March 28, 1961 M. L. JONES 2,977,033

THREAD HOLDING AND CUTTING DEVICE

Filed March 31, 1958

Fig. 1

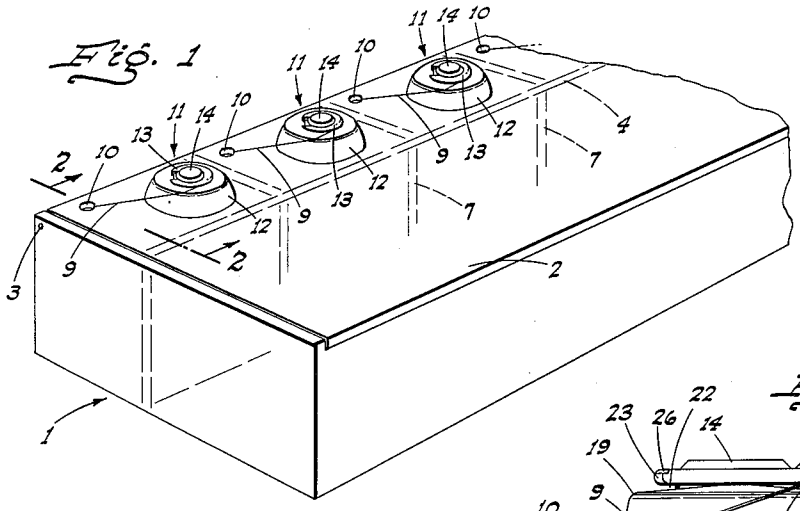



Fig. 2

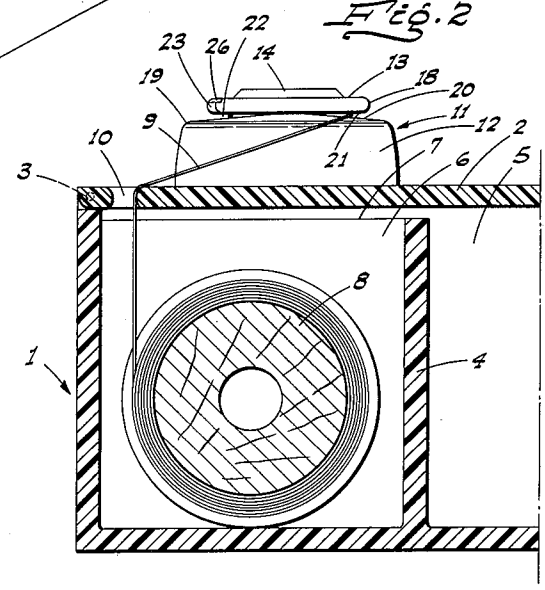



Fig. 3

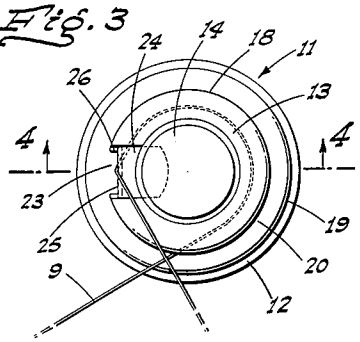



Fig. 4

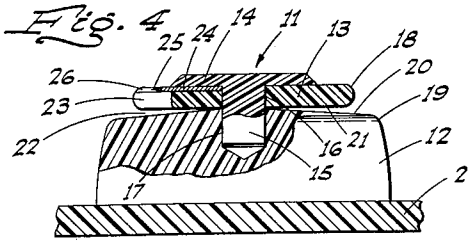



Fig. 5

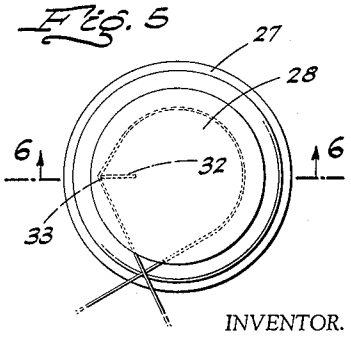
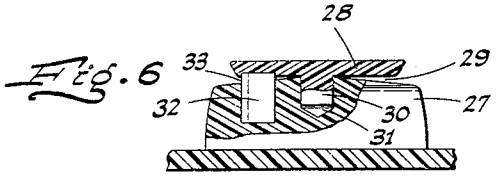



Fig. 6




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# THREAD HOLDING AND CUTTING DEVICE

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2 Claims. (Cl. 225—6)

This invention relates in general to an improvement in a sewing box or kit.

In particlar the invention is directed to, and it is a major object to provide, a thread holding and cutting device especially adapted—though not so limited—to be mounted on the lid of a sewing box; there preferably being a number of such devices so mounted, and each device receiving the thread from a corresponding spool in the box.

Another important object of the present invention is to provide a device, as above, which is arranged to normally and frictionally hold the thread in a position for ready manual access and release so as to permit a desired length of thread to be drawn from the spool; to then again receive the thread in holding relation upon a simple manipulation thereof; and finally to cut off such length of thread upon a pull being imposed thereon.

An additional object of the invention is to provide a thread-holding and cutting device which is capable—without structural change—of effectively receiving and holding thread having different gauges; i.e., thread varying in diameter from very fine to coarse.

A further object of the invention is to mount each of the thread holding and cutting devices on the lid of a sewing box in a position such that opening and closing of the lid does not materially vary the effective length of the thread which runs from within the box, through an aperture in the lid, and thence to said device.

It is also an object of the invention to provide a thread holding and cutting device which is designed for ease and economy of manufacture.

Still another object of the invention is to provide a practical and reliable thread holding and cutting device, and one which will be exceedingly effective for the purpose for which it is designed.

These objects are accomplished by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claims.

In the drawings:

Fig. 1 is a fragmentary perspective view of a sewing box showing a number of the thread holding and cutting devices as mounted on the lid of said box.

Fig. 2 is an enlarged fragmentary transverse sectional elevation, taken on line 2—2 of Fig. 1.

Fig. 3 is an enlarged top plan view of one of the thread holding and cutting devices.

Fig. 4 is a diametral elevation, mainly in section, taken on line 4—4 of Fig. 3.

Fig. 5 is a view similar to Fig. 4, but shows a modification of the device.

Fig. 6 is a diametral elevation, mainly in section, taken on line 6—6 of Fig. 5.

Referring now more particularly to the drawings and to the characters of reference marked thereon, and at present to Figs. 1–4 inclusive, the numeral 1 indicates—generally—a rectangular sewing kit or box having a lid



2 hinged at the rear, as at 3, for opening and closing movement.

Intermediate the front and rear of the box 1 the same is fitted internally with an upstanding, longitudinal partition 4 which defines—in said box—a forward compartment 5 for the reception of sewing accessories. Rearwardly of the partition 4 the box is formed internally with a row of spool compartments 6; adjacent compartments being separated by transverse partitions 7.

Each compartment 6 contains a spool 8 of thread; the thread 9 from each such spool 8 leading upwardly through an aperture 10 in the lid 2 closely adjacent its rear edge, and of course similarly disposed relative to the hinge 3. From the aperture 10 the thread 9 leads at a forward and upward diagonal to the related one of the thread holding and cutting devices, each of which is indicated generally at 11.

Each thread holding and cutting device 11 is rigidly mounted on the lid 2 overlying the corresponding compartment 6, but in offset relation to the aperture 10, as shown.

Each device 11 comprises a cylindrical base 12 which is relatively short vertically, and which base is affixed to the lid 2.

A circular disc 13 rests concentrically atop the cylindrical base 12 and is attached to the latter by means of a circular cap plate 14 which engages the top of the disc 13; the cap plate 14 having a central neck 15 which depends through a bore 16 in the disc 13 and thence enters, and is secured in, a socket 17 in base 12.

All of the foregoing parts are preferably fabricated of plastic and are secured together by a suitable adhesive; the base 12 similarly being affixed to the lid 2.

The disc 13 is of somewhat lesser diameter than the base 12, while the cap plate 14 is of lesser diameter than said disc; the periphery of the disc being rounded, as at 18, while the upper and outer circumferential corner of the base 12 is also rounded, as at 19.

The top surface 20 of the base 12 slopes outwardly and downwardly, while the bottom surface 21 of the disc 13 is horizontal; thus forming a radially inwardly tapering, circumferential, thread receiving groove 22 between the disc 13 and base 12. The groove 22 preferably tapers at an angle of 3½ degrees and such groove feathers out quite close to but short of the neck 15.

At one point in the circumference thereof the disc 13 is formed with a substantially radial, outwardly opening notch 23. A horizontal, substantially rectangular blade 24 is recessed into the top of the disc 13, and confined by the cap plate 14; such blade projecting radially outwardly so that the cutting edge 25 overhangs the notch 23, but is disposed inwardly of the outer end or throat of such notch.

As shown, the cutting edge 25 is straight and extends transversely between opposite sides of the notch 23; the recess in which the blade 24 seats being shown in part at 26.

Each of the thread holding and cutting devices 11 functions as follows:

The thread 9, as aforesaid, normally leads from the aperture 10 at a forward and upward diagonal to the device 11, with the thread engaged in wedging or frictional holding relation in the tapered circumferential groove 22. See Fig. 1.

When a length of thread is needed for sewing, the thread between the aperture 10 and device 11 is grasped and first withdrawn from the groove 22, and then a sufficient length is pulled off of the spool 8 and through such aperture 10.

Nextly, the thread, at the inner end of the length needed for sewing, is wound—part-circle—into the groove 22 and pulled relatively taut, which wedges or

frictionally engages the thread in said groove by reason of the taper of the latter.

As the circular disc **13** is of lesser diameter than the cylindrical base **12**, manual entry of a thread into the groove **22** can be more readily accomplished, and additionally such entry is smooth, because of the rounding of the periphery **18** of said disc **13** and the upper outer corner or edge **19** of the base **12**.

The wound-in portion of the thread is then brought out of the groove **22** upwardly through the notch **23** and across the cutting edge **25** of blade **24**. Thereafter, by pulling on the free length of thread, it is easily severed at its inner end by said cutting edge. The wound-in portion of the thread remains in the groove **22**, so that the thread again spans between the aperture **10** and device **11** for easy manual access when again needed.

By reason of the fact that each aperture **10** is close to the hinge **3**, the lid can be opened and closed without substantially altering the effective length of that part of the thread which so spans between each aperture **10** and the corresponding device **11**.

In the embodiment shown in Figs. 5 and 6 each device comprises a cylindrical base **27**, and a top disc **28** related to such base **27** in the same manner as in the previously described embodiment, and for the purpose of defining a tapered, circumferential, thread receiving groove **29**. Here, however, no cap plate is needed and the neck **30** is integral with the disc **28** and seats in a socket **31** in base **27**.

In this embodiment—i.e. that of Figs. 5 and 6—the blade **32** is vertically and radially disposed, with its cutting edge **33** outermost; such blade spanning the thread-receiving groove **29** adjacent but short of the periphery of the disc **28**. The blade **32** is held in place by embedding part in the base **27** and part in the disc **28**.

The instant embodiment of the device is used in substantially the same manner as described in connection with the device formed as in Figs. 1–4 inclusive, except that the thread is cut by merely carrying it in the groove **29** across the cutting edge **30**, and then imparting a pull in a generally circumferential direction. See Fig. 5.

From the foreging description it will be readily seen that there has been produced such a device as will substantially fulfill the objects of the invention, as set forth herein.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations therefrom may be resorted to as do not form a departure from the spirit of the invention, as defined by the appended claims.

Having thus described the invention, the following is claimed as new and useful, and upon which Letters Patent are desired:

1. A thread holding and cutting device comprising, as a unit, a base, a disc secured on the base, the adjacent surface of the base and disc being angularly related to define a relatively narrow but deep inwardly tapering circular groove for wedging engagement with a portion of a thread wound-in by manipulation of a free length of such thread, and a cutter mounted on the unit adjacent the disc with its cutting edge exposed and facing radially out relative to the disc and disposed radially out from the bottom of the groove.

2. A thread holding and cutting device comprising, as a unit, a base, a disc secured on the base, the disc being formed with a circumferentially extending peripheral notch therethrough, and a cutter blade supported on the disc and spanning the disc with its cutting edge facing radially out; the adjacent surfaces of the base and disc being angularly related to define a relatively narrow tapering thread-wedging groove therebetween and extending unobstructedly thereabout; the cutting edge of the blade being disposed radially out from the bottom of the groove and the notch communicating with said groove.

**References Cited** in the file of this patent

UNITED STATES PATENTS

| | | |
|---|---|---|
| 649,180 | Robinson | May 8, 1900 |
| 1,311,616 | Pattie | July 29, 1919 |
| 2,501,515 | Hood | Mar. 21, 1950 |
| 2,515,509 | Green | July 18, 1950 |
| 2,630,981 | Strocco | Mar. 10, 1953 |
| 2,646,908 | Madan | July 28, 1953 |
| 2,673,669 | Hawkins | Mar. 30, 1954 |
| 2,711,294 | Nylund et al. | June 21, 1955 |

FOREIGN PATENTS

| | | |
|---|---|---|
| 415,676 | Germany | July 4, 1925 |
| 603,290 | France | Jan. 8, 1926 |