

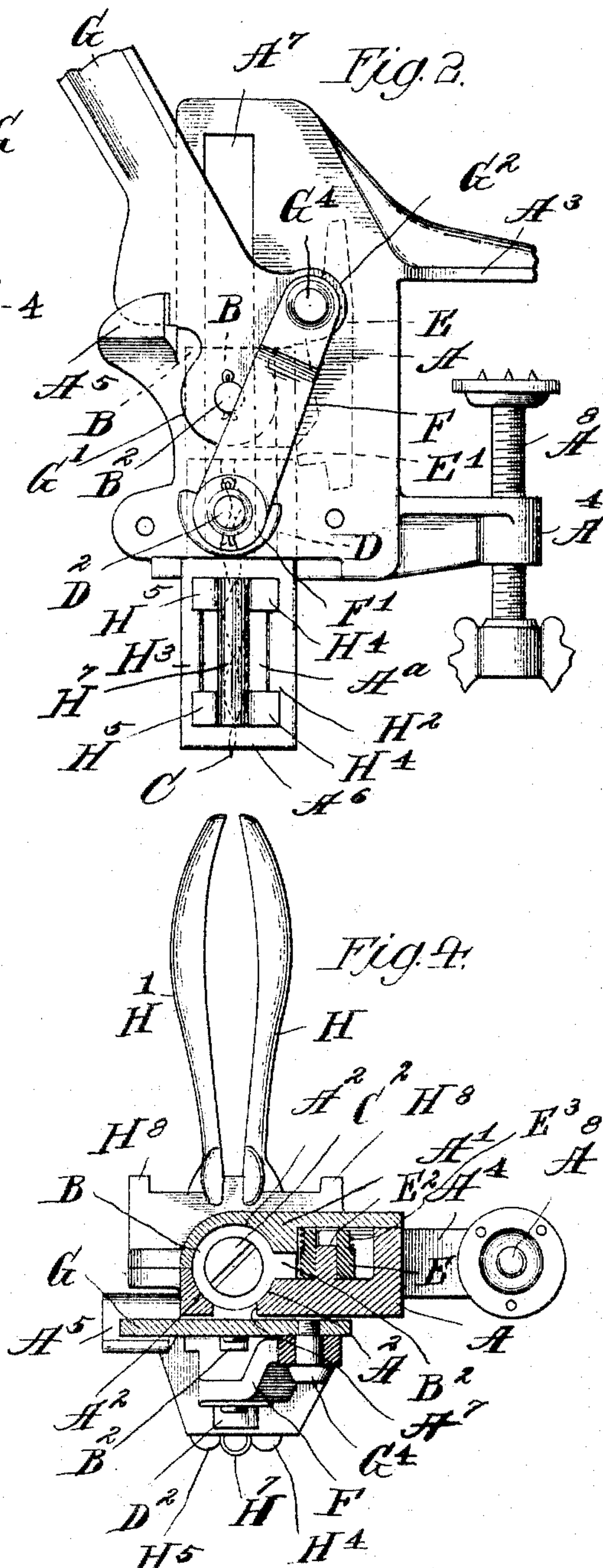
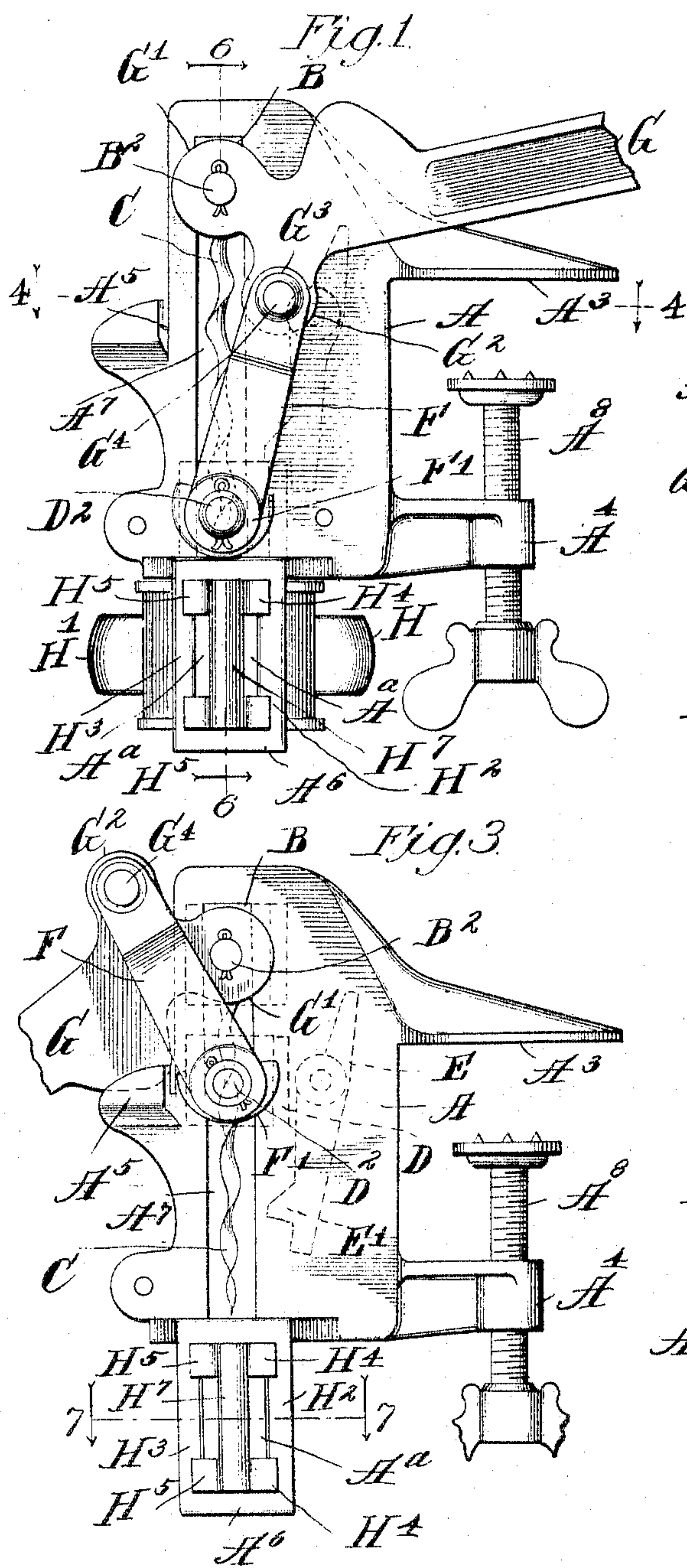
L. & E. STROHACKER.

CORK EXTRACTOR.

APPLICATION FILED JULY 2, 1904.

NO MODEL.

2 SHEETS—SHEET 1.



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L. & E. STROHACKER.

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2 SHEETS—SHEET 2.

Fig. 5.

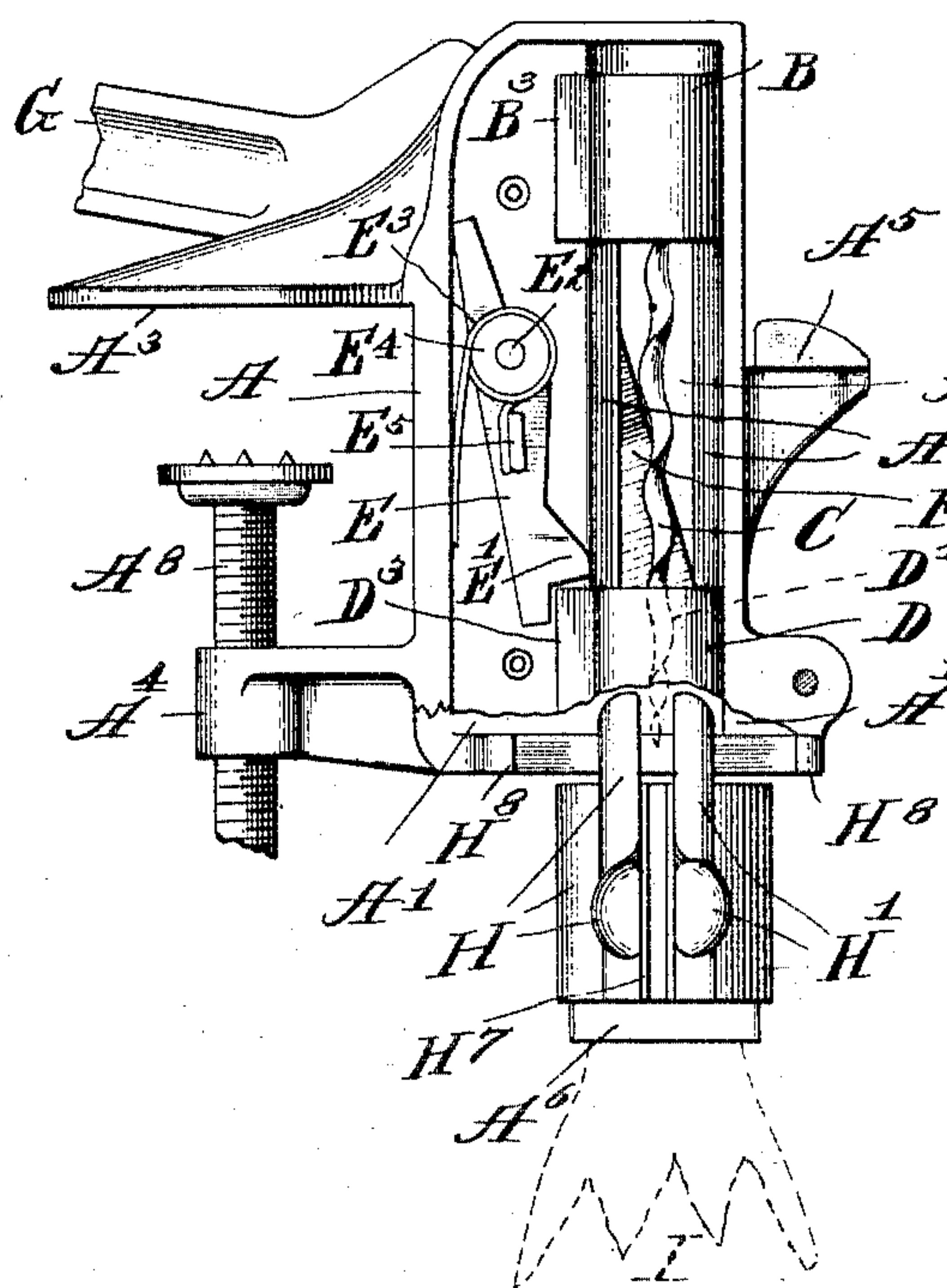


Fig. 6.

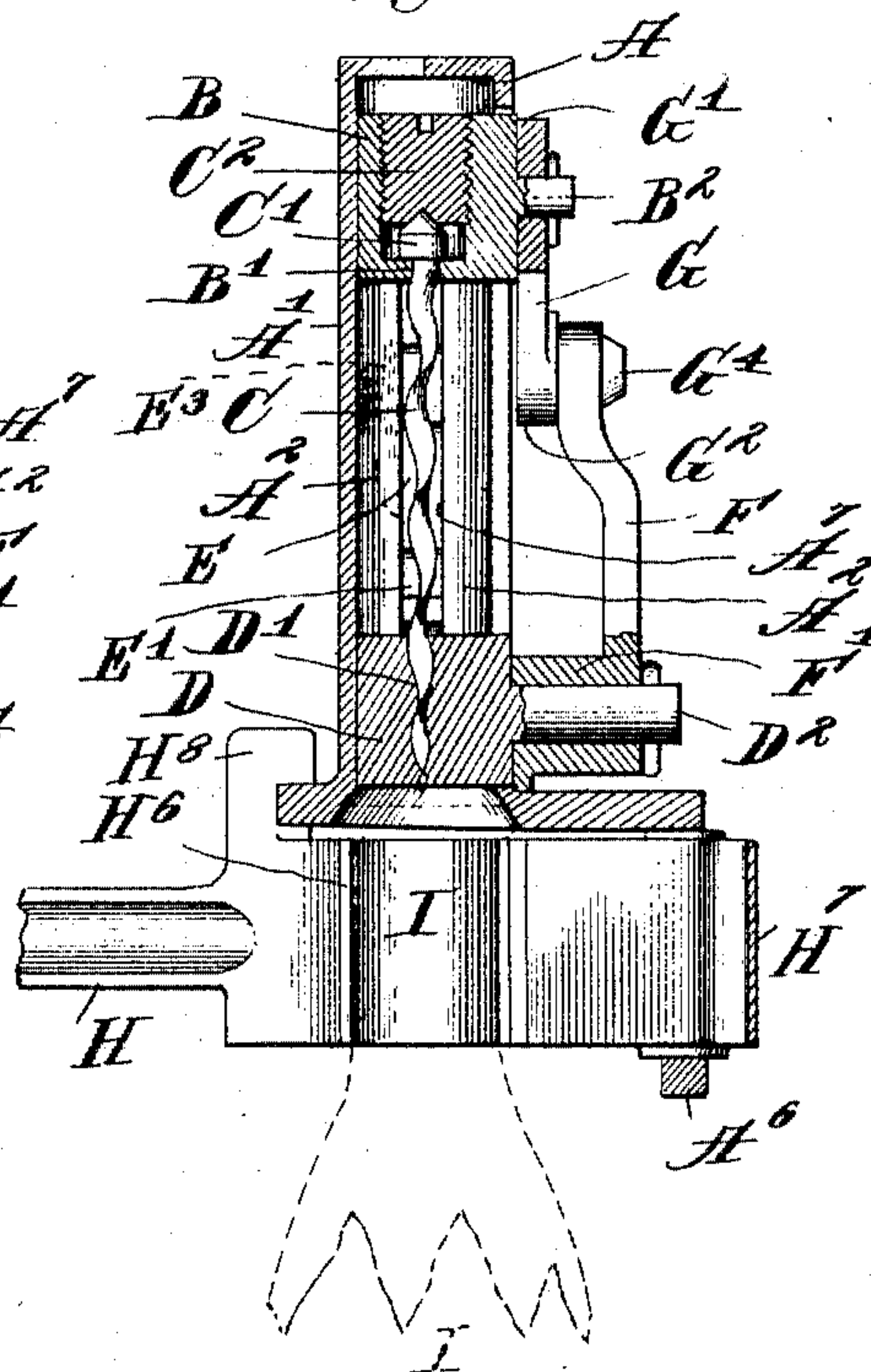
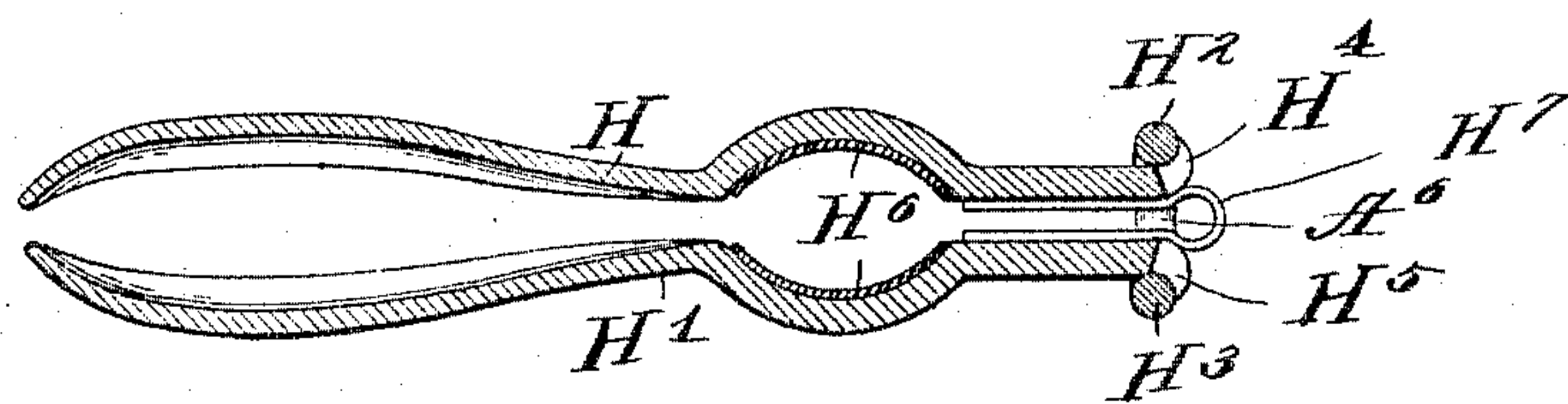


Fig. 7.



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UNITED STATES PATENT OFFICE.

LOUIS STROHACKER AND EDWARD STROHACKER, OF CHICAGO, ILLINOIS.

CORK-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 776,152, dated November 29, 1904.

Application filed July 2, 1904. Serial No. 215,188. (No model.)

To all whom it may concern:

Be it known that we, LOUIS STROHACKER and EDWARD STROHACKER, citizens of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Cork-Extractors, of which the following is a specification.

The object of our invention is to provide a cork-extractor of direct action, simple construction, and easy operation; and it consists of certain new and useful features of construction and combinations of parts especially devised to those ends, all as hereinafter fully described, and specifically pointed out in the claims.

Referring to the accompanying drawings, which form a part of this specification, Figure 1 is right side elevation of a cork-extractor embodying our invention. Fig. 2 is a like view of the same with parts thereof in different position from those shown in Fig. 1. Fig. 3 is also a like view of the same with parts thereof in still different positions from those shown in Figs. 1 and 2. Fig. 4 is a section at the dotted line 4 4 in Fig. 1 of parts there shown. Fig. 5 is a left side elevation of the cork-extractor with a part of its supporting-casing nearest to the observer broken away to show the construction and arrangement of its interior parts. Fig. 6 is a section at the dotted line 6 6 in Fig. 1 of parts there shown. Fig. 7 is a section at the dotted line 7 7 in Fig. 3 of parts there shown.

Like letters of reference indicate corresponding parts throughout the several views.

A A' are casings, formed, preferably, of cast metal, and are provided interiorly with a vertical slideway A² for the travel of parts to be described hereinafter and exteriorly with jaws A³ A⁴ and lugs A⁵ A⁶. The casings A A' constitute the main frame of the extractor. A longitudinal slot A⁷ extends through the casing A for the projection of parts there-through from the slideway A². The lug A⁵ serves as a fulcrum for the operating-lever of the extractor, and the lug A⁶ has an opening A⁸ therethrough to admit and furnish pivot-

bearings for the jaws for grasping the necks of bottles to be uncorked. The jaw A⁴ is provided with a thumb-screw A⁸ for securing the extractor to any suitable support.

B, Figs. 5 and 6, is a corkscrew-carrier provided with an annular bearing B' therein and a transverse pivot-bearing B² and a transverse unlocking-lug B³ thereon and slidably mounted in the upper portion of the slideway A² of the extractor-frame.

C, Fig. 6, is a corkscrew rotatably mounted by its upper end portion C' in the annular bearing B' in the corkscrew-carrier B. We prefer to mount the corkscrew in its carrier by forming a head C' on the upper end portion thereof and suspending it thereby in the annular bearing B' in the carrier B, retaining it in operative position therein by means of the plug C².

D, Figs. 5 and 6, is a corkscrew-nut threaded longitudinally and spirally at D' to admit freely therethrough the corkscrew C and provided with a transverse pivot-bearing D² and a transverse locking-nut D³ and slidably mounted in the lower portion of the slideway A² of the extractor-frame.

E, Fig. 5, is a detent-lever provided with a detent E' and mounted between its ends on a pivot-bearing E² on the extractor-frame. A spring E³, coiled about a boss E⁴ on the lever E and having its end portions included between the extractor-frame and a lug E⁵ on such lever E, normally maintains the detent E' in the path of the locking-lug D³ of the corkscrew-nut D, thereby insuring the retention of the latter at the bottom of the slideway A² except when released from such detent E' by the descent of the corkscrew-carrier B.

F is a link hinge-jointed by one end F' thereof to the pivot D² on the corkscrew-nut D.

G, Figs. 1, 2, and 3, is a lever hinge-jointed by one side G' thereof and to one side of its median line to the pivot B² on the corkscrew-carrier B and by the other side G² thereof and to the opposite side of its median line to the free end portion G³ of the link connection F of the corkscrew-nut D by means of a

pivot G^4 and adapted to be swung over and fulcrumed upon the lug A^5 , Figs. 3 and 5, on the extractor-frame.

H H' are counterpart handled jaws for grasping and holding the necks of bottles while corks are being extracted therefrom and are pivoted to the pintle-like sides H^2 H^3 of the lug A^6 by means of the outwardly-curved hooks H^4 H^5 thereon. The portions of the jaws H H' that come in contact with the bottle-necks are lined with india-rubber H^6 to prevent breakage of the same. A U-shaped spring H^7 is inserted between the hooked ends of the jaws H H' and maintains them in engagement with the parts H^2 H^3 of the lug A^6 and also normally holds them opened against the lugs H^8 , Figs. 4 and 5, on the extractor-frame.

Supposing the neck of a bottle from which the cork is to be extracted is being grasped between the jaws of the extractor closed tightly thereon by the left hand of an operator, its operation to extract the cork will be as follows: The operator will seize the lever G , Figs. 1 and 6, with his right hand and swing it over to the position shown in Fig. 2, during which operation the screw C will rotatably travel downward through the spiral thread D' , Fig. 6, of the nut D to the position shown in Fig. 2, which is its downward limit of travel. Just as the screw C is finishing its downward course the unlocking-lug B^3 , Fig. 5, strikes the detent E' and throws it out of engagement with the locking-lug D^3 on the nut D to the position shown in Fig. 2. The lever G is then swung downward to the position shown in Fig. 3, during which operation the carrier B , its screw C , and nut D will assume the positions shown in Fig. 3 and the cork will have been extracted from the bottle. The lever G is next swung from the position shown in Fig. 3 to that shown in Fig. 1, during which operation the nut D is caused to descend to and is locked in the position there shown by the detent E' and the screw C will have been withdrawn from the extracted cork. The operation of the lever G in practice is a continuous forward movement succeeded by a continuous reverse or backward movement to the position from which its movement began.

The sole function of the detent E' is to lock the nut D at its lower limit of travel, and thereby render the pivot G^4 available as a fulcrum for the lever G while the corkscrew C is being thereby forced downward into the cork to be drawn.

What we claim as new, and desire to secure by Letters Patent, is—

1. In a cork-extractor, in combination, a frame having a slideway therein for movable parts, a corkscrew-carrier slidably mounted in the slideway in the frame, a corkscrew ro-

tatably mounted in and depending from the carrier, a corkscrew-nut threaded longitudinally to admit therethrough the corkscrew and slidably mounted in the slideway in the frame, and an operating-lever, hinge-jointed by one side thereof and at one side of its median line, to the carrier, and by the other side thereof and at the opposite side of its median line, to the free end portion of a link connection on the nut, substantially as and for the purpose specified.

2. In a cork-extractor, in combination, a frame having a slideway therein, a corkscrew-carrier slideway mounted in the slideway in the frame, a corkscrew rotatably mounted in and depending from the carrier, a corkscrew-nut threaded longitudinally to admit therethrough the corkscrew and slideway mounted in the slideway in the frame, a link hinge-jointed, by one end thereof, to the corkscrew-nut, and an operating-lever, hinge-jointed by one side thereof and to one side of its median line, to the carrier, and by the opposite side thereof and to the opposite side of its median line, to the free end portion of the link connection on the corkscrew-nut, substantially as and for the purpose specified.

3. In a cork-extractor, in combination, a frame having a slideway therein for movable parts, a corkscrew-nut, having a locking-lug thereon and mounted in the slideway in the frame, a detent mounted on the frame for engaging the locking-lug, on the nut, and therethrough locking the nut at its lower limit of travel, at predetermined times, a corkscrew-carrier with its corkscrew, mounted in the slideway in the frame, and having an unlocking-lug thereon for disengaging the detent from the locking-lug of the nut, as the carrier approaches its lower limit of travel, a link pivoted, by one end thereof, to the corkscrew-nut, and an operating-lever, pivoted by one side thereof and to one side of its median line, to the carrier, and by the opposite side thereof and to the other side of its median line, to the free end of the link of the corkscrew-nut, substantially as and for the purpose specified.

4. In a cork-extractor, in combination, a supporting-frame having a slideway therein, a corkscrew-carrier, provided with an annular bearing therein, and a transverse pivot-bearing and a transverse unlocking-lug thereon, and slidably mounted in the frame, a corkscrew, rotatably mounted, by its upper end portion, in the annular bearing in the corkscrew-carrier, a corkscrew-nut, threaded longitudinally to admit therethrough the corkscrew, and provided with a transverse pivot-bearing and a transverse locking-lug, and slidably mounted in the frame, a detent mounted on the frame normally locking the corkscrew-nut, through the locking-lug thereon, at its lower limit of travel, a link connected by one

end to the pivot-bearing on the corkscrew-nut,
and an operating-lever, connected by one side
thereof and to one side of its median line, to the
pivot-bearing on the corkscrew-carrier, and
5 by the opposite side thereof and to the oppo-
site side of its median line, to a pivot on the
free end of the link connection of the cork-
screw-nut, substantially as and for the pur-
pose specified.

In testimony whereof we have signed our 10
names to this specification in the presence of
two subscribing witnesses.

LOUIS STROHACKER.
EDWARD STROHACKER.

Witnesses:

K. A. CASTELLO,
L. L. MORRISON.