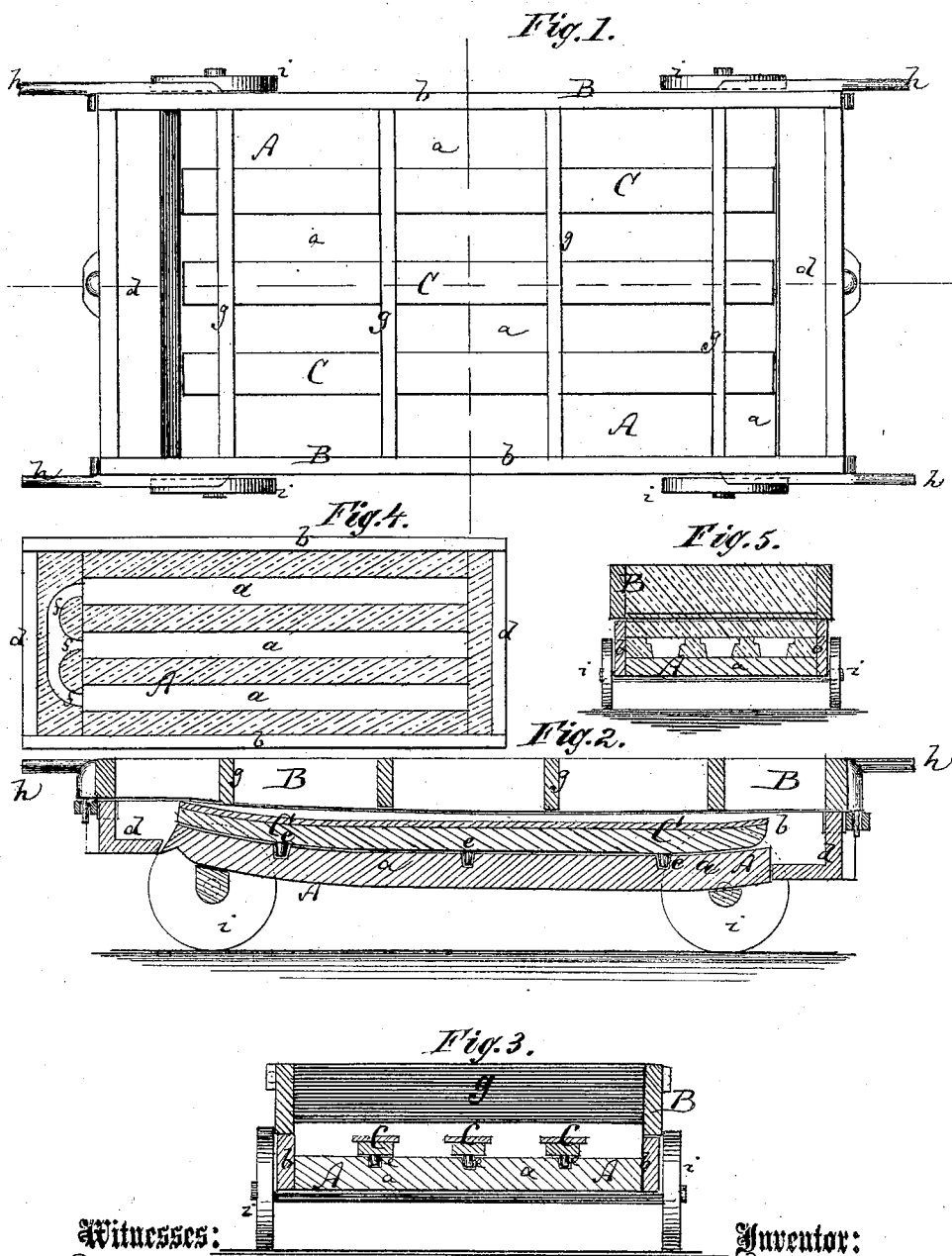


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Improvement in Mold for Casting and Chilling Sleigh-Shoes.

No. 127,738.

Patented June 11, 1872.



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IMPROVEMENT IN MOLDS FOR CASTING AND CHILLING SLEIGH-SHOES.

Specification forming part of Letters Patent No. 127,738, dated June 11, 1872.

Specification describing a new and Improved Mold for Casting and Chilling Sleigh-Shoes, invented by VOLNEY A. BUTMAN, of Ironton, in the county of Sauk and State of Wisconsin.

Figure 1 represents a top view; Fig. 2, a longitudinal vertical section; Fig. 3, a vertical transverse section of my improved mold for casting and chilling sleigh-shoes. Fig. 4 is a longitudinal, and Fig. 5 a vertical transverse, section of the same, showing the same in place.

Similar letters of reference indicate corresponding parts.

This invention pertains to improvement in chill-molds for sleigh-shoes; and consists in a certain construction of parts, as hereinafter described and subsequently claimed.

A in the drawing represents the lower part or nowel of the flask. B is the upper part or cope of the same. The nowel is made of cast-iron, with a cast-iron bed or bottom, *a*, whose surface is so arched as to give the requisite curved form to the shoes cast upon it. The sides *b b* of the nowel are cast separate and project upward, and are also made of metal and firmly fastened to the bed *a* by means of bolts. The ends *d d* of the nowel are made detachable, being held by means of hooks to the projecting side pieces. This is for the purpose of preserving the flask, as, if the ends are made in one with the bed, they are very apt to crack off in casting. C C are the patterns placed within the nowel and upon the bed *a* to form the cavities within the sand for the reception of the molten metal. These patterns

have at their lower edges projecting dowel-pins *e e* that fit into corresponding apertures in the bed *a*, as shown in Figs. 2 and 3. The dowels serve the double purpose of keeping the patterns in place and of core prints.

When the sand has been placed in the nowel, and the patterns have been withdrawn, and connecting-chambers *f f* been formed in one end, as in Fig. 4, the cope B is applied on top of the nowel, said cope being a wooden frame with transverse ribs *g g* and end handles *h h*, as shown. The process of casting is then carried out, the metal being chilled as it comes in contact with the bed *a*, and the shoes thereby being prepared for service.

The nowel-frame A is supported on wheels *i i*, to be conveniently conveyed from place to place.

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

1. The nowel-frame A, provided with the removable end pieces *d d* and the separate sides *b b* bolted to the bed *a* and mounted on the wheels *i i*, substantially as herein shown and described.

2. The patterns C C having the dowel-pins and core prints *e e*, and combined with the metallic bed *a* of the nowel, as set forth.

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