B. S. PORTER.

Whiffletree-Plates.

No. 165,176. Patented July 6, 1875.

Fig. 1.

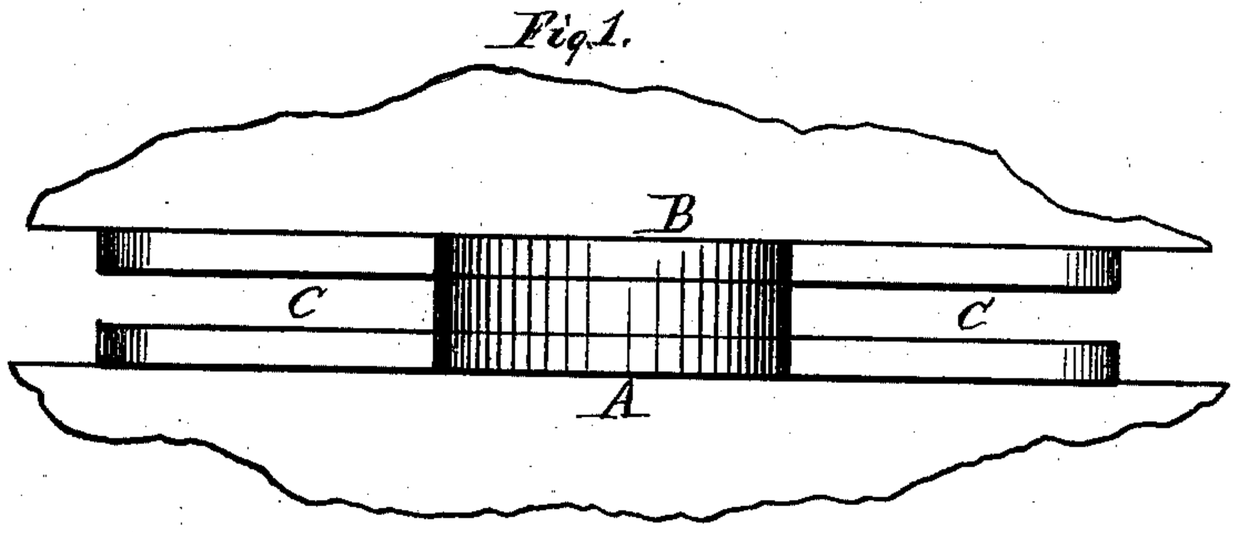


Fig. 2

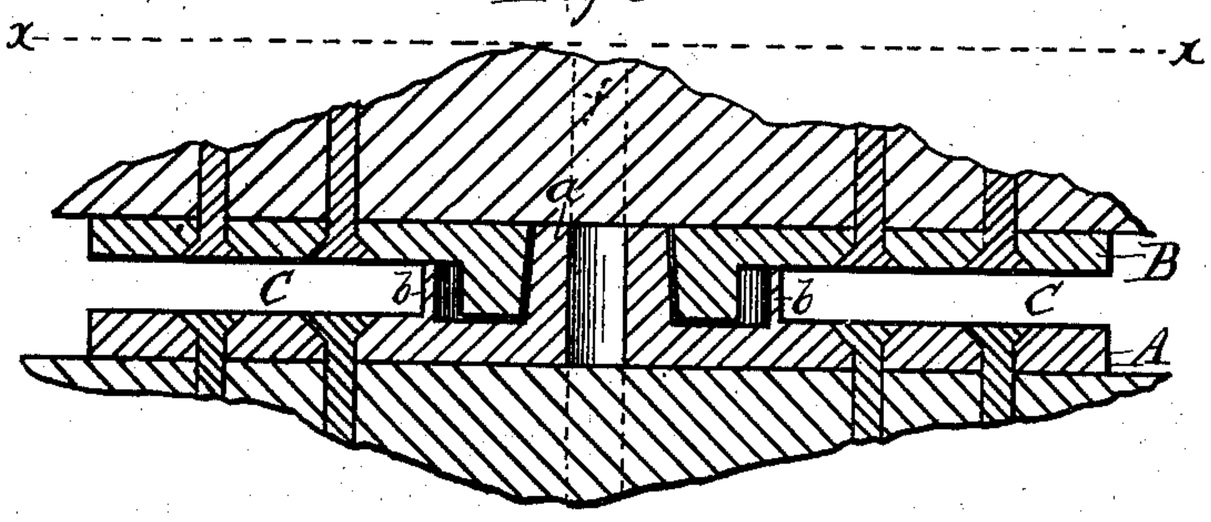
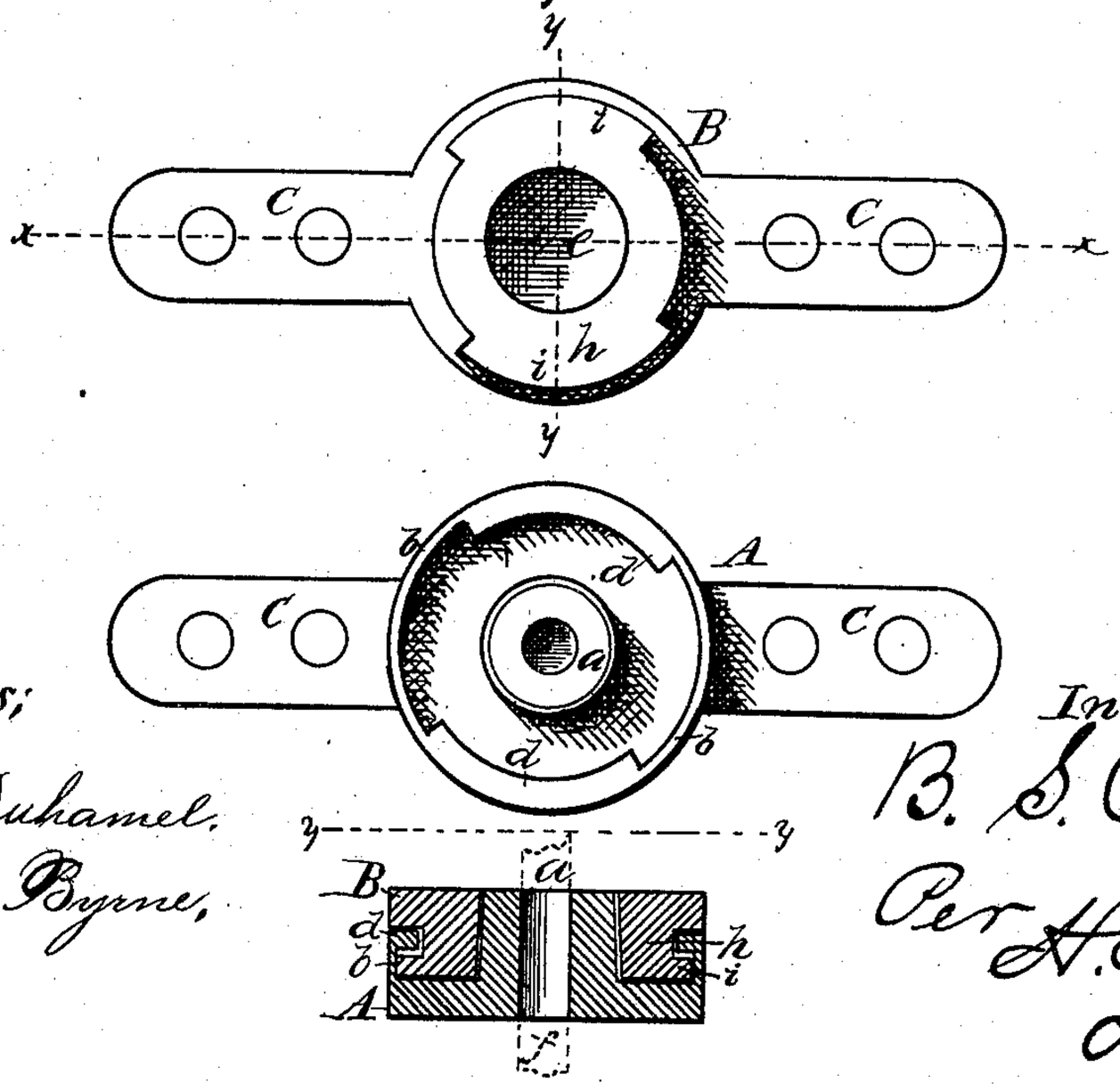


Fig. 3.



Witnesses;

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UNITED STATES PATENT OFFICE.

BENJAMIN S. PORTER, OF OTTAWA, ILLINOIS.

IMPROVEMENT IN WHIFFLETREE-PLATES.

Specification forming part of Letters Patent No. **165,176**, dated July 6, 1875; application filed March 30, 1875.

To all whom it may concern:

Be it known that I, BENJAMIN S. PORTER, of Ottawa, county of La Salle and State of Illinois, have invented certain new and useful Improvements in Whiffletree-Plates, of which the following is a specification:

The nature of my invention consists in the construction and arrangement of a whiffletree-plate for connecting the whiffletrees to the double-tree, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which forms a part of this specification, and in which—

Figure 1 is a front view of a whiffletree and part of a double-tree, showing my connecting-plate between them. Fig. 2 is a longitudinal section of the same, and Fig. 3 shows the two parts of the connecting-plate attached.

The whiffletree-plate or connecting-plate consists of two circular plates, A and B, each provided with straps or arms C C, having bolt or screw holes for the passage of bolts or screws to fasten them to the doublé-tree and whiffletree, respectively. The plate A is provided with a central hub, *a*, the center of which is hollow for the reception of bolt *f*, and with a circumferential flange, *b*, projecting in the same direction as the hub; and on this flange or rim are two inwardly-projecting flanges, *d d*, directly opposite each other, and extending each about one-fourth the inner circumference of the rim. The plate B has a central aperture, *e*, to receive the hub *a*, and has an annular projection, *h*, with side flanges *i i*, corresponding in size and position with the flanges *d d*. In placing the whiffletree on the double-tree, they must be at right angles with each other, when the plates will fit into each other, and, when the whiffletree is turned into position, the flanges *i i* pass under the flanges *d d*, thus holding them together and taking off a great proportion of the strain from the draft-bolt *f*, which passes through the hub and centers of the plates.

When in position for use the plates are securely fastened together, and it is only by turning them half-way round that they can be detached from each other.

Whiffletree-plates have been constructed with flanges on each plate fitting into each other, thus forming a means of attachment for the whiffletree, and excluding dust; but they are objectionable for the reason that the strain of draft must be borne by the devices used to attach these plates together, there being no bolt passing through the whiffletree, the plates, and the bar of shaft or tongue.

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

The combination of the plate A, provided with hollow central hub *a*, for the reception of a bolt, *f*, and circumferential rim *b*, having interior flanges *d d*, with the plate B, provided with central aperture *e*, and annular projection *h*, with exterior flanges *i i*, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my invention I hereunto affix my signature.

BENJAMIN S. PORTER.

Witnesses:

JAMES MCMANUS,

E. S. BUSHNELL.