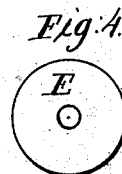
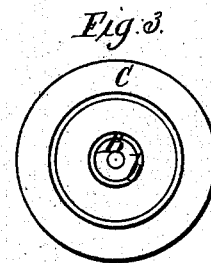
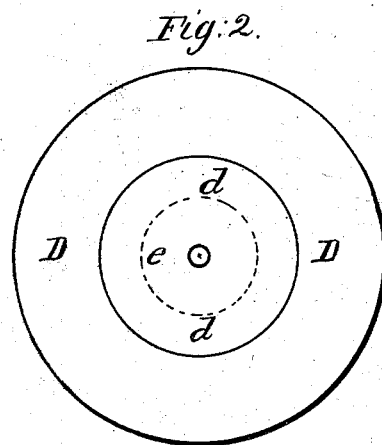
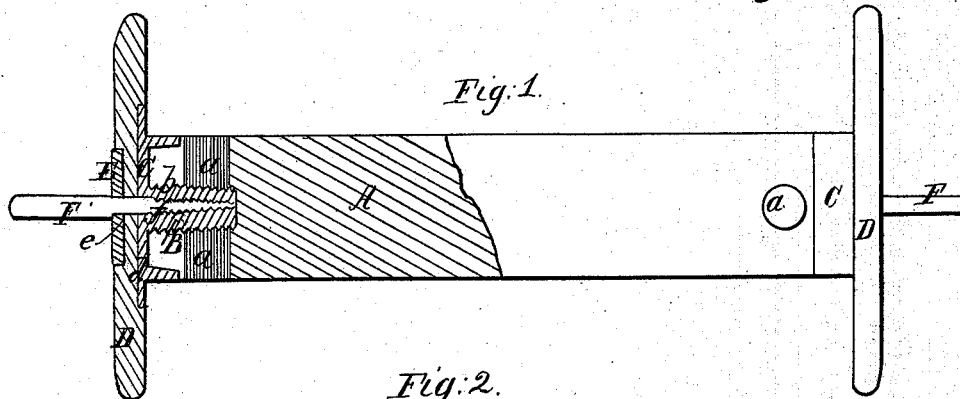


*Day & Folsom.*  
*Jack Spool for Spinning.*

*N<sup>o</sup> 49,507.*

*Patented Aug. 22, 1865.*



*Witnesses,*  
*Wm. Ketchum*  
*J. A. Heald.*

*Inventor,*  
*Daniel R. Day*  
*John G. Folsom*  
*By their Attorney J. B. Woodruff.*

# UNITED STATES PATENT OFFICE.

DANIEL R. DAY AND JOHN G. FOLSOM, OF WINCHENDON, MASSACHUSETTS.

## IMPROVEMENT IN JACK-SPOOLS.

Specification forming part of Letters Patent No. 49,507, dated August 22, 1865.

*To all whom it may concern:*

Be it known that we, DANIEL R. DAY and JOHN G. FOLSOM, of the town of Winchendon, in the county of Worcester, in the State of Massachusetts, have invented certain new and useful Improvements in Jack-Spools; and the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a spool with one end cut in section, showing the mode of fastening. Fig. 2 is an inside view of the spool-head, showing the recess for the cap-flange C, the recess for the washer E on the outside being shown in dotted lines. Fig. 3 shows the cap or socket flange. Fig. 4 is a view of the washer E.

The object of our invention is to secure soft-wood heads to light soft-wood shafts for jack-spools, so that the heads may be easily taken off, and when on be tight and not liable to become loose by the wood shrinking.

Our invention consists in putting through the shaft or body of the spool hard-wood pins into which a screw-thread is cut, so that the plug-screw of the socket-cap will fit into the hard-wood pin and be held there more securely than in the soft wood.

To enable others skilled in the art to make and use our invention, we will describe it more fully, referring to the drawings and to the letters marked thereon.

The middle piece or shaft, A, of the spool is made of white pine or other soft wood. At a short distance from each end a hole of about half an inch in diameter is bored through from side to side, into which are fitted plugs or hubs *a a* of hard wood. The shaft A is then bored in the direction of its length in and through the plugs *a a*, the hole being provided with a screw-thread to receive a central screw, B, of

metal, which forms a part of the socket-cap and flange C for securing the ends of the shaft A. The spool-heads D D, being turned of suitable size and thickness, are recessed, as shown at *d d*, to admit the flange C flush with the inner face of the spool-heads D D. On the outside of the spool-head a smaller recess, *e*, is formed, as shown in dotted lines, Fig. 2, to receive the metal cap or washer E flush with the outside of the head. The heads D D are held firmly to the flange C by a metal screw, *f*, which is fitted into the cap-flange, the projecting ends of the screws forming the pivots or journals F F of the jack-spool.

The advantages of our mode of constructing the flanges and fitting into the shaft the plugs of hard wood, the grain of which runs across the shaft, so that the screw may be held securely in the spool rather than in the end of the shaft, (in which case it is very difficult to make a screw hold,) will readily be seen and its merits appreciated by those using jack-spools, and the efficiency and the neatness of securing the spool-heads by having the metal caps on the outer ends sunk in flush with the head and held by the journals is also regarded as a valuable improvement over all other methods of fastening known or used.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The hard-wood plugs *a a*, put into the shaft A, in combination with the screw-cap flange C, outside plate, E, and journals F *f*, as herein described, for the purposes set forth.

DANIEL R. DAY.  
JOHN G. FOLSOM.

Witnesses:

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T. K. WARE.