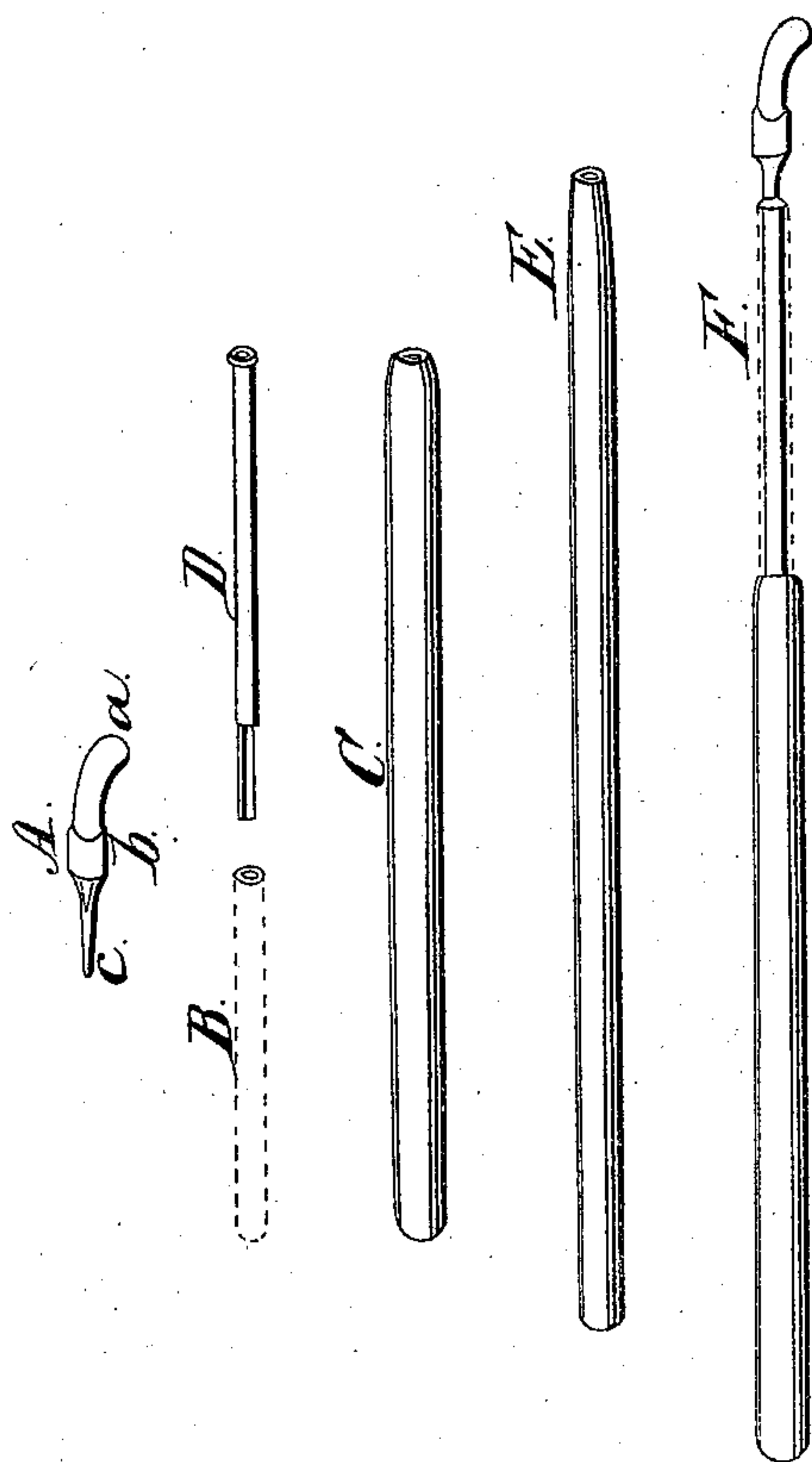


B. Wood,

Dentists' Tooth Plugger.

N^o 46,602. Patented Feb. 28, 1865.



Witnesses.

W. H. W. H. W.
C. P. W. H. W.

Inventor.

Barnabas Wood

UNITED STATES PATENT OFFICE.

BARNABAS WOOD, OF ALBANY, NEW YORK.

IMPROVEMENT IN PLUGGING-INSTRUMENTS FOR THE TEETH.

Specification forming part of Letters Patent No. 46,602, dated February 28, 1865.

To all whom it may concern:

Be it known that I, BARNABAS WOOD, of Albany, in the county of Albany, in the State of New York, have invented a new and useful Instrument for Filling Teeth; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This instrument is designed for applying the fusible metal filling known as "Wood's Fusible Metal or Plastic Metallic Filling," the object being to provide an instrument, otherwise suitable, which shall be able to receive readily a due amount of caloric, in quantity rather than intensity, convey it readily to the material to be manipulated, and retain as long as practicable the temperature requisite for manipulating. A reference to the nature of the said fusible metal and the manner of working with it, as described in my specification relating to the same, under date of 18th February, 1864, will indicate the importance of this. Hence, the part of the instrument designed for receiving the heat and conveying it to the material should have considerable capacity for and be a good conductor of heat, while the shaft or support should be the reverse.

My invention consists in so constructing and combining these parts as that the essential requisites in this respect and others are practically attained and in a simple and economical manner. This I effect, first, by forming a head or bit of metal with a bulb thereon between the beak or blade and the neck, the beak or blade, which may be of various forms and sizes suited to different cases, projecting sufficiently beyond the bulb to reach the desired places, and the neck being extended sufficient for attachment to a support or shaft; and, second, by combining this head or bit with a tubular shaft for its support, as herein described.

The head of the instrument, including the bulb, may be of silver, German silver, bronze, or other hard metal or alloy that is a good conductor of heat. The tubular shaft may be of metal the same as that of which the head is made, or of a different metal, having a lower conducting power or otherwise preferable, being made as thin as is consistent with strength; or it may be of glass, porcelain, or

other non-conductor of heat; or it may be a combination of the two, using, for example, a metal tube as thin as desired to diminish conduction, and having this inlaid, cased, or enameled with a poor conductor.

As an insulator for the protection of the lips when the tubular shaft is of metal, I incase the shaft with simply a glass tube, as shown by the drawings, which also serves as an additional support.

The head of the instrument is affixed into the shaft, according to circumstances, by means of a solder, or a luting, or any cement that will bear the heat to which it is subjected. Water-glass answers well by itself, or mixed with ground siliceous earth; also, zinc white calcined and mixed up into a paste with a solution of chloride of zinc affords a good luting for the purpose.

I most commonly make the heads of German silver. For one style of the instrument I use tubes made of glass, affixing the heads thereto by means of either of the above-named lutings. For another style I use thin tubes made of German silver from one to two inches in length, and about one-tenth of an inch, more or less, in diameter. Solder the heads to them and set them, with or without a glass casing, into ordinary handles. Sometimes I use larger metal tubes with glass tubes secured therein, affixing the head thereto with cement.

I will now describe the several parts of my invention by the accompanying drawings.

Letter A represents the head or bit of the instrument; *a*, the blade or beak; *b*, the bulb; *c*, the neck; B, metallic tubular shaft; C, handle for the same; D, insulating tubular casing for the shaft B. E exhibits a non-metallic tubular shaft extended to a handle; F, the entire instrument.

The instrument is used as follows: The fusible metal to be applied to the dental cavity having been cut up into pieces of suitable size, the bulb of the instrument is heated to the proper temperature over the flame of a spirit-lamp, or otherwise, and the blade or point is then applied to a piece of the metal, which will soften under it and cling to it so that it may be carried to the cavity and molded therein; or the pieces may be first placed into the cavity and then fused down with the heated instrument, in either case

adding piece after piece until the work is complete, as further described in my specification of an improvement on fusible metal for filling teeth February 18, 1864.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The herein-described instrument, consisting of a metallic head, as described, affixed to a tubular shaft, whether of metal or other material, for an instrument for filling teeth with the herein-mentioned fusible metal filling or other similar material.

2. The construction of the head A with a bulb, blade, and neck, as represented.

3. The formation of the bulb *b* between the blade *a* and the neck *c*.

4. The combination of the head A and tubular shaft B or E.

5. The application of the insulating tubular casing D to the tubular shaft B.

In testimony whereof I hereunto set my name and seal this 17th day of September, A. D. 1864.

BARNABAS WOOD, [L. S.]

Witnesses:

WM. TAYLOR,
HENRY MCBRIDE.