United States Patent [19]

Davis

[11] **3,788,175**

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[54] **CUTTING APPARATUS**

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[52] **U.S. Cl.** **83/83,** 33/128, 83/522, 83/614, 83/649

[51] **Int. Cl.** **B26d 7/06**

[58] **Field of Search** 83/649, 650, 614, 522, 83; 33/128

[56] **References Cited**

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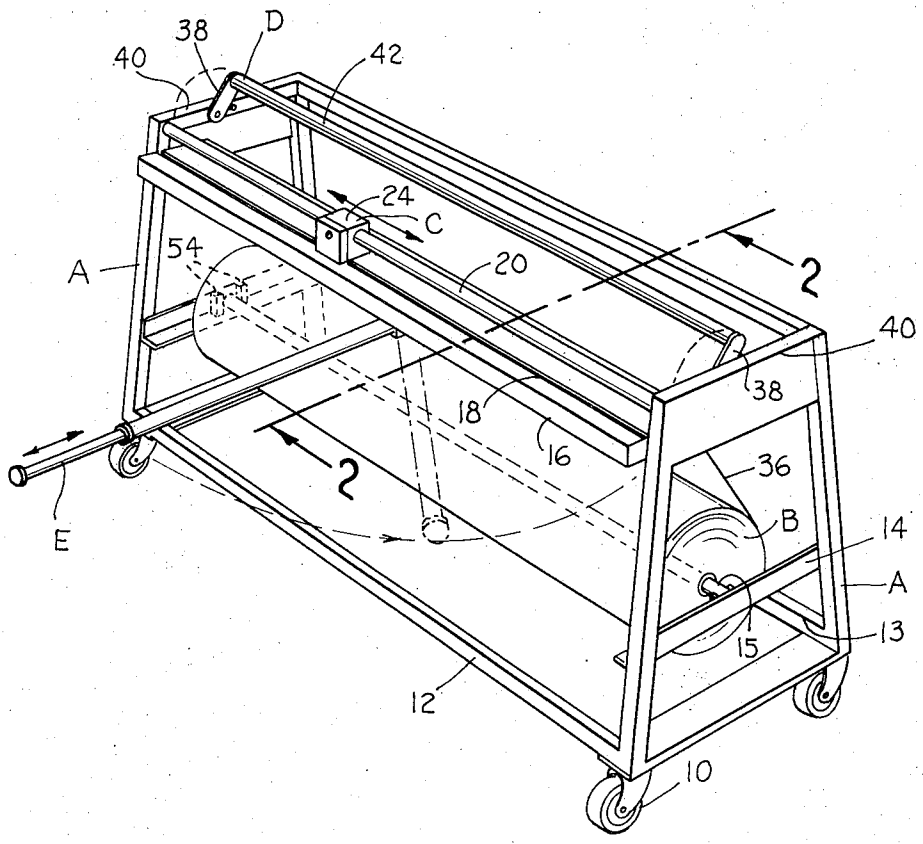
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[57] **ABSTRACT**

An apparatus for cutting and dispensing sheet material from a roll of material comprising rack means carried by a pair of standards for supporting an elongated roll of sheet material. The sheet material is fed over a cutting surface under a pressure bar which holds an end of the sheet material on the cutting surface after a cutting blade severs the sheet material. An arm extends outwardly from adjacent the middle of the cutting surface for measuring the length of the material to be cut. The arm also provides means over which the material can be automatically folded upon cutting.

4 Claims, 5 Drawing Figures



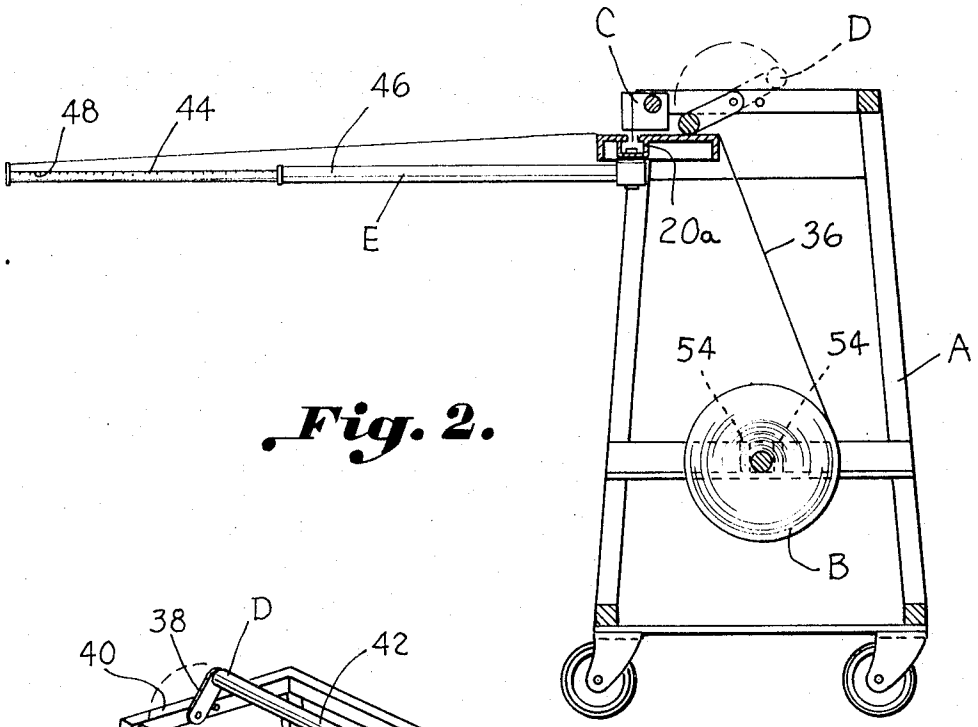


Fig. 2.

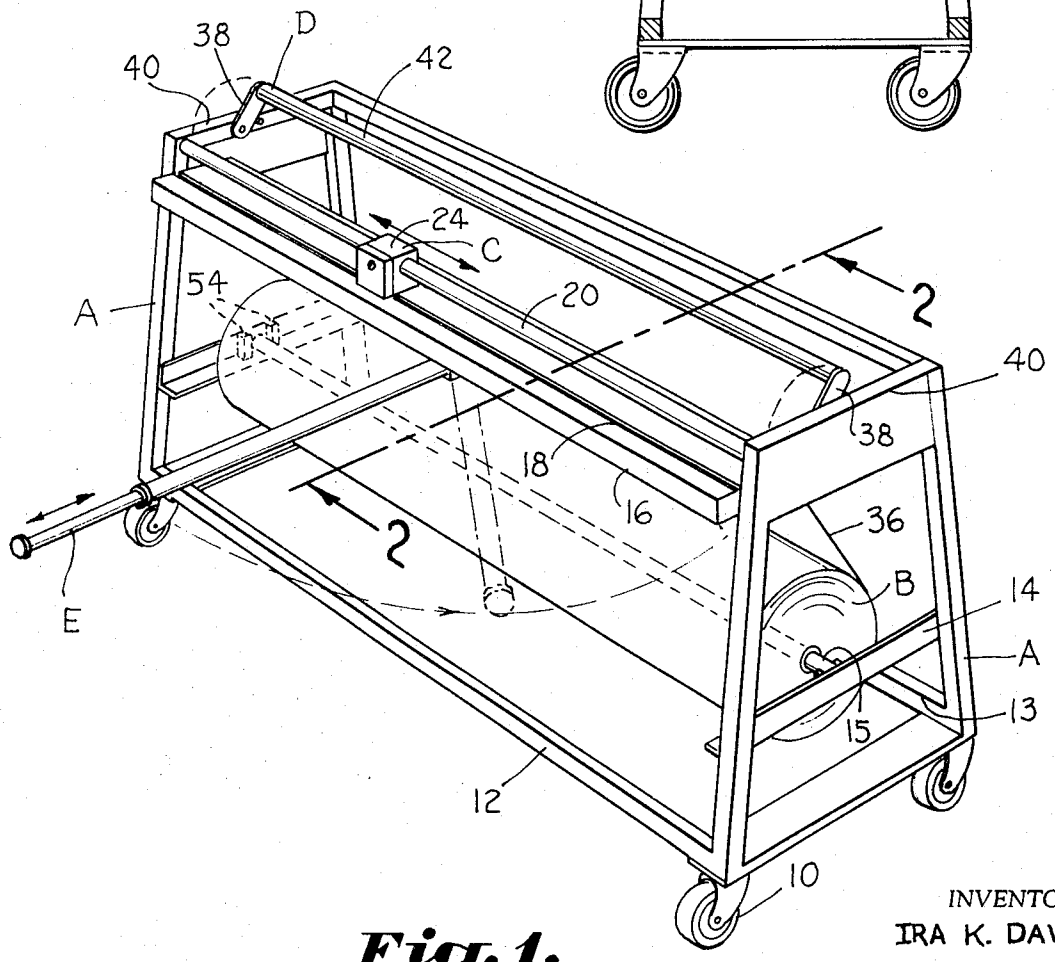


Fig. 1.

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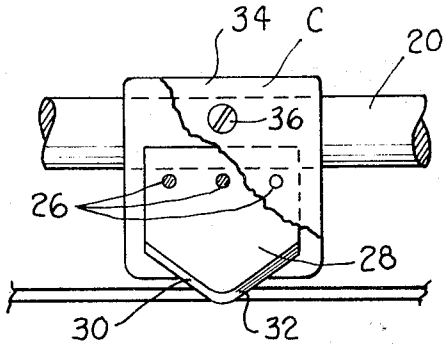


Fig. 5.

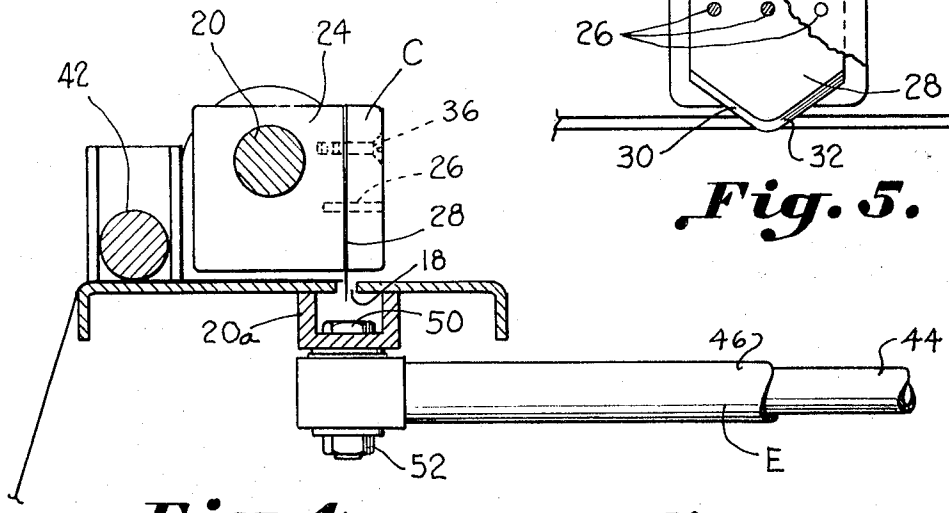


Fig. 4.

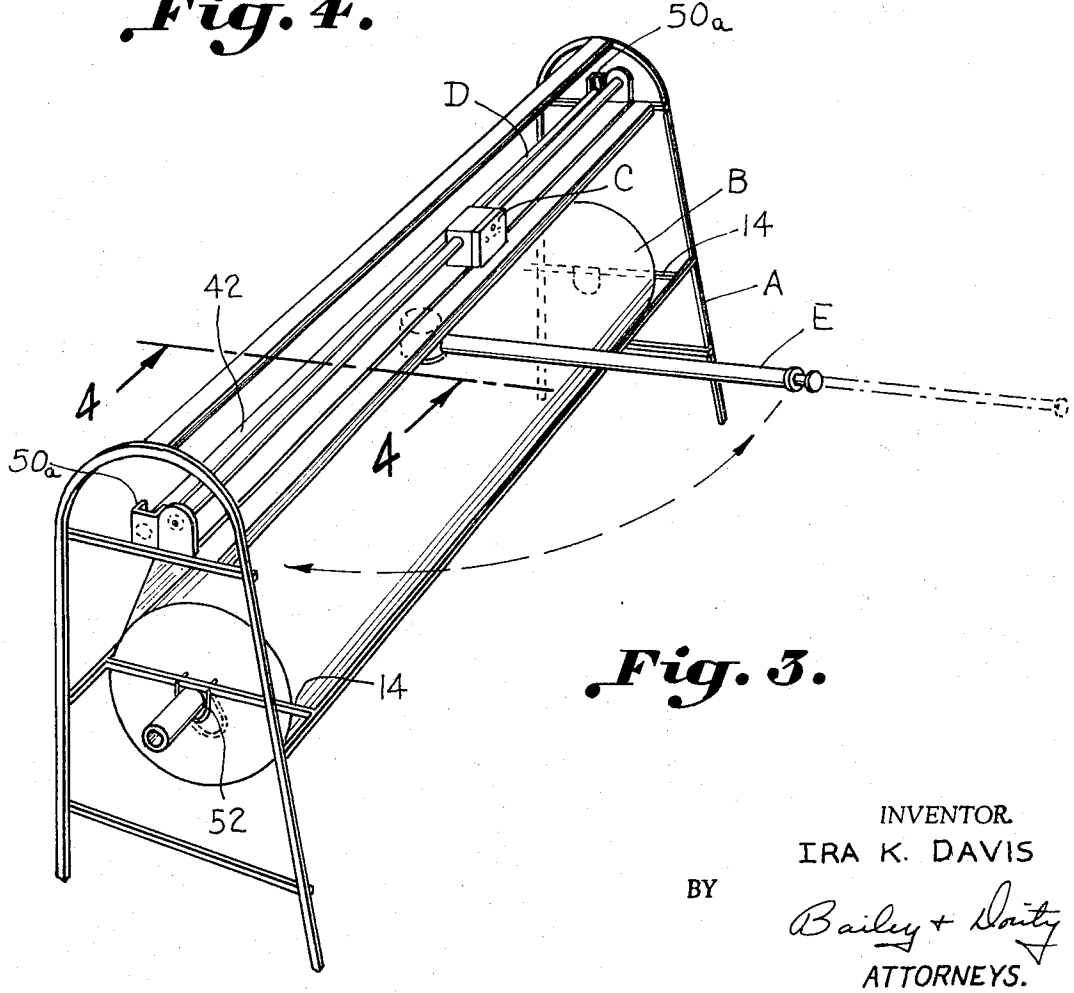


Fig. 3.

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CUTTING APPARATUS

This invention relates to a dispenser for sheet material and more particularly to a dispenser which is provided with means for measuring the material being cut, as well as folding the material after such has been cut.

In recent years disposable sheet material has become economically feasible due mainly to the feature that such is non-woven. This sheet material can be printed in many attractive and decorative designs, and is quite suitable for use in dining rooms, and on banquet tables in restaurants and motels. The sheet material can also be utilized as disposable bed sheets which can be used particularly in hospitals and motels.

One of the problems provided with dispensers heretofore developed is that there is no readily available means of measuring the length of the material and they require expensive heavy duty cutter bars.

Accordingly, it is an important object of the present invention to provide a dispenser of disposable material which can be readily transported and the material can be cut and folded in predetermined measured lengths.

Another important object of the present invention is to provide a simple dispenser of disposable material which utilizes a pressure roller for holding the material while a cutter is moved laterally across the material.

Another important object of the present invention is to provide a dispenser of disposable material which utilizes a protective bar for the cutting assembly, as well as provides a means for lifting the dispenser.

The construction designed to carry out the invention will be hereinafter described, together with other features thereof.

The invention will be more readily understood from a reading of the following specification, and by reference to the accompanying drawings forming a part thereof, wherein an example of the invention is shown and wherein:

FIG. 1 is a perspective view of a cutter assembly constructed in accordance with the present invention.

FIG. 2 is a transverse sectional view taken along the lines 2—2 of FIG. 1,

FIG. 3 is a perspective view illstrating a modified form of the invention,

FIG. 4 is a transverse sectional view taken along the lines 4—4 of FIG. 3 illustrating the cutter assembly, as well as the means for folding and measuring the material being cut, and

FIG. 5 is en enlarged front elevational view, with parts broken away, illustrating a cutter utilized in the dispenser.

Referring in more particular to the drawings, there is illustrated an apparatus for cutting and dispensing sheet material from a roll of sheet material comprising a pair of spaced standards A with rack means carried by standards A for supporting an elongated roll of sheet material B. A cutting surface is carried between the spaced standards. A horizontally disposed elongated bar is carried between the standards above the cutting surface with a cutting blade C mounted thereon for reciprocal sliding movement. A pressure bar is carried on the cutting surface adjacent the cutting blade. The sheet material extends from the roll B between the pressure bar D and the cutting surface so that the pressure bar holds an end of the sheet material on the cutting surface after the cutting blade severs the sheet material. An arm E extends outwardly from the cutting surface for indicating the length of the material cut.

Referring to FIG. 1, there is illustrated a heavy duty dispenser which can be located in a storage room or the like, of a motel or if desired, rolled to a dining room so that individual sheets can be cut adjacent the tables. The A-shaped standards A may be constructed of any suitable material, such as channel members, and supported on casters **10**. The standards A are joined by lower cross bars **12** and **13**, respectively. A rack constructed of angle-iron **14** is carried by each of the A-shaped standards for supporting the ends of a pipe **15** upon which the rolls of disposable material B is carried. Positioned adjacent the upper portion of the standards A is a relatively flat cutting surface **16** which has an elongated groove **18** disposed therein. The cutting surface **16** may be constructed of a channel member which is split to define the groove **18.** Positioned directly below the groove **18** is an inverted channel member **20a** upon which the outwardly extending arm E is supported.

An elongated bar **20** is carried between the standards A adjacent the upper foremost corners. Positioned on the bar **20** is the cutter, which includes a square metallic block **24,** which has a hole extending therethrough, through which the bar **20** passes. The block has three-spaced pins **26** extending forwardly therefrom for receiving a steel blade **28.** The blade has a sharpened forward and trailing edge **30** and **32,** respectively. An outer plate **34** is secured over the blade by a screw **36** for locking the blade to the block **24.** The lower edge of the blade **28** extends within the groove **18** so that as such is pulled across the apparatus it severs the disposable material **36** extending from the roll of sheet material B. A pivotal pressure bar D is provided for holding the end of the sheet material **36** on the cutting surface **16** after the material has been severed. The pressure bar includes a pair of disposed arms **38** which are pivotally connected by their lower end to an upper portion **40** of the standards A. The free ends of the arms **38** have a roller **42** journalled therebetween. When the sheet material **36** is being threaded under the pressure roller it is raised to the position illustrated in FIG. **1.** Once the material has been threaded over the cutting surface **16** the pressure bar D is pivoted forward so that the roller **42** will rest thereon. It is important that the material can be drawn freely under the roller **42** when such is in the lowered position so that the material can be readily taken off of the roll. However, it is equally important that the material can be rerolled on the roll B in instances where too much of the material has been drawn thereoff. The pressure exerted by the pressure bar **42** aids in rewinding the material on the roll.

The arm E extends outwardly from the cutting surface **16** for indicating the length of the material to be cut. The arm E is constructed of a pair of tubular members **44** and **46** wherein the member **44** is allowed to telescope within the member **46.** Calibrations in the form of marks **48** may be provided on the members **44** and **46** to indicate the distance from the groove **18.** The inner end of the telescoping member E is journalled by means of a bolt **50** and a nut **52** in the channel member **20** carried beneath the groove **18.** This enables the member E to be folded under the cutting surface **16,** such as illustrated in FIG. **1,** when not in use. The arm E has a double purpose in that it indicates the length of material drawn off the roll B plus, it provides a means

for automatically folding the material cut in half once severed. Such is very convenient when it is desired to cut a number of table cloths for relatively small square tables, such as is utilized in restaurants. The material is merely drawn off of the rolls and the cutter C is moved back and forth. The material automatically folds over the arm E when severed.

FIG. 3 illustrates a modified form of the invention wherein a lightweight stand is utilized and the standards A are constructed of relatively lightweight wrought iron. Like reference characters are utilized on the modified form of the invention for like and corresponding parts. One of the primary differences is the manner in which the pressure bar D is mounted, adjacent the pressure plate. Such includes a channel member **50**a which is welded on the standards adjacent the cutting surface. The rod **42** fits within the opposed channels **50** and rests on top of the cutting surface **16** for holding the end of the material after such has been severed.

The roll of material B is supported between the cross braces **14** by U-shaped members **52** carried thereby. It is noted that the roll of material B is illustrated in FIG. **2** as being held in position on the angle member **14** by the spaced tabs **54.**

While a preferred embodiment of the invention has been described using specific terms, such description is for illustrative purposes only, and it is to be understood that changes and variations may be made without departing from the spirit or scope of the following claims.

What is claimed is:

1. An apparatus for cutting and dispensing sheet material from a roll of sheet material comprising: a pair of spaced standards, rack means carried by said standards for supporting an elongated roll of sheet material, a cutting surface carried between said spaced standards, a horizontally disposed elongated bar carried between said standards above said cutting surface, a cutting blade mounted on said elongated bar for reciprocal sliding movement, a pressure bar carried on said cutting surface adjacent said cutting blade, said sheet material extending from said roll of sheet material between said pressure bar and said cutting surface so that said pressure bar holds an end of said sheet material on said cutting surface after said cutting blade severs said sheet material, and an arm extending outwardly from said cutting surface for indicating the length of material cut one end of said arm is carried adjacent the center of said cutting surface with the other end extending outwardly therefrom so that said material can be supported in a folded manner after being cut.

2. The apparatus as set forth in claim **1,** wherein said one end of said arm is pivotally connected to a bottom side of said cutting surface so that said arm can be pivoted under said cutting surface when not in use.

3. The apparatus as set forth in claim **1,** wherein said arm is telescoping and has a measuring scale thereon.

4. The apparatus as set forth in claim **1,** wherein said pressure bar is pivotally mounted between said standards so that such can be readily raised for insertion of the sheet material between the cutting surface and the pressure bar.

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