(No Model.) 2 Sheets—Sheet 1.

M. F. DOLAN.

CLOTHES HORSE.

No. 379,378. Patented Mar. 13, 1888.

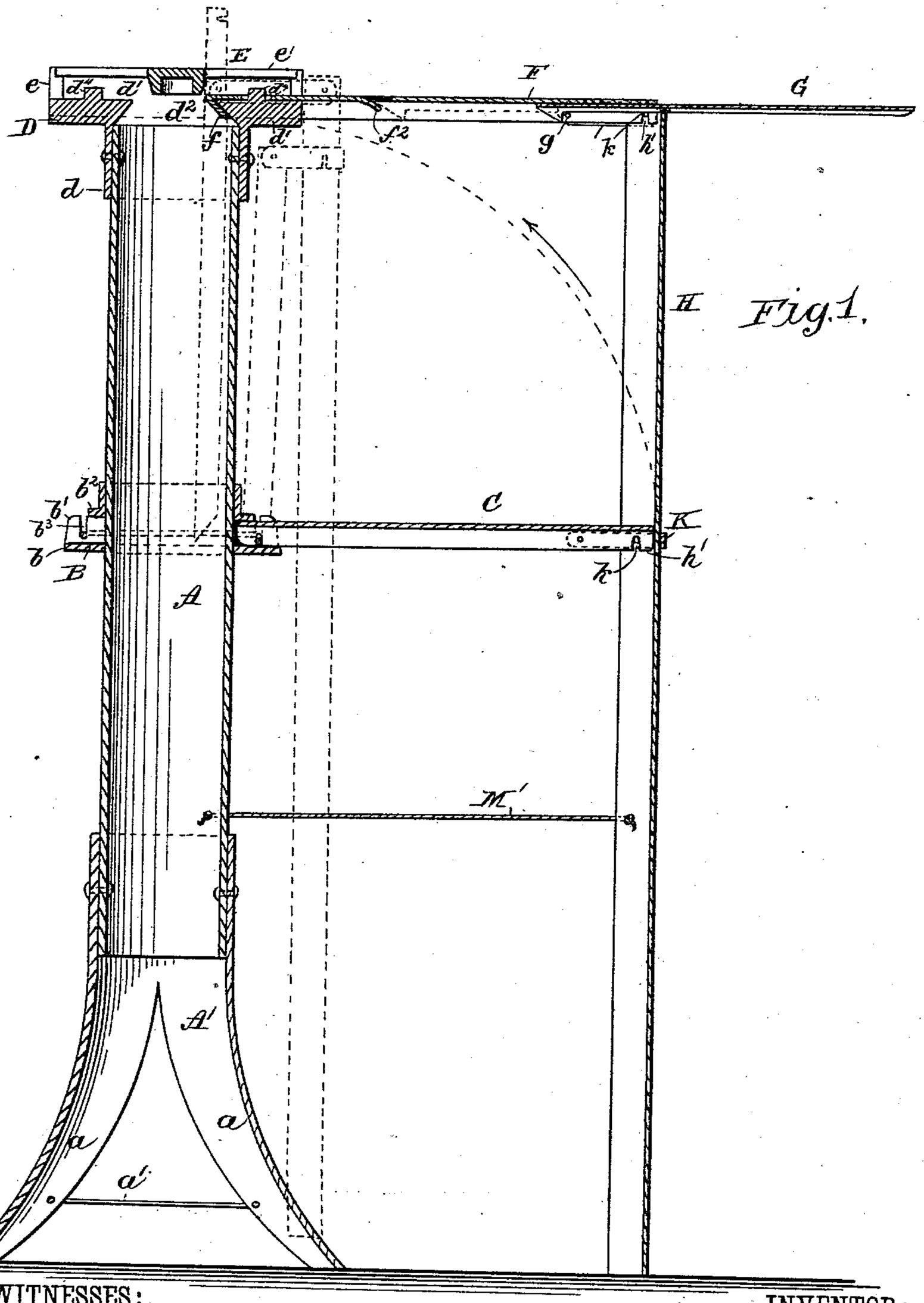

Fig. 1.

WITNESSES:

J. V. Garfield.

C. Sedgwick

INVENTOR:

M. F. Dolan.

BY Munn & Co

ATTORNEYS.

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Fig. 2.

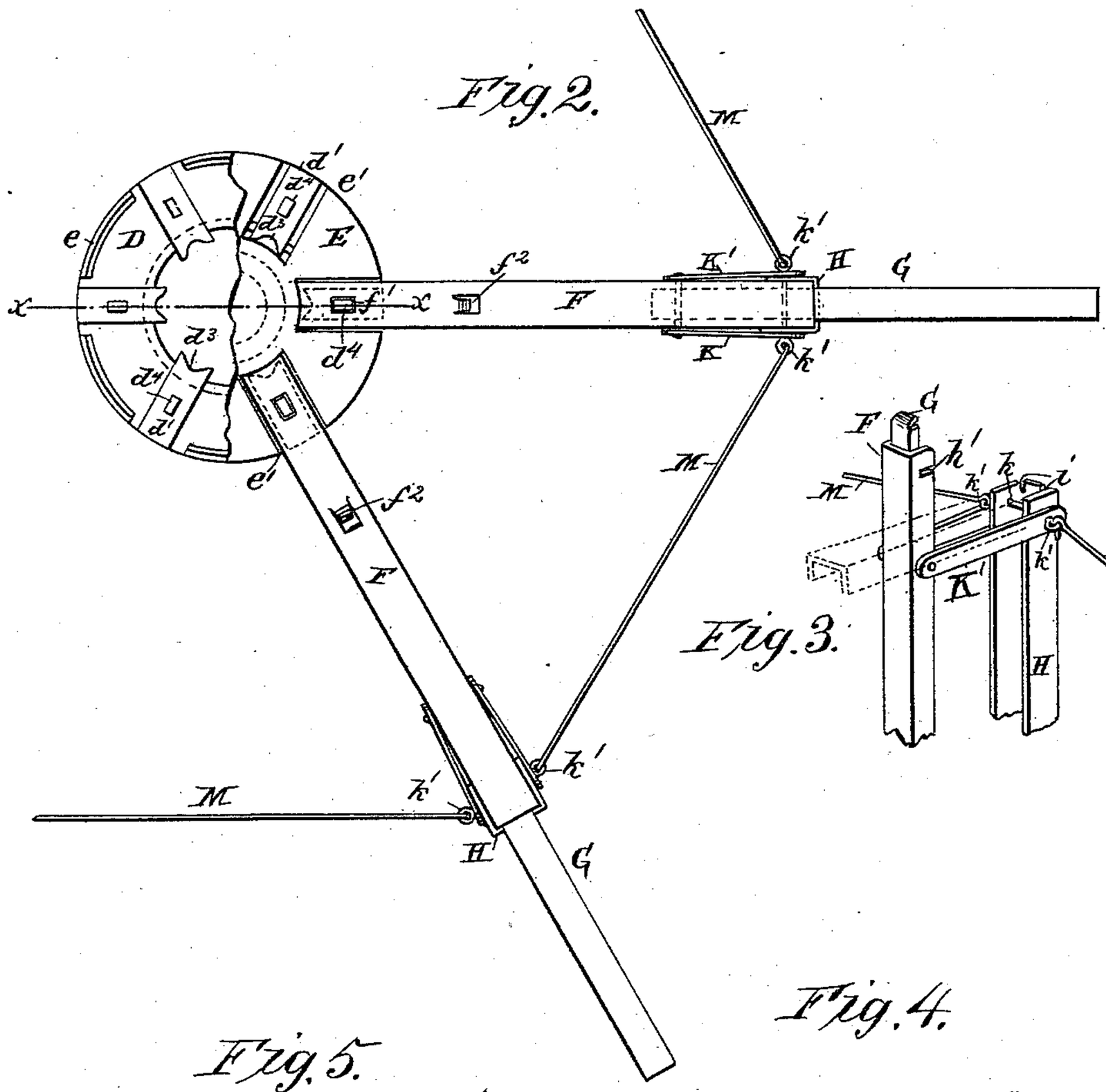


Fig. 3.

Fig. 5.

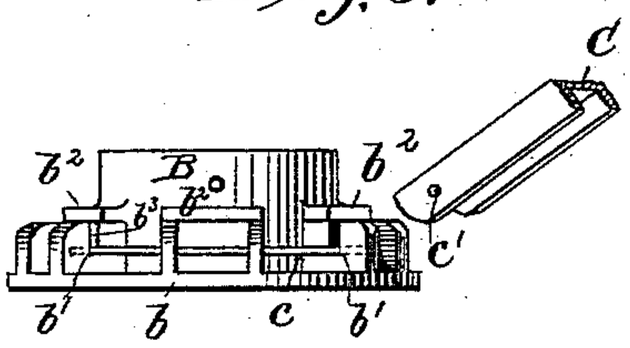


Fig. 4.

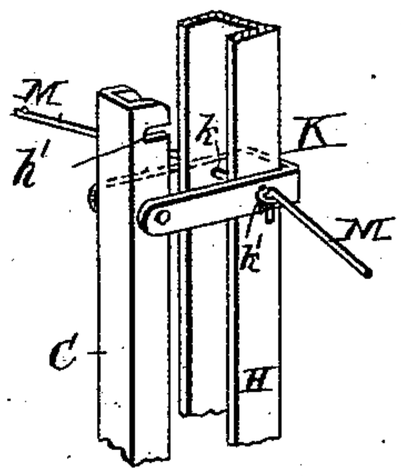
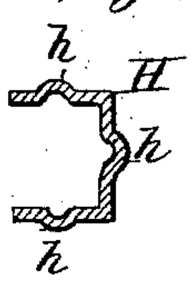


Fig. 6.



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C. Sedgwick

INVENTOR:

M. F. Dolan

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

MARTIN F. DOLAN, OF BROOKLYN, NEW YORK.

CLOTHES-HORSE.

SPECIFICATION forming part of Letters Patent No. 379,378, dated March 13, 1888.

Application filed April 21, 1887. Serial No. 235,609. (No model.)

To all whom it may concern:

Be it known that I, MARTIN F. DOLAN, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Clothes-Horse, of which the following is a full, clear, and exact description.

My invention relates to an improvement in clothes-horses, and has for its object to provide a simple and readily-operated device capable of sustaining a large amount of line, which when folded up will occupy a minimum amount of room and which will readily stand beneath a mantel or shelf of equivalent height.

The invention consists in the construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a central vertical section through line *x x* of Fig. 2. Fig. 2 is a plan view with the top partially broken away. Fig. 3 is a perspective detail view of a portion of the top rail and vertical support, illustrating the relative position of the same when folded. Fig. 4 is a similar view of a portion of one vertical support and attached intermediate arm, illustrating their relative positions when folded. Fig. 5 is a side elevation of the intermediate carrier, and Fig. 6 is a transverse section through one of the vertical supports.

In carrying out the invention a central tubular standard, A, is provided, preferably supported upon an attached tubular base, A′, having its diverging legs *a* braced by suitable transverse rods, *a′*. Above the center of the combined standard and base a circular carrier, B, is secured to the outer surface of the standard, provided with a flange, *b*, integral with its lower edge, and a series of upwardly-extending lugs, *b′*, spaced in pairs integral with said flange and the body, the tops of each pair being partially covered by horizontal projections b^2, each lug beneath said top having aligning vertical slots b^3, as shown in Fig. 5. Each pair of lugs is adapted to receive the inner ends of horizontal arms C, which arms are preferably made of light angle-iron and are pivotally fastened in engagement with the carrier by being passed over the lugs, and a straight wire, *c*, passed through apertures *c′* in the arms and through the slots b^3 in the lugs, the ends of the wire being thereupon united by twisting the same, or in any other approved manner.

Over the top of the standard A a second carrier, D, is slid, and fastened by means of an integral collar, *d*, as shown in Fig. 1. The carrier D is adapted to project beyond the sides of the standard, and is provided upon the upper surface with a series of spaced rectangular projections, *d′*, which extend transversely the carrier and project slightly over a central aperture, d^2, formed in said carrier, preferably of a diameter equal to the diameter of the standard.

The inner surface of each projection *d′* is made to incline inward, as shown in Fig. 1, and the inner upper edge is provided with a central concavity, d^3, and upon the upper surface of the said projections, centrally the same, rectangular lugs d^4 are formed, as illustrated in Figs. 1 and 2.

Integral with the edge of the carrier D a series of spaced flanges, *e*, are provided, which flanges are of a height greater than the projections *d′* and partially inclose the space intervening the projections *d′*. An annular cap, E, is supported by and fastened to the flanges *e*, which cap is formed with a series of rectangular recesses, *e′*, adapted to register with the projections *d′*, and of a size greater than that of said projections, as shown in Fig. 2.

A second series of horizontal arms, F, of the same general construction as the lower arms, C, provided with an inwardly-bent inner end, *f*, and a rectangular aperture, *f′*, in the top near said inner end, are passed between the carrier D and cap E, so that the lug d^4 will enter the apertures *f′*, and the inwardly-bent ends of the arms engage the inclined inner edge of the projections *d′*.

In the upper surface of the arms F, to the rear of their center, a downwardly-projecting tongue, f^2, is formed, and within the said arms an extension, G, is fitted, adapted to engage the tongue f^2 when carried inward and a stop-pin, *g*, when carried outward, as shown in Fig. 1.

For each of the arms C and F a perpendicular support, H, is provided, also preferably

formed of angle-iron, having longitudinal beads *h* formed therein, as shown in Fig. 6, to strengthen the same. The outer ends of the lower arms, C, adapted to enter the supports H, are furnished with a slot, *h'*, upon the under side, and are pivotally connected to said supports by means of a horizontal U-band, K, which band, embracing the outer face and sides of the supports, is secured thereto by a pin, *k*, passing through said bands and supports, having an eye, *k'*, at each end, the members of the band being pivotally attached to the sides of the arms C a short distance from their outer ends. The upper arms, F, are likewise provided with an end slot, *h'*, and are pivoted to the supports H by bands K in similar manner. When the arms C and F are in a horizontal position, the slots *h'* receive the pins *k* and afford a rest for the outer ends of said arms.

The top of the supports H is provided with two grooves, *i*, in which the bottom edges of the extensions G are adapted to slide.

To form a brace for the several wings of the horse and add to the capacity thereof, rods M, having hooks at the ends, are inserted in the several eyes *k'*, as shown in Fig. 2, and additional surface is also provided by means of lengths of rope, M', attached to the standard and to the several supports H beneath the arms C, as shown in Fig. 1.

In operation, when it is desired to fold the horse, the extension G is slid in and the supports H are lifted up, which disengages the upper arm, F, from the lug *d'*, and the said arm, having a slant downward, will, as the support is lifted and carried inward, drop perpendicularly within the standard, as shown in dotted lines, Fig. 1, and also in detail, Fig. 3, the arm C meanwhile also folding up parallel with the support H between it and the standard. Thus the support H and arm C are held in suspension close to the standard by the upper U-band, K, all the wings being similarly folded in turn, and the device, now occupying little space, may be readily stored out of the way.

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

1. In a clothes-horse, the combination, with the tubular standard having a slotted or open top, of the upper arms, F, said top and arms having locking parts which are adapted to engage when the arms are drawn out of the standard and lowered into horizontal position, but are disengaged by reversing this operation, substantially as set forth.

2. In a clothes horse, the combination, with the tubular standard having the slotted or open top, of arms F, which lock with said top when in horizontal position, the swinging supports H, and devices which connect the said arms to the upper ends of said supports and also serve to suspend the arms in the standard when the parts are folded, as shown and described.

3. In a clothes-horse, the combination, with the tubular standard, of upper and lower carriers, the series of upper arms, F, detachably connected with the upper carrier, D, the lower series of arms, C, hinged to the lower carrier, B, a series of vertical supports, H, and hinges which loosely connect the latter to both series of arms, whereby the movable parts may be folded alongside and within the standard, as shown and described.

4. The combination, with a central tubular standard, A, provided with a tubular carrier, D, at the top, having exterior flanges, *e*, a series of intervening rectangular projections, *d'*, provided with lugs d^4, and a circular apertured cap, E, covering said carrier, of the upper horizontal arms, F, provided with a slot, *f'*, the lower arms, C, and vertical supports H, pivoted to said arms, and means for retaining said arms in a horizontal and vertical position, substantially as shown and described.

MARTIN F. DOLAN.

Witnesses:
EDWARD V. GRIMES,
DANIEL J. DOLAN.