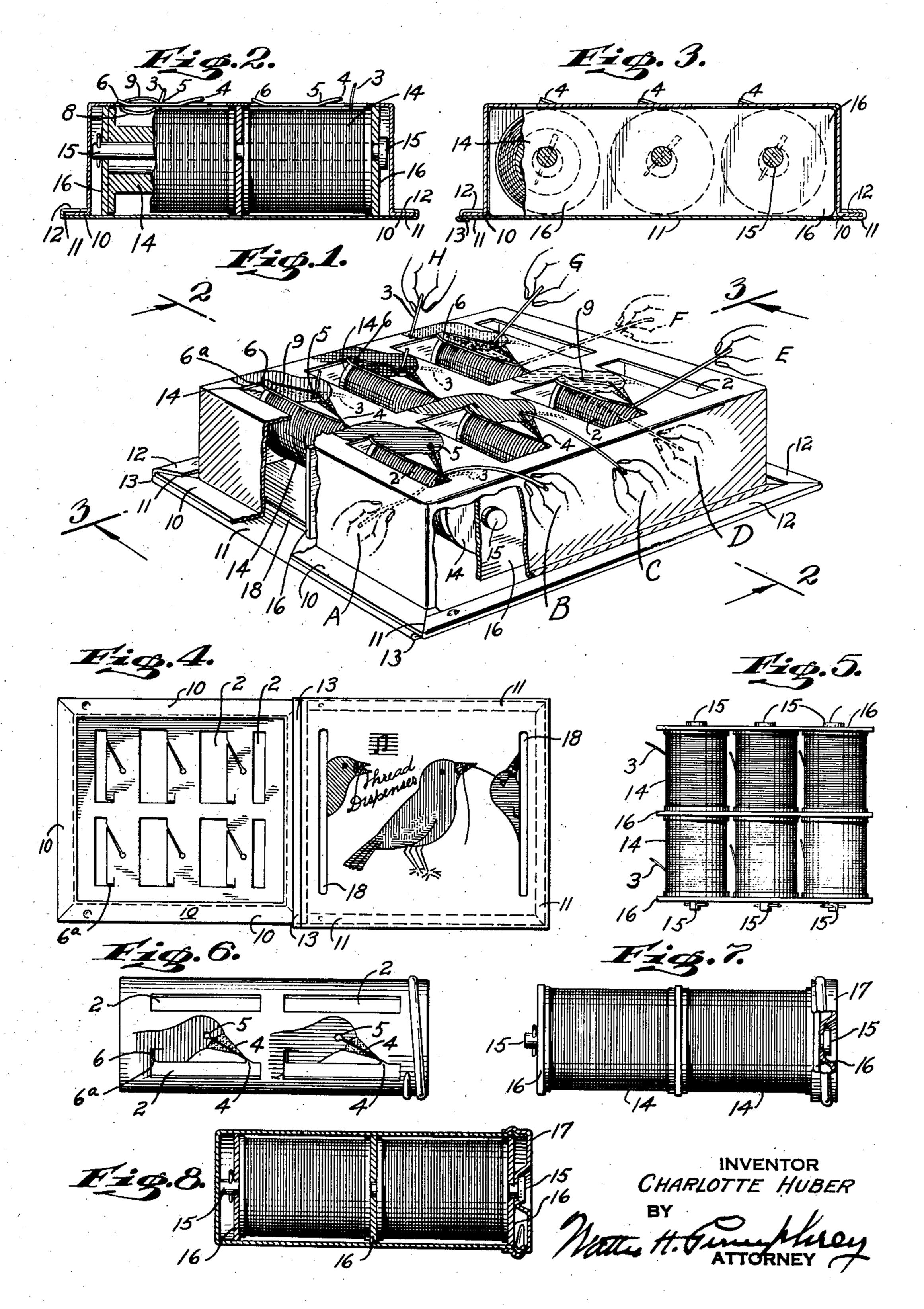
THREAD DISPENSER

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5 Claims. (Cl. 242—137)

This invention relates to a thread dispenser in the form of a container for spool thread of the usual assorted sizes and colors, such as are found, loose, partially unwound and in more or less disorder in a woman's sewing basket. The spools being mounted and arranged in the container in an orderly manner to permit selection at a glance and the thread from any selected spool to be readily drawn out, cut to the desired 10 length and the end of the thread from the spool left conveniently accessible, to be again, in like manner, drawn out length by length, whenever required.

Among the important features of the invention 15 may be mentioned the following:

A thread dispenser construction such that the position of the dispenser on a table or other support determines whether it is open for use or closed. That is to say, when the dispenser is posi-20 tioned for use, the top thereof presents cut-outs or open windows through which the spools of thread therein are exposed to view, enabling instant selection to be made and the thread desired drawn out as required, wtihout necessitating 25 close inspection to determine size, color, etc. When not in use, the position of the dispenser is reversed, with its windowed top turned downward, closing the windows and protecting the contained spools of thread from entering dust 30 and the fading effect of sunlight etc.

In thus utilizing reversibility of the dispenser to open and close the same, the construction is greatly simplified, as the use of a hinged or other form of top cover is avoided, the over all 35 dimensions are reduced, less space occupied and the user can handle the same with greater ease

and convenience.

When reversed or in the closed position, above described, a removable bottom cover of the dis-40 penser is brought uppermost which presents a smooth surface that lends itself to ornamentation and by suitable decoration of the bottom and the windowed top, the dispenser is given a pleasing and attractive appearance.

In cooperative relation with each spool in the dispenser there is a terminal loop former, consisting of a thread holder and a cutter, both of which are engageable by the thread through open entrance slits leading inward from the dis-50 penser windows and into which the thread may be readily drawn without hesitation or uncertain effort. These open entrance slits avoid the usual annoyance to the user of being required to pass the thread through one or more small 55 openings so that the end thereof will be accessible for drawing the thread length by length from the spools.

Aside from the window openings and the thread holder slits leading from these openings, the dispenser is an ordinary box with a sliding 5 or other form of bottom cover and as no special design or construction is required, the cost of manufacture is reduced to a minimum.

The spools of thread within the dispenser are rotatably mounted in a frame of very light and 10 inexpensive construction, the spool and frame assembly being such as to be entered in and removed from the dispenser as a unit. The spools are arranged in end to end relation on wooden rods and are spaced apart by cardboard strips 15 so as to turn freely and independently of each other. The card board strips are apertured for tight fitting passage of the rods and, as proportioned, the assembly fits snugly and is self holding in the dispenser without requiring fasten- 20 ings of any kind. Insertion or removal of this assembly unit requires only the opening of the bottom of the dispenser to give access to the interior and this is done by removing the sliding cover.

The above and other structural features of the invention will be explained at greater length in the detail description that follows.

In the accompanying drawing I have shown several constructions suitable for carrying my 30 invention into effect but do not wish to be understood as intending to limit myself to the same, as various changes may be made therein within the meaning of the appended claims.

In the drawing

Figure 1 is a perspective view showing a thread dispenser containing six spools, parts being broken away to show the arrangement of the spools and their carrying frame therein.

Figure 2 is a cross section on the line 2, 2 of 40 Fig. 1.

Figure 3 is a longitudinal section on the line 3, 3 of Fig. 1.

Figure 4 is a bottom plan view, with the slid- $_{45}$ ing cover drawn out to expose the interior of the container from which the spool assembly has been removed.

Figure 5 is a plan view of the unit assembly of the spools and their carrying frame.

Figure 6 is a plan view of a modification in which the thread dispenser is shown of tubular form.

Figure 7 is a similar view of a unit assembly of spools, carrying frame etc., suitably formed 55 for insertion in the dispenser shown in Fig. 6, and

Figure 8 is a central longitudinal sectional view showing the unit assembly of Fig. 7 inserted in the container of Fig. 6.

Referring now to the drawing I represents the dispenser which is ordinarily stamped up from thin sheet metal but may be otherwise formed of any material preferred. By varying the dimensions of the dispenser, as shown, for example, in Figs. 1 and 8, it may be made to accompodate any number of spools of thread desired.

As will appear, each spool, with its mounting and thread end loop former, is complete, self-contained and independent of any other spool or spools with which it may be associated, so that shape and dimensions of the dispenser are the only limitations upon the number of spools, it can be made to accommodate. Popular demand, however, is for small conveniently handled types of the two and six spool order therein shown.

The dispenser may take the form of a flat box of any shape in outline desired. Ordinarily, it is made square or rectangular, as in Figs. 1 to 25 4, but may be made in a tubular form, as in Figs. 6 and 8.

The top of the dispenser is cut out at a number of points to provide open windows 2, 2, etc., suitably spaced apart and so located as to clearly expose to view and make accessible the spools of thread therein. Preferably, there is a window above each spool through which the free end 3 of the spool thread is brought up for engagement with the terminal loop former consisting of the thread holder 6 and cutter 5.

Passage for the thread to the holder 6 and cutter 5, is provided by way of open flared entrance slits 6a and 4, leading inward from each window opening 2. Entrance to these slits is 40 made wide enough to enable the thread to be readily passed into them without requiring special care or effort on the part of the person handling the thread.

The thread holder 6 and 4 is in the form of a hooklike lug and the cutter 5, is shown as a circular opening at the end of the slit 4 both being integrally formed in the container top.

The dispenser is open at the bottom and provided with an outward turned flange 10, which is engaged by a channel-edged cover 11, the side and rear marginal portions 12, of which are bent over to slidingly engage the flange. The front edge 13 of the cover is also bent over to provide a thumb and finger hold for slidingly moving the 55 cover back and forth as required to open and close the bottom of the dispenser.

The spools of thread 14, within the container, are rotatably mounted in a frame of very light construction, to turn freely, individually, under the pull of the free ends 3 of the thread as, for example, when a length of thread is being drawn from the dispenser.

The frame is made up of a number of rods 15, preferably of wood, on which the spools 14 are loosely mounted in end to end relation and are spaced apart and held properly positioned on the rods by cross strips 16 of cardboard or other suitable material.

The assembly of the spools and their carrying frame is best shown in Fig. 5 and is dimensioned to so snugly fit within the dispenser as to be frictionally held therein without the aid of other fastening means.

The assembly shown in Fig. 5 is removable 75 from and replaceable in the dispenser as a unit

and either operation may be carried out by merely removing the sliding cover 11. No fitting is required, there are no parts to be connected or disconnected, excepting the thread, and the manner of looping the thread so the 5 free end will be accessible, is very simple and easily understood by anyone of average intelligence without requiring special skill or experience.

When the unit assembly of the spools and 10 their carrying frame have been entered in the dispenser and the sliding cover closed, it only remains to loop the free end of the thread from each spool between the thread holder and cutter and the dispenser is ready for use.

It will be understood that the operation in forming the end loop 9 in the thread is the same for each spool in the dispenser, also that the same loop formation is employed for the thread end of new spools as for the end of each 20 length of thread after it is drawn from the dispenser but before it is cut off, so that a loop from each spool will always be available.

In describing the formation of the loop, it will be assumed that the free end of the thread 25 is brought up from a spool through the window directly above the same, as shown by the thumb and finger illustrations marked A and B.

With the end of the thread thus held between the thumb and finger, it is first drawn into and 30 through the slit passage 4, until it enters the cutter opening 5, as indicated at C. It is then carried over to form the loop 9, by being passed around the lug 6 and into the slit 6a, as indicated at D and from there it is brought back to 35 the slit 4, indicated at E and F, and again passed through the slit passage into the cutter opening, as indicated at G and H. By a slight jerk, the thread is cut off on the edge of the cutter opening 5, leaving the loop 9 available for a thumb $_{40}$ and finger hold when the next length of thread is to be drawn from the dispenser. As the loop of the selected thread is grasped between the thumb and finger and pulled upward, the extreme cut end of the thread frees itself from 45 the cutter opening and is drawn through and clear of the slit 6a. Continued upward pull then draws the thread from the spool through the cutter opening 5 and when a full length is drawn out, the loop forming operation, above described, is repeated from the point indicated at C, in Fig. 1, where the thread first enters the cutter opening 5, in which it remains until the spool is exhausted. If through rough or careless handling or for any other reason, the loop formation tends to loosen or free itself, a double loop may be formed by repeating the operation, to hold the thread more securely. If the windows shown in the top of the dispenser are found insufficient or not conveniently positioned for the 60 contained spools, as might happen if several half-length spools were substituted for one or more of full length, additional windows may be provided in the cover, as indicated at 18 in Fig. 4.

The modification shown in Figs. 6 to 8, inclusive, is merely an adaptation of the above described construction to a dispenser of tubular form, in which the cover 17 at one end of the tubular dispenser is removably held in position by a screw thread connection and is rotatably attached to the unit spool assembly to be conveniently inserted and withdrawn from the dispenser casing.

As being the most pleasing effect to the dis- 75

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penser, a bird motif decoration in contrasting colors is employed in its ornamentation and so applied that the entrance slit 4 appears as the open beak of a bird, the cutter opening 5, the bird's eye and the slit 6a and the lug 6, as the bird's wing, as shown. This form of decoration serves to guide and locate the slit passages 4, and 6a and is of material aid in that respect in forming the thread loop.

I claim:

1. A dispenser for spool thread consisting of a suitable container, part of the body portion of which is relatively movable to give access to the interior thereof, cut-outs forming open windows in the body of the container through which spools of thread therein are exposed to view and made accessible for drawing thread therefrom, each of the aforesaid cut-outs having slit-like extensions terminating in formations suitable for serving as holders and cutters for the free ends of the thread from the contained spools.

2. A thread dispenser as defined in claim 1, in which the thread holders and cutters are separated sufficiently to provide a loop-forming space

25 between them for the engaged thread.

3. A thread dispenser as defined in claim 1, in which the thread holders and cutters are formed as integral parts of the container.

4. A thread dispenser as defined in claim 1, in which the thread holders are formed as lugs bent 5 up from the body of the container and the cutters are formed as enlarged openings at the end of the slits leading to the same.

5. A dispenser for spool thread, comprising a container provided with a relatively movable section giving access to the interior thereof, and a spool thread assembly removable from and replaceable in the container as a unit, the said assembly consisting of requisite shafting carrying a plurality of spools of thread arranged in end-to-end relation and independently rotatable thereon, and supporting members for the shafting serving to space the spools apart, the said shafting and its supporting members being separably associated to permit rearrangement, renewal and replacement of the spools on the shafting.

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