

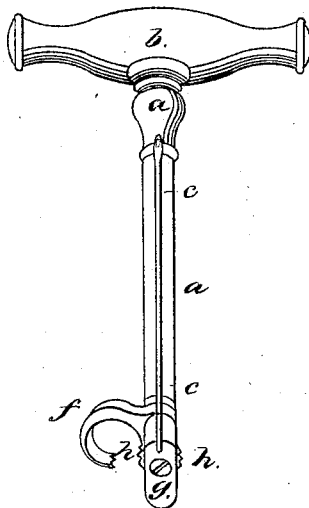
*J. Mc Connell,*

*Tooth Extractor.*

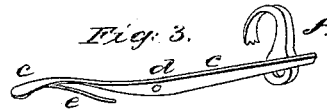
*N<sup>o</sup> 1327.*

*Patented Sep. 20, 1839.*

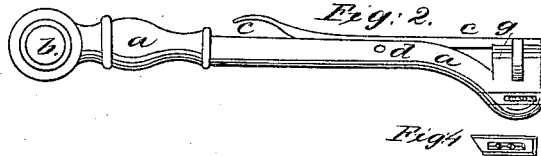
*Fig. 1*



*Fig. 3.*



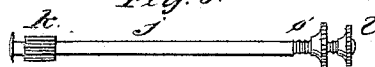
*Fig. 2.*



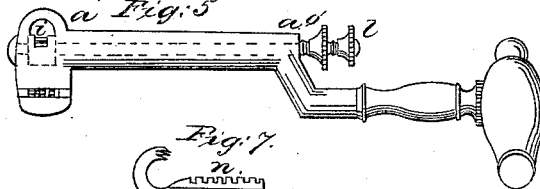
*Fig. 4.*



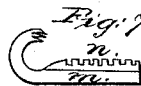
*Fig. 6.*



*Fig. 5.*



*Fig. 7.*



*Inventor:*

*John Mc Connell.*

# UNITED STATES PATENT OFFICE.

JOHN McCONNELL, OF PHILADELPHIA, PENNSYLVANIA.

## KEY FOR EXTRACTING TEETH.

Specification of Letters Patent No. 1,327, dated September 20, 1839.

*To all whom it may concern:*

Be it known that I, JOHN McCONNELL, of the city of Philadelphia, in the State of Pennsylvania, have made an Improvement in that Instrument for Extracting Teeth Which is Usually Known Under the Name of the "Dutch Key."

In this instrument, as ordinarily made, the hook, or claw, turns upon a joint pin above the bolster, or that part which forms the fulcrum of the instrument in the act of drawing a tooth. In my improved instrument, the hook, or claw, I sometimes make so as to turn upon a joint pin, as heretofore, for the purpose of placing it upon the tooth, but when so placed it is to be prevented from turning upon its joint pin by means of a check lever, or spring latch, which is made to fall into a notch formed in the head of the hook, for that purpose, and when so fixed the instrument may be turned in either direction without loosening the hook, or claw, so that the latter may become the fulcrum upon which the instrument may turn in the operation of extracting a tooth; but instead of allowing the hook, or claw, to turn upon a joint pin, I sometimes make it with a shank which passes through a mortise in the head of the bolster, where it is acted upon by a pinion by which its claw end is drawn firmly against the tooth, when it is fixed in its place by means of a tightening screw, thus enabling a single claw to fit every tooth, whatever may be its size.

In the accompanying drawing, Figure 1 is a back and Fig. 2 a side view of the instrument as made with the hook, or claw, to turn upon a joint pin, with my improvements thereon, *a, a*, being its shaft affixed to the handle *b*, in the ordinary manner. Along the shaft I make a groove to receive the lever, or spring latch *c, c*, shown separately in Fig. 3. This lever has a joint pin at *d*, and is borne up by the spring *e*. The hook, or claw, *f*, has a notch in it to receive the end of the lever, or latch, *c*, which will fall into said notch when the hook is brought into a position which causes the notch to coincide with the groove in the shaft. On each side of the bolster, *g*, I form a dove-tail groove to receive two steel bits, *h, h*, shown separately in Fig. 4, which bits slide into said grooves, and are furnished with teeth, or points, for the purpose of holding firmly on the side of the tooth. These bits must be of tempered steel. They should be

about the eighth of an inch in width and of sufficient thickness to bear the strain to which they are to be subjected. They extend along the whole width of the bolster and may be removed and replaced at pleasure.

In using the instrument under this form of it, such a hook, or claw, is to be selected as is adapted to the size of the tooth to be drawn, and this being affixed by the joint pin, the lever is to be raised out of the notch, the instrument is to be placed on the tooth, the points of the bit on the bolster, or fulcrum, being brought into contact with the tooth as low down as possible. The point of the hook, or claw, is then to be pressed down against the tooth, when the end of the lever *c*, will fall into its notch, and hold it permanently. By this means, a firm hold of the tooth will be obtained, and it may be drawn in either direction, the point of the hook, or claw, if required, operating as a fulcrum.

Fig. 5 represents my improved instrument under its second modification, that is, with the shank of the claw made to slide through a mortise in the head of the bolster. *i*, is this mortise, and *j*, Fig. 6, is a spindle which passes through the shaft *a, a*, which is made tubular for that purpose, as shown by the dotted lines. The shaft, *j*, carries a pinion, *k*, seen immediately under *i*, in Fig. 6, which pinion is made to revolve by turning the head *l*, of the shaft.

Fig. 7, shows the form of the claw used with this instrument, *m*, being the shank which passes through the mortise, *i*, having on its side *n*, a toothed ratchet, adapted to the pinion *k*, by which arrangement the claw may be drawn closely up against the tooth. *o*, is a tightening screw nut upon the spindle, by which it may be firmly fixed in its place when the claw has been made to embrace the tooth.

I will here remark that instead of the movable bits, with their points, such points may be formed directly upon the bolster, but they will soon lose their sharpness, and will, therefore, be inferior to the movable bits.

What I claim as my invention in the above described instrument, is—

1. The manner of confining the hook, or claw, in its place, by means of the spring latch, or lever, as described in the first modification of my improved instrument.

2. I claim, likewise, the manner of constructing and operating the claw, so that a single claw may serve for teeth of every size, by causing the shank of the claw to  
5 slide through a mortise in the head of the bolster, and be regulated and affixed by the rack and pinion, and the tightening screw, substantially as herein shown.

3. I also claim, in combination with the

foregoing, the insertion of movable bits, 10 furnished with points on the sides of the bolster, in the manner and for the purpose, herein set forth.

JNO. McCONNELL.

Witnesses:

JOHN BURNS,  
CHALKLY SOMERS.