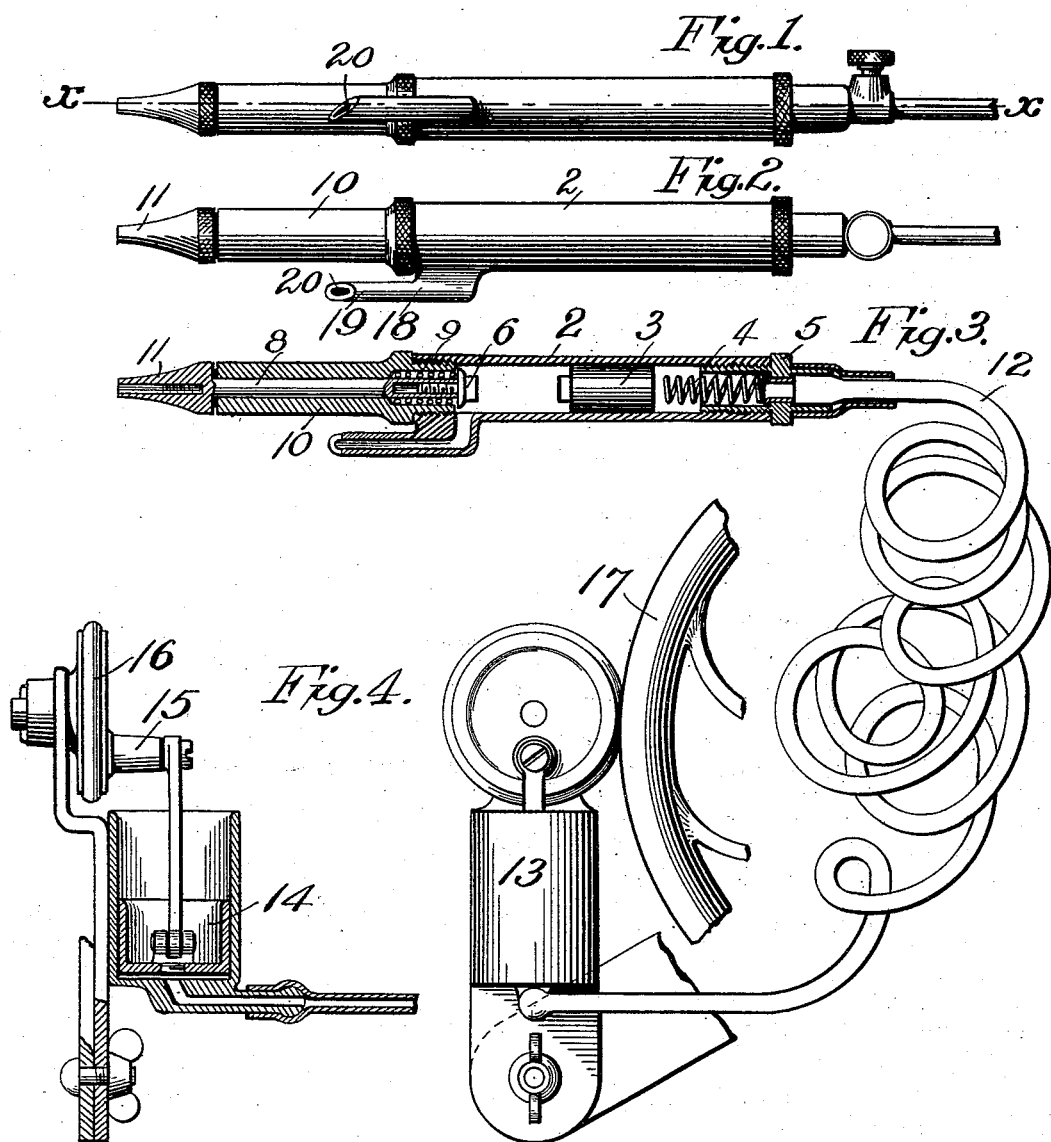


(No Model.)

A. E. PECK.
DENTAL PLUGGER.

No. 492,830.

Patented Mar. 7, 1893.



Witnesses,
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UNITED STATES PATENT OFFICE.

ARTHUR E. PECK, OF MINNEAPOLIS, MINNESOTA.

DENTAL PLUGGER.

SPECIFICATION forming part of Letters Patent No. 492,830, dated March 7, 1893.

Application filed June 6, 1892. Serial No. 435,591. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR E. PECK, of Minneapolis, in the county of Hennepin and State of Minnesota, have invented a certain new and Improved Dental Plugger, of which the following is a specification.

My invention relates to a pneumatic dental plugger and especially to a novel device adapted to be grasped by the thumb and finger to prevent rotation and consisting of an escape pipe so arranged as to be in convenient position for enabling the operator to firmly grasp the implement while at the same time maintaining an easy and perfect control over the same.

My invention consists in the combination with the air chamber of the barrel of the plunger, and the other parts commonly arranged therein, of an escape pipe extending from the side of said barrel to form an external shoulder to be grasped between the thumb and the forefinger and said pipe being extended forward and provided with an angular or beveled end upon which the top of the forefinger may be placed to shut off the escape of air in the forward end of the plugger barrel.

The invention will be more readily understood by reference to the accompanying drawings in which:—

Figure 1 is a side view of a dental plugger embodying my invention. Fig. 2 is a plan view thereof. Fig. 3 is a longitudinal section on the line $x-x$ of Fig. 1. Fig. 4 is a sectional detail of the air-pump, which however, is of the ordinary simple construction.

As shown in the drawings, 2 represents the barrel of the plugger wherein the hammer 3 is adapted to reciprocate the return stroke thereof being taken up by the cushion spring 4 arranged in the rear end of the barrel and the forward stroke being taken up by the adjustable head 6 arranged in the inner end of the plugger shank 8 and acting against the spring 9 arranged in the head 10. On the shank is the clutch wherein the tool is fixed. As shown the head 10 screws into the end of the barrel making an air-tight joint and the end 5 also makes an air-tight joint therewith. From this end projects the flexible tube 12 connecting with the cylinder 13 of the air-pump. In this cylinder is the piston 14 connected

with the crank arm 15 of the wheel 16 arranged to engage the large wheel 17 of the dental engine and to be operated thereby to alternately force through and draw back the air in the tube 12 thus reciprocating the hammer or piston 3. Ordinarily a small opening has been made in the side of the barrel over which the finger or thumb has been placed to prevent the escape of the air thus forming an air cushion before the hammer and preventing its striking the inner end of the shank 8. This arrangement however has been found extremely inconvenient owing to the difficulty of holding the instrument steady in the hand, it being liable to slip or turn therein. To prevent this I provide the shoulder or lateral projection 18 on the side of the barrel and having the forwardly extending pipe 19 projecting forward some distance over the head or sleeve 10 and having the beveled end 20. The length of this pipe may be adjusted to suit the hand of the operator and when in use the instrument is grasped so as to bring the projection 18 and the pipe between the thumb and forefinger, the end of the forefinger lapping over the end of the pipe 20 and the inner side of the finger resting upon and being guided by the sleeve 10. By drawing in the end of the finger the opening in the end of the pipe and down through the projection may be closed thus forming an air-cushion and stopping the operation of the plugger.

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

The combination in a dental plugger, of the barrel, the hammer, means for operating the latter, the plugger device to be operated by said hammer and the laterally and longitudinally projecting pipe having the beveled end 20 said pipe arranged to be grasped between the thumb and finger of the hand, and the opening therein in position to be closed by the end of the forefinger, substantially as described.

In testimony whereof I have hereunto set my hand this 26th day of May, A. D. 1892.

ARTHUR E. PECK.

In presence of—

A. C. PAUL,

FREDERICK S. LYON.