

O. F. MORRILL.

Sad Iron.

No. 40,768.

Patented Dec. 1, 1863.

Fig. 1.

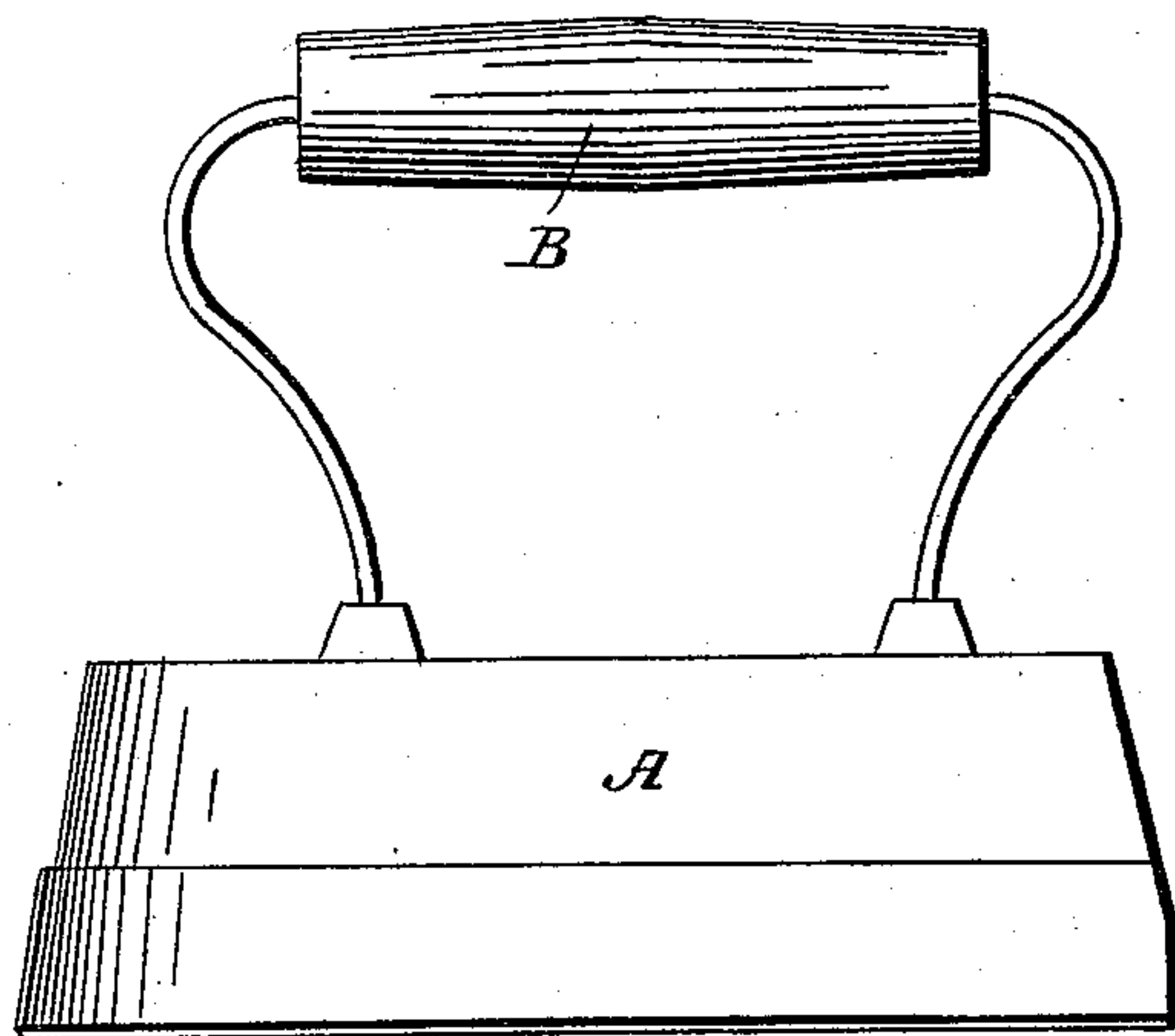


Fig. 2.

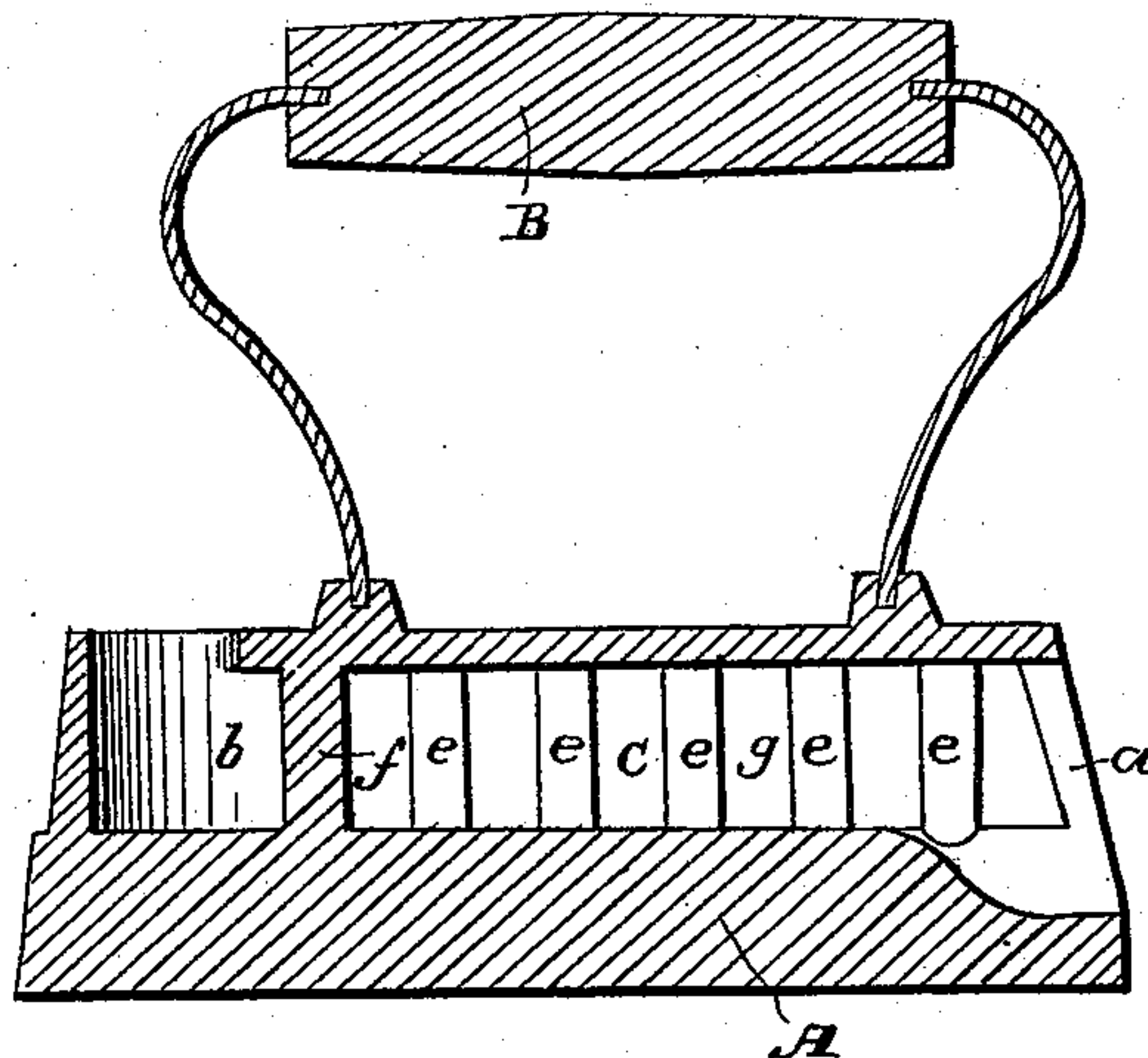
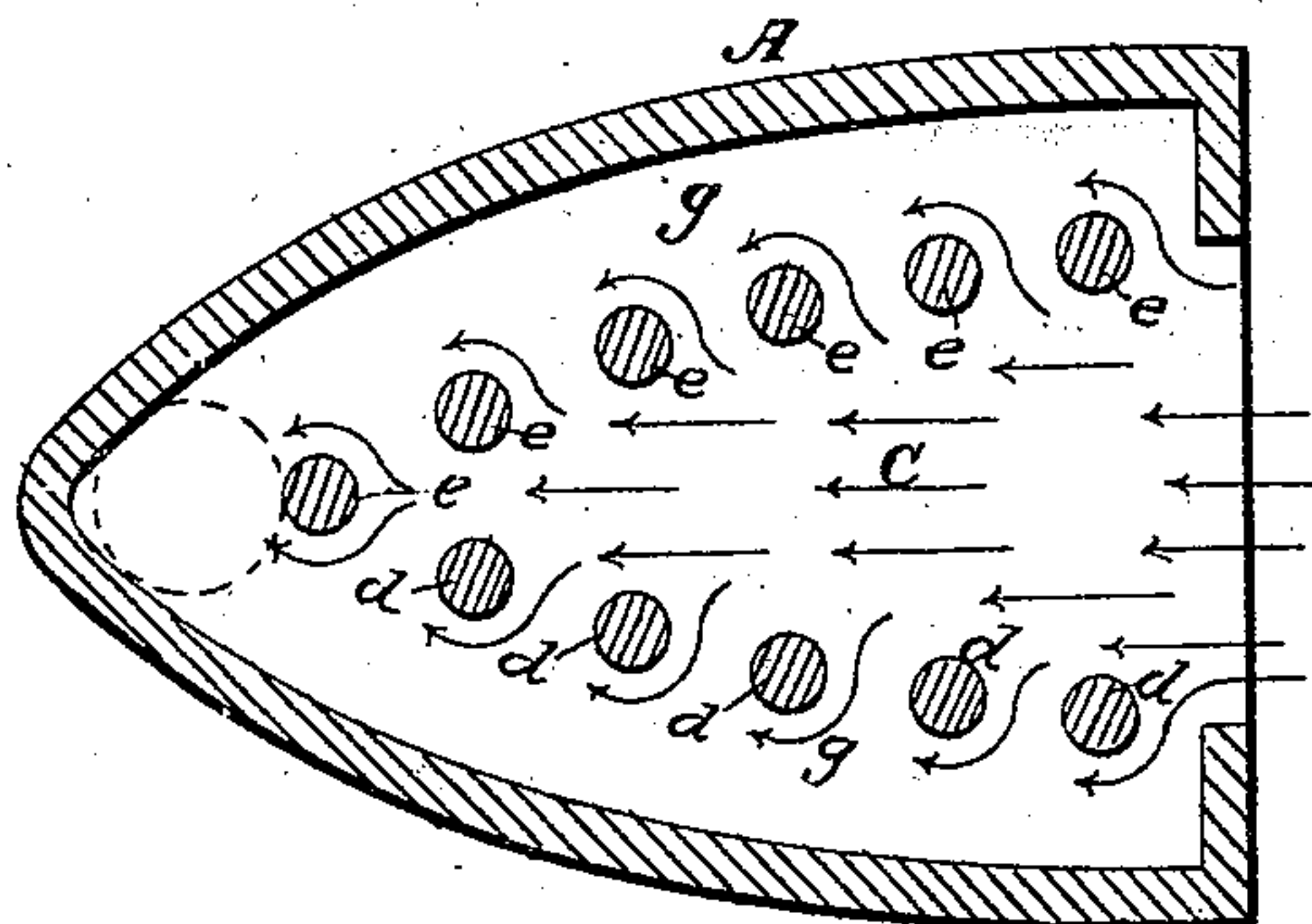


Fig. 3.



Witnesses:
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OSCAR F. MORRILL, OF CHELSEA, MASSACHUSETTS.

IMPROVEMENT IN SAD-IRONS.

Specification forming part of Letters Patent No. 40,768, dated December 1, 1863.

To all whom it may concern:

Be it known that I, OSCAR F. MORRILL, a resident of Chelsea, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Chambered Sad-Irons; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a side elevation, Fig. 2 a longitudinal and vertical section, and Fig. 3 a horizontal section, of a smoothing or sad iron provided with my improvement.

My invention has reference to a chambered sad or smoothing iron furnished with heat-intercepting posts or standards arranged vertically within and across its flame or heat chamber, or from top to bottom thereof; and it consists in an improved arrangement of such posts, they being disposed in two ranges and in such manner that the distance between them shall increase as the said ranges approach the heel of the iron, the several posts of each range being arranged either at equal or unequal distances asunder, as circumstances may require.

The chambered smoothing-iron in question, on which my improvement is made, is such as is ordinarily used over an aerovapor or a gas-burner, the flame of such gas being led directly into the heel of the iron and caused to circulate through the chamber and about the posts therein, and afterward to escape through an opening or passage leading out of the chamber and near the toe of the iron.

In the drawings, A denotes the body of the iron, while B is its handle and C the chamber within such body. This chamber has an in-

duction passage, *a*, made through the heel of the iron and leading into such chamber. There is also an eduction or discharge passage or flue, *b*, carried out of the chamber C at or near the toe of the iron in manner as shown in Fig. 2. The two ranges of heat-intercepting and deflecting posts are represented in Fig. 3 at *d d d e e e* as projecting backward from a common post, *f*, and increasing in their distance asunder as they approach the opening *a* at the heel of the iron. The spaces *g g* between the external sides of the ranges and the inner sides of the chamber C may be made wider at the toe than at the heel of the iron in order to more readily carry off the heat or flame which may pass into them from the spaces between the posts.

The arrows in Fig. 3 exhibit the manner in which the flame passes through the angular space between the rows of posts, and by the posts is deflected into the spaces *g g*. By the aforesaid arrangement of the posts the flame will be equally distributed within the chamber C, and thus more equally heat the iron than would be the case were they arranged indiscriminately within the chamber or in the manner in which it has been customary to arrange them prior to my invention.

I claim as my invention—

My improved sad-iron as constructed with its heat-intercepting posts arranged in two ranges, disposed with respect to one another, and the induction and eduction passages, substantially in manner as specified.

OSCAR F. MORRILL.

Witnesses:

R. H. EDDY,
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