June 15, 1937. S. IOCCA 2,084,144

CLOTH LAYING DEVICE

Filed Sept. 18, 1936

FIG. 1.

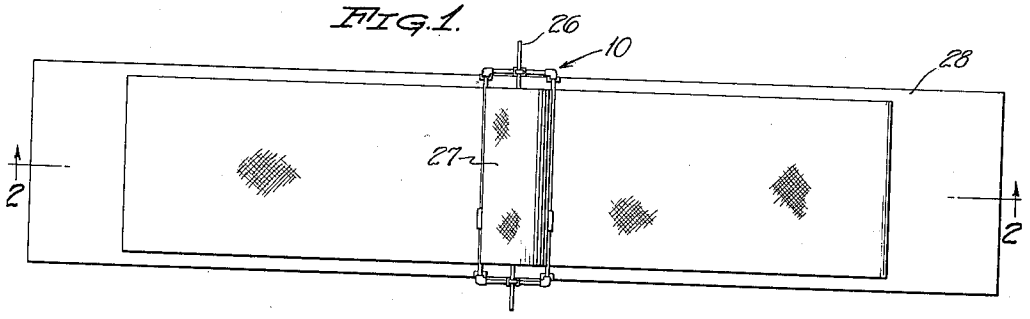


FIG. 2.

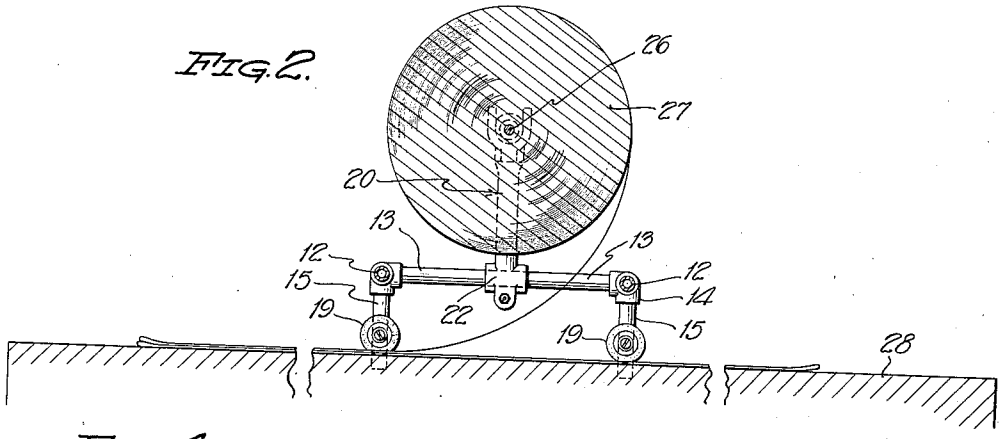


FIG. 4.

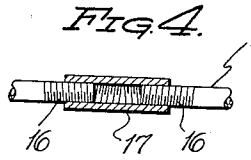


FIG. 3.

WITNESS:

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CLOTH LAYING DEVICE

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3 Claims. (Cl. 270—31)

This invention relates to improvements in cloth laying devices.

In clothing factories, it is the practice to lay out a bolt of cloth or lining material in plys upon a relatively long table in order that the pattern may be applied to the uppermost ply of material to facilitate cutting out of a plurality of pieces during a single cutting operation of the cutting machine. To lay out the length of material by hand from the bolt of cloth requires skill by the operator to evenly position the folded plys of material one upon the other, and furthermore considerable time is required for such hand operation. It is therefore one of the main features of this invention to provide a cloth laying device which is mounted upon a cloth lay out table, and by which a bolt of cloth may be supported in an elevated position for back and forth movement over the length of the table to enable paying out of the cloth into evenly stacked folded plys or layers therealong.

Another feature of the invention is to provide a cloth laying device which is guided during its travel back and forth by the longitudinal side edges of the table top to insure accurate stacking of the plys of material as they are paid out from the bolt.

A further feature of the invention is the provision of a cloth laying device which may be rolled back and forth over a lay out table during a cloth laying operation and which may be freely lifted therefrom to be out of the way during a cloth cutting operation, or when the table is needed for other purposes.

A still further feature resides in a cloth laying device which is simple of construction, inexpensive of manufacture, and relatively light in weight so as not to be burdened upon an operator during manual pushing of the same when in use.

With these and other objects in view, the invention resides in the certain novel construction, combination and arrangement of parts, the essential features of which are hereinafter fully described, are particularly pointed out in the appended claims, and are illustrated in the accompanying drawing, in which:

Figure 1 is a top plan view of a cloth lay out table with my cloth laying device in operative position thereon.

Figure 2 is an enlarged vertical sectional view on the line 2—2 of Figure 1.

Figure 3 is a perspective view of the cloth laying device with a bolt of cloth supported thereby.

Figure 4 is an enlarged detail sectional view through the adjustable connection between the two frame sections.

Referring to the drawing by reference characters, the numeral 10 designates my improved cloth laying device in its entirety, and which includes a rectangular shaped frame 11. The frame 11 is constructed of length of pipe and includes parallel side rails 12—12, end rails 13—13, and corner pipe couplings 14. The couplings 14 are of the type having three nipples, one nipple of which extends downwardly, and to each of which a depending leg 15 is connected. The rectangular shaped frame 11 is formed of two sections by constructing the side rails 12—12 of two lengths of pipe, the adjacent ends of the lengths of pipe being reversely screw threaded as at 16, and to which a knurled sleeve 17 is threadedly connected. The sleeve 17 acts in the capacity of a turn buckle, and its bore is reversely threaded as shown in Figure 4 of the drawing to engage the reversely threaded ends of the sections of the side rails. It will be seen that by turning the knurled sleeve 17, the length of the frame 11 may be extended or reduced.

Journaled on stub shafts 18 extending inwardly from the legs 15, are rollers 19, which may be in the form of ball bearing rollers having rubber treads. The traction surface of the rollers 19 is disposed inwardly of the bottom ends of the legs 15 for a purpose to be hereinafter explained.

Supported by the end rails 13—13 are opposed upstanding bearings 20—20. Each bearing 20 comprises an upstanding post 21, the lower end of which is provided with a clamp 22, which clamp is securely fastened to its respective end rails 13. Carried by the top of the post 21 is a U-shaped bearing or seat 23, the said bearing being formed of channel material so as to provide a groove 24 in the bearing for receiving a bearing collar 25 carried by a shaft 26. The shaft 26 rotatably supports the bolt of cloth or lining material to be laid out and the same is designated 27 in the drawing.

In practice, the lay out device 10 is positioned upon the flat top of an elongated lay out table 28, the sides of which are parallel as shown in Figure 1 of the drawing. The device 10 is positioned upon the table with the bottom ends of the depending legs 15 overlapping the side edges of the longitudinal sides of the table 28, the rollers 19 engaging the top surface of the table adjacent the longitudinal edges. By reason of the adjustable coupling 17, the frame may be adjusted so as to permit free movement of the legs 15 with respect to the adjacent sides of the table

top. With the lay out device 10 thus positioned upon the table, the bolt of cloth 27 is supported upon the upstanding bearings 20 as shown in Figure 3 of the drawing. In laying out the bolt of cloth, the device 10 is moved toward one end of the table and the free end of the cloth is placed thereon, after which an operator merely pushes the device toward the opposite end of the table, and upon completion of such movement of the device, a single ply is deposited upon the table. It will thus be seen that by moving the device back and forward, lengthwise to the table that the material from the bolt of cloth 27 will automatically pay out and deposit folded plys or layers in even stacked arrangement as illustrated in Figure 2. By reason of the legs 15 engaging opposite longitudinal sides of the table top, an accurate stacking of the plys or layers will be produced.

By reason of the light construction of the cloth laying device, the same may be readily lifted from the table when desired, and replaced thereon for use. Also, by constructing the frame of standard piping, it is possible to manufacture the device at a relatively low cost.

While I have shown and described what I consider to be the most practical embodiment of my invention, I wish it to be understood that certain changes and alterations as come within the scope of the appended claims may be resorted to if desired.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent of the United States, is:—

1. A cloth laying device comprising a rectangular shaped frame, legs depending from the corners of said frame, rollers mounted on the inner sides of said legs, opposed posts rising from the ends of said frame, U-shaped channel bearings carried by the top of said posts, a shaft on which a bolt of cloth is adapted to be mounted, and bearing collars carried by said shaft and seated in the respective U-shaped channel bearings.

2. A cloth laying device comprising a rectangular shape frame, said frame including a pair of U-shaped frame sections, adjustable coupling means connecting the leg portions of said frame sections together, legs extending downwardly from the corners of said frame sections, rollers carried by the lower ends of said legs, and bearing members rising upwardly from the bight portions of said frame sections and disposed in transverse alinement with each other.

3. A cloth laying device comprising a rectangular shape frame, said frame including a pair of U-shaped pipe frame sections, the leg portions of said U-shaped pipe frame sections being disposed in axial alinement and having their free ends reversely screw threaded, coupling sleeve members threadedly connecting the threaded free ends of said leg portions together, legs secured to and depending from the corners of said U-shaped pipe frame sections, traction rollers at the lower ends of said legs, and bearing members rising upwardly from the bight portions of said frame sections and disposed in transverse alinement for rotatably supporting a roll of cloth to be layed in lengths upon a lay-out table.

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