(No Model.)

G. H. COATES.

FINGER NAIL CUTTER.

No. 342,780. Patented June 1, 1886.

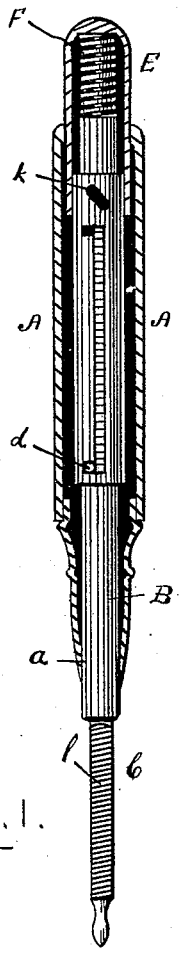

FIG. 1.

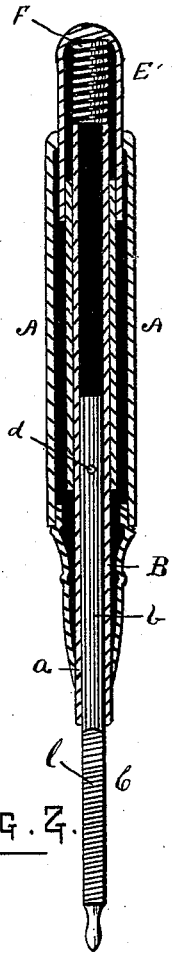

FIG. 2.

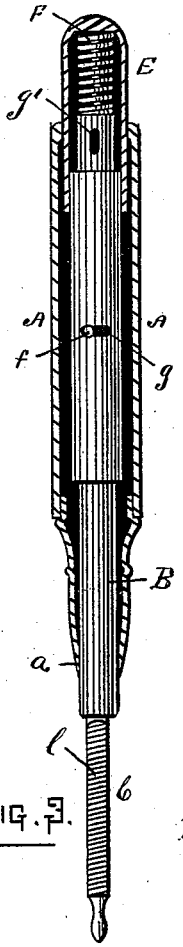

FIG. 3.

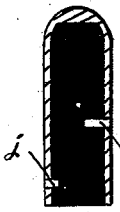

FIG. 4.

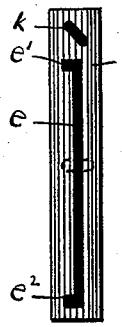

FIG. 5.

FIG. 6.

FIG. 10.

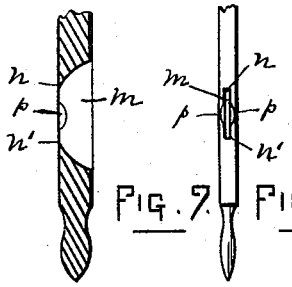

FIG. 7. FIG. 8.

FIG. 9.

WITNESSES.

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UNITED STATES PATENT OFFICE.

GEORGE H. COATES, OF WORCESTER, MASSACHUSETTS.

FINGER-NAIL CUTTER.

SPECIFICATION forming part of Letters Patent No. 342,780, dated June 1, 1886.

Application filed August 24, 1885. Serial No. 175,245. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. COATES, a citizen of the United States, residing in Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Finger-Nail Cutters, of which the following is a specification, accompanied by drawings, illustrating a finger-nail cutter embodying the several features of my invention, and in which—

Figure 1 is an elevation with the outer case shown in sectional view. Fig. 2 is a vertical sectional view. Fig. 3 is an elevation showing the opposite side to that seen in Fig. 1, and with the outer inclosing-case in section. Fig. 4 is a sectional view of the cap. Fig. 5 shows the rotating sleeve. Fig. 6 is a detached view of the inner tube. Fig. 7 is a sectional view of a part of the blade. Fig. 8 is an edge view of a part of the blade. Fig. 9 is a transverse sectional view of the blade; and Fig. 10 shows a portion of the inner tube.

Similar letters indicate like parts in the several views.

My invention relates to the construction of the nail-cutter itself, and also to the handle or case for holding the cutter in position; and it consists in the formation of a curved depression arranged with reference to the cutter, so as to facilitate its use, and in the locking mechanism contained in the handle, whereby the blade of the cutter is rigidly held in position, as hereinafter described.

A is a shell or case to which the tube B is attached at *a*. The tube B extends the entire length of the shell A and contains the tang *b* of the blade C. A slot, *c*, is formed in the tube B, Fig. 6, through which a pin, *d*, in the tang *b* passes. A sleeve, D, is placed on the tube B, having a slot, *e*, with the notches e' e^2 at each end of the slot *e*. The tube B has a pin, *f*, entering a short transverse slot, *g*, in the sleeve D, by which the sleeve D is held from sliding on the tube B, and is allowed a limited rotary motion.

In the upper end of the tube B, and on the side opposite the slot *c*, I form a short slot, g', into which a pin, *h*, in the cap E, Fig. 4, passes, which serves to prevent the rotary motion of the cap E, but permits a limited sliding motion. The cap E is closed at the top. Its lower end overlaps the upper end of the sleeve D, and a pin, *j*, in the cap E enters a helical slot, *k*, in the upper end of the sleeve D.

Between the upper end of the tube B and the cap E is a spiral spring, F, whose tension maintains the pin *h* at the upper end of the slot g', and also the pin *j* at the upper portion of the helical slot *k*, holding the sleeve D with the notches e' and e^2 coincident with the slot *c* in the tube B, and locking the pin *d* at each end of the slot *e*. By pressing the cap E downward, and compressing the spring F, the action of the pin *j* in the helical slot *k* will rotate the sleeve D and bring the slot *e* in the sleeve D coincident with the slot *c* in the tube B, releasing the pin *d* in the tang *b*, and allowing the blade C to slide the length of the slot *e*.

The blade C and tang *b* are made preferably of one piece of steel, and upon the flat sides of the blade file-teeth *l* are formed, and a mortise, *m*, is cut through the blade from edge to edge, the sides of the mortise forming sharp cutting-edges at *n n'*.

In order to allow the edge of the finger-nail to be readily entered in the mortise *m* and presented to the cutting-edges *n n'*, I make a curved depression, *p*, in the blade midway between the cutting-edges *n n'*.

I am aware that finger-nail cutters have been made having a mortise in a steel blade, with the walls of the mortise forming cutting-edges with one side of the blade. Such I do not now claim.

I am also aware that a handle having an inner tube carrying the tool has been used, said tube having a slot in which a pin entered, and a sleeve inclosing said inner tube, having a slot with notches for locking the pin at each end of the slot; but in such cases the inner tube turns, carrying the pin into the slot and causing a partial rotation of the tang, which is objectionable.

In my present improvement the inner tube is rigidly attached to the outer case, and the sleeve alone has a rotary motion, carrying the notches e' and e^2 on the pin *d*, which has only a longitudinal sliding motion.

What I claim as of my invention, and desire to secure by Letters Patent, is—

1. In a finger-nail cutter consisting of a metallic blade having a mortise passing through the blade and forming cutting-edges with one side of the blade, the curved concave depression *p*, formed in the side, making the cutting-edges and opening into said mortise, as and for the purpose set forth.

2. The combination, with an outer shell or case, of an inner slotted tube, a sleeve turning on the inner tube and having a slot with locking-notches and a helical slot, a cap overlapping said sleeve and carrying a pin entering said helical slot in the sleeve, and a spring applied to said cap to hold it up in position to be depressed by the thumb, as and for the purpose set forth.

3. The combination, with an outer shell or case, of an inner slotted tube attached to said case, a slotted sleeve turning on said inner tube but held from sliding thereon, and having a slot and a series of locking-notches and a short helical slot, a cap sliding over the end of said sleeve but held from turning, and carrying an actuating-pin entering said helical slot in the sleeve, and a spring between the end of the fixed inner tube and the sliding cap, whereby the cap is held up and the actuating-pin held in one end of the helical slot, as and for the purpose set forth.

GEO. H. COATES.

Witnesses:
RUFUS BENNETT FOWLER,
C. F. STEVENS.