

H. K. PORTER.
Whiffletree-Centers.

No. 156,437.

Patented Nov. 3, 1874.

Fig. 1.

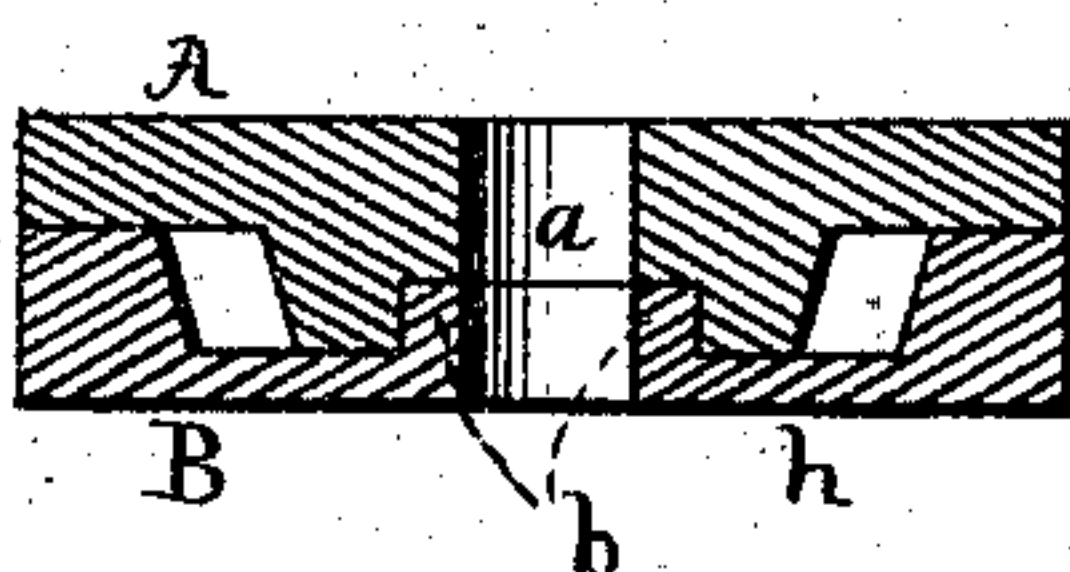


Fig. 2.

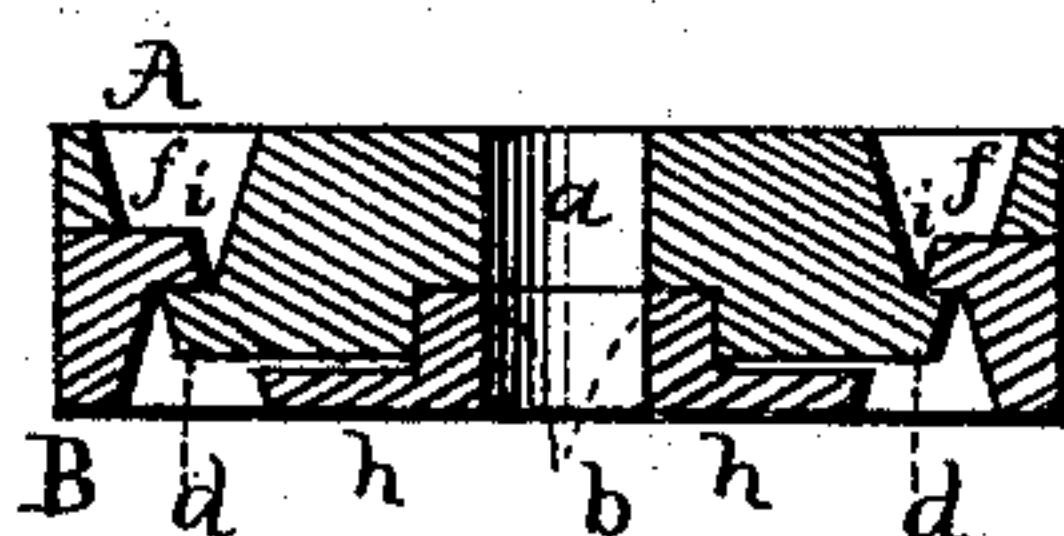


Fig. 3.

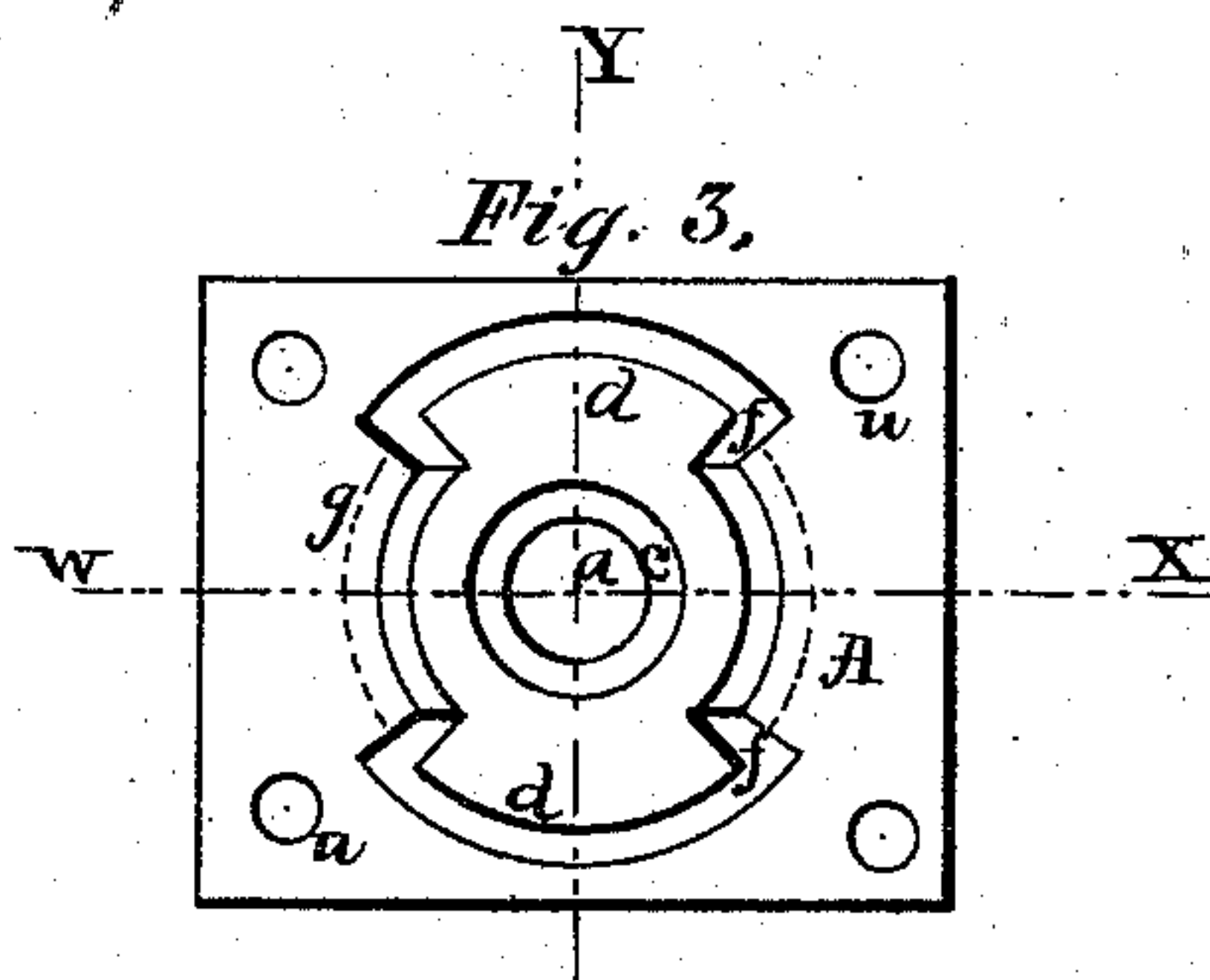


Fig. 4.

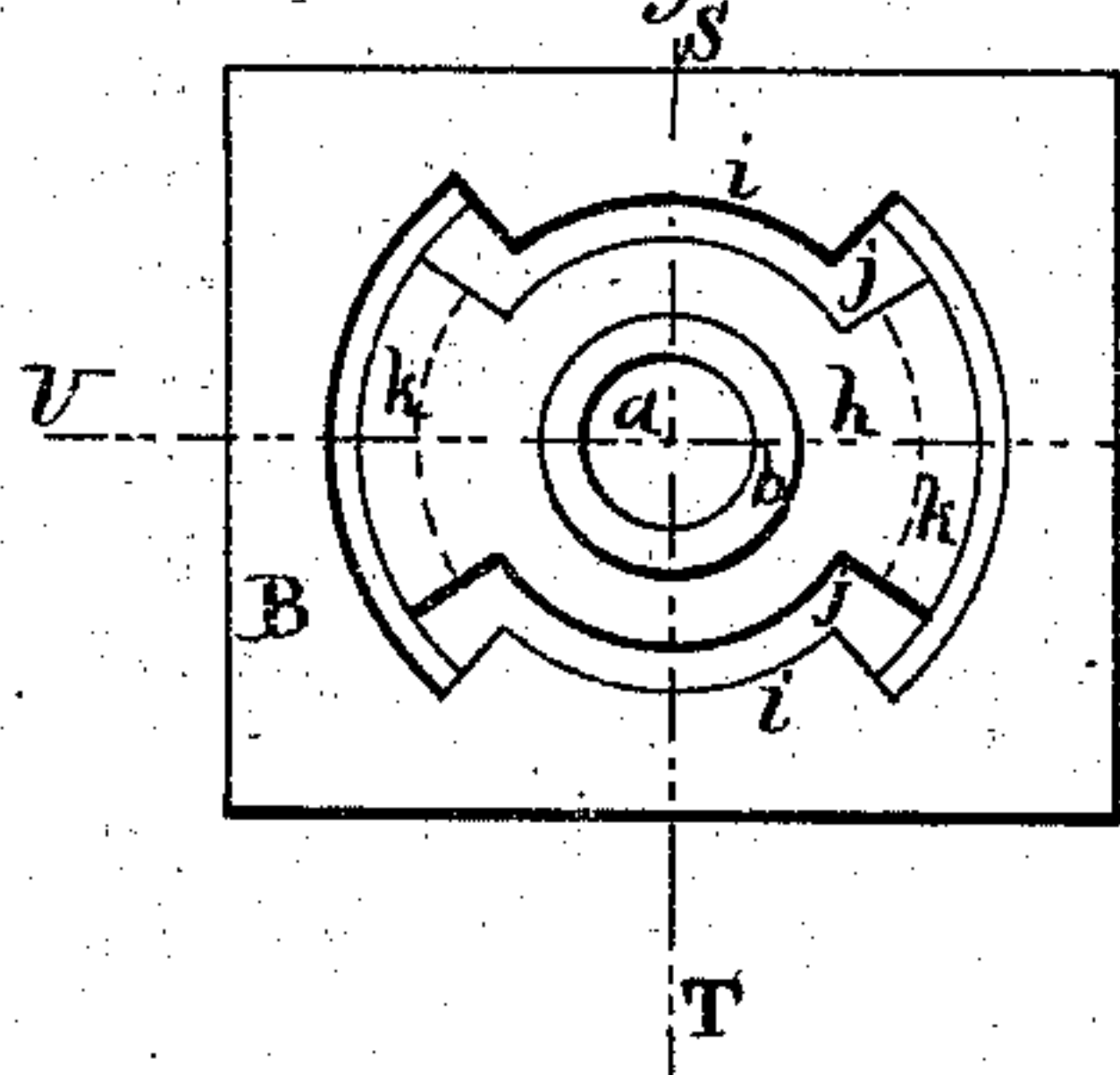


Fig. 5.

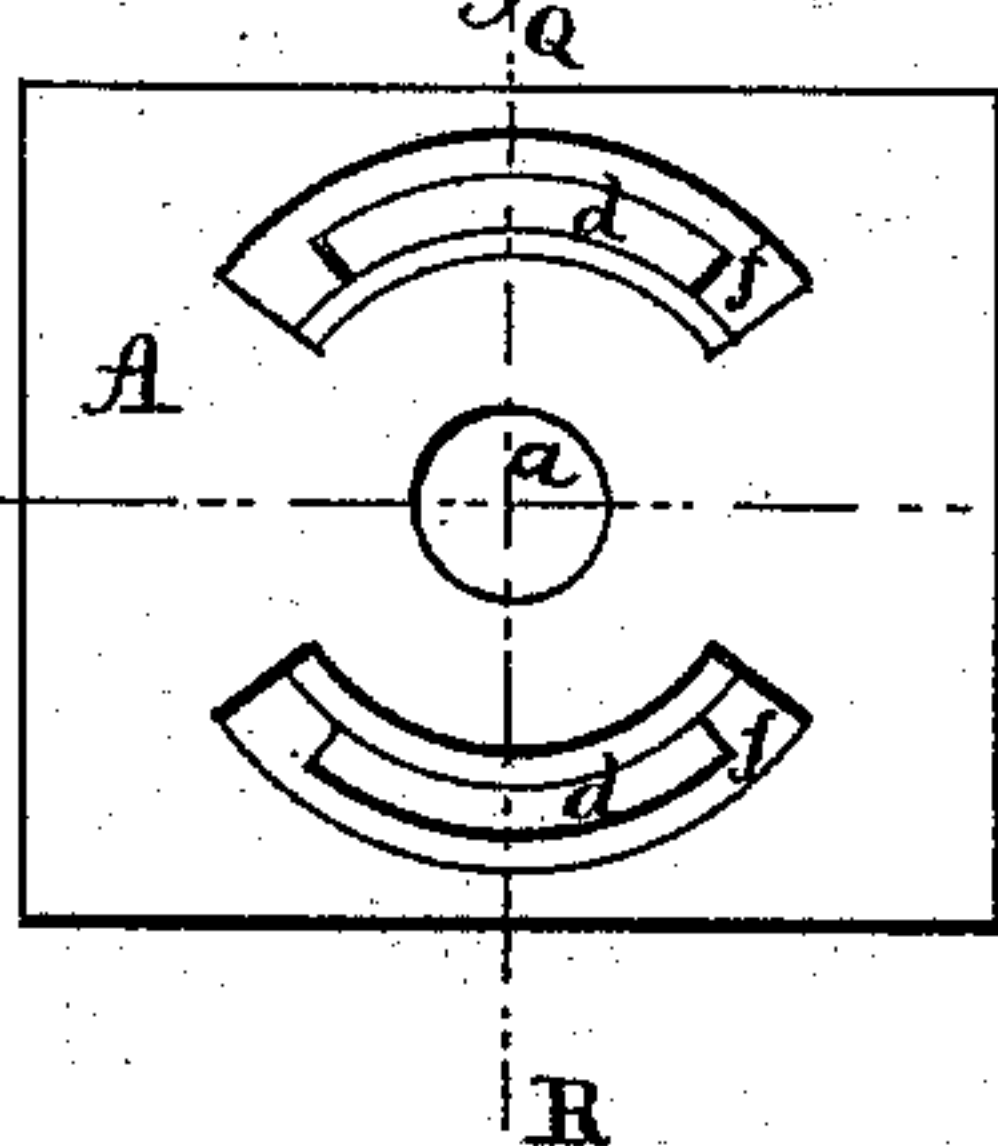
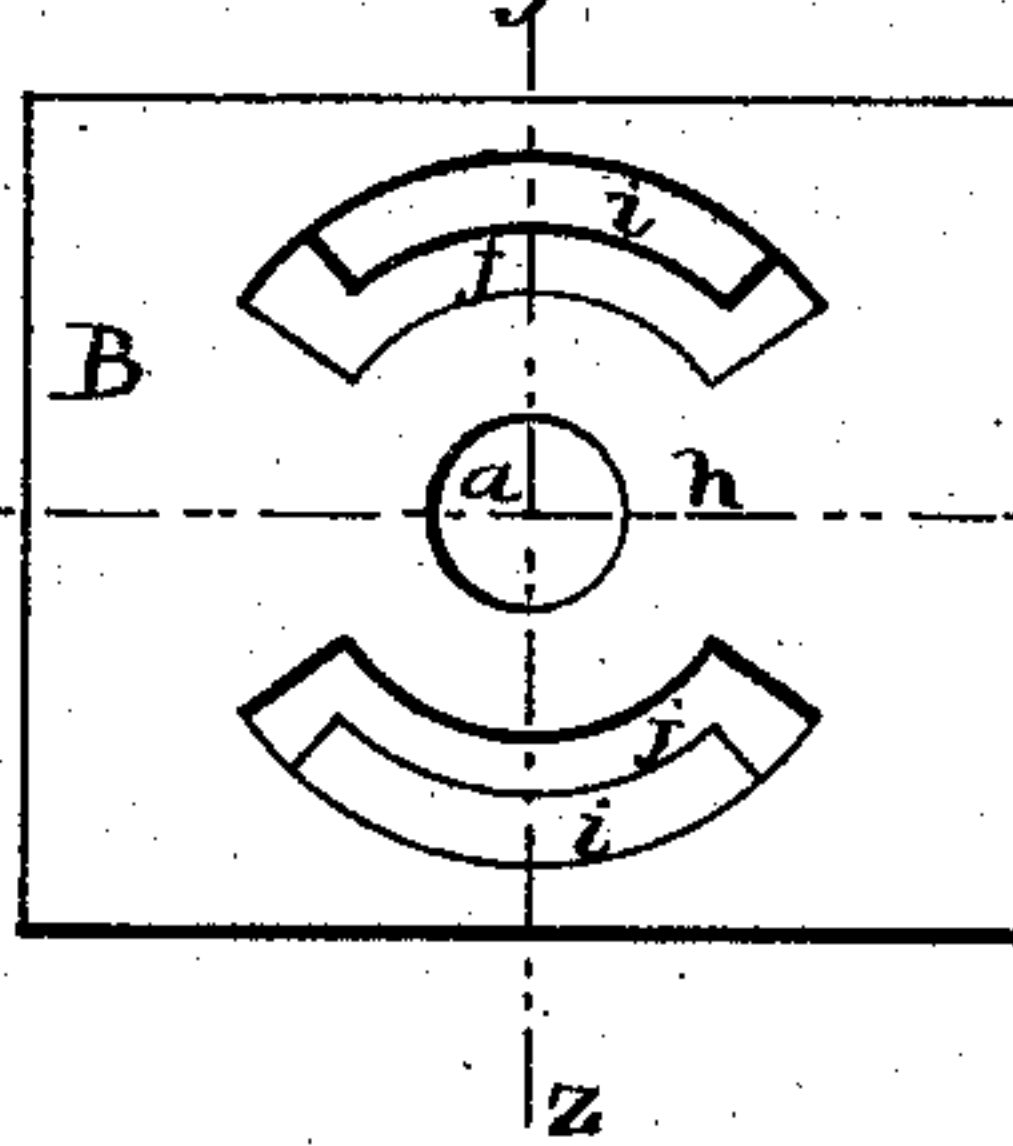


Fig. 6.



Witnesses;

Eben Hutchinson
Sam'l W. Clarke

Inventor:

Henry K. Porter

UNITED STATES PATENT OFFICE.

HENRY K. PORTER, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN WHIFFLETREE-CENTERS.

Specification forming part of Letters Patent No. **156,437**, dated November 3, 1874; application filed March 28, 1874.

To all whom it may concern:

Be it known that I, HENRY K. PORTER, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Whiffletree-Center, of which the following is a specification:

The invention consists in the peculiar construction of the locks of the pivot irons or circles, so that they are cast complete and ready for use without finishing, and yet possess all the desired advantages of those which are constructed at much greater cost, and which are wrought into form by expensive processes.

Figure 1 is a vertical section taken on line W X, Fig. 3, and line U V, Figs. 4, 5, and 6, and shows the halves of the circle when united, the line of this section being in the direction of the axis of the whiffletree. Fig. 2 is also a vertical section, taken on the lines Q R S T and Y Z of Figs. 3, 4, 5, and 6. Fig. 3 is a bottom side or plan view of A. Fig. 4 is a top side or plan view of B. Fig. 5 is a top side or plan view of A. Fig. 6 is a bottom side or plan view of B.

A is the half of the circle, which is attached to the whiffletree; and B, that which is secured to the cross-bar by screws, as shown at *u*. *a* is the hole for the bolt; and *b* is a concentric flange formed upon B, and which fits into the circular recess formed in A. (Shown in Figs. 1 and 2, and marked *c* in Fig. 3.) *d d* are flanges forming segments of a circle, a part, as shown inside dotted line *g*, being cut away for the purpose hereinafter stated. *f f* are apertures corresponding to but slightly larger than flanges *d*, and cut through bed A, so that when molded for casting, the sand beneath flanges *d d* and between its lower plane and the upper plane of the main bed, as shown in Fig. 3, shall be supported by that in recesses *f*, and allow the withdrawal of the pattern, yet leaving the perfect sand-mold be-

neath the flanges. *h*, Figs. 1, 2, and 6, represents a thin bar extending across the aperture in circle B, the circular flange or thimble *b* being formed upon this bar. *i i* are two segmentary flanges, formed flush with the top of the circle or plate B, as shown in Fig. 2. The dotted line *k*, Fig. 4, shows the part of this circular flange which is cut away for the purpose hereinafter stated. *j j* are apertures directly beneath but slightly larger than flanges *i i*, and which constitute the space between bar *h* and the circular space cut in the main bed. The object of these spaces *j* is the same as the spaces *f f* in circle A, as before explained.

For the purpose of uniting these two halves of the circle, one half is rotated horizontally ninety degrees relatively to the other, when the flanges *d d* of plate A will occupy the space *k*, cut away between flanges *i i*, plate B, and the flanges *i i* will occupy the spaces *g*, cut away between the flanges *d* in plate A, thereby allowing the main plates to be brought together, when, by rotating one of the plates ninety degrees, the flanges *d d* and *i i* will be locked each behind the other, as shown in Fig. 2, while the circular flange *b* serves to prevent all lateral motion.

By this peculiar construction I am enabled to cast, perfect and finished, a centrally-pivoted and most safely-locking circle, without increase of expense over the most unsafe kind.

Having thus described my invention, what I claim is—

A whiffletree circle or center consisting of the combined parts A B, formed respectively with the flanges *d d* and *i i*, and the apertures *f f* and *j j*, substantially as described and shown.

HENRY K. PORTER.

Witnesses:

EBEN HUTCHINSON,
SAML. W. CLARKE.