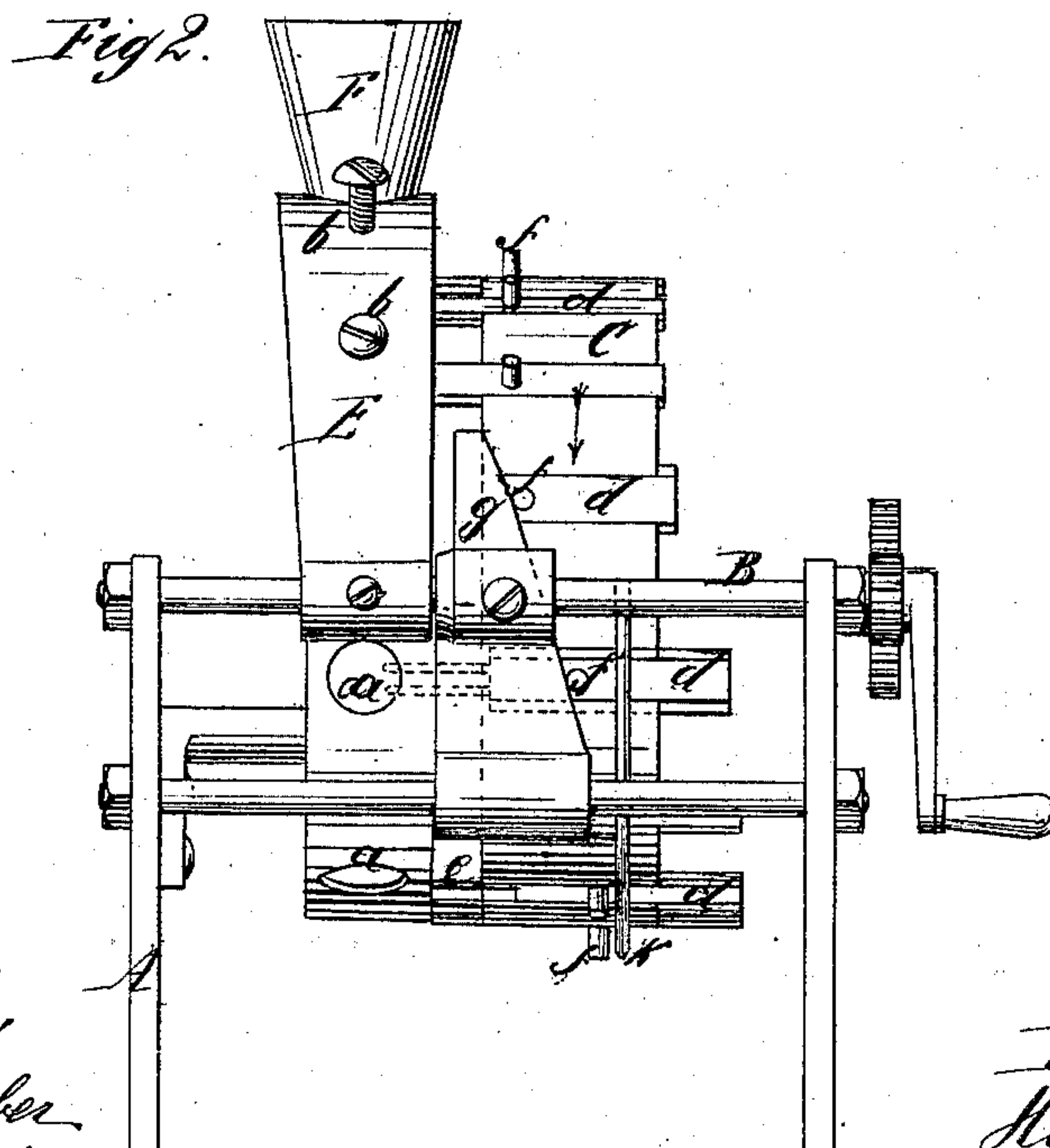
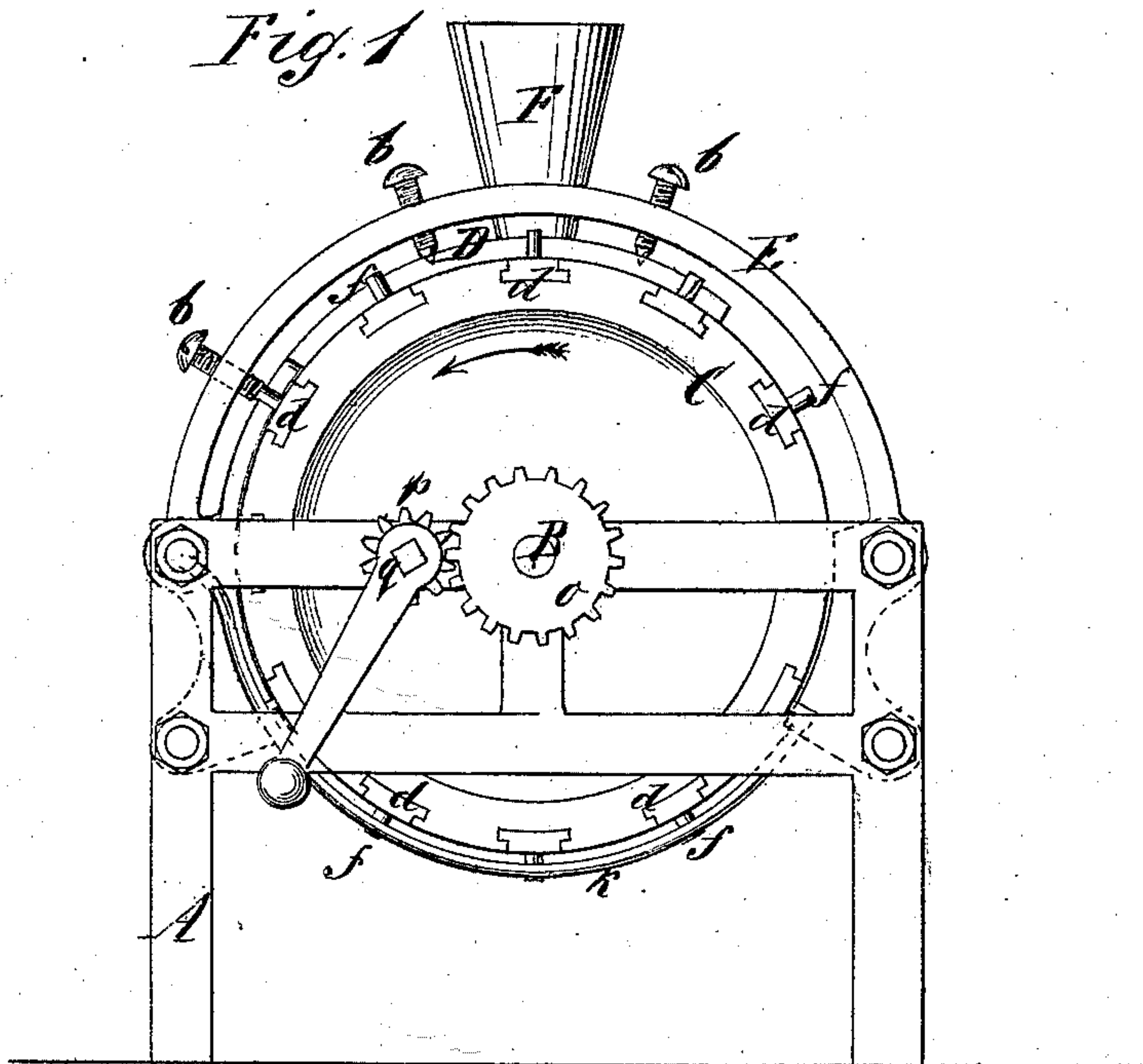


H. HOLT.
Machines for Casting Seals.

No. 147,395.

Patented Feb. 10, 1874.



Witnesses:
Ernest Bilhuber
Char. Wahler.

Inventor:
Horace Holt
Van Santvoord & Hauff
attors

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Fig. 3.

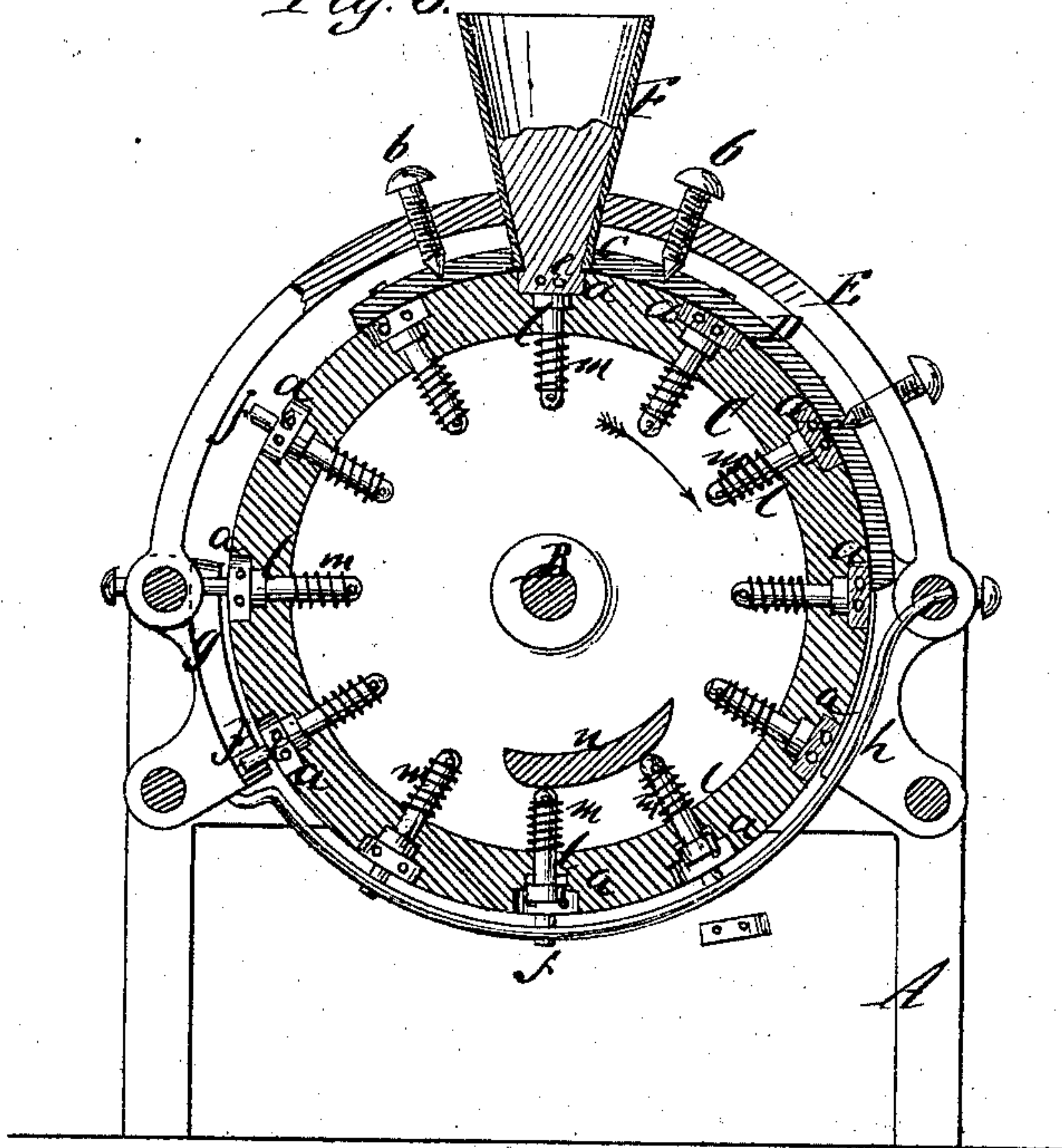
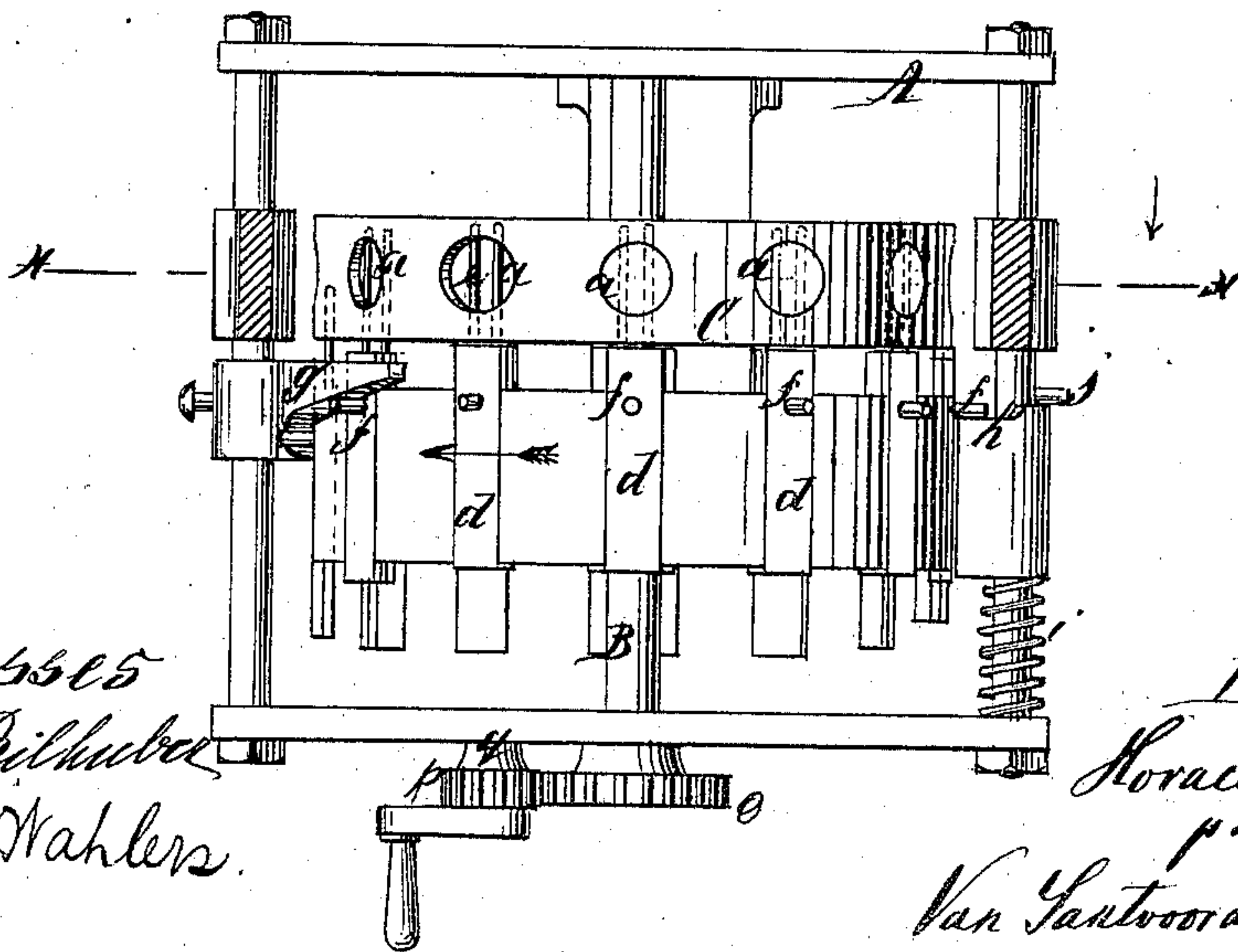


Fig 4.



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UNITED STATES PATENT OFFICE

HORACE HOLT, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND WILLIAM W. SECOMBE, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR CASTING SEALS.

Specification forming part of Letters Patent No. **147,395**, dated February 10, 1874; application filed January 9, 1874.

To all whom it may concern:

Be it known that I, HORACE HOLT, of the city, county, and State of New York, have invented a new and useful Improvement in Machines for Casting Seals and other Articles; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a front view of this invention. Fig. 2 is an end view of the same. Fig. 3 is a longitudinal section of the same, taken in the plane indicated by the line *x x*, Fig. 4, and looking in the direction opposite to that line. Fig. 4 is a plan or top view of the same, partly in section.

Similar letters indicate corresponding parts.

This invention relates to a machine in which a series of molds move against an apron provided with an aperture, through which the molten metal flows into such molds as the same pass the aperture, said apron forming one side of the finished mold, in such a manner that seals or other articles of a similar nature can be cast with great dispatch. With said molds are combined core-slides, which are automatically pushed toward and from the molds at the proper intervals, so that the seals or other articles are cast with the requisite perforations, cavities, or holes. Each mold is also provided with an ejector, which is actuated by a cam, and serves to throw out the castings after the same have set in the mold.

In the drawing, the letter A designates a frame, which forms the bearings for a shaft, B, and on this shaft is mounted a drum, C, which is provided with a number of cavities or molds, *a*, produced at suitable distances apart in the circumference of said drum. When the shaft B is turned, the molds *a* in the drum are made to sweep past an apron, D, Figs. 1 and 3, which is depressed upon the circumference of the drum by set-screws *b*, and which is of such a length that it covers two or more of the molds, and that it forms one side of each of the molds during the time, when the molten metal

is poured in and allowed to set. The set-screws *b* are tapped in an arch, E, which is supported by the traverses of the frame A, and in this arch is a hole to receive a funnel, F, the lower end of which fits tightly into an aperture, *c*, in the apron D, so that, if the funnel is filled with molten metal and the drum C is rotated, each mold, on passing the aperture *c* in the apron, is brought in communication with the funnel, and the molten metal descends and fills said mold. In line with each of the molds *a* is situated a slide, *d*, which moves in a suitable groove in the circumference of the drum, and to the end of which are secured pins *e*, (one or more,) which form the cores in order to produce the required holes or cavities in the articles to be cast. From each of said slides projects a pin, *f*, and as the drum revolves in the direction of the arrow marked thereon, these pins are successively brought in contact with a cam, *g*, which is fastened to one of the traverses of the frame A, Fig. 2, and which serves to move the core-slides back, so as to withdraw the cores *e* from the castings. As the motion of the drum progresses, the pins *f* come in contact with a second cam, *h*, Figs. 1, 3, and 4, which carries the core-slides back, so that the cores are in the required position as the molds pass under the aperture *c* in the apron D, when they receive the molten metal. The cam *h* is placed loosely on the traverses of the frame A, and it is held in position by springs *i*, which press the same up against stops *j*, Fig. 4, so that, if one of the core-slides should stick or be prevented from moving inward, the cam *h* can yield, and injury to the mechanism is prevented. A guard, *k*, Figs. 1, 2, and 3, prevents the core-slides from receding beyond the desired point. Each mold is provided with an ejector, *l*, Fig. 3, which is pressed down by a spring, *m*, and as the drum revolves the shanks of these ejectors come in contact with a cam, *n*, whereby the same are forced out against the action of their springs, and the castings contained in the molds are ejected. After the shanks of the ejectors have passed the cam *n* they recede to their original position by the action of the springs *m*, leaving the molds in the proper condition to receive

the molten metal. On the shaft B, which carries the drum C, is mounted a cog-wheel, *o*, which gears in a pinion, *p*, secured on the driving-shaft *q*, so that the drum can be readily revolved with the required velocity.

It will be readily seen from this description that the apron D forms one side of each of the molds as the same move past said apron, and this effect would also be produced if the molds *a*, instead of being made in the circumference of a drum, as shown, will be made in a flat or curved piece which has a reciprocating or oscillating motion under the apron.

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

The combination of a plate or ring containing one or more molds and one or more core-slides with an apron which forms one side of the mold or molds, and with cams for moving the core-slides, substantially in the manner shown and described.

HORACE HOLT.

Witnesses:

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