(No Model.)

H. B. PIPER.

Hose Reel.

No. 238,153. Patented Feb. 22, 1881.

Fig 1.

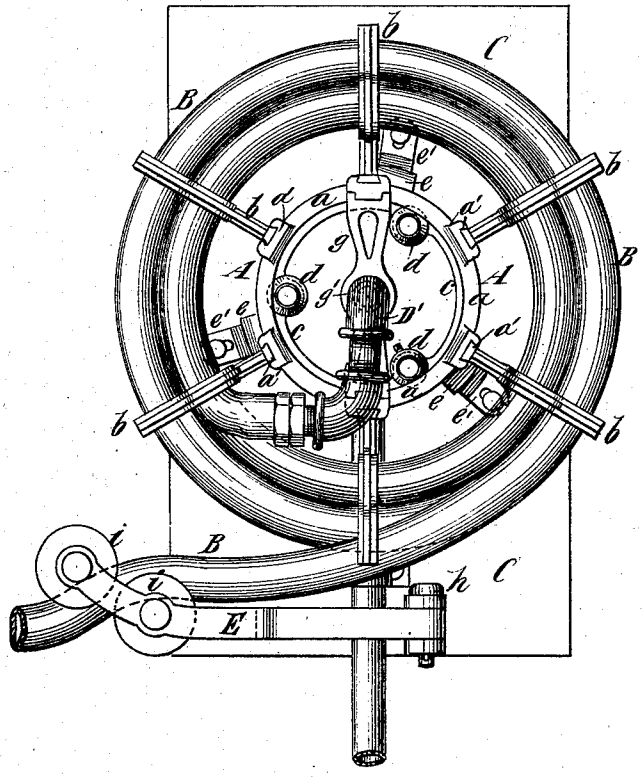


Fig 2.

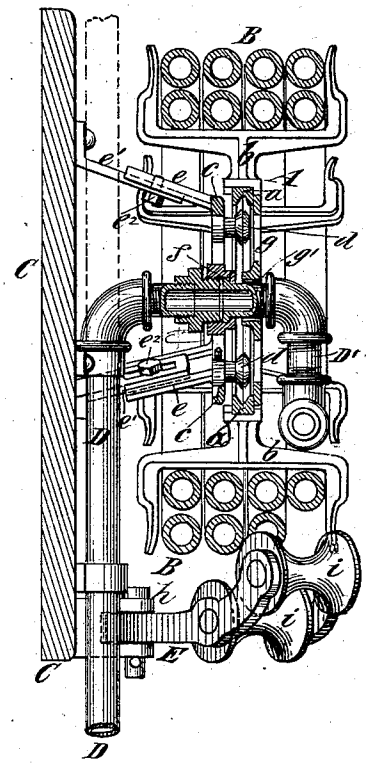
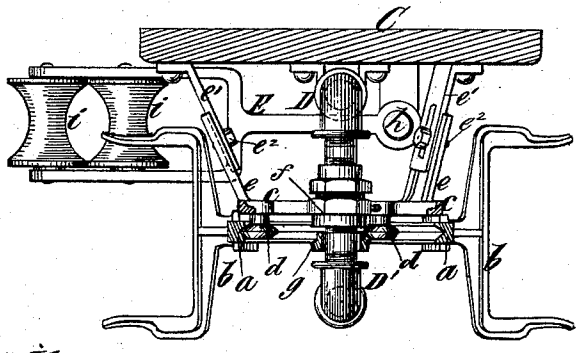


Fig 3.



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UNITED STATES PATENT OFFICE.

HENRY B. PIPER, OF MORRISANIA, NEW YORK, ASSIGNOR TO JOHN D. BROWN, OF JERSEY CITY, NEW JERSEY.

HOSE-REEL.

SPECIFICATION forming part of Letters Patent No. 238,153, dated February 22, 1881.

Application filed December 18, 1880. (No model.)

To all whom it may concern:

Be it known that I, HENRY B. PIPER, of Morrisania, in the county and State of New York, have invented certain new and useful Improvements in Hose-Reels, of which the following is a specification.

My invention relates especially to hose-reels for hose which is kept ready for use in hotels, factories, and other buildings, and which is constantly connected with the fixed water-pipes, so that in case of fire all that is necessary to prepare the hose for operation is to turn on the water and unwind the hose from its reel.

My invention consists in the combination, with a hose-reel having an open center, of a support or bearing adapted to support said reel with its axis horizontal, and V-shaped friction-wheels pivoted in said support or bearing, and fitting within the open center of said reel, and a water-pipe to which the hose may be connected, extending through said support or bearing, but entirely separate from the same, whereby I produce a reel which may be readily attached to the wall of a building or other upright support.

It also consists in the combination, with a rotary hose-reel, of a support or bearing upon which said reel may turn, an upright from which said support or bearing projects horizontally, and arms connecting said support or bearing with said upright, and adapted to be adjusted to different lengths, to move said support or bearing nearer to or farther from the upright, and thus nearer to or farther from the wall or support to which said upright is secured.

In the accompanying drawings, Figure 1 represents a side view of a reel and appurtenances embodying my invention. Fig. 2 represents a vertical section through the same in a plane parallel with its axis, and Fig. 3 represents a horizontal section thereof in a plane parallel with the axis.

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

The reel A, upon which the hose B is to be wound, is composed of a ring, *a*, having extending outward therefrom a series of radial arms, *b*, forked at their outer ends, so as to receive the hose. The reel A is arranged with its axis horizontal, and is thus rotated in a vertical plane. These arms are shown as connected with the ring *a* by being inserted in dovetailed recesses *a'* in said ring, but might be otherwise connected. Upon the side of the ring *a* of the reel is a second ring, *c*, upon which are pivoted a series of friction-wheels, *d*, which are shown as having Λ-shaped peripheries and engage with a Λ-shaped groove in the inner surface of the ring *a*, and when so constructed the ring *c* forms a support or bearing for the reel, as it supports the same through the wheels *d*. The ring *c* is sustained by means of arms, which connect it with a plank or upright, C, which may be secured to a wall, and said arms, as clearly shown in Figs. 2 and 3, are each composed of two pieces, *e e'*, adjustably secured together by means of bolts e^2 passing through slots therein, so that said arms may be lengthened or shortened, to hold the reel nearer to or farther from the wall or from the upright C, and after adjustment may be readily secured together. The reel, being thus supported, will turn with little friction upon the support or bearing, and is held against side movement in either direction.

D designates a water-pipe extending upward at the back of the reel, or between the reel and the upright C, which is provided with an elbow, and is extended through the open center of the reel, and also of the support or bearing, in line with the axis of the reel, and thence downward, where it is permanently connected with the inner end of the hose B.

In order to permit the reel to turn freely while the hose is connected with the water-pipe, the portion D' of the pipe, which extends downward in front of the reel, is swiveled at *f*, at which point there is a stuffing-box to preclude leakage; and in order to steady the pipe I employ a cross-piece, *g*, upon the reel, as seen in Figs. 1 and 2, provided with a central opening, *g'*, through which the pipe D' projects.

Where the pipe D has attached to it other reels above that here shown it would be continued straight up, as shown in dotted outline in Fig. 2, and the branch pipe would be joined therewith by a T; but where the reel here

shown is the highest, and none others are above it, the branch pipe is connected with the upright pipe by an elbow, as seen in Fig. 2.

It will be understood that the water-pipe is entirely separate from and independent of the support or bearing of the reel, and supports no part of the weight of the reel.

In order to properly guide the hose while drawing it off the reel, and also while winding it on the reel, I employ a novel construction of guide, composed of an arm, E, pivoted at one end to a pivot, *h*, and forked at the other end, so as to embrace two rollers, *i*, having concave peripheries, and between which the hose is passed as it is drawn from the reel or wound up thereon after use. The arm E of the guide is free to swing upon its pivot into any position, and when winding insures the hose being received upon the forks of the arms *b*.

By my invention I produce a hose-reel of light and tasteful appearance, upon which the hose may be readily wound, and from which it may be unwound with little resistance from friction, and in which the water-pipe does not support or aid in supporting said reel.

I am aware that it is old to arrange a rotary reel upon a horizontal bed or frame, the axis of the reel being vertical, and to arrange spherical rollers between said reel and bed or frame; but in such case other rollers are necessary to keep the reel down upon its bed or frame, and the reel cannot be secured to a wall or other upright support, but is only adapted to be secured to a floor or other horizontal support, where it will take up room which is often needed for other uses.

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

1. The combination, with a hose-reel having an open center, of a support or bearing adapted to support said reel with its axis horizontal, and V-shaped friction-wheels pivoted in said support or bearing, and fitting within the open center of said reel, and a water-pipe to which the hose may be connected, extending through said support or bearing, but entirely separate from the same, substantially as specified.

2. The combination, with a rotary hose-reel, of a support or bearing upon which said reel may turn, an upright from which said support or bearing projects horizontally, and arms connecting said support or bearing with said upright, and adapted to be adjusted to different lengths, so as to move said support or bearing nearer to or farther from said upright, substantially as specified.

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