Aug. 5, 1969 M. J. TAYLOR 3,459,353

ADJUSTABLE LENGTH SHEET DISPENSER

Filed Aug. 3, 1967

FIG. 1

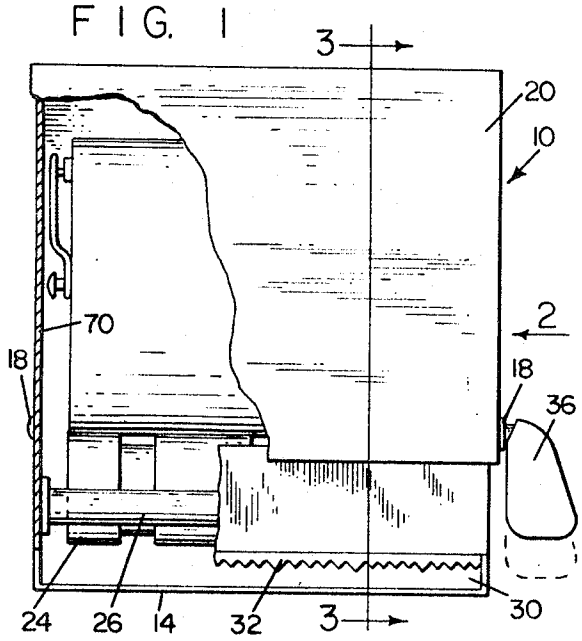


FIG. 2

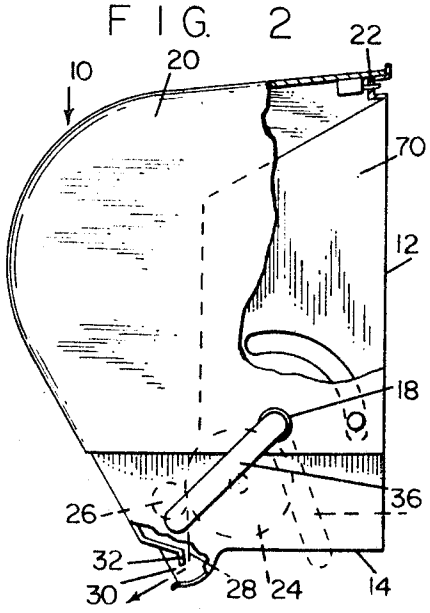


FIG. 3

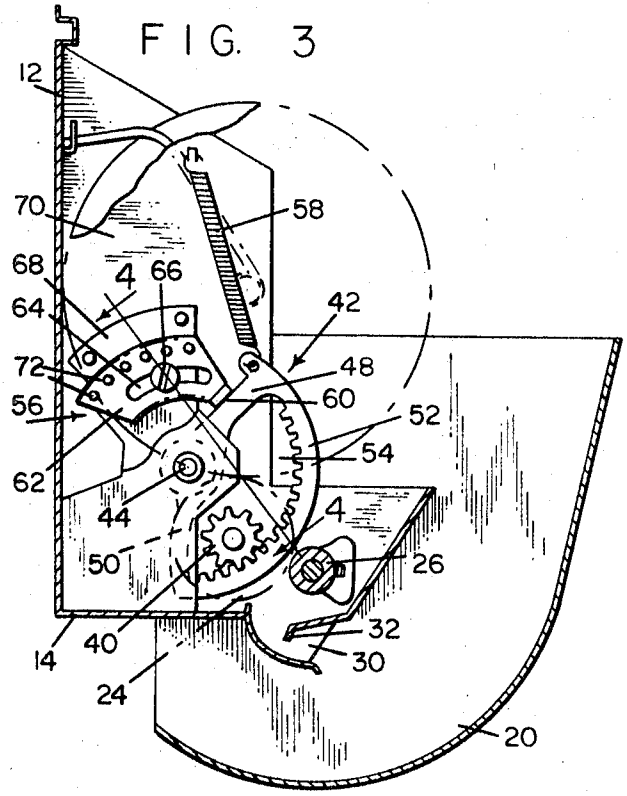
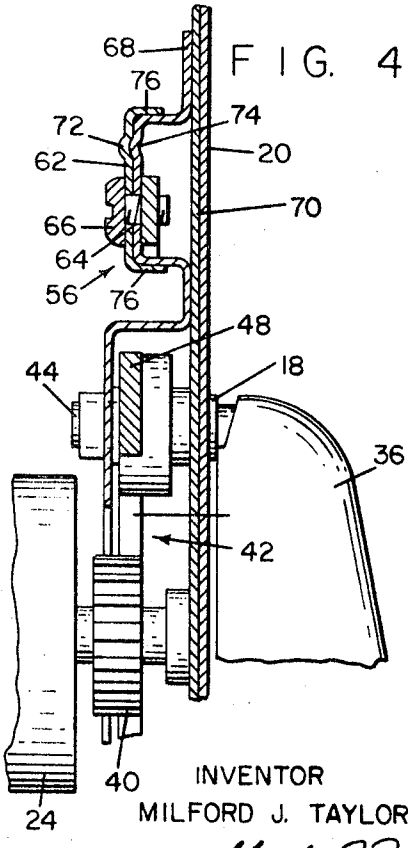


FIG. 4



INVENTOR
MILFORD J. TAYLOR
BY Charles R. Fay
ATTORNEY

United States Patent Office 3,459,353
Patented Aug. 5, 1969

3,459,353

ADJUSTABLE LENGTH SHEET DISPENSER

Milford J. Taylor, Erving, Mass., assignor to Erving Paper Mills, Erving, Mass., a corporation of Massachusetts

Filed Aug. 3, 1967, Ser. No. 658,164
Int. Cl. B65h 17/26
U.S. Cl. 226—132 7 Claims

ABSTRACT OF THE DISCLOSURE

A dispenser for sheets in continuous form, e.g., towels, including means for projecting a predetermined length of sheet material from a roll by manual actuation of a dispensing device, said means being located in a housing and being concealed therein, with means for adjusting the length of the sheet dispensed. The adjustment means comprises an adjustable stop which controls the length of actuation of the manually actuated dispensing device.

This invention relates to a sheet dispenser of the type which causes a predetermined length of sheet material to be projected through a slot in a housing upon manual actuation of means for this purpose, the sheet then being torn off as by pressure against a cutter bar by the operator, wherein the principal object of the present invention comprises means for adjusting the length of sheet material which is so projected at each actuation of said manual means.

A further object of the invention resides in the provision of an easily adjustable control device for the manually actuated dispenser means by which it can be actuated only to certain predetermined but variable limits, so that a sheet from a few inches to a number of inches can be projected at any one actuation of the sheet dispensing means, said adjustment means comprising an adjustable stop which limits the degree of actuation of said manually operated means.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings in which:

FIG. 1 is a view in front elevation illustrating the invention;

FIG. 2 is a view in side elevation thereof, parts broken away;

FIG. 3 is a section on an enlarged scale on the line 3—3 of FIG. 1; and

FIG. 4 is a section on an enlarged scale on the line 4—4 of FIG. 3.

In carrying out the present invention, there is provided a fixed housing member generally indicated at **10** which includes a back wall member **12** by which it may be secured to a support, and a bottom member generally indicated at **14**, these members being fixed relative to each other and mounting thereon pivot means of any desired kind such as at **18** for pivotally mounting a cover member **20**. As shown in FIGS. 1 and 2, the cover member **20** may be completely closed and latched as by any kind of well known lock **22** with respect to the rear wall member **12** of the fixed portion of the housing. When unlatched as shown in FIG. 3, it may be moved down to a position wherein the interior of the housing is completely exposed and a new roll of sheet material may be supported therein to be passed between a pair of rolls **24** and **26**, the sheet being indicated at **28** passing out through an opening at **30** to be torn off against a cutter bar or the like **32**. The roll of sheet material may be mounted in any way desired on a wall **12**.

Roll **24** is rotated by means of an outside handle **36** moving from the solid line position of FIG. 2 to the dotted line position thereof. By rotating roll **24** in contact with roll **26**, the paper sheet **28** is thus traveled at a predetermined amount for dispensing.

A gear **40** is mounted to rotate roll **24**. There is a well known one-way clutch between the gear and roll so that the gear can move in both directions of rotation and the roll is only impelled in a sheet dispensing direction. A quadrant generally indicated at **42**, see particularly FIG. 3, is fixed to the handle **36** as at **44**, see FIGS. 3 and 4. This quadrant has a pair of arms **48** and **50** which together with an arcuate connecting member therefor **52** form an opening **54** which receives gear **40**, see FIG. 3. The quadrant arm **52** is provided with internal gear teeth meshed with the teeth of the gear **40** and thus it will be seen that when the handle **36** is moved as for instance in a counterclockwise direction in FIG. 2, the quadrant will be likewise moved to the same degree turning gear **40** in turn turning the roller **24** to cause the sheet to move from its source of supply to be dispensed to a certain degree. Upon return to normal position, the quadrant turns the gear also, but not the roll.

In order to vary the amount of sheet material dispensed at each actuation of handle **36**, an adjustable stop member generally indicated at **56** is provided for the quadrant, the quadrant always being returned to normal position against this stop by a spring **58**. The stop member **56** has a stop surface **60** and is mounted on an arc-shaped member **62** having an arc-shaped slot **64** therein accommodating a headed screw or the like **66**, which screw is mounted in a fixture **68**, see FIG. 4. The fixture **68** is secured to the side wall of the housing as at **70**. The headed fastener **66** is located in fixed position but can be slightly let off as by a screwdriver so as to release the arcuate shaped member **56** so that the latter can be moved to either side of the position shown in FIG. 3 which is substantially in an intermediate position. A series of indentations **72** in cooperation with a detent **74** serve to prevent disturbance of the setting.

It will be seen that if the stop member **56** is moved in a clockwise direction in FIG. 3, it will cause the stop **60** to likewise move in this direction, causing the quadrant **52** to stop sooner in its counterclockwise motion under influence of spring **58**.

On the other hand, if the stop member **56** is moved in the opposite direction, the stop **60** will move in a counterclockwise direction allowing the quadrant a greater range of motion and thus more sheet material will be dispensed at each actuation of handle **36**.

The stop member **56** is provided with a pair of flanges as shown at **76, 76** so that it can only move in an arcuate direction under influence of the member **68** which is also arc-shaped and extends outwardly from wall **70**, see FIG. 4, for this purpose.

The roll of sheet material may be supported within the housing in any desired manner and the stop member **56** is adjusted to the position desired for the amount of sheet material to be dispensed at each actuation of the handle **36**. This adjustment will allow a few inches or more of sheet dispensed at a single actuation depending upon the position of the stop member **56** which cannot be adjusted from the outside of the device.

The quadrant always moves to its full extent in the dispensing direction so that arm **48** thereof comes in contact with gear **40**, but in the opposite direction of motion the quadrant can only go to its full extent and contact the gear when stop member **56** is moved to its farthest position relative to slot **64** in a counterclockwise direction.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:

1. A dispenser for sheet material including a housing, a manually operated device on the housing for causing the material to be drawn from a source of supply within the housing for dispensing, said manually operated device including a roll engaged with the sheet and having a predetermined variable rotative action to travel a predetermined but variable length of sheet material to be dispensed, a movable element to actuate the roll, means inside the housing controlling the degree of motion of said element, means also inside the housing to adjust said controlling means, to vary the length of sheet material dispensed at each actuation of the roll, said adjusting means being capable of actuation only from the inside of the housing to prevent unauthorized adjustment.

2. The dispenser of claim 1 wherein said element comprises a quadrant, said quadrant being in operative engagement with respect to said roll causing it to move in a dispensing direction upon actuation of said device, and the adjusting means comprising a separate, adjustable stop for the quadrant.

3. The dispenser of claim 1 wherein said element comprises an oscillatable quadrant, said quadrant being in operative engagement with respect to said movable means causing it to move in a dispensing direction upon actuation of said manual device, and a one-way driving means between said element and said movable means, so that the latter can move only in the dispensing direction, being

nonoperative upon motion of the quadrant in the reverse direction, the adjusting means including an arcuately adjustable stop in the path of the quadrant.

4. The dispenser of claim 1 wherein said element includes a quadrant engaging the roll to drive the same in one direction only, said adjustable means including a stop arranged to contact said quadrant in adjusted but predetermined location limiting the degree of motion thereof under influence of said device.

5. The dispenser of claim 1 wherein said element includes a quadrant engaging the roll to drive the same in one direction only, said adjustable means including a stop arranged to contact said quadrant in adjusted but predetermined location limiting the degree of motion thereof under influence of said device, said stop comprising a generally arcuate member and including means restraining it to an arcuate motion to conform to the path of oscillating motion of said quadrant.

6. The dispenser of claim 1 wherein said adjustable means comprises a stop and means to locate the same in various positions to interdict the motion of said element to a varying degree.

7. The dispenser of claim 1 including means to lock the housing.

References Cited

UNITED STATES PATENTS

1,142,442	6/1915	Krauth	226—133
2,099,647	11/1937	Gautier	226—133 X
2,601,159	6/1952	Marsh	226—133

ALLEN N. KNOWLES, Primary Examiner

REEXAMINATION CERTIFICATE (53rd)

United States Patent [19]

Taylor

[11] **B1 3,459,353**

[45] Certificate Issued **Mar. 1, 1983**

[54] **ADJUSTABLE LENGTH SHEET DISPENSER**

[75] Inventor: **Milford J. Taylor**, Erving, Mass.

[73] Assignee: **Erving Paper Mills**, Erving, Mass.

Reexamination Request

No. 90/000,151, Jan. 28, 1982

Reexamination Certificate for:

Patent No.:	**3,459,353**
Issued:	**Aug. 5, 1969**
Appl. No.:	**658,164**
Filed:	**Aug. 3, 1967**

[51] **Int. Cl.**[3] **B65H 17/22**

[52] **U.S. Cl.** **226/132**

[58] **Field of Search** ... 226/132, 133, 134, 127, 129, 130, 131, 136, 137, 139; 312/38, 39, 41; 225/10, 11, 16; 83/240, 247.

[56] **References Cited**

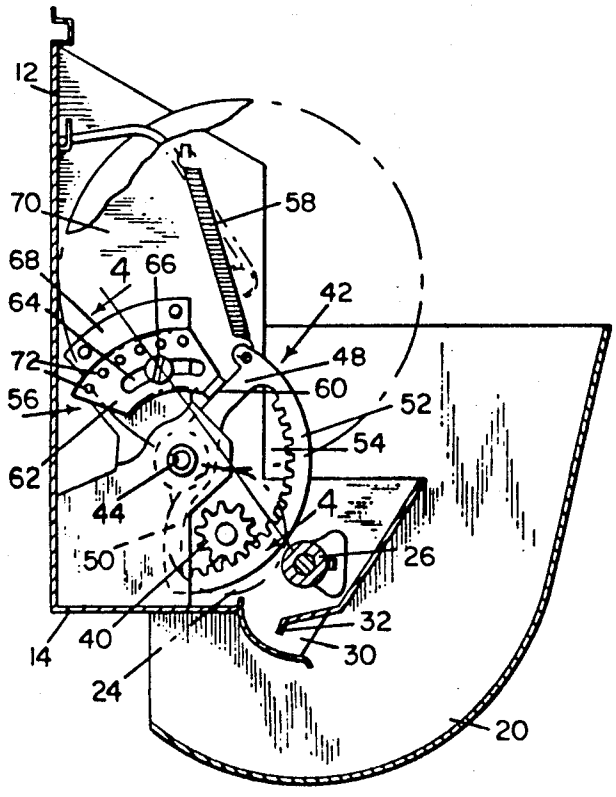
U.S. PATENT DOCUMENTS

1,092,405	4/1914	Shattuck	226/134 X
1,092,743	4/1914	Parvin et al.	
1,142,442	6/1915	Krauth	226/133
1,229,533	6/1917	Shattuck.	
1,250,790	12/1917	Brownson.	
2,248,193	5/1939	Price et al.	271/2.3
2,303,520	12/1942	Wilson	242/55.5
2,865,699	12/1958	Fitzgerald	312/39

Primary Examiner—Stanley N. Gilreath

[57] **ABSTRACT**

A dispenser for sheets in continuous form, e.g., towels, including means for projecting a predetermined length of sheet material from a roll by manual actuation of a dispensing device, said means being located in a housing and being concealed therein, with means for adjusting the length of the sheet dispensed. The adjustment means comprises an adjustable stop which controls the length of actuation of the manually actuated dispensing device.



REEXAMINATION CERTIFICATE ISSUED UNDER 35 U.S.C. 307.

NO AMENDMENTS HAVE BEEN MADE TO THE PATENT.

AS A RESULT OF REEXAMINATION, IT HAS BEEN DETERMINED THAT:

Claims 1–7, having been finally determined to be unpatentable, are cancelled

* * * * *