

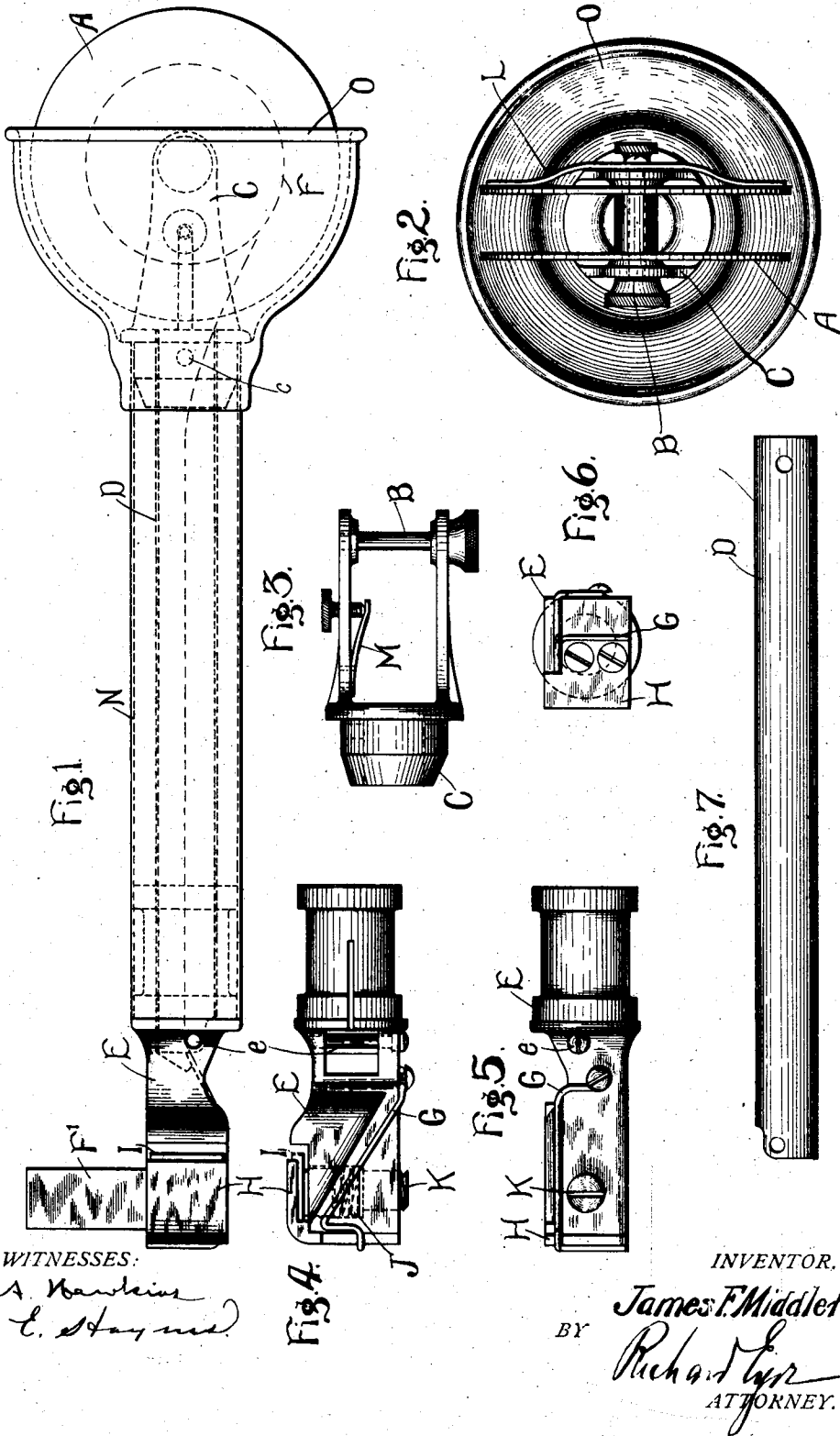
No. 762,739.

PATENTED JUNE 14, 1904.

J. F. MIDDLETON.
TAPING DEVICE.

APPLICATION FILED APR. 11, 1903.

NO MODEL.



UNITED STATES PATENT OFFICE.

JAMES F. MIDDLETON, OF PITTSFIELD, MASSACHUSETTS, ASSIGNOR TO
STANLEY ELECTRIC MANUFACTURING COMPANY, OF PITTSFIELD, MAS-
SACHUSETTS, A CORPORATION OF NEW JERSEY.

TAPING DEVICE.

SPECIFICATION forming part of Letters Patent No. 762,739, dated June 14, 1904.

Application filed April 11, 1903. Serial No. 152,098. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. MIDDLETON, a citizen of the United States, and a resident of Pittsfield, Massachusetts, have invented certain new and useful Improvements in Taping Devices, of which the following is a specification.

The object of my invention is to provide means for winding conductors with insulating material which shall be quicker and more economical and which shall give more uniform results than with former methods. The ordinary method of taping joints and terminals from a roll held in the hand is slow and laborious, requiring frequent shifting from one hand to the other in order to prevent twisting of the tape, and often the winding tension is much varied during the operation, resulting in unevenness of the finished work. My invention is designed to remedy these defects.

Referring to the drawings, Figure 1 shows a side view of a structure embodying my invention. Fig. 2 is an end view of the same. Fig. 3 shows a detail of the holder for the tape-roll. Figs. 4, 5, and 6 show details of the smaller end of my device, and Fig. 7 shows a detail of the inside tube.

A represents a spool or bobbin on which the roll of tape is placed. Spool A is loosely mounted on the shaft B, Fig. 3, which is carried by piece C and which is removable therefrom. Piece C is bored to receive tube D, and the two are secured together by pin *e*. The other end of tube D passes into and is pinned to piece E by pin *e*. The tape passes from the tape-roll F (shown in dotted lines in Fig. 1) through tube D and over pin *e*. From there it passes around guide-wire G, making a right-angled turn, then bends at right angles and passes between plates H and I, and comes out as shown at F' in Fig. 1. The purpose of guide-wire G is to enable the tape by folding over it to make the right-angled turn in its own plane without wrinkling or binding. The purpose of plates H and I is to permit adjustment of the friction,

and consequently of the tension, on the tape at F'. Plate H is secured to piece E, and plate I is pressed against plate H by spring J. Set-screw K adjusts the pressure of spring J, and consequently the tension on tape F'. Another adjustment of the tape tension is obtained by means of spring L, Fig. 2, and adjustable brake M, Fig. 3, which bear on bobbin A and by their friction increase the tape tension.

Tube N is the handle or holder for the device, and it has a bearing fit on pieces C and E, forming a bearing in which all the operating parts revolve. Tube N carries at one end the guard O, which partially surrounds and protects the tape-bobbin A.

The operation will be obvious from the above. The device being grasped by tube N, all the operative parts are free to revolve, and consequently will turn at the proper rate to keep tape F' from twisting. The tension on the tape is kept uniform by the adjustable devices heretofore described. Accordingly, the operation will be both swift and uniform.

I do not desire to limit myself to the particular construction and arrangement of parts here shown, since changes therein which do not depart from the spirit of my invention, and which are within the scope of the appended claims, will be obvious to those skilled in the art.

Having thus fully described my invention, I claim as new and desire to protect by Letters Patent—

1. In a taping device, a tubular holder, a tube rotatably mounted within said holder, and means carried by said tube for supporting and guiding a tape through said holder.

2. In a taping device, a tubular holder, a tube rotatably mounted within said holder, and means carried by said tube for supporting, guiding, and restraining the movement of, a tape through said holder.

3. In a taping device, a tubular holder, a tube rotatably mounted within said holder, means carried at one end of said tube for rotatably supporting a roll of tape, and means

carried at the other end of said tube for directing and restraining the movement of the tape.

4. In a taping device, a holder, a tube rotatably mounted therein, a shaft carried at one end of said tube adapted to rotatably support a roll of tape, means adapted to guide the tape through said tube, and means carried at the other end of the tube for directing and
10 restraining the movement of the tape.

5. In a taping device, a holder, a tube rotatably mounted therein, a shaft carried at one end of said tube adapted to rotatably support a roll of tape, means for guiding the
15 tape through said tube, and means carried at

the other end of said tube for guiding and delivering the tape at right angles to the axis of said tube.

6. In a taping device, a tube, means for guiding a tape through said tube, means carried at one end of said tube for directing and
20 restraining the movement of the tape, and a holder within which said tube is free to revolve.

Signed at Pittsfield, Massachusetts, this 9th
25 day of April, 1903.

JAMES F. MIDDLETON.

Witnesses:

L. A. HAWKINS,
R. E. HAYNES.