No. 815,040. PATENTED MAR. 13, 1906.

P. F. RUTTERFORD.

INSTRUMENT FOR STOPPING TEETH.

APPLICATION FILED MAR. 6, 1905.

Fig. 1.

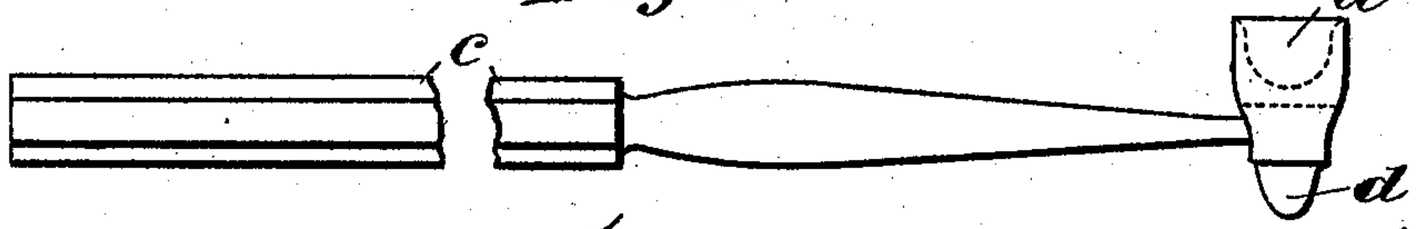


Fig. 2.

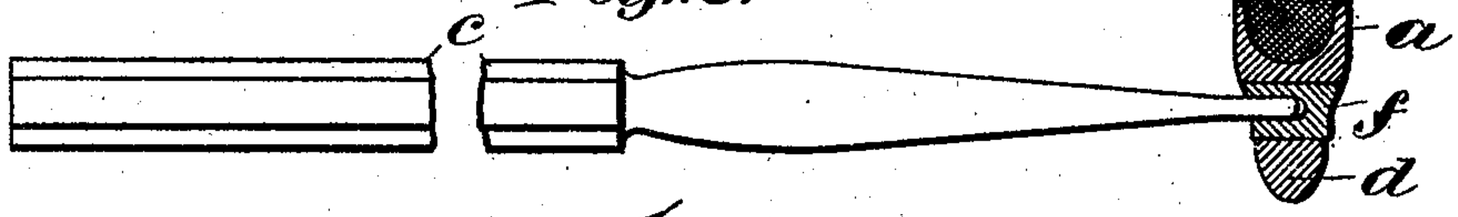


Fig. 3.

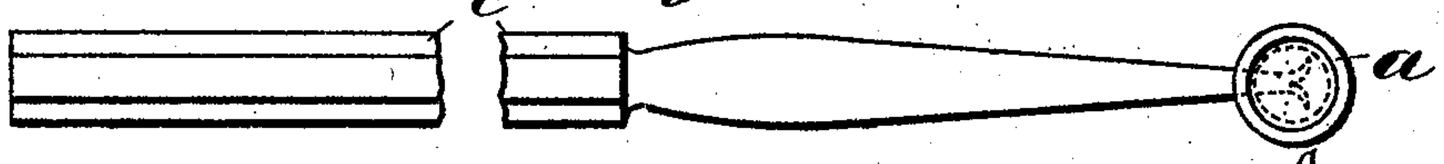


Fig. 4.

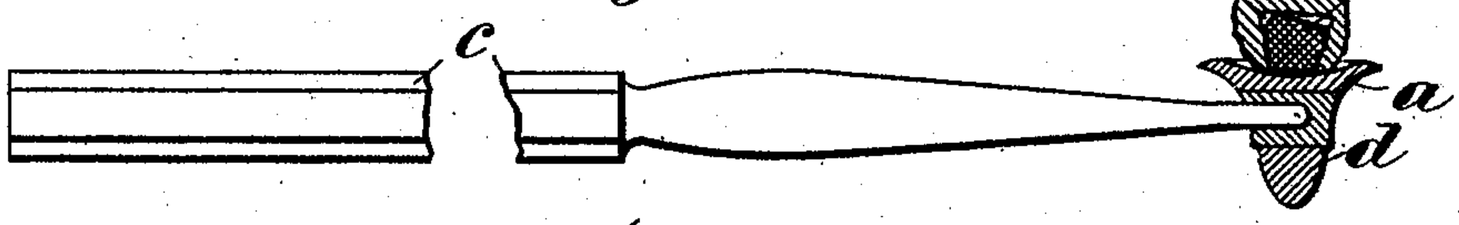


Fig. 5.

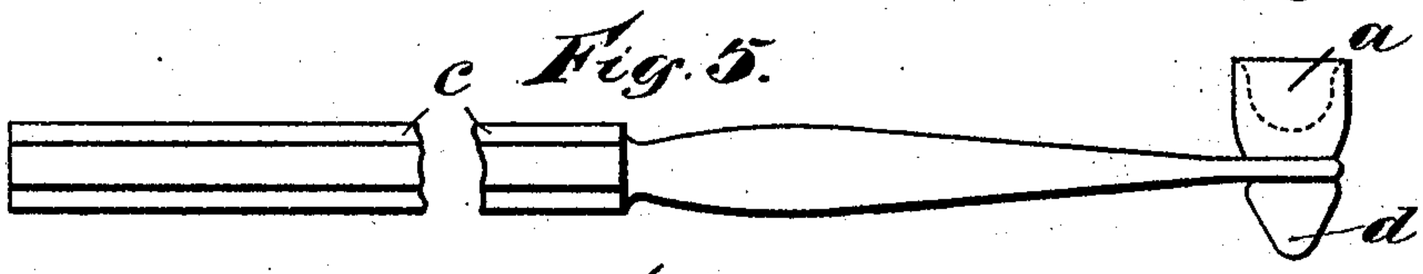


Fig. 6.

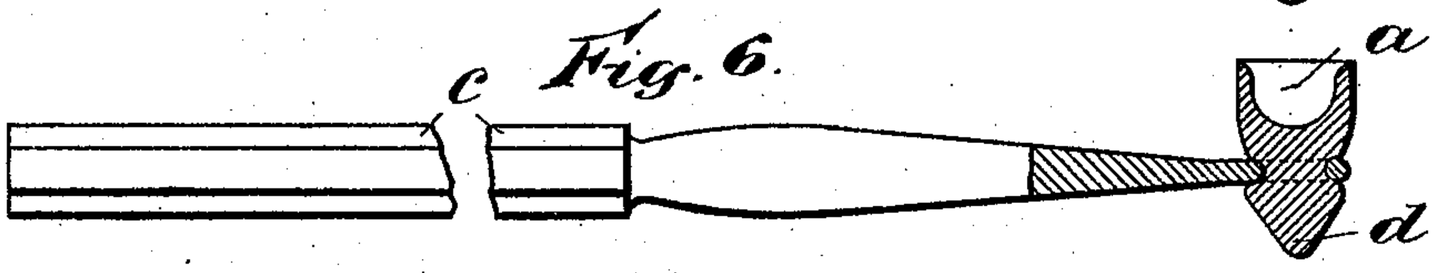


Fig. 7.

Fig. 8.

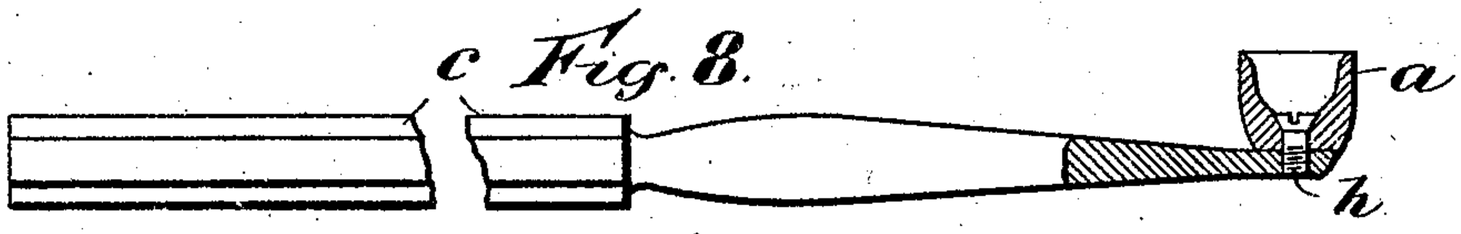
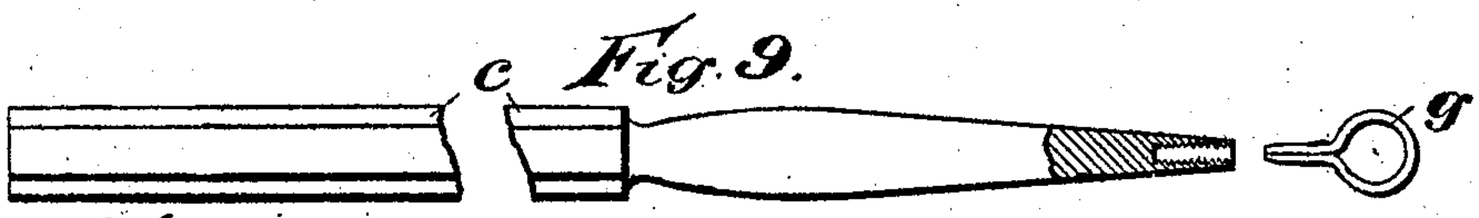


Fig. 9.



Witnesses.
Spencer Blotter Thomas
Axel Camillo Eifgen

Inventor
Percy Frederick Rutterford

UNITED STATES PATENT OFFICE.

PERCY FREDERICK RUTTERFORD, OF LONDON, ENGLAND.

INSTRUMENT FOR STOPPING TEETH.

No. 815,040. Specification of Letters Patent. Patented March 13, 1906.

Application filed March 6, 1905. Serial No. 248,603.

To all whom it may concern:

Be it known that I, PERCY FREDERICK RUTTERFORD, a subject of the King of Great Britain, residing at London, England, have invented new and useful Improvements in Instruments for Stopping Teeth, of which the following is a specification.

In the practice of stopping teeth it is well known that in some cases it is difficult to introduce the stopping material—such as an amalgam of gold, silver, or platinum, for example—into the cavity of the tooth which it is desired to stop.

The object of my present invention is to produce an instrument for the purpose of facilitating the operation which shall be simple in construction and easy to manipulate.

In the accompanying sheet of drawings, Figure 1 is an elevation, Fig. 2 a longitudinal section, and Fig. 3 a view taken on a plane at right angles to Figs. 1 and 2, of an instrument made in accordance with my invention, and Fig. 4 shows the same in section, but as in actual use when placing a piece of stopping in a cavity of a tooth. Figs. 5 and 6 are views similar to Figs. 1 and 2 of a modified arrangement; Fig. 7, a detail of part of Figs. 5 and 6, and Figs. 8 and 9 further modifications. The whole of the figures are drawn to an enlarged scale for the sake of clearness.

a is a piece of india-rubber or other suitable elastic and flexible material made in the shape of a hollow cup adapted to contain within it the piece of stopping *b* intended to be placed in the cavity of the tooth. The interior of this cup may be ribbed or roughened or provided with small projections or recesses for the purpose of assisting the retention of the stopping material therein. The cup *a* is fixed to a handle *c*, which may be made of steel or any other suitable material. The lower part *d* of the piece of material in which the cup *a* is formed is preferably shaped as shown in Figs. 1 and 2, so that it may be used for pressing the stopping into the cavity.

The instrument is used in the following way: The piece of stopping *b* to be put into a cavity is placed in the cup *a*, as shown in Fig. 1. The cup *a*, with the stopping *b*, is then conveyed by the handle *c* into the mouth of the patient and the stopping *b* brought opposite the cavity to be stopped, (*e* in Fig. 4.) The cup *a* is now pressed by the handle *c* against the tooth, and as the lip or edge of the cup *a* is elastic and flexible it is pressed aside and the stopping *b* is pushed out from the cup into the cavity, as shown in Fig. 4. The cup is now removed, leaving the stopping in the cavity, and the lip or edge of the cup springs back into its normal position ready to receive another piece of stopping. The part *d* of the piece containing the cup can then be used for pressing the stopping home into the tooth and completing the operation, or the ordinary well-known instruments may be used for finishing the stopping.

In the arrangement shown in Figs. 1 to 4 the piece *a d* is fixed to the handle *c* by being molded round the roughened or splayed-out end of the latter and then vulcanized while in that position; but inasmuch as the cup *a* and the presser *d* must be made of comparatively soft rubber, in which the handle would not have a good firm hold, it is necessary to make the part *f* in which the handle is fixed of hard rubber, as shown in Fig. 2, for example. The manufacture of the instrument in that way with two kinds of rubber is somewhat expensive, and in order to produce a cheaper article the modification shown in Figs. 5, 6, and 7 may be employed. In this latter arrangement the cup *a* and presser *d* are made of one quality of rubber of the required softness and the handle *c* is made with a ring *g* at its end through which the piece *a d* is passed, as shown in Figs. 5 and 6, and is prevented from falling out by the ring *g* taking into a groove or recess surrounding the piece *a d*, as shown.

If preferred, the presser *d* may be omitted, the handle *c* being connected to the bottom of the cup *a* by a screw *h* passing through the bottom of the latter and tapped into the handle *c*, as shown in Fig. 8, or any other suitable means may be employed for securing the cup *a* to the handle *c*.

Fig. 9 illustrates another method of attaching the cup *a* and presser *d* to the handle *c*, in which a ring *g* may be formed separately of a piece of German-silver or other suitable metal wire, preferably of half-round sections, the ends of which are screwed or fitted into a hole formed in the end of the handle *c* after having been first opened out to receive the part *a d*. The ends of the wire *g* may be further secured in the hole in the end of the handle *c* by a blow from a hammer.

I claim—

1. An instrument for stopping teeth which consists of an elastic flexible cup to contain the stopping material and an elastic presser

for pressing the stopping material into the cavity, substantially as described.

2. An instrument for stopping teeth consisting of a head comprising at one end an elastic flexible cup and at the other end a presser and a handle connected to said head between the ends thereof and extending at right angles to said head.

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

PERCY FREDERICK RUTTERFORD.

Witnesses:

SPENCER SHOTTER THOMAS,

AXEL CAMILLO EITZEN.