Dec. 2, 1930. W. G. GOODWIN 1,783,285

MOLD

Filed Sept. 10, 1928

Fig. 1.

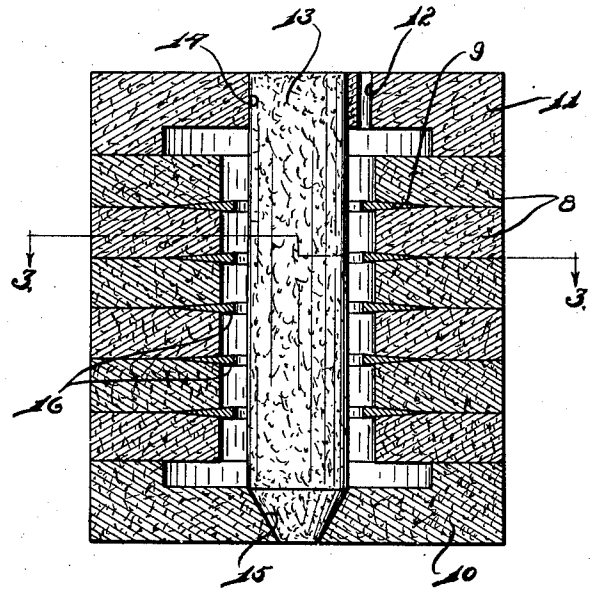


Fig. 2.

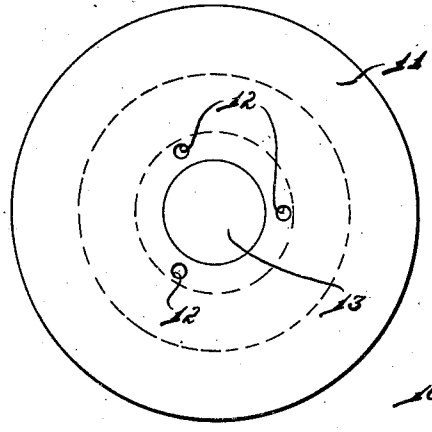
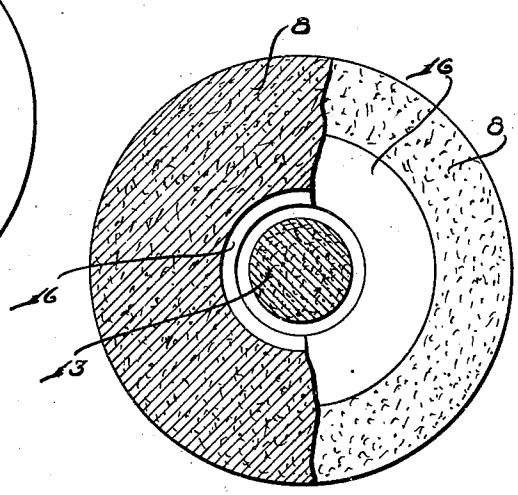


Fig. 3.



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UNITED STATES PATENT OFFICE

WILLIAM G. GOODWIN, OF ROYAL OAK, MICHIGAN

MOLD

Application filed September 10, 1928. Serial No. 304,960.

My invention relates to a new and useful improvement in a method of casting, and particularly the method of assembling the mold from various sections and also formation of these sections from core sand and subsequently baking the mold sections or cores thus formed.

It is an object of the present invention to provide a mold in which a clean casting, having a smooth surface, and accurate to dimensions, may be cast, thus reducing the machine work on the casting to a minimum.

It is another object of the invention to provide a method of casting whereby radiating fins may be anchored in the casting while the same is being cast.

Another object of the invention is the provision of a method of casting in which a casting may be produced which is free from imperfections such as blow holes and the like, and in the manufacture of which the cost is reduced to a minimum.

Other objects will appear hereinafter.

The invention consists in the combination and arrangement of parts hereinafter described and claimed.

The invention will be best understood by a reference to the accompanying drawings which form a part of this specification, and in which,

Fig. 1 is a central, vertical, sectional view of the mold in assembled relation.

Fig. 2 is a top plan view of the invention.

Fig. 3 is a view taken on line 3—3 of Fig. 1.

The mold comprises a plurality of core sections 8 positioned one above the other and each having on its under surface an inclined face 9 to provide a recess. The bottom section 10 serves to support the upper sections, and the top section or core 11 is provided with the sprue or gate posts 12. A center core 13 engages in the opening 14 formed in the top 11 and in the tapered opening 15 formed in the base 10. In the manufacture of these core sections 10 and 11 core sand is used and core then removed from the core box and baked, subsequently to which it may be handled with considerable freedom. After the various sections have been placed one upon another, as shown in Fig. 1, a suitable slip jacket is placed upon the mold to hold the various sections in position when the pouring is taking place.

The advantages of the formation of the mold from core sand with the various core sections formed and backed as described are as enumerated herein, and a practical commercial method of manufacturing in which radiating fins in the form of discs 16 may be embodied in the casting is provided.

With the use of a green sand mold the insertion of the discs in the mold as set up becomes impractical, because of the imperfections which will arise in the mold and the breaking down of the side walls thereof.

While I have illustrated and described the preferred form of my invention I do not wish to limit myself to the precise details of structure shown, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

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

1. A mold comprising a plurality of superimposed sections each having a central opening and each having its face which engages with an adjacent section inclined to co-operate with the inclined face of the section engaged to provide a recess communicating with the central opening formed in the sections.

2. A mold comprising a plurality of superimposed sections each having a central opening and each having its face which engages with an adjacent section inclined to co-operate with the inclined face of the section engaged to provide a recess communicating with the central opening formed in the sec-

tions, and a radiating fin engaged in said recesses.

3. A mold comprising a plurality of superimposed sections each having a central opening and each having its face, which engages with an adjacent section cut away to co-operate with the cut away face of the section engaged to provide a recess communicating with the central opening formed in the sections.

In testimony whereof I have signed the foregoing specification.

WILLIAM G. GOODWIN.