

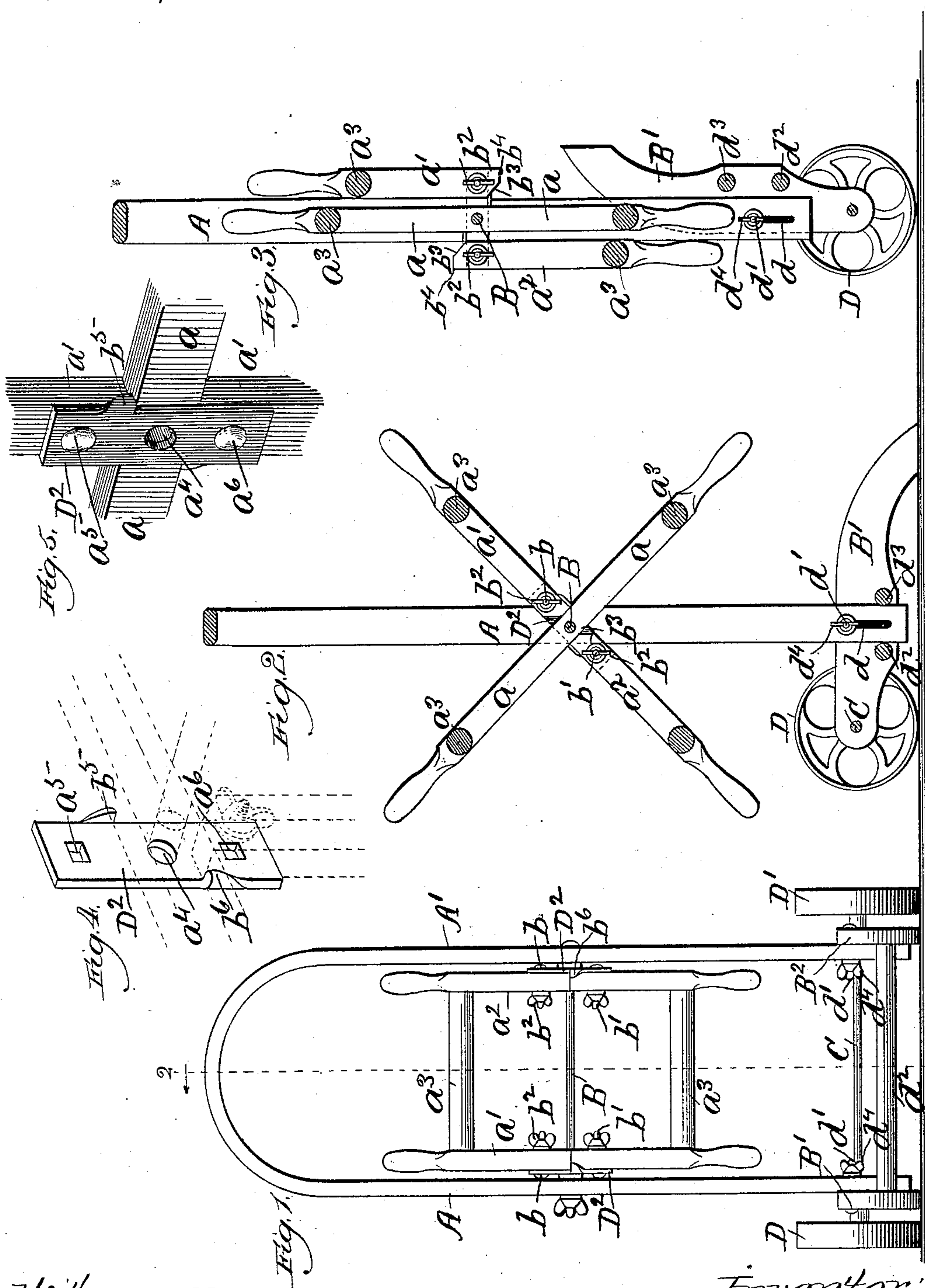
(No Model.)

C. W. KIMBALL.

HOSE REEL.

No. 397,987.

Patented Feb. 19, 1889.



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES W. KIMBALL, OF CHICAGO, ILLINOIS.

HOSE-REEL.

SPECIFICATION forming part of Letters Patent No. 397,987, dated February 19, 1889.

Application filed March 27, 1888. Serial No. 268,647. (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
5 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.

10 The object of this invention is to provide a hose-reel of the knockdown pattern wherein the different parts are arranged to fold together in a compact manner, so as to economize space in storing and shipping.

Figure 1 is an elevation of a hose-reel embodying my improved features; Fig. 2, a vertical central section in the plane 2, Fig. 1, showing the parts unfolded and in position
20 for use; Fig. 3, a similar view showing the opposite or folded position, and Figs. 4 and 5 details of construction.

In the drawings, A A' represent the standards or vertical side framing-bars; B, the axial
25 shaft upon which the reel-arms are mounted; B' B', the horizontal foot-pieces; C, the truck-axle, and D D' the truck-wheels.

The skeleton reel consists of the two companion cross arms, a , mounted on the axial
30 shaft B just inside of the standards A A', the companion arms a' a^2 cut in two in the middle and abutting against the continuous cross-arms a and the horizontal rounds a^3 connecting the radial reel-arms. The inner ends of the folding arms a' a^2 , abutting against the
35 continuous cross-arms, are connected by means of the metal plates or straps D², (see Fig. 4,) which are provided centrally with the aperture a^4 for the insertion of the respective ends of the reel-shaft, upon which said plates
40 are mounted just inside of the standards, as shown in Fig. 1. The plates D² are also provided near each end with the apertures a^5 a^6 for the insertion of the pivot or clamping bolts
45 b b' , which pass through the correspondingly-perforated ends of the folding arms a' a^2 for the purpose of adjustably securing these parts relative to each other. The inner ends of the pivot-bolts b b' are threaded for the engagement
50 of the clamping-nuts b^2 .

Figs. 1 and 2 show the reel in position for

use, and when it is necessary to convert the same into the folded position shown in Fig. 3, all that is required is to slack back on the clamping-nuts and bring the reel-arms parallel with the standards, the short arms a' a^2
55 folding up against each side of and at opposite ends of the continuous cross-arm, as shown. A part of the inner ends of the folding arms a' a^2 are cut away on a bevel, b^3 , to
60 facilitate the folding of the same, the portion b^4 abutting squarely against opposite sides of the cross-arm a when adjusted for use. The plates D² are provided on each edge with the
65 lugs b^5 b^6 , which curve inwardly a little, so as to overlap and bear against the square corner of the inner ends of the arms a' a^2 when they
70 are unfolded and clamped tightly against the plates D². These lugs serve to stiffen the structure and assist the clamping-bolts in securing the arms rigidly, as shown in Fig. 5. When the nuts on the clamping-bolts are
loosened for the purpose of converting the reel into a folded position, the divided arms
75 a' a^2 may be moved just far enough away from the plates D² to permit of the ends clearing the lugs b^5 b^6 .

One end of the foot-pieces B B' rests upon the floor, while the opposite ends are slightly
80 raised and are mounted on the truck-axle C. The lower ends of the standards A A' are provided with the slot d , through which passes the bolt or bolts d' , adjustably securing the
85 standards and foot-pieces together. Connecting the foot-pieces and placed closely against each side of the standards are the horizontal rounds d^2 d^3 , which serve to retain and
90 strengthen these parts when the reel structure is in position for use. By loosening up on the nut or nuts d^4 the standards may be moved
upward by means of the slot d until they clear the rounds d^2 d^3 , when the standards and foot-
95 pieces may be folded parallel relative to each other and to the reel-arms, as shown in Fig. 3. The slot d may be in the foot-pieces instead of in the arched framing-standards, as
the result will be the same. By this arrangement the entire reel structure may be quickly
and conveniently converted from one position
100 to the other and be made to occupy but little space when folded for storage or shipment.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is—

1. In a folding hose-reel, the combination, with the side standards, of an axial or pivot shaft having the respective ends inserted in said standards, the continuous cross arm or arms a , mounted on said shaft, the divided arms a' a^2 , abutting against said cross-arms, the connecting-plates D^2 , provided with the curved lugs b^5 b^6 , and the clamping-bolts adjustably securing said plates to the short arms a' a^2 , whereby said latter arms may be folded parallel to the standards and cross-arms or secured in a fixed position at right angles to said cross-arms, substantially as and for the purpose set forth.

2. In a folding hose-reel, the combination, with the divided arms a' a^2 , of the joining plate or plates D^2 , provided with lugs which are adapted to overlap the inner ends of said arms, and the pivotal clamping-bolts b b' , whereby the two parts comprising said arms may be secured in a fixed rigid position to form a continuous arm or folded in a parallel plane, substantially as and for the purpose set forth.

3. In a folding hose-reel, the combination,

with the side standards, of the horizontal foot-pieces adjustably secured to the lower ends of said standards, the truck-axle upon which one end of said foot-pieces is mounted, and the truck-wheel mounted on the respective ends of said axle, whereby said axle and truck-wheels may be set at right angles to said standards or folded in a plane parallel therewith, substantially as and for the purpose set forth.

4. In a folding hose-reel, the combination, with the side standards provided with slots in the lower ends, of the horizontal foot-pieces, the bolt or bolts d' , inserted in said slots and adjustably securing said standards and foot-pieces, and the rounds d^2 d^3 , connecting said foot-pieces and arranged closely to and on each side of said standards, said slots providing for a vertical movement of said standards for the purpose of throwing the same into and out of engagement with said rounds, substantially as and for the purpose set forth.

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