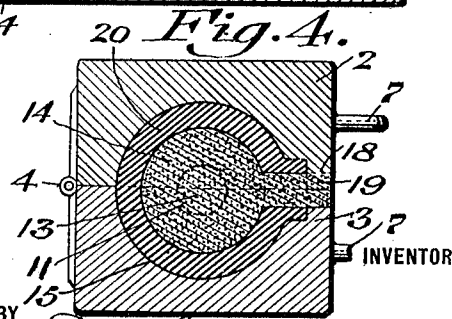
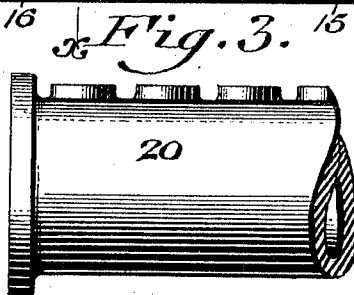
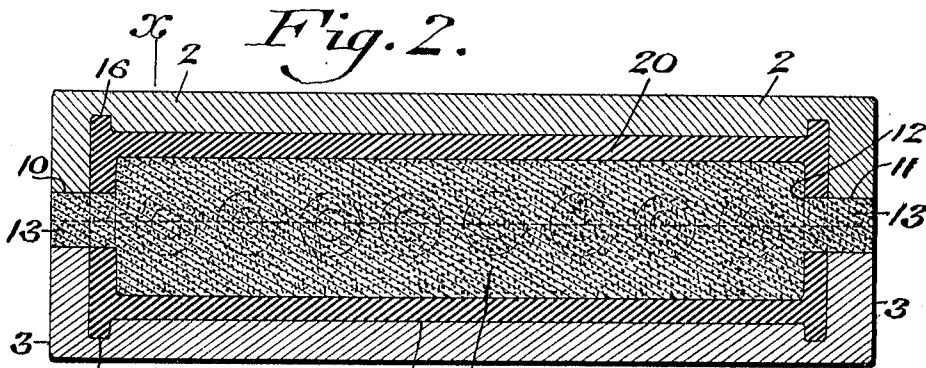
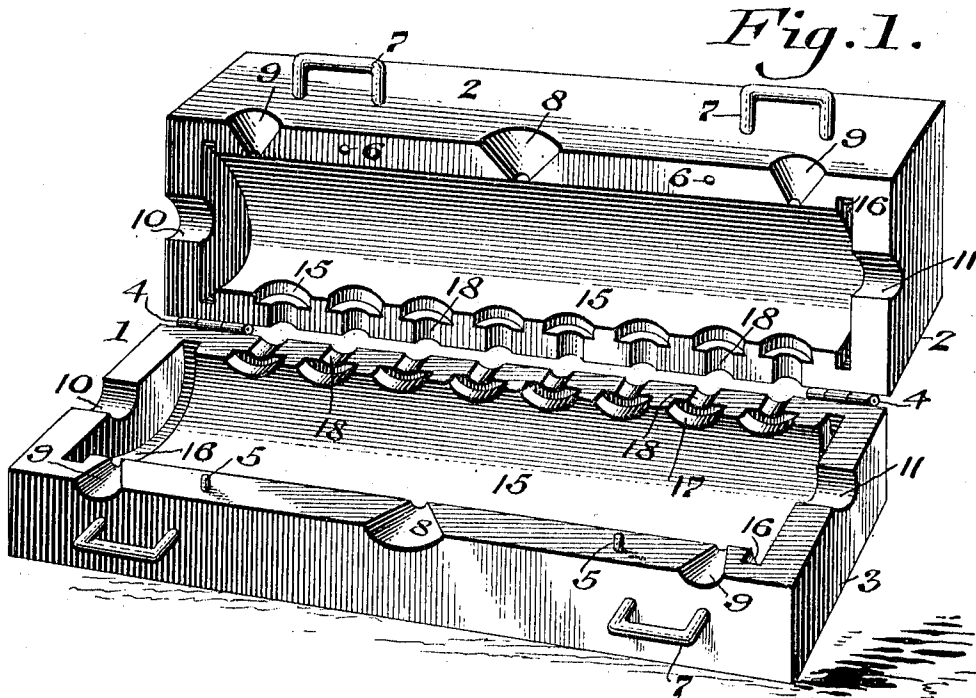


C. GORMAN.
MANIFOLD MOLD.
APPLICATION FILED MAY 11, 1910.

984,425.

Patented Feb. 14, 1911.



WITNESSES

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CORNELIUS GORMAN, OF PHILADELPHIA, PENNSYLVANIA.

MANIFOLD-MOLD.

984,425.

Specification of Letters Patent. Patented Feb. 14, 1911.

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To all whom it may concern:

Be it known that I, CORNELIUS GORMAN, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Manifold-Mold, of which the following is a specification.

My invention relates to molding devices and consists of a novel construction of a manifold mold by the employment of which I am enabled to entirely dispense with the use of anchors.

It further consists of a novel construction of a manifold mold in conjunction with which a sand core is employed and wherein a casing may be produced which is harder on the exterior portion than on the interior portion thereof.

It further consists of a novel construction of a manifold mold wherein provision is made for the escape of the fumes and gases.

It further consists of a novel construction of the cope and drag which are connected together in such a manner that a minimum amount of time is necessary to open the mold.

It further consists of a novel construction of manifold mold wherein a plurality of laterally extending apertures communicating with the atmosphere are provided.

It further consists of other novel features of construction, all as will be hereinafter fully set forth.

For the purpose of illustrating my invention, I have shown in the accompanying drawings one form thereof which is at present preferred by me, since the same has been found in practice to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of these instrumentalities as herein shown and described.

Figure 1 represents a perspective view of a manifold mold, embodying my invention. Fig. 2 represents a longitudinal sectional view thereof, but showing in addition the sand core and casting. Fig. 3 represents a side elevation of a portion of a finished casting. Fig. 4 represents a section on line $x-x$ Fig. 2.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings:—1 designates a manifold mold or flask embodying my invention, the same consisting of the cope 2 and the drag 3 which are movably connected together in the present instance by means of hinges 4, it being apparent from Fig. 1 that dowel pins 5 are secured to the drag which coöperate with apertures 6 in the cope 2. Both the cope and the drag are preferably provided with suitable handles 7. The gate 8 in the present instance, as well as the risers 9 are formed partly in the cope and partly in the drag.

10 and 11 designate apertures formed partly in the cope 2 and partly in the drag 3 and through which the ends 13 of the sand core 14 are adapted to extend, such ends forming a shoulder 12. The body of the cope and drag is recessed in any desired manner and in the present instance they are provided with the semicircular recess 15 having at its ends in proximity to the apertures 10 and 11, the flange forming recess 16. The sides of the mold opposite to the gate 10 are provided with a desired number of boss forming recesses 17 communicating with the apertures 18 which extend completely through the sides of the mold, thereby adapting the same to receive the lateral extensions 19 of the sand core 14.

20 designates the casting which is obtained by the employment of the construction shown in the drawings for the purpose of illustrating one form of my invention.

It will be apparent to those skilled in this art that by the employment of my novel construction of manifold mold I am enabled to dispense entirely with the use of anchors. It will be further apparent that owing to the provision of the novel construction and location of the apertures 18, that the gases and fumes may readily pass from the interior of the mold to the atmosphere, whereby I am enabled to produce a much better casting than if all of the fumes and gases are retained within the mold.

It will now be apparent that I have devised a novel and useful construction of a manifold mold which embodies the features of advantage enumerated as desirable in the statement of the invention and the above description, and while I have, in the present instance, shown and described a preferred embodiment thereof which has been found in practice to give satisfactory and reliable results, it is to be understood that

the same is susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of its advantages.

5 Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:—

10 1. A manifold mold consisting of a cope 2, a drag 3 having common thereto, a core receiving chamber communicating with a row of laterally extending core receiving apertures 18, the latter extending through one side only of said mold, the latter also having core receiving apertures 10 and 11 in the ends thereof, a gate 8 for said mold, and risers 9, said risers 9 being located in the side opposite to said side apertures 18, all of said apertures 18, 10, 11 and 9 being open to the atmosphere.

20 2. A manifold mold consisting of a cope 2, a drag 3 common thereto, whereby a core receiving chamber is provided, said core receiving chamber communicating with a row of laterally extending core receiving apertures 18, the latter extending through one side only of said mold, the latter also having core receiving apertures 10 and 11 in the ends thereof, a gate 8 for said mold, and risers 9, said risers 9 being located in the side opposite to said side apertures 18, all of said apertures 18, 10, 11 and 9 being open to the atmosphere, in combination with handles.

CONN. GORMAN.

Witnesses:

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AMELIA E. WAGNER.