W. LEAHY.

METHOD OF CASTING.

APPLICATION FILED DEC. 4, 1920.

1,386,516. Patented Aug. 2, 1921.

Fig. 1.

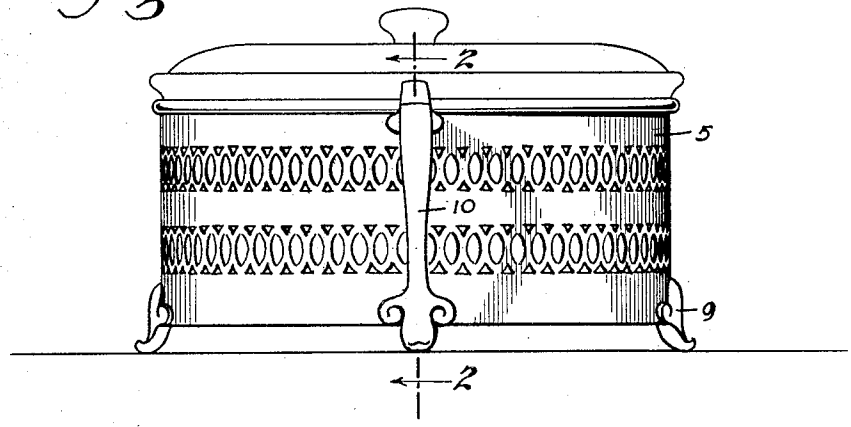


Fig. 2.

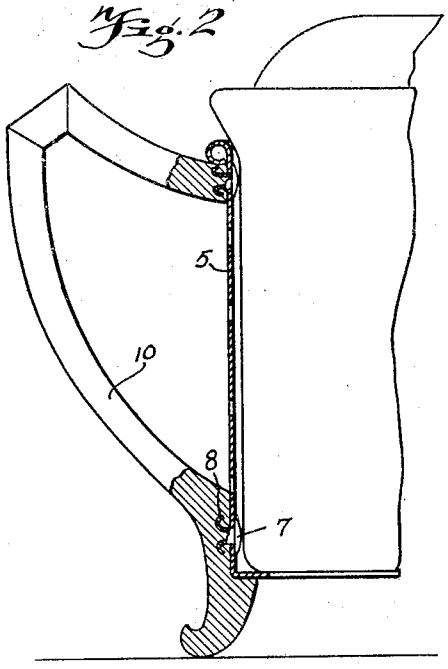


Fig. 3.

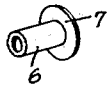
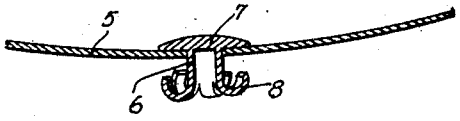


Fig. 4.



WITNESSES

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METHOD OF CASTING.

1,386,516. Specification of Letters Patent. Patented Aug. 2, 1921.

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To all whom it may concern:

Be it known that I, WILLIAM LEAHY, a citizen of the United States, and resident of the city of New York, borough of Manhattan, in the county of New York and State of New York, have invented a new and Improved Method of Casting, of which the following is a full, clear, and exact description.

My invention relates to a method of casting whereby a metallic member in the process of being formed is rigidly secured to an already formed member.

It is well appreciated with regard to the connection of two metallic elements, one with the other, and particularly where these elements are relatively small, that considerable difficulty has been experienced in providing a connection which would embody strength, and firm gripping qualities, so that the one member would not eventually become detached from the second of the same.

Although my invention is not necessarily limited to the particular adaptation hereinafter specified, it is primarily intended for use in affording connection between metallic elements, such as for instance, the handles and foot portions of receptacles with the body of the same.

Also it is primarily intended to be used upon a higher class of receptacles, such as casseroles, etc. where quality of work is a major factor.

Reference is had to the attached sheet of drawings as illustrating one example of the practice of the method hereinafter described, and in which drawings;

Figure 1 is a side view of a casserole embodying my invention.

Fig. 2 is an enlarged sectional side view along the lines 2—2 of Fig. 1, and taken in the direction of the arrows.

Fig. 3 is a perspective view of one of the elements permitting of the accomplishment of my object, and

Fig. 4 is a sectional plan view of certain of the parts as illustrated in Fig. 2.

As previously brought out my invention is primarily intended for use in connection with the higher classes of metallic objects, although not necessarily limited to this association, by virtue of the fact that it will serve equally well to connect any number of different metallic elements, and thus for the purpose of illustration, I have shown my invention in association with a casserole.

According to the customary procedure, it is a well appreciated fact that it has been customary to provide the handle and foot portions of a receptacle of this type, and to rivet or otherwise suitably affix these portions to the body of the receptacle.

This method of procedure has embodied certain defects in that a connection thus established has readily broken, also in certain instances, play has come into being which has resulted in the connection being rendered virtually useless.

According to my invention, it will be seen, reference being had primarily to Figs. 3 and 4, that the reference numeral 5 indicates the body of the casserole, which is provided with any suitable number of openings adjacent the points at which connection with the handle and foot portions of the same are to be established.

A hollow shank rivet 6 is now inserted through the openings to a point at which its head 7 lies flush against the body 5, this shank extending in the direction of the object such as the handle or leg, which is to be affixed to the body 5.

Subsequent to this procedure, and as has been illustrated in Fig. 4, the hollow shank of the rivet has its outer end portion split to provide a number of independent segments 8, which latter are now bent, as has been indicated in Fig. 4, to upset the outer end of the shank. In this connection it is to be noted that the flanged portion of the shank is spaced from the body 5, so that the upset portion 8 will extend beyond the outer face of this body portion, for a purpose hereinafter more fully specified.

Any suitable type of mold (not shown) is now applied to the body 5, and has certain of its portions overlying the rivets affixed to this body. Subsequent to this, fluid metal is introduced into the mold, and this metal will flow to and envelop the segments 8 of the rivet and the protruding portions of the shank thereof, so that upon the metal hardening these portions of the rivets will not alone be gripped by the metal, but will practically merge into the same.

It will be seen in Figs. 1 and 2, that I have shown legs 9 and combined legs and handles 10 affixed to the body 5 of the casserole, in

the manner specified, but it will be obvious that this is merely for the purpose of illustration, and that my invention is well adaptable for use in connecting or fastening any metal object to a second similar object.

Thus I have provided a method of casting by means of which two members may be connected together, in such manner as to present the appearance of but one integral portion, aside from the fact that the connection thus established will be of such a nature that the possibility of any play coming into being, or disengagement of one of the members from the second of the same is precluded, by virtue of the finished product illustrated to best advantage in Fig. 2, which is derived from my improved method of manufacture.

Obviously as aforestated numerous changes in the method of procedure, according to the nature of the objects to be joined may be resorted to, without in the least departing from the spirit of my claims, which are—

1. A method of casting, by means of which one metallic object is to be connected to a second object characterized by applying a rivet to the last named object, and subsequently attaching a mold to said object, which mold will engage the same at points adjacent the points of disposition of the rivets, and in pouring fluid metal into said mold to cause said metal to engage said rivets.

2. A method of casting by means of which one metal object is to be connected to a second object characterized by applying a hollow shank rivet to the last named object, the shank of said rivet extending outwardly through an opening in the body of said object, in applying a mold to said object, said mold extending to points adjacent the points at which the rivets are disposed, and in pouring metal into said molds, a certain portion of said metal contacting with and enveloping said rivets.

3. A method of casting by means of which one metal object is to be connected to a second object characterized by applying a hollow shank rivet to the last named object, the shank of said rivet extending outwardly through an opening in the body of said object, and subsequently loosely heading the segments thus formed, in applying a mold to said object, said mold extending to points adjacent the points at which the rivets are disposed, and in pouring metal into said molds, a certain portion of said metal contacting with and enveloping said rivets.

4. A method of casting by means of which one metallic object is to be connected to a second object characterized by applying a hollow shank rivet to the last named object, the shank of said rivet extending outwardly through an opening in the body of said object, so that said rivet is capable of limited play, in applying a mold to said object, said mold extending to points adjacent the points at which the rivets are disposed, and in pouring metal into said molds, a certain portion of said metal contacting with and enveloping said rivets.

WILLIAM LEAHY.