

J. T. CODMAN.
Dental-Pluggers.

No. 145,051.

Patented Dec. 2, 1873.

Figs.

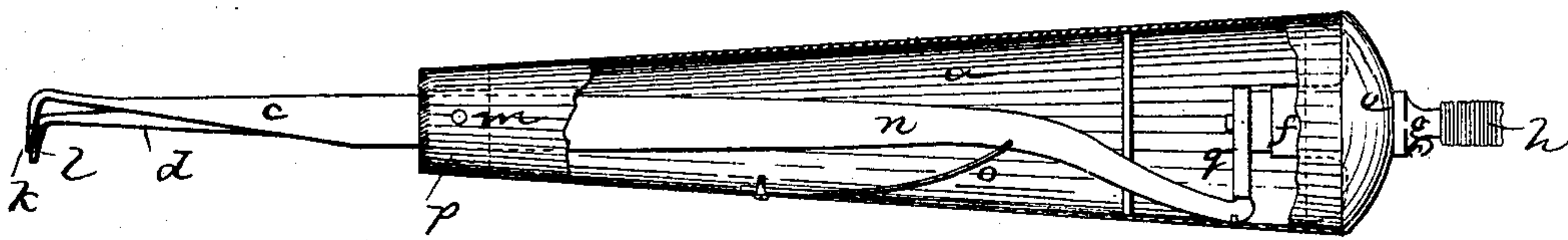


Fig. 2.

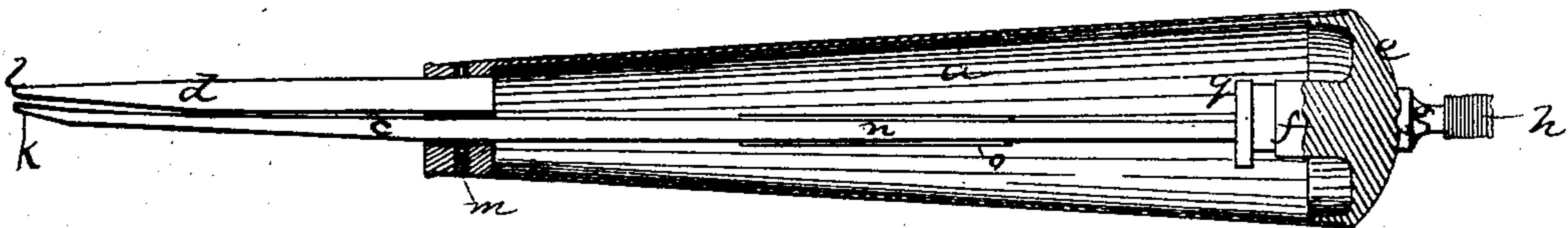
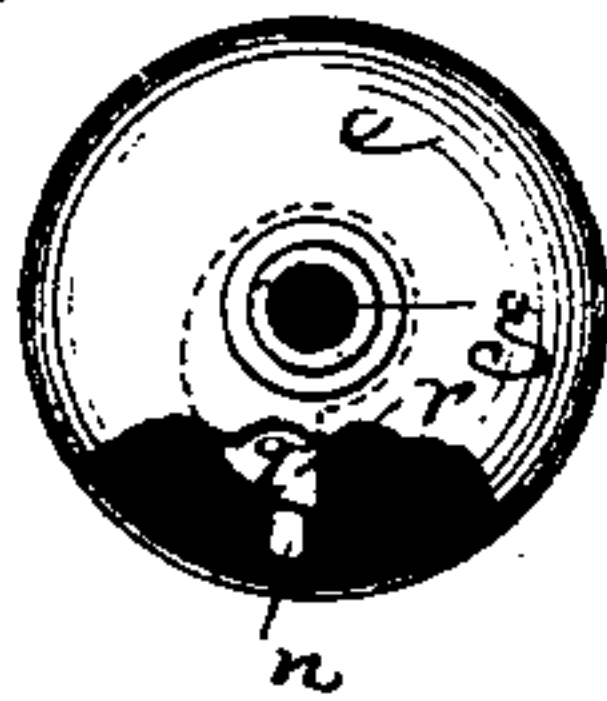


Fig. 3.



Witnesses:

*Mo. W. Frothingham.
L. H. L. L. L. L.*

Inventor:

*John T. Codman.
By his Atty.
Crosby & Gould*

UNITED STATES PATENT OFFICE.

JOHN T. CODMAN, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN DENTAL PLUGGERS.

Specification forming part of Letters Patent No. **145,051**, dated December 2, 1873; application filed November 12, 1873.

To all whom it may concern:

Be it known that I, JOHN T. CODMAN, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Dental Plugger; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

The invention has reference to that class of plugging-instruments in which the pressing-point stands at a right angle to the shank, or at an approximation to such angle.

In my improvement I pivot this shank in a handle, and make it a trip-lever, the outer or plugging arm of which extends beyond the handle, while the inner arm lies within the handle, and is normally held in position by the stress of a spring, a cam, or a wiper, on a shaft journaled and rotating in the head of the handle, operating to depress the inclosed lever-arm against the stress of the spring, and to lift the plugger-point, and the spring driving the said arm in the opposite direction, and so as to impart a percussive blow to the plugger-point when the cam-shoulder passes the lever-arm, there being combined with the plugger-arm a similar but stationary arm, or an arm forming a fixed extension from the handle, the bend, at its end, making a rest, which, being held against the filling, forms a guide and rest in directing the lever-point in its action as a hammer or plugger.

The invention consists, primarily, in a dental plugger having the construction thus generally described.

The drawing represents an instrument embodying the invention.

Figure 1 shows the instrument in side and sectional elevation. Fig. 2 is a section showing the lever in plan. Fig. 3 is an end view, the head being broken away to show the cam.

a denotes the handle, made hollow, or as a case, small at the end *b*, from which extend the lever or plugger arm *c* and the stationary or rest arm *d*, and large at the other end. The larger end is covered by a cap, *e*, which cap is made with a hub or bearing, *f*, for supporting a rotary shaft, *g*, extending through the cap. This shaft may be rotated by hand

or by power; and if by power, it may be connected to a flexible spring, *h*, which, being rotated, imparts rotation to the shaft. The lever-arm *c* is bent at its end to form the plugger-point *k*, and the arm *d* has a similar bend to form the resting and guiding point *l*, the two points being side by side. The lever is pivoted, at *m*, near the small end of the handle, and has within the handle a long arm, *n*, which is normally held in position by the stress of a spring, *o*, the movement of the lever being limited and determined by a stop, *p*. The end of the lever-arm extends beyond a cam or wiper, *q*, on the inner end of the shaft, and as the shaft turns this cam moves the arm to draw back the plugger-point, and against the stress of the spring, until, in its rotation, the shoulder *r* of the cam reaches the arm. The spring will then operate the arm, and throw forward the plugger-point against the filling, and at the proper point, which point is determined by the operator, who, holding the handle, directs the stationary point to the proper position. By applying power, the blows may be very rapidly given.

It will be obvious that, with the construction thus described, the operator, without labor other than in directing the instrument, can work readily and rapidly, and to much better advantage than if the plugger-point were in line with the shank, and had the blow imparted without the aid of the rest.

I do not herein claim in a dental plugger the converting of a rotary into a reciprocating motion by means of a cam, as this is claimed by me in another pending application.

I claim—

1. A dental plugger having the lever *c*, with its bent plugger-point *k*, said lever being operated by the cam *q* and spring *o*, or equivalent mechanism, substantially as shown and described.

2. In combination with the lever-arm *c*, the fixed arm *d*, substantially as shown and described.

JOHN T. CODMAN.

Witnesses:

FRANCIS GOULD,
M. W. FROTHINGHAM.