

(No Model.)

2 Sheets—Sheet 1.

W. E. WARNER.
MOLD FOR CASTING CAN OPENERS.

No. 488,590.

Patented Dec. 27, 1892.

FIG. 1—

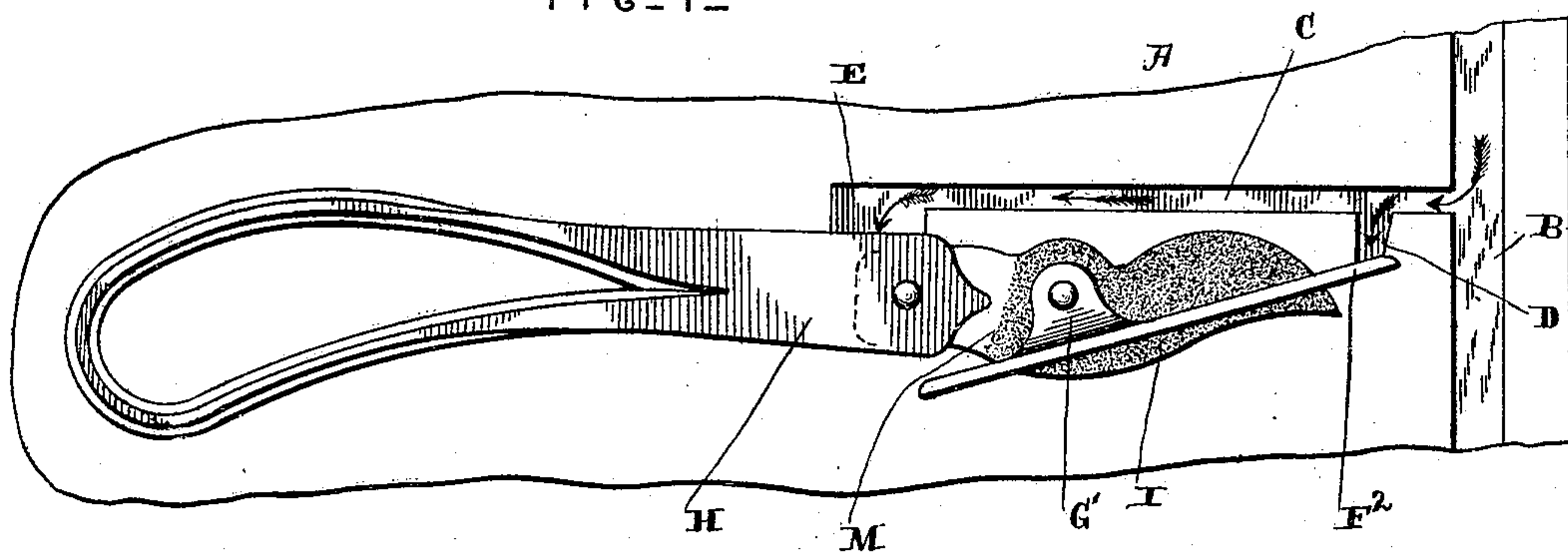


FIG. 2—

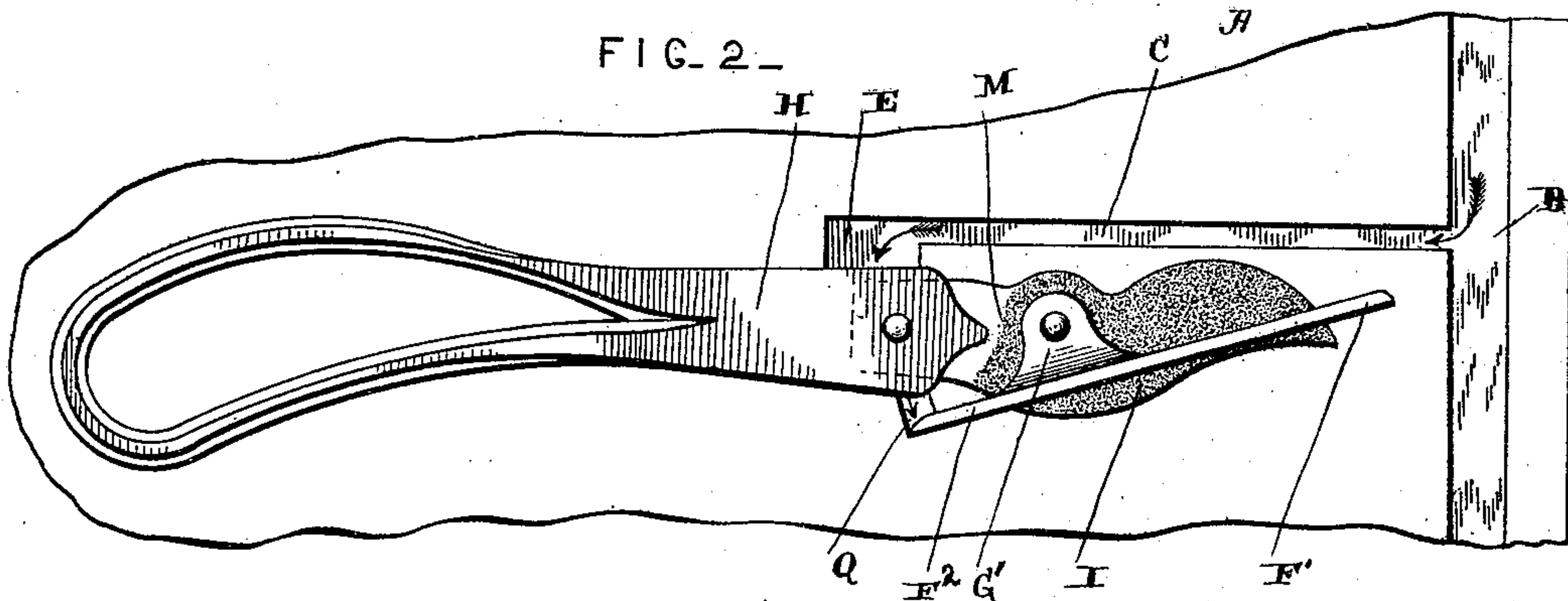
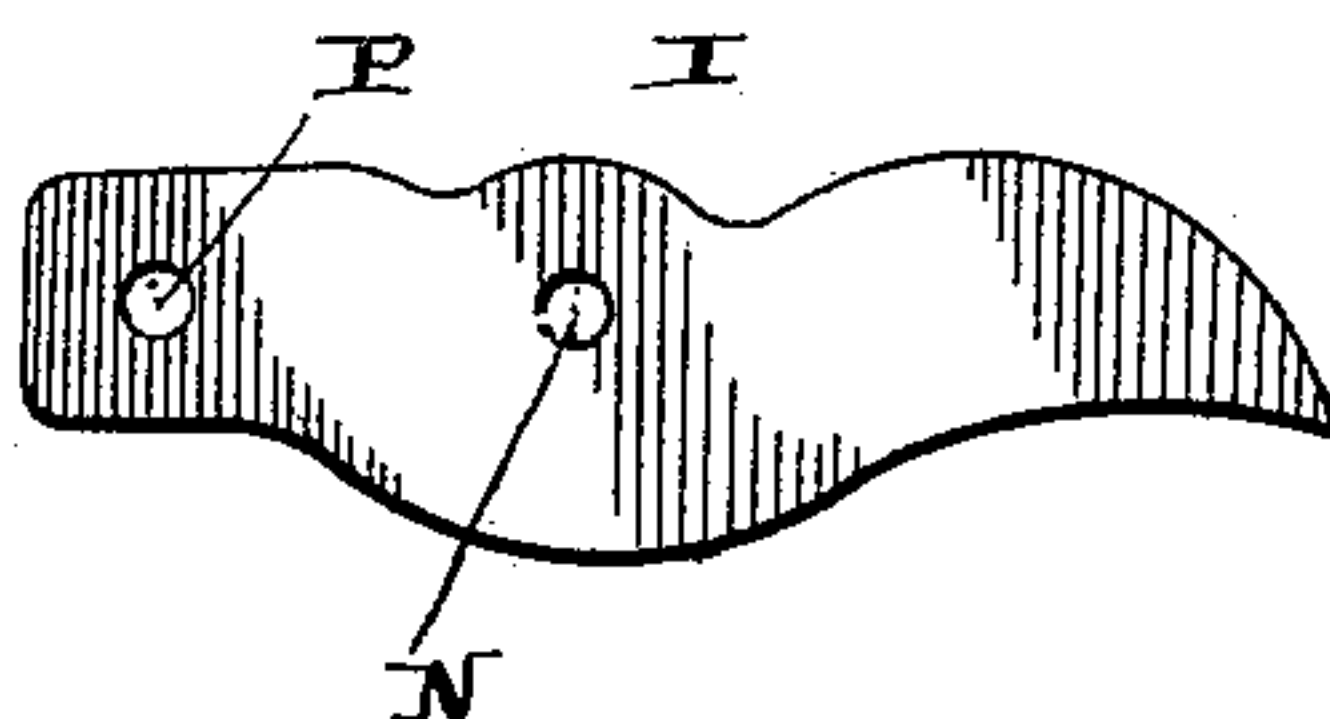


FIG. 3—



WITNESSES—

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per
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Fig. 4.

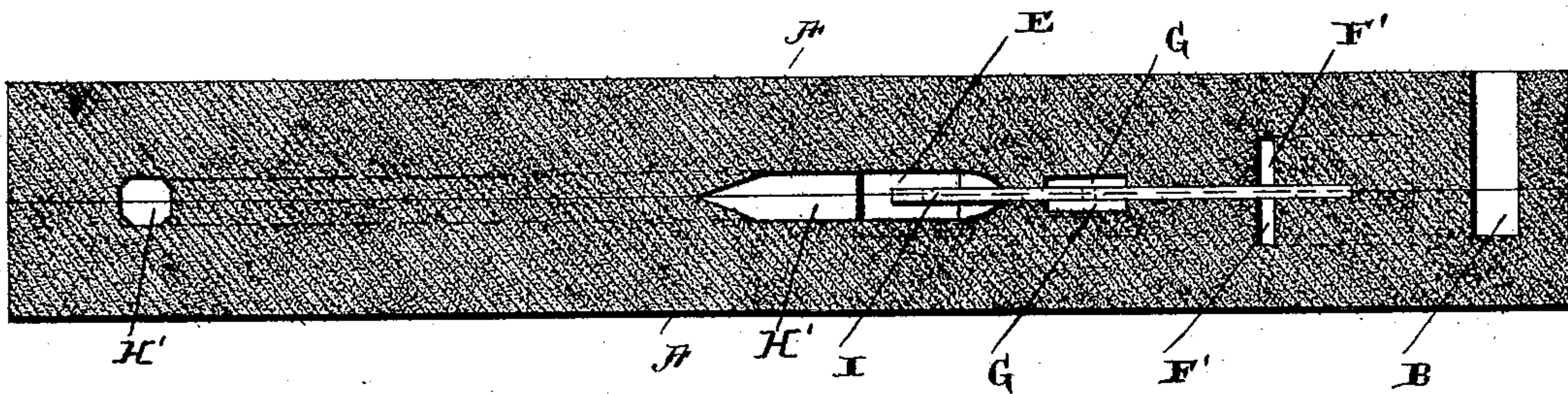
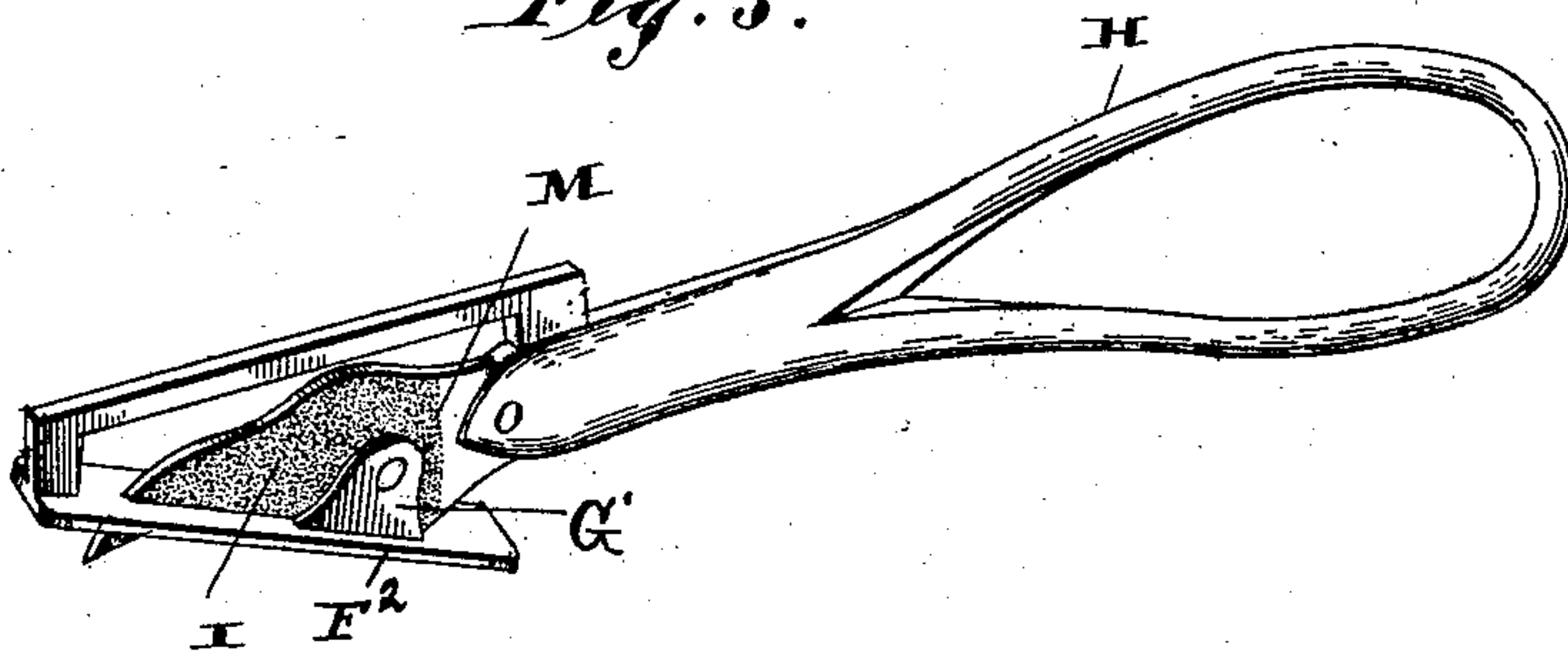


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

WARREN EUGENE WARNER, OF ROCHESTER, NEW YORK.

MOLD FOR CASTING CAN-OPENERS.

SPECIFICATION forming part of Letters Patent No. 488,590, dated December 27, 1892.

Application filed November 5, 1891. Serial No. 410,983. (No model.)

To all whom it may concern:

Be it known that I, WARREN EUGENE WARNER, of Rochester, in the county of Monroe and State of New York, have invented
5 certain new and useful Improvements in Molds for Casting Can-Openers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in molds for casting can openers; and it consists
15 in the construction of the mold, which will be fully described hereinafter and particularly referred to in the claim.

The object of my invention is to cast a handle directly to a blade for can openers, and at
20 the same time cast a fulcrum plate which is pivotally connected to the blade in front of the handle, which does away with the necessity of rivets to connect these parts as heretofore used; which enables me to produce these
25 articles much cheaper, and which is a great saving in time, and therefore in expense to the manufacturer.

In the drawings:—Figure 1 is a side view of a can opener which embodies my invention, showing it placed in one side of the mold. Fig. 2 is a similar view showing a modification in the construction of the mold. Fig. 3 is a detached view of the blade. Fig. 4, is a vertical section of the mold before the molten
35 metal is poured therein, showing the blade in position. Fig. 5, is a perspective view of the casting and sprue.

A, indicates a mold which is made of sand or of any other suitable or desirable substance, and which is provided with a main gate B, and an auxiliary gate C which extends outward therefrom preferably at a right angle as shown. Extending laterally from this auxiliary gate C near its inner end, and near the
45 main gate B, is a small gate D, and at the outer end of the gate C is another small gate E. The small gate D at the inner end of the auxiliary gate C, communicates with a cavity F' made in the mold, and which cavity is the shape of the fulcrum plate F² as shown. This cavity is formed with the recesses G, which extend
50 upon opposite sides of the steel blade I and

form the pivotal ears G' of the fulcrum plate F². The small gate E, at the outer end of the auxiliary gate C, communicates with a cavity
55 H' in the form or shape of the handle H of the opener as shown.

In operation, the steel or other blade I, is coated with oil and sand from the point M outward, and is placed in the mold at the
60 proper place, so that the handle will be cast around its inner end, and the fulcrum plate around the blade as shown. As shown in Fig. 3 the blade is provided with an opening N, between its ends, which opening is between
65 the fulcrum ears G' of the fulcrum plate F², and another opening or perforation P, which is inside of the inner end of the handle. Metal run into the main gate B passes through the auxiliary gate C, and the small gates D, and
70 E, to the fulcrum plate and handle cavities, and also through the perforations N and P. As the blade I is not oiled where it passes into the handle cavity, the handle is cast tightly around it, and the metal runs through the
75 opening P, holding the inner end of the blade rigidly and firmly in place. The metal also passes through the perforation N, between the ears G' and connects them and forms a pivotal point or fulcrum for the blade upon
80 the plate F². As the blade is oiled and sanded from the point M, the fulcrum plate is not cast to the blade, nor is the metal cast tightly in the perforation N. By this means, the sand
85 rattles off of the blade when it is removed from the mold, and the blade is pivotally connected to the fulcrum plate without any riveting. It is then only necessary to cut the metal which is cast in the gates E, and D, by a blow with a chisel, when the article is finished without any riveting of any kind. While
90 I here show only one opener being cast, it will be readily understood that as many as desired may be extended from opposite sides of the main gate B, for the purpose of casting a large
95 number at one time.

In Fig. 2, the blade I, is placed in the mold in the same manner shown in Fig. 1, but instead of having two gates extending from the auxiliary gate C, I have only one, and then a
100 gate Q, extending from the rear end of the cavity for the fulcrum plate to that for the handle. In all other respects the operation and result are the same.

From the above description, it will be seen that I am enabled to reduce the cost of manufacturing articles of this character considerably, which is a big saving to the manufacturer, where they are manufactured in large quantities.

The opener proper is not my invention, and I therefore make no claim to it, but only to the method of casting the same, and to the mold used.

Having thus described my invention, I claim:—

A mold for casting can openers having a handle cavity, a fulcrum plate cavity, a blade cavity extending into the handle cavity and through the fulcrum plate cavity, and suitable gates leading to the handle and plate cavities, substantially as specified. 15

In testimony whereof I affix my signature in presence of two witnesses.

WARREN EUGENE WARNER.

Witnesses:

N. R. STREETER,
C. F. GARFIELD.