2 Sheets—Sheet 1.

J. G. GINGRAS.

PLAITING-IRONS.

No. 194,142. Patented Aug. 14, 1877.

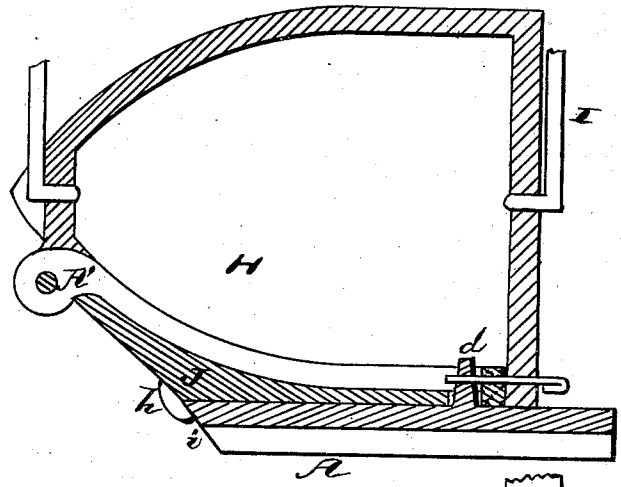

Fig. 4.

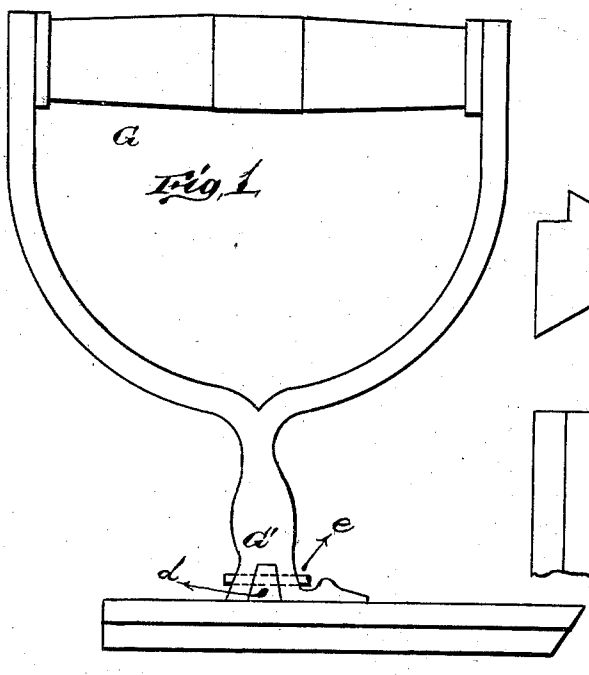

Fig. 1.

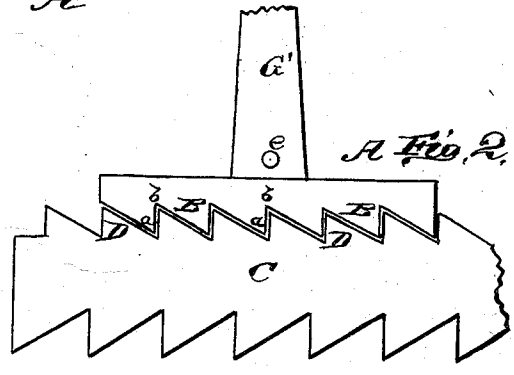

Fig. 2.

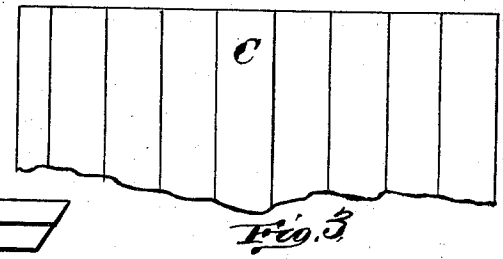

Fig. 3.

WITNESSES

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2 Sheets—Sheet 2.

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Fig. 5.

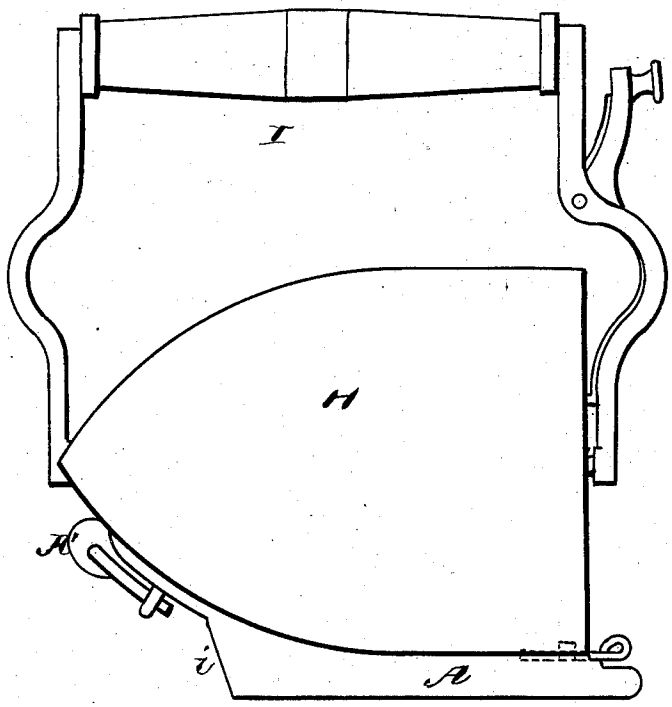


Fig. 6.

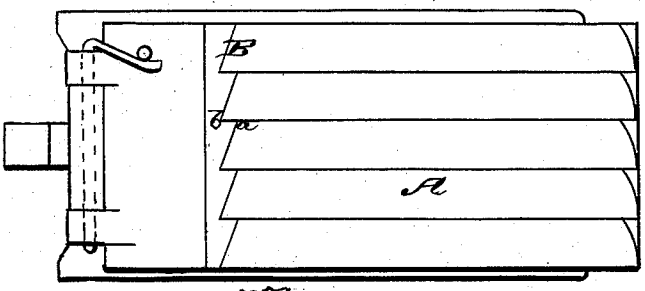
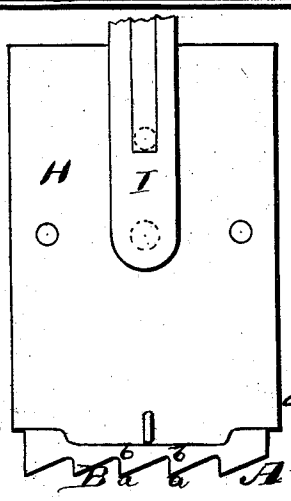


Fig. 7.



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UNITED STATES PATENT OFFICE.

JOSEPH G. GINGRAS, OF SHREVEPORT, LOUISIANA, ASSIGNOR OF ONE-HALF HIS RIGHT TO WM. I. McCAUSLAND, OF DALLAS, TEXAS.

IMPROVEMENT IN PLAITING-IRONS.

Specification forming part of Letters Patent No. **194,142**, dated August 14, 1877; application filed May 26, 1877.

To all whom it may concern:

Be it known that I, JOSEPH G. GINGRAS, of Shreveport, in the parish of Caddo and State of Louisiana, have invented a new and valuable Improvement in Plaiting-Irons; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side view of my plaiting-iron in its simplest form. Fig. 2 is a sectional end view of the same in position on the plaiting-board, and Fig. 3 is a sectional plan view of the plaiting-board itself. Fig. 4 is a central longitudinally-vertical sectional view of my device as applied to a polishing-iron. Fig. 5 is a side elevation, Fig. 6 a plan view, and Fig. 7 an end view, of the same.

The nature of my invention consists in a plaiting-iron composed of a peculiarly-constructed iron or metal plate used in connection with a correspondingly-constructed board, as will be hereinafter more fully set forth.

The annexed drawings, to which reference is made, fully illustrate my invention.

A represents the plaiting-iron, consisting of a metal plate of any suitable dimensions, which is formed on its face with a series of V-shaped recesses running longitudinally in the same. By means of these recesses the face of the iron A is formed into a series of longitudinal acute-angled teeth, B B, as shown. The two sides of each tooth B are preferably made so that one will be just double the length of the other, and the short side, from the angle *a* to the base at *b*, stands perpendicular, and the long side from the angle *a* to the base at the next point *b* will be at an angle of about sixty degrees; but I do not, of course, confine myself to these proportions and angles, as they may be varied, if desired. The teeth should, however, in all cases be of acute angles, and have their sides varying in length, according to the depth of the plait and the distance between the plaits desired.

C represents the plaiting-board, made preferably of wood suitable for the purpose, and provided on its face with a series of longitudinal acute-angled teeth, D D, corresponding exactly with the teeth B on the iron A.

The fabric to be plaited is laid across the board C, and the iron A, having been previously heated, is placed on the fabric so as to gradually and successively press the fabric over and between the teeth D of the plaiting-board, and the iron then moved across back and forth over the fabric to form the creases necessary therein, and this is continued by moving the fabric until the whole has been thus creased. The fabric will then almost of itself fall into regular and even plaits, all of the same size and at equal distances apart, and can then be sewed fast, in the usual manner.

The board C may, as shown in the drawing, have teeth D on both sides, in which case the two sets of teeth are of different size and two correspondingly-shaped irons provided.

These irons may be used separately with handles by having a perforated lug, *d*, cast on the back of each iron; then a handle, G, provided with a slotted foot, G′, placed over said lug, and held by a pin, *e*, passed through the foot and lug; or the irons A may be constructed to be attached to ordinary or other sad-irons, and be used with them.

In the drawing I have shown a hollow sad-iron, H, hung in a handle, I, and having one side of the iron open for the insertion of a hot bolt. The iron A is then formed with a projection, A′, at one end, to be hinged to the sad-iron H, said iron A then constituting the door for closing the sad-iron. In that case, however, I prefer to make the plaiting-iron A simply with the perforated lug *d*, as above described, and make an end thereof beveled, as shown at *i*.

The sad-iron H is provided with a hinged side or door, J, having on its outer face, near the inner end, two beveled lugs or hooks, *h h*, under which the beveled end *i* of the plaiting-iron A is inserted, and the lug *d* passed inward through a slot in the door J, and held by a pin passing through the perforation in the lug, said pin being also used to lock the door J in place. The plaiting-iron A can then be easily removed and other attachments may be substituted.

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

1. A plaiting-iron consisting of an iron having a series of longitudinal acute-angled teeth, with their sides of unequal length, and a correspondingly-shaped plaiting-board, substantially as herein set forth.

2. A plaiting-iron, A, provided with a series of longitudinal acute-angled teeth, B, having their sides of unequal length, and adapted for use, substantially as herein set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOSEPH G. GINGRAS.

Witnesses:

F. G. McWILLIAMS,

ROBT. J. LOWRY.