(No Model.) 2 Sheets—Sheet 1.

F. A. WINTER.

REEL FOR MEASURING ROPE.

No. 353,107. Patented Nov. 23, 1886.

Fig. 1.

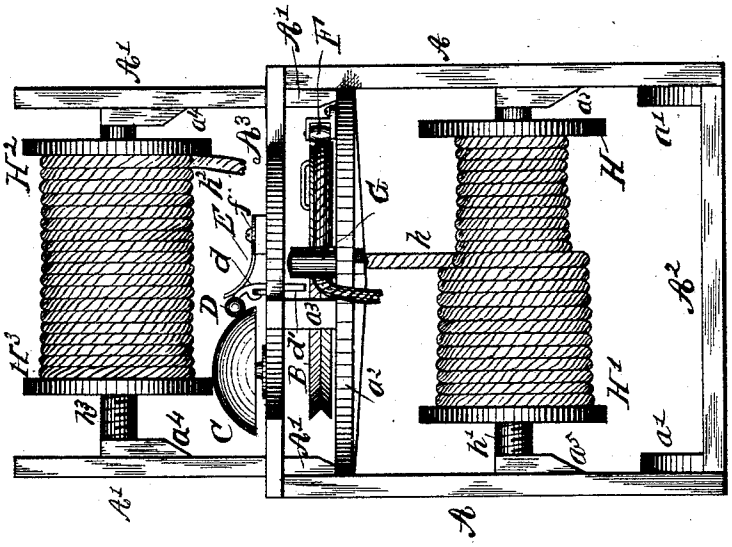
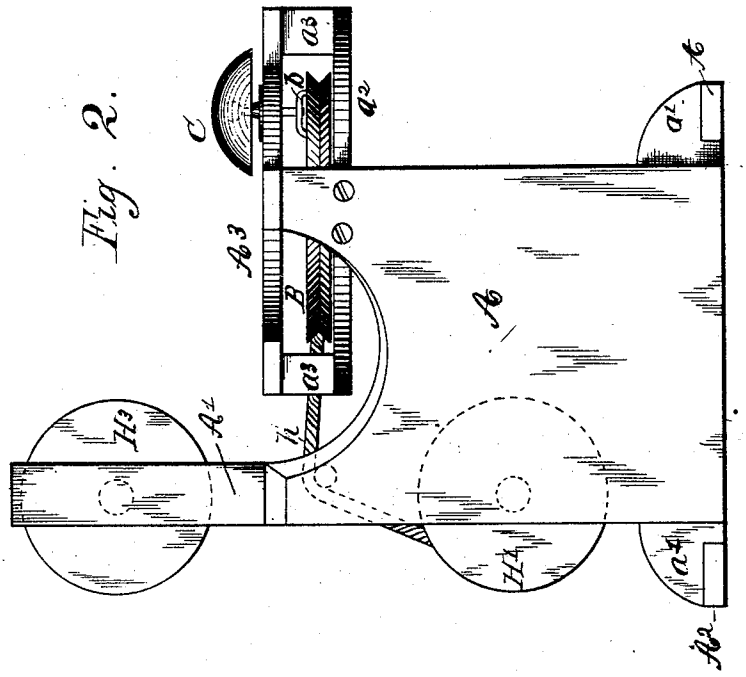


Fig. 2.



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Fig. 3.

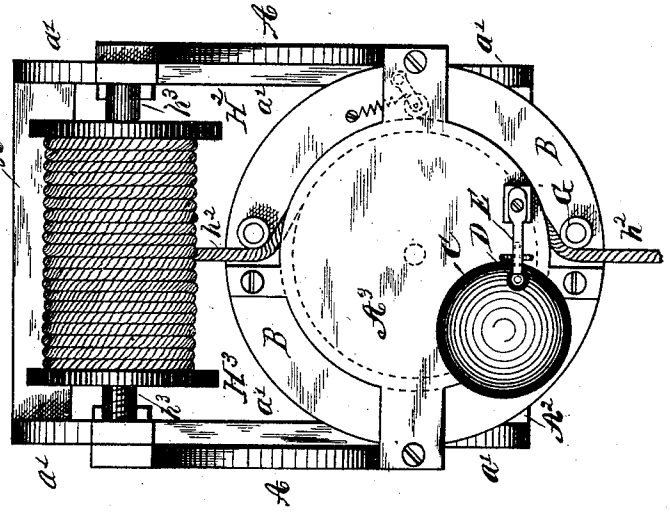
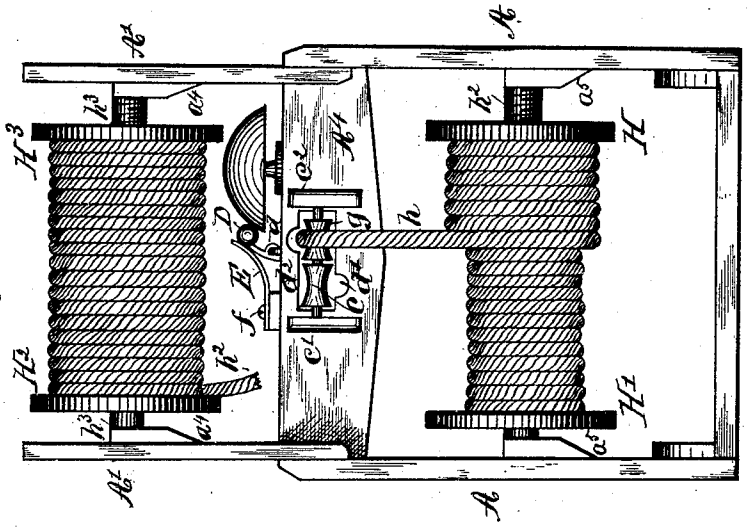


Fig. 4.



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UNITED STATES PATENT OFFICE.

FREDERICK A. WINTER, OF THOMSON, GEORGIA.

REEL FOR MEASURING ROPE.

SPECIFICATION forming part of Letters Patent No. 353,107, dated November 23, 1886.

Application filed March 16, 1886. Serial No. 195,454. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK A. WINTER, a citizen of the United States, residing at Thomson, in the county of McDuffie and State of Georgia, have invented certain new and useful Improvements in Rope-Measuring Devices; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The object of this improvement is a device adapted to the convenient and rapid measurement of rope by the yard. These results are attained by the mechanism illustrated in the drawings herewith filed as part hereof, in which the same letters of reference denote the same parts in the different views.

Figure 1 is a front elevation of a rope-measuring device embodying the features of my improvement. Fig. 2 is a side elevation of the same. Fig. 3 is a plan. Fig. 4 is a rear view.

A A′ A^2 A^3 A^4 a' a^2 a^3 is a supporting-frame, made of wood, secured together, substantially in the order shown, by any suitable means.

B is a sheave, arranged to revolve on a pin or journal set into a perforation in the frame-piece a^2. The sheave B is made of a size suitable for measuring one yard around its periphery, and is provided with a staple or plate, *b*, for a purpose hereinafter set forth.

C is a gong or bell fixed to the frame-piece A^3.

D is a hammer pivotally connected to the piece A^3, as shown at *d*, and provided with a perpendicular extension, *d′*, which passes through a suitable opening in the piece A^3, and has a position adapted to engage the staple *d* on the sheave D when the latter is put in motion, as hereinafter explained.

E is a spring, secured to the piece A^3 in a manner to press the hammer D against the gong or bell C.

H H′ *h′* and H^3 H^3 h^3 are rope reels or spools supported by open-top pillow-blocks a^4 a^5, fixed to the frame parts A A′. The disks H′ and H^3 of the reels or spools are made adjustable on the spool-shafts, which are provided with threads, as shown, which correspond with threads in the perforations of the disks H′ H^3.

The transverse frame-piece A^4 (shown in Fig. 3) is provided with perforations d' d^2 and rollers *c g*, supported by vertical strips c' c^2. The rope from the reel H H′ is passed over the roller *g* and through the perforation d^2, and around the side of sheave B, between the same and a roller, F, fixed to the piece a^2, adjacent to side of the supporting-frame, and also between the sheave B and a roller, G, fixed to the front of the piece a^2. (Fully shown in Fig. 1.) The roller F is secured to the piece a^2 by means of a frame, which may be adjusted in a circular direction, and thereby made to set closer to the sheave B, and thus made to suitably bear upon different-sized ropes or cords and hold them against the sheave B with sufficient firmness to cause the latter to turn evenly with the movement of the ropes h^2 h^4 as they are drawn from the reels or spools, which will cause the sheave B to turn and the staple *b*, affixed thereto, to strike the extension of the hammer D and cause the gong or bell C to ring once with each complete revolution of the sheave, and thus indicate that a yard of rope has been drawn from the reel connected with the motion of the sheave.

In order to measure rope from the top reel, H^2 H^3, the rope from the lower reel is disengaged from its connection with the sheave, as shown, and the rope h^4 put through the opening *d′* in the frame-piece A^4 and given a similar connection with the sheave and rollers with that shown for the rope from the reel or spool H H′. On account of the open tops of the pillow-blocks a^4 a^5, which form the bearings for the spindles h' h^3 of the reels, they may be readily removed when exhausted of their ropes and fresh reels set in their places. By reason of the adjustable disks H′ H^3 they may be set closer to the opposite disks, and thus made to press the coils of rope together in a manner to prevent them from getting out of place when the ropes are disconnected with the measuring mechanism.

Having explained the features of my im-

provement, what I claim as new, and desire to secure by Letters Patent, is—

In a rope-measuring device, the frame having rope-reel supports, as shown, and transverse connection provided with a sheave adapted to measuring the rope from reels above and below the same, the rollers for holding the rope against the sheave, the bell, and the hammer, all combined and arranged to operate as shown and specified.

In testimony whereof I affix my signature in presence of two witnesses.

FREDERICK A. WINTER.

Witnesses:

P. F. SARLING,

B. H. WILLINGHAM.