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WEBBING DISPENSING APPARATUS

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2 Sheets-Sheet 1

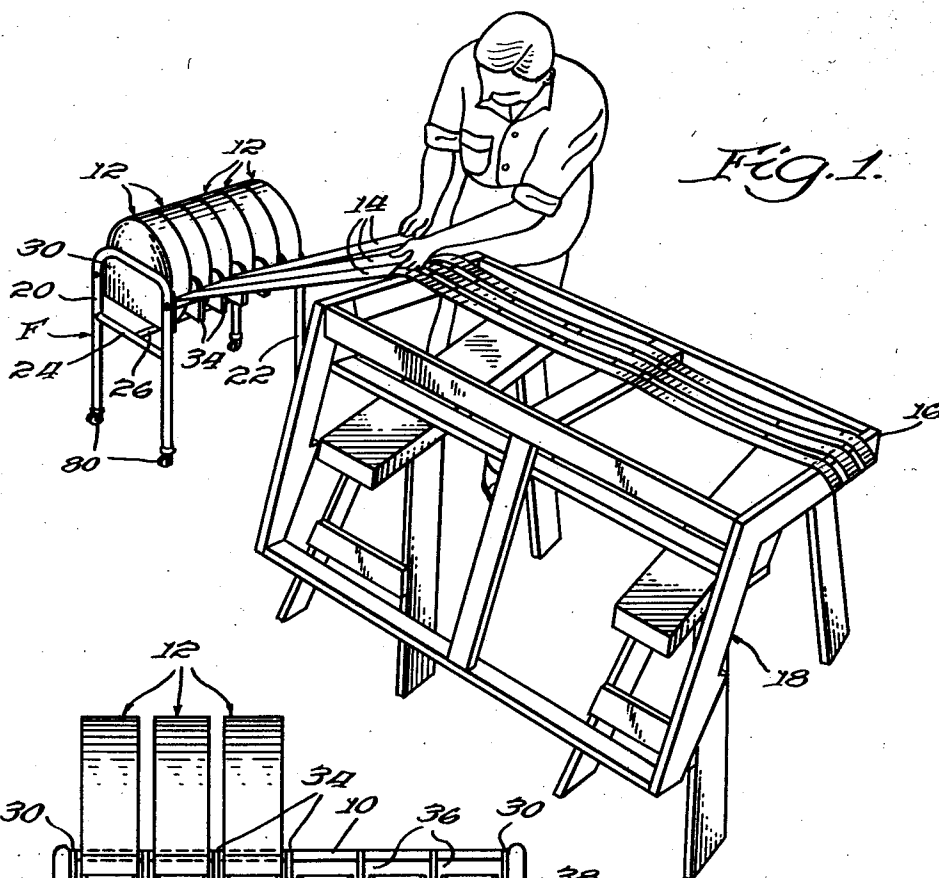
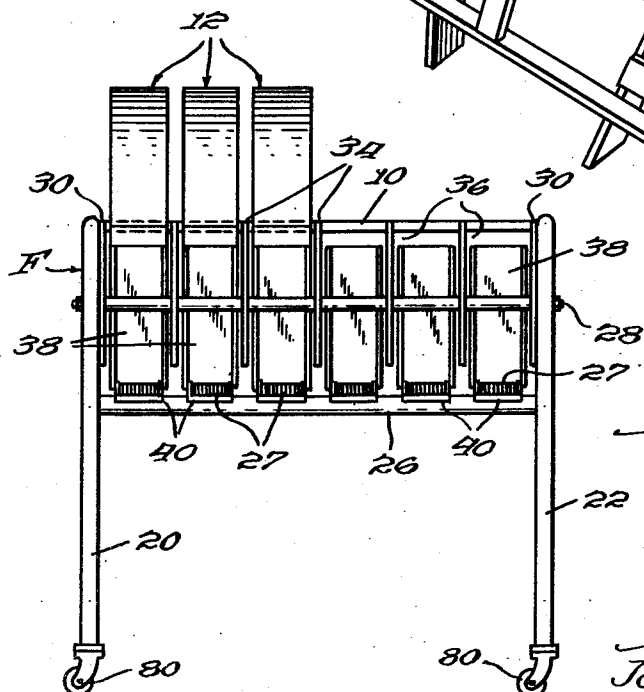


Fig. 2.

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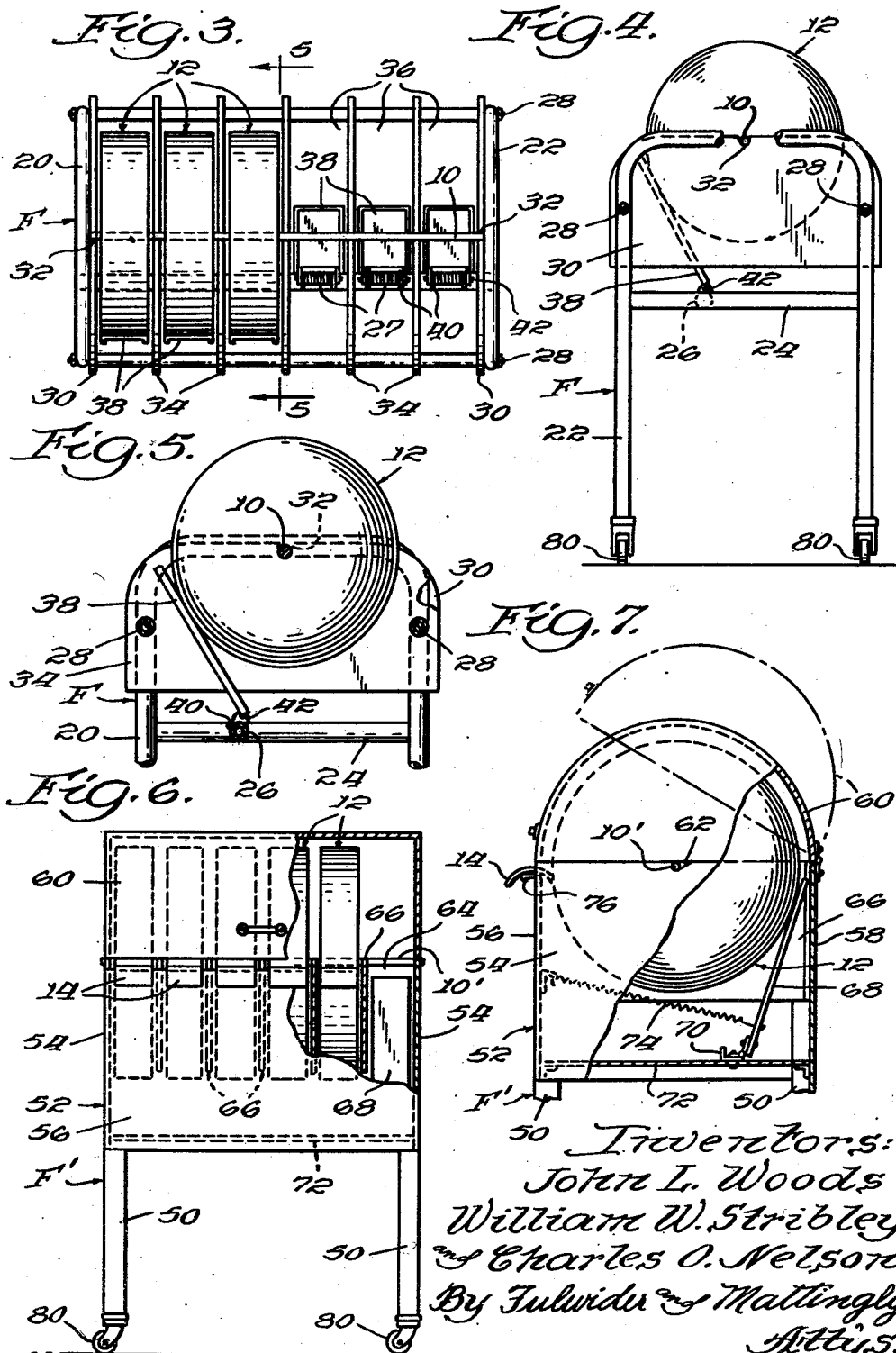
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WEBBING DISPENSING APPARATUS

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1 Claim. (Cl. 242—55.3)

The present invention relates generally to the field of upholstering, and more particularly to a novel device for dispensing fabric webbing utilized extensively in upholstering certain articles of furniture.

In upholstering articles of furniture such as chairs and couches, it is an almost universal practice to apply strips of fabric webbing to the frame thereof, which webbing serves as a base for upholstering materials subsequently applied thereto. Such webbing is generally sold in roll form consisting of a roll containing several yards of webbing material wrapped about itself. In utilizing the webbing, one or more rolls are normally disposed on the floor adjacent the furniture frame being upholstered and the free end or ends of such rolls are raised upwardly to be stretched over the frame whereby the webbing may be secured thereto.

This practice involves several disadvantages, the chief of which results from the tendency of the strips of webbing to become entangled whereby the upholsterer must periodically stop his work so as to untangle the strips. Another disadvantage is that the webbing rolls pick up dirt and dust from the floor whereby the upholstering work cannot be conducted in a proper atmosphere of cleanliness. Yet another disadvantage is the waste of webbing material which occurs where the webbing is cut into strips of a length deemed proper for the workpiece before such strips are applied thereto.

It is a major object of the present invention to provide novel webbing dispensing apparatus which will permit the upholstering operation to take place in a minimum amount of time and with a minimum amount of effort on the part of the upholsterer.

It is a further object of the present invention to provide webbing dispensing apparatus which will allow the upholstering operation to take place in an atmosphere of complete cleanliness.

It is a more particular object of the present invention to provide webbing dispensing apparatus which is capable of supporting a plurality of webbing rolls adjacent the workpiece whereby the strips of webbing may be unrolled from the main body of the rolls and readily affixed to the workpiece without the formation of slack in the main body of the roll, and without causing the upholsterer to be distracted from the upholstering operation.

A further object of the present invention is to provide webbing dispensing apparatus which is simple of design and rugged of construction whereby it may have a long service life.

Another object of the present invention is to provide webbing dispensing apparatus which may be fabricated of readily obtainable materials and by simple manufacturing processes whereby it may be retailed at a comparatively low cost.

It is yet a further object of the present invention to furnish webbing dispensing apparatus which may be readily moved from one position adjacent to the workpiece to another position whereby the upholstering operation may be considerably simplified.

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Yet an additional object of the present invention is to supply webbing dispensing apparatus capable of supporting a plurality of webbing rolls with their main bodies completely enclosed to avoid the likelihood of such webbing becoming soiled.

Other objects and advantages of the present invention will become apparent from the following detailed description of two forms thereof, taken in conjunction with the appended drawings, wherein:

Figure 1 is a general perspective view showing webbing dispensing apparatus constructed in accordance with the present invention, and the manner wherein it is utilized during an upholstering operation;

Figure 2 is a side view of said webbing dispensing apparatus;

Figure 3 is a top plan view of said webbing dispensing apparatus;

Figure 4 is an end view of said webbing dispensing apparatus;

Figure 5 is a vertical sectional view taken on line 5—5 of Figure 3;

Figure 6 is a side view of an alternate form of webbing dispensing apparatus embodying the present invention; and

Figure 7 is an end view partly broken away in section of the webbing dispensing apparatus disclosed in Figure 6.

Referring now to the drawings, and more particularly to Figures 1 through 5 thereof, the preferred form of webbing dispensing apparatus embodying the present invention broadly comprises a frame F mounting a horizontal shaft 10, which shaft is adapted to coaxially rotatably receive a plurality of rolls of webbing 12 whereby the free ends 14 thereof may be unrolled therefrom and affixed to the frame 16 of an article of furniture 18.

More particularly, the frame F will comprise a pair of horizontally spaced, inverted, generally U-shaped frame members 20 and 22, each frame member including a horizontal spacer 24 interconnecting the intermediate portion of each vertical leg thereof; the mid-portions of the spacers 24 being interconnected by a horizontal crosspiece 26. The frame members 20 and 22 are also shown as being interconnected by means of a pair of horizontal support rods 28. Secured to the inner sides of each frame member is an end plate 30, which plates are each formed with a slot or notch 32 adapted to receive the ends of shaft 10. The rods 28 mount a plurality of vertical plates 34 where there will be defined separate compartments 36.

In order to load the shaft 10 with rolls of webbing the shaft may be lifted from within the notches 32 whereafter the rolls may be received upon the shaft. Next, the shaft is replaced within the notches 32 with the individual webbing rolls in proper alignment to be disposed within the individual compartments 36.

It should be particularly noted that the present invention contemplates novel means for restraining the formation of slack within the main body of each roll of webbing 12 as the free end 14 is unrolled therefrom. To this end, the horizontal crosspiece 26 is seen to mount a plurality of elongated abutment elements or levers 38. These levers are pivotally connected to the crosspiece 26 for movement toward and away from the peripheries of the webbing rolls 12. The crosspiece 26 additionally mounts suitable spring means 27 adapted to resiliently bias the levers 38 toward the shaft 10 so as to cause these levers to exert a radially inwardly directed force upon the periphery of each webbing roll carried by the shaft. This force should be of sufficient magnitude to restrain the formation of slack within the main body of each roll of webbing as the free end 14 thereof is unrolled therefrom.

Preferably, the levers 38 will be secured to the crosspiece 26 by means of brackets 40 affixed to the crosspiece in vertical alignment with the webbing rolls 12. The

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lower end of each lever 38 may be pivotally connected to each bracket 40 by means of horizontal pins 42 having their ends disposed within aligned bores formed in the ears of the brackets. The preferred form of biasing means for the levers 38 will consist of a torsion spring 27 carried by each of the pins 42. The levers 38 may conveniently be formed of flat sheet metal stock.

In operation, referring to Figure 1, the free ends 14 of the webbing rolls 12 will be unrolled from the main body thereof in a plane generally normal to the longitudinal axis of the shaft 10. During this operation the intermediate portions of the levers 38 will be in engagement with the peripheries of the webbing rolls as shown clearly in Figure 5. If the springs 27 have been properly chosen with regard to their strength characteristics the levers 38 will exert sufficient radially inwardly directed force upon each webbing roll periphery as to restrain the formation of slack therein. This will result primarily from the braking action afforded by these levers with respect to the webbing rolls. By this arrangement, the upholsterer need not divert his attention from the upholstering operation in order to avoid the formation of slack within each webbing roll main body.

Referring now to Figures 6 and 7, there is shown another form of webbing dispensing apparatus embodying the present invention. In this form of the apparatus the webbing rolls 12 are adapted to be completely enclosed except for their free ends 14. With this arrangement, the webbing rolls are well protected against soilage. The frame F' of this form of the invention is seen to comprise a plurality of upstanding legs 50 and a rectangular enclosure 52 interconnecting and supporting the upper portions of the legs 50. This enclosure includes a pair of parallel side plates 54 and a pair of parallel front and rear plates 56 and 58 respectively, the latter being positioned normally to the side plates. A semi-circular cover 60 is hinged to the upper portion of the rear plate 58.

The shaft 10' of this form of the invention is adapted to be removed from within the enclosure thereof by first lifting the cover 60 to its dotted line position of Figure 7. Thereafter, the ends of this shaft may be upwardly removed from notches 62 formed at the upper mid-portion of each side plate 54. The shaft 10' may then co-axially rotatably receive the webbing rolls 12. Next, the shaft and its rolls may be lowered within the enclosure with the rolls in vertical alignment with the individual compartments 64 defined therein by the vertical spacing plates 66, as indicated in Figure 6.

In this form of the invention the slack restraining means may comprise a plurality of levers 68 pivotally connected at their lower ends to a plurality of brackets 70. Each of these brackets is shown mounted to the upper surface of a bottom plate 72 disposed between the legs 50. As shown in Figure 7, the upper portions of these levers 68 may be biased toward the shaft 10' by means of a tension spring 74.

Conveniently, the upper edge of the front plate 56 will be formed with a plurality of downwardly bent flaps 76, each flap being in alignment with one of the rolls 12. With this arrangement, the free end 14 of each roll may be guided through the opening defined by the formation of the flaps 76. As these free ends 14 are pulled outwardly by the upholsterer, the upper ends of the levers 68 will exert a radially inwardly directed force upon the periphery of each webbing roll. The tension of the

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spring 74 should be so chosen that such force will be of sufficient magnitude to restrain formation of slack in the main body of each webbing roll, as in the case of the aforescribed preferred embodiment of the present invention.

Preferably, with both forms of the invention the lower ends of the legs of the frame will mount wheel means such as casters 80 whereby the apparatus may be easily moved from one location to another during the upholstering operation. Such movement will be facilitated if the weight of the frame is kept to a minimum by the use of light, but rigid, metallic construction.

It will be apparent to those skilled in the art that various modifications and changes may be made with respect to the aforescribed construction without departing from the spirit of the invention or the scope of the following claim.

We claim:

Webbing dispensing apparatus, comprising: a pair of horizontally spaced inverted generally U-shaped frame members; wheel means on the bottom of said frame members; end plates secured to the upper portion of said frame members and formed with downwardly extending slots at their upper mid-portions; a horizontal shaft having its ends insertable within said slots, said shaft being adapted to coaxially receive a plurality of rolls of webbing whereby the free ends thereof may be unrolled therefrom in a direction substantially normal to said shaft; a pair of horizontal support rods interconnecting the upper portion of said frame members, said rods being parallel to said shaft; a plurality of spaced vertical plates mounted by said rods for defining a separate compartment for each of said rolls; a horizontal spacer interconnecting the intermediate portions of each of said frame members; a horizontal crosspiece interconnecting the mid-portions of said spacers, said crosspiece being disposed parallel to said shaft below said rolls; a plurality of brackets affixed to said crosspiece underneath each of said rolls; a lever disposed in vertical alignment with said brackets; a plurality of horizontal pins pivotally connecting each of said brackets to the lower end of said levers whereby said levers may move toward and away from the periphery of each roll in a vertical plane; and a torsion spring carried by each of said pins for resiliently biasing said levers toward said shaft so as to exert a radially inwardly directed force upon the peripheries of said rolls of sufficient magnitude to restrain the formation of slack therein as the free end of each roll is unrolled from the main body thereof.

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