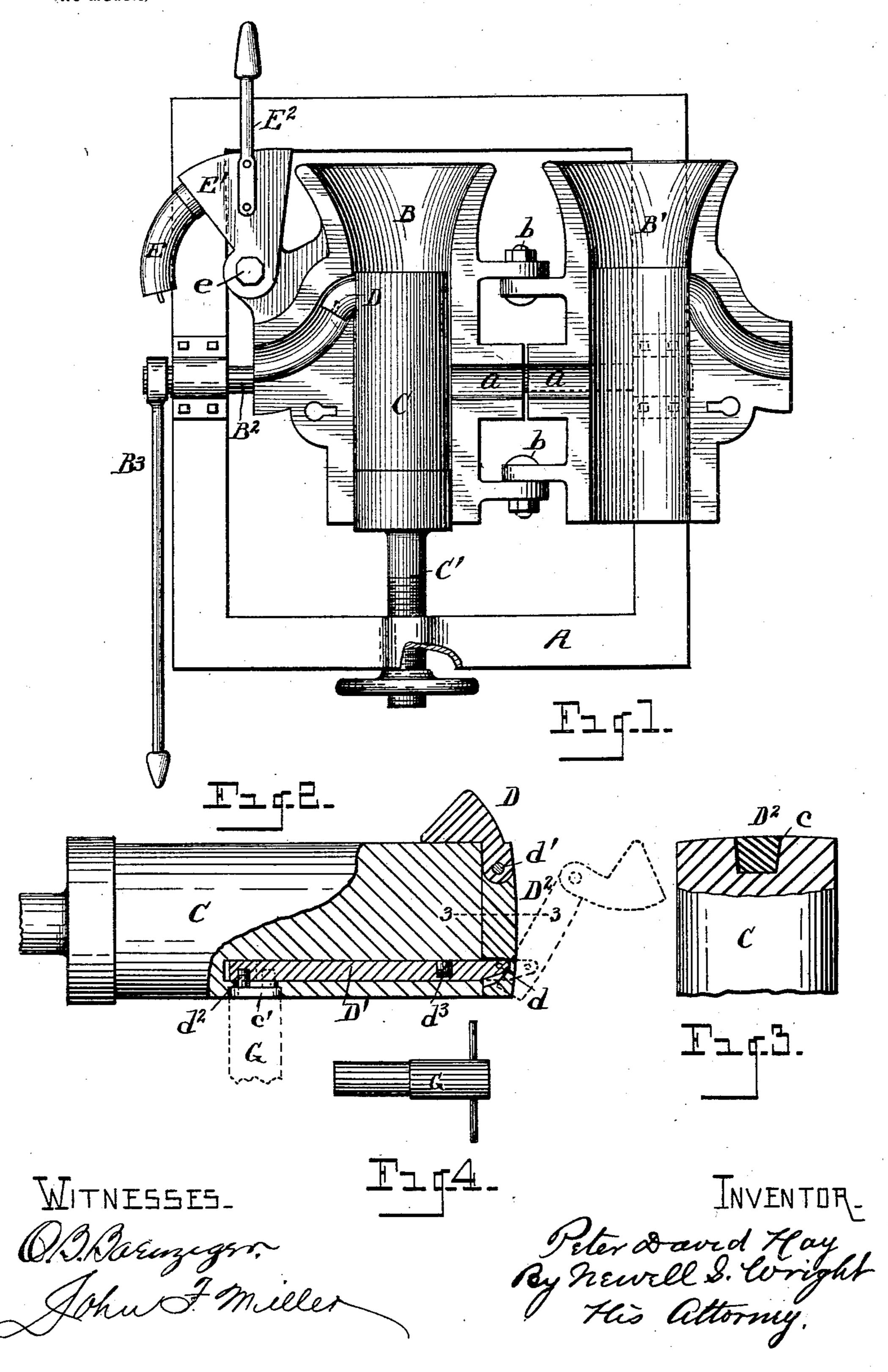
## P. D. HAY.

## MOLD FOR CASTING WASTE TRAPS.

(Application filed Jan. 27, 1897. Renewed May 22, 1899.)

(No Model.)



## United States Patent Office.

PETER DAVID HAY, OF DETROIT, MICHIGAN, ASSIGNOR TO THE DETROIT SANITARY SUPPLY COMPANY, OF SAME PLACE.

## MOLD FOR CASTING WASTE-TRAPS.

SPECIFICATION forming part of Letters Patent No. 630,884, dated August 15, 1899.

Application filed January 27, 1897. Renewed May 22, 1899. Serial No. 717, 799. (No model.)

To all whom it may concern:

Be it known that I, Peter David Hay, a citizen of the United States, residing at Detroit, county of Wayne, and State of Michi-5 gan, have invented a certain new and useful Improvement in Molds for Casting Waste-Traps; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in ro the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention is designed to provide certain 15 new and useful improvements in molds for casting waste-traps in a convenient and economical manner; and it consists of the construction, combination, and arrangement of devices and appliances hereinafter described 20 and claimed, and illustrated in the accom-

panying drawings, in which—

Figure 1 is a plan view showing the mold opened. Fig. 2 is a detail view, partly in section, showing the construction of the main 25 core and the elbow-core connected therewith. Fig. 3 is a view in section on the line 33, Fig. 2. Fig. 4 is a detail view of the outlet-core. I carry out my invention as follows:

A is any suitable support or frame.

BB' represent the two parts of a mold hinged together, as at b. This mold is journaled in the frame, as indicated at B2, so as to be reversible. A lever B<sup>3</sup> may be provided for reversing the mold.

C denotes the main core, made advanceable and retractable in any suitable manner, as by a threaded stem C', contacting with the

under surface of the frame.

D is an elbow-core connected with the main 40 core and arranged to be moved out of the way in withdrawing the core in the following manner: Within the main core is a reciprocatory bar D', having jointedly connected with its outer end a latch  $D^2$ , as indicated at d. 45 To this latch the elbow-core D is jointedly connected, as shown at d'. To receive the latch D<sup>2</sup>, the inner end of the main core is constructed with an outwardly-flaring recess, (indicated at c in Fig. 3,) the latch be-50 ing of corresponding form in cross-section,

seated, so that no metal can pass thereby. To complete the inlet-elbow of the trap, I provide an inlet-core E, carried by a swinging arm E', jointedly connected with the part 55 B of the mold, as indicated at e, an operatinghandle E<sup>2</sup> being also provided.

To form the outlet-passage, a detachable outlet-core G is provided, engageable in the

outlet-ducts a a of the mold.

The bar D' is limited in its reciprocation in any suitable way, as by a set-screw  $d^2$  thereupon projecting into a slot c' in the core C.

To adjust the core D, I provide the bar D' with a set-screw  $d^3$  to contact with the ad- 65

jacent face of the core C.

The operation of the device is as follows: When the core C is in place and ready to be withdrawn, tension thereupon will first retract it away from the latch D<sup>2</sup> to the limit 70. of the slot c', relieving the latch from the socket c. Further tension will cause the core D to swing on its joint at d'. The swing of the core D on the joint d' will not, however, alone turn it entirely out of the way of the 75 mold to permit the removal of the core C, but as the tension is continued the latch will swing on its joint at d sufficiently to allow the core C to be withdrawn from the mold. It will be understood that the core G must 80 also be withdrawn to allow the core C to be removed. When this has been done, the core C may be withdrawn, the core D and the latch D<sup>2</sup> being swung back out of the way of the mold. The core E being also swung out 85 of the way, the mold may be readily opened. It is also evident that the two parts of the mold being closed the main core C is advanced thereinto readily, the core D being in retracted position, as above explained. As 90 the core C is forced into the mold the core D is obviously forced downwardly into normal position by contact with related parts of the mold. The cores E and G are then inserted and the mold closed, when it may be reversed 95 for filling.

It will be seen that this mold can be operated and the traps manufactured thereby by a single attendant. When the core C and the core G are in place in the mold, the mold 100 is swung into downward position, when the so as to make sure of its being always closely | lever is within easy reach of the operator and

may readily be advanced into place in the mold. After the mold has been filled with metal the core E is removed before the mold is swung back into horizontal position.

5 What I claim as my invention is—

1. In an apparatus for the purpose set forth, the combination of a two-part hinged mold, a main core, means to reciprocate said core, a swinging latch carried at one extremity of said core, and an elbow-core having a jointed connection with said latch, said main core having a limited movement toward and from said latch, substantially as set forth.

2. In an apparatus for the purpose set forth, the combination of a two-part hinged mold, a main core, means to reciprocate said core, a bar D' carried by said core and having a limited reciprocation therein, a latch having a jointed connection with said bar, and an elbow-core jointedly connected with said latch, said main core recessed to receive said latch, substantially as set forth.

3. In an apparatus for the purpose set forth, the combination of a two-part hinged mold, a main core C, means to reciprocate 25 said core, a reciprocatory bar engaged with the main core, a swinging latch carried at the outer end of said bar, and an elbow-core jointedly connected with the end of said latch, substantially as described.

4. In an apparatus for the purpose set forth, the combination of a mold, a main core, means to reciprocate said core, a bar D' carried by said core and having a limited reciprocation therein, a latch having a jointed 35 connection with said bar, and an elbow-core jointedly connected with said latch, substantially as set forth.

In testimony whereof I sign this specifica-

tion in the presence of two witnesses.

PETER DAVID HAY.

Witnesses:

N. S. WRIGHT, JOHN F. MILLER.