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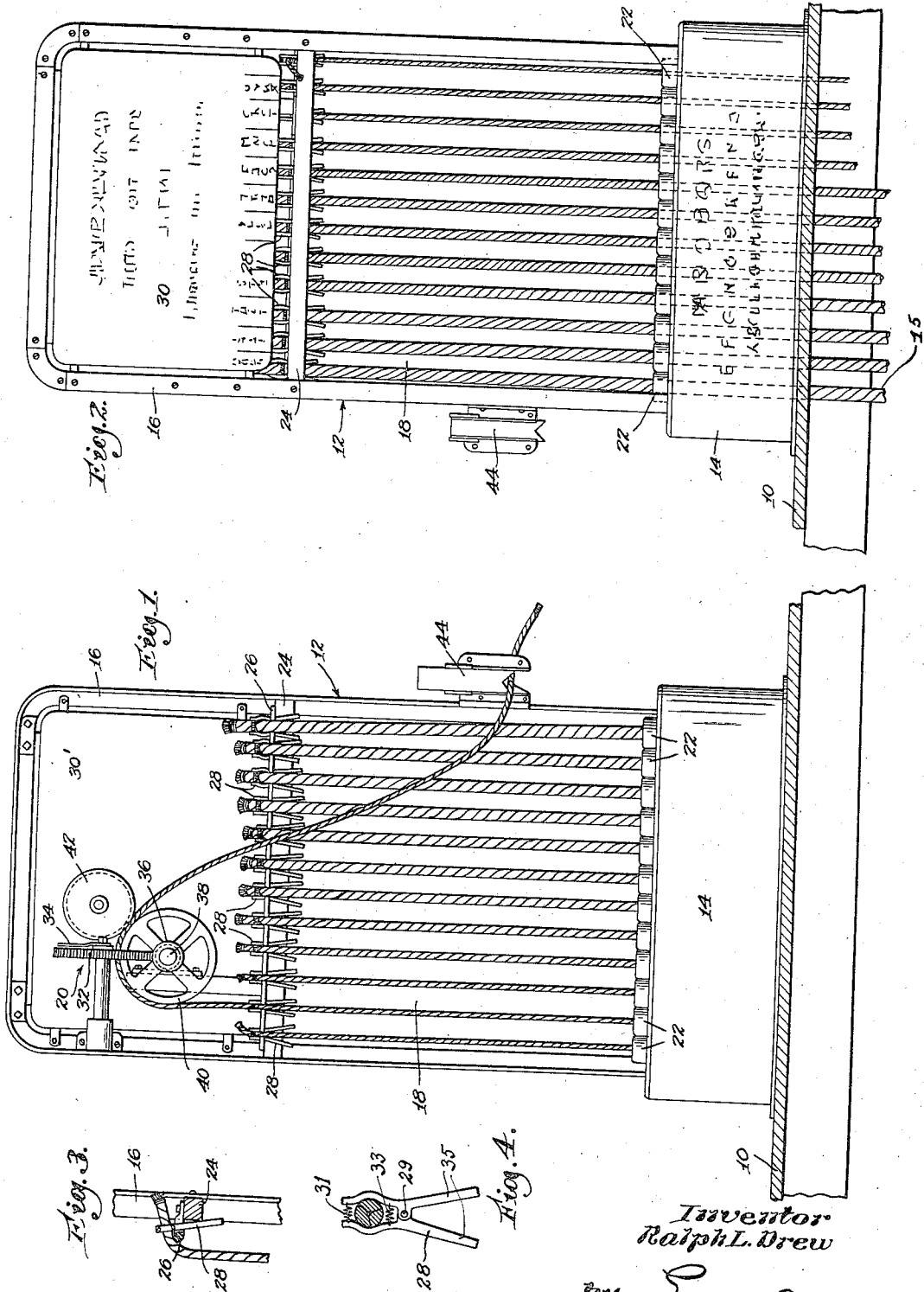
R. L. DREW

2,038,781

COMBINED DISPLAYING AND DISPENSING DEVICE FOR LINEAR ARTICLES

Filed May 26, 1933

2 Sheets-Sheet 1



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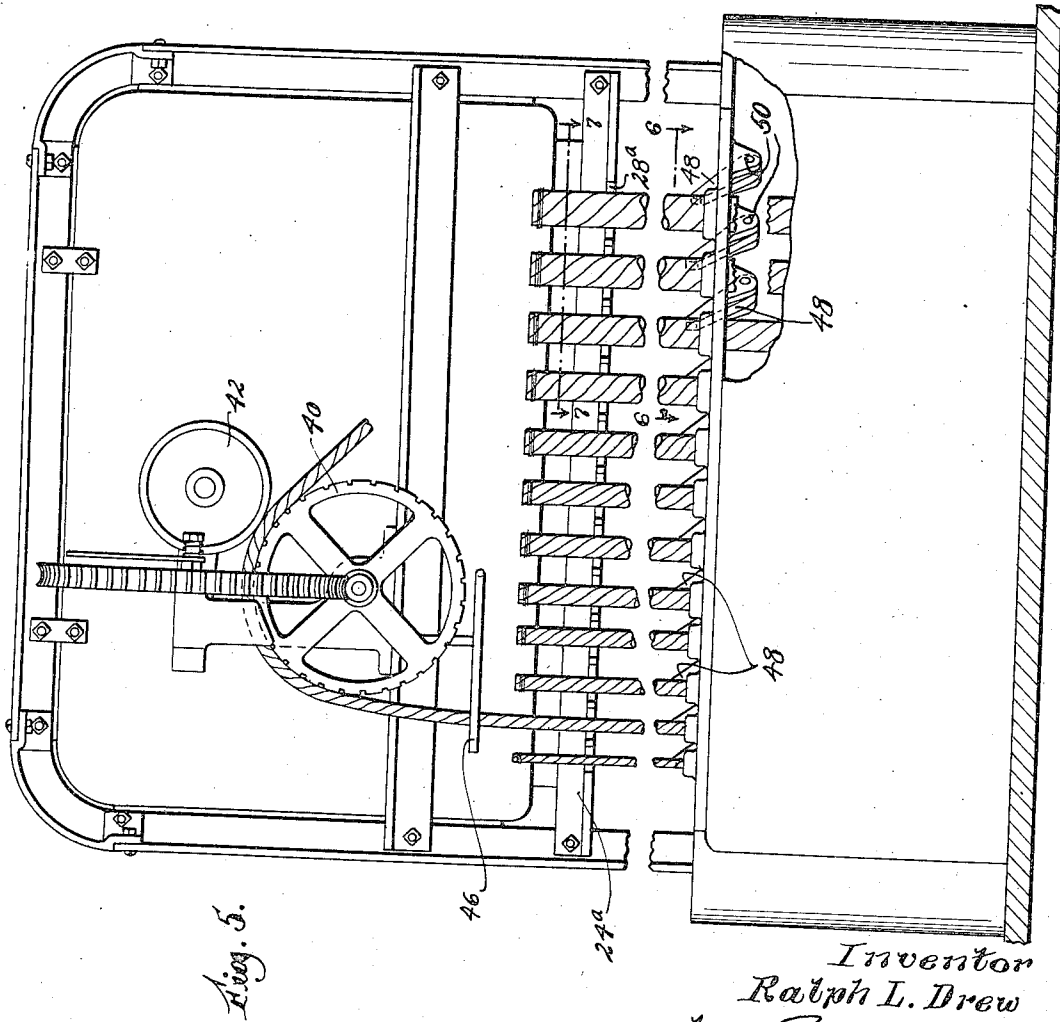
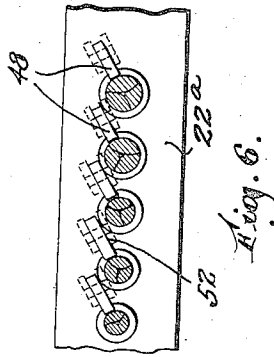
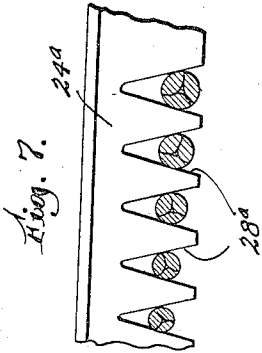
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COMBINED DISPLAYING AND DISPENSING DEVICE FOR LINEAR ARTICLES

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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

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COMBINED DISPLAYING AND DISPENSING DEVICE FOR LINEAR ARTICLES

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1 Claim. (Cl. 211—13)

This invention provides a combined displaying and dispensing device for linear articles.

More especially it provides for assembling and exhibiting a variety of specimens, of rope, for example, in mutually comparative relation, each specimen being intact with the coil or other supply of its particular variety which is being offered for sale, which usually is a mass of considerable and cumbersome bulk. It also provides so that the customer in making his selection may take the actual sample which he chooses, as a part of the desired length of that article, measured directly in the apparatus; with consequent advancement of another portion to the display position. The invention is particularly useful as a means for concentrating a number of varieties, in display, of rope or the like merchandise which ordinarily comes in large coils, each occupying considerable space.

Rope, for example, may be carried in stock by a retail dealer in a variety of sizes, and also in varieties of structure, and of grade, or of materials or brands. The supply coils, heavy and bulky, if kept in convenient location for view and examination of customers will take up considerable valuable space. Hence the dealer is likely to store the coils in his basement or other out-of-the-way place, and to keep only samples on the selling floor. The salesman, going to cut a length which he believes is like the selected sample, may make an error of selection; and may substitute inferior or different rope from that designated by the customer.

It is among the objects of the present invention to provide the general salesroom with an improved advertising-display, and sales-rack for ropes whose actual bulk may be stored elsewhere, as for example in the basement.

A feature resides in the provision for exhibiting a multiplicity of such in very small floor space in such manner that all can be seen in comparison together, and each can be handled and fully examined, in conjunction with coating measuring means for any part of this rope display which the customer may select to be cut from the supply; and to leave a fresh intact portion of the supply to serve as a replacement sample.

The invention provides for making the display a spread, so that it can be seen as a whole in association with suitable placarded information or advertising matter and this may refer to individual specimens as well as to the whole so that a customer sees that he actually gets the rope to which the information refers, and which he selects from among those displayed.

The apparatus illustrated as embodying the invention has a display stand having a multiplicity of base guides, arranged at intervals in a straight line, each guide being adapted to receive a rope led into it from a supply at a remote location, such as from a basement or lower level, with the ropes extending up through the floor and through the guides to terminal grips a few feet vertically above them. Thus all the ropes stand vertically erect in spaced parallel relation in a plane. A one-way clamp may be associated with each base guide, permitting a free draft of rope from supply, for exhibition by handling, or for cutting off a length, but automatically tending to prevent any part of the rope above the base from slipping backward.

A board surmounting this display approximately in the plane of the ropes has a rear face to hold the rope grips out of view from the front, as also a device for measuring any of these ropes, and also any incidental implements, as calipers, reeling device, tabular information and cutter,—all for use of the salesman in dispensing the rope;—and has a front face which may be for benefit of the customer, by carrying information co-operating with the display of actual rope specimens. The measuring device is coordinated with the said guides and the displayed portions of ropes so that any individual rope may be selected and be measured while it continues on the stand, with its base guide serving to guide the rope on this temporary course leading through the measuring apparatus. When a length of rope has been measured, and served by being bound on each side of the place where it is to be cut, the cut may be effected; and the end of rope remaining becomes the new sample.

It is intended that the patent shall cover, by suitable expression in the appended claim, whatever features of patentable novelty exist in the invention disclosed.

In the accompanying drawing:

Figure 1 is a rear elevation of a device embodying features of the invention;

Figure 2 is a front elevation thereof,

Figure 3 is a detail of means which may be employed for supporting the respective rope ends in the stand;

Figure 4 is a further detail of the means of Figure 3;

Figure 5 is an elevation, with the central portion removed, of a modified form of display device embodying features of the invention;

Figure 6 is a detail plan of the base guides and clamps of Figure 5; and

Figure 7 is a detail plan of the rail grips of Figure 5.

Referring to the drawings, a floor of a building is represented at 10, which may be the first floor below which (as in a basement, not shown), suitable supply quantities of rope or of other materials of various sizes or kinds may be stored conveniently and in the customary large reels or coils. On the floor 10 I provide the display stand of the invention, indicated generally at 12, which comprises a base 14 and a frame 16 surrounding a display area 18. Base 14 may be hollow and may be secured rigidly to the floor. Its top wall is provided with multiple openings which may be through guiding nipples 22; and the floor 10, directly under the base, is arranged, as by openings or a long slot, for passage of ropes 15 from the supply coils in the basement to the display stand 12.

In a preferred embodiment, the multiple openings in base 14, are arranged side by side in a single row along the base, and each opening is made to constitute a guide for a rope, whether that rope passes thence vertically upward across the display area 18, or whether it makes a rather abrupt turn, as from the right of Figure 1, on a course leading to the measuring device 20 located on the frame 16 above the display area. For the smooth running of the rope suitable guide pieces 22 may be provided, in the nature of short pieces of piping with smoothed or chamfered throats, one for each of the base openings; or a single multiple-guide piece may be employed; and the ropes 15 below the floor 10 will naturally be suitably guided from their respective locations of supply which may occupy any convenient positions.

Preferably the ropes may be led into stand 12 in a definite mutual relation, graded in succession as to size or kind.

In the illustrated embodiment of the invention, each rope extends vertically upward out of its base guide 22, across the display area 18, and, as seen from the front, disappears at the top of that area. But if it were desired that the ropes be supplied through a wall, or down through a ceiling, in reaching the display area, corresponding guides might be otherwise located suitably in relation to that area. And, for example, in the case of a wall entrance, the ropes might extend horizontally through the display area.

The up-from-below form here chosen for representation has a cross support immediately above the display area, at the rear and seen from the front, by which support the displayed portion of the rope may be suspended. This support may be a bar 24 extending across frame 16, with a smaller bar 26 close by to cooperate for holding hanger clamps 28, as seen in Figures 1-4. However, when the article suspended is a rope or something that can be held by a friction grip I prefer the simpler suspending means of Figures 5 and 7, which may be merely an angle bar 24^a notched in V-shape as at 28^a. The notch, being of suitable angle, will hold any of the various sizes of rope; yet the rope may be easily disengaged.

In cases where the separable hanger clamps 28 of Figures 1-4 are used, each clamp may have a pair of rope-gripping jaws hinged together as at 29, with the two springs 31, 33 tending to close the jaws, and with handles 35 by which the jaws may be opened. A clamp 28 having been slipped over the end of a rope, with its jaws open, and the jaws then allowed to close into rope engagement,

one of the jaw handles 35 may be dropped between the bars 24, 26, and the rope will then rest on bar 26 as seen in Figure 3. Any rope may be easily lifted out and its clamp removed.

The stand 12 carries a rope measuring mechanism 20 in coacting relation to the base guides 22. Preferably it will be above the display area 18 and behind the face plate 30, or in any desired relation to the ropes on display. The measuring mechanism may be of any suitable sort, that illustrated being a known variety in which an indicating wheel or disk 32 is rotated in association with a fixed pointer 34. Wheel 32 has a toothed periphery in mesh with gear 36 on shaft 38, and is rotated by means of a wheel 40 on the shaft 38 over whose periphery the rope to be measured is drawn, while a floating wheel, 42, with grooved periphery, coacts to hold the rope in frictional driving engagement with wheel 40.

Any one of the displayed ropes may be selected and be withdrawn from its suspending support 24, 26 or 24^a, 28^a, for examination or for draft. In the latter case the rope end may be threaded between the wheels 40, 42 of the measuring apparatus, with the rope engaging around the periphery of wheel 40, for the measuring. As the rope is drawn through mechanism 20 the indicating wheel 32 and fixed pointer 34 show the length of rope passing the mechanism. After a desired length has been drawn, suitable bindings may be applied, one in advance of and one in rear of the point where the rope is to be cut. By a suitable cutter, indicated at 44, the cut may be effected between the bindings, which then serve to prevent unwinding of the rope at each cut end. The portion of rope which was on display, and which may have been examined and selected by a customer, is included in the piece measured and cut for that customer. On the one hand he actually gets the rope of his selection, with no possibility of error or substitution; and on the other hand the device makes it probable that the customer has had a wider range of choice, for the concentration of the display coupled with the banishment of the supply encourages the dealer to carry and display a larger stock of varieties.

After the cutting, the hanger clamp 28 being still off, the rope from which the piece has been cut may now be returned to its proper display position in the stand, either by inserting its end in a V-notch 28^a, or by re-applying clamp 28 and hanging it in support 24, 26.

Each of the base guides 22 serves to guide a rope to its display stretch and to maintain that stretch in proper relation to adjacent ropes. Also each said guide performs a guiding function for its rope on the temporary course it may take through the measuring apparatus. Furthermore, the coordination of the measuring device with multiple ropes displayed in spaced relation all in the same vertical plane, permitting any one of the multiplicity of ropes to reach the measuring apparatus through a straight course from its base guide 22, eliminates possibility of kinking, and ensures a free and easy advancement of rope from the supply coil stored in the basement or in any other desired place where it will not be taking up valuable floor space, or be detracting from the general appearance of a show room or the like.

If a guide 46 be provided adjacent to the wheel 40 of the measuring apparatus, this will guide a rope from one of the base guides 22 to wheel 40 and hold it thereon.

In Figures 1 and 2 each suspending clamp 28 provides a secure removable fastening for holding a rope in desired display relation, extending loosely through its base guide 22 and maintained taut by its own weight, with any surplus, inadvertently drawn through the base guide, returnable through the guide 22. With the notch suspension I prefer to take the weight of the rope below the guide 22 off of the suspending means 24^a, 28^a. To this end, and also to ensure against a rope being allowed inadvertently to drop through the base, I may provide the rope engaging dogs 48 in the base, as seen in Figures 5 and 6. Each of these dogs is pivoted as at 50 and extends at an upward incline into engagement with its rope, through a vertical slot as at 52 in guide 22^a. The dog 48 permits upward travel of a rope, but prevents downward travel thereof by pinching or biting into the rope whenever downward travel of the rope is attempted. Thus these base grips sustain the weight of the rope below, leaving only display portions to be sustained by the upper suspension support 24^a, 28^a.

The base 14 preferably rises an appreciable distance above the floor, thereby providing a face area suitable for bearing advertising or informative data, and adapted also to protect the portions

of the ropes adjacent to the floor against becoming soiled by dirt and water when the floor is being swept or mopped.

While herein described as it may be used for rope, the apparatus is useful for other linear articles, as for example other varieties of cordage products, upholstery or curtain cord or other cords or cables, insulated or other electrical wires, rubber tubing, garden hose, etc.

I claim as my invention:

A display and dispensing device comprising the combination of side uprights, a multiple guide base joining them; a horizontal rail also joining them but located at a display distance above said base, thereby to provide an intervening display area; a multiplicity of individual grip elements removably supported, in side by side relation, on said rail; said base guide being adapted to guide a multiplicity of ropes or the like coming up from below into said display area, and each said grip element being adapted to engage detachably an end portion of one of said ropes for suspending it in parallel relation to other ropes within said area; and there being at the base a plate surrounding the ropes protectively to a low elevation above the floor.

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