W. J. REAGAN.

Uniting Handles to Sad-Irons.

No. 158,521. Patented Jan. 5, 1875.

FIG. 1.

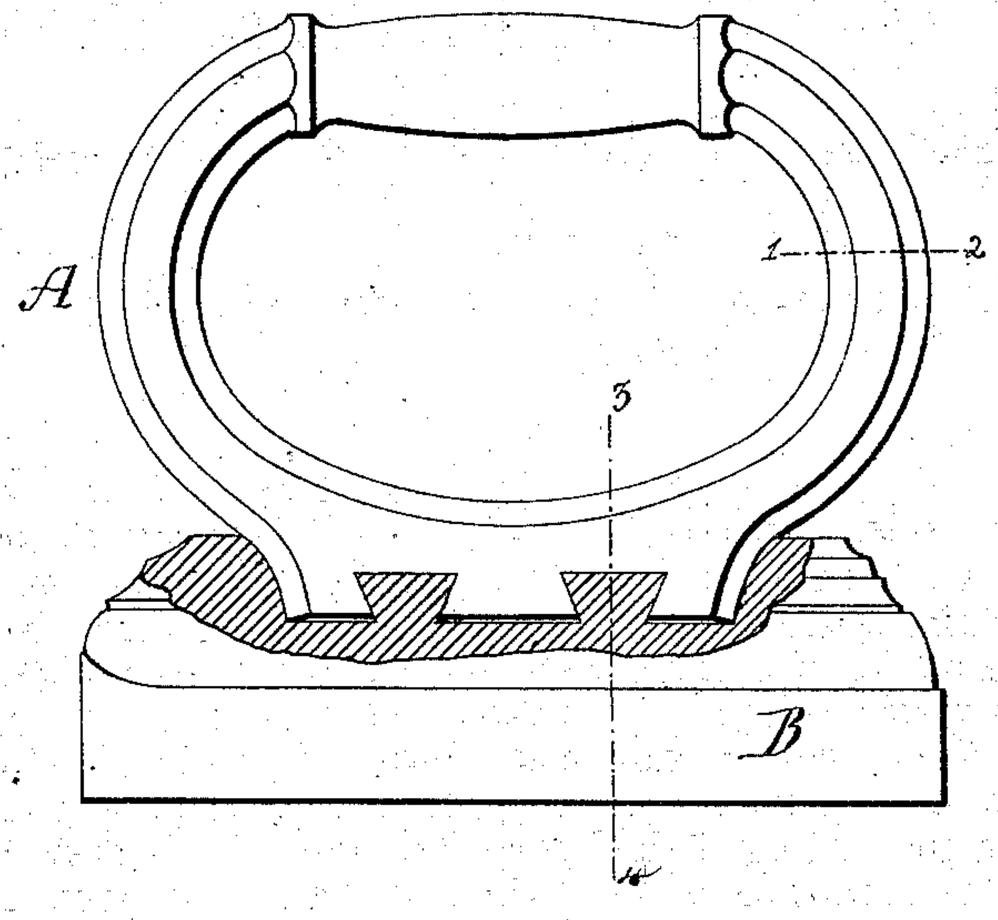


FIG. 2.

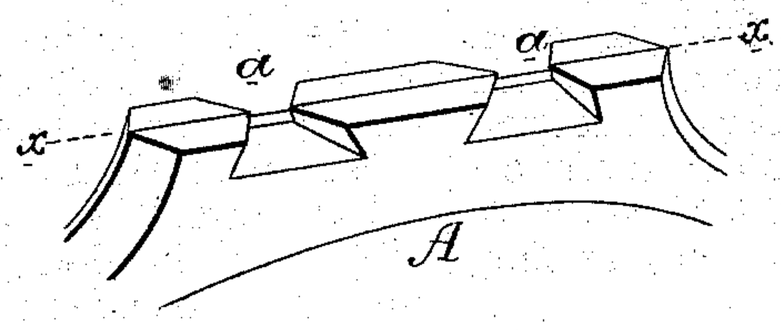


FIG. 3.

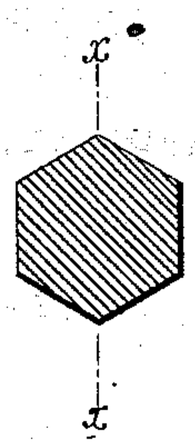


FIG. 4.

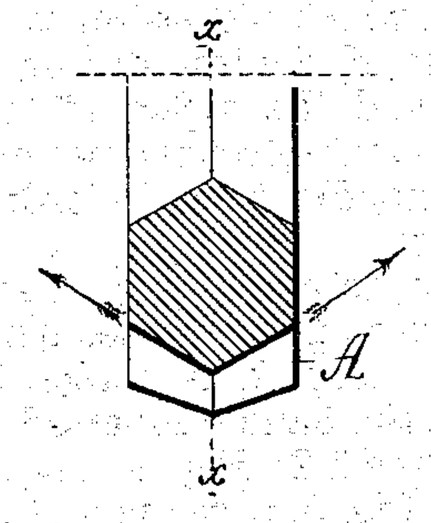
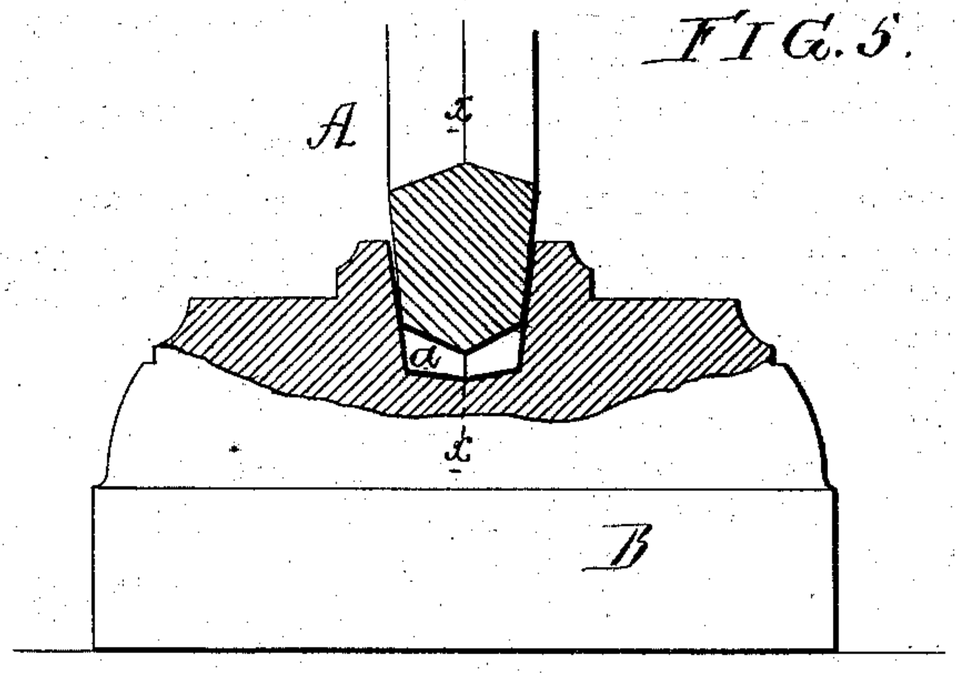


FIG. 5.



Witnesses; Hubert Howson
Thomas McElwain

W. J. Reagan
by his Attys.
Howson & Howson

THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

UNITED STATES PATENT OFFICE.

WILLIAM J. REAGAN, OF ROYER'S FORD, PENNSYLVANIA, ASSIGNOR TO ROYER'S FORD IRON FOUNDRY, OF SAME PLACE.

IMPROVEMENT IN UNITING HANDLES TO SAD-IRONS.

Specification forming part of Letters Patent No. **158,521**, dated January 5, 1875; application filed November 4, 1874.

To all whom it may concern:

Be it known that I, WILLIAM J. REAGAN, of Royer's Ford, Montgomery county, Pennsylvania, have invented certain Improvements in Sad-Irons, and in Patterns for the same, of which the following is a specification:

My invention relates to that class of sad-irons in which a cast-iron handle is united to the body of the iron during the casting of the latter; and the object of my invention is to insure a more firm and permanent attachment of the handle than in ordinary sad-irons of this class.

In the accompanying drawing, Figure 1 is a side view, partly in section, of my improved sad-iron; Fig. 2, a perspective view of the base of the handle inverted; Fig. 3, a section on the line 1 2; Fig. 4, a section on the line 3 4; and Fig. 5, a section of part of the cast-iron handle and pattern of the body as they appear in the mold.

A is the handle, and B the body, of the sad-iron, the two being united during the process of casting, as explained hereafter. The base of the handle has two dovetailed recesses, *a a*, best observed in the inverted perspective view, Fig. 2.

In molding the handle the parting of the sand will be on the central line *x*, from which the base of the handle and its dovetails are beveled in the direction of the arrows, Fig. 4, so that the pattern, on being drawn from the sand, will leave its own cores for the formation of the said recesses. In the upper side of the body of the sad-iron is a longitudinal recess conforming in shape to that of the base of the handle.

In molding the sad-iron, a cast-iron handle, A, is placed in the said recess, in the top of the pattern of the body B, as shown in Fig. 5, and the sand is rammed around all parts of the handle and over the body, after which the pattern of the latter is withdrawn, leaving the handle embedded in the sand, with the exception of that portion of its base which projected into the longitudinal recess above referred to, and this portion of the base will be surrounded by the metal which is poured into the mold, the said metal entering the dovetailed recesses, so that the handle will be firmly united to the body of the sad-iron.

There may be but one dovetailed recess in the base of the handle, or there may be more than two such recesses; but in sad-irons of ordinary dimensions I prefer two recesses.

I am aware that the handle of a sad-iron has been provided with a dovetailed projection for attachment to the body during the process of casting. This I do not claim; but—

I claim as my invention—

The within-described sad-iron handle, having a transverse dovetailed and beveled recess or recesses, as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WM. J. REAGAN.

Witnesses:

HUBERT HOWSON,
HARRY SMITH.