W. J. STOTT.

TWINE HOLDER.

APPLICATION FILED OCT. 22, 1920.

1,398,347. Patented Nov. 29, 1921.

Fig. 1.

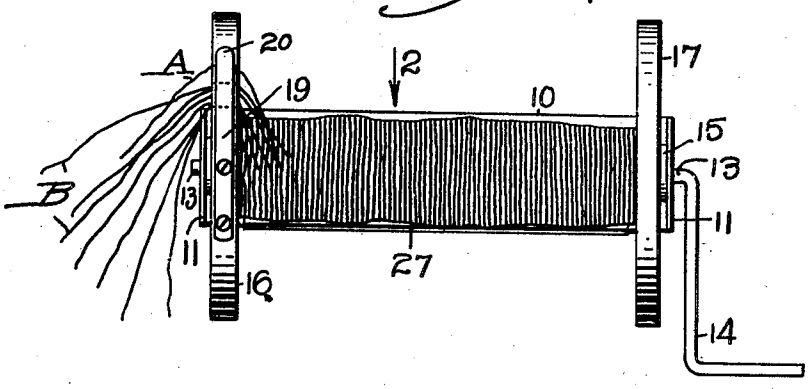


Fig. 2.

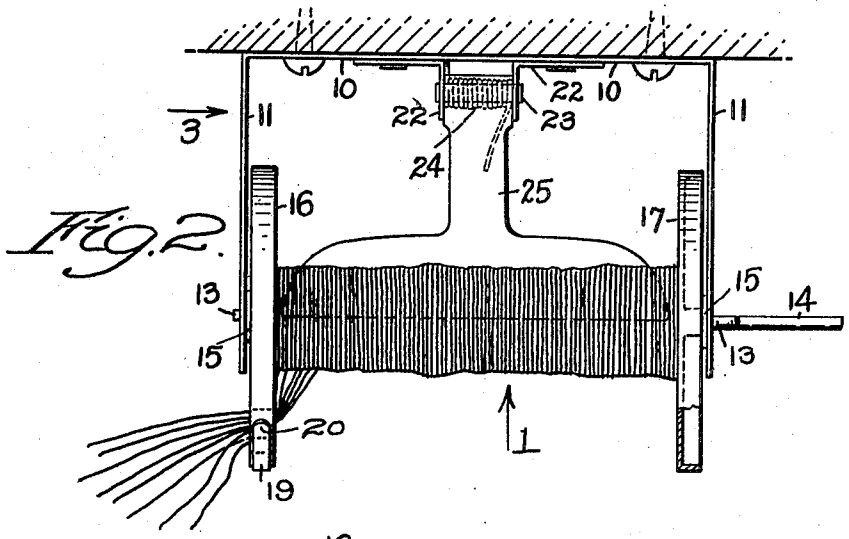
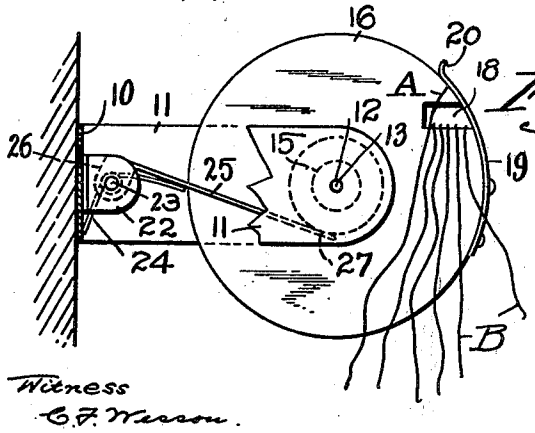


Fig. 3.



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TWINE-HOLDER.

1,398,347. Specification of Letters Patent. Patented Nov. 29, 1921.

Application filed October 22, 1920. Serial No. 418,661.

To all whom it may concern:

Be it known that I, WILLIAM J. STOTT, a citizen of the United States residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Twine-Holder, of which the following is a specification.

This invention relates to a device for receiving and holding short lengths of twine and string for the purpose of keeping the same in a position where they will be readily accessible and in an untangled condition.

The principal objects of the invention are to provide a device of this character with means for temporarily holding one end of each piece of string or twine while it is wound on a cylinder from that end, and to provide for conveniently locating the same end of the string after the winding operation is completed, so that it will be easy to unwind the same again and have it automatically detach itself from the cylinder; also to provide an improved spring tension device for holding the string or cord in a taut condition while it is being wound, and for assisting in detaching it when desired.

Further objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings in which—

Figure 1 is a side view of a preferred embodiment of the invention;

Fig. 2 is a plan of the same, and

Fig. 3 is an end view. The arrows 1, 2 and 3 indicate the directions in which the respective views are taken.

In the form illustrated, the article embodies a support 10 which I have shown as being fixed to a vertical wall, although it is applicable to a horizontal or other surface. This consists of a piece of sheet metal having a flat portion adapted to engage the surface to which it is attached, by means of screws or the like. It also is provided with two ends 11 constituting supporting plates, each of which is provided with a perforation at 12 constituting a bearing for a shaft 13.

This shaft 13 has a crank 14 on the end for turning it by hand. It is provided with a cylindrical center portion or drum 15 extending from one bearing to the other. On this are located two heads 16 and 17. I have shown the head 16 as formed of wood and the head 17 of sheet metal, although these materials are not absolutely essential. It will be seen that the central portion 15 and the two heads 16 and 17 together constitute a spool.

The head 16 is intact and of plain cylindrical form, but it is provided with a notch 18 cut into its edge and with a spring 19 secured to its edge beyond the notch and projecting over the notch. This spring is offset at its end 20 to facilitate the entrance of a string or cord under it, so that it can be held between it and the edge of the spool head. One of the cords A is shown as in this position.

On the support 10 are fixed two brackets 22 bent up into parallel planes at their adjacent ends. These adjacent ends have bearings supporting a shaft 23 on which is wound a string 24 having one end engaging the support 10. Also mounted on this shaft is a brake 25 preferably formed of sheet metal and having two ears 26 bent into parallel planes and perforated. These two ears are carried on the shaft 23 so that the brake is pivotally mounted thereon. The opposite end of the spring 24 presses against this brake 25 and forces it against the string or cord on the spool.

The operative face 27 of this brake is straight and extends substantially the whole length of the spool between the heads. It is located in such position that the brake is, as nearly as possible, tangent to the body of the string on the spool at all times no matter how much there may be on it.

In the operation if the device a string that it is desired to save is taken near one end and forced under the spring 19 into the position shown at A in Fig. 3. This temporarily holds that end of the string. The operator then turns the crank 14 in the right hand direction in Fig. 1 and thus winds the string on the spool. As it is wound the brake holds it down and keeps it taut, but the operator controls the feed longitudinally of the spool with his left hand. When wound all the way on the spool the brake holds the free end. After several strings are wound on in this way, the ends held under the spring 19 can be pushed into the notch 18 as indicated by the several ends B. These are held therefore in this general position where they do not conflict with the operation of the device.

When it is desired to unwind the string the crank is turned in the opposite direction. An end is separated by the flat opera-

tive surface 27 of the brake as the spool rotates backward and is caught by the left hand if desired while the string is being unwound. The brake itself will serve to unwind it under ordinary circumstances if the crank is turned continuously in the left hand direction.

When the loose end B is reached the same will be readily withdrawn from the notch 18 as no force can be applied by the spool to the end while in that notch.

In this way the strings that come tied around packages can be preserved in an untangled and readily accessible condition, thus saving a great deal of time in the household or office and conserving one of our waste products.

Although I have illustrated and described only a single form of the invention I am aware of the fact that modifications can be made therein without departing from the scope of the invention as expressed in the claims. Therefore I do not wish to be limited to all the details of construction herein shown and described, but what I do claim is:—

1. As an article of manufacture, a string holder comprising a support having two bearings, a shaft supported by the bearings provided with a crank for operating it, and a spool on the shaft comprising a head provided with yielding means for holding the loose ends of the strings and with a notch in the edge of the spool head for receiving a plurality of loose ends.

2. In a string holder, the combination of a support having two bearings, a shaft rotatably mounted in said bearings, a spool on the shaft comprising a head, and a spring on the edge of the head for holding the loose ends of the strings, said head having a notch therethrough under said spring for receiving a plurality of loose ends.

3. In a string holder, the combination of a support consisting of a sheet metal member adapted to be secured to a wall and having two projections extending from its opposite ends in parallel planes, said projections having a pair of bearings, a shaft supported in said bearings, a pair of spool heads on said shaft near its ends between said bearings, a pair of brackets on said support between said projections, a shaft or stud supported by said brackets parallel with the first named shaft, a spring coiled around said shaft or stud having one end projecting therefrom, and a brake consisting of a sheet metal member having two ears bent into parallel position and pivoted on said shaft or stud, said brake being located in position to be engaged by the free end of said spring and having a wide operative surface extending substantially the full length of said spool between said heads for engaging with spring pressure any string wound on the spool.

4. In a string holder, the combination of a support adapted to be secured to a wall and having a pair of bearings, a shaft supported in said bearings, a pair of spool heads on said shaft, a pair of brackets on said support between said bearings, a shaft or stud supported by said brackets parallel with the first named shaft, a spring coiled around said shaft or stud having one end projecting therefrom, and a brake consisting of a sheet metal member having two ears bent into parallel position and pivoted on said shaft or stud, said brake being located in position to be engaged by the free end of said spring and having a wide operative surface extending substantially the full length of said spool between said heads for engaging string wound on the spool.

5. In a string holder, the combination of a support adapted to be secured to a wall and having a pair of bearings, a shaft supported in said bearings, a pair of spool heads on said shaft, a shaft or stud supported parallel with the first named shaft, a spring coiled around said shaft or stud having one end projecting therefrom, and a brake pivoted on said shaft or stud, said brake being located in position to be engaged by the free end of said spring and having a wide operative surface extending substantially the full length of said spool between said heads for engaging string wound on the spool.

In testimony whereof I have hereunto affixed my signature.

WILLIAM J. STOTT.