

No. 769,958.

PATENTED SEPT. 13, 1904.

J. E. PRICE.
PATTERN.

APPLICATION FILED MAR. 8, 1904.

NO MODEL.

Fig. 1.

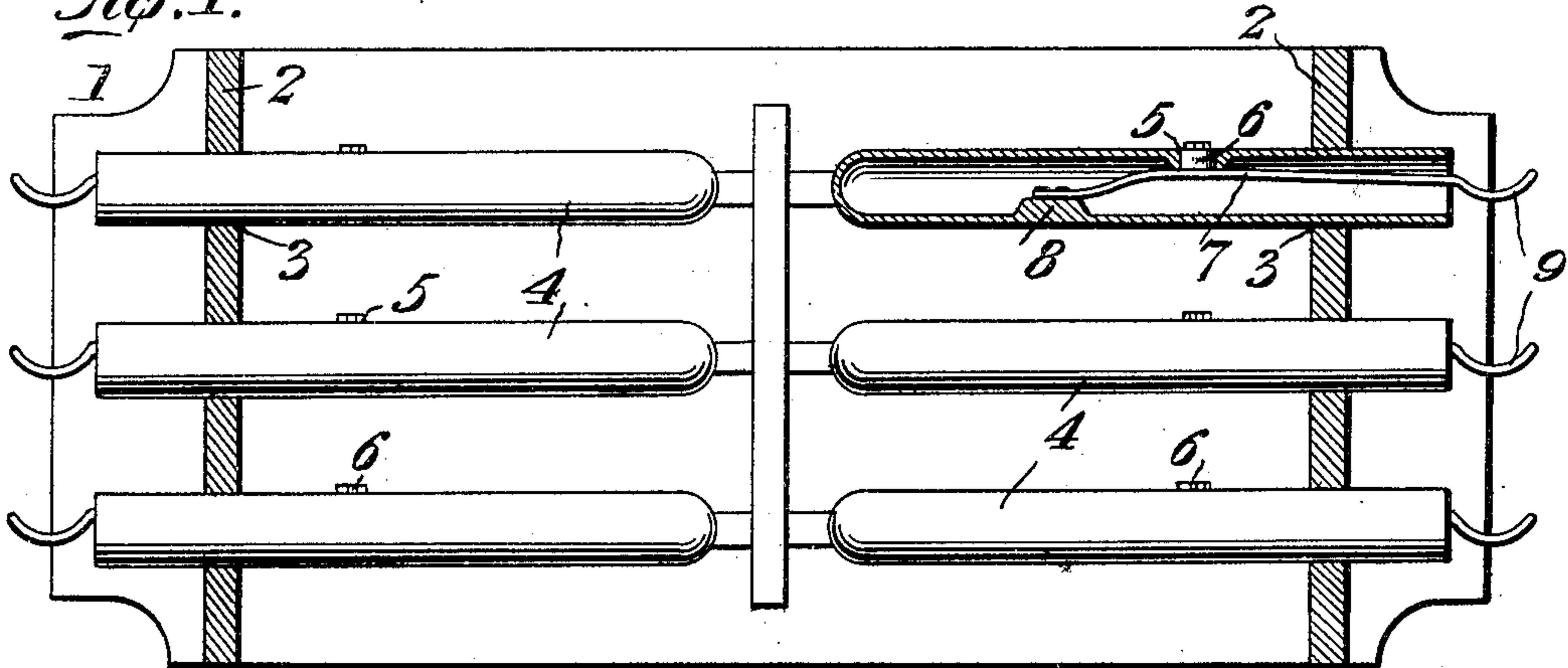


Fig. 2.

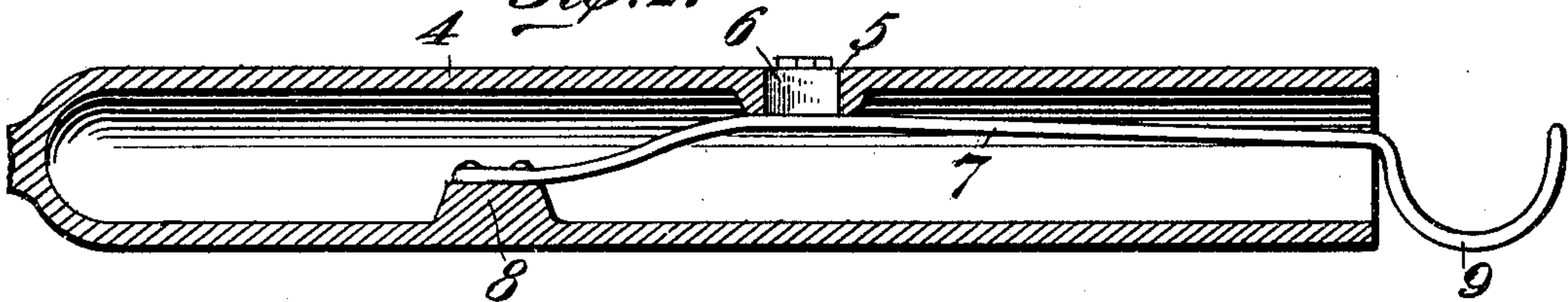


Fig. 4.

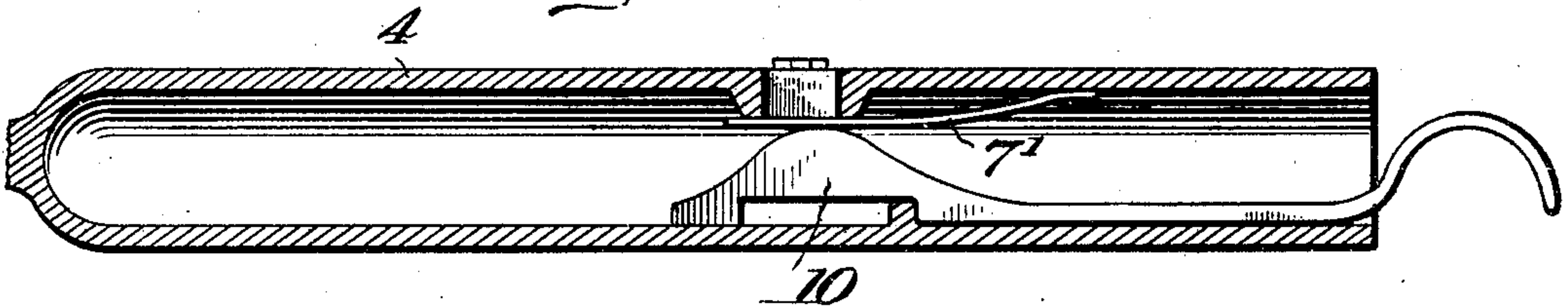
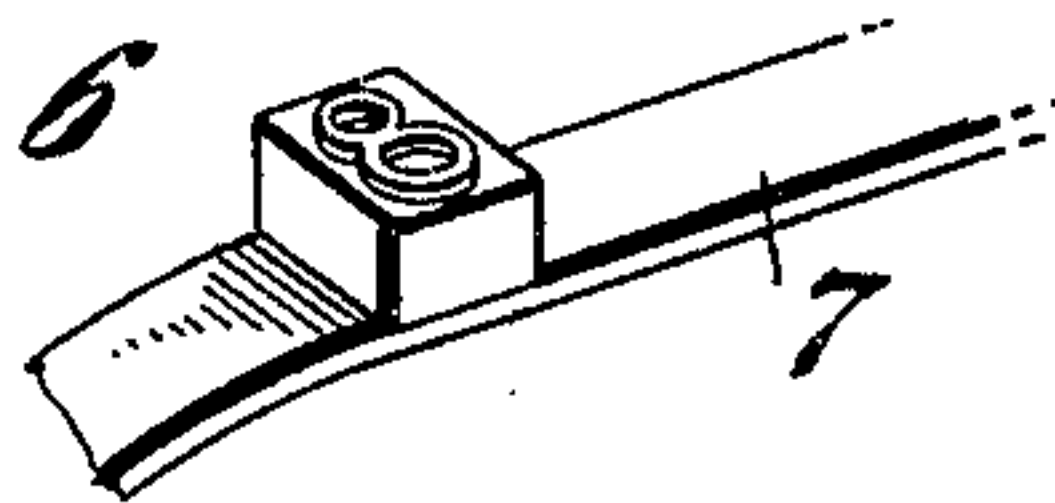


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

JONATHAN E. PRICE, OF CHATTANOOGA, TENNESSEE.

PATTERN.

SPECIFICATION forming part of Letters Patent No. 769,958, dated September 13, 1904.

Application filed March 8, 1904. Serial No. 197,104. (No model.)

To all whom it may concern:

Be it known that I, JONATHAN E. PRICE, a citizen of the United States, residing at Chattanooga, in the county of Hamilton and State of Tennessee, have invented a new and useful Pattern, of which the following is a specification.

This invention relates to patterns for the casting of various articles, and while capable of general use is intended principally for the casting of sash-weights and similar small articles where it is desirable that some designating-mark be molded in the article.

A further object of the invention is to provide a pattern having a movable member which may be withdrawn to a position within the general lines of the pattern in order to permit the removal of such pattern in the ordinary manner.

With these and other objects in view, as will more fully hereinafter appear, the invention consists in the novel construction and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that various changes in the form, proportions, size, and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a sectional elevation of a mold, illustrating the use of a pattern constructed in accordance with the invention. Fig. 2 is an enlarged sectional view of the pattern. Fig. 3 is a detail view of a portion of the same. Fig. 4 is a view similar to Fig. 2, illustrating a slight modification.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

In the casting of small metal articles, such as sash-weights, it is usual to employ a single-piece flask and after the sand has been rammed around the pattern to withdraw the latter through openings formed in the sides or ends of the flask as distinguished from the casting of larger articles, where the flask is formed of a drag and cope which may be separated to

permit the removal of the pattern prior to the removing of the metal. Where the patterns are withdrawn from the sides or ends of the flask, they must be necessarily of such shape as to permit their removal without disturbing the sand, and in the manufacture of sash-weights it is usual after the withdrawal of the pattern to insert a rod or stick bearing a number to indicate the weight of the article and impress the same into the sand, so that it may be reproduced in the metal. This in many cases is ineffectual, and in some cases the sand will break down and ruin the mold. The present invention is designed more particularly to overcome these disadvantages and to provide a pattern in which the weight, the name of the maker, or any other distinguishing-mark may be formed in the mold and at the same time permit the withdrawal of the pattern in the usual manner without any danger of injury to the mold, and while intended principally for the purpose of providing designating-marks on the articles it is of course to be understood that the invention is applicable to the molding of designs or ornamentation or patterns of any character.

The flask 1 is of the ordinary type and provided with vertical sides 2, having openings 3 for the passage of the patterns in the usual manner.

The pattern 4 is of a shape corresponding to that of the article to be cast, in the present instance a sash-weight, and the pattern is shown in the form of a tube closed at the inner end and provided with an opening 5, the walls of which are preferably somewhat thicker than the main body of the tube in order to form a guide for a movable mold member 6, on which may be formed a numeral to designate the weight of the article, or the name of the maker, or any desired trade-mark, pattern, or ornamentation, this being dependent on the character of the article to be cast. The movable pattern 6 is mounted on a spring 7, that is secured at its inner end to a lug within the tube, and at its outer end, which projects beyond the open end of the tube, is curved in order to form a handle 9 for convenience in depressing the spring to an extent sufficient to withdraw the movable member to

a position within the general lines of the tube, and thus permit the movement of the pattern lengthwise and without danger of disturbing the sand or injuring the mold.

5 In using the device the flask is partly filled with sand in the usual manner and the pattern or patterns are placed in position with the movable member 6 projecting from the periphery of the pattern. The sand is then
10 filled in and rammed around the pattern in the usual manner, the spring being of sufficient strength to resist the ramming operation and hold the movable member 6 in proper position. After the flask is filled and properly
15 rammed the spring is depressed in order to withdraw the movable member 6 to a position within the general lines of the pattern, and the latter is withdrawn longitudinally in the usual manner, after which the cores or
20 chills or other device for the formation of the eye are placed in position in the end of the mold.

As a modification of the invention the movable member may be mounted on a spring 7',
25 tending normally to withdraw said movable member to a position within the tubular pattern, and when placed in position a slidable block 10 may be forced under the spring in order to force said movable member outward.
30 This will tend to firmly hold the movable member in position during the ramming op-

eration, and the subsequent withdrawal or partial withdrawal of the block will permit the spring to move the auxiliary member within the lines of the mold, and thus will
35 allow the withdrawal of the latter.

It is to be understood that the application of the invention for the formation of sash-weights is merely typical, inasmuch as the invention may be used in the formation of
40 any cast articles where it is desired to form a pattern, design, or other mark in cameo on the cast article.

Having thus described my invention, what is claimed is—
45

A hollow pattern open at one end and having an opening in its wall, a movable member guided in the opening, a leaf-spring secured at one end within the pattern and carrying
50 said member, the opposite end of the spring being projected through the open end of the pattern and shaped to form a handle for the manual manipulation of the movable member and the withdrawal of the pattern from the
55 mold.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JONATHAN E. PRICE.

Witnesses:

J. H. JOCHUM, Jr.,

J. ROSS CALHOUN.