

No. 782,501.

PATENTED FEB. 14, 1905.

J. M. HARPER.

SAD IRON.

APPLICATION FILED MAY 21, 1902.

Fig. 1.

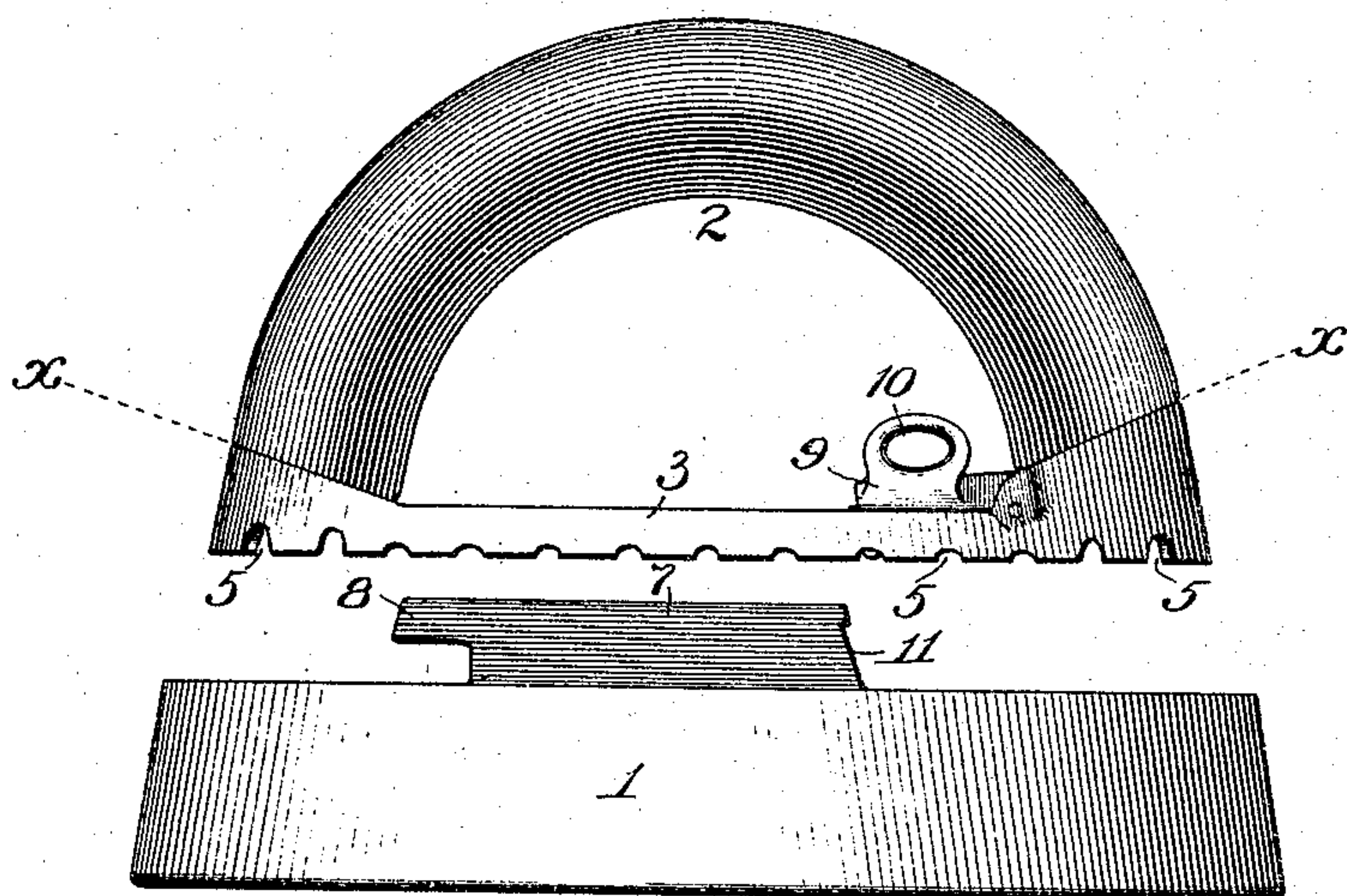


Fig. 2.

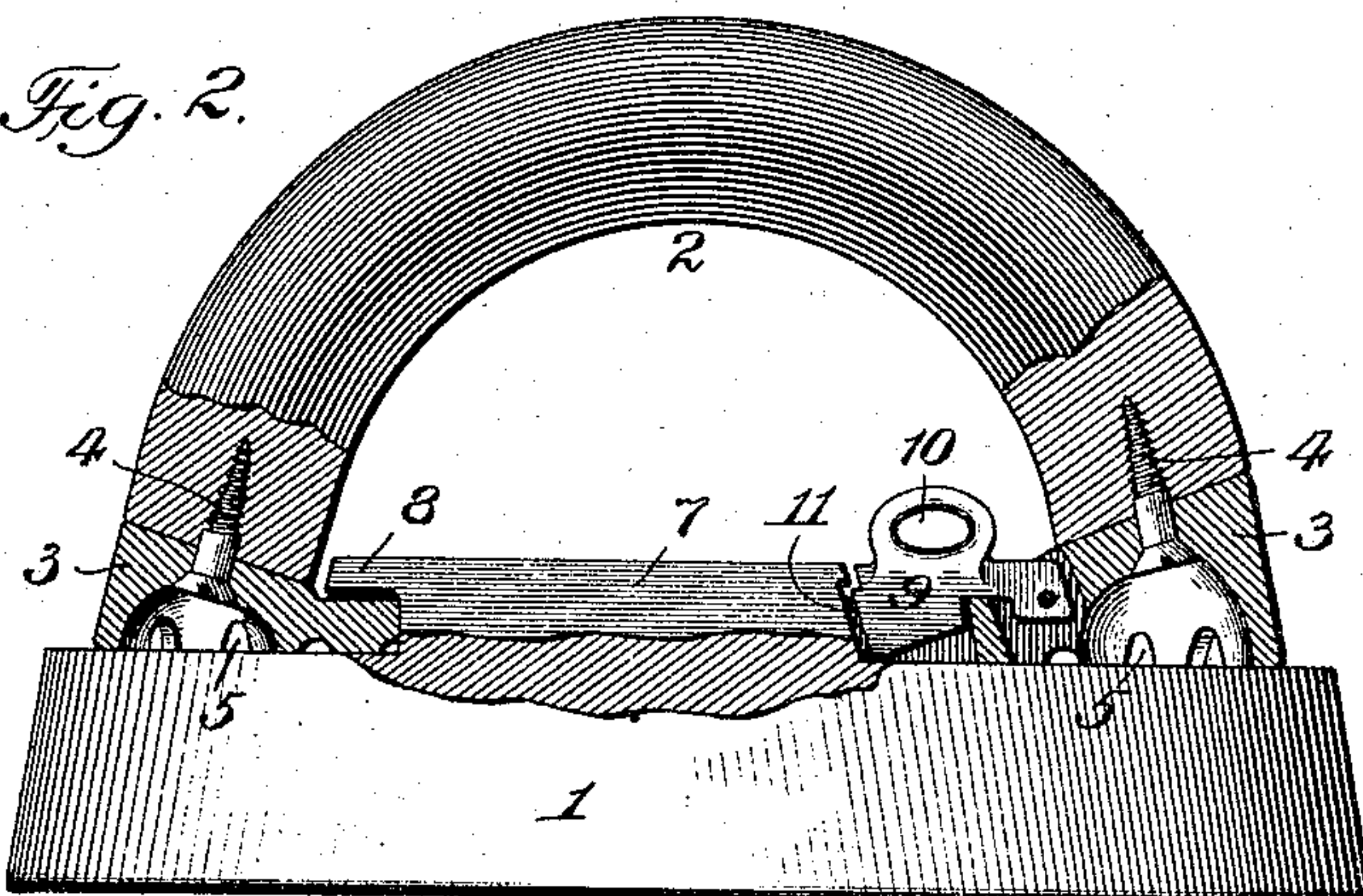
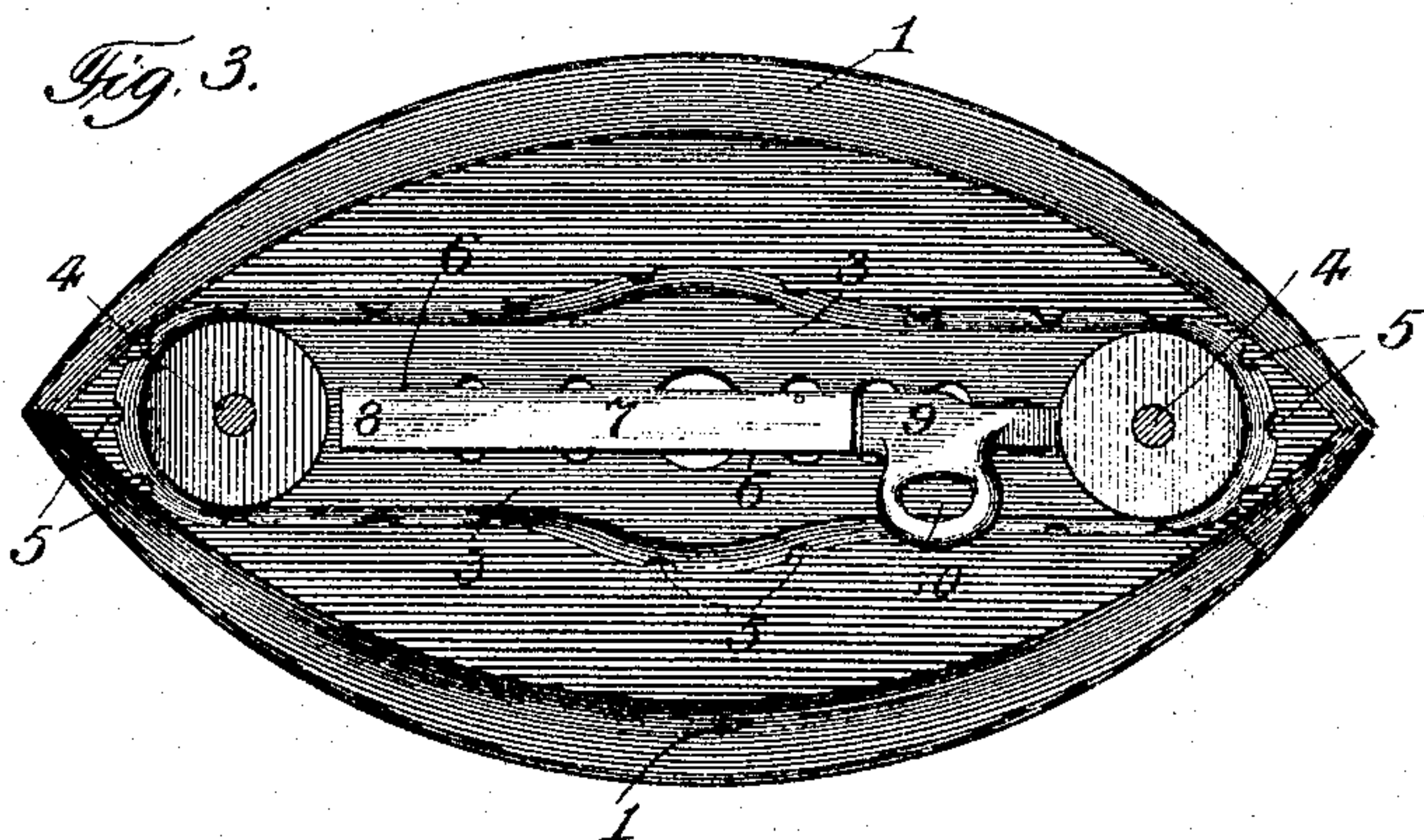


Fig. 3.



Attest:

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UNITED STATES PATENT OFFICE.

JAMES M. HARPER, OF CHICAGO, ILLINOIS, ASSIGNOR TO HARPER
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SAD-IRON.

SPECIFICATION forming part of Letters Patent No. 782,501, dated February 14, 1905.

Application filed May 21, 1902. Serial No. 108,311.

To all whom it may concern:

Be it known that I, JAMES M. HARPER, a citizen of the United States of America, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sad-Irons, of which the following is a specification.

The present invention relates to that type of sad-irons which forms the subject-matter of the Potts Letters Patent, No. 113,448, dated April 4, 1871, and in which the handle portion is detachably connected to the body portion of the sad-iron, so as to be interchangeable with a series of such body portions so as to be capable of successive use with a series of such body portions; and the primary object of the present invention is to provide a simple and effective latch mechanism for locking the handle portion to the body portion of the sad-iron in a substantial manner and with which a ready and convenient detachment of the parts can be effected when desired.

In the accompanying drawings illustrative of the present invention, Figure 1 is a side elevation of a sad-iron embodying the present invention, the parts being shown in a detached condition; Fig. 2, a side elevation with parts in section with the parts in an engaged condition; Fig. 3, a sectional plan view at line *xx*, Fig. 1.

Similar numerals of reference indicate like parts in the several views.

Referring to the drawings, 1 represents the body portion of the sad-iron of any usual and approved size and shape; 2, the handle portions composed of the usual segmental wooden grip portion and the longitudinal member or casting 3, secured to the respective ends of such wooden grip portion by the usual wood-screws 4 to tie such ends together.

5 represents grooves or channels in the under or bearing surface of the handle member 3, forming air-passages between the under surface of such member and the adjacent top surface of the body portion 1 of the sad-iron, and which passages are adapted to permit of a circulation of air so that the conduction of heat from the body portion 1 to the handle portion 2 is reduced to such an extent as to

prevent any danger of the ends of the wooden grip portion of the handle becoming charred by the conduction of heat from the body portion during long continued use.

6 is a longitudinal orifice formed centrally in the connecting member 3 aforesaid and formed of a greater length than the longitudinal fixed latch member of the body portion of the sad-iron hereinafter described.

7 is a longitudinal fixed latch-bar or spine secured centrally to the top of the main body portion of the sad-iron 1 and adapted to fit the orifice or opening 6, before described, in the connecting member 3 of the handle portion and adapted to have limited independent longitudinal movement therein, for purposes hereinafter stated.

8 is a longitudinally-projecting toe at one end of the member 7 under which an end wall of the orifice 6 of the handle member 3 is adapted to be moved longitudinally in effecting an engagement of the parts.

9 is a latch-bar pivoted at one end in an extension of the orifice 6 aforesaid, with its opposite end adapted to drop behind the end of the fixed latch member 7, opposite to the end thereof which is provided with the engaging toe 8, the arrangement being such that with the latch-bar in engaging position an independent longitudinal movement of the handle portion with relation to the body portion of the sad-iron, with a consequent disengagement of parts, is prevented in a very effective and substantial manner.

10 is a projecting ring or handle on the latch-bar for convenient manipulation of the same in the operation of applying or removing the handle portion of the sad-iron.

11 is an undercut wall at the rear end of the fixed latch member 7, preferably of the inclined form shown in Fig. 2 and ending at top in an overhanging projection, as shown.

The free end of the movable latch-bar 9 has a reverse formation to the above-described rear end of the fixed latch member, and the respective ends are adapted to interlock to prevent disengagement of the handle from the body of the sad-iron, and the structural arrangement of parts is such that by lifting the

latch-bar manually out of engagement with the latch member 7 the handle can be moved longitudinally upon the sad-iron body to effect a disengagement of said handle when desired.

5 In the operation of removing the handle portion the latch-bar is first raised out of its engagement with the end of the member 7, after which the handle portion is given an independent longitudinal movement to free the engaging end wall of the orifice 6 from its engagement with the engaging toe 8, after which the
10 handle portion is free to be removed for engagement with a freshly-heated sad-iron body portion, as usual in the present type of sad-
15 irons, and in effecting such engagement the reverse of the operations just described will be employed.

Having thus fully described my said invention, what I claim as new, and desire to secure
20 by Letters Patent, is—

In a sad-iron, the combination of a main body portion, a longitudinal spine secured

thereto and provided with a projecting toe at one end, a detachable handle the base portion of which is provided with a longitudinal opening to receive the aforesaid spine and capable
25 of independent movement so as to carry the base portion of the handle beneath the projecting toe aforesaid, and a latch-bar pivoted to the handle portion and adapted to drop by
30 gravity behind the end of the aforesaid spine to lock the parts to their engagement, the rear end of said spine having an undercut wall forming an overhanging projection at top,
35 and the free end of the latch-bar having a reverse formation for engagement therewith, substantially as set forth.

Signed at Chicago, Illinois, this 17th day of May, 1902.

JAMES M. HARPER.

Witnesses:

ROBERT BURNS,
HENRY A. NOTT.