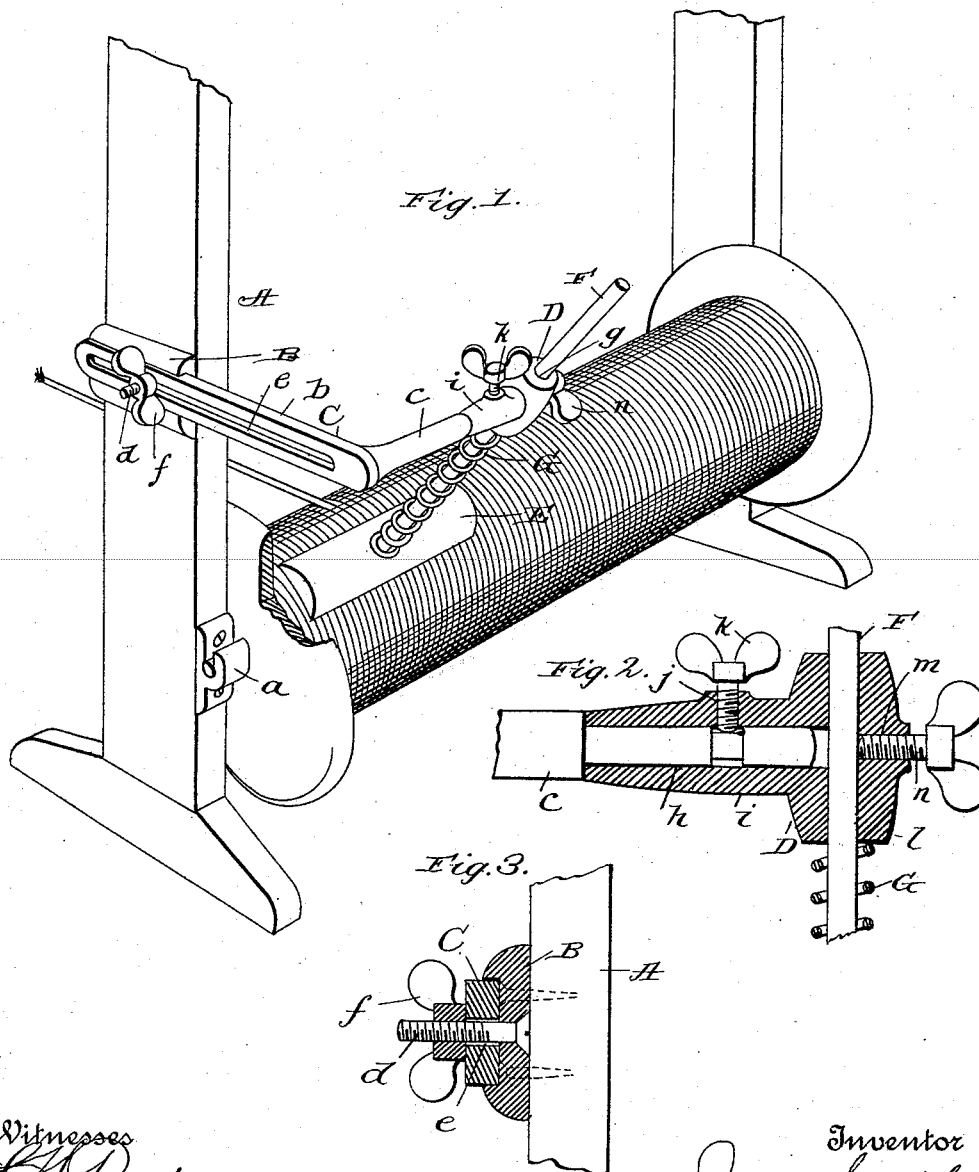


(No Model.)

J. SEMPLE.  
YARN CREEL.

No. 524,957.

Patented Aug. 21, 1894.



Witnesses  
*C. F. Baader*  
*N. F. Matthews.*

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*James Semple*  
By Attorney *James Sheehy*

# UNITED STATES PATENT OFFICE.

JAMES SEMPLE, OF WOONSOCKET, RHODE ISLAND.

## YARN-CREEL.

SPECIFICATION forming part of Letters Patent No. 524,957, dated August 21, 1894.

Application filed May 24, 1894. Serial No. 512,348. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES SEMPLE, a citizen of the United States, residing at Woonsocket, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Yarn-Creels; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improvement in yarn creels and it has for its object to improve the efficiency of such devices by providing a cheap and effective means of regulating the tension of the yarn as it is drawn from the spools, and to facilitate the removal of the spools from the frame.

Other objects and advantages will appear from the following description and claims when taken in connection with the annexed drawings, in which—

Figure 1, is a perspective view of a portion of a spool frame with my improvements in position. Fig. 2, is a longitudinal, sectional view of the adjustable socket or holder with the same applied to the bracket arm and the arm or rod of the friction pad in position, and Fig. 3, is a sectional view of the flanged guide and one of the uprights of the spool frame taken through the slidable bracket.

Referring by letter to said drawings: A, indicates the upright frame which may be of the ordinary construction, and of any suitable height according to the number of spools it is desired to receive. This frame is provided on its uprights and at suitable altitudes at opposite points with lug journals *a*, to receive the spindle ends or shafts of the spools, and sustain the latter in a horizontal position within the frame.

B, indicates a grooved or slotted plate which is suitably secured to the outer side of the uprights, and these guide plates are designed to be placed alternately on each outer side of the uprights of the frame; it being more convenient to have them in this way than to arrange them above each other.

C, indicates a bracket. This bracket is of a form, substantially as shown, and comprises a slotted branch *b*, and a branch *c*, disposed at right angles thereto. The slotted branch

of the bracket is placed in the guide plate B, and a threaded rod or bolt *d*, which extends laterally from this guide plate passes through the slot *e*, of the branch *b*, and receives on its outer end a thumb nut *f*, which is designed to adjustably secure the bracket in the guide plate, as will presently appear.

D, indicates the socket or holder. This holder is of a peculiar construction and is of approximately T-shape in outline, having a circular aperture *g*, in one branch, and a similar aperture *h*, arranged relatively at right angles thereto in the other branch. The socket in the branch *i*, of this holder receives the outer end of the arm *c*, of the bracket, and is provided with a lateral screw tapped aperture *j*, to receive a set screw *k*, for the purpose of securing the holder to said arm. The apertured branch *l*, of this holder is also provided with a screw tapped aperture *m*, to receive a set screw *n*, for the purpose of securing the stem of the friction pad or plate thereto.

E, indicates the friction pad or plate, which is designed to normally bear upon the yarn of the spool. This plate has a stem or handle F, extending therefrom and it passes through the aperture *g*, of the holder D. Surrounding the stem or handle and interposed between the plate or pad, and the holder D, is a spiral spring G, which exerts a pressure against the head of the pad or plate so as to force it against the yarn upon the spool.

From the construction described it will be seen that by simply loosening the thumb screw K, the holder D, and consequently the pad carried thereby may be swung upon the arm *c*, of the bracket to any desired position, and it will also be seen that by loosening the thumb screw *f*, the bracket and the friction pad or plate can be moved bodily toward and from the frame. These brackets overhang the spools and the stems of the friction plate are disposed obliquely toward the frame so that by moving the bracket inwardly, the friction plate will be moved tighter against the spool or yarn thereon, and the force of contact lessened when the bracket is pulled outwardly; the thumb screw *f*, serving to secure the bracket at the desired point. The springs are so made and tempered and tested as to be

all of as near the same tension as possible, but any variation might be corrected to a great extent by the adjustment of the brackets.

In removing the spools, it is simply necessary to grasp the extended ends of the pad stems or handles and draw them upwardly as far as the springs will permit, and then secure them in the holder by turning the screws *n*, which impinge against said stems, after which the screws *k*, should be loosened when the holder and friction plate can be swung freely upon the bracket and out of the way of the spool.

Having described my invention, what I claim is—

1. The combination of a bracket having a slotted branch and an arm or branch at an angle thereto, a friction pad or plate having a stem or handle, a holder having an eye to receive said stem or handle and carrying a set screw for securing the stem or handle in said eye and also having a socket or aperture

to receive the angular arm or branch of the bracket, and a set screw for securing the same in position thereon, substantially as specified. 25

2. The combination with a frame and a spool journaled therein; of a bracket having a branch adapted to be adjustably connected to the frame and an arm or branch at an angle thereto, a friction pad or plate having a stem or handle, a holder having an eye to receive said stem or handle and also having a socket aperture to receive the angular arm or branch of the bracket and means for adjustably fixing it in position upon said arm or branch and a spring interposed between the friction pad and the holder, all substantially as and for the purpose set forth. 30 35

In testimony whereof I affix my signature in presence of two witnesses.

JAMES SEMPLE.

Witnesses:

GEO. W. SPAULDING,  
CAROLINE R. MASON.