

J. F. DIGAN.
METAL FOUNDER'S MOLD.
APPLICATION FILED AUG. 31, 1910.

987,442.

Patented Mar. 21, 1911.

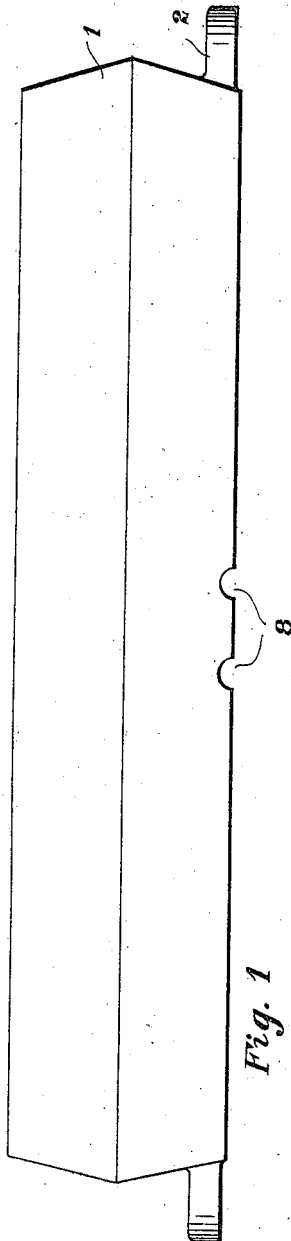


Fig. 1

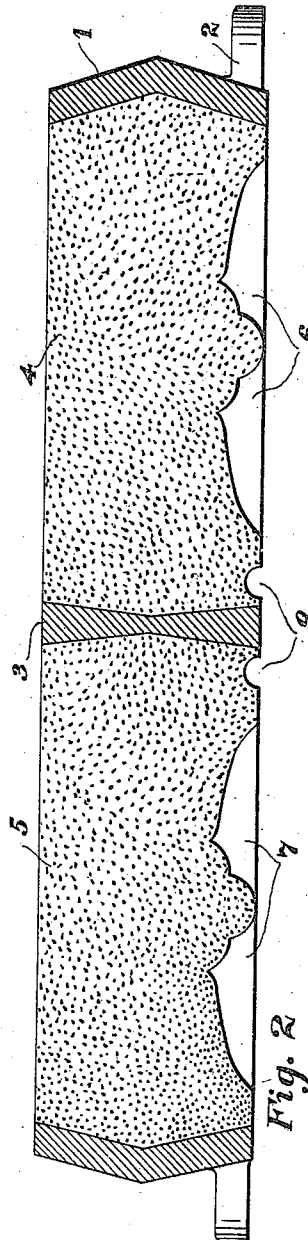


Fig. 2

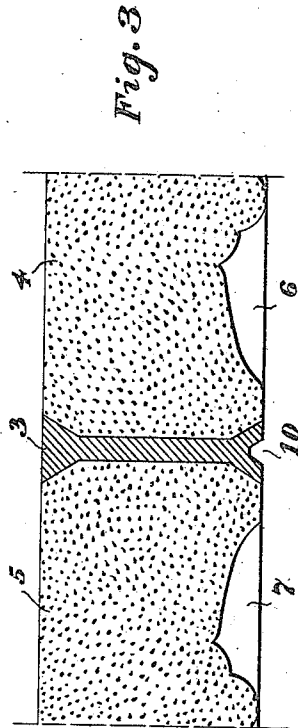


Fig. 3

Witnesses

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METAL-FOUNDER'S MOLD.

987,442.

Specification of Letters Patent.

Patented Mar. 21, 1911.

Application filed August 31, 1910. Serial No. 579,838.

To all whom it may concern:

Be it known that I, JAMES FRANCIS DIGAN, a citizen of the United States, residing at Logansport, Cass county, Indiana, have invented certain new and useful Improvements in Metal-Founders' Molds, of which the following is a specification.

In sand molds constructed on the twin system, as often used in the making of radiator-sections, one radiator column or section will be molded in one-half of the flask and the other column in the other half of the flask, the two halves of the flask being separated by a partition. In pouring one of the halves the gas frequently passes through the parting between the half-molds and causes the loss of the casting when the other column is poured.

My invention aims to remedy the above-mentioned evil, and the invention will be readily understood from the following description taken in connection with the accompanying drawing in which—

Figure 1 is an end elevation of a half-mold embodying my invention. Fig. 2 a vertical transverse section of the same: and Fig. 3 a vertical transverse section of a portion of the mold in modified form.

In the drawing:—1, indicates the usual half-flask: 2, the usual dowel-ears: 3, the longitudinal partition dividing the half-flask into twin sand-receiving compartments: 4, the rammed sand in one of the compartments: 5, the rammed sand in the other compartment: 6, the mold cavity in the face of sand 4, this cavity pertaining to a radiator column: 7, the mold cavity in the face of the sand in the other compartment and pertaining to the second radiator column: 8, notches in the end walls of the flask: and 9, grooves formed in the face of the sand, one groove at each side of the flask-partition, these grooves communicating with the notches 8 in the walls of the flask.

The grooves 9 may be formed by suitable strips on the follow-board bearing the patterns which form the cavities 6 and 7. The notches 8 and grooves 9 may be formed either in the cope or the drag or in both.

Gas forming in one of the mold cavities and seeking to pass through the parting joint and reach the other mold cavity will have an opportunity to escape through the grooves 9 and notches 8, thus preventing the pouring of one-half of the mold from producing evil effects in the other half of the mold.

In the example illustrated in Fig. 2 the grooves 9 are formed in the sand, the pair of grooves straddling the central partition and providing a plurality of passages for the gases.

In the modification illustrated in Fig. 3, instead of forming the grooves in the sand of the mold, and forming them in duplicate, a single groove 10 is employed and this groove is formed directly in the joint face of the central partition 3, this groove extending the length of the partition and communicating with grooves in the end walls of the flask as in the former case.

I claim:—

1. A mold comprising a half flask provided with a partition separating it into two compartments, a sand mold formed in each compartment, a groove extending through the flask near to and in the direction of the partition, and formed in the parting plane between the upper and lower flask sections, said groove not being connected directly with a mold cavity, and outlets through the walls of the flask communicating with the groove.

2. A mold comprising, a half flask provided with a partition separating it into two compartments, a sand mold formed in each compartment and having each a mold cavity in its face, a groove extending through the flask between the two mold cavities in the portion of the parting between the upper and lower flask sections, said groove not being connected directly with a mold cavity, and outlets through the end walls of the flask communicating with said groove.

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Witnesses:

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JOHN S. BURKE.