

No. 891,651.

PATENTED JUNE 23, 1908.

J. H. ABBOTT,
DENTAL TOOL.
APPLICATION FILED MAY 22, 1906.

Fig. 1.

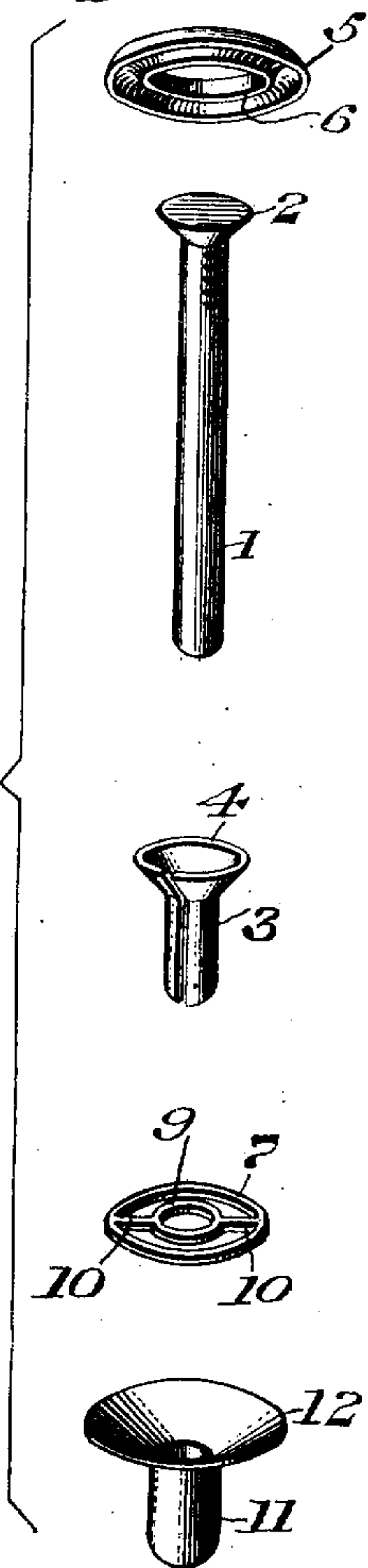


Fig. 2.

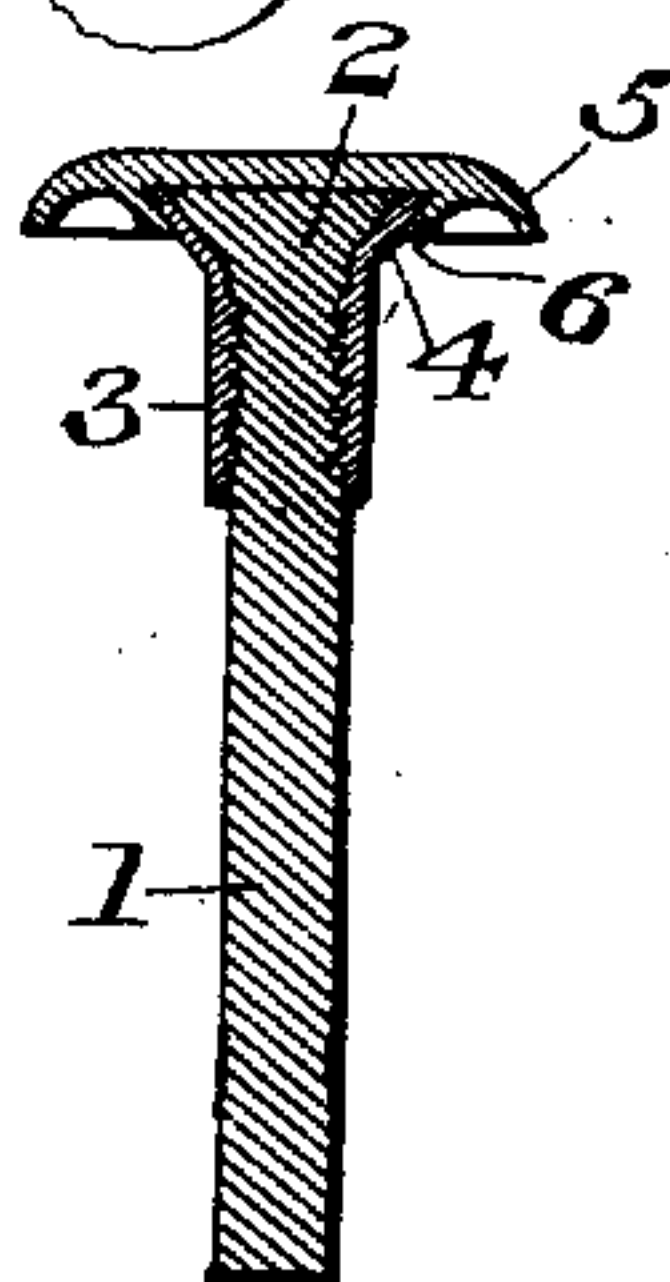


Fig. 3.

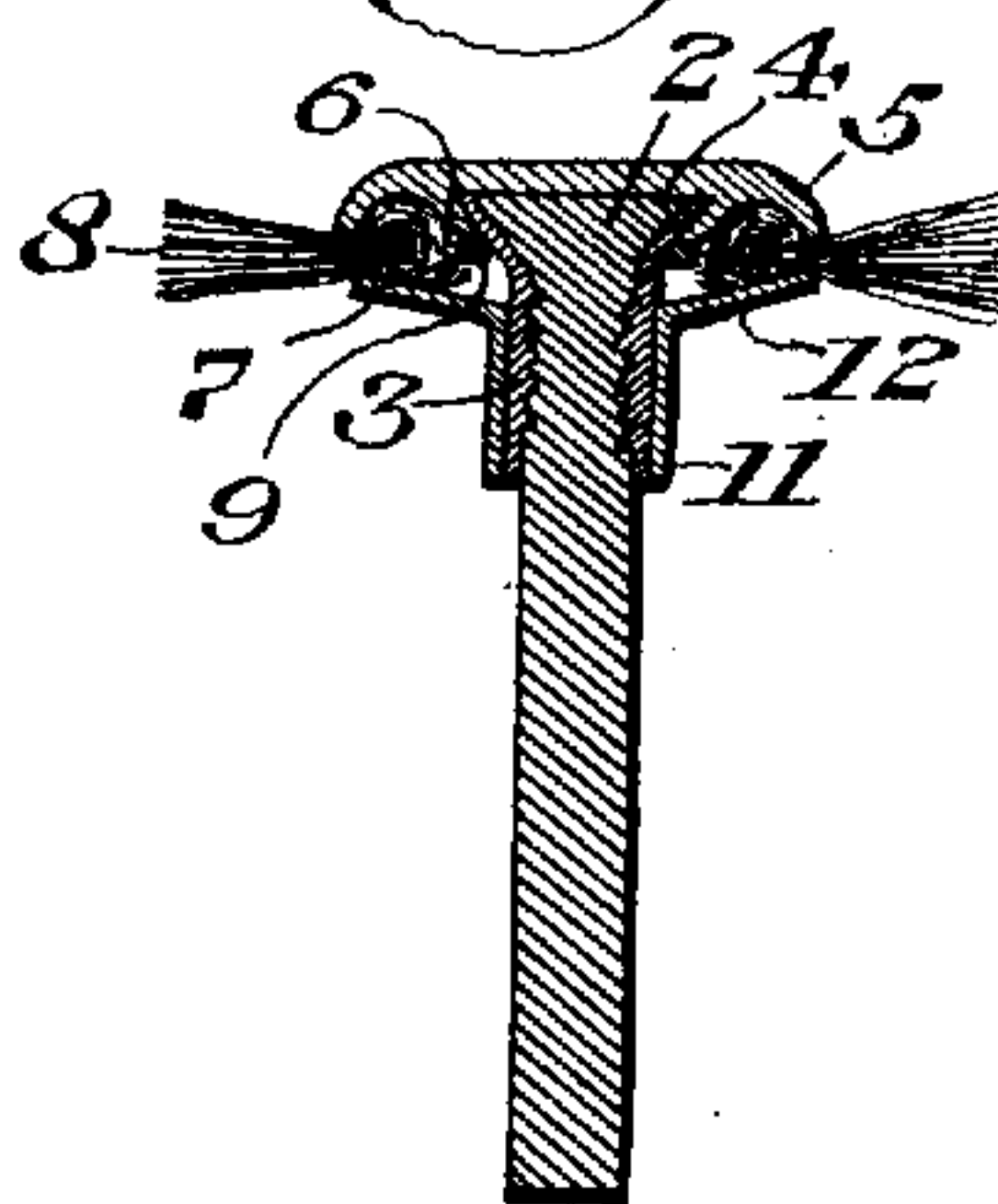


Fig. 4.

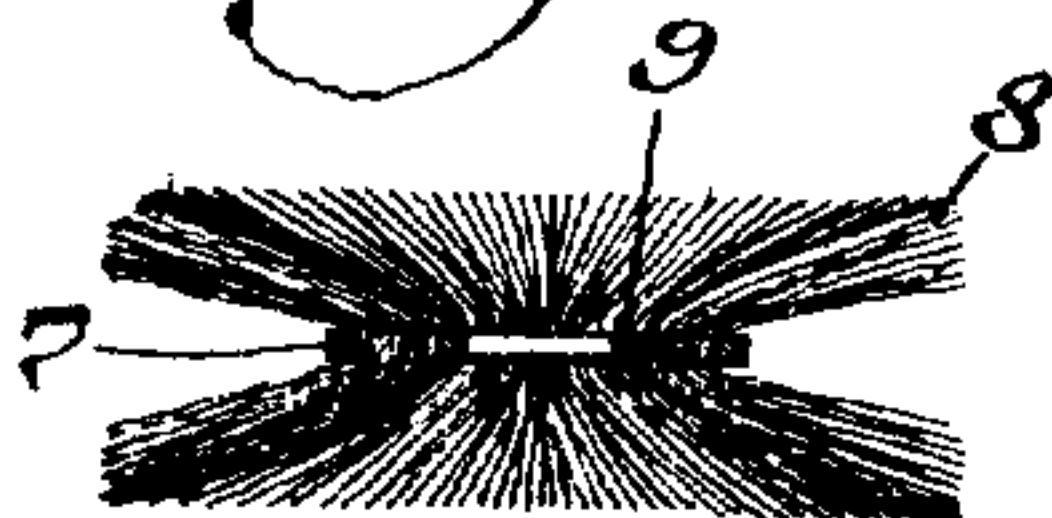
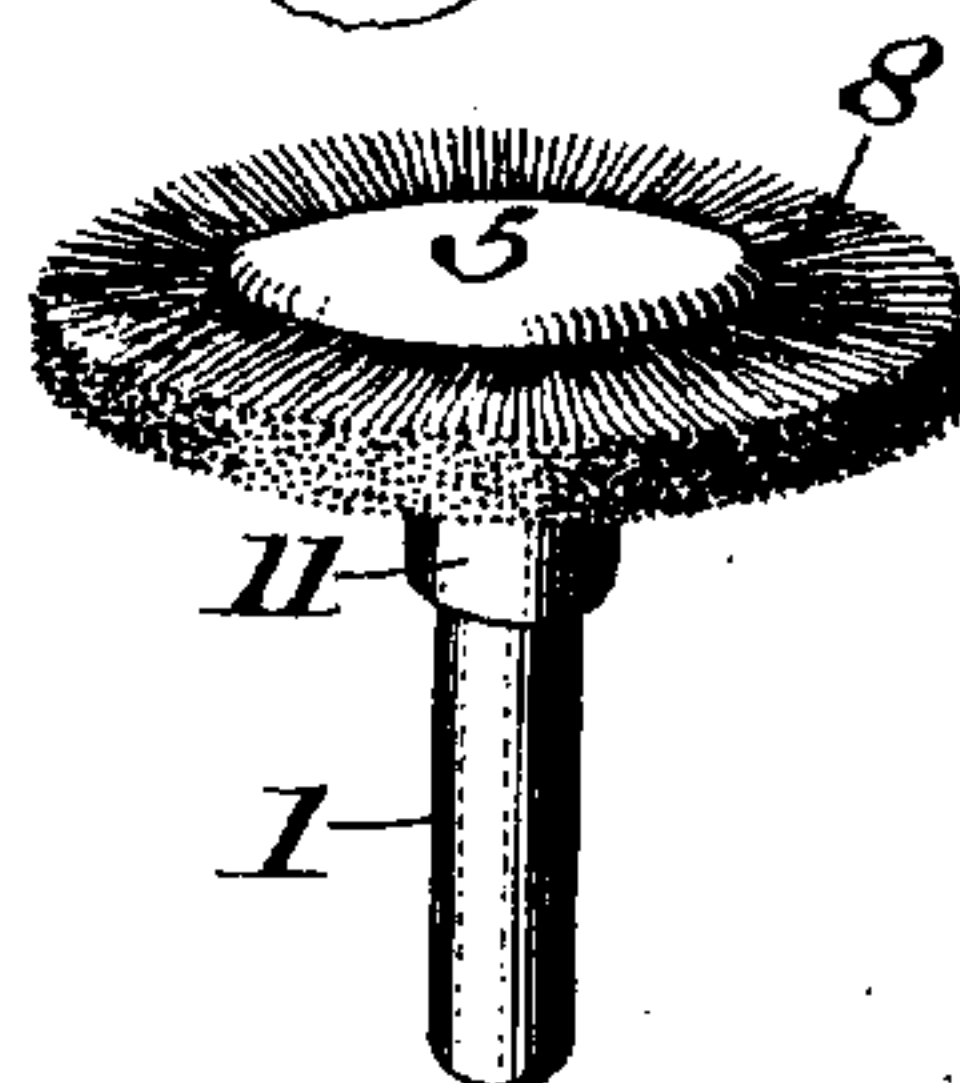


Fig. 5.



Witnesses
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DENTAL TOOL.

No. 891,651.

Specification of Letters Patent.

Patented June 23, 1908.

Application filed May 22, 1906. Serial No. 318,192.

To all whom it may concern:

Be it known that I, JAMES HERMAN ABBOTT, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Dental Tool, of which the following is a specification.

My invention relates to a new and useful dental tool and consists of an easy and effective means for fastening the parts of the brush to the mandrel.

It further consists of means for centering the bristles of the tool and positively holding the same in position with respect to the mandrel.

It further consists of other novel features of construction, all as will be hereinafter fully set forth.

Figure 1 represents a perspective view of the various parts of a dental tool embodying my invention, showing the parts in separated position. Fig. 2 represents a sectional view of the device showing some of the parts in position. Fig. 3 represents a sectional view showing the completed tool. Fig. 4 represents a sectional view showing the bristles in position on the ring. Fig. 5 represents a perspective view of the dental tool embodying my invention.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings:—I have found in practice that it is difficult to always center the bristles used in making the tool, since while they may be mounted upon a ring, the latter with the bristles thereon, must be placed upon the mandrel and it will often result that an unequal number of bristles will be situated on one side or the other of the said mandrel.

In the drawings I have shown one form for overcoming this difficulty, although it will be apparent that other means may be employed to accomplish the same purpose within the scope of my claims.

1 designates the mandrel, in the present instance being provided with the head 2, while upon said mandrel is adapted to be slipped the split sleeve 3 which in the present instance is provided with the flaring portion

4, which is adapted to seat the head 2 of the mandrel, when the parts are in position. I preferably form the mandrel and the sleeve of the same material and the sleeve of such size with respect to the mandrel that the edges of the split sleeve will be separated a slight distance when placed on the said mandrel.

5 designates a disk which is suitably shaped and is provided with the depending flange 6 which is adapted to fit over the head 2 on the mandrel and the flaring portion 4 of the sleeve 3 so that when a tool or die is properly operated the flange 6 is caused to engage the sleeve 3 and head 2 and lock the parts in position as shown in Fig. 2.

7 designates a ring which is adapted to be passed around the bristles 8, said ring having a centering device 9 connected therewith, in the present instance, the same consisting of a ring, which is connected with the ring 7 by the bars 10, it being noted that the bristles are adapted to be seated in the space, formed between the two rings 7 and 9 and that when the ring 7 is passed up over the mandrel, the same will be properly guided by the ring 9 which engages with the mandrel, so that an equal amount of bristles will be distributed on all sides of the mandrel.

11 designates a collar provided with a flange 12, said collar being adapted to pass up over the mandrel and closely fit the split sleeve 3, said flange 12, it will be noted, being adapted to cooperate with the disk 5 to hold the bristles 8 in proper position. When the collar 11 which is smaller than the outer diameter of the sleeve when the latter is in position on the mandrel is forced upon the sleeve 3, it will cause the split sleeve to be closed, so that the same will grasp the mandrel and all the parts will be firmly and securely held in position.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. In a dental tool, a mandrel, a flange connected therewith bristles, a split sleeve on said mandrel and a collar surrounding said sleeve and having a flange between which and the first mentioned flange the bristles are held said collar causing said

split sleeve to tightly engage the said mandrel.

2. In a dental tool, a mandrel having a head thereon, a disk having a flange which
5 is connected with said head bristles, a split sleeve mounted on said mandrel and a collar having a flange between which and the disk

the bristles are held, said collar closely engaging said sleeve whereby the latter tightly engages said mandrel.

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Witnesses:

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