No. 780,322. PATENTED JAN. 17, 1905.

M. N. CALLENDER.

ELECTRIC DENTAL INSTRUMENT HOLDER.

APPLICATION FILED NOV. 3, 1904.

Fig. 1.

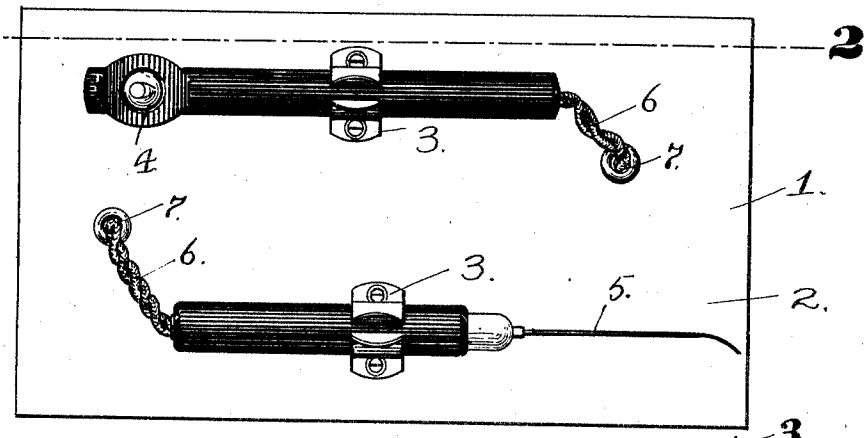


Fig. 2

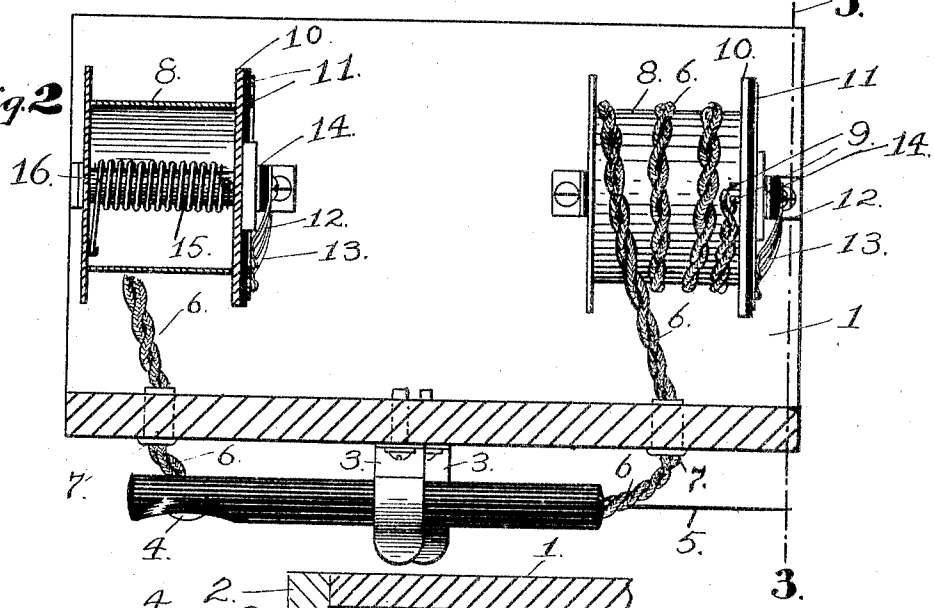
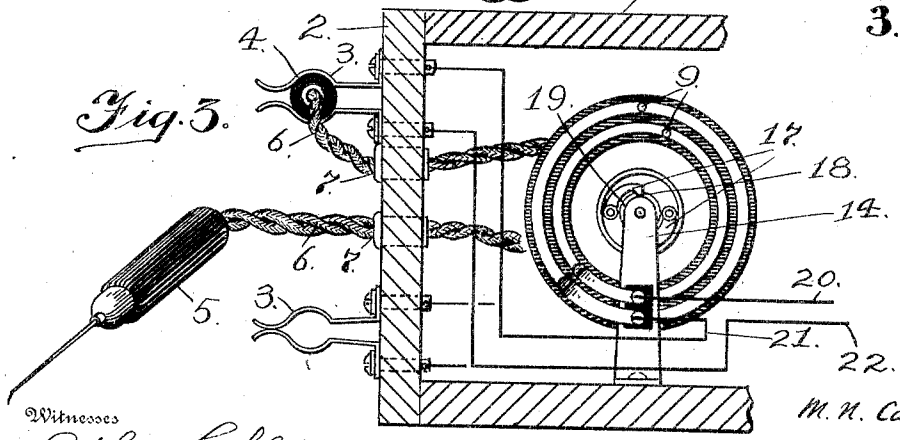


Fig. 3.



Witnesses

Arthur L. Slee.

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No. 780,322. Patented January 17, 1905.

UNITED STATES PATENT OFFICE.

MONROE N. CALLENDER, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR TO J. W. ROOCH, OF SAN FRANCISCO, CALIFORNIA.

ELECTRIC-DENTAL-INSTRUMENT HOLDER.

SPECIFICATION forming part of Letters Patent No. 780,322, dated January 17, 1905.

Application filed November 3, 1904. Serial No. 231,307.

To all whom it may concern:

Be it known that I, MONROE N. CALLENDER, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Electric-Dental-Instrument Holders, of which the following is a specification.

This invention relates to improvements in electric dental-instrument holders, the object of the invention being to provide an apparatus for supporting in a manner convenient to the operator dental instruments which utilize an electric current.

In present forms of switchboards for electric dental instruments in which the instruments are supported upon the board the cords for each instrument must be of sufficient length to allow complete freedom of movement of the instrument when being used by the operator, and these cords hang down when the instrument is in position upon the switchboard, and therefore are inconvenient and present an untidy appearance.

It is the object of my invention to provide a switchboard and holder which shall be free from this objection.

In the accompanying drawings, Figure 1 is a front elevation of the apparatus. Fig. 2 is a section thereof on the line 2 2 of Fig. 1, one of the drums being shown in section. Fig. 3 is a broken vertical section of the apparatus on the line 3 3 of Fig. 2.

Referring to the drawings, 1 represents a cabinet within which the apparatus is inclosed. This cabinet may form the upper portion of a larger cabinet containing drawers and the like, the remainder of which, however, is omitted from the drawings as immaterial to the present invention. Upon the front wall or supporting-board 2 of the cabinet are mounted any desired number of spring-clips 3, each adapted to hold a dental instrument. In the present instance only two of such spring-clips are shown; but as many more may be supported thereon as desired. The dental instruments shown in the present instance are an electric lamp 4 and a hot-air injector 5. In each case the current is supplied to the dental instrument by means of wires 6, which pass through an opening 7 in the front wall of the cabinet and are coiled around a drum 8, the ends of the wires then being connected to two binding-posts 9, extending inwardly from the flanged end 10 of the drum, said binding-post being connected through said end with concentric collector-rings 11 on the end, which revolve in contact with spring-contacts 12 13, supported upon one of the posts 14 which support the shaft 15 of the drum.

When the operator takes down a dental instrument and moves the same from the switchboard, thereby drawing the cords through the aperture 7 and causing the drum to revolve, he thereby winds up a spring 16, secured to the drum and to the shaft 15, upon which it revolves, and upon releasing the cord the spring 16 rewinds the same upon the drum, withdrawing it through the aperture 7, so that when the dental instrument is replaced in its proper spring-clip upon the switchboard the cord is withdrawn behind the switchboard and wound up out of sight. There is provided with each drum the pawl-latching device commonly used on window-shades—that is to say, upon the end of the drum are pivotally mounted a pair of pawls 17, one or the other of which is adapted to engage a notch 18, formed in the periphery of a circular support 19 for the pawls secured to the post 14. When the operator draws out the cords, unwinding the same from the drum, he will allow one of these pawls to fall into the notches, so that the drum is held stationary while the instrument is being used, and after use the operator will slightly pull the cords to withdraw the pawl out of the notch, and thereby allow the spring to wind up the drum. The two spring-contacts are connected to the source of electricity, one contact, 12, directly with a wire 20 and the other contact, 13, through the members of the spring-clip by a wire 21, leading to one of said members, and by a wire 22, leading from the other member to a source of electricity. Thus when the dental instrument is withdrawn from the spring-clip the circuit is closed through said

spring-clip; but when the instrument is inserted into the clip the circuit is broken and no current is being used.

I claim—

1. In an apparatus of the character described, a board for holding a dental instrument, electric wires leading to the instrument, a drum around which the wires are wound, a spring for winding up said drum, a pawl for holding the drum against the spring, terminals on the drum respectively connected with the ends of the wires, and connections from the terminals to a source of electricity, substantially as described.

2. In an apparatus of the character described, a switchboard having thereon means for holding a dental instrument, electric wires leading to the instrument, a drum around which the wires are wound, a spring for winding up said drum, a pawl for holding the drum against the spring, terminals on the drum respectively connected with the ends of the wires, connections from the terminals to a source of electricity, and a switch on the board in the circuit so formed, substantially as described.

3. In an apparatus of the character described, a board having thereon a spring-clip for holding a dental instrument, electric wires leading through the board to the instrument, a drum behind the board around which the wires are wound, a spring for winding up said drum, a pawl for holding the drum against the spring, terminals on the drum respectively connected with the ends of the wires, and connections from the terminals to a source of electricity, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two subscribing witnesses.

M. N. CALLENDER.

Witnesses:
FRANCIS M. WRIGHT,
BESSIE GORFINKEL.