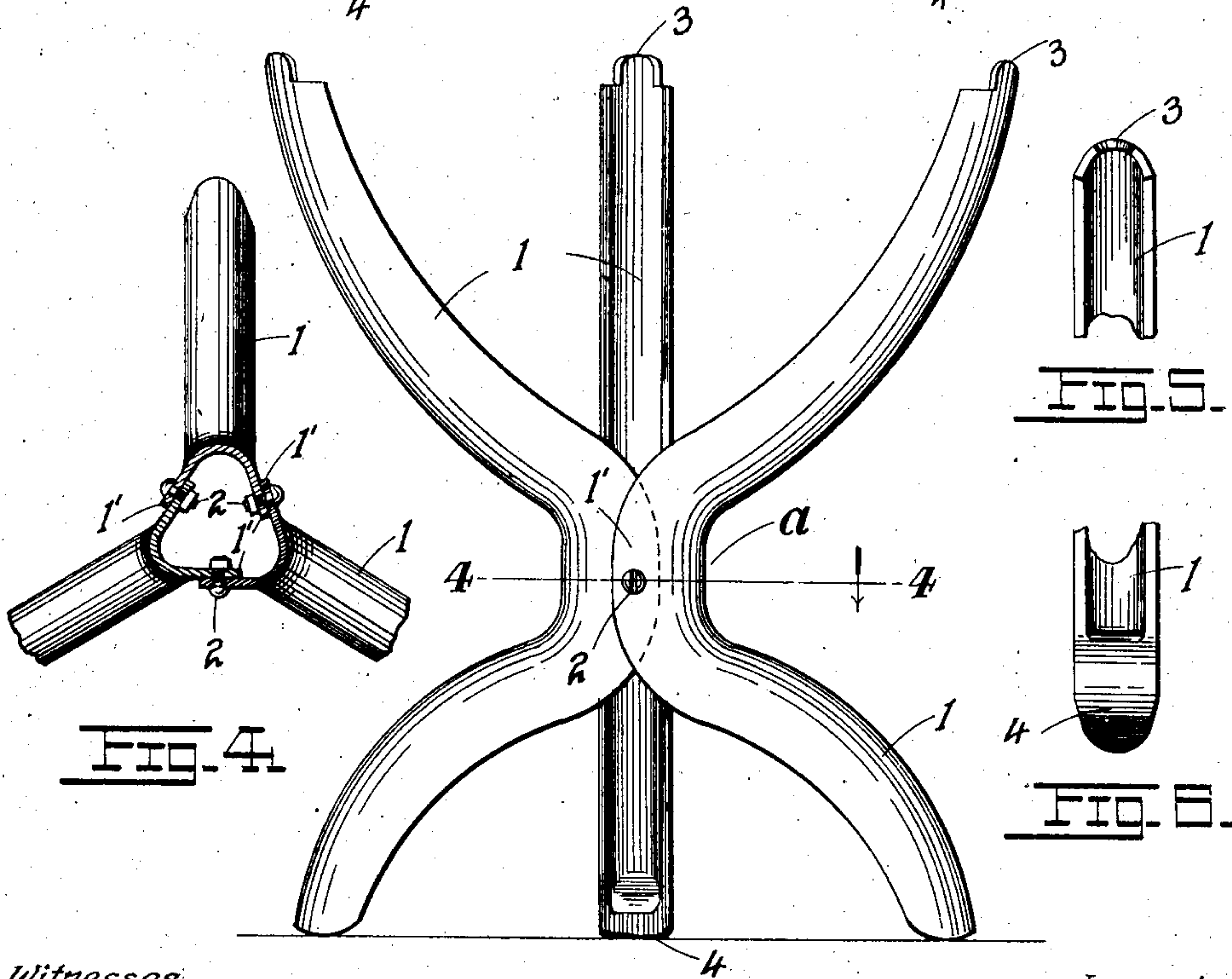
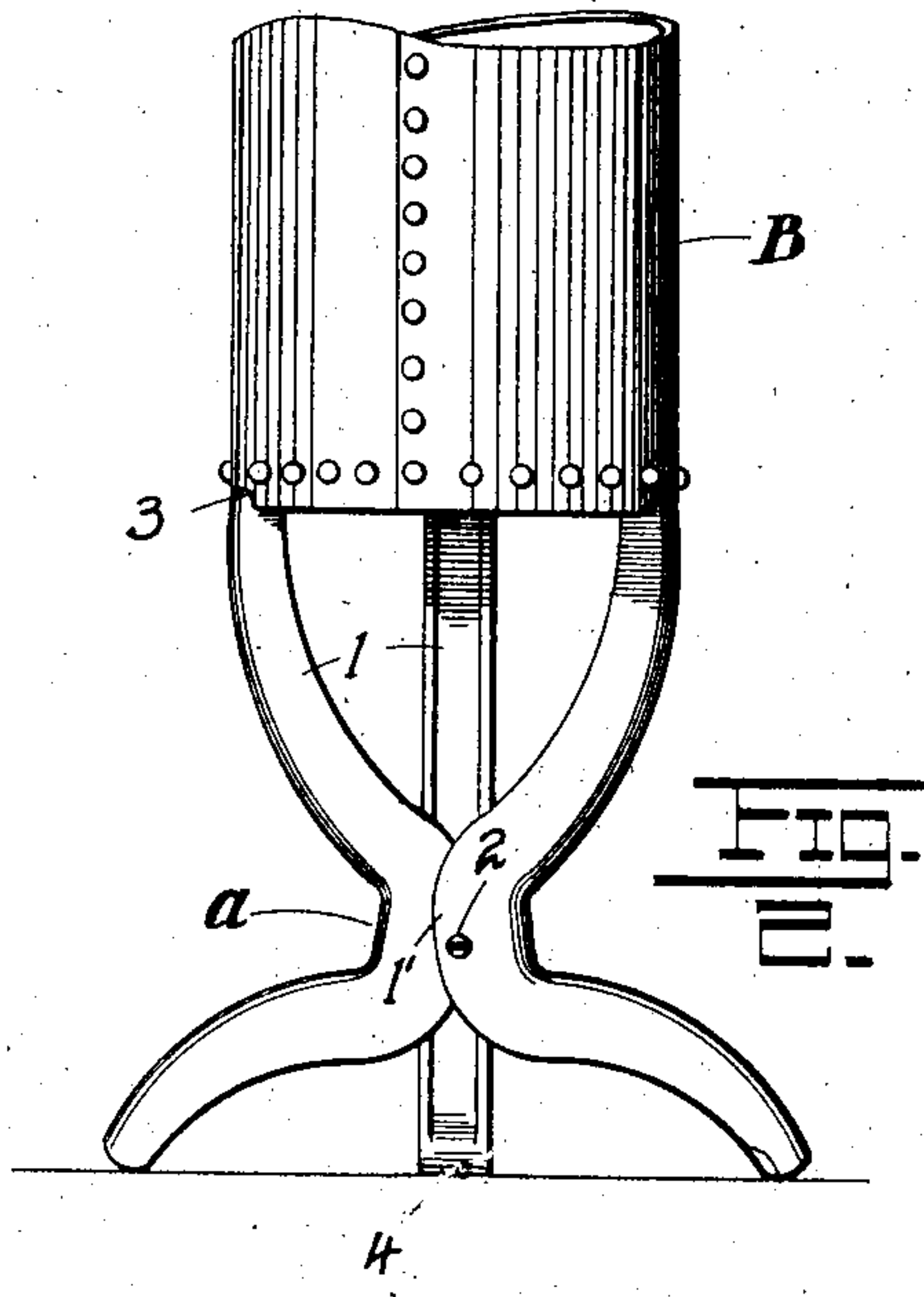
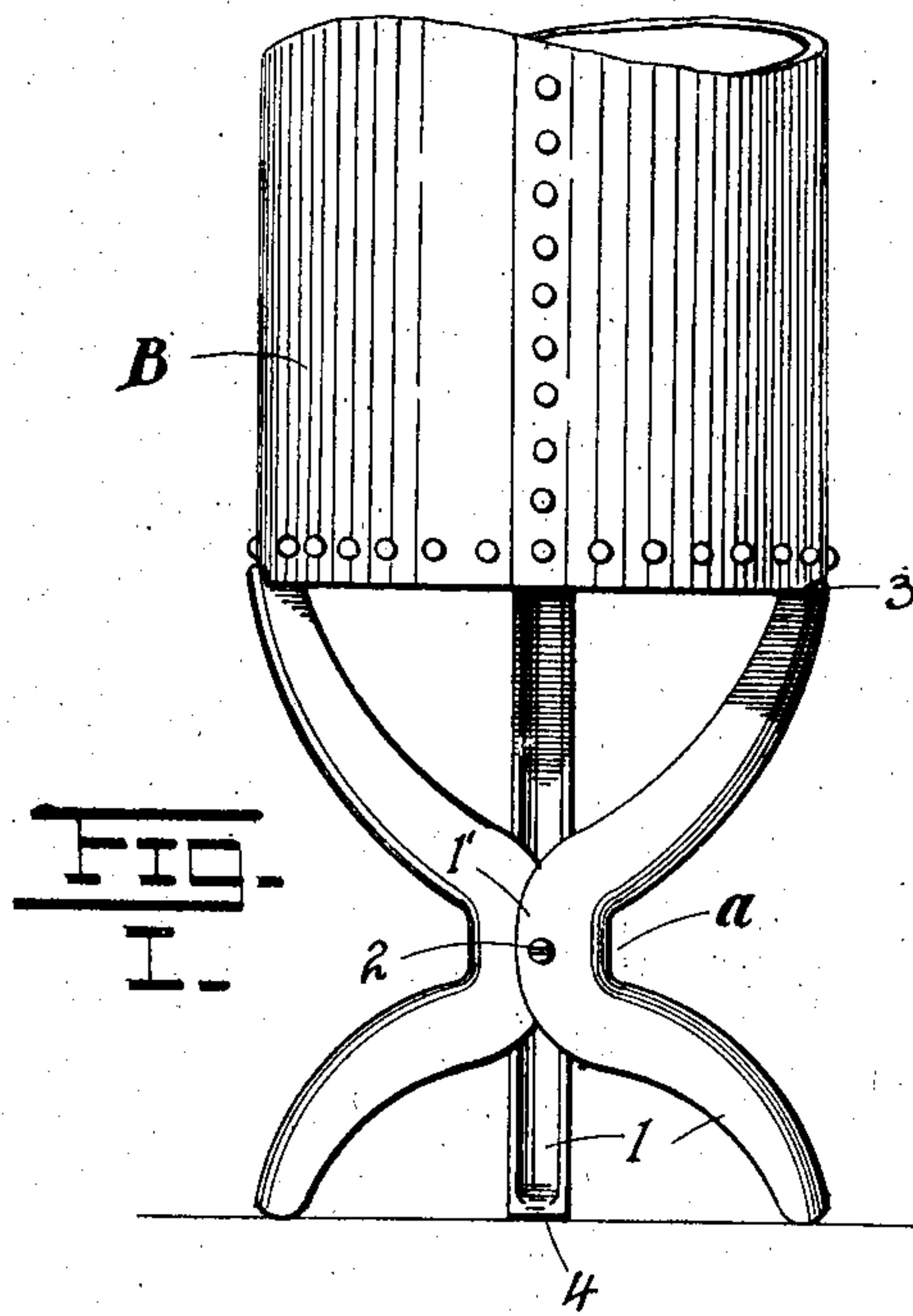


No. 834,377.

PATENTED OCT. 30, 1906.

C. H. FOSTER.  
RANGE BOILER STAND.  
APPLICATION FILED DEC. 16, 1905.



Witnesses  
*W. J. Gawn*  
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FIG. 3.

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# UNITED STATES PATENT OFFICE.

CHARLES H. FOSTER, OF ST. LOUIS, MISSOURI.

## RANGE-BOILER STAND.

No. 834,377.

Specification of Letters Patent.

Patented Oct. 30, 1906.

Application filed December 16, 1905. Serial No. 292,003.

*To all whom it may concern:*

Be it known that I, CHARLES H. FOSTER, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Range-Boiler Stands, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in range-boiler stands; and it consists in the novel arrangement and combination of parts more fully set forth in the specification, and pointed out in the claims.

In the drawings, Figure 1 is an elevation showing a stand for a boiler of large cross-sectional diameter. Fig. 2 is a similar view applied to a smaller boiler. Fig. 3 is an enlarged elevation of the stand detached. Fig. 4 is a horizontal section on line 4-4 of Fig. 3. Fig. 5 is a top plan of one of the legs, and Fig. 6 is a bottom plan thereof.

The object of my invention is to construct a range-boiler stand of a series of sections pivotally and adjustably jointed together so as to accommodate boilers of different cross-sectional areas, one which is readily assembled and taken apart, one which is in a measure collapsible and capable of folding within a small compass, one which is simple in construction, light, and durable, and one possessing further and other advantages better apparent from a detailed description of the invention, which is as follows:

Referring to the drawings, 1 represents a series (preferably three) of angular members or bent legs substantially V-shaped in cross-section, the location of the angle  $a$  or bend of the member being preferably between one-third and one-half of the vertical height of the member—that is to say, a height measured along a line passing through the vertex of the angle and limited by two parallel horizontal planes passing through the opposite ends of the member. At the bend or angle  $a$  the sides of the member are somewhat widened beyond the dimensions on either side of the angle, thereby forming enlargements or lobes 1', which in the assembling of the parts are made to overlap one another, when they are subsequently pivotally connected by screw-bolts 2, as shown, or by rivets, if desired. The several lobes 1', assembled in the manner indicated, form (for a stand having three legs, as shown) a triangular bond or connec-

tion, each member being capable of oscillation in the plane of its length about the pivotal connection with its adjacent members, as clearly obvious from the drawing, Fig. 4. In practice the shorter arms of the members are selected for the feet, though the principle of operation would be the same if the stand were to rest on the longer arms. The ends of the longer arms or portions of the several members—that is, the portions above the angle  $a$ —terminate in lips 3, projecting beyond the members proper, said lips engaging the base of the boiler B when the latter rests on the stand. The members 1 are virtually V-shaped channel-bars, and to prevent the edges of the feet from cutting into the floor the lower ends of the channels are closed by the terminal walls 4, which latter rest directly on the floor or on the supporting-surface for the stand.

It will be seen that the portions or arms of each member 1 subtending the angle  $a$  are disposed exteriorly to the axis of oscillation of the member and extend in the same plane from such axis, so that if the upper arm is oscillated outwardly the lower arm will oscillate inwardly, and vice versa. It therefore follows that the weight of the boiler supported on the upper arms or portions in its tendency to spread them apart at the same time exerts a corresponding tendency to draw the short arms together; but as the short arms rest upon the floor they cannot possibly approach each other or shift their position, for the reason that the same force which tends to spread the upper arms tends to force the ends of the lower arms into the floor. It therefore follows that once the boiler is set or placed down on the stand the several members of which the stand is composed become locked against any possible spreading and act as a unit in supporting the weight they are designed to carry. Obviously the principle of construction here involved may be employed in making a stand of two or more members, and the stand here shown with three members is but a single example of what is possible under this principle. With three members a tripod results in which the strains are evenly distributed, and this form is most convenient to manufacture. While herein specifically denominated as a "range-boiler stand," it is obvious that it may be used for any purpose whatsoever and to support any kind of weight.



Having described my invention, what I claim is—

1. A supporting-stand comprising in combination a plurality of bent members, and means for pivotally mounting the same at the vertices of the bends about transverse axes permitting free rotation of the members, the portions or arms of each member on opposite sides of its pivotal axis extending outwardly from said axis, the upper ends of the several members being adapted to engage the article to be supported, substantially as set forth.

2. A supporting-stand comprising in combination a plurality of bent channel members, and means for pivotally connecting said members at the vertices of the bends, the pivotal axes being substantially horizontal, the portions or arms of each member on opposite sides of the pivotal connection extending outwardly in the same plane, and each of said members being provided at its upper end with means adapted to engage the article supported, substantially as set forth.

3. A supporting-stand comprising in combination a plurality of bent channel members, and means for pivotally connecting said

members at the vertices of the bends, the pivotal axes being substantially horizontal, the portions or arms of each member on opposite sides of the pivotal connections extending outwardly in the same plane, each of said members being provided at its upper end with means adapted to engage the article supported, and having a lower terminal wall adapted to rest on the surface supporting the stand, substantially as set forth.

4. A supporting-stand comprising in combination a plurality of bent members, and means for pivotally mounting the same at the vertices of the bends about transverse axes permitting free rotation of the members, the portions or arms of each member on opposite sides of its pivotal axis extending outwardly in the same plane from its axis, the upper ends of the several members being adapted to engage the article to be supported, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES H. FOSTER.

Witnesses:

EMIL STAREK,

MARY D. WHITCOMB.