

(No Model.)

G. O. DRAPER.
RING RAIL.

No. 465,247.

Patented Dec. 15, 1891.

Fig. 1.

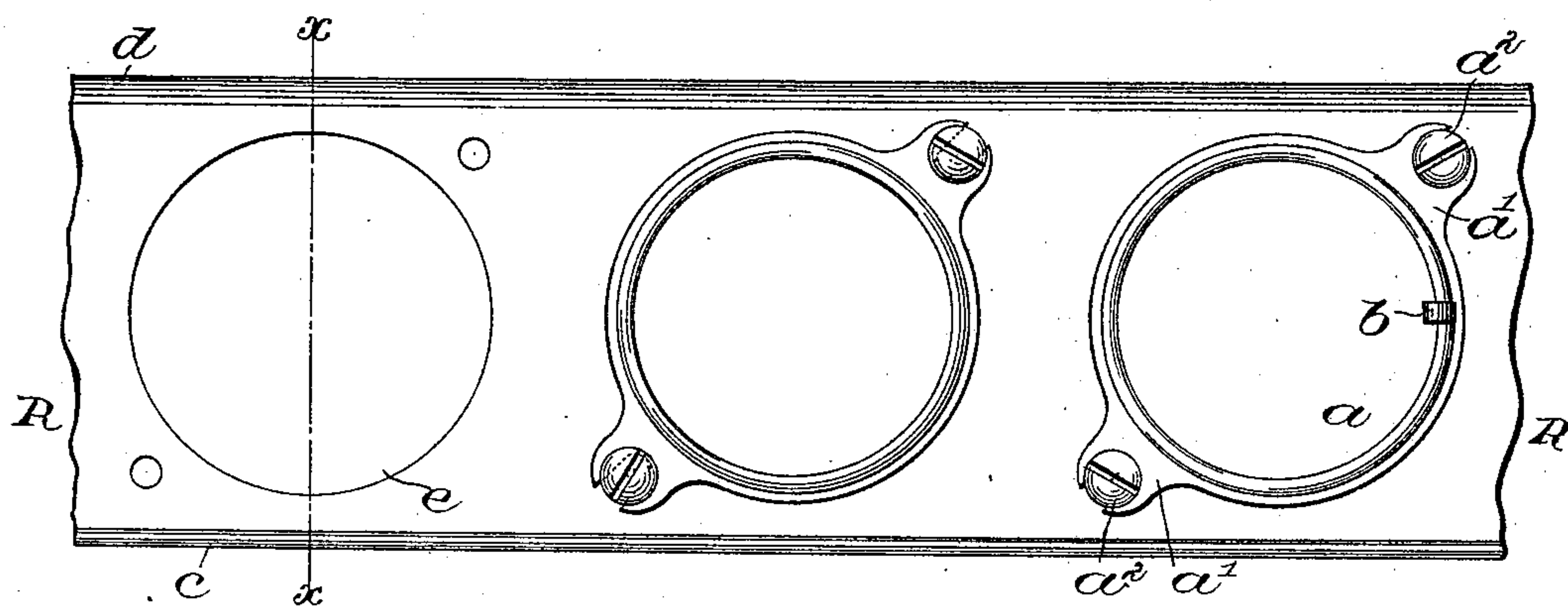


Fig. 2.

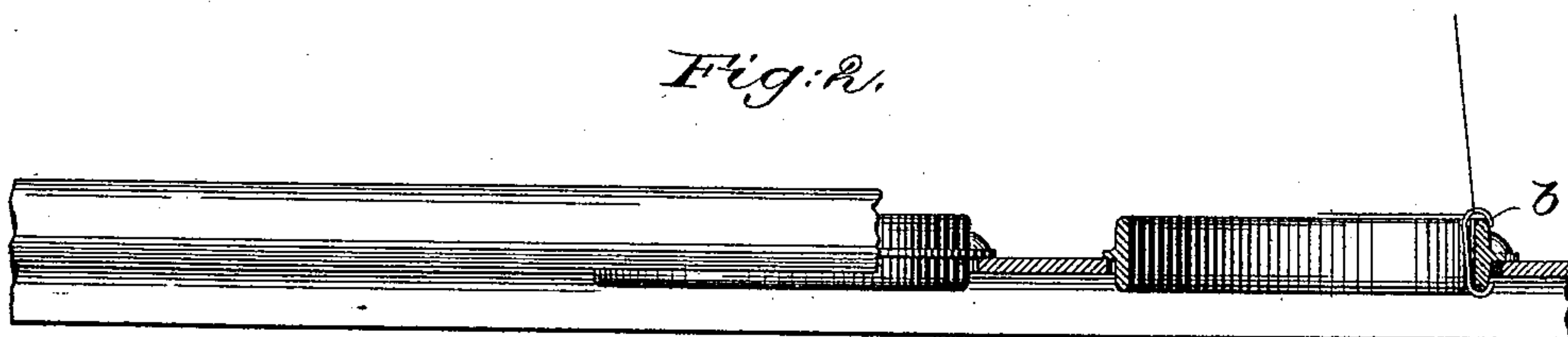
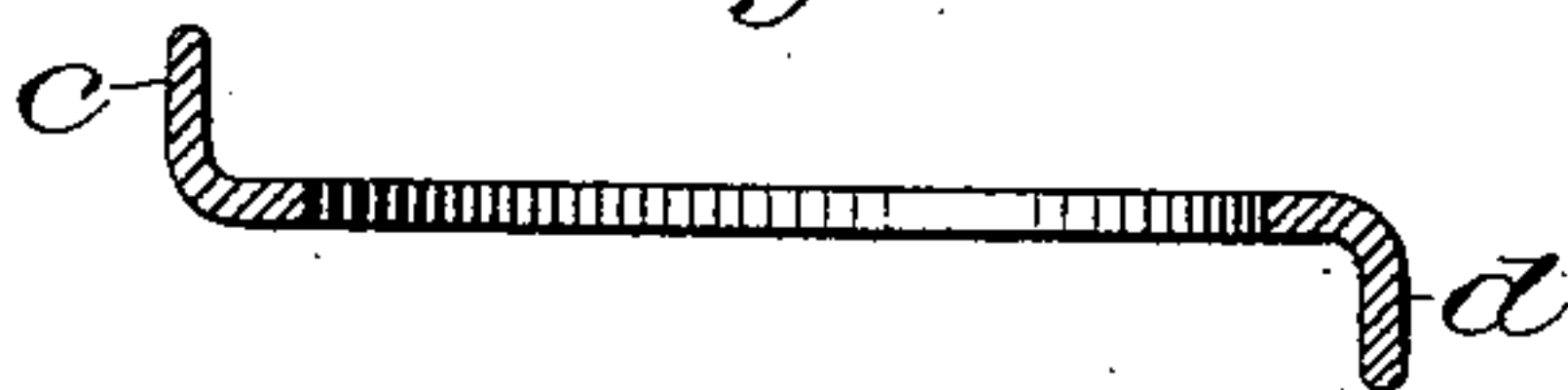


Fig. 3.



Witnesses:
Fred S. Greenleaf
Edward F. Allen.

Inventor:
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By Leroy & Gregory Attys.

UNITED STATES PATENT OFFICE.

GEORGE O. DRAPER, OF HOPEDALE, MASSACHUSETTS.

RING-RAIL.

SPECIFICATION forming part of Letters Patent No. 465,247, dated December 15, 1891.

Application filed May 26, 1891. Serial No. 394,152. (No model.)

To all whom it may concern:

Be it known that I, GEORGE O. DRAPER, of Hopedale, county of Worcester, State of Massachusetts, have invented an Improvement in Ring-Rails, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object the production of a novel ring-rail, one containing special advantages when employed in that class of frames wherein the yarn or material being twisted is wet. In this class of machines, where the yarn or material being twisted is wet, great difficulty is experienced in rust affecting the rail, and many plans have been tried to obviate the difficulty, all of which are more or less expensive.

In accordance with my invention the ring-rail is composed of brass or equivalent material which will not easily rust or be affected by dampness, the said rail having its flanges turned in opposite directions, so that it may be reversed when the rings are worn, the rail in practice when in use presenting an upward flange at its rear side and a downward flange at its front side, these flanges tending to stiffen the rail and prevent its sagging; also enabling it to be rolled out of thinner stock, making the rail lighter and less expensive.

The rail will preferably be constructed of rolled malleable metal of uniform thickness, and the upwardly-turned flange prevents water or other liquid used from flowing over the rear side of the ring-rail upon other parts of machinery below or upon the driving-bands and acting upon the whirl of the spindle.

Figure 1 is a top or plan view of a portion of a ring-rail embodying my invention; Fig. 2, a detached view of the rail shown in Fig. 1, partially broken out, one of the rings being also broken out or shown in section; and Fig. 3 is a transverse section of the rail looking from the right in Fig. 1.

The rings *a*, having ears *a'* to receive the screws *a²*, by which to attach the rings to the rail and the traveler *b*, one for each ring, are and may be all as usual in twisting-frames.

The rail *R*, composed of brass or other ma-

terial which will not rust, is made from a strip of metal bent at its opposite edges to leave substantially equal flanges *c d*, the said flanges being bent in opposite direction, so that one stands up at the surface of the rail, and the other hangs down below the rail.

In practice this rail may be used either side up; but when in use the lip or flange at the rear side of the rail will stand upwardly, so that any water or other liquid thereon cannot run over the back of the rail, but must escape from the front of the rail.

The rail may be produced by any usual means employed for flanging wrought metal.

The rail will be provided with a series of openings, as *e*, at the proper distance apart to receive the rings, said openings being equidistant from the front and back of the rail. The flanges also materially stiffen and strengthen the same, enabling thinner material to be used.

In the class of ring used herein the traveler wears unequally, and the life of the ring is materially increased by swerving the ring so as to place the undermost flange of the ring uppermost.

Having described my invention, I claim—

1. A reversible ring-rail having at its opposite edges flanges of substantially equal depth turned in opposite directions, substantially as described.

2. A reversible ring-rail of rolled metal having at its opposite edges stiffening-flanges of substantially equal depth turned in opposite directions, substantially as described.

3. A reversible ring-rail having at its opposite edges flanges of substantially equal depth turned in opposite directions and a series of ring-receiving holes equidistant from the edges of the rail, substantially as described.

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

GEORGE O. DRAPER.

Witnesses:

GEO. W. GREGORY,
EDWARD F. ALLEN.