

J. W. BAXTER.
Dental-Pluggers.

No. 158,888.

Patented Jan. 19, 1875.

Fig. 1

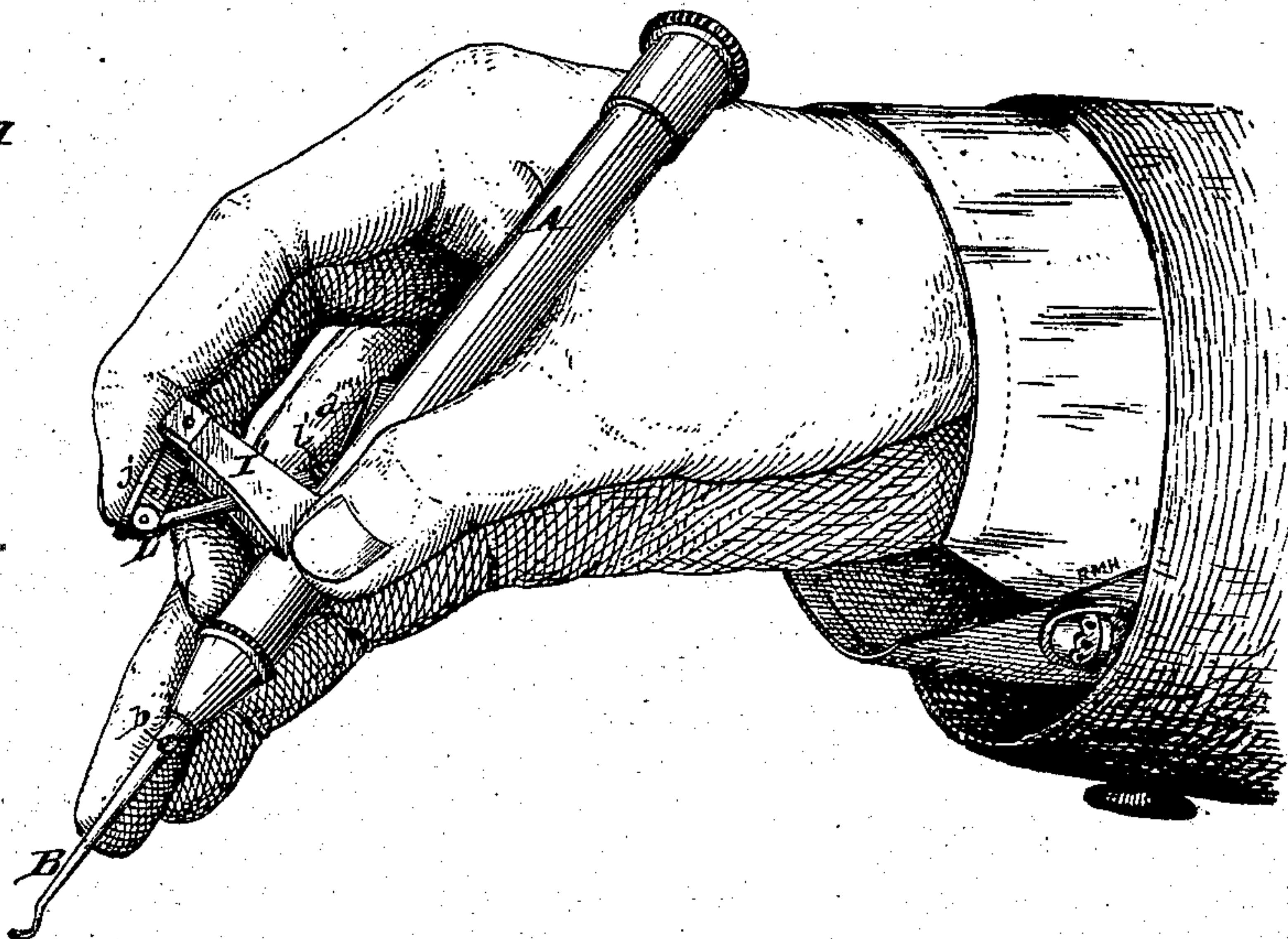


Fig. 2

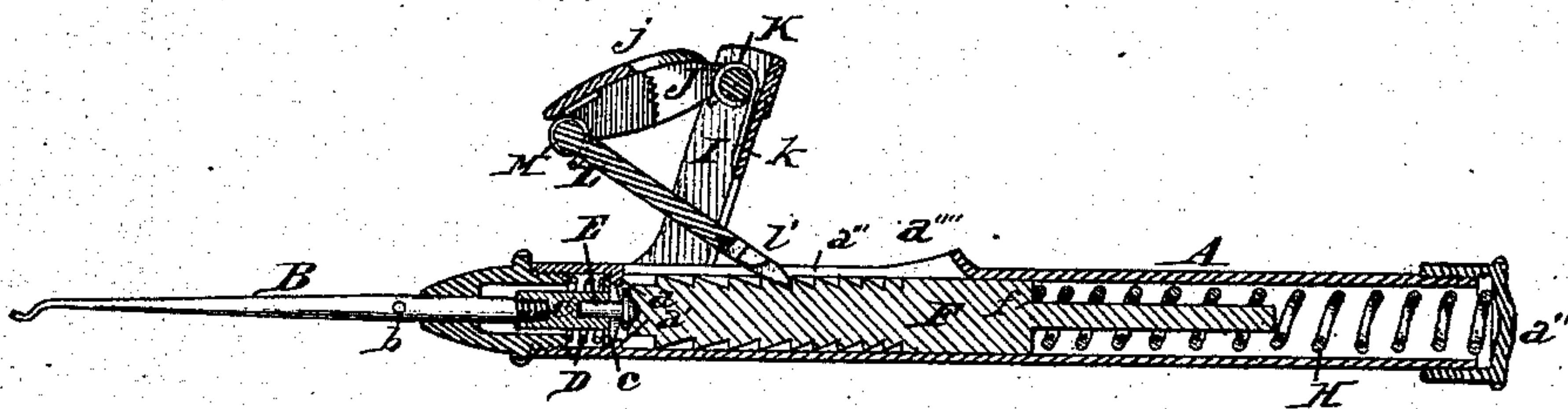
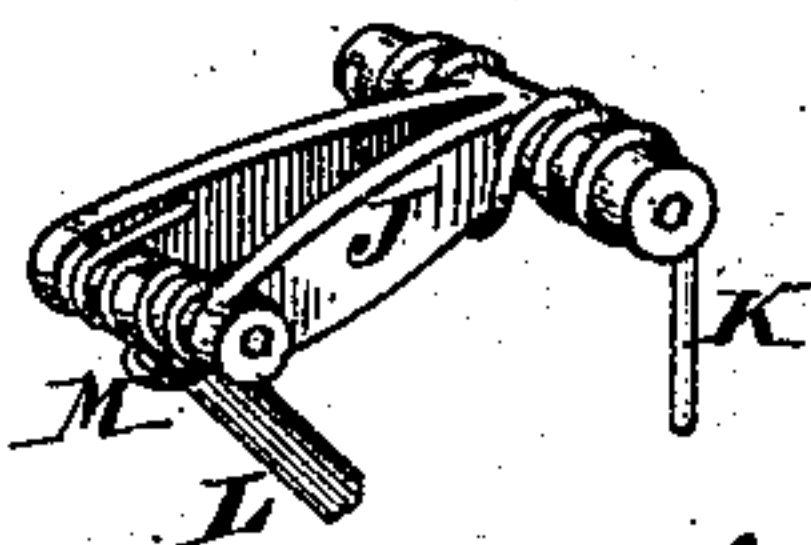


Fig. 3



Attest

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JONATHAN W. BAXTER, OF VEVAY, INDIANA.

IMPROVEMENT IN DENTAL PLUGGERS.

Specification forming part of Letters Patent No. 158,888, dated January 19, 1875; application filed November 14, 1874.

To all whom it may concern:

Be it known that I, JONATHAN W. BAXTER, of Vevay, Switzerland county, Indiana, have invented certain new and useful Improvements in Tooth Filling and Plugging Devices, of which the following is a specification:

My invention relates to that class of tooth-pluggers in which the tool is operated by a spring-hammer actuated by the fingers of the operator; and consists, first, of a certain combination of devices for operating the hammer, by which the operator is enabled to vary the power of the blow without stopping to re-adjust the propelling devices; second, in connection with the devices for compressing the spring of the hammer, of peculiarly-connected coiled springs, for restoring the finger-presser and its rod to its normal position after a blow, and preserving contact of the rod with the hammer.

Figure 1 is a perspective view of a plugger in the hand of an operator embodying my invention. Fig. 2 is a longitudinal section of the plugger, with the finger-presser partly drawn back, and in position to compress the hammer for a moderate blow. Fig. 3 is a perspective view of finger-presser and axis with pressing-surface removed.

A is the case of a tooth-plugging point, B, of any desired configuration. The butt end of the point is screwed into a socket, C, with an enlarged head, *c*, fitted to move longitudinally inside of the case, and retained in either of two directions by projections *a a'* on the case A, and a notch cut across the head *c*. This notch and projections, which can be reversed, so as to have the projections on the head *c* and the notches in the case, permit the tool to be turned half-way round at any time while in operation. The head and its point B have sufficient longitudinal play in the case to enable the point to enter the work after the blow is struck, and the spring D serves to keep the point-head up in the case until the blow is struck. A removable pin, E, in the head *c*, receives the blow. The slot in the upper surface of head *c*, when in proper position, drops around the projections *a a'*, and is retained there by spring D until, by inserting a small rod into a hole, *p*, in point B, the operator draws it forward, and revolves it to the opposite position. The hammer or plunger

F is circular, fitting the case A accurately, and it has, from its lower or striking end some distance up, a ratchet-surface, the greatest pitch of whose teeth are toward the striking end. The other end is decreased in diameter, and fitting over it, and resting between the shoulder *f* and cap *a''* of case A, I provide a spiral spring, H, which furnishes the propelling power to the hammer or plunger F. To provide for the hammer-operating device, I secure to the outside of case A, in position shown, standards I I', which uphold the axis of finger lever or presser J, and, in order to give the said presser an upward tendency, I place a spiral spring, K, around its axle and under the lever, with bearings *k k'* on the standards I I'. The body of the presser J, upon which is secured presser-plate *j*, is separated into two arms, which embrace and hold at their farthest end the rod L, to preserve a downward tendency, to which I provide a coil-spring, M, similar to spring K.

In operation, the finger, pressing against finger-presser J, forces it over the arc of a circle, carrying with it the rod L, which rests in the teeth of the plunger, through slot *a'''* of case A, and, consequently, also forces the latter, until the projections *l l'* of said rod meet the upward incline *a''''* of the case A, and are thereby disengaged from the plunger F, which being thus released, darts against the pin E by the force of spring H, and thus furnishes the desired blow, while the ratchet L and finger-presser J, by the force of springs K and M, return to their former positions. By causing the ratchet to gear in different places along the plunger the force of the blow is modified or varied at will.

I claim—

1. The combination of ratchet-formed plunger F, relief-incline *a''''*, rod L *l l'*, and finger-presser J, connected and operating substantially as and for the purpose specified.

2. In combination with rod L, finger-presser J, and bearings *k k'* on standards I I', the springs K and M, connected and operating substantially as specified.

In testimony of which invention I hereunto set my hand.

J. W. BAXTER.

Witnesses:

FRANK MILLWARD,
H. M. HUNTER.