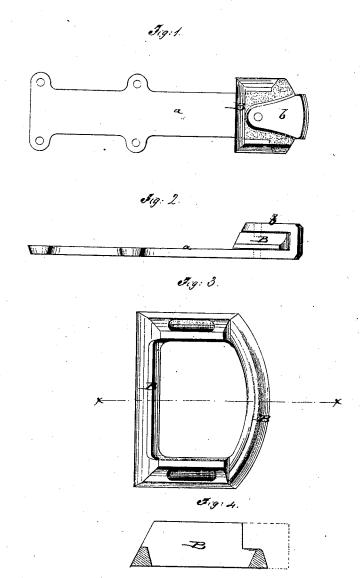
J. Herald,

Casting Core.

No. 110,038.

Patented Dec. 13.1870.



Witnesses: Than Nida. I & Mpalee

Javentor: Derald PER Munufle Attorneps.

## United States Patent Office.

## JOHN HERALD, OF UNADILLA, NEW YORK.

Letters Patent No. 110,038, dated December 13, 1870.

## IMPROVEMENT IN CORES FOR CASTING.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN HERALD, of Unadilla, in the county of Otsego and State of New York, have invented a new and improved Sand-Holder for Casting Hook-shaped Straps; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 represents a face or top view of a hook-shaped strap, containing my sand-holder under the

Figure 2 is an edge view of the same.

Figure 3 is a plan view, on an enlarged scale, of the sand-holder.

Figure 4 is a transverse section of the same, taken on the plane of the line x x, fig. 3.

Similar letters of reference indicate corresponding

The object of this invention is to provide a rigid or stable mold which can be inserted between the spaces intended for the casting of the main body or shank of a strap or plate, and the turned-over car or hook of the same.

The invention consists in the use, for the stated purpose, of a metallic case or sand-holder, in which the sand for the said mold is contained.

Fig. 1 represents a strap or plate of the nature referred to, holding between its shank or body,  $a_i$  and turned-over hook or ear, b, the sand-holder B, which was instrumental in the formation of said hook during

the process of casting. This sand-holder B is a metallic case or rim, open or closed at the bottom, and filled with sand when applied.

Heretofore the portion of the mold used for the stated purpose was made of sand alone, and therefore not readily removable from the finished plates without being destroyed, unless previously baked and hardened by special process. This process of baking and hardening involved considerable expensive labor, without giving perfectly satisfactory results.

The metallic case or holder B will retain the requisite quantity of sand for a suitable length of time, and can be handled, applied, and removed with perfect liberty and ease. It need not only be filled with sand, but may, if desired, be also in part or entirely surrounded with sand, as indicated by dotted lines in fig. 4, the metal serving as a brace or rib for holding the outer sand properly in place.

It is evident that the invention is applicable to the casting of all hook-shaped plates or devices, between hook and shank.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

The metallic sand-holder B, arranged for application between the hook and shank of a hook-shaped plate or article to be cast, substantially as herein shown and described.

JOHN HERALD.

Witnesses:

A. V. BRIESEN, T. B. MOSHER.