H. H. SMITH.

TELEGRAPHIC DOT TRANSMITTER.

APPLICATION FILED JUNE 22, 1910.

982,638.

Patented Jan. 24, 1911.

2 SHEETS—SHEET 1.

Fig 1

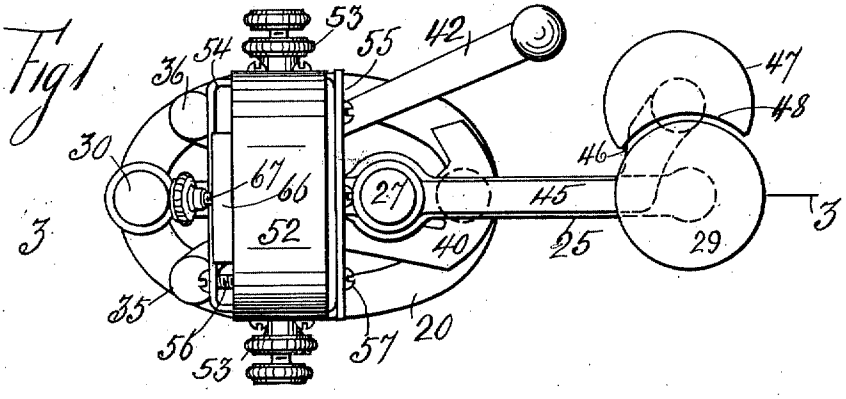
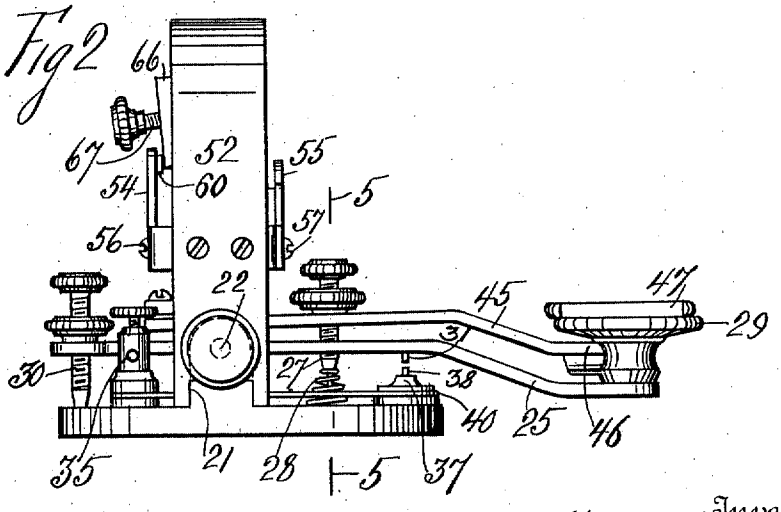


Fig 2



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2 SHEETS—SHEET 2.

Fig 3

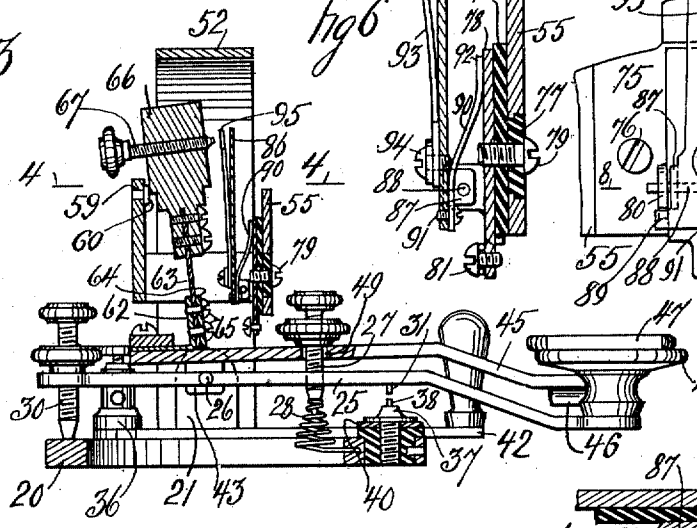

Fig 6

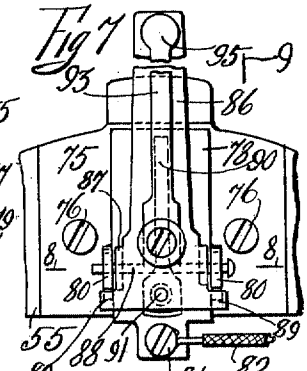

Fig 7

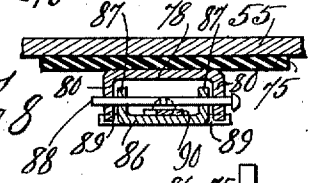

Fig 8

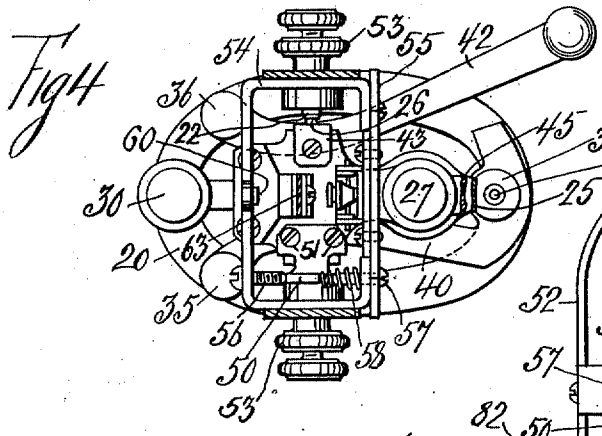

Fig 4

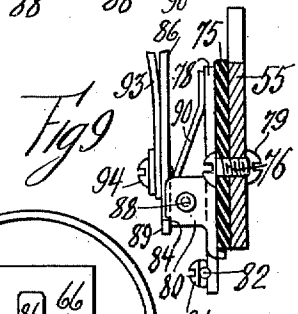

Fig 9

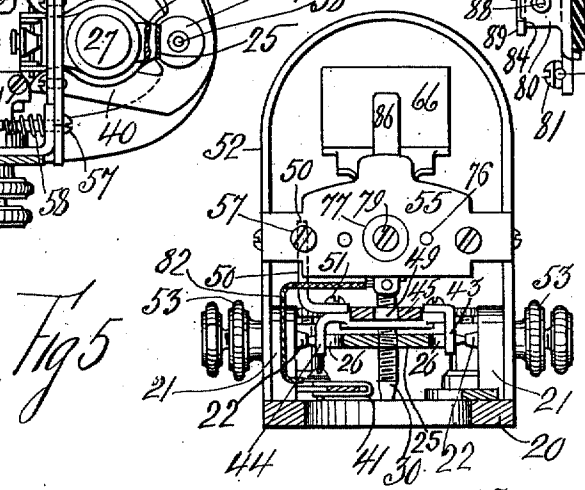

Fig 5

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UNITED STATES PATENT OFFICE.

HARRY H. SMITH, OF BROOKLYN, NEW YORK.

TELEGRAPHIC DOT-TRANSMITTER.

982,638. Specification of Letters Patent. Patented Jan. 24, 1911.

Application filed June 22, 1910. Serial No. 568,267.

To all whom it may concern:

Be it known that I, HARRY H. SMITH, a citizen of the United States, and a resident of the borough of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in a Telegraphic Dot-Transmitter, of which the following is a specification.

This invention relates to a telegraph dot transmitter, which can be attached to an ordinary telegraphic transmitter key.

The organization of the invention comprises a vibrator which is actuated by a supplemental lever by means of which the circuit is consecutively opened and closed, so that a predetermined number of dots can be automatically transmitted on the line. The dashes are made with the ordinary key to which the invention is attached. The supplemental lever is supported on the pivots of the main lever with the main portion of its length over the said main lever, and the vibrator extends up from said supplemental lever.

Referring to the drawings, Figure 1 represents a top plan view of an ordinary telegraphic key with the invention attached thereto, Fig. 2 is a front elevation of Fig. 1, Fig. 3 shows a partial section of Fig. 1 on the line 3, 3, Fig. 4 represents a top plan view and section of Fig. 3, as on the line 4, 4, Fig. 5 is a right hand end view and section of Fig. 2 on the line 5, 5. Fig. 6 represents an enlarged portion of Fig. 3, Fig. 7 shows a left hand side view of Fig. 6, Fig. 8 is a section of Fig. 7 on the line 8, 8, and Fig. 9 shows a section of Fig. 7 on the line 9, 9.

An ordinary base frame is represented at 20, from which extend upwardly the brackets 21, that carry in threaded engagement therewith the pivot bearings 22. A main key lever 25 has extending from its sides the pivots 26 that are supported in the pivot bearings 22. A spring adjusting screw 27 is in threaded engagement with about the central portion of the lever 25, and bears on a spring 28 that normally maintains the lever 25 in its upper position. A finger button 29 is carried at the front end of the lever 25, and a stop screw 30 is supported at the other end thereof, and a contact 31 extends from the lower face of the said lever 25. An insulated binding post 35 extends from the frame 20, as well as the binding post 36, which latter is not insulated from said frame. Main line wires not shown are connected with said binding posts. An insulated anvil 37 with the contact 38 extends from the frame 20, the contact 38 being in the path of the contact 31. A strip 40 carrying the binding clip 41 connects binding post 35 with anvil 37. An ordinary cut out lever 42 is pivoted on the lower end of the post 36 to close the circuit when the key is not in use.

On the pivots 26 are fulcrumed the legs 43 and 44 of the supplemental lever 45. The leg 44 is detachably connected to said lever which for the major portion of its length is directly over the lever 25. The lever 45 has a lug 46 laterally extending from the front end thereof which supports the insulated finger button 47, that has a portion thereof cut away as shown at 48 to clear the finger button 29. An opening 49 is formed in the lever 45 to clear the spring screw 27. A bracket 50 is supported on the lever 45 by means of the screws 51.

A U shaped frame 52 fitted over the brackets 21 is clamped in place by means of the knurled nuts 53 of the pivot bearings 22. The legs of the U shaped frame are connected by means of the bracket 54 and the ends of the latter are connected by the front plate 55. A stop screw 56 is supported in the rear member of the bracket 54, and a second stop screw 57 is supported in the plate 55, and a spring 58 encircles the screw 57. The rear wall of the bracket 54 has an opening 59 which supports a stop 60 preferably of leather or other non-elastic material for the vibrator to be described.

To the top face of the supplemental lever 45 is clamped the knee 62 to which latter is fastened the vibrating spring 63, by means of the plate 64 and screws 65. The said spring 63 supports the weight 66 at the upper end thereof and a contact screw 67 is in threaded engagement with said weight. The spring 63 with its weight 66 constitutes the vertical vibrator of the invention.

A plate 75 of insulating material is connected to the front plate 55 by means of screws 76, and a washer 77 of insulating material is fitted to plate 55 and bears against said plate 75. A metallic plate 78 is secured to the rear face of the plate 75 by means of screws 79. Journal lugs 80 with the notches 84 extend from the plate 78 and a binding screw 81 is in threaded engagement with the lower end of said plate. An electric wire

82 connects the binding screw 81 with the clip 44 of the strip 40.

A stop lever 86 has extending from its lower end the journal lugs 87 which, by means of the pin 88 are hinged to the journal lugs 80. Stops 89 extend from the lower end of the lever 86 which can bear against the notches 84 of the lugs 80. A spring 90 is fastened to the lever 86 by means of the screw 91, and the end 92 of said spring bears against the plate 78. A contact spring 93 is supported on the stop lever 86 by means of the screw 94, and the upper end 95 of said spring 93 is in the path of the contact screw 67.

To operate the invention the dashes of the alphabet are made in the usual way by means of the main key lever 25, and the dots are made with supplemental lever 45 by bearing down on the finger button 47 the requisite interval of time. This operation causes the bracket 50 to bear against the end of the stop screw 57, and the impetus thereby given to the vibrating spring 63 and the weight 66 causes the contact screw 67 to make consecutive contacts with the contact spring 93. While the contacts are made an electric circuit is established from the binding post 35, through the strip 40, wire 82, metallic plate 78, spring 90, stop lever 86, contact spring 93 and contact screw 67 of the vibrator, and from the latter through the supplemental lever 45 to the binding post 36. When the finger button 47 is released the spring 58 forces the bracket 50 from engagement with the stop screw 57, and causes the weight 66 to bear on the stop 60 thereby stopping all vibrations of the vibrator, and consequently the automatic transmission of dots on the line.

Having described my invention what I desire to secure by Letters Patent and claim is:

1. The combination for a telegraphic transmitter key of a supplemental lever pivoted directly on and over the main key lever of said transmitter key, and a vertical vibrator extending from said supplemental lever to consecutively open and close the electric circuit of the apparatus for specific intervals of time.

2. The combination for a telegraphic transmitter key of a supplemental lever supported on the pivots on the main key lever of said key with the major portion thereof directly over said main key lever, a vertical vibrator extending up from said supplemental lever to consecutively open and close the circuit of the apparatus, and means connected up with the supplemental lever to locate the vibrator out of action upon the release of the said supplemental lever.

3. The combination for a telegraphic transmitter key of a supplemental lever supported on the pivots of the main key lever of said key, a vertical vibrator extending up from said supplemental lever, a bracket extending up from the supplemental lever, a detachable frame connected up with the frame of the transmitter key, a pair of stop screws connected up with the former frame with their ends in the path of the bracket extending from the supplemental lever, a spring encircling one of said screws and bearing against said bracket and a contact spring extending from the detachable frame in the path of said vibrator.

4. The combination for a telegraphic transmitter key of a supplemental lever supported on the pivots of the main key lever of said key, an insulated binding post on the key, a vertical vibrator extending up from said supplemental lever, means connected with the supplemental lever to maintain it out of action upon the release of said supplemental lever, a detachable frame connected up with the frame of the key, a stop lever pivoted up with said detachable frame, a spring between said stop lever and said detachable frame, a spring on said stop lever in the path of the vibrator and electric connections between the said stop lever and the insulated binding post on the transmitter key.

5. The combination for a telegraphic transmitter key of a supplemental lever supported on the pivots of the main key lever of said key, a vertical vibrator extending up from said supplemental lever, means connected with the supplemental lever to maintain it out of action upon the release of said supplemental lever, a detachable frame over and connected up with the frame of the key, an insulated binding post for the latter frame, a plate of insulating material bearing against the detachable frame, a metallic plate bearing against said insulating material, means to clamp said plates and detachable frames together, journal lugs extending from the metal plate, a stop lever pivoted to the metallic plate, a spring on the stop lever bearing on the metallic plate, a spring extending from the stop lever in the path of said vibrator, and electric connections between the metallic plate and said binding post.

6. The combination for a telegraphic transmitter key of a supplemental lever supported on the pivots of the main key lever of said key with the major portion of said supplemental lever directly over said main key lever, an insulated binding post for the key, a knee extending from the supplemental lever, a vibrating spring extending up from said knee, a weight supported at the upper end of said spring, a contact screw carried by said weight, a U shaped detachable frame connected up with the frame of the key, a stop lever pivoted on and insulated from said detachable frame, a spring carried on

the stop lever in the path of the said contact screw, a bracket extending up from the supplemental lever, stops on the detachable frame in the path of said bracket and electric connections between said stop lever and the said insulated binding post.

7. The combination for a telegraphic transmitter key of a supplemental lever pivoted on the main key lever of said key, a vertical vibrator extending from said supplemental lever to consecutively open and close the electric circuit of the apparatus for specific intervals of time, and a stop of non-elastic material for said vibrator connected up with the apparatus.

8. The combination for a telegraphic transmitter key of a supplemental lever pivoted on the main key lever of said key, a vertical vibrator extending up from the supplemental lever, a detachable frame connected up with the frame of the transmitter key, and a stop of non-elastic material for said vibrator connected up with said detachable frame.

Signed at the borough of Manhattan in the county of New York and State of New York this 21st day of June A. D. 1910.

HARRY H. SMITH.

Witnesses:
A. A. DE BONNEVILLE,
MARTIN ZIMANSKY.