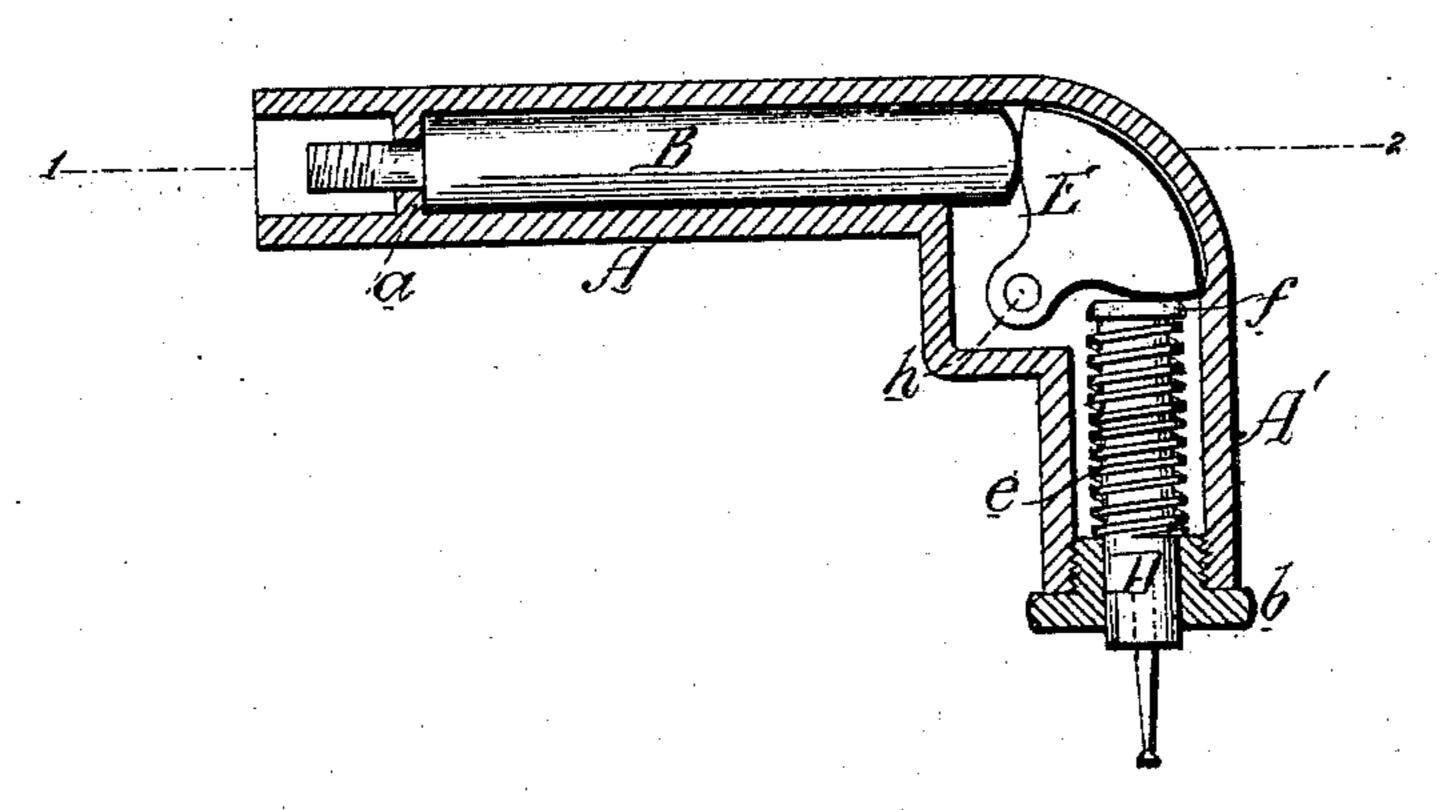
S. D. STROHM.

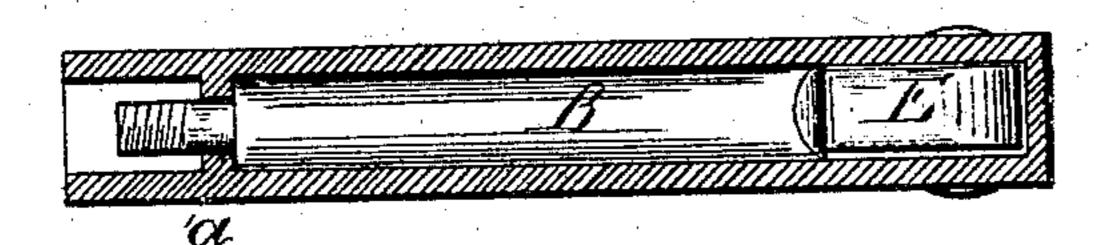
No. 170,129.

Patented Nov. 16, 1875.

FIG.1.



TIGO.2.



Witnesses. Harry Smith Thomas Milliain Samuel D. Strohm by his attorneys, Howson and lon

United States Patent Office.

SAMUEL D. STROHM, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO WILLIAM H. WRIGHT, OF SAME PLACE.

IMPROVEMENT IN DENTAL PLUGGERS.

Specification forming part of Letters Patent No. 170, 129, dated November 16, 1875; application filed October 2, 1875.

To all whom it may concern:

Be it known that I, Dr. Samuel D. Strohm, of Philadelphia, Pennsylvania, have invented certain Improved Attachment for Dental Plugging-Instruments, of which the follow-

ing is a specification:

The object of my invention is to construct a cheap, simple, and easily-applied attachment for dental plugging-instruments, whereby the tool may be caused to operate in a direction at right angles, or thereabout, to the stem of the main instrument; and this object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figure 1 is a vertical sectional view of my improved attachment for dental plugging-instruments; and Fig. 2, a sectional plan on the

line 1 2, Fig. 1.

Ordinary dental pluggers, in which the tool is arranged in line with the stem of the instrument, are objectionable, because of the difficulty and inconvenience which are experienced in applying the tool so arranged to certain parts of the mouth. This defect has been overcome by constructing an instrument with a tool-carrying spindle arranged at right angles to the operating-spindle; but this plan is also objectionable, as it is only adapted for certain classes of work, and necessitates the use, in addition, of an ordinary straight plugger. I overcome all these objections by the construction of an attachment having an operating and a tool-carrying spindle arranged at right angles, or thereabout, to each other, and adapted for ready connection to or disconnection from the operating-spindle of an ordinary plugging-instrument.

The attachment consists of a casing having two tubular arms, A and A', arranged at right angles, or thereabout, to each other, the arm A carrying a spindle, B, and the arm A' a spindle, D. Motion is communicated from one to the other of these spindles by the intervention of a lever, E, arranged at the intersection of the arms A and A', and hung loosely to a pin, h. The lever E has two faces, at right angles, or thereabout, to each other,

against one of which faces bears the end of the spindle B, and against the other that of the spindle D, the parts being held in contact with each other, and lost motion being prevented by the action of a spring, e, coiled round the spindle D, and bearing at one end against the flange f, and at the opposite end against a screw-plug, b, which closes the end of the tube A'.

The spindle B is reduced in diameter at its outer end, where it bears against a shoulder, a, on the casing, and this reduced portion is threaded, as shown, or provided with other means by which it may be connected to the end of the operating-spindle of a straight plugger, to which the tool is ordinarily attached, the socketed end of the arm A being adapted to the casing of said instrument.

When the attachment is to be used in connection with an electric plugger, the spindle B is connected to the end of the rod which receives the blow of the electric hammer.

I wish it to be understood that I do not desire to claim, broadly, an electric plugging-instrument in which the tool-carrying spindle is arranged at right angles, or thereabout, to the operating-spindle; but

I claim as my invention—

1. The within-described attachment for dental plugging-instruments, consisting of a casing having two spindles at right angles, or thereabout, to each other, one of said spindles carrying the plugging-tool, and the other being arranged for attachment to the operating-spindle of an ordinary straight plugging-instrument, substantially as set forth.

2. The combination of the casing A A', spindle B, lever E, and spindle D, having a flange, f, with the coiled spring e and screw-plug b, adapted to the end of the arm A' of the cas-

ing, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SAMUEL D. STROHM.

Witnesses:
JOHN M. DEEMER,
HARRY SMITH.