July 26, 1966 A. C. BEAM 3,262,649

YARN REEL AND STAND

Filed July 13, 1964

Fig. 1

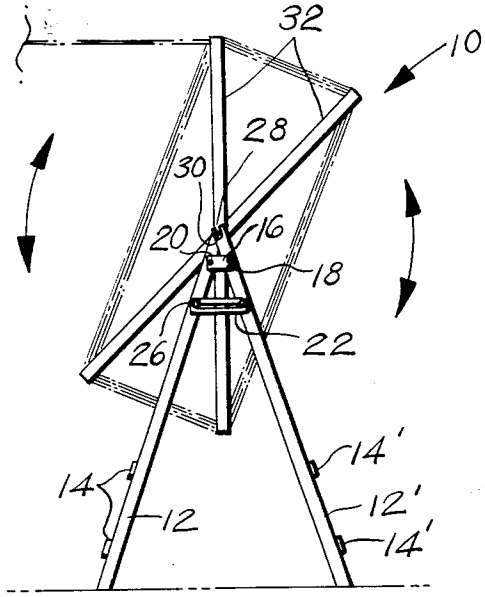


Fig. 2

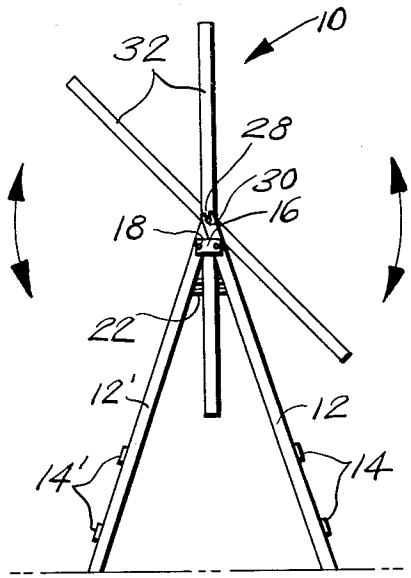


Fig. 3

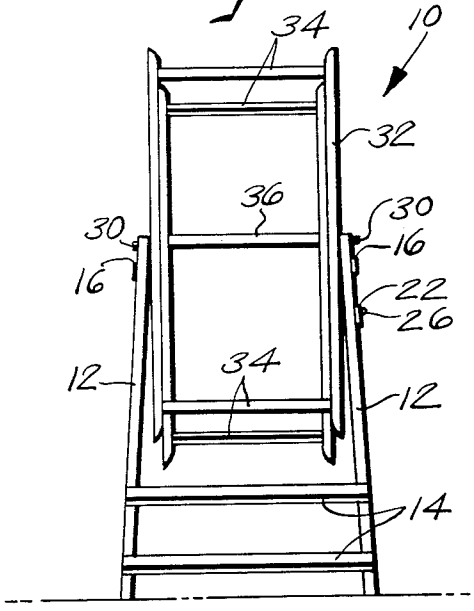
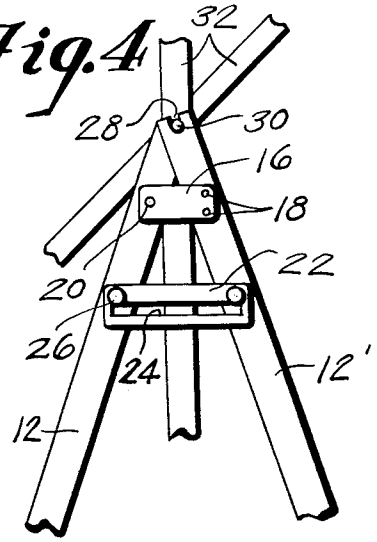


Fig. 4



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YARN REEL AND STAND

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1 Claim. (Cl. 242—54)

This invention relates to yarn apparatus and more particularly to a yarn holding reel and stand.

Today millions of women in the United States are knitting, some as a hobby and some for profit. They buy their yarn in hanks which must be wound into a ball to be used conveniently.

The primary object of the present invention is to provide a yarn reel and stand which will receive on the reel a hank of yarn and the reel will be spread apart so that the yarn may be wound off of the reel into a ball by hand with the reel turning easily on the stand while the ball is being wound.

Another object of the present invention is to provide a yarn reel and stand which will enable the operator to sit down while winding the yarn and the operator can consequently watch television, entertain or the like while winding yarn.

A further object of the present invention is to provide a yarn reel and stand which will have a collapsible and removable reel together with a foldable stand to allow for easy storage and transportation.

A further object of the present invention is to provide a yarn reel and stand which will quickly and easily accept a hank of yarn on the reel and the apparatus will be of such construction as to allow it to stand on the floor when being used.

A still further object of the present invention is to provide a yarn reel and stand of the above mentioned type which will have legs acting as stabilizing means to prevent the legs of the stand from extending too far apart when the apparatus is in use.

Other objects of the invention are to provide a yarn reel and stand bearing the above objects in mind which is of simple construction, has a minimum number of parts, is inexpensive to manufacture and is efficient in operation and use.

For other objects and for a better understanding of the invention, reference may be had to the following detailed description taken in conjunction with the accompanying drawing, in which:

FIGURE 1 is a side view of a reel and stand comprising the present invention; showing the yarn in phantom lines;

FIGURE 2 is a view of the opposite side of FIGURE 1;

FIGURE 3 is an end view of FIGURE 1; and

FIGURE 4 is an enlarged fragmentary view of FIGURE 1 shown in elevation.

Referring now more in detail to the drawing, a yarn reel and stand **10** made in accordance with the present invention is shown to include a pair of spaced apart legs **12** and a pair of spaced apart legs **12'** which are provided respectively with a pair of parallel cross members **14** and **14'** to prevent legs **12** and **12'** from spreading apart. A pair of plates **16** of rectangular configuration made of metal or other suitable material are secured by means of pairs of bolts **18** to legs **12'** and a pin **20** extending from the upper extremities of legs **12** receives the other

end of plate **16** and provides hinge means for legs **12** and **12'**. An elongated latch member **22** of metal or other suitable material is provided with a U-shaped opening **24** which allows a pair of pins **26** to be slidably received within latch member **22**. The upper extremities of opening **24** of latch **22** receives pins **26** and latches the legs **12** and **12'** so that they will not accidentally spread or close until desired. An opening **28** of U-shaped configuration through the upper extremities of legs **12** and **12'** freely and slidably receive shafts **30** of the reel frame members which will hereinafter be described. Shafts **30** project at right angles from a pair of pivotable frames **32**, one being received within the other to form a completely collapsible reel. Frames **32** are provided with a plurality of parallel, spaced apart cross members **34** and the inner frame **32** is provided with a central cross member **36** which receives and is secured to shafts **30** which thus supports the reel member of the herein described apparatus.

In use, the reel comprising the frame **32** is lifted from the stand comprising the legs **12** and **12'** and the hank of yarn is slipped on to the reel, after which the reel frames **32** are spread apart to apply tension to the yarn contained thereon. The reel member is then placed with the shafts **30** back into the openings **28** of the upper extremities of legs **12** and **12'** and thus the stand comprising the legs **12** and **12'** supports the frames **32** forming the reel member of the apparatus.

The reel is then easily rotated by grasping with the hand and the yarn is wound off into a ball by the hands of the operator.

It shall be noted that various forms of hinge means and latch means may be utilized in the stand member of the present invention to provide proper folding and latching.

While various changes may be made in the detail construction, it shall be understood that such changes shall be within the spirit and scope of the present invention as defined by the appended claim.

What I claim as new and desire to protect by Letters Patent of the United States is:

A yarn reel and stand device comprising, a pair of A-shaped collapsible leg members, an X-shaped collapsible reel supported on said leg members, a pair of rectangular plate members carried by said leg members for providing hinge means for folding said leg members, an elongated latch member carried by said leg members for providing rigid stability for said leg members when said stand is in an expanded position, cross members secured to said leg members for imparting rigidity to said members, the upper extremities of said leg members being provided with U-shaped openings, a shaft member secured to each side of said reel, each of said U-shaped openings adapted to receive the outer portion of said shaft member, at least one plate for providing hinge means for said leg members, a plurality of bolts for securing said leg members to one end of said plate, a pivot pin on the other end of said plate adapted to be received by the opposite side of said leg member thereby allowing the upper extremities of said leg members to pivot in such a manner that said members may be folded together for storage or transport, a latch member having an elongated U-shaped slot, pin members

extending at right angles from said leg members, said pin members being adapted to be received within said slot thereby providing slideable and pivotable means for locking said legs at one side of said stand, a central cross member positioned within said reel and the upper extremities of said leg members, and a shaft secured at each end of said central cross member protruding through the frame members of said reel and being rotatably supported by said U-shaped openings at the upper extremity of each of said leg members.

References Cited by the Examiner

UNITED STATES PATENTS

441,481	11/1890	Garner	211—178
1,840,120	1/1932	McClintock	242—55.3
1,981,268	11/1934	Heiser	248—166
2,198,114	4/1940	Houger	242—127

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