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F. F. BARTH

SPOOL FOR SEWING MACHINES

Filed Nov. 18, 1925

Fig.1

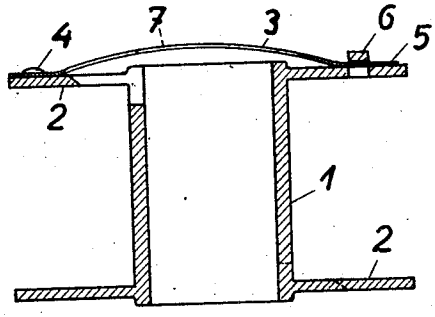


Fig.2

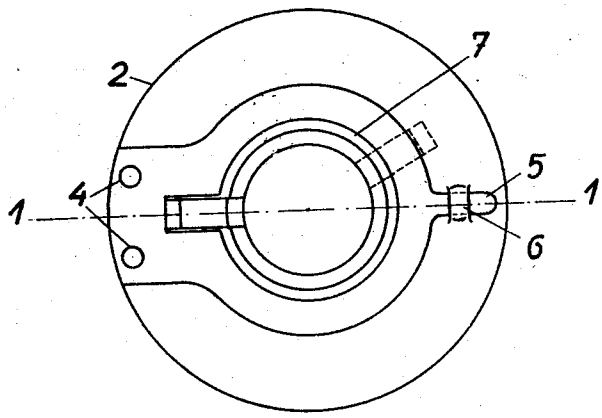
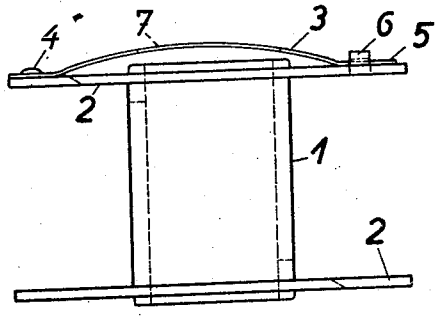


Fig.3



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UNITED STATES PATENT OFFICE.

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SPOOL FOR SEWING MACHINES.

Application filed November 18, 1925, Serial No. 69,784, and in Germany May 12, 1925.

The known arrangement of a friction and braking spring, on the bottom of the shuttle, to prevent the spool from turning too quickly and causing the thread to unwind, with consequent trouble, has been found to answer its purpose in the case of central shuttles for sewing machines. According to the present invention, a spring for the same purpose is attached to the spool, instead of to the shuttle, an arrangement which renders the advantages of such spring available, by using spools according to this invention, in the case also of shuttles in which a bottom spring is not employed.

Moreover, should the spring be broken as the result of careless handling, the results are less inconvenient when the springs are attached to the spools themselves instead of to the shuttle.

One embodiment of the invention is illustrated in the accompanying drawing in which—

Figure 1 is an enlarged longitudinal section of the bobbin, along the line 1—1 of Figure 2;

Figure 2 is a plan, and

Figure 3 a side elevation.

A braking spring 3, in the form of a domed disc is attached to one of the flanges 2 of the spool 1 by rivets 4. The spring 3 is provided with an extension tongue 5 adapted to slide in an eyelet 6 stamped out of the flange 2. The domed spring 3 with a central aperture 7 exerts a more uniform pressure than a flat spring projecting at an acute angle from the flange of the bobbin; though it is not intended that the use of a flat spring arranged in said manner should be excluded.

I claim:

1. In a spool for sewing machines the combination of a central cylindrical portion, flanges on same, and a flat spring fixed to the outer face of one of the said flanges and adapted to act in the axial direction of the spool.

2. In a spool for sewing machines the combination of a central cylindrical portion; flanges on same, and a flat spring fixed to the outer face of one of the flanges and adapted to act in the axial direction of the spool, the said central cylindrical portion, flanges and spring being formed with a central passage extending through them.

3. In a spool for sewing machines the combination of a central cylindrical portion; flanges on both ends of the same; a flat spring of the shape of a domed disk with a central hole on the upper face of the one flange; means for fastening one side of the said spring at one side of the last mentioned flange near its rim; means for guiding and supporting the other side of the said spring on the other side of the said flange in such a way as to allow for flexing of the spring while preventing the full displacement of the spring.

4. In a spool for sewing machines the combination of a hollow central cylinder, flanges on the said cylinder, one of the said flanges being formed with an eye, a spring mounted upon the said eyed flange and adapted to act in an axial direction, and a tongue upon the spring the said tongue being adapted to engage with the eye in the flange.

In testimony that I claim the foregoing as my invention, I have signed my name hereto.

FRIEDRICH FELIX BARTH.