

Aug. 2, 1938.

G. M. G. MAKIN

2,125,796

CLOTH REEL

Filed Dec. 21, 1936

2 Sheets-Sheet 1

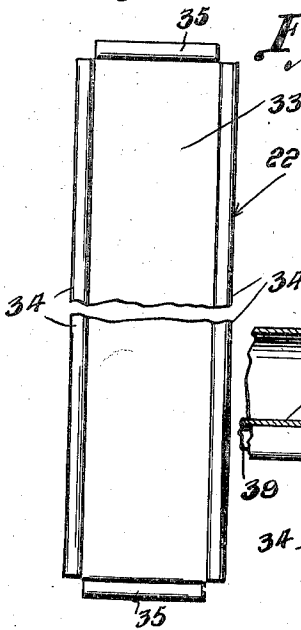
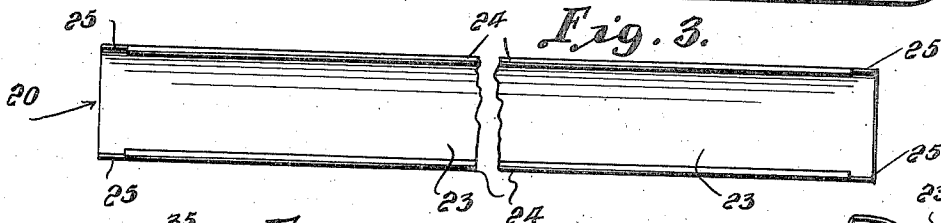
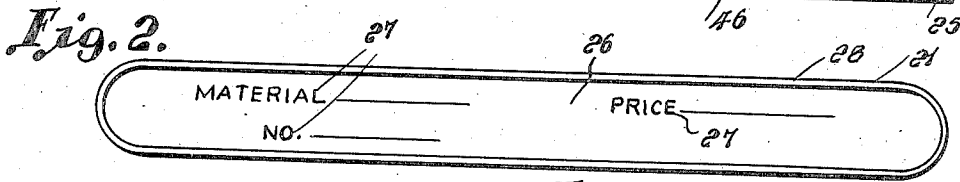
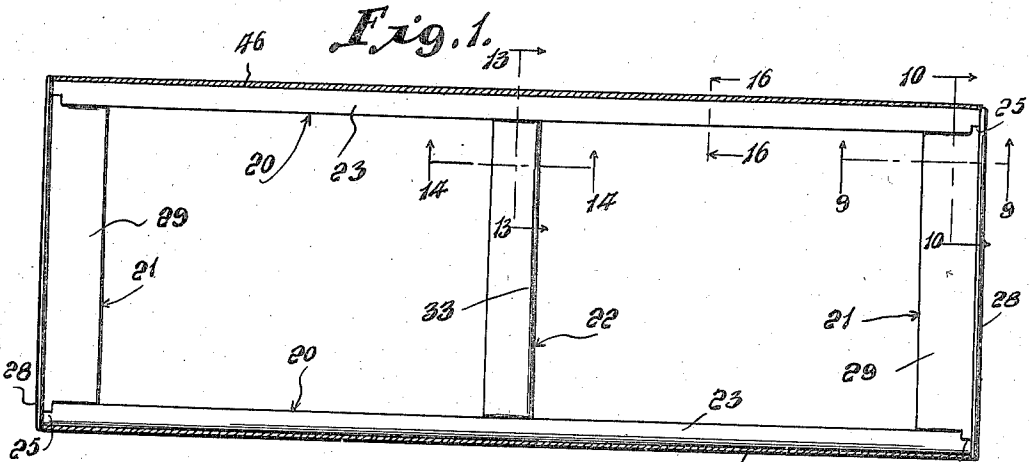
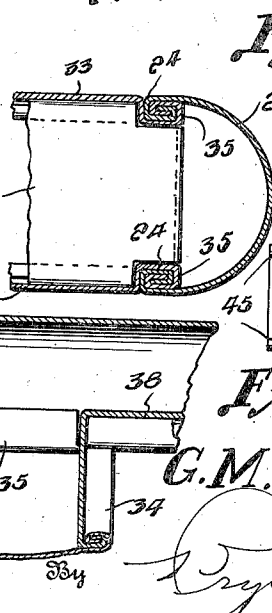


Fig. 6.



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2 Sheets-Sheet 2

Fig. 5.

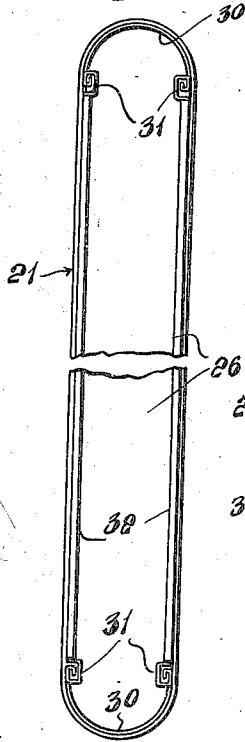


Fig. 6.

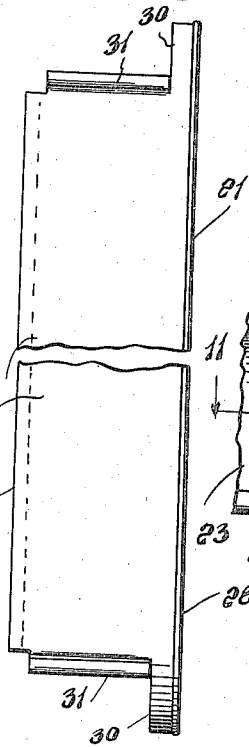


Fig. 7.

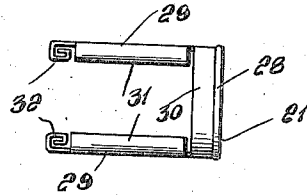


Fig. 9.

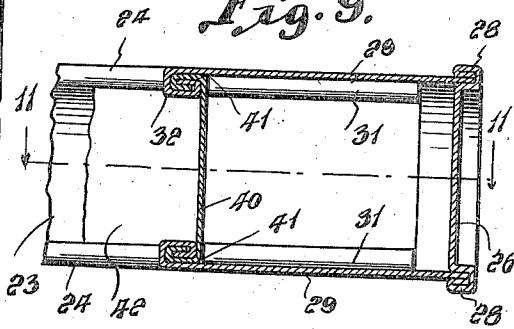


Fig. 10.

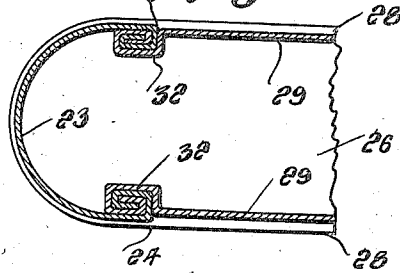


Fig. 11.

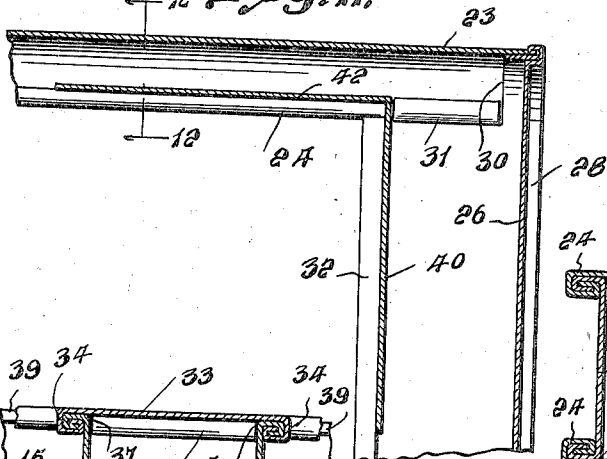


Fig. 12.

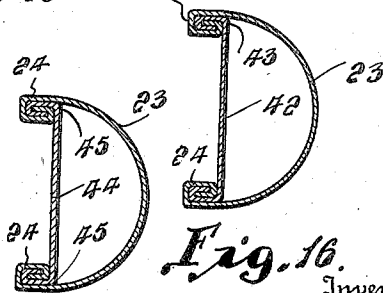
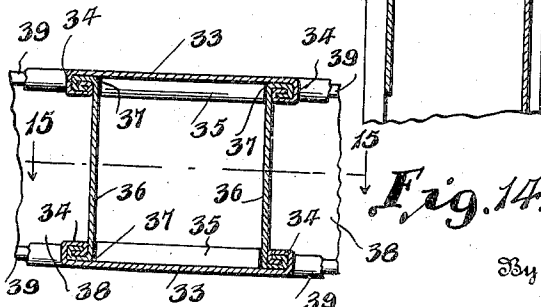


Fig. 16.

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Fig. 14.



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UNITED STATES PATENT OFFICE

2,125,796

CLOTH REEL

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Application December 21, 1936, Serial No. 117,038

5 Claims. (Cl. 206—50)

This invention relates to certain new and useful improvements in cloth reels.

The primary object of the invention is to provide a cloth reel of the type employed in sales rooms for the display of cloth, the cloth being wound on the reel after the manufacture thereof in a textile mill.

A further object of the invention is to provide a cloth reel of the foregoing character that is formed of sheet metal of relatively thin gage, but constructed to provide sufficient rigidity and strength and to possess inherent advantages over similar reels of wooden construction.

With the above and other objects in view that will become apparent as the nature of the invention is better understood, the same consists in the novel form, combination and arrangement of parts hereinafter more fully described, shown in the accompanying drawings and claimed.

In the drawings:—

Figure 1 is a plan view of a cloth reel constructed in accordance with the present invention, the paper wrapper therefor being shown in section;

Figure 2 is an end elevational view showing an area for the display of data identifying the cloth;

Figure 3 is an inner side elevational view, partly broken away of a side rail of the cloth reel;

Figure 4 is an end elevational view of the side rail showing the rolled edges for the sliding reception of reinforcing strips;

Figure 5 is an inner side elevational view of the end rail of the reel detached from the reel frame;

Figure 6 is a side elevational view of the end rail;

Figure 7 is an end elevational view of the end rail;

Figure 8 is a fragmentary elevational view of one side of an intermediate brace bar;

Figure 9 is a detail sectional view taken on line 9—9 of Figure 1, showing the corner connection between the side and end rails of the reel;

Figure 10 is a detail sectional view taken on line 10—10 of Figure 1, showing the side rail of arcuate formation in cross-section and its slidable interlocking connection with the end rail;

Figure 11 is a detail sectional view taken on line 11—11 of Figure 9, showing an angle corner brace between a side and end rail;

Figure 12 is a detail sectional view taken on

line 12—12 of Figure 11, showing a part of a side rail and a corner brace;

Figure 13 is a detail sectional view taken on line 13—13 of Figure 1, showing the connection between the side rail and the intermediate cross brace bar;

Figure 14 is a detail sectional view taken on line 14—14 of Figure 1;

Figure 15 is a sectional view taken on line 15—15 of Figure 14;

Figure 16 is a cross-sectional view taken on line 16—16 of Figure 1, showing a reinforcing strip between the free edges of the transversely curved side rail; and

Figure 17 is a plan view of one of the reinforcing strips shown in Figure 16.

As shown in Fig. 1 of the drawings, the cloth reel is of skeleton formation, being constructed of relatively thin gage metal and comprises side rails 20, end rails 21 and an intermediate transversely extending brace rail 22.

One of the side rails 20 is shown in detail in Figs. 3 and 4 and being specifically designated by the reference character 23 is of arcuate formation in cross-section with an open rolled seam 24 at each longitudinal side edge thereof that terminates in proximity of the end rail 21 as shown at 25.

An end rail 21 is shown in detail in Figs. 5 to 7 and as shown in Fig. 2, the same comprises an outer end wall 26 that may be provided with suitable data 27 identifying the cloth wound on the reel. The opposite ends of the end wall are rounded and the edges of the end wall are provided with a continuously rolled seam 28 in which adjacent edges of a pair of side walls 29 are anchored, the ends of the side walls being cut-away as shown in Fig. 6 to provide a relatively narrow arcuate flange 30 at each end of the end rail 21. The straight edges at each end of the side walls 29 of the end rail are provided with rolled seams 31, while a rolled seam 32 is formed at the other side edges of the side walls 29.

The intermediate transversely extending brace rail 22 as shown in Figs. 8 and 14 comprises a pair of rectangular plates 33 having a rolled seam 34 at each side edge thereof and a rolled seam 35 at each end.

In assembling the several rails comprising the cloth reel, a pair of angle braces is associated with each end of the intermediate brace rail 22, each angle brace including a leg 36 having a rolled seam 37 at each side edge thereof for slidable interlocking engagement with the asso-

ciated seams 34 of the rail plates 33. The other legs 38 of the angle braces are respectively directed outwardly and laterally of the intermediate brace rail 22. Rolled seams 39 are formed on the opposite sides of the leg 38 of the angle brace, and the oppositely extending and aligned legs 38 of a pair of angle braces at each end of the intermediate brace rail 22 are moved into sliding interlocking engagement with the side edge seams 24 on the side rails 23 to position the intermediate brace rail 22 intermediate the ends of the side rails 20. It will be understood that the rolled seams 35 carried by the ends of the brace plates 33 as shown in Figs. 8 and 14 are also slidably interlocked with the side rail seams 24.

Angle braces also extend between opposite ends of the end rails 21 and adjacent ends of the side rails 20, one of these angle braces being shown in Fig. 11 as comprising a leg 40 that is shown in Fig. 9 as having a rolled seam 41 at each side edge that slidably interlocks with the seams 32 on the side walls 29 of the end rails. The other leg 42 of the angle brace is provided with a rolled seam 43 at each side edge as shown in Fig. 12 that has interlocking sliding engagement with the side edge seams 24 on the side rails 23, the ends of the seams 24 moving into sliding interlocking engagement with the seams 31 on the ends of the side walls 29 of the end rail while the terminal ends of the side rails 23 move into abutting engagement with the seam 28 at the end of the end rail to overlie the flange 30 as shown in Fig. 11.

As shown in Figs. 16 and 17, bracing strips 44 having rolled edges 45 are slidably interlocked with the edge seams 24 on the side rails 23 between adjacent ends of legs 38 and 42 of the angle braces, but if desired, the angle braces may be of such length as to completely close the inner open sides of the rails.

After all of the parts are assembled, the several seams are rolled into a flat condition for locking the parts together for the rigid assembly of the parts to be retained against relative movement. If desired, desired seams may be soldered to add to the rigidity of the device. The paper or other covering 46 is provided for the reel as shown in Fig. 1 and the paper covering or sheathing provides a winding surface for the cloth.

From the above detailed description of the invention, it is believed that the construction and manufacture thereof will at once be apparent, and while there is herein shown and described the preferred embodiment of the invention, it is

nevertheless to be understood that minor changes may be made therein without departing from the spirit and scope of the invention as claimed.

I claim:—

1. In a cloth reel, a skeleton frame including side and end rails and an intermediate transversely extending brace rail, said rails being constructed of sheet metal, a slidable interlocking connection between the rails, the side rails being substantially semi-circular in cross-section with the open sides facing inwardly and brace strips between the edges of the open sides having an interlocking connection at their edges with the rails.

2. In a cloth reel, a skeleton frame including side and end rails and an intermediate transversely extending brace rail, said rails being constructed of sheet metal, a slidable interlocking connection between the rails, and angle braces between the corners of the side, end and brace rails having an interlocking connection at their edges with the rails.

3. In a cloth reel, a skeleton frame including side and end rails and an intermediate transversely extending brace rail, said rails being constructed of sheet metal, a slidable interlocking connection between the rails, the side rails being substantially semi-circular in cross-section with the open sides facing inwardly, brace strips between the edges of the open sides having an interlocking connection at their edges with the rails, and angle braces between the corners of the side, end and brace rails having an interlocking connection at their edges with the rails.

4. In a cloth reel, a skeleton frame including side and end rails, and an intermediate transversely extending brace rail, said rails being constructed of sheet metal, a slidable interlocking connection between the rails, and angle braces between the corners of the side, end and brace rails having a slidable interlocking connection therewith.

5. In a cloth reel, a skeleton frame including side and end rails and an intermediate transversely extending brace rail, said rails being constructed of sheet metal, a slidable interlocking connection between the rails, the side rails being substantially semi-circular in cross-section with the open sides facing inwardly, brace strips between the edges of the open sides having an interlocking connection at their edges with the rails, angle braces between the corners of the side, end and brace rails having a slidable interlocking connection therewith.

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