June 6, 1967 E. W. BLAIR 3,323,243

ROTARY DISPLAY UNIT

Filed Sept. 27, 1965

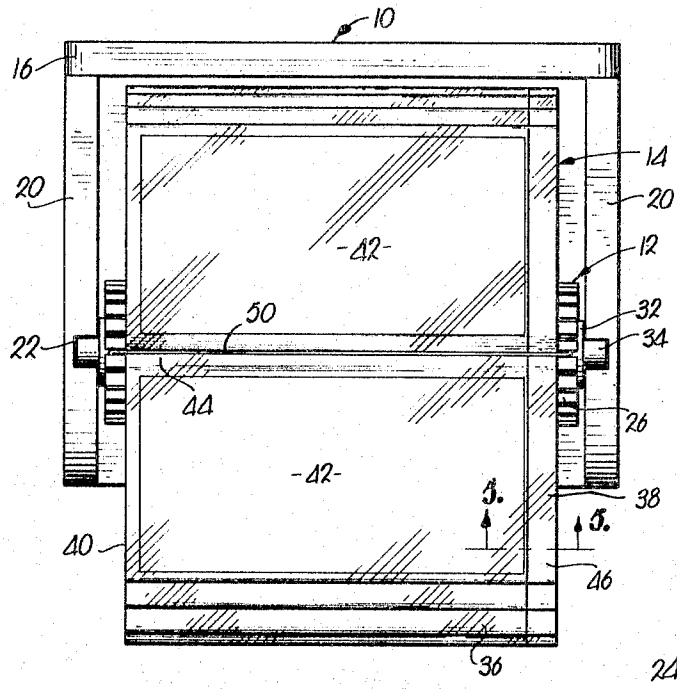


Fig.1.

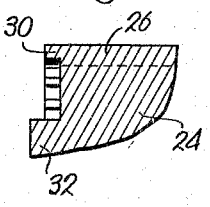


Fig.4.

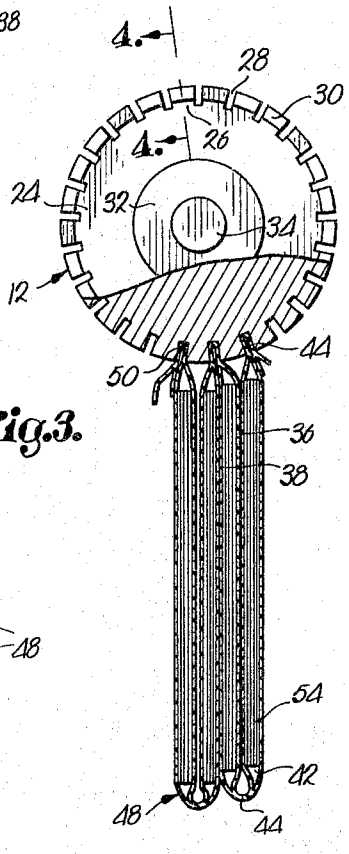


Fig.3.

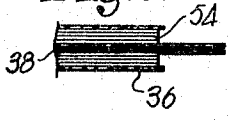


Fig.5.

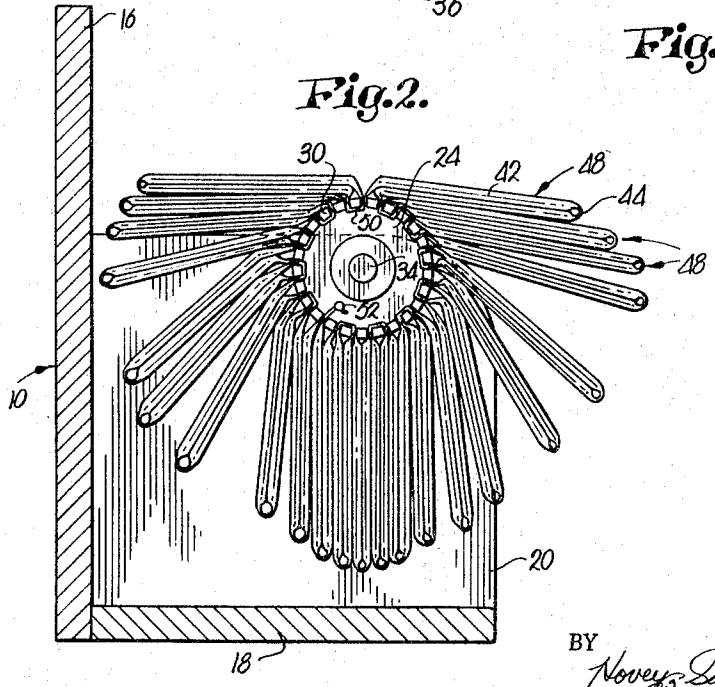


Fig.2.

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ROTARY DISPLAY UNIT

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This invention relates to display structure and, more particularly, to a display unit adapted to rotatably carry and exhibit a series of initially side-by-side display pockets.

It is the primary object of my invention to provide a rotary display unit having a drum which is adapted to carry a series of side-by-side display pockets whereby the pockets are selectively exhibited as the drum is rotated. Heretofore, novelty cards, picture postcards and the like have often been dispensed for sale from a long, transparent plastic holder having a series of side-by-side pockets therein so that the buyer could inspect the cards and remove the ones desired.

The plastic holders were generally hung from a relatively tall rack and extended to the floor and thus, large space requirements were necessary. The present invention obviates this disadvantage by providing structure which compactly carries the cards while still making them all available for quick inspection and removal. Also, the display unit of this invention can carry a much longer series of display pockets than could be practically suspended vertically from a rack or the like.

It is an important object of the present invention to provide a display mechanism having a rotary drum for carrying a series of side-by-side display pockets which are grouped in successive pairs and folded, all to the end that they are mountable substantially radially about the drum, there being retainer means on the drum for holding the especially arranged pockets. The various grouped pairs are then brought into register for display by merely rotating the drum or turning the pockets about their connecting points on the drum.

Another object of the instant invention is to provide a display unit wherein display pockets of the aforementioned character are quickly and easily mounted on a rotary drum due to the provision of rib and slot structure on the drum which is designed to cooperate with a string for pivotally securing the pockets to the drum.

In the drawing:

FIGURE 1 is a top plan view of a rotary display unit made pursuant to the teachings of my invention;

FIG. 2 is a side elevational view thereof, parts being broken away and in section to reveal details of construction;

FIG. 3 is an enlarged, fragmentary, side elevational view of the drum, parts being broken away and in section for clearness;

FIG. 4 is a cross-sectional view taken along line 4—4 of FIG. 3; and

FIG. 5 is a cross-sectional view taken along line 5—5 of FIG. 1.

The rotary display unit of the present invention broadly comprises a support **10** rotatably receiving a drum **12** which is adapted to carry a transparent plastic holder **14**. Support **10** is substantially box-like in construction and includes a back panel **16**, a bottom panel **18**, and a pair of opposed side panels **20**. Each side panel **20** is provided with a notch **22** opening inwardly and upwardly for rotatably receiving drum **12**.

Drum **12** includes a central hub **24** having a plurality of equally spaced, radially extending, longitudinal ribs **26** which form a series of slots **28** therebetween. Ribs **26** are substantially rectangular in transverse cross-sectional configuration and the outer surfaces thereof are

arcuate to define the generally cylindrical, outer surface of drum **12**. Each rib **26** is provided with a pair of projections **30** extending from the opposed ends of the ribs, it being noted from FIG. 4 that the outer surface of each projection is coextensive with the outer surface of its corresponding rib, while the inner surface thereof is disposed slightly outwardly from the bottom of proximal slots **28**.

A circular spacer **32** is provided at each end of hub **24** and is axially aligned therewith, each spacer **32** carrying a shaft structure or trunnion **34**. Drum **12** is thus adapted to be rotatably mounted on support **10** by inserting trunnions **34** into respective notches **22**.

Drum **12** is conveniently constructed by sawing and machining an initially cylindrical block of material, preferably wood, to form ribs **26**, projections **30** and spacer **32**. The elements of drum **12** are thus integrally related, as best shown in FIGS. 3 and 4. Trunnions **34** may be formed of metal to provide ease of rotation within notches **22**.

Holder **14** comprises a pair of initially planar, elongated, transparent plastic sheets **36** and **38** which are joined in substantially face-to-face relationship by heat sealing the adjacent sides **40** thereof. A plurality of side-by-side, substantially flat pockets **42** are formed in holder **14** by heat sealing along equally spaced, transverse lines across sheets **36** and **38**, and pockets **42** are thus interconnected by flexible strip areas **44**. As best shown in FIG. 5, sheet **36** is slightly narrower than sheet **38** to give an offset relationship on the open side **46** of holder **14**.

In use, each successive pair of pockets **42** of holder **14** are folded about a corresponding strip **44** to form a plurality of display members **48** which are then mounted on drum **12** by looping a retaining string **50** about alternating strips **44** which interconnect members **48**. A continuous length of string is employed for this operation and may start, for example, from a nail **52** placed in one end of hub **24**. String **50** is wrapped or looped over an alternating strip **44** to draw the latter into the bottom of a respective, longitudinal slot **28**. String **50** is then tightened against the inner surface of a proximal projection **30** as shown in FIG. 2, after which it is looped over the next alternating strip **44** to draw the latter into an adjacent slot **28**. String **50** is sequentially looped and tightened over successive alternating strips **44** and proximal projections **30** until all members **48** have been drawn into their display positions. String **50** is then tied to a projection **30** or nail **52** so that string **50** securely retains members **48** on the drum.

When drum **12** is fully supplied with members **48**, they will naturally suspend from the drum as shown in FIG. 2. Cards **54**, such as novelty cards or picture postcards, are placed in pockets **42** through open side **46** for display. Thus, a person viewing the rotary display unit will be able to see the cards which are located in the uppermost pair of pockets **42**. If the person desires to view other cards, he need only flip either of the uppermost members **48** to pivot the latter about the proximal section of string **50** and drum **12** will automatically rotate and rebalance itself due to the added weight of a pivoted member **48** on one side of the drum.

Thus, as each member **48** is pivoted to bring the cards thereof into register for display, the uppermost pockets **42** will always lie in a substantially horizontal plane as shown in FIG. 2. When a customer desires to remove a card **54** from its respective pocket **42**, he need only reach into open side **46** and grasp the card, this operation being facilitated by the offset relationship between the sheets **36** and **38**.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. In a rotary display unit having a support rotatably receiving a drum which is adapted to carry and selectively exhibit a plurality of side-by-side, substantially flat display pockets joined to each other by interconnecting flexible strips, each successive pair of pockets being folded about a corresponding strip to form display members, the latter being joined by alternating strips, said drum comprising:

a hub;

shaft structure on the opposed ends of said hub for rotatably mounting said drum in said support; and

retaining means on said hub for securing said alternate strips longitudinally on the drum in a successive, spaced manner.

2. In a rotary display unit having a support rotatably receiving a drum which is adapted to carry and selectively exhibit a plurality of side-by-side, substantially flat display pockets joined to each other by interconnecting flexible strips, each successive pair of pockets being folded about a corresponding strip to form display members, the latter being joined by alternating strips, said drum comprising:

a hub;

shaft structure on the opposed ends of said hub for rotatably mounting said drum in said support; and

a plurality of longitudinal rib sections mounted on and extending radially from said hub and defining a plurality of slots therebetween so that said drum will carry said display members when a string is coupled to said alternating strips to draw the latter into respective slots and said string is tightened.

3. In a rotary display unit having a support rotatably receiving a drum which is adapted to carry and selectively exhibit a plurality of side-by-side, substantially flat display pockets joined to each other by interconnecting flexible strips, each successive pair of pockets being folded about a corresponding strip to form display members, the latter being joined by alternating strips, said drum comprising:

a hub section;

shaft structure on the opposed ends of said hub for rotatably mounting said drum in said support;

a plurality of longitudinal rib sections mounted on and extending radially from said hub and defining a plurality of slots therebetween; and

a projection extending outwardly from an end of one of said sections so that said drum will carry said display members when a string is coupled to said alternating strips to draw the latter into respective slots and said string is tightened about said projection.

4. Apparatus as set forth in claim 3, wherein a projection extends outwardly from each end of each of said ribs so that a continuous length of string may be successively looped about said alternating strips and sequentially tightened about corresponding proximal projections to draw said alternating strips into respective slots.

5. In a rotary display unit having a support rotatably receiving a drum which is adapted to carry and selectively exhibit a plurality of side-by-side, substantially flat display pockets joined to each other by interconnecting flexible strips, each successive pair of pockets being folded about a corresponding strip to form display members, the latter being joined by alternating strips, said drum comprising:

a hub;

shaft structure on the opposed ends of said hub for rotatably mounting said drum in said support;

a plurality of longitudinal ribs mounted on and extending radially from said hub and defining a plurality of slots therebetween, said ribs having a substantially rectangular, transverse, cross-sectional configuration, the outer surfaces thereof being arcuate to define a generally cylindrical outer surface of the drum; and

a projection extending outwardly from each of said ribs, the outer surface of each projection being coextensive with the outer arcuate surface of its respective rib whereby a continuous length of string may be successively looped about said alternating strips and sequentially tightened about corresponding proximal projections to draw said alternating strips into respective slots.

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