Feb. 2, 1960 F. E. SMITH 2,923,490

REEL ASSEMBLY FOR KITE-LINES AND THE LIKE

Filed Oct. 19, 1956

FIG. 1

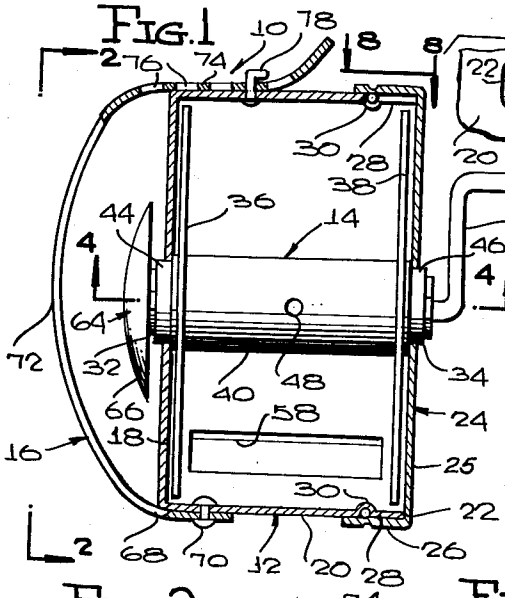


FIG. 8

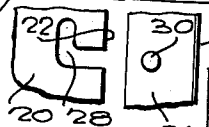


FIG. 4

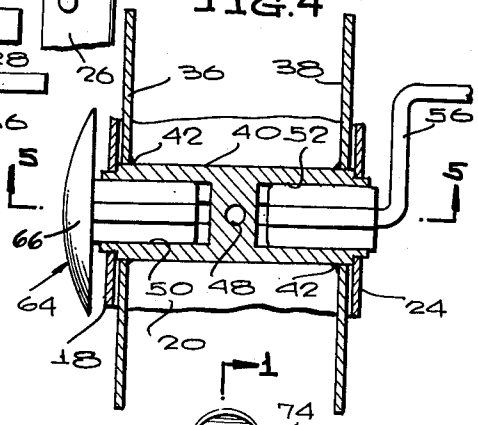


FIG. 2

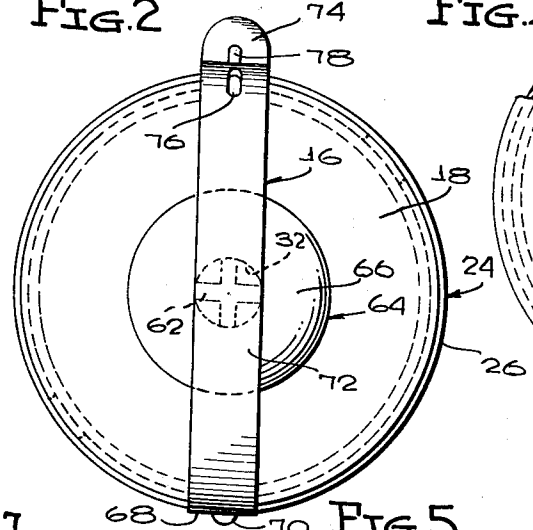


FIG. 3

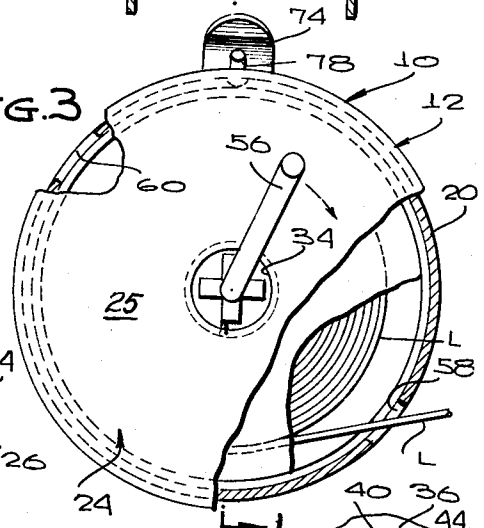


FIG. 6

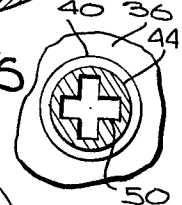


FIG. 5

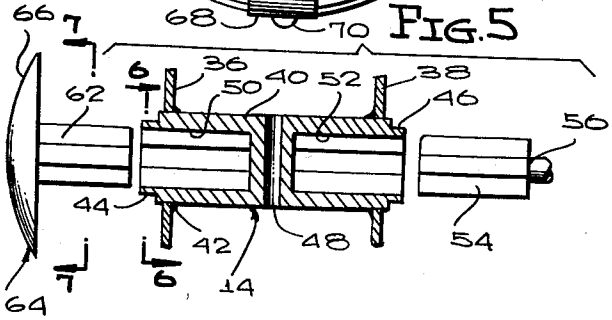
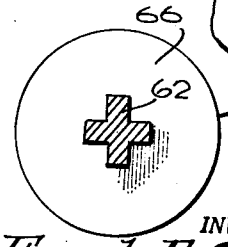


FIG. 7



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REEL ASSEMBLY FOR KITE-LINES AND THE LIKE

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Application October 19, 1956, Serial No. 617,164

2 Claims. (Cl. 242—96)

This invention relates to an improved brake-equipped reel for kite-lines and the like.

The primary object of the invention is to provide a more practical and efficient reel of this kind which involves a casing containing a manually rotated reel drum which has on one end thereof a brake disc which is engageable by the hand for braking the drum, and a handle bail on the same end of the casing which facilitates holding and handling of the reel and manual engagement with the brake disc.

Another object of the invention is to provide a reel of the character indicated which can be made in well-finished, rugged, and serviceable forms at relatively low cost, is easily used, and is highly satisfactory and acceptable for the purpose intended.

These together with other objects and advantages which will become apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout the several views, and in which:

Figure 1 is a vertical longitudinal sectional view through a reel of the invention, taken on line 1—1 of Figure 3;

Figure 2 is a left-hand end elevational view, taken from the line 2—2 of Figure 1;

Figure 3 is a right-hand end elevational view of Figure 1, portions being broken away and in section;

Figure 4 is a fragmentary transverse sectional view taken substantially on line 4—4 of Figure 1;

Figure 5 is an exploded transverse sectional view taken substantially on line 5—5 of Figure 4;

Figure 6 is an enlarged fragmentary transverse sectional view taken substantially on line 6—6 of Figure 5;

Figure 7 is a transverse sectional view taken substantially on line 7—7 of Figure 5; and

Figure 8 is a fragmentary exploded top plan view, on an enlarged scale, taken from line 8—8 of Figure 1.

Referring to the drawings in detail, the illustrated reel, indicated generally at 10, comprises a cylindrical casing 12 having a side wall 20 preferably integral with an end wall 18. The other end of the casing 12 is open and has an end edge 22. Engaged over the end edge 22 is a cylindrical cover 24 having a web 25 having thereon a peripheral flange 26 which is removably engaged over the open end of the side wall 20, see Figure 1. Any suitable means can be utilized for detachably retaining the cover 24 on the open end of the side wall 20, such as L-shaped bayonet slots 28 opening through the edge 22, and radial pins 30 extending from the inner side of the flange 26, which engage in the slots 28.

The casing end wall 18 and the web 25 of the cover 24 have aligned axial journal holes 32 and 34, respectively, for a purpose hereinafter described.

The reel 10 further comprises a reel assembly 14 which comprises a pair of annular end plates 36 and 38 secured on the opposite ends of a cylindrical reel drum

40, as by welds 42, for example. The drum 40 has on its opposite ends reduced diameter pintle portions 44 and 46 which are rotatably engaged in the holes 32 and 34, respectively, of the casing end wall 18 and the cover 24. Suitable means are provided on the drum 40 for securing thereto one end of a kite-line L, such as a diametrical bore 48.

Opening at opposite ends of the drum 40 and accessible from the exterior of the casing 12, are sockets 50 and 52 which have irregular cross sections, cruciform as shown, for example. Removably engaged in the socket 52 is a cruciform cross section end portion 54 of a hand winding crank 56. The winding crank 56 when rotated in one direction winds the line L on the drum 40. The casing side wall 20 has thereon a longitudinally elongated slot 58 through which the line L is drawn, as shown in Figure 3. If desired, the side wall 20 may have a second longitudinally elongated slot 60 opposite the slot 58, providing an observation window, so that a user of the reel 10 can observe the amount of line wound on the drum 40 and also observe the manner in which the line is being wound upon the drum.

Removably engaged in the socket 50 of the drum 40 is a cruciform cross section stub shaft 62 of a brake, indicated generally at 64, which includes an enlarged annular brake disc 66 on the outer end of the stub shaft 62, which is adapted to be frictionally engaged by the palm of the hand, so as to limit or prevent rotation of the drum 40 as the line L is payed off the drum.

The reel 10 further comprises a handle 16 in the form of a bail 72 having one end portion 68 secured by means of a fastener, such as rivet 70, to the outer side of the casing side wall 20, with the bail 72 extending crosswise of the brake disc 66, and with the other end 74 of the bail 72 having therein a plurality of longitudinally spaced holes 76 which are selectively engageable over a hook 78 secured on the outside of the casing side wall 20, for adjusting the length of the bail 72 and its longitudinal spacing from the end wall 18 of the casing 12, and from the brake disc 66, as clearly seen in Figure 1.

The foregoing is considered as illustrative only of the principles of the invention. Since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, as fall within the scope of the appended claims.

What is claimed as new is as follows:

1. In a line reel, a casing having a side wall and first and second end walls having therein aligned journal openings, a reel assembly comprising a cylindrical drum having on its ends reduced pintle portions journaled through said journal openings, said drum having first and second ends, hand crank means engaged with said second end of the drum, and a brake assembly comprising a stub shaft mounted non-rotatably on said first end of the drum, said stub shaft having an outer end, and an enlarged brake disc fixed on said outer end, a handle bail having a first end fixed to said casing side wall, said bail having a second end, securing means on the opposite side of the casing side wall with which said second end of the bail is selectively engageable for adjusting the length of the bail, said bail extending crosswise of and being longitudinally outwardly spaced from the brake disc.

2. A reel comprising a casing having a side wall and first and second end walls, said end walls having aligned openings therein, a drum having reduced pintles on its ends journaled in the end wall openings, a hand crank non-rotatably engaged with the drum pintle at and located outside of said second end wall, a brake disc non-

rotatably mounted on the drum pintle at and located outside of said first end wall, and a handle bail extending across said first end wall and crosswise of said brake disc and secured at its ends to the casing, said handle bail having an intermediate portion spaced longitudinally outwardly from and facing said brake disc, said handle bail having a first end fixed to the casing side wall, and a second end, said second end having longitudinally spaced holes therein, and a hook on the casing side wall remote from said first end over which holes are selectively engaged for adjusting the spacing of said intermediate portion of the bail from the brake disc.

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