J. McMILLAN.

THREAD-SPOOL.

No. 185,864. Patented Jan. 2, 1877.

FIG. 1

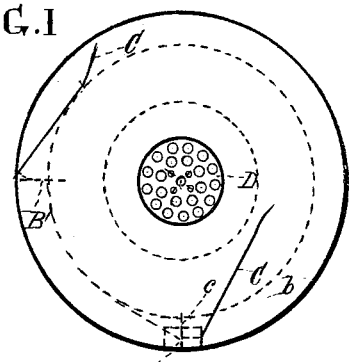


FIG. 2

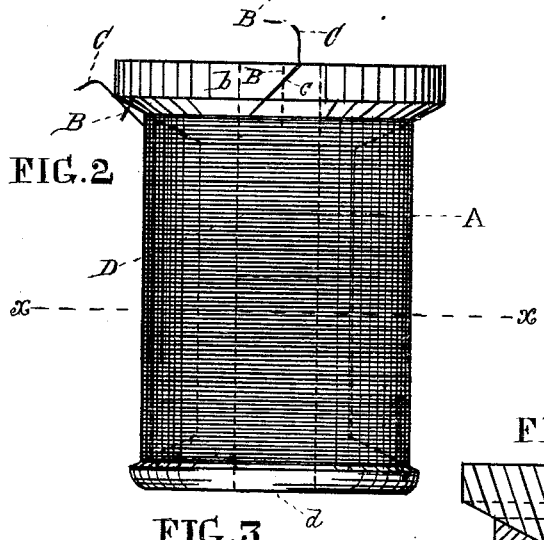


FIG. 4

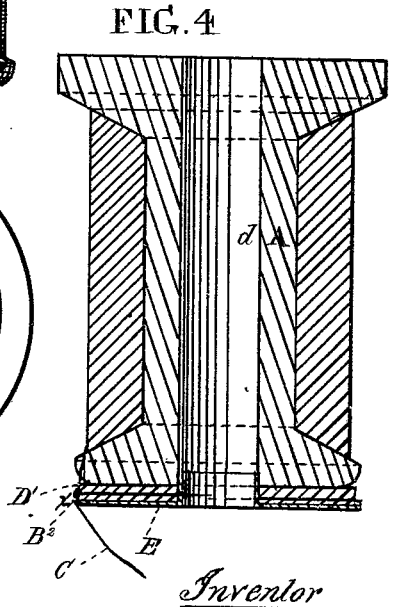


FIG. 5

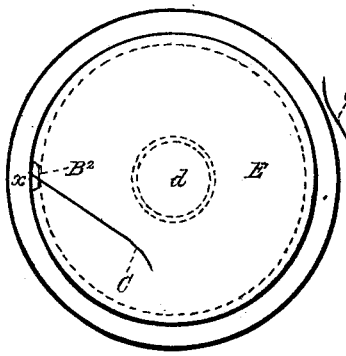
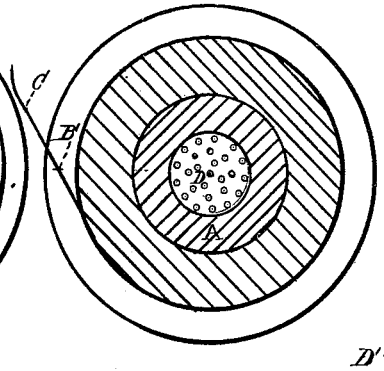


FIG. 3



Witnesses

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UNITED STATES PATENT OFFICE.

JAMES McMILLAN, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN THREAD-SPOOLS.

Specification forming part of Letters Patent No. **185,864**, dated January 2, 1877; application filed September 10, 1874.

To all whom it may concern:

Be it known that I, JAMES McMILLAN, of the city and county of Philadelphia, in the State of Pennsylvania, have invented a Combination of a Thread-Cutter and Pin-Cushion with the End of a Spool, of which the following is a specification:

My invention consists in the combination of a thread-cutter and pin-cushion with the end of a spool, the cutter being driven into one of the flanges, in the periphery of which is a slit, which holds the unwound thread, and the cushion being held on the end of the spool by means of a metallic plate, as hereinafter described.

In the accompanying drawings, Figure 1 is one end of a spool, on an enlarged scale, with my improvements attached. Fig. 2 is a side elevation of the same. Fig. 3 is a cross-section taken at the line *x x* of Fig. 2. Fig. 4 is a vertical section of the spool A, having the flat cushion D′ and plate-cutter B^2 in combination. Fig. 5 is an end view of the same.

Like letters of reference in all the figures indicate the same parts.

A is a spool, constructed in the ordinary manner, having my improvements connected with the upper end. In the periphery of the flange *b* there is a slit, *c*, in which is inserted a cutter, B, which is seen clearly in Figs. 1 and 2, so that by taking hold of the free end of the thread C, and drawing it tightly against the cutter, the portion outside of the cutter is severed from the inside of the same, leaving a part in the slit *c*, to prevent the unwinding of the thread from the spool. If desired, instead of placing the cutter in the slit, as above described, a cutter, B^1, may be driven into the flange *b*, in the manner shown in Fig. 3.

D is a pin-cushion, made of any suitable material, and inserted in the spindle-hole *d* of the spool at its upper end. The cushion may also be advantageously used for holding needles.

On one end of the spool is a flat pin-cushion, in which the pins are stuck at right angles to the axis of the spool. This cushion is held on the end of the spool by means of the circular plate E, having a portion at *x* sharpened to form a cutter, B^2, as seen in Figs. 4 and 5. The plate has its central portion punched and bent to fit in the spindle-hole *d*. This cutter is used in place of the cutter B or B^1, and in connection with the slit *c*. This mode of combining the cushion and cutter with the spool is particularly applicable to spools for sewing-machines, because it admits of the spindle passing clear through.

I claim as my invention—

1. The combination of the cutter B or B^1 with the flange *b* of the spool, for cutting off the free end of the thread, substantially as described.

2. The spool A, having a flange, *b*, provided with a slit, *c*, for holding the unwound end of the thread, substantially as set forth.

3. A combined spool, thread-cutter, and pin-cushion, the cutter being fast to the flange on one end of the spool, and the cushion confined to either end of the spool by means of the metallic plate E, substantially as set forth.

JAMES McMILLAN.

Witnesses:
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