

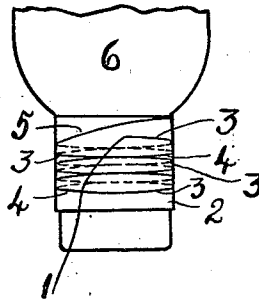
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T. ANDREW

YARN PACKAGE

Original Filed April 14, 1920



INVENTOR:-

Thomas Andrew

By Brown & Swain

ATTORNEYS:-

UNITED STATES PATENT OFFICE.

THOMAS ANDREW, OF ROCHDALE, ENGLAND.

YARN PACKAGE.

Original application filed April 14, 1920, Serial No. 373,950. Divided and this application filed September 14, 1921. Serial No. 500,324.

To all whom it may concern:

Be it known that I, THOMAS ANDREW, a subject of the King of the United Kingdom of Great Britain and Ireland, and resident of 492 Manchester Road, Rochdale, in the county of Lancaster, England, have invented new and useful Improvements in Yarn Packages, of which the following is a specification.

This application is a division of application No. 373,950, filed April 14, 1920.

The object of this invention is to make more easy, convenient and expeditious than it has hitherto been the attachment of the last wound end of the yarn of one yarn package such as a bobbin, cop or the like to the first wound end of another for the placing of yarn packages one after another in creels with the beginning of each attached to the end of another and continuous running off or unwinding of one yarn package after another. To this end, the invention consists in yarn packages provided with securely fixed coils of yarn wound on the yarn holders such for example as wood or other bobbins, tubes, or skewers previously to the ordinary windings or coils of the "bottoms" of first wound portions of the ordinary formation of the yarn packages so as to be furnished with portions of yarn readily found and unwound for attachment to the last wound ends of the yarn of other yarn packages.

The accompanying drawing is a diagrammatic side elevation of the lower part of a bobbin with yarn wound upon it below and previously to the ordinary windings forming the bottom of the bobbin.

The accompanying drawing shows the end 1 of yarn led to the yarn holder, in the case shown a bobbin, as secured in position by a downwardly wound coil 3 being first wound on the yarn holder 2 and then an upwardly wound coil 4 being wound over it and the end 5 of yarn extending from the upwardly wound coil 4 being led to and wound in the "bottom" 6 of the ordinary windings of yarn on the yarn holder 2. By a suitable number of turns being included in the downwardly and upwardly wound coils 3, 4 any length of yarn requisite may be provided for facilitating the connection of the end first wound upon one yarn holder to the end last wound upon another yarn holder in order that the yarn holders may be

mounted in creels and unwound successively in the manner hereinbefore mentioned. By the ends 1 and 5 of yarn being secured respectively by the coils 3, 4 and by the ordinary windings of the "bottom" 6 of the yarn package on the yarn holder 2, the coils 3, 4 are themselves secured in position on the yarn holder 2 so that the end 1 is kept in position to be found easily and the length of yarn for the connection of one yarn package to another is retained on the yarn holder 2 and preserved from unwinding or breakage in the handling or carriage of the yarn packages until required for use.

According to this invention therefore coils or windings of opposite hand are wound one to overlap another on yarn holders previously to the commencement of the coils or windings of the bottoms or like parts of yarn packages, such as bobbins, so as to be on parts of the yarn holders to project from the completed yarn packages at the ends at which winding was begun, so that the earlier wound coil or winding secures the end of yarn first led to the yarn holder and is itself secured by a later coil or winding of opposite hand and the last overlapping coil is secured by the yarn forming its end portion extending into the bottom or like basal part of the yarn package.

What I do claim as my invention and desire to secure by Letters Patent is:—

1. In a yarn package, a yarn holder, a loose projecting easily accessible end of yarn continuing into and having its immediate continuation overlapped and secured by securely fixed coils of yarn wound on the holder previously to the ordinary initial windings of the yarn package and on part of the holder to project from the first wound end of the completed yarn package.

2. In a yarn package, a yarn holder, a loose projecting easily accessible end of yarn continuing into and having its immediate continuation overlapped and secured by securely fixed coils of yarn wound in spirals of opposite hand on the yarn holder previously to the ordinary initial windings of the yarn package and on part of the holder to project from the first wound end of the completed yarn package.

3. In a yarn package, a yarn holder, a loose projecting easily accessible end of yarn continuing into and having its immediate continuation overlapped and secured by se-

curely fixed coils of yarn wound in spirals of opposite hand on the holder previously to the ordinary initial windings of the yarn package and on part of the holder to project
5 from the first wound end of the completed yarn package and having the end of the last wound overlapping coil continuing into the

ordinary initial windings of the yarn package.

In testimony, that I claim the foregoing 10
as my invention, I have signed my name this thirtieth day of August, 1921.

THOMAS ANDREW.