

A. S. MANN.

Sad, Fluting, and Band-Irons.

No. 139,590.

Patented June 3, 1873.

Fig. 1.

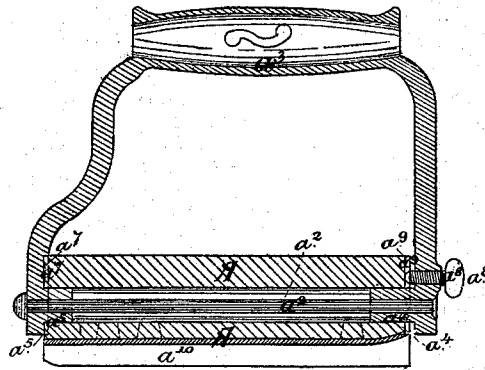


Fig. 2.

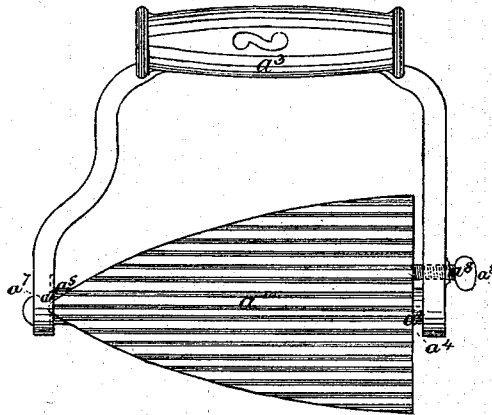
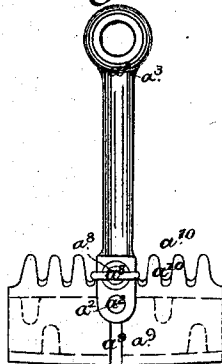


Fig. 3.



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IMPROVEMENT IN SAD, FLUTING, AND BAND IRONS.

Specification forming part of Letters Patent No. **139,590**, dated June 3, 1873; application filed December 2, 1872.

To all whom it may concern:

Be it known that I, AUSTIN S. MANN, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Sad, Fluting, and Band Irons; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon which form a part of this specification.

My invention relates to improvements in the construction of sad, fluting, and band irons.

In the accompanying drawings, Figure 1 is a longitudinal section of a combined sad, fluting, and band iron with some of my improvements thereon. Fig. 2 is a side view of Fig. 1 in the position used as a band-iron. Fig. 3 is an end view of Fig. 1 in the position used as a sad or smoothing iron.

The same letters indicate similar parts in all the drawings.

The combined, sad, fluting, and band iron A is constructed with a hole running longitudinally through it. Upon the extremities, or thereabout, of the handle a^3 , and on the inner side thereof, are formed two projections, a^4 a^5 , having perforations through them. This handle, after being sprung into position, has a rod or other metal, a^2 , passed through it and securely fastened to the said projections a^4 a^5 , at each extremity. The part of the handle grasped by the hand is hollow, which serves to prevent its becoming too hot for handling. At the point of iron A, and in the handle a^3 , is formed a groove, a^7 , into which the point of the iron is forced in the action of fastening, by means of screw a^8 or other suitable means, when the same is used for fluting or plain ironing. Running down the center of the heel of iron A is a groove, a^9 , into which the end of said screw a^8 projects, thus securely fastening the handle at both ends. The fluting of the iron A is of uniform depth from the point running backward until approaching the heel, when it is gradually deepened, as shown in Fig. 1 of the accompanying drawings, and for a purpose explained further on. The handle of the said iron A is held in position shown in Fig. 2, when used as a band-iron, by

means of a slot formed in end of the iron A, by the peculiar shape of the hole or opening therein, and is held in position by the screw a^8 . Upon turning the handle over to position shown in Fig. 2, the projection a^5 is readily slipped into position and held there, as before described. In Fig. 3 the variable depth of the fluting of the iron is clearly shown. The corrugated or fluted face of the iron consists of a thin plate, a^{10} , cast separately, and united to the body A of the iron by casting the latter on it, the plate a^{10} being provided with projections upon the side to be joined to the body A, for the purpose of securing a stronger joint. The main object in forming the iron in the manner just stated is to secure a smooth finish for both faces of the iron in the process of casting, so that but little subsequent dressing will be required.

It is well-known that the top surface of a piece of casting is never as smooth as the bottom surface, and that other conditions being the same the surfaces of thin cast plates or objects present a better finish than those of thicker ones. I take advantage of these facts by casting the corrugated surface of the iron, the most difficult to dress, separately, in the form of a thin plate; and to complete the iron this thin plate is suspended in the cope of the flask, with the corrugations uppermost, and the main body A of the iron is then cast on it. In this way I secure the best obtainable finish for both surfaces of the iron.

An incidental advantage resulting from this mode of construction is that the corrugated plates become somewhat annealed, and can, in consequence, be more easily dressed. By making the flutes of the fluted surface of the iron of variable depth, fabrics may be fluted to varying depth with the same iron, a base-board being provided having flutes of corresponding varying depth.

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

1. A combined smoothing and fluting iron, composed of the separately-cast thin corrugated plate a^{10} and main body A, united together by casting them on each other, substantially as and for the purpose specified.

2. A reversible sad and fluting iron hinged

to the handle and secured rigidly thereto by a set-screw, a^8 , the point of the iron entering a groove, a^7 , in the handle, and the set-screw entering a groove, a^9 , in the heel of the iron, substantially as specified.

3. A fluting-iron having grooves of variable depth from end to end, substantially as specified.

4. A sad-iron composed of the perforated plate A and a handle, which, being cast or formed in a single piece with inwardly-projecting studs a^4 and a^5 on its arms, is "sprung" on the plate, substantially as specified.

5. The perforated plate A of a sad-iron and its handle formed and sprung on the plate, as described, in combination with the rod a^2 , substantially as specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

AUSTIN S. MANN.

Witnesses:

J. C. McCREA,

JAMES A. MAHAFFEY.