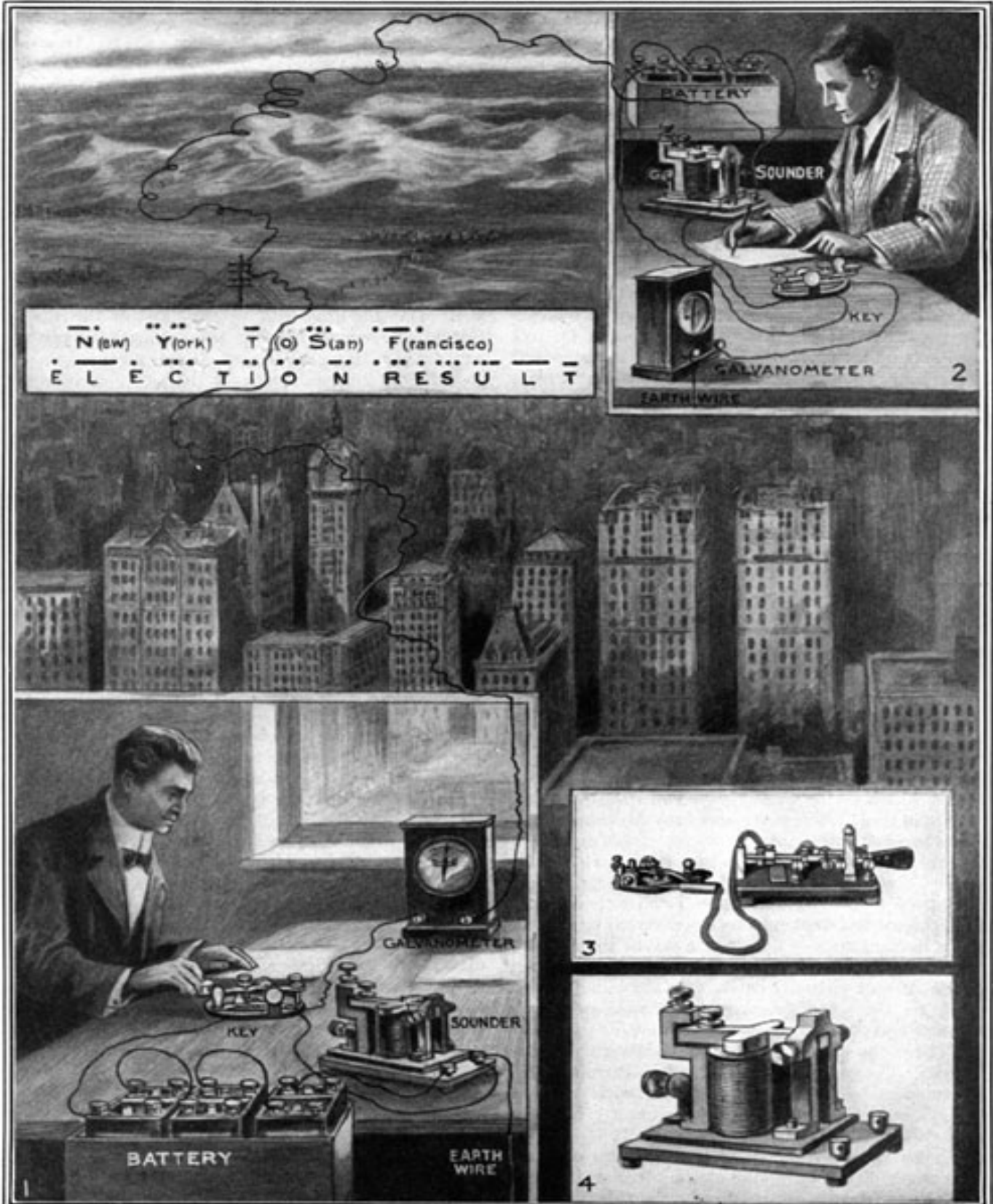


# THE STORY OF "DOTS" AND "DASHES"



Every time the sending operator (1) presses his key, the scander at the right of the receiving operator (2) clicks. A quick double click is a "dot"; two clicks separated by a distinct interval is a "dash." The sample message shows how telegraphers abbreviate, using initials for cities, and so on. The "vibroplex" (3), sometimes called a "bug," is a device attached to the regulation sender, which makes sending easier, doing away with "telegrapher's cramp." "Dashes" are sent by pressing the key to the left; but when it is pressed to the right, a vibratins

# S. F. B. Morse. Telegraph Signs.

N<sup>o</sup> 1647.

Patented Jun. 20, 1840.

Example 1<sup>st</sup>

1<sup>st</sup> For Numerals



Example 2<sup>d</sup>

For Compound Numerals  
Showing the numerals combined together



Example 3<sup>d</sup>

2<sup>d</sup> For Letters



The System of Type

Example 4<sup>th</sup>

1<sup>st</sup> For Numerals



Example 5

2<sup>d</sup> For Letters



Example 6.

Type for circular  
Post Rule



Fig. 1  
Vertical  
Block

Inventor  
S. F. B. Morse

Pittsfield June 25. 1864

My dear Sir

Accept my thanks for your kindness in sending me the very interesting and able letter of the Hon. Secretary Seward to Mr. Chandler, on the subject of Mr. Collins' petition for the aid of the Government in constructing our Overland international Telegraph line. I had seen extracts from it & allusions made to it in several papers, and was upon the point of soliciting a copy from Mr. Seward as a document I wish to preserve, but your friendly consideration makes it unnecessary.

To you, as well as to myself, the rapid progress of the Telegraph throughout the world, must seem wonderful, and with me you will doubtless often recur to our friend Annie's inspired message "What hath God wrought." It is, indeed, his marvellous work, and to him be the glory.

Early in the history of the invention in forecasting its future, I was accustomed

*My dear Sir,*

*Accept my thanks for your kindness in sending me the very interesting and able letter of the Hon. Secretary Seward to M. Chandler on the subject of W. Collins petition for the aid of the government in constructing our Overland international Telegraph line. I had seen extracts from it and allusions made to it in several papers, and was upon the point of soliciting a copy from M. Steward as a document I wish to preserve, but your friendly consideration makes it unnecessary.*

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Source 4

Copy the primary source, cut apart and tape together into a strip. This was the first telegraph sent by Samuel Morse.

This sentence was written from Washington by me at the Baltimore Terminus at 8.<sup>h</sup> 45 min  
A.M.

W h a t h

in on Friday May 24.<sup>th</sup> 1844, being the first<sup>ever</sup> transmitted from Washington to Baltim

a t h g o

Baltimore, <sup>by Telegraph</sup> and was indited by my much loved friend Annie G. Ellsworth. Saml. F. M.

D W T O U

worth. Saml. F. Morse. Superintendent of Elec. Mag. Telegraphd.

u g h t. ?



Source 5

Clipart

[1843?]

Conductors

Estimate of Carrying on Posts. -

to the Capitol from the Patent Office. -  
A man will prepare 16 posts W. day, at present  
It will take 67 posts from Patent Off. to Cap.  
that is 5 days, say one week.

100 feet apart

52 posts in a mile

32  
16  
48

40 miles  
16 | 2080 posts to Baltimore  
130 days for one man to prepare them

Four men would prepare them in one month ~~or~~

or 40 days,

4 Men at 1.25 W. day  
40 days

makes \$50.00 each or 200 dollars for four

52 posts  
12 miles to Beltsville

16 | 624 posts  
39 days one man, 10 days four men \$48.75  
say 50 dollars to prepare posts

99350

Washington May 31. 1844 -

Dear Sidney,

You will see by the Paper, how great success has attended the first efforts of the Telegraph. That sentence of Annie Ellsworth's was divinely indited, for it is in my thoughts day and night. "What hath God wrought." It is his work, and he alone could have carried me thus far through all my trials, and enabled me to triumph over the obstacles physical and moral which opposed me; "Not unto us, not unto us, but to thy name O Lord be all the praise!" — I begin to fear now the effects of public favor, lest it should kindle that pride of heart and self-sufficiency, which dwells in my own, as well as <sup>in</sup> other's trusts, and which, <sup>alas!</sup> is so ready <sup>to</sup> be <sup>inflamed</sup> by the slightest spark of praise. I do indeed feel gratified, <sup>and it is right I should rejoice</sup> but I rejoice with fear, and I desire <sup>that a sense of dependence,</sup> <sup>upon</sup> and increased obligation to the Giver of every good and perfect gift, may keep me humble, and circumspect.

The Conventions at Baltimore happened most opportunely for the display of the powers of the Telegraph, especially as it was the medium of correspondence <sup>in one instance</sup> between the <sup>Democratic</sup> Convention and the first candidate elect for the Vice Presidency. The enthusiasm of the



crowd before the window of the Telegraph Room  
in the Capitol, was excited to the highest pitch, at  
the announcement of the nomination of the Pres-  
idential Candidate, and the whole of it afterwards  
centered upon the Telegraph. ~~afterwards~~ They  
gave the Telegraph 3 cheers, and I was called to  
make my appearance at the window, when three  
cheers were given <sup>to me</sup> by some hundreds present, composed  
<sup>mainly</sup> of ~~members~~ members of Congress. - Such is the feeling in Con-  
gress that many tell me, they are ready to grant any  
thing. Even the most inveterate opposers, have changed  
to admirers and one of them Hon. Cave Johnson, who rid-  
iculed <sup>my system</sup> ~~it~~ last session by associating ~~my system~~ <sup>it</sup> with the ~~most~~  
~~any~~ tricks of animal magnetism, came to me and said, "Sir  
I give in, it is an astonishing invention." When I see all this,  
and such enthusiasm every where manifested, and contrast  
the present with the past season of darkness and almost  
despair, have I not occasion to exclaim "What hath God wrought?"  
Surely now but He who has all hearts in his hands, and  
turns them as the rivers of water are turned, could so  
have brought light out of darkness. Sorrow may con-  
tinue for a night but joy cometh in the morning. -  
Pray for me then, my dear brother, that I may have a  
heart to praise the Great Deliverer, and in future  
when discouraged or despairing be enabled to remember  
His past mercy, and in full faith rest all my cares on  
him who careth for us. -

From the first paragraph.....

*Dear Sidney,*  
*You will see by the papers, how great \_\_\_\_\_ has attended the first efforts of the Telegraph. That sentence of Annie Ellsworth's was divinely \_\_\_\_\_, for it is in my thoughts day and night. "What hath God wrought?". It is his work, and he alone could have carried me thus far through all my trials and enabled me to triumph over the obstacles physical and moral which oppose me.*

From the second paragraph.....

*The Convention at Baltimore happened most opportunely for the display of the powers of the Telegraph, especially as it was the medium of correspondence in any instance between the Democratic Convention and the first candidate elect for the Vice Presidency. The enthusiasm of the crowd before the window of the Telegraph Room in the Capitol was excited to the highest pitch at the announcement of the nomination of the Presidential Candidate, and the whole of it afterward seemed turned upon the Telegraph. They gave the Telegraph 3 cheers, and I was called to make my appearance at the window, when three cheers were given to me by some hundreds present, composed mainly of members of Congress.*

Washington May 7<sup>th</sup> 1844

Dear Sidney,

I have a moment just before retiring to bed very much fatigued, to write a few lines.

This morning my young friend Miss Annie G. Ellsworth left Washington with her Cousin Mr. Goodrich Smith for New York to pass a week or two in the city. She will be at Mr. Manning Tracy's N<sup>o</sup>. 107 Second Avenue, 2 doors above D. Street I gave her a letter to sister Catherine, and for my sake and her father's & mother's I wish you and sister would become acquainted with her, and particularly my Susan if she arrives in N York soon, as I expect she will be with you in a day or two at furthest.\* Let me know when Susan <sup>and</sup> the <sup>two</sup> Charles arrive, for if they come within the next fortnight, I think I can contrive to run on and pay a visit of two or three days, unless my marplot Smith should prevent again, as he is likely to do if he comes on here. As yet there is no settlement of that matter, and he seems determined (inter nos,) to be as ugly as he can and defeat all application for an appropriation if I am to have the management of it; he chafes like a wild boar, but when he finds he can effect nothing by such a temper, self interest may soften him into terms. — You will see by the papers

\* I had a letter from Susan yesterday in which she says she shall be in New York, (God willing,) in three weeks from the date and it is now four weeks. —

that the Telegraph is in successful operation for 22 miles to the Junction of the Annapolis road with the Balt. & Wash. road. The nomination of W. Frelinghuysen as V. Pres.<sup>t</sup> was written, sent on, and the receipt acknowledged back, in 2 minutes and 1 Second, a distance of 44 miles. The news was spread all over Washington, one hour & 4 minutes before the cars containing the news by express arrived.

In about a fortnight I hope to be in Baltimore and a communication will be established between the two cities. —

Good bye I am almost asleep from exhaustion so excuse abrupt closing. Love to Catherine & Emily, and the Children and to Richard, Louisa and family. —

Your affectionate brother  
as ever  
Saml. D. Morse

P.S. I sent you a few days ago one of W. Ellsworth's Reports. Did you get it?

Source 8 Transcription

From the last line on the first page and the top of the second page of another letter written in May 7, 1844 from Samuel Morse to his brother Sidney

*You will see by the papers that the Telegraph is in successful operation for twenty-two miles. . . . The nomination of Mr. Frelinghuysen as Vice-President was written, sent on, and the receipt acknowledged back in two minutes and one second, a distance of forty-four miles. The news was spread all over Washington one hour and four minutes before the cars containing the news by express arrived. In about a fortnight I hope to be in Baltimore, and a communication will be established between the two cities.*