(No Model.)

C. J. LE ROY.

Rack and Spool for Holding Rope Coils.

No. 239,518. **Patented March 29, 1881.**

Fig. 1.

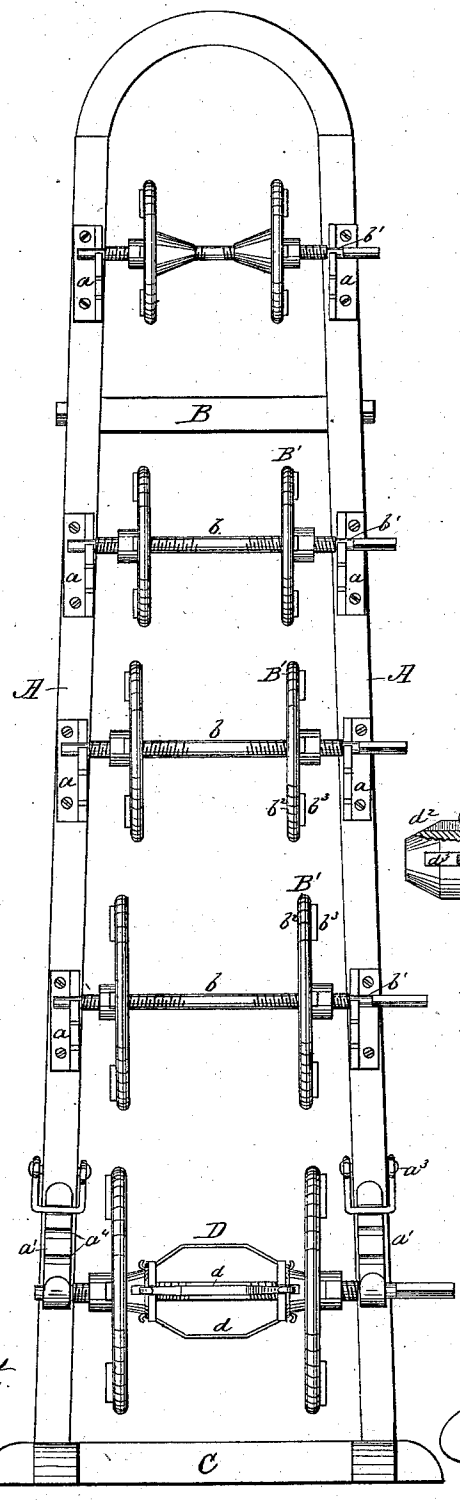


Fig. 2.

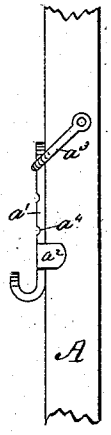


Fig. 3.

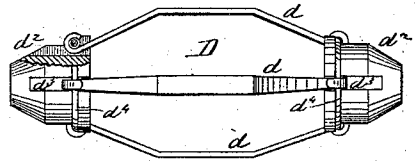
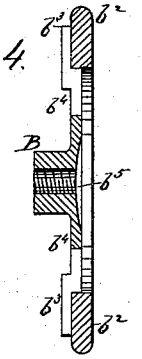


Fig. 4.



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UNITED STATES PATENT OFFICE.

CHARLES J. LE ROY, OF PALESTINE, TEXAS.

RACK AND SPOOL FOR HOLDING ROPE-COILS.

SPECIFICATION forming part of Letters Patent No. 239,518, dated March 29, 1881.

Application filed December 21, 1880. (No model.)

To all whom it may concern:

Be it known that I, CHARLES JEROME LE ROY, a citizen of the United States, residing at Palestine, in the county of Anderson and State of Texas, have invented a new and useful Improvement in Racks and Spools for Holding Rope-Coils; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the drawings hereto annexed.

My invention relates particularly to certain new and useful improvements upon my rack and spool for holding rope-coils, patented September 28, 1880, No. 232,733; and it consists in a peculiar construction of frame adapted for supporting spools of different lengths, as well as an improved construction of spool for expanding and holding the coil of rope in the center of the reel while being used, and improved hangers for the reels, whereby the latter may be arranged within the frame to accommodate the different sizes of coils now manufactured.

In the accompanying drawings, Figure 1 represents a front elevation of my invention; Fig. 2, a section of the frame, showing the adjustable hanger; Fig. 3, the coil-expander, and Fig. 4 a sectional view of one of the wheels.

The frame which I use in my improvement consists of two uprights, A, slightly inclined toward each other at the top, for the purpose of providing a varying intermediate space between them to accommodate reels of different lengths. These upright posts are connected at the top by one or more cross-bars, B, and held firmly in position by an H-shaped base, C, to the cross-bar of which the ends of said uprights are secured in any suitable manner.

Upon the two posts of the frame, at suitable intervals, are secured notched or slotted plates *a*, arranged co-ordinately to furnish hangers or bearings for the spindles of the reels. These plates may be of any convenient length, and provided with any number of said notches that may be found serviceable.

As a substitute for the stationary hanger, I also provide an adjustable hanger consisting of a sliding plate, a', having its lower end curved upward to form a bearing for the spindle, and provided with flanges or guides a^2 upon each side, to hold the plate in line with the post while being adjusted. This adjustable hanger is supported and held in position by an automatic clamping device, which consists of a half-link, a^3, pivoted at its ends to opposite sides of the post, so that it will drop by its own weight into any one of the notches a^4 in the hanger, which is placed between the post and said link, while the weight of the rope-coil upon the hanger causes the clamp to compress the latter and hold it in any desired position.

In my improved spool or reel I employ the same construction of spindle as in my patented invention above referred to, except that the spindle *b* is turned down near its ends to form journals b', adapted for being snugly adjusted into the bearings upon the rack, whereby lateral movement of the spindle may be prevented. The ends of the spindle *b* inside the journals are turned with a right-hand thread upon one side and a left-hand thread upon the other, upon which are screwed the wheels B′, consisting of a light wooden rim, b^2, secured upon its outer side to projecting lugs b^3 upon the ends of eccentrics b^4. The central portion or hub, b^5, of said eccentrics is dish-shaped upon the inner side for the purpose of receiving the ends of the coil-expander D. Said expander consists of four or more bow-shaped steel-wire springs, *d*, fastened to two cast hubs or washers, d^2, in the following manner: The hubs d^2, which are made to slide upon the spindle within the wheels, are constructed with radial slots d^3 in their peripheries, in which the ends of the steel-wire springs *d* are secured by the ring d^4, which is slipped over the hub and soldered in position, and over which the extreme ends of said springs are bent to form a rigid attachment. As the bows of these springs are turned outward we have thus constructed an oblong device, which may be elongated by compressing the springs together, or made to expand in the center by pressure upon the outer ends of the hubs. When used, the expander, with the spindle, is inserted into the eye of a rope-coil, to the size of which eye it is easily adjusted by lateral pressure upon the washers, exerted by screwing the wheels closer together upon the spindle. The coil is thus held firmly in the center of the reel. The eye of the coil may also be

fitted closely upon the spool by means of simple and inexpensive cones arranged upon the spindle, upon the inner side of each wheel.

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

1. In a reel-spool, the combination of the spindle *b*, wheels B′, dish-shaped upon the inner sides of their hubs, and the coil-expander D, constructed of two hubs connected by bow-shaped springs, substantially as and for the purpose described.

2. In a rack for holding rope-coils, the adjustable hanger, consisting of the sliding plate *a′*, turned up at the lower end to form a bearing for the spindle, and a clamping device, a^3, pivoted to the post and resting in a notch in said plate, substantially as shown and described, whereby a reel may be supported in any desired position.

CHARLES JEROME LE ROY.

Witnesses:
JAMES VAUGHAN,
CHARLES ALBERT HOTCHKISS.