

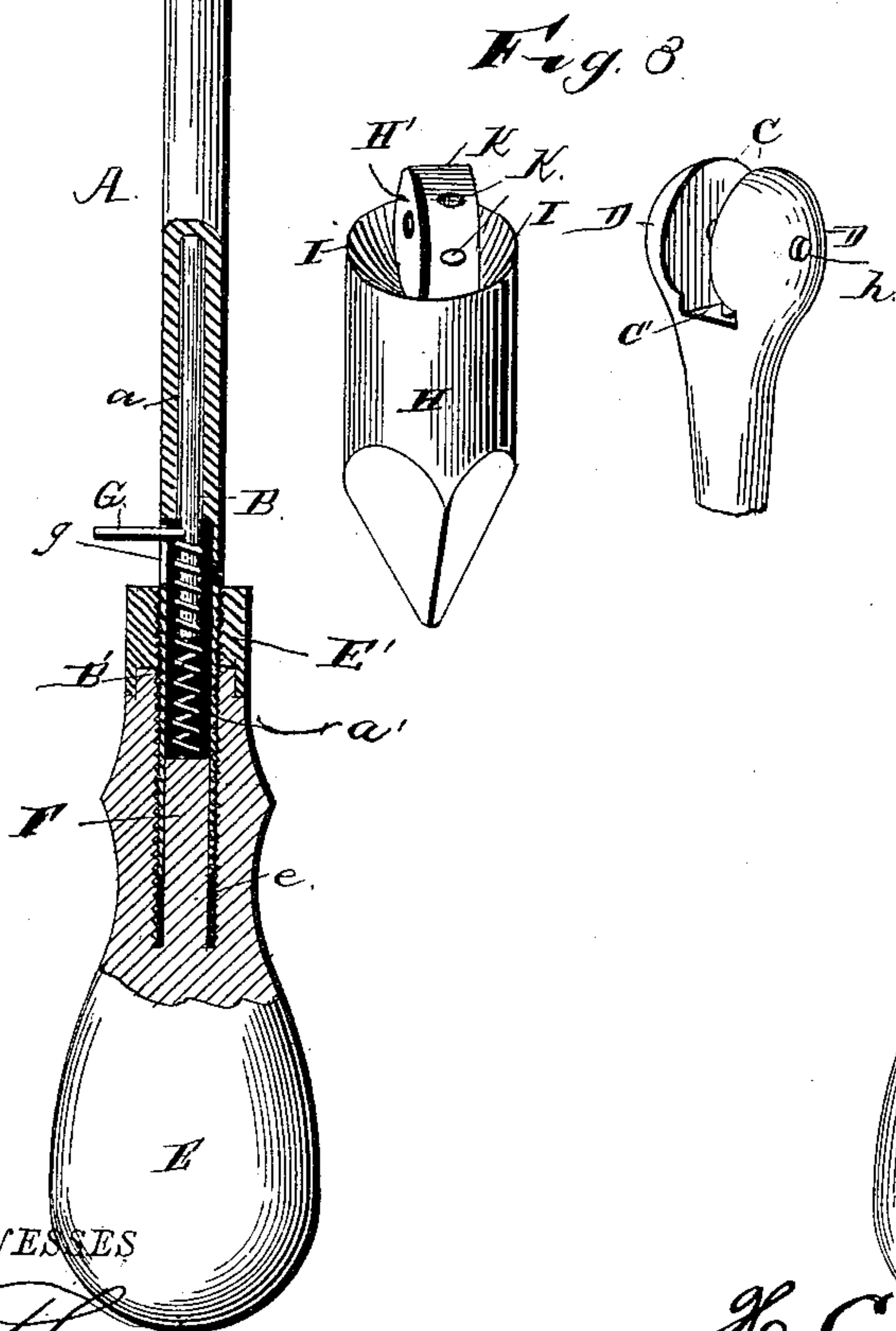
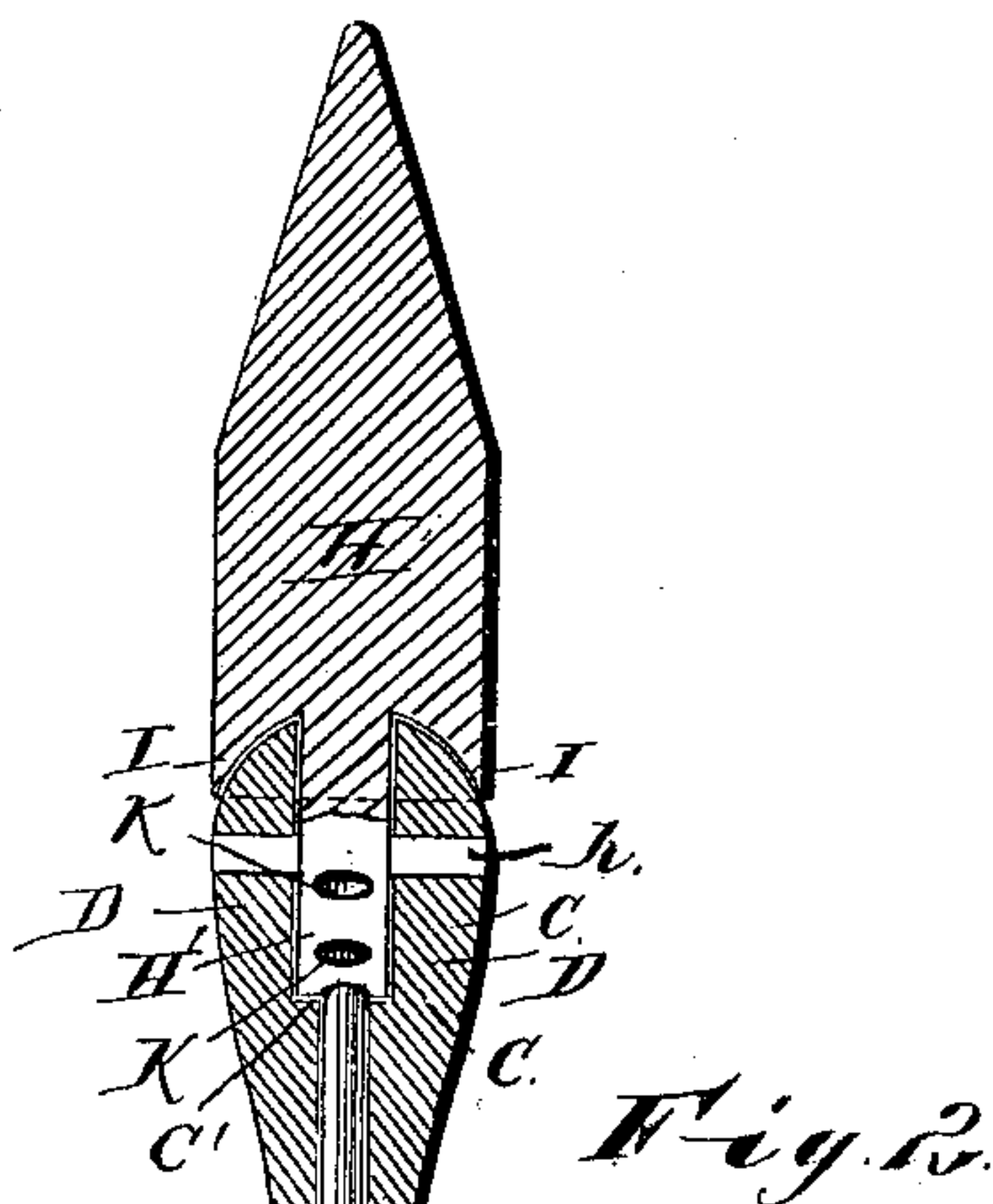
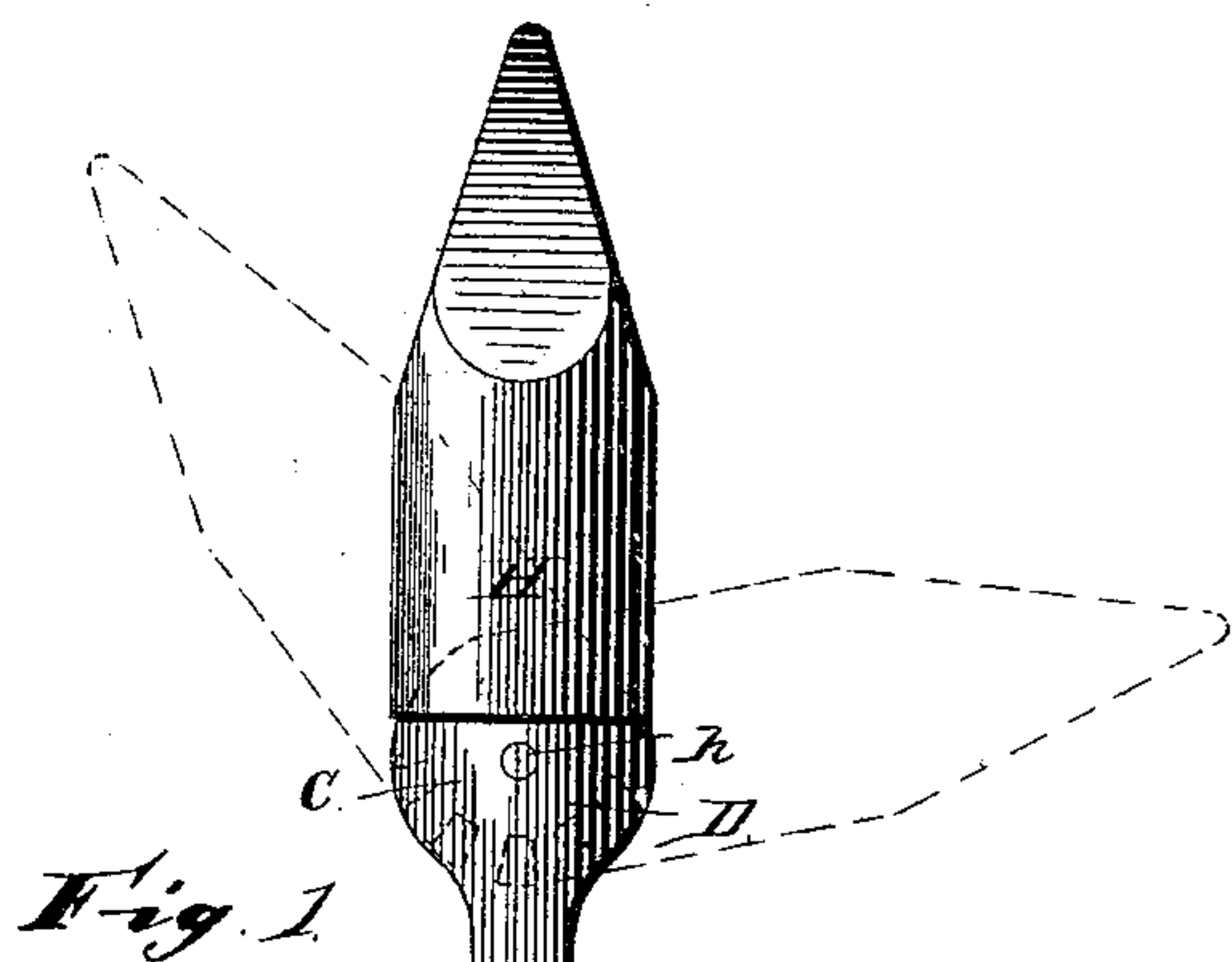
(No Model.)

H. C. MYLANDER.

SOLDERING IRON.

No. 371,534.

Patented Oct. 11, 1887.



WITNESSES

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UNITED STATES PATENT OFFICE.

HENRY CASPER MYLANDER, OF OAK HARBOR, OHIO.

SOLDERING-IRON.

SPECIFICATION forming part of Letters Patent No. 371,534, dated October 11, 1887.

Application filed May 17, 1887. Serial No. 238,510. (No model.)

To all whom it may concern:

Be it known that I, HENRY CASPER MYLANDER, a citizen of the United States, residing at Oak Harbor, in the county of Ottawa and State of Ohio, have invented new and useful Improvements in Soldering-Irons, of which the following is a specification.

My invention relates to improvements in soldering-irons; and it consists in a certain novel construction and arrangement of parts for service, fully set forth hereinafter, and specifically pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a side view, partly in section, with the end of the pivot-pin presented. Fig. 2 is a similar view with the side of the pivot-pin presented. Fig. 3 is a detached perspective view of the upper end of the shank and the copper point.

Referring by letter to the drawings, A designates the shank of the soldering-iron, provided with a longitudinal opening, *a*, in which operates the pin B, and the said shank is provided at the upper end with a spherical or rounded head, C, divided by the slot C' into the ears D D, having aligned central openings therein. The lower end of the opening *a* is enlarged to form the recess *a'*, and a spring, B', operates in the said recess around the pin B.

E designates the handle of the soldering-iron, having a longitudinal recess, *e*, therein, to receive the lower end of the shank A. A ferrule, E', is secured on the upper end of the said handle, having a threaded recess or opening to align with the recess *e* in the handle, and the lower end of the shank is exteriorly threaded to enter the said ferrule and secure the handle in place.

F designates a stud formed integral with the handle or secured in place in the lower end of the recess *e*, and projecting outwardly in such a manner that when the handle is screwed on the shank the said stud F will enter the lower end of the shank and press against the lower end of the spring. It will be readily seen that as the handle is screwed on the spring is compressed, thus pressing the pin B forward with greater force, and as the handle is unscrewed the strength of the spring is lessened. Thus the adjustable handle allows of the alter-

ing at will of the tension of the actuating-spring for the pin B.

G designates a thumb-hold secured at the inner end in the pin B near the handle, and projecting outwardly through and adapted to operate in the slot *g* in the side of the shank A.

H designates the soldering-copper, having the tongue H' on the lower end, to be secured between the ears D D at the upper end of the shank, the said tongue being provided with a transverse perforation to align with the openings in the said ears, and *h* is a pivot-pin passed through the said aligned openings.

The shoulders I I on each side of the tongue H' are recessed or hollowed out to receive the edges of the rounded ears D D, and it will be seen that when the copper point is properly secured in place and the pivot-pin passed through the ears D and the tongue H', the copper will be very firmly secured in place and will have no lateral play.

The curved periphery of the tongue H' is provided with a series of sockets, K K, adapted to receive the tapered end of the pin B, which is automatically forced thereinto by the spring hereinbefore described.

The manner of adjusting the iron for use is obvious. Retract the pin B by means of the thumb-hold, turn the copper point to the desired angle, and allow the point of the pin to automatically engage in one of the sockets, thus firmly locking the said copper at the desired angle to the shank. It will be seen that the manner of adjusting the said copper is very simple. It is merely necessary to draw the pin B back sufficiently to release the copper point, allow the said point to swing around until it has nearly reached the point at which it is desired to be locked, when, if the locking-pin is released, it will automatically slip into the desired socket when it becomes aligned therewith.

I am aware that it is not new to pivot the copper point to the shank, and also that it is not new to provide means to adjust the said copper at the desired point or angle; but I am not aware that the means for accomplishing the adjustment of the copper as herein described has been heretofore used. The means of adjustment which I provide do not require

that the hand which holds the iron shall leave the handle thereof, the finger-hold being within easy reach, as will be readily seen. I am also not aware that the knuckle-joint, herein described, between the upper end of the shank and the copper point has been heretofore used, as shown. Further, I am not aware that a spring-actuated pin has been used to secure the copper point at the desired angle, and that the tension of the actuating-spring has been adjustable by a mere twist of the handle.

Having thus described the construction, operation, and advantages of my invention, I claim—

1. A soldering-iron having the shank A, copper point pivoted to the upper end of the same, having a rounded lower end provided with sockets, and the spring-actuated pin in the said shank to automatically engage in the said sockets, substantially as and for the purpose set forth.

2. In a soldering-iron, the combination of the shank A, ears D at the upper end, copper H, having a rounded tongue, H', pivoted between said ears, sockets K in the periphery of the said tongue, longitudinally-movable pin B in the said shank, spring B' around the lower end of the pin, slot g in the shank, and thumb-hold G, secured to the pin and operating in the said slot, substantially as and for the purpose set forth.

3. In a soldering-iron, the combination of the hollow shank A, the copper point having a perforated lower end and pivoted to the up-

per end of the said shank, pin B in the shank, spring B' at the lower end to actuate the same, handle E, having recess e therein, ferrule E', secured thereon and interiorly threaded to screw on the lower end of the shank, and the stud F in the recess e, to enter the lower end of the hollow shank and press against the lower end of the spring, substantially as and for the purpose set forth.

4. In a soldering-iron, the combination of the hollow shank, copper point pivoted thereto, spring-actuated pin in the said shank, and handle to screw on the lower end of the shank and adapted to adjust the tension of the spring, substantially as and for the purpose set forth.

5. The combination, with the shank and spring-actuated pin operating therein, of the point pivoted to the said shank and having sockets therein to receive the end of the said pin, substantially as described.

6. The combination, with a shank having the rounded ears D on the end, of the point having the tongue H', pivoted between the said ears, and the recessed shoulders I to receive the said ears, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

HENRY CASPER MYLANDER.

Witnesses:

H. F. HARRISON,
U. A. KAHLERT.