MACHINE FOR HANDLING ROLLS OF FLOOR COVERING

Filed June 26, 1956

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This invention relates to material handling devices, and more particularly to an improved machine for handling rolls of linoleum or other floor covering and for supporting said rolls while desired lengths of floor covering are unrolled therefrom and severed. A main object of the invention is to provide a novel and improved machine for handling rolls of linoleum or other floor covering and for supporting the rolls while desired lengths are cut therefrom, the improved machine being simple in construction, being easy to manipulate, and providing a great saving in time and labor in handling rolls of linoleum or the like.

A further object of the invention is to provide an improved machine of the traveling crane type especially arranged for handling rolls of linoleum and for supporting the rolls while desired lengths are removed therefrom, the machine involving relatively inexpensive components, being rugged in construction, eliminating laborious and hazardous lifting of bulk rolls of linoleum or other products with which the machine is employed, and being especially useful for warehouses or the like where rolls of linoleum or similar products are stored.

Further objects and advantages of the invention will become apparent from the following description and claims, and from the accompanying drawings, wherein:

Figure 1 is a perspective view showing an improved machine for handling rolls of linoleum or similar products, constructed in accordance with the present invention.

Figure 2 is a horizontal cross-sectional view taken on the line 2—2 of Figure 1.

Figure 3 is an enlarged transverse vertical cross-sectional view taken on the line 3—3 of Figure 1.

Figure 4 is a cross sectional detail view taken on the line 4—4 of Figure 3.

Figure 5 is a perspective view showing a modified form of cradle-like support for a roll of linoleum or similar rolled-up sheet material, as employed in a roll handling machine according to the present invention.

Referring to the drawings, 11 generally designates an improved machine for handling rolls of linoleum and similar products and for supporting such rolls while desired lengths thereof are removed therefrom, the machine comprising a carriage 12 forming part of a traveling crane having the horizontal supporting rails 13, 13 from which the carriage 12 is suspended, as by the use of suitable supporting rollers 14. The carriage 12 has mounted thereon a conventional cradle-like support arrangement designated generally at 15 and including a reel assembly 16 of the duplex type on which are wound the respective cables 17, 17 which travel over pulleys 18, 18 supported at the respective opposite ends of the carriage 12. The reel 16 is driven by a suitable motor 19 mounted on the carriage 12 and is controlled in a conventional manner.

Designated at 20 is a first beam member which is formed at its opposite ends with apertured lugs 21, 21 to which the ends of the respective cables 17, 17 are attached. As shown in Figure 4, the beam member 20 is of tubular construction and has pivotally connected to its intermed-
A biased locking pin is provided in the main beam member 20', as in Figures 1 to 4, said locking pin being engageable in apertures in the lower beam member 22' and being provided with a head 32.

Rigidly secured to and depending from the lower beam member 22' are the symmetrically spaced pairs of flat hook elements 33', 33' provided with the respective sets of spaced rollers 34, 35 and 36, as in Figures 1 to 4, defining a split, cradle-like support adapted to carry a relatively elongated roll of linoleum or other rolled-up sheet material, whereby the roll may be handled by the machine in the same manner as previously described in connection with Figures 1 to 4.

While a specific embodiment of an improved machine for handling rolls of floor covering such as linoleum and the like and for supporting said rolls while desired lengths of material are unrolled therefrom, it will be understood that various modifications within the spirit of the invention may occur to those skilled in the art. Therefore, it is intended that no limitations be placed on the invention except as defined by the scope of the appended claims.

What is claimed is:

1. A machine for handling rolls of sheet material and for supporting such rolls while desired lengths are unrolled therefrom comprising a traveling crane having a pair of spaced depending supporting cables, pulley means supporting said cables and holding said cables a substantial distance apart in substantially parallel relation, a horizontal beam member connected at its ends to the ends of said cables, a second horizontal beam member subjacent said first-named beam member, means pivotally connecting said second beam member at its intermediate portion to the intermediate portion of the first beam member, a pair of parallel vertical hook elements rigidly secured to the ends of said second beam member, and a plurality of parallel horizontal rollers journaled between said hook elements and arranged to define a cradle to rotatably support a roll of sheet material.

2. A machine for handling rolls of sheet material and for supporting such rolls while desired lengths are unrolled therefrom comprising a traveling crane having a pair of spaced depending supporting cables, pulley means supporting said cables and holding said cables a substantial distance apart in substantially parallel relation, a horizontal beam member connected at its ends to the ends of said cables, a second horizontal beam member subjacent said first-named beam member, a vertical pivot pin pivotally connecting said second beam member at its intermediate portion to the intermediate portion of the first beam member, a pair of parallel vertical hook elements rigidly secured to the ends of said second beam member, a plurality of parallel horizontal rollers journaled between said hook elements and arranged to define a cradle to rotatably support a roll of sheet material, releasable detent means mounted on said first beam member and being lockingly engageable with said second beam member, and spring means biasing said detent means toward locking position.

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