

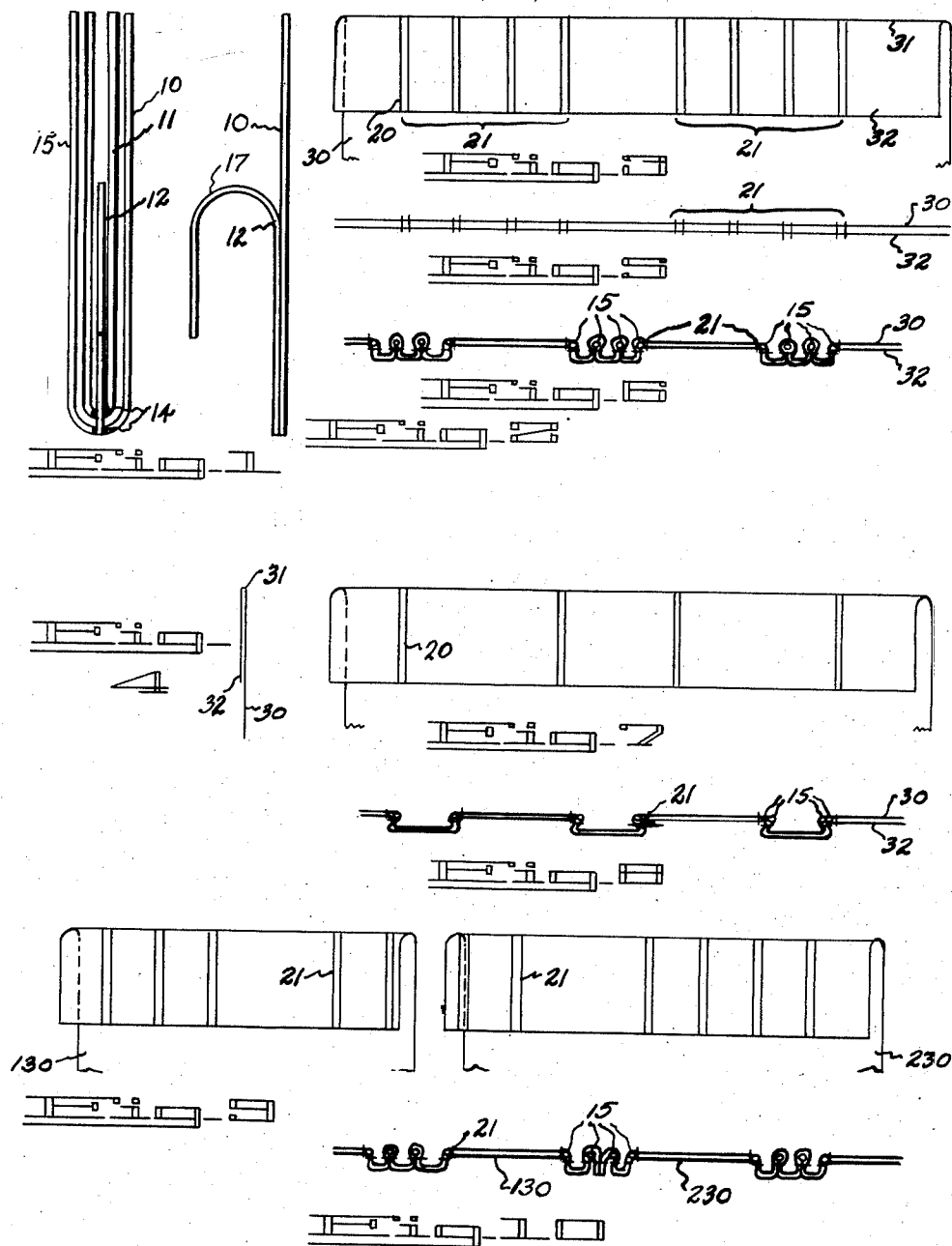
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PLEATING DEVICE

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PLEATING DEVICE

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2 Claims. (Cl. 160-348)

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Be it known that the undersigned has invented a new and useful pleating device of which the following is a specification.

In the making of drapes, the task of forming pleats and of hanging the drapes so that satisfactory pleating and hanging of the drapes will be assured is quite difficult, often beyond the capacity of the inexperienced. In this application there is disclosed a device for pleating drapes and for hanging them, useful in the manner described herein to enable even the most inexperienced person to obtain satisfactory results.

For an understanding of the device herein disclosed and its manner of use, reference should be had to the appended drawing and to the following specification.

In this drawing:

Fig. 1 is a view of a pleating device, full size.

Fig. 2 is a side view as if from the right of Fig. 1.

Fig. 3 is a quarter-scale view of a drape formed for use with the pleating device of Fig. 1.

Fig. 4 is a diagrammatic right edge view of the drape of Fig. 3.

Fig. 5 is a full-scale diagrammatic view of the drape formed for pleating.

Fig. 6 is a double-scale diagrammatic view of the drape pleated in a triple or French pleat.

Fig. 7 shows a drape formed for box pleating.

Fig. 8 shows the drape of Fig. 7 box pleated.

Fig. 9 shows two drapes formed for being pleated and joined.

Fig. 10 shows the drapes of Fig. 9 pleated and joined.

The pleating device hereof includes three pieces of wire, referenced 10, 11, and 12, which are formed as shown in Figs. 1 and 2 and soldered together by solder at two points 14 to form a unitary pleater. The lower part of the device may be regarded as a base and the four upwardly projecting portions 15 may be regarded as the four fingers of the pleater. Each finger is of fine wire. The wire 12 is bent, as shown, to provide a hook 17 well below the upper ends of fingers 15.

The pleater is shown full scale, and is $\frac{1}{2}$ " wide and $3\frac{1}{2}$ " long, and the fingers are spaced $\frac{1}{8}$ ", $\frac{1}{4}$ ", and $\frac{1}{8}$ ", respectively.

The wires are of springy material so that the fingers, which are long, tend to retain their predetermined shape and spacing, as shown in Fig. 1, and to return thereto if sprung away.

The use of the pleater herein disclosed will now be described, with reference particularly to Figs. 3-10.

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There is provided for use with the pleater a pattern in the form of a strip of paper, approximately 3" wide and 48" long. On this strip are marked lines corresponding in general to the lines 20 arranged in pairs 21, as shown on Fig. 3. This strip is a pattern strip and is used as follows:

A drape 30 has its upper end turned over at 31 to provide a loose hem 32 which may be tacked or basted down. The pattern strip, previously described, is then laid over the hem 32, whereupon stitch lines 20 are sewn on the hem 32 to secure it to the body of the drape 30, after which the paper pattern strip may be torn off the hem to leave the hem stitched to the drape proper on lines 20. These lines are closely spaced and arranged in pairs. Each pair defines a long, narrow pocket or tunnel 21 inside the hem, open at its lower end and closed at its upper end where the hem is folded over at 31. The several pairs 20 are spaced on a spacing considerably greater than the spacing of the lines of a pair, and the several groups shown are spaced apart an even greater space. Thus, for a 3" hem, the spacing of a pair is $\frac{1}{4}$ ", the spacing between pairs is $1\frac{1}{2}$ " and the spacing between groups is 4", by way of example.

Thereupon, the four fingers of a pleater are worked into the four pockets or tunnels 21 formed by the pairs of stitch lines 20, with the result that at each group of four pockets there is formed a triple or French pleat, as shown in Fig. 6.

Since the several pleaters on a drape are identical, the groups of pleats of a drape will likewise be identical, assuming, of course, that the stitch lines were formed according to the pattern provided and above described. Likewise, since the several pleaters on a drape are identical, the hanger hooks 17 will be located properly and identically so that the drape will hang evenly. These hanger hooks may be used for hanging the drape on the sliders of traverse rods or directly over a drape rod, below the upper edge of the drape and thereby concealed.

Figs. 7-8 show the formation of a box pleat. The outer two tunnels 21 of each group are utilized, with the inner two tunnels 21 of each group being omitted or not utilized. The two outer fingers of the pleater will be squeezed together and used in pairs, two fingers to a loop or tunnel 21, to define the box pleat.

Figs. 9-10 show the joining and pleating of two drapes, 130 and 230, utilizing tunnels 21 formed by lines 20, with two fingers and two tunnels to a drape.

Now having described the pleater herein dis-

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closed and its manner of use, reference should be had to the claims which follow.

I claim:

1. For use with a drape having at its upper edge a plurality of vertically extending horizontally spaced parallel tunnels or loops closed at their upper ends and open at their lower ends, a pleater and hanger device insertable upwardly into said tunnels through their open lower ends, said device having a drape hanging hook and four coplanar closely and horizontally spaced upwardly projecting elongated vertical pleating fingers having blunted upper ends, all four of said fingers being of substantially the same length and extending the full lengths of said tunnels, and projecting well above the hook and being spaced two to each side of the hook, said fingers and hook being interconnected at their lower ends, with all four fingers coming together at their lower ends closer than at their upper ends for pinching the pleats together at the lower ends of the tunnels, the hanger and pleater being constructed of wire and being formed and dimensioned to have sufficient resilience at the lower ends of the fingers to enable all fingers to be moved manually and easily towards or away from one another to facilitate insertion of the fingers into said tunnels and to enable the intermediate fingers to be squeezed manually towards and closely adjacent the outermost fingers for a considerable distance along such fingers, the fingers having an inherent tendency to return to their original spacing after being manually squeezed together or spread apart.

2. For use with a drape having at its upper edge a plurality of vertically extending horizontally spaced parallel tunnels or loops closed at their upper ends and open at their lower ends, a pleater and hanger device insertable upwardly into said tunnels through their open lower ends, said device having a drape hanging hook and four coplanar closely and horizontally spaced upwardly

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projecting elongated vertical pleating fingers having blunted upper ends, all four of said fingers being of substantially the same length and extending the full lengths of said tunnels, and projecting well above the hook and being spaced two to each side of the hook, said fingers and hook being interconnected at their lower ends, with all four fingers coming together at their lower ends closer than at their upper ends for pinching the pleats together at the lower ends of the tunnels, the hanger and pleater being constructed of wire and being formed and dimensioned to have sufficient resilience at the lower ends of the fingers to enable all fingers to be moved manually and easily towards or away from one another to facilitate insertion of the fingers into said tunnels and to enable the intermediate fingers to be squeezed manually towards and closely adjacent the outermost fingers for a considerable distance along such fingers, the fingers having an inherent tendency to return to their original spacing after being manually squeezed together or spread apart, the outer pair of fingers being the legs of a U-shaped piece of wire, the inner pair of fingers also being the legs of a second U-shaped piece of wire nested coplanar with and inside the first piece of wire, and the hook being an inverted third U-shaped piece of wire whose plane is normal to the plane of the first two pieces of wire, all three pieces being joined at the nested bights of the first two and at the end of one leg of the third piece.

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The following references are of record in the file of this patent:

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