

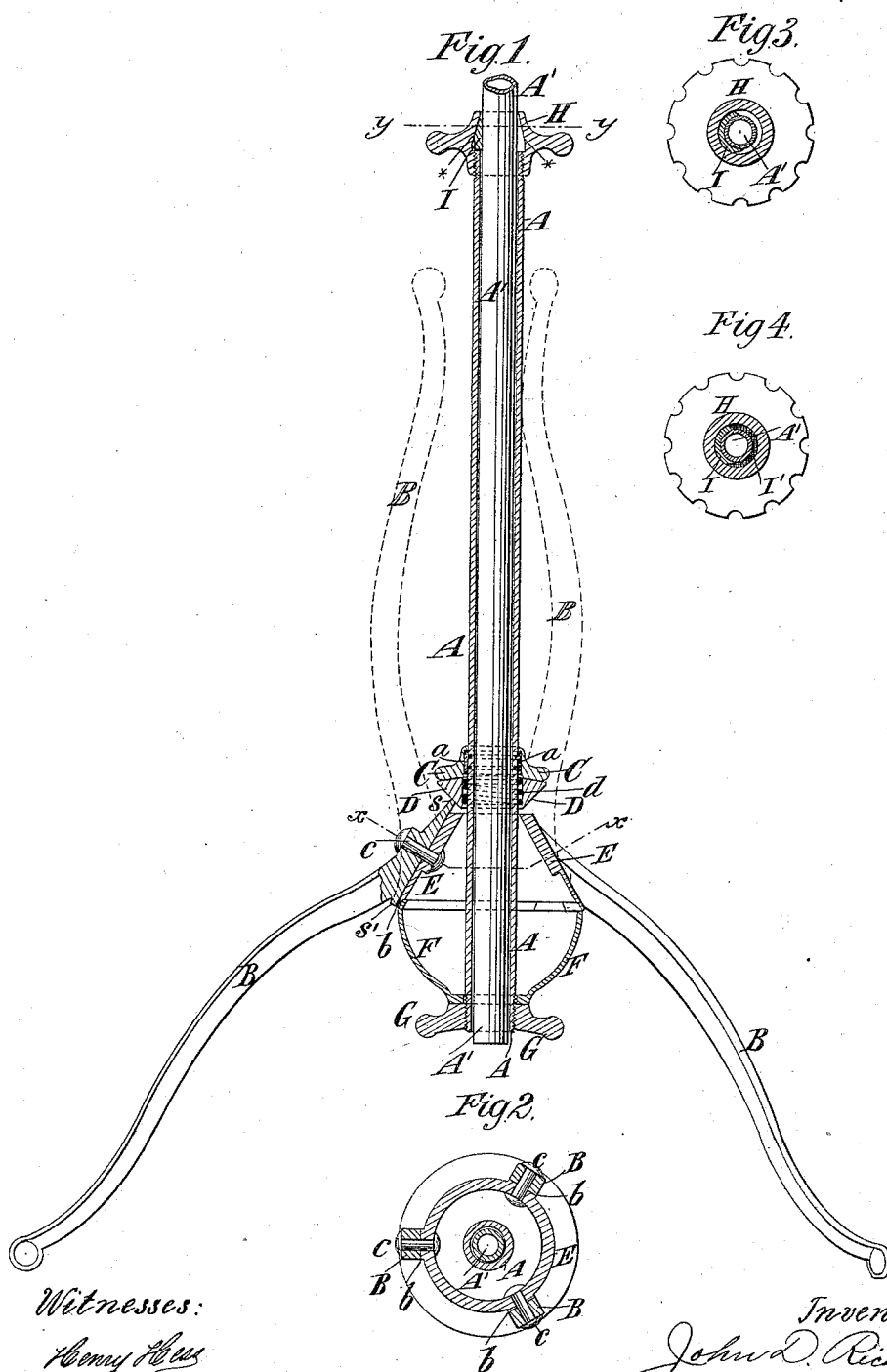
(No Model.)

J. D. RICHARDSON.

TRIPOD STANDARD.

No. 335,774.

Patented Feb. 9, 1886.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN D. RICHARDSON, OF BROOKLYN, ASSIGNOR TO HIMSELF, AND FRANK L. MANCHESTER AND JOSEPH W. SULLINGS, BOTH OF NEW YORK, N. Y.

TRIPOD-STANDARD.

SPECIFICATION forming part of Letters Patent No. 335,774, dated February 9, 1886.

Application filed February 13, 1885. Serial No. 155,805. (No model.)

To all whom it may concern:

Be it known that I, JOHN D. RICHARDSON, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful
5 Improvement in Tripod-Standards, of which the following is a specification.

One feature of my invention is applicable to tripod-standards for dress-forms, stands, tables, and other articles, whether the vertical
10 post or standard be adjustable or not, and in which the legs or feet are so pivoted that they may be swung into positions parallel with the standard, for convenience in packing and carrying the same, or into positions radially divergent from the standard, for affording the
15 same a stable support.

Another feature of the invention is applicable only to those standards in which an inner adjustable section of pipe or rod is capable of
20 being slid vertically in a tubular fixed standard, and there secured at different heights.

The invention will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a sectional elevation of a standard and tripod-support therefor embodying my invention. Fig. 2 is a horizontal section thereof on the plane of the dotted line *x x*, Fig. 1. Fig. 3 is a similar section on the dotted line *y y*, Fig. 1; and Fig. 4 is a section similar to Fig. 3, showing
30 a modification of my invention.

Similar letters of reference designate corresponding parts in the several figures.

A designates the main standard, which here
35 consists of a tube of fixed length; and B designates the legs, which constitute a supporting-tripod therefor. The legs are three in number; but four or more might be used. The standard A has near its lower end a fixed collar, C, which may be secured in any suitable
40 manner. As here shown, a cast-metal collar, C, having a chambered or recessed interior, is slipped upon the tube, and lead or other soft metal, *a*, is poured in and fills the space between the recessed interior of the collar and the standard A. To give the soft metal a better hold on the tube A, the surface of the latter may be circumferentially grooved or otherwise formed with recesses or depressions in
50 which the metal will hold. The collar may thus be secured in place rigidly and at small

expense. As hereshown, the collar is slightly concaved on the under side, and when the tube and collar are inverted the soft molten metal *a* may be readily run in, the interior of the collar being slightly notched to form an inlet-opening, if desired. 55

On the tube A, below the collar and in the order named, are loosely placed a flange or collar, D, made conical on the under side, a reversely-conical hub, stock-piece, or center, E, and a cap or shell, F, and these are all secured on the tube A by a nut, G, screwed thereonto. The shell F and hub or center E might be cast together, but would then require to be cored 65 out.

The conical hub, stock-piece, or center E is of circular form transversely, as shown in Fig. 2, and has a number of flat or plain surfaces or seats, *b*—one for each leg B. To these seats
70 the legs B are secured, each by a single pivot or rivet, *c*, and being thus secured they may be turned down, so as to be radially divergent from the hub E and from each other, and thereby afford a stable support for the standard. The legs may also be turned into position approximately parallel with each other, and at the side of the standard A, when desired, as shown by dotted lines in Fig. 1, and thereby afford convenience for packing or carrying the article. 75

The loose collar D is recessed on the upper side, and between it and the fixed collar C is a spiral spring, *d*, which exerts a downward pressure on the collar D. The length of the legs B above their pivots *c* is such that their ends *s* project above the top of the hub or center E, as shown in Fig. 1, and below their pivots *c* they have shoulders *s'*, which, when the legs are inverted, come above the top of the hub or center E. Consequently, whether the legs are in the position shown in full lines or inverted, as shown in dotted lines, the conical collar D always bears on the ends *s* or shoulders *s'*, and is pressed against them by 95 the spring *d*.

Now, it will be understood that by loosening the nut G the cap F, hub or center E, and its legs will be freed or loosened from each other, and the legs may then be turned; but
100 by tightening the nut said parts will be clamped tightly together, and the conical col-

lar D will press so tightly upon the ends *s* or shoulders *s'* of the legs as to hold them against movement on their pivots and render them rigid for the time. It will be evident that the spring *d* is not an indispensable element, although I desire to use it, because it will cause the collar D to automatically press against the ends or shoulders *s* or *s'* of the legs, and so hold them until the nut G can be tightened.

10 In this example of the invention the standard A has fitted within it an extensible standard, A', which may also consist of a tube; but if the fixed standard had no such extensible section it might be a rod instead of a tube.

15 At the top of the standard A is a clutch or clamp for securing the adjustable section A' at any elevation desired. This clutch consists of a collar, nut, or gland, H, made internally conical, as shown at *, and screwed

20 upon the top of the tube A. Within the collar or nut H is a wedge, I, curved internally to fit the tube A', and externally to fit the nut H. The wedge is also tapered externally to fit the conical surface * of the nut H. This wedge, as shown in the horizontal section, Fig. 3, partly embraces the rod or tube A'. It rests upon the top of the tube A, and by tightening the nut H the wedge I is crowded or wedged against the tube A', and the latter is thereby held in position vertically.

The tubes A A' may be of gas-pipe, and the other parts may be malleable cast-iron or other cast metal.

Fig. 4 differs from Fig. 3 only in having a block or piece of india-rubber or other elastic or yielding material, I', fitting in the gland or nut H on the side of the adjustable rod A', opposite the wedge I. When the gland or nut is screwed down to tighten the wedge I against the standard A', the yielding block I' is compressed and forms a brake to prevent the sudden fall of the standard A' and the article supported thereby when the gland or nut H is loosened.

45 I am aware of United States Letters Patent No. 132,704, granted October 29, 1872, to Asa W. White, for music-stands, and do not claim as of my invention anything shown or described therein.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with a standard and a collar fitting thereon, of a conical hub or center loosely fitting the standard below the collar, legs each pivoted to the conical hub or center and having their ends *s* and shoulders *s'* presented above the hub or center and bearing against the collar, and a nut applied to the bottom of the standard and serving to clamp or force the ends or shoulders of the legs upon the collar, substantially as herein described.

2. The combination, with a standard and a collar, D, thereon having a conical lower surface, of a conical hub or center fitting the standard below the collar, legs B, each pivoted to the hub or center, and having ends and shoulders *s s'*, on which the conical face of the collar acts to clamp them in place, and a nut applied to the standard for clamping the legs and collar together, substantially as herein described.

3. The combination, with the standard and a collar fast thereon, of a loose collar, D, having a conical lower face, a spring, *d*, interposed between said collars, a conical hub or center, and legs pivoted thereto and having ends and shoulders *s s'*, on which the collar D acts, and a nut for clamping the legs and collar D together, substantially as herein described.

4. The combination, with the fixed standard A and adjustable standard A', of the upwardly-tapering wedge I, having a bearing upon the upper end of the standard A, and curved to fit the standard A', and the nut or gland H, screwed upon the standard A and having its interior conical, with an upward taper to fit said wedge, whereby provision is afforded for tightening the wedge upon the standard A' by screwing up the nut or gland, substantially as herein described.

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Witnesses:

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