

D. R. WINTER.
WHIFFLETREE PLATES.

No. 182,256.

Patented Sept. 12, 1876.

Fig. 1.

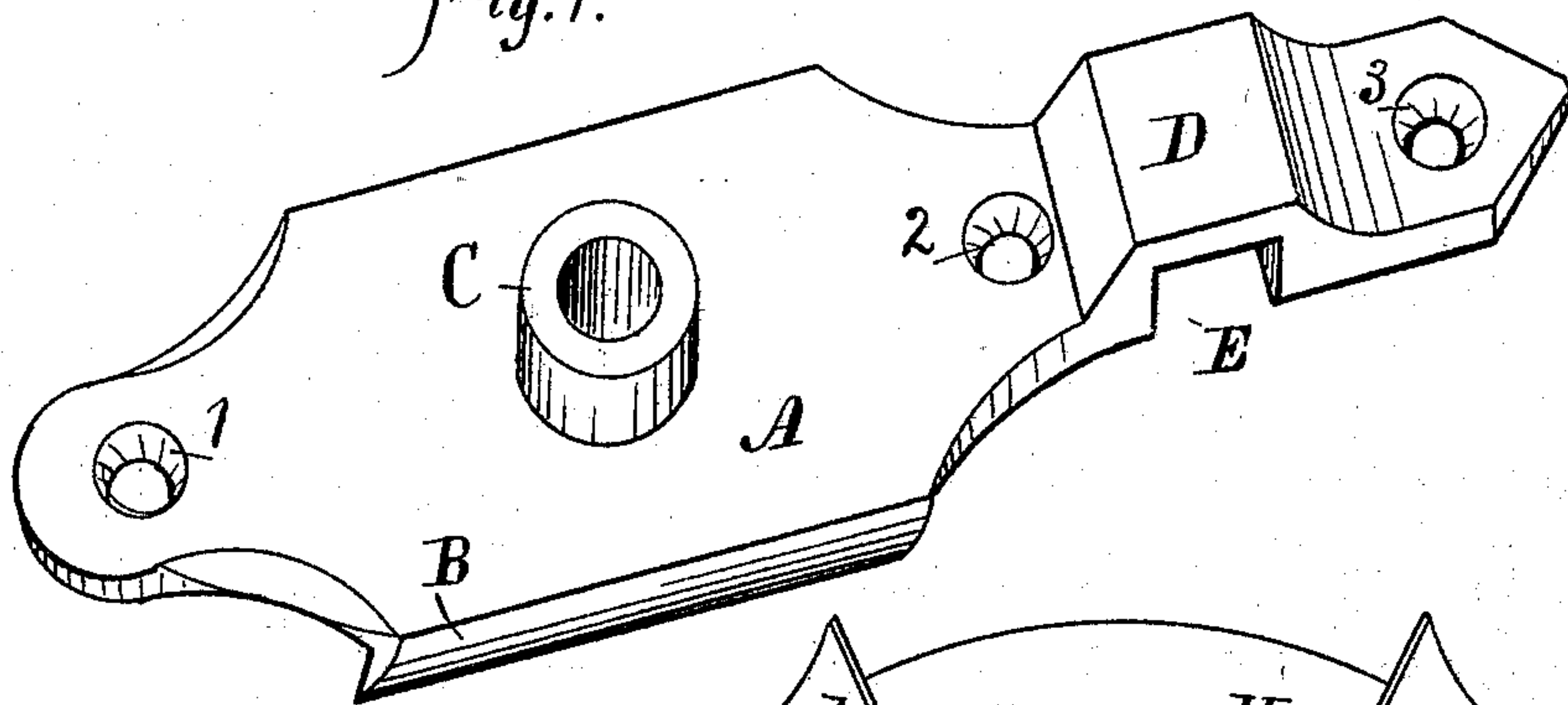


Fig. 2.

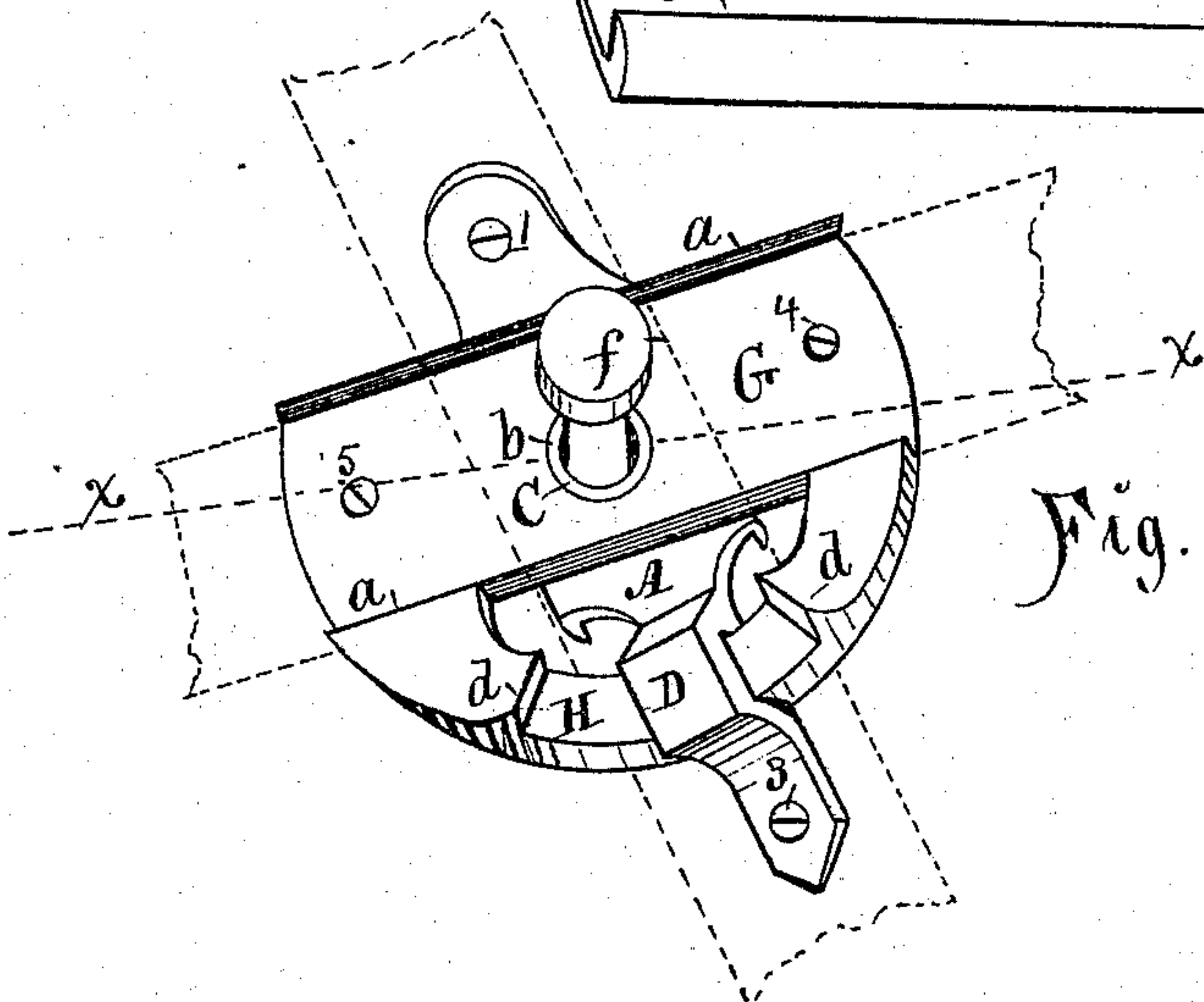
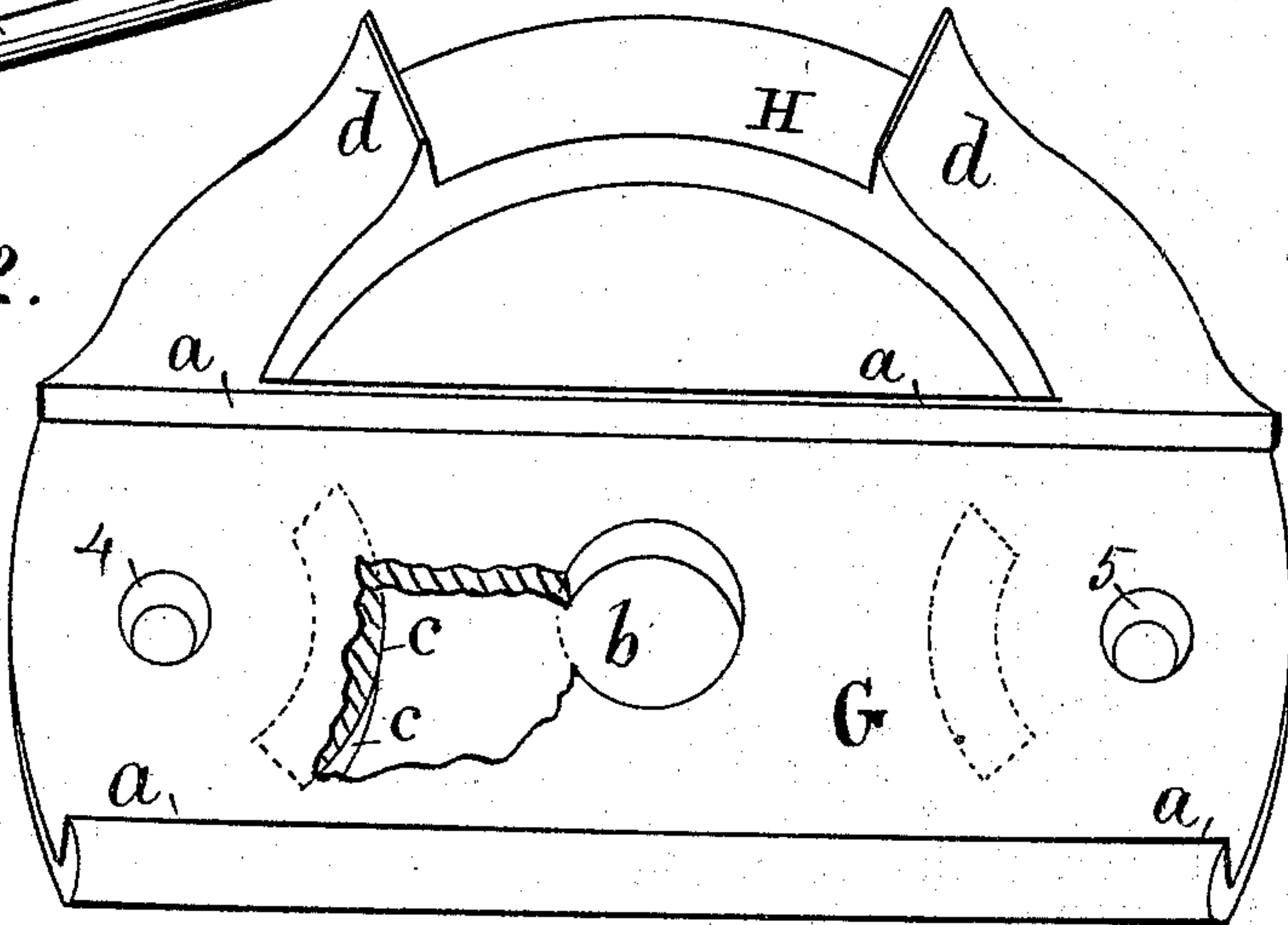


Fig. 3.

Witnesses,
Jno. Brooke
Rmy Perkins

Inventor,
Daniel R. Winter
By Thomas G. Orrig, Att'y.

UNITED STATES PATENT OFFICE.

DANIEL R. WINTER, OF NEWTON, IOWA, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO JAMES M. IRWIN, OF SAME PLACE.

IMPROVEMENT IN WHIFFLETREE-PLATES.

Specification forming part of Letters Patent No. 182,256, dated September 12, 1876; application filed December 20, 1875.

To all whom it may concern:

Be it known that I, DANIEL R. WINTER, of Newton, in the county of Jasper and State of Iowa, have invented Combined Whiffletree and Pole Plates for Wagons, of which the following is a specification:

The object of my invention is to connect a whiffletree to a wagon tongue or pole in such a manner that the play of the whiffletree will be limited, and the straps and stays usually required dispensed with. It consists in the manner of forming and combining a whiffletree bearing-plate and a tongue-plate, as hereinafter fully set forth.

Figure 1 of my drawing is a perspective view of the plate designed to be rigidly secured on the top of the wagon-tongue.

A is the body of the plate, of oblong form, and corresponding in size with the pole or tongue to which it is to be applied. B is one of the parallel flanges on the longitudinal edges, designed to lap over the side of the pole. C is a boss around the bolt-hole in the center of the plate, designed to form a pivot for the whiffletree-plate. D is a rear extension, swelling upward sufficiently to allow a transverse slot, E, to be formed in its under side. 1 2 3 are screw or bolt holes.

Fig. 2 is a perspective view of my whiffletree-plate. G is the body of the plate, of oblong form, and corresponding in size with the whiffletree. *a a* are parallel flanges on the top side, designed to lap over the edges of the whiffletree. *b* is a hole in the center, designed to admit the boss C on the plate A. 4 and 5 are screw-holes. *c c* are lugs on the under side of the plate G, to engage the sides of the plate A, and aid in limiting the play or turning of the whiffletree when horses are attached. Corresponding lugs or stops are on the opposite side of the central hole *b*. 4 and 5 are screw-holes, through which screws or bolts are passed to secure the plate G to the whiffletree. H is a semicircle, cast solid with the plate G, and is concentric with the cen-

tral hole *b* in the plate G. *d d* are lugs forming shoulders on the top of the circle H. The space between these shoulders *d* is the prescribed limit of the play allowed to the whiffletree.

Fig. 3 is a top-plan view, showing the two plates combined, and illustrates the manner of applying and co-operating them on the whiffletree and tongue. The parallel broken and crossed lines indicate the relative positions of the tongue and whiffletree, and the angles of the whiffletree and its plate G relative to the right-angle line *x x* indicates the play allowed and circumscribed by the stops *c* and shoulders *d*.

The boss C on the plate A is passed through the central hole in the plate G, and forms a pivotal journal upon which the whiffletree and its plate can turn. The semicircle H enters and traverses the slot E in the rear extension D of the plate A. *f* is a bolt passed down through the whiffletree and the tongue, and their respective plates G and A, to secure the whiffletree to the tongue.

No traces, straps, chains, or stays of any kind are required; and thus, by means of my two plates or castings, a simple and durable way is provided for securing a double-tree or whiffletree, with metal bearings for the same, and also a limited play, such as is usually obtained by attaching stay straps or chains near the ends of the whiffletree and the axle of the wagon.

I claim as my invention—

The wagon-tongue plate A, having the central boss C and the rear extension D, with a transverse slot, E, in combination with the whiffletree-plate G, having a central hole, *b*, and lugs *c* on the under side, and a concentric semicircle, H, with shoulders *d*, substantially as and for the purposes shown and described.

DANIEL R. WINTER.

Witnesses:

CASSIUS BRANNEN,
C. P. HOLMES.