

(Model.)

C. E. GLESSNER.

COMBINED TWEEZERS AND SCREW DRIVER.

No. 311,308.

Patented Jan. 27, 1885.

Fig. 1.

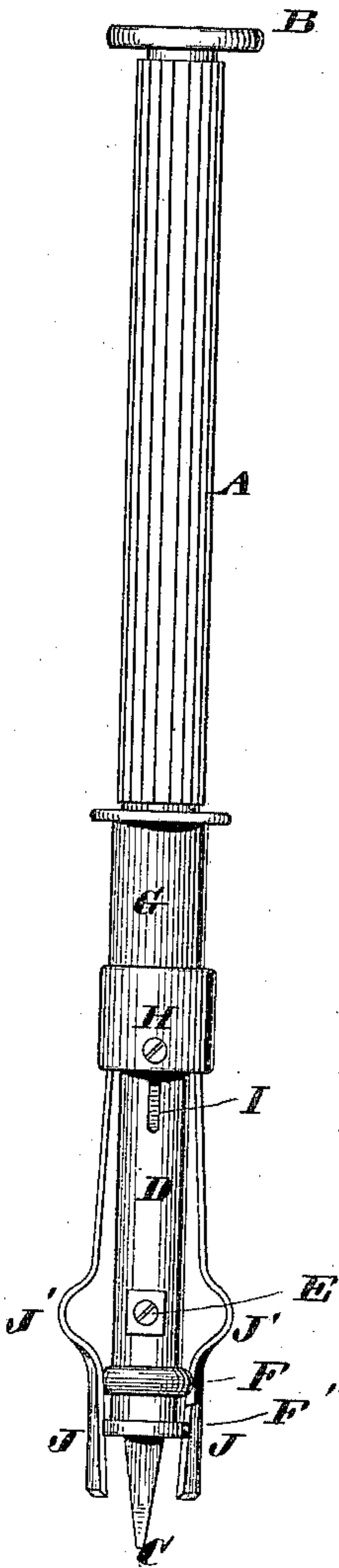


Fig. 2.

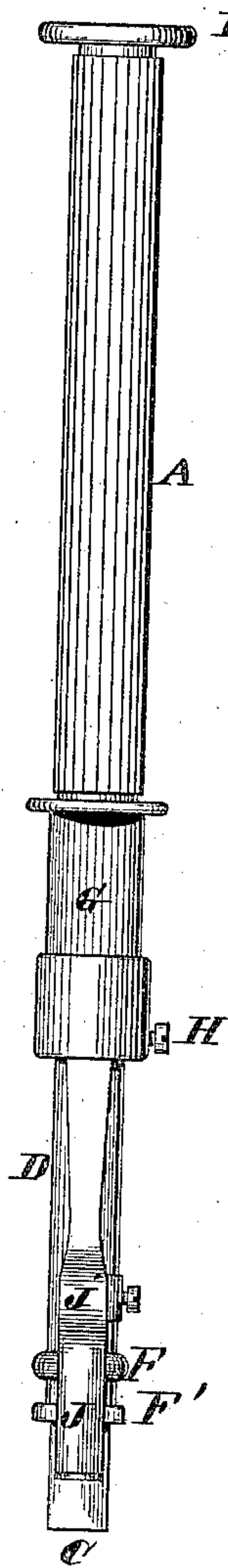
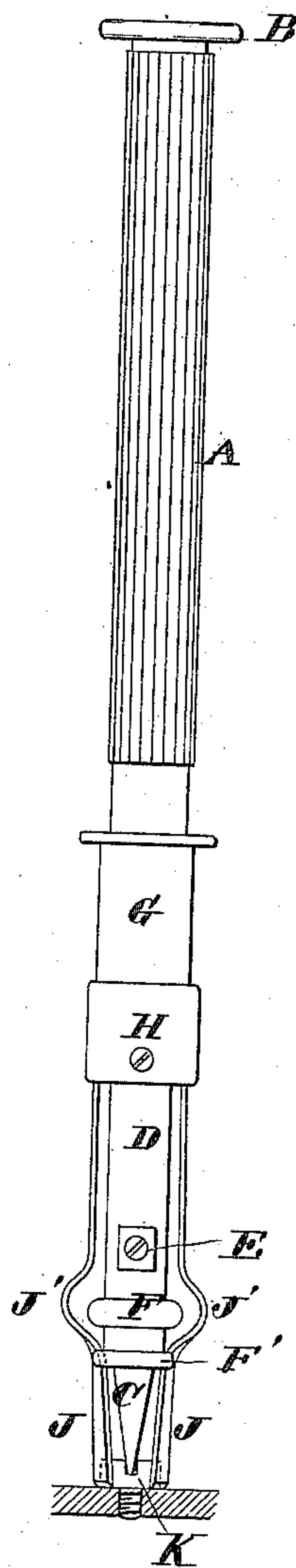


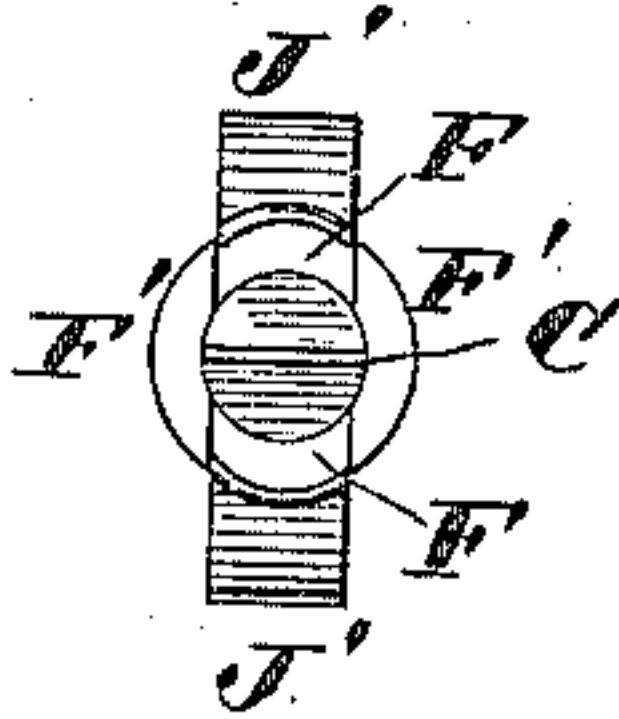
Fig. 3.



Attest:

Charles Pickles
Geo. L. Wheelock

Fig. 4.



Inventor:

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UNITED STATES PATENT OFFICE.

CHARLES E. GLESSNER, OF BOULDER, COLORADO.

COMBINED TWEEZERS AND SCREW-DRIVER.

SPECIFICATION forming part of Letters Patent No. 311,308, dated January 27, 1885.

Application filed October 13, 1884. (Model.)

To all whom it may concern:

Be it known that I, CHARLES E. GLESSNER, of Boulder, Boulder county, Colorado, have invented a certain new and useful Combined
5 Tweezers and Screw-Driver, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

Figures 1 and 2 are side views at right angles to each other, showing the spring-jaws retracted. Fig. 3 is a side view showing the point of the screw-driver, and the spring-jaws engaging a screw. Fig. 4 is an end view of the instrument as seen in Fig. 1.

15 A is the stem of the instrument, ending at top in a swiveled or turning head, B, and at bottom in a screw-driver, C.

D is a sleeve which fits upon the lower part of the stem, leaving the point of the screw-driver exposed. The sleeve is held in position upon the stem by a set-screw, E, and its position can be changed so as to leave a greater or smaller length of the screw-driver point exposed.

25 G is a sleeve sliding upon the sleeve D, and prevented from turning thereon by a stud-screw, H, whose point works in a slot, I, of the sleeve D. The sleeve G carries two spring-jaws, J, forming tweezers, whose purpose is to grasp the head of the screw K when in an advanced position, as seen in Fig. 3.

35 F and F' are bosses or beads on the sleeve D, the bead F acting to open the spring-jaws as they are retracted, and the bead F' acting as a guide or stay to the jaws, which occupy recesses in this bead when they are in advanced position, as seen in Fig. 3.

I prefer to make the spring-jaws transversely curved, as shown, so that they will take firm

hold of the screw-head. The spring-jaws are bowed outward at J', so as to allow their points to approach each other as the sleeve G descends the jaws being out of contact with the bead F when in their extended position, and being carried toward each other by their own elasticity.

I have described the sleeve G as working on a sleeve, D; but the sleeve D is not essential, as the sleeve G may work directly on the stem of the screw-driver and the beads F F' be made upon the same.

I claim—

1. In a combined tweezers and screw-driver, the combination of the stem A, provided with an opening-bead, F, advance recessed bead F', and driver C, and the sleeve G, sliding thereon, having spring-jaws J, formed with bows J', the jaws adapted to occupy the recesses in the advance bead, and the opening-bead releasing the jaws from the recessed bead when the sleeve is retracted, as set forth.

2. The combination of the stem A, having a point, C, the sleeve G, having spring-jaws J J, and the intermediate adjustable sleeve, D, as set forth.

3. The combined tweezers and screw-driver, consisting of the stem A, having point C, the sleeve G, having stud-screw H, and carrying spring-jaws J J, formed with bows J' J', and the intermediate sleeve, D, formed with the opening-bead F, guide-bead F', having recesses for the jaws, slot I for the stud-screw, and the set-screw E, as set forth.

CHARLES E. GLESSNER.

Witnesses:

EDWARD L. WALKER,
JAMES P. MAXWELL.