(No Model.)

F. KAEMPEN, Jr.

MOLD FOR STOVE LIDS OR COVERS.

No. 512,195. Patented Jan. 2, 1894.

Fig. 1.

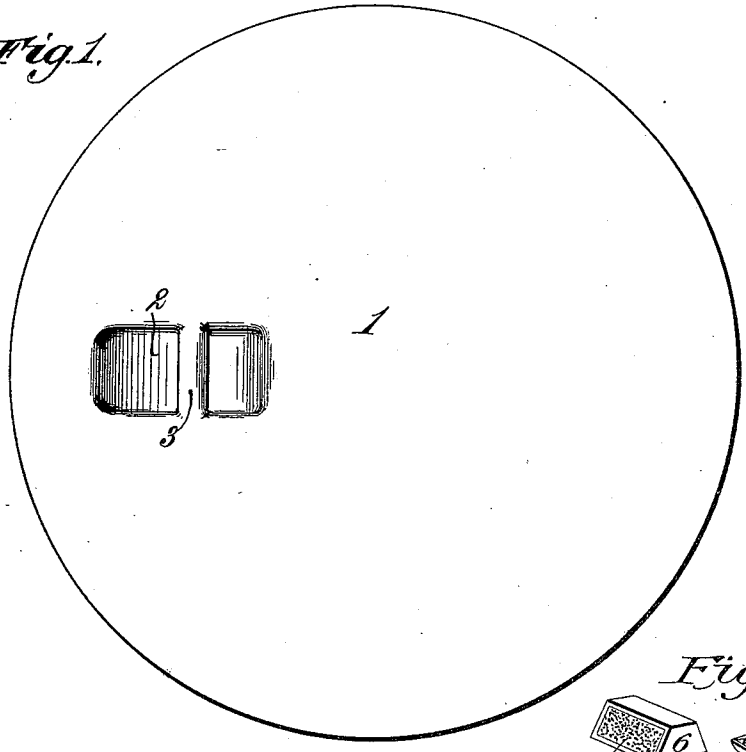


Fig. 6.

Fig. 2.

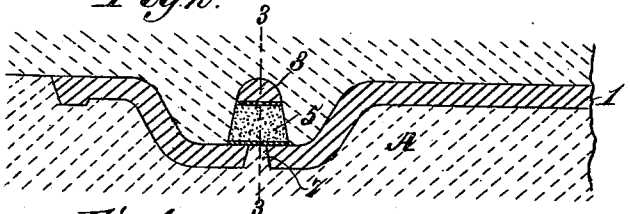


Fig. 3.

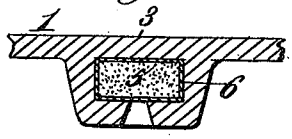


Fig. 4.

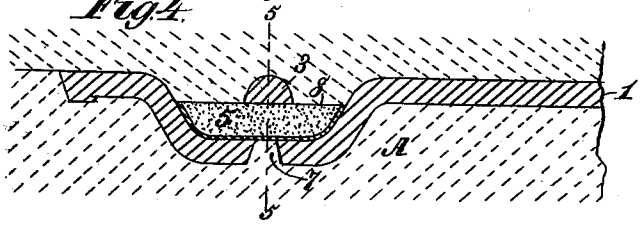
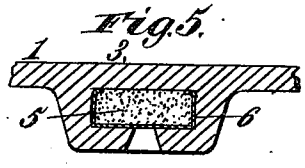


Fig. 5.



Witnesses.
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FOLHERT KAEMPEN, JR., OF QUINCY, ILLINOIS, ASSIGNOR TO THE GEM CITY STOVE MANUFACTURING COMPANY, OF SAME PLACE.

MOLD FOR STOVE LIDS OR COVERS.

SPECIFICATION forming part of Letters Patent No. 512,195, dated January 2, 1894.

Application filed February 16, 1893. Serial No. 462,561. (No model.)

To all whom it may concern:

Be it known that I, FOLHERT KAEMPEN, Jr., a citizen of the United States, residing at Quincy, in the county of Adams and State of Illinois, have invented new and useful Improvements in Molds for Stove Lids or Covers, of which the following is a specification.

My invention relates to the manufacture of stove lids, or covers, the purpose thereof being to provide a lid of this description which shall have a strong, solid bar of iron cast in one and the same piece with the lid and lying across the lifter-opening, the ends of said bar having integral union with the metal of the lid in such manner that no joints shall be discernible at said points and the strength and durability of said parts shall be very materially increased.

My invention consists in the improvement in the art of casting stove-lids, or covers, hereinafter fully described and particularly pointed out in the claim.

To enable others skilled in the art to which my invention pertains to fully understand and practice the same, I will describe said invention in detail, reference being made to the accompanying drawings, in which—

Figure 1, is a plan view showing a stove-lid having a lifter-bar cast integral with the lid. Fig. 2, is a section taken in the longitudinal, vertical plane of the lifter-opening, showing a part of the metal forming the latter, before its removal from the sand. Fig. 3, is a vertical section in the line 3—3, Fig. 2. Fig. 4, is a vertical section showing the same parts illustrated in Fig. 2, with a varied form of incased core. Fig. 5, is a section on the line 5—5, Fig. 4, and Fig. 6, is a view showing in detail two different forms of the incased core.

In the said drawings the reference numeral 1 indicates a portion of an ordinary stove-lid, or cover, in which the lifter-opening 2 is contained, said opening being of the usual shape, or so nearly so as to require no specific description. Crossing said opening at the proper point is the lifter-bar 3, which is a strong, solid, continuous piece of iron formed in one piece with the lid, or cover, 1. The ends of this lifter-bar unite with the sides of the lifter-opening not only integrally, but in such a manner that no joints, or other features of distinction between the metal of the said bar and that of the lid, can be distinguished. Moreover, the upper, or exposed surfaces of said parts, are smooth and flush, one with another, or practically so, and the lifter-bar shows no tin, or other metal, such as has been used, heretofore, in some instances, for the formation of the said bar.

In practicing my said invention, I employ flasks of any ordinary, or preferred kind, and after molding the lid, or cover, in the sand in one part of said flask, as, for example, in the "drag" part A, I insert a core, consisting of sand, or any non-combustible material, or substance. I prefer to use a core 5, composed of a mixture of sand and some binding material, incased in a shell of tin, or other metal, 6, said core being substantially trapezoidal in cross-section and open upon the two converging sides. This core is placed in the "drag" part of the flask and held by a nipple, 7, of sand resting thereon. The core fills the space immediately beneath the lifter-bar 3 and between the same and the bottom, or floor, of the lifter-opening. I may, however, and preferably do, extend the body of this core upon both sides of the lifter-bar 3, as seen in Fig. 4, in which case the upper, plane face 8 of said core will be co-extensive with the length of the said opening, measured in the plane of the upper face of the core, which is substantially co-incident with the lower face of the lifter-bar 3.

In practice the cope of the mold is provided with a recess to form the lifter-bar, and the core is arranged beneath this recess, and is supported by the sand-nipple 7 which forms a part of the drag. The incasing tin lies below the lower face of the lifter-bar, or in substantially the plane of the lower face of said bar, whereby there is no exposure of the tin, except upon the lower exterior surface of the lifter-opening, where its presence is unobjectionable.

In molding a stove-lid or cover the core is placed in the flask after both the drag and cope have been molded, and just after removing the pattern, before closing the flask.

It should be noted that although I have shown and described a core incased by a shell of tin, or other suitable sheet-metal, I do not

specifically limit my invention to the use of such an incasing shell of any form. Its function is merely to hold the sand, or other material of which the core is formed, and enable it to maintain its proper form. I may, however, use some suitable binding-material, mixed with the sand, of such kind that the core, when once molded, will retain its form, or I may employ any known substance, other than sand, and either with or without a binding-material, said substance being of such character that when molded, or shaped, to the required form, it will retain such form under ordinary circumstances.

What I claim is—

In a sand mold for casting stove-lids, or covers, the combination with the cope of said mold, having a recess to form the lifter-bar, of a core arranged beneath said recess and supported by a sand nipple forming part of the drag, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

FOLHERT KAEMPEN, JR.

Witnesses:

H. HEIDBREDER,

H. C. SPRICK.