

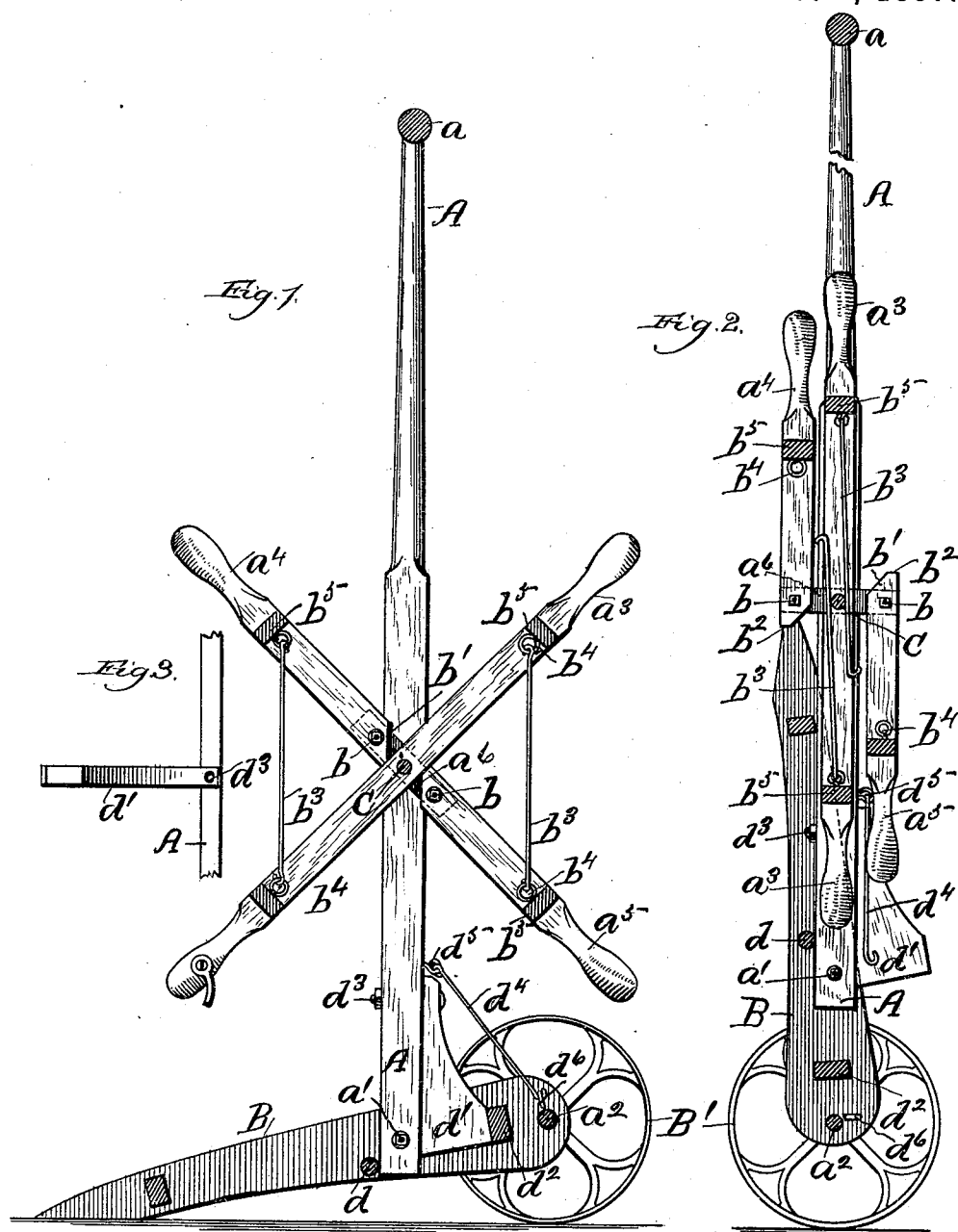
(No Model.)

C. W. KIMBALL.

HOSE REEL.

No. 372,473.

Patented Nov. 1, 1887.



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UNITED STATES PATENT OFFICE.

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HOSE-REEL.

SPECIFICATION forming part of Letters Patent No. 372,473, dated November 1, 1887.

Application filed February 24, 1887. Serial No. 228,650. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. KIMBALL, of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Hose-Reels, of which the following is a full, clear, and exact description, that will enable others to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to improvements in that class of hose-reels employed for domestic purposes, the object being to provide an article of the "knockdown" order, which may be so compactly folded as to save much valuable space in storing and also greatly lessen the cost of transportation.

Figure 1 is a central vertical longitudinal section of a device embodying my improved features, showing the reel-arms opened out in position to receive the coil of the hose. Fig. 2 shows the same in a folded position, and Fig. 3 a detached detail of construction.

In the drawings, Fig. 1 represents one half of the reel structure, looking at the inner side, the companion half being an exact counterpart.

A is one of the uprights or standards supporting the reel structure, the upper ends of which are connected by the cross-bar handle *a*. The lower ends of these standards are pivoted at *a'* to the foot-bars B, one end of which rests upon the ground, the opposite end or ends supporting the axle *a''*, mounting the truck-wheels B'.

The skeleton reel is shown in this case with four arms; but any other number may be used. The cross-arm *a''* is composed of a single piece and forms two of the reel-arms, while the two companion arms *a'* *a'''* are connected at their inner ends by means of the connecting metal strap *a''*, to which said ends are adjustably secured by the pivot-bolts *b*. The strap *a''* is mounted upon and placed on the outer side of the arms *a'* *a'''*, next to the upright A, the continuous cross-arm *a''* resting between the inner ends of the arms *a'* *a'''*, so as to bring all of the radial arms in the same circular plane. A portion of the inner ends of the arms *a'* *a'''* are cut away on a bevel, *b'*, to readily permit of their being folded, leaving the other portions of the ends with the square face *b''*, so that the same will abut against and have a rigid bear-

ing on the cross-arm *a''*, inserted between when the said arms are unfolded and in position for use, as illustrated in Fig. 1. The reel-arms are locked in this position by means of the adjustable brace-rods *b''*, the hook ends of which engage with the eyebolts *b'''*, inserted in the cross-bars *b''*, which connect the respective radial arms. One end of the locking-rods *b''* is permanently secured in the eyebolts, while the hook end proper readily engages or disengages, as may be necessary, in converting the reel from one position to the other.

I may employ various means other than the locking-rods *b''* for securing the reel-arms relative to each other, when unfolded, without departing from the spirit of my invention.

The skeleton reel is mounted on the axial shaft C, the ends of which are inserted in and connect the standards or side pieces, A. The standards A are locked in the vertical position and at right angles to the foot-pieces by means of the rod *d* on one side and the adjustable locking wedge-block *d'*, placed on the opposite side and wedging in between the lower end of the standards and the cross-bar *a''*, connecting the foot-pieces. The wedge *d'* is beveled off on the outer edge in the direction of the top and pivoted to the standard or standards by the bolt *d''*, whereby the same may be thrown out of a locking position (see Fig. 3) and the standards and foot-pieces folded parallel with each other, as shown in Fig. 2. The hook ends of the stiffening-rods *d'* engage with the eyebolts *d'''*, inserted in the standards A, and the companion eyebolts *d'''* in the foot-piece B, and may be thrown out of engagement when the reel is to be folded.

By this construction and arrangement all the parts of the reel structure may be folded up parallel and relative to each other and made to assume a very flat and compact form, which will enable a number to be packed in the same amount of space heretofore required for a single reel, thus greatly reducing the cost of transportation, saving much time in handling, and rendering the article much less liable to being broken in shipping.

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

1. In a hose-reel, the combination, with an

axial shaft suitably supported at each end, of the reel cross-arm a^3 , mounted on said shaft, the reel-arms $a^4 a^5$, abutting against said cross-arms, and the connecting-strap a^6 , to which the inner ends of the arms $a^4 a^5$ are pivoted, whereby all the radial arms forming the reel proper are adapted to be folded in a parallel plane relative to each other, substantially as set forth.

2. In a hose-reel, the combination, with the supporting standards, of the axial or reel shaft, the cross-arm a^3 , the companion arms $a^4 a^5$, the strap a^6 , pivotally connecting said latter arms, the foot-pieces to which the lower ends of said standards are pivoted, whereby the parts named are adapted to fold together in a parallel position relative to each other, and the means described for locking the same in a rigid position when unfolded for use, substantially as set forth.

3. In a hose-reel, the combination, with the foot-pieces, of the supporting standards piv-

oted at their lower ends to said foot-pieces, the rod d , the adjustable wedge block or blocks d' , pivoted to said standards, and the cross-bar d^2 , whereby said foot-pieces and standards are locked at right angles relative to each other when in position for use, substantially as set forth.

4. The combination, with the foot-pieces, of the standard or standards A, pivoted to said foot-pieces, the rod d , the cross-bar d^2 , and the locking wedge-block d' , substantially as and for the purpose set forth.

5. The combination, with the foot-pieces, of the standard or standards A, the rod d , the cross-bar d^2 , and the detachable rods d^4 , connecting said standards and foot-pieces.

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