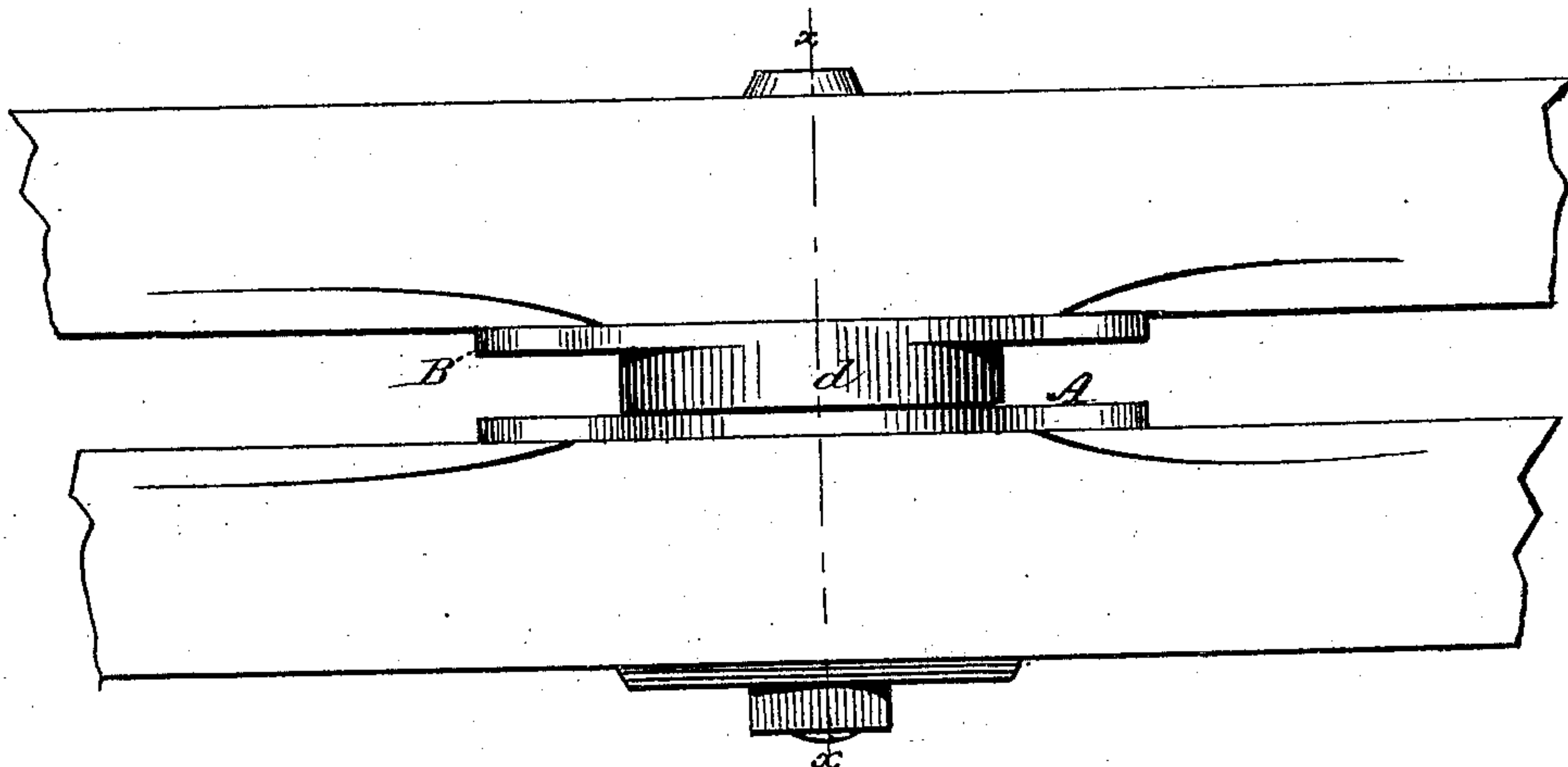


B. S. PORTER.  
Whiffletree-Plate.

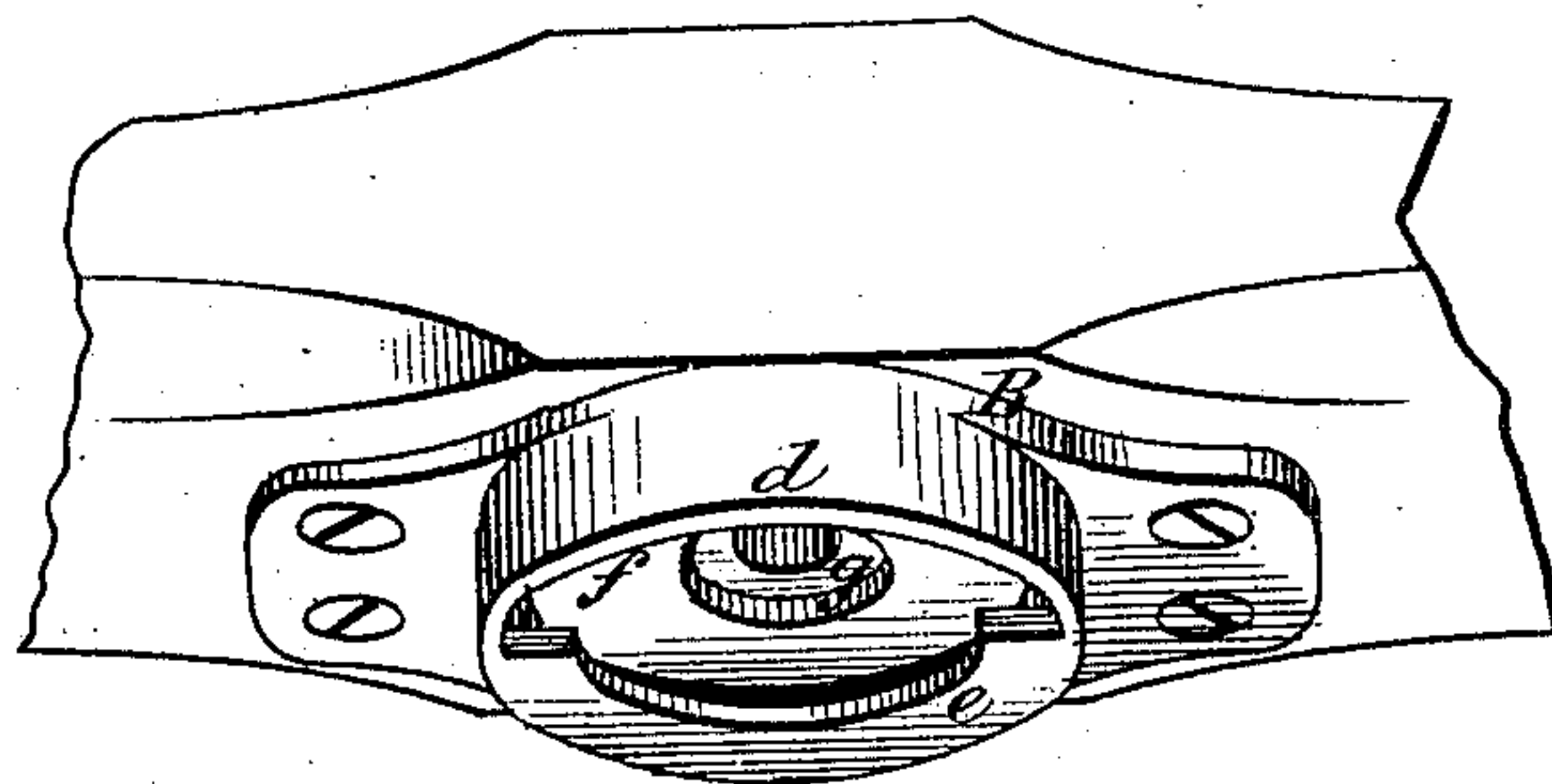
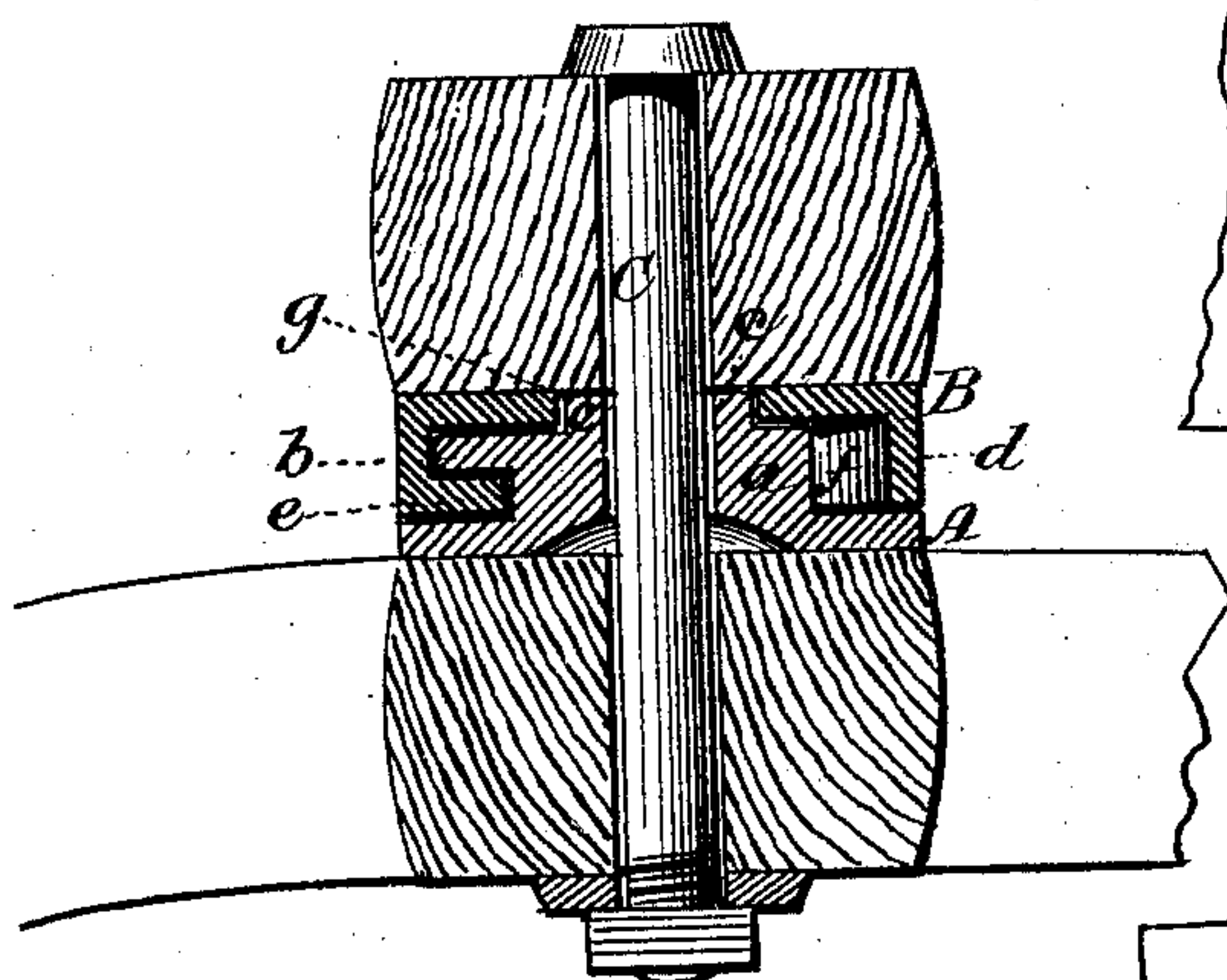
No. 210,557.

Patented Dec. 3, 1878.

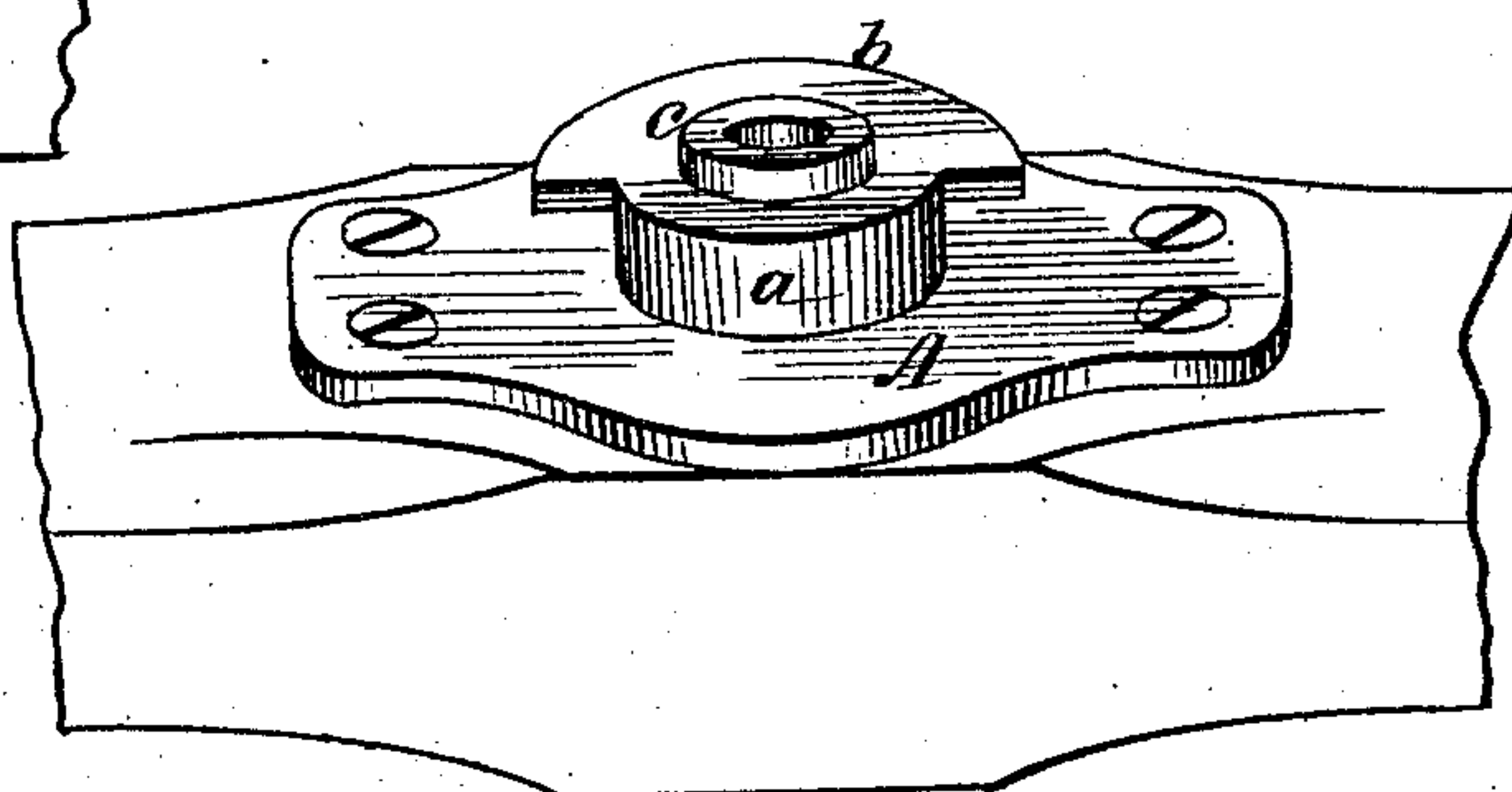
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Attest:*  
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*Atty's*

# UNITED STATES PATENT OFFICE.

BENJAMIN S. PORTER, OF OTTAWA, ILLINOIS, ASSIGNOR TO JAMES G. ENGLISH AND EDWIN F. MERSICK, OF NEW HAVEN, CONN.

## IMPROVEMENT IN WHIFFLETREE-PLATES.

Specification forming part of Letters Patent No. **210,557**, dated December 3, 1878; application filed November 14, 1878.

*To all whom it may concern:*

Be it known that I, BENJAMIN S. PORTER, of Ottawa, in the 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:

As hitherto constructed, the locking-plates for whiffletrees are adapted to be placed and kept in working position by turning the whiffletree through a quarter-circle, by means of quarter-circle flanges, forming double locks on opposite sides of the bolt, for holding the parts together in the event of the accidental breaking or loss of the bolt.

My improved lock-plates are adapted to work with half-circle flanges, forming a single lock on one side of the bolt, which holds the plates together with greater security, gives greater bearing-surface, and can only be separated by turning the whiffletree completely around—that is, end for end.

The shaft-bar plate has a central hub with a half-circle flange on one side and a hub-collar termination, which fits into and forms a bushing for the eye of the whiffletree-plate, and through which the confining-bolt passes, so that there is no wear on the bolt at this point.

Referring to the drawings, Figure 1 represents a side elevation of the whiffletree and shaft-bar united by my improved locking-plates; Fig. 2, a cross-section of the same, and Fig. 3 the lock of the shaft-bar plate and the lock-plate of the whiffletree separated.

The shaft-bar plate A has a central hub, *a*, with a semicircular flange, *b*, formed on one side, and a central collar termination, *c*. The whiffletree-plate B has a circular rim, *d*, with a semicircular flange, *e*, formed on one side, extending toward the center. The shoulders or ends of the flanges *b* and *e* pass each other in placing the plates together, and the flange *b* will be in the open rim-space *f*, with the hub-collar *c* fitting as a bushing in the eye *g* of the upper plate, B, and extending entirely through it. The bolt C passes through from

the top of the whiffletree to the bottom of the shaft-bar, and is secured by a nut and a jam-plate.

In placing the whiffletree in working position, it is turned entirely around, end for end, upon the plate A, bringing the hub-flange *b* on the same side of and above the rim-flange *e*, so that in the event of the accidental loss or breaking of the bolt the plates could not be separated without turning the whiffletree completely around, end for end. This advantage is obtained by the arrangement of the half-circle flanges of each plate on one side only of the bolt, so that when interlocked they will both be on one side of the bolt, as in Fig. 2, and form a single half-circle lock, as contradistinguished from a double quarter-circle lock.

By this construction greater wearing-surface, easier movement, and greater security are obtained, while the bushing formed by the hub-collar prevents all wear of the bolt in the whiffletree-plate eye. The plates are secured in position by screws.

The device can be used with a double-tree, and the positions of the plates may be reversed from those stated.

I claim—

The improved whiffletree lock-plates, consisting of the part A, having the hub *a*, provided with the semicircular flange *b*, and the collar *c* outside of said flange, and the part B, having the circular rim *d*, the semicircular flange *e*, and the collar-receiving opening *g*, all constructed and adapted to form a continuous half-circle bearing and a single lock on one side of the bolt, requiring a complete turn of the whiffletree, end for end, to separate said half-circle lock.

In testimony whereof I have hereunto set my hand in the presence of two witnesses.

BENJAMIN S. PORTER.

Witnesses:

P. TALBOT,  
WILL. F. NEELY.