(No Model.)

T. E. HAYES.

Rope Reel.

No. 231,796. **Patented Aug. 31, 1880.**

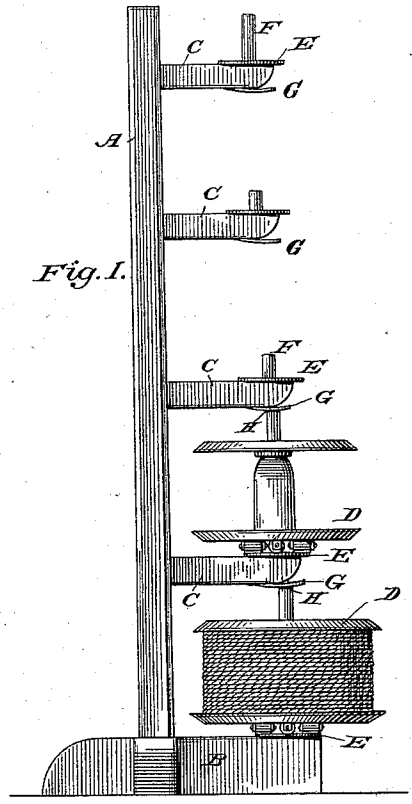


Fig. I.

Fig. 2.

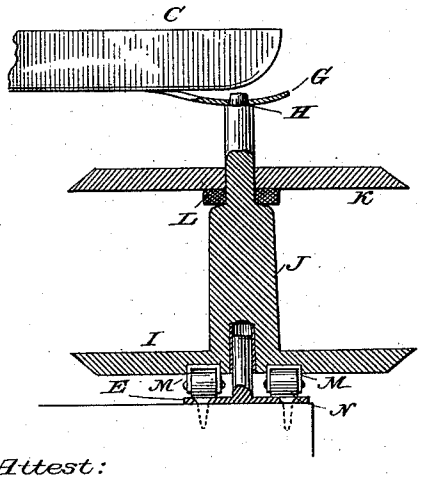
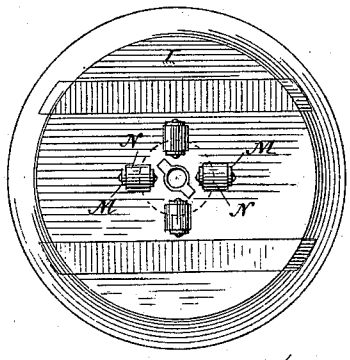


Fig. 3.



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UNITED STATES PATENT OFFICE.

THEODORE E. HAYES, OF DUBUQUE, IOWA.

ROPE-REEL.

SPECIFICATION forming part of Letters Patent No. 231,796, dated August 31, 1880.

Application filed April 16, 1880. (No model.)

To all whom it may concern:

Be it known that I, THEODORE E. HAYES, of Dubuque, in the county of Dubuque and State of Iowa, have invented a new and useful Improvement in Rope-Reels; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to reels for cordage; and its object is to supply a simple and convenient device for holding several reels of rope in such a way that they will be easily accessible.

The invention consists in the improved construction of the apparatus and the various novel combinations of the operative parts, all as fully hereinafter explained.

In the accompanying drawings, Figure 1 represents a side view of the device; Fig. 2, a vertical section through one of the reels; and Fig. 3 a bottom view, showing the manner of attaching the reels.

A represents an upright standard secured upon a suitable base, B, and provided with horizontal projecting arms C upon one or both sides. These arms form brackets or supports, upon which reels D are placed. Upon the upper side of such a bracket, C, and at the outer end thereof, is secured a circular wooden or metallic plate, E, provided at the center with the pivot F. On the under side of the arm C is a leaf-spring, G, having a perforation, H, near its end, and in this perforation is journaled the upper end of the rope-reel D, the lower end being provided with a socket which receives the pivot on the plate E. The under side of the ends of the arms C are beveled, as shown, to allow a slight movement of the leaf-spring, by which means the rope-reel can be easily removed at any time, though the downward pressure of the spring is sufficient to keep the journal of the reel in constant engagement with the perforation in such spring in ordinary use.

The reel D is composed of a rope-bed, I, supporting a cone, J, around which the rope is coiled, and a top or friction plate, K, resting on the cone, and provided on its under surface with a rubber disk, L.

In reels as before constructed the top plate has been provided with a screw-threaded central opening engaging with a corresponding screw-thread on the spindle. The adjusting of the plate necessarily required time and trouble, and I have found that the friction between the rubber disk and the spindle is amply sufficient to retain the plate in place.

On the bottom of the rope-bed are secured bearings M, in which are journaled the anti-friction rollers N N, any number of which may be used, and which, bearing on the circular plate E, allow the reel to be revolved with a minimum of friction.

Any number of reels may be secured upon the vertical standard, according to the number of arms, the upper arm in all cases being provided with a pivot of greater length, since the reel placed thereon will have no other support.

In the operation of my device the coil of rope is placed on the cone resting on the rope-bed, and the friction-plate K, having the rubber disk, is pushed down so as to bear on the coil and hold it in position.

It will readily be seen that by moving the spring slightly upward the reel can be disengaged from its bearings whenever desired.

Under some circumstances the device can be operated to advantage without the use of the anti-friction rollers; but it will usually be found preferable to employ such rollers, the friction being thereby reduced and the operation of the machine being rendered more effective.

Having thus described my invention, what I claim as my invention is—

1. The combination of the standard A, the arms C C, provided with the spring-bearings G, and plate E with the reels having rollers M, adapted to bear on such plate E, the upper end of the reel-spindle being journaled in the spring G, all substantially as described.

2. The combination, with the rope-bed I and its spindle, of the plate K and friction-disk L, substantially as and for the purposes set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THEODORE E. HAYES.

Witnesses:

CHARLES E. CURRY,

L. F. HANNAS.