

DESERET NEWS.

Truth and Liberty.

NO. 29.

GREAT SALT LAKE CITY, WEDNESDAY, SEPTEMBER 22, 1858.

VOL. VIII.

Though storm-clouds gather o'er our head.

(Written in a Lady's Album.)

BY ELDER W. G. MILLS.

Though storm-clouds gather o'er our head,
Like vengeful sprites commingling;
And winds on rapid pinions speed,
A deathlike dirge attuning;
Though chills attack the shrinking frame,
That seems of life a weary;
While every scene by field and stream
Is comfortless and dreary:

Yet soon the teeming clouds will burst
Their vapory margined river,
And nature thus with plenty nursed
Will smile and thank the Giver;
The piercing blasts will genial be,
Like babes at rest reclining,
As Sol peeps forth, for night nor day.
Nor clouds obscure his shining.

Thus when the path of life appears
By clouds and storms attended,
And distant scenes are viewed through tears,
And human hope suspended;
The hand that stills the wildest storm,
And wisely governs nature,
Will shield the humble heart from harm
And blessings give the creature.

And though the present may be dark,
Our pleasures from us given,
He that provided Noah's Ark
Still rules in earth and heaven;
He keeps the bird that wings the air,
Protects the fragile flower;
And we, the subjects of His care,
Shall realize His power.
G. S. L. CITY, April, 1858.

[From Life Illustrated.]

THE TELEGRAPH TO EUROPE.

The Atlantic cable is the theme of every tongue, and the gigantic undertaking of laying it has been successfully accomplished. John Bull has given the right hand of telegraphic fellowship to Brother Jonathan; an iron cord unites the two hemispheres in a very convenient way for *tête-à-tête*. The electric current with its load of intelligence is connected to the wires, and in a twinkling the message has traversed broad ocean, giving us information for which the most rapid steamers would have made us wait seven days.

The electric telegraph, as such, is no very new thing. To no single individual is due the credit of having invented the telegraph as a whole, but it has been made from small beginnings, progressing step by step until it has reached its present state of advanced improvement. Though telegraphing by electricity was known as early as 1774, yet the first line put up in the United States for the transmission of messages from city to city was the one between Baltimore and Washington, in 1844. This line was built for and worked by the Morse instrument, which, on account of its certainty and simplicity, is still in most general use in this country.

It is necessary to the use of any instrument that a current of electricity shall be supplied to work it. Electricity is to the telegraph what steam is to the steam-engine—the motive power. The plan now adopted is to have what is called a line-battery to send a current through the wire from station to station, and a local battery to work the instrument. To operate in this way, what is termed a "receiving magnet" is used, and by means of this the local battery is brought into action to work the recording register. In a few words, it consists chiefly in the combination of a style or point, which is operated by electricity, with clock-work and a drawing-off apparatus by which the intervals of time, which the style touches the paper and also those in which it is withdrawn from it, may be accurately registered, the steady motion of the clock-work producing this effect, and by registering these different intervals of time corresponding to the motion of the operating key at a distant station, a message may be intelligibly transmitted.

That the credit of a successful attempt to connect the two continents is due to the energy and perseverance of our fellow-citizen, Cyrus W. Field, we suppose there is no doubt, but that he was the originator of the idea seems not quite so certain. Be that as it may, it is certain that the great scheme that has accomplished the result was planned in the dining-room of Cyrus W. Field, 84 Gramercy Park, one evening in the early part of March, 1854, when Cyrus W. Field, his brother David Dudley Field, Samuel F. B. Morse, Peter Cooper, Moses Taylor, Marshal O. Roberts, and Chandler White were present. Maps were laid upon the table, and conversation ensued upon the practicability of the enterprise and the

best route, and there was formed an association for the purpose of establishing telegraphic communication between America and Europe, from which resulted the present success.

The two Fields and Mr. White went to Newfoundland to ask for a charter and assistance. They arrived at St. John's in March, 1854, and called upon the Governor, who convoked the Executive Council the same day. The Governor gave a favorable answer in an hour or two, and immediately sent a special message to the legislature, then in session, recommending them to pass an act of incorporation, with a guaranty of the interest on the Company's bonds to the amount of \$200,000, and a grant of fifty square miles of land on the Island of Newfoundland, to be selected by the company. These terms were agreed upon, and out of the agreement has resulted that splendid success which has astonished the world.

We would not, however, take all the credit for our countrymen. The honors are so great they can well be shared. Much as Americans have done in the matter, the thing would not have been accomplished but by aid and influence of Englishmen and English capital. We have a few among us who are not satisfied with the result *per se*, but seem to be almost sorry for the success, because both ends of the cable rest on British soil! Fie on all such narrow, sectional feelings! The world should be our country, and all men our countrymen; and more than any one thing that has ever been done in any age to bring about the consummation so devoutly to be wished, is the cable which, safely anchored on either shore of the wide Atlantic, shall hasten the good time coming—

"When man shall be
Unselfish—free,
And each shall be to each a brother."

The cable is 11-16ths of an inch in diameter, and made up as follows:

The central strand is composed of seven small copper wires (No. 22); this is surrounded by three distinct layers of gutta percha, for the purpose of insulating the wire. This is covered by being wound with yarn saturated with a mixture of pitch and tar. Around the whole are eighteen protecting strands of annealed iron wire, each strand being composed of seven wires, No. 22. There are therefore seven miles of copper and 126 miles of iron wire in each mile of cable, weighing about a ton, and yet the flexibility is so great that it is nearly as manageable as a small rope.

PROF. SAMUEL F. B. MORSE.

Samuel Finley Breese Morse, best known as the inventor of the electric telegraph, is the eldest son of Rev. Jedediah Morse, the first American geographer, and was born in Charlestown, Mass., April 27th, 1791. He was educated in Yale College, and graduated in 1810.

A passion for art was early developed, and he was sent to England to study, and was there the pupil of Allston, West, and Copley. He made rapid progress in his profession, and won a great deal of praise in London, but on his return to America met at first with but poor encouragement. He was, in the end, however, successful, and on settling in New York in 1822 found his talents appreciated and skill put in requisition. He painted a full-length portrait of Lafayette for the corporation of New York, and shortly afterward formed that association of artists which resulted in the establishment of the National Academy of Design. The idea of the electric telegraph first occurred to him on his return from a second visit to Europe in the packet-ship *Sully*, in 1832. In 1835, after great difficulty and discouragement, he succeeded in fully demonstrating the practicability of his invention, by putting in operation in the New York University a model of his "Recording Electric Telegraph." In 1837 his caveat was filed in the Patent-Office in Washington, but it was not till 1840 that his patent was finally perfected. The first electric telegraph in the United States, between Washington and Baltimore, was completed in 1844. Since that time a perfect net-work of wires has been extended over the whole country. The transatlantic submarine telegraph is the grand crowning triumph for Professor Morse's fame.

CYRUS WEST FIELD.

Our article would be incomplete without a brief sketch of the man through whose instrumentality the great accomplishment of the age has been wrought.

We copy the following from the Springfield Republican:

Cyrus W. Field having achieved greatness and renown through the success that has crowned his energy and perseverance in the laying of the Atlantic telegraph cable, the public is interested to know what manner of man he is, and to learn the chief incidents of his history. His family is one of the most honorable in Western Massachusetts, with members distinguished in nearly every department of active life. Rev. D. D. Field, a native of East Guilford, Conn., a graduate of Yale College in 1802, first settled in Haddam, Connecticut. His children were seven sons and two daughters. Of the former are, David Dudley Field, one of the first lawyers of New York city; Jonathan E. Field, a member of the Berkshire bar, and resident of Stockbridge; Cyrus West

Field, whose name is now a household word; Matthew D. Field, of Southwick, in this county, a civil engineer, and one of the Republican senators from Hampden county in 1857; Stephen I. Field, a judge of the Supreme Court of California; and Rev. H. M. Field, formerly pastor of the Congregational Church in West Springfield, and now one of the conductors of the New York Evangelist. The seventh and oldest son, Timothy, went to sea thirty or more years ago, and has never been heard from since. One of the daughters married the brother of Mr. Cyrus Field's wife, and died at Paris within a few years. The other daughter married Rev. Josiah Brewer, and became with him a missionary in Greece, whence they have returned, and now reside at the family home in Stockbridge, in this State.

In 1819, Rev. Dr. Field removed from Haddam to Stockbridge, Berkshire County, Massachusetts, and became pastor of the village church there, a relation he continued till 1837, when it was dissolved, and he returned to his old charge at Haddam for a few years; but he retired from the ministry some ten years since, and came to Stockbridge again, where, among his old friends, and with a portion of his children, he is living out in peace and honor the few remaining days of a long and useful life. Thus Stockbridge may fairly claim to be the family home; here the father passed his most active and important years; and here his sons were reared and prepared for the important lines of action into which they have nearly all since fallen. David Dudley Field and Rev. Henry M. are graduates of Williams College, in the same county.

Mr. Cyrus W. Field engaged early as a clerk for his older brother, Matthew, who was a paper manufacturer at Lee. About the period of his majority, perhaps before, he engaged in the same business on his own account in Westfield, in this county, but failed about 1837. He subsequently went to New York and established a paper commission house—one of the first of the large modern establishments of that description. Ill success overtook him here again; but it did not conquer its victim. Nerved to new labor, he continued the same business, commanded fortune, paid off all his old debts, and became a rich man. Liberal in dispensing the blessings of his wealth, he was the patron of art, and surrounded his father, at Stockbridge, with all the comforts and luxuries that old age covets. Some five or six years ago, he seemed to have conceived the purpose of constructing the ocean telegraph, and at once threw into its consummation all his native enthusiasm, all his acquired knowledge of men and things, all his energy and perseverance, and all his pecuniary means.

There seems to be no divided honor in this enterprise—no possibility of question as to the author of the great achievement of modern civilization. Hundreds may have dreamed and suggested the idea; but Mr. Field was the first to set seriously at work for its realization, and the first to accomplish it. Fortunate is he in having completed his own work. No Fulton can come in to rob him of the honor.

Mr. Field is about 43 years old, and looks younger, if possible. He has a light, lithe body, all muscle and nerves, and no flesh, five feet eight inches high, and weighs perhaps 140 pounds. His features are sharp and prominent, a nose that almost exhausts his face; eyes small, sunken, gray or blue, and apparently half closed; a large forehead; and a full head of auburn hair. There is a youthful, almost boyish appearance about him, that makes him seem younger than he really is. There is little of the impressiveness of figure and manner about him that distinguishes his brother Dudley, of the New York bar.

We do not know that these facts in the history of the new Moral Hero of the Christian Civilization are exact to date and letter; but they trace the outline of his life and character with correctness.

By Atlantic Telegraph.

VALENCIA VIA TRINITY BAY, }
August 16. }

To the Honorable, the President of the United States:—

Her Majesty desires to congratulate the President upon the completion of that great international work in which the Queen has taken the deepest interest. The Queen is convinced that the President will join with her in fervently hoping that the electric cable which now connects Great Britain and the United States will prove an additional link between the nation whose friendship is founded upon their common interest and reciprocal esteem. The Queen has much pleasure in thus communicating with the President, and renewing to him her wishes for the prosperity of the United States.

PRESIDENT BUCHANAN'S PEPLY.

The President cordially reciprocates the congratulations of Her Majesty, the Queen, on the success of the great international enterprise accomplished by the science, skill and indomitable energy of the two continents. It is a triumph more glorious, because more useful, than was ever won by the conqueror on the field of battle.

May the Atlantic Telegraph Company, under

the blessing of Heaven, prove to be a bond of perpetual peace and friendship between the kindred nations, and an instrument destined by Divine Providence to diffuse religion, civilization, liberty and law throughout the world. In this view will not all the nations of Christendom spontaneously unite in the declaration that it shall be forever neutral, and that its communications shall be held sacred to the places of their destination in the midst of hostilities!

(Signed) JAMES BUCHANAN.
Washington City, August 16, 1858.

Trial of Breech-loading Arms.

It will be recollected by most of our readers that Congress, at the last session, made an appropriation of \$25,000 for the purpose of altering the government muzzle-loading firearms to breech-loading, and authorized a trial to be made of all breech-loading arms susceptible of adaptation to this change, whose owners were willing to compete, with a view of ascertaining their relative merits. The Board of Ordnance officers, consisting of Col. Ripley, Captain Maynadier, and Major Ramsay, detailed by the Secretary of War to examine and report on such plans as might be submitted by inventors, have lately concluded their examination, and it is presumed will soon furnish their report to the Secretary. The programme of the recent trial, which took place at West Point, was as follows: 20 rounds for accuracy, at 100 yards; 80 rounds more, to make 100, for endurance; 20 rounds for rapidity; 20 rounds for accuracy at 600 yards; 3 rounds for penetration.

The competing guns, named in the order in which they were filed before the Board, were Morse's, Joslyn's, Mt. Storm's, Merrill's, Maynard's, and Sharp's; and all of them had been altered from muzzle to breech-loading, Storm's having been altered from an old U. S. rifle, and although, in consequence, somewhat rough in appearance, elicited marked evidences of approval from the general ease and facility with which it was handled throughout the trial. The following is the tabular statement, as prepared by the correspondent of the New York Times, the guns being placed in the order of their apparent superiority in each branch of the trial:

TWENTY ROUNDS FOR ACCURACY, AT ONE HUNDRED YARDS.

Mt. Storm,	1	Morse,	4
Joslyn,	2	Maynard,	5
Sharp,	3	Merrill,	6

All the guns stood the test in this respect, but Sharp's evidently worked hard, and Morse had twenty-eight miss-fires.

RAPIDITY—TWENTY ROUNDS.

	M.	S.		M.	S.
1. Mt. Storm,	2	10	4. Joslyn,	2	55
2. Merrill,	2	25	5. Morse,	3	40
3. Sharp,	2	45	6. Maynard	4	15

TWENTY ROUNDS FOR ACCURACY—SIX HUNDRED YARDS.

Balls in target.		Balls in target.	
1. Mt. Storm,	11	4. Joslyn,	5
2. Sharp,	7	5. Maynard,	3
3. Morse,	7	6. Merrill,	3

PENETRATION—INCH BOARDS, INCH APART, THIRTY YARDS.

Mt. Storm,	1	Joslyn,	4
Morse,	2	Sharp,	5
Merrill,	3	Maynard,	6

This result being estimated by allowing for different weight of powder and ball, and not merely for the number of inches passed through, which were in the order of firing first named, to wit:—

THREE ROUNDS EACH.

Weight of ball, of pdr.	Weight of grains.	1	2	3	Total.
Morse,	744	70	12 3-8	13 1-8	37 7-8
Joslyn,	550	60	12 1-2	11	32 1-2
Mt. Storm,	500	60	12	11 1-8	33 1-2
Merrill,	744	70	13 1-4	13 3-8	33 3-4
Maynard,	744	70	11 1-4	11 1-8	32 7-8
Sharp,	550	70	10 1-4	11 1-2	31 3-4

After these results were obtained, Storm proposed that all the guns should be immersed in water for a stated period, and afterwards tried, to see what effect this exposure, to which they are likely to be subjected in practice, would have, but this was objected to. He also proposed that they should be thrown against rocks, or down precipices, to further test their powers of endurance, but all refused compliance to this course, except Sharp. Four of the guns tried were loaded with the usual cartridge, and Mt. Storm's had the additional advantage of capability of being loaded with loose powder and ball.—[Scientific American, Aug. 14.]

At a military entertainment at Cincinnati, in giving the regular toasts, "the Army" was not forgotten, when a distinguished Colonel rose, and commenced by saying:—

"Here's to the Army—may it never want!" and there he rested, colored, stammered, and was completely lost; when a shrewd one sitting at his side whispered, "And may it never be wanted!"—which the Colonel repeated in a clear voice, and which produced the effect of calling down the house.—[From Harper.]

Happiness is a perfume that one cannot shed over another without drops falling on one's self.