Used on Wagons, Buggies, Reapers, Thrashers and Mill Machinery. It is CALCIUM TO FARMERS AND TEAMSTERS. It cures scratches and all kinds of sores on Horses and Stock, as well as on men.

PROPOSALS FOR FILLING ALLEY. Scaled proposals will be received by the undersigned until 12 o'clock p. m., Monday, Sept. 12, 1881, for furnishing the Board of Education with wood—hard and soft, and coal—hard and soft, for the use of city schools for the ensuing year. Proposals to be endorsed "Bids for furnishing Fuel." The Board reserves the right to reject any or all bids. CHARLES CONYER, Secretary.

PROPOSALS FOR WOOD AND COAL. Scaled proposals will be received by the undersigned until 12 o'clock p. m., Monday, Sept. 12, 1881, for furnishing the Board of Education with wood—hard and soft, and coal—hard and soft, for the use of city schools for the ensuing year. Proposals to be endorsed "Bids for furnishing Fuel." The Board reserves the right to reject any or all bids. CHARLES CONYER, Secretary.

NOTICE TO CONTRACTORS. Scaled proposals will be received by the Board of County Commissioners of Douglas County, Nebraska, until Thursday, September 15, 1881, at 2 o'clock p. m., for the erection of a court house building at Omaha, in said county. In assessing work with plans and specifications on file in the county clerk's office. Each bid must be accompanied by a good and sufficient bond in the sum of Five thousand dollars, conditioned that the bidder will enter into contract and give a good and sufficient bond to the county clerk. Separate bids for the several parts of the building will be considered and all proposals must be made upon schedules prepared by the architect and furnished on application to the county clerk. The Board reserves the right to reject any or all bids. By order of the Board of County Commissioners, JOHN R. MANCHESTER, County Clerk, Omaha, Aug. 11, 1881.

PROPOSALS FOR HAY. Scaled bids will be received by the undersigned up to Friday, the 12th day of August, A. D. 1881, at 4 o'clock p. m., for furnishing sixty (60) tons of hay for the use of the law department during the balance of the present fiscal year. Any information needed will be furnished by J. J. Gallagher, City Clerk. The right is reserved to reject any and all bids. Envelopes containing proposals shall be marked "Proposals for furnishing Hay" and be addressed to the undersigned. J. J. L. C. JEWETT, City Clerk, Omaha, Aug. 4, 1881.

M'DONALD AND HARRISON, 1408 FARNHAM STREET, ARE NOW OFFERING FOR ONE MONTH ONLY DECIDED BARGAINS IN Ladies' Suits, Cloaks, Ulsters, Circulars, Etc., AT COST. 200 Handsome Suits, at \$5.00; 300 Stylish Suits, \$10.00; 75 Black Silk Suits, \$17.00. We have several lots of staple goods which will be offered at SEVENTY-FIVE CENTS ON THE DOLLAR. All ladies should avail themselves of this great sale of CORSETS AND UNDERWEAR, LINEN AND MOHAIR ULSTERS, SILK AND LINEN HANDKERCHIEFS, LAWN SUITS AND SACQUES. McDONALD & HARRISON.

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