W. S. HOTCHKISS.

SPOOL-STAND.

No. 190,491. Patented May 8, 1877.

Fig. 1.

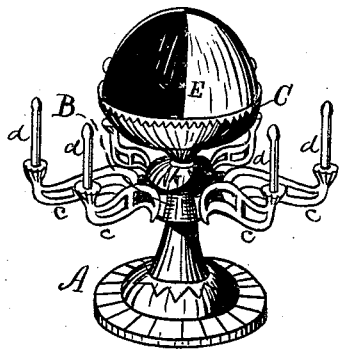


Fig. 2.

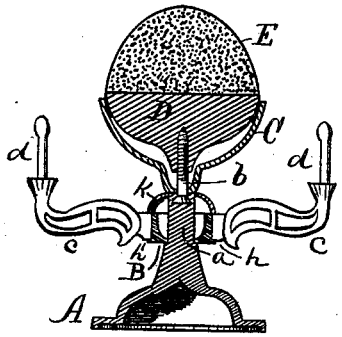


Fig. 3.

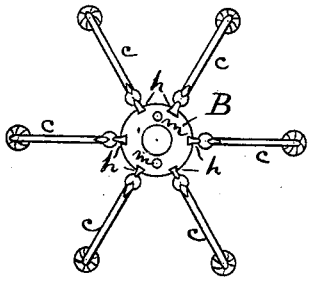
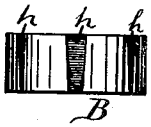


Fig. 4.



Witnesses,
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E. H. Davison

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Walter S. Hotchkiss.
By James Shepard Atty.

UNITED STATES PATENT OFFICE.

WALTER S. HOTCHKISS, OF SOUTHINGTON, CONNECTICUT.

IMPROVEMENT IN SPOOL-STANDS.

Specification forming part of Letters Patent No. **190,491**, dated May 8, 1877; application filed April 13, 1877.

To all whom it may concern:

Be it known that I, WALTER S. HOTCHKISS, of Southington, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Spool-Racks, of which the following is a specification:

My invention consists of the peculiar construction of certain parts, and in the combination of parts, as hereinafter described.

In the accompanying drawing, Figure 1 is a perspective view of a spool-rack which embodies my invention. Fig. 2 is a vertical section of the same, and Figs. 3 and 4 are views of detached parts of the same.

A designates the base, surmounted by an upright shaft, *a*, Fig. 2, from the upper end of which projects a screw, *b*, the same being a common wood-screw cast into the shaft. Upon the shaft *a* I hang the hub B, so as to revolve thereon, and provided with arms *c*, carrying spool-spindles *d*, as hereafter more fully described. A cup-shaped rose, C, having a central hole, is slipped over the screw *b*, and rests upon the end of shaft *a*. A block, D, with a pin or needle cushion, E, secured thereto, is then placed in the cup-shaped rose, and screwed upon the wood-screw *b*, and the several parts are securely held in place, as shown in Figs. 1 and 2.

For convenience of casting, and of cleaning when cast, I form the hub and arms in detached parts, and afterward secure them together.

The spool-spindles *d* are to receive and hold spools from which thread may be unwound when on the spindles; or, if desired, the spools may be very conveniently removed for unwinding, and then replaced, as there are no obstructions above said spindles. These spindles are formed on the upturned ends of the arms *c*, which ends form shoulders for the base of the spools to rest upon.

The main portion of the spindles *d* I make cylindrical in form, and with an oval-shaped enlargement at their upper ends.

By this shape the spindle can be made of a small amount of metal, and yet fill the bore of the spool; and, also, the enlargement has a tendency to prevent the spool from being accidentally lifted off the spindle.

The hub B I cast hollow, with the hole at its base of a size to fit the shaft *a*, the rest of the interior being larger, so as to make the hub as light as is consistent with strength.

In the edge of the hub I form as many dovetailed recesses *h* as there are arms *c*, said recesses being the most open at the top, as shown by the side elevation of said hub in Fig. 4.

The arms *c* are provided with a base, the sides of which are beveled to correspond with the dovetailed recesses *h*, into which they are firmly driven, as shown, Fig. 3 being a view of the under side of the hub and arms.

In order to render the arms doubly secure in their places, and also to get as long a bearing as possible—that is, a bearing at each end in a light hub—I secure a cap, *k*, by means of rivets *m*, Fig. 3, to the hub, and over the open ends of the dovetailed recesses, so that the arms cannot be detached without first detaching the cap.

I also form this cap hollow, and contracted at the top, so as to fit the shaft *a*, whereby the hub is supported upon the shaft *a* with all the firmness of one long solid bearing, while the parts are very much lighter than a solid hub, and are also of such form that the proper holes can be cast, so that the hub requires no drilling.

I claim as my invention—

1. In a spool-rack, the cylindrical spindles *d*, formed on the upturned ends of the arms *c*, and provided with an oval-shaped enlargement at their upper ends, substantially as described, and for the purpose set forth.

2. In a spool-rack, the hub B, provided with dovetailed recesses *h* at its edge, and the arms *c*, bearing a correspondingly-beveled base at their inner ends, and spool-bearing spindles at their outer ends, substantially as described, and for the purpose specified.

3. The combination of the hub B, recessed as described, the arms *c*, fitted therein, and the cap *k*, secured thereto, substantially as described, and for the purpose specified.

4. The base A, provided with shaft *a* and screw *b*, in combination with the revolving hub B, carrying spool-spindles, the cup-shaped rose C, block D, and cushion E, substantially as described, and for the purpose specified.

WALTER S. HOTCHKISS.

Witnesses:
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