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P. J. DUGGAN & J. J. McCARTHY.

BOBBIN HOLDER FOR SPINNING SPINDLES.

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FIG. 1.

FIG. 2.

FIG. 3.

Witnesses.

Patrick J. Duggan.
Joseph J. McCarthy.

By Charles J. Hannigan

Attorney.
UNITED STATES PATENT OFFICE.

PATRICK J. DUGGAN AND JOSEPH J. McCARTHY, OF PROVIDENCE, RHODE ISLAND.

BOBBIN-HOLDER FOR SPINNING-SPINDLES.


To all whom it may concern:

Be it known that we, PATRICK J. DUGGAN and JOSEPH J. McCARTHY, citizens of the United States, residing at the city of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Bobbin-Holders for Spinning-Spindles, of which the following is a specification.

This invention relates to a bobbin-holder adapted to be secured upon the spindle of spinning-frames; and the object of our invention is to provide means to firmly hold by frictional contact a bobbin when positioned upon the spindle.

The invention consists of the novel construction, arrangement, and combination of parts, as hereinafter described and claimed.

In the accompanying sheet of drawings, Figure 1 represents a top plan view of our improved bobbin-holder; Fig. 2, a side elevation of the same, and Fig. 3 a central vertical sectional view showing a bobbin secured to the holder device.

Like reference-letters indicate like parts.

A designates our improved bobbin-holder as a whole, comprising in its structure a circular cup-shaped supporting member and three coil-springs secured thereto, respectively. The supporting member is in the form of a disk, having three upwardly-extending integral flanges c e c formed at its outer edge, and which flanges are each provided with a row of small perforations through their upper portions, as at d d in Figs. 2 and 3. The upper portion of each flange c of the holder member is surrounded by a coil-spring e, which is of round steel wire, and each spring is secured in place by having its wire passed through each perforation of each flange of said member. The support or holder member has a hub formed centrally of its bottom b, projecting downwardly therefrom, and this hub is provided with a tapering opening g of a size to fit that portion of a tapering spindle to which said member is securely fastened, as at a point h.

j represents the bobbin of a spinning-frame, said bobbin having the usual V-shaped groove or score formed around the exterior surface of its head and near the base end thereof, as at k. This head portion of the bobbin is of greater diameter than the diametrical distance between the springs e. Therefore when the bobbin is mounted and forced downwardly on the spindle the bobbin-head expands the springs, and the moment the bobbin is seated upon the supporting member these springs contract within the groove k and cause the bobbin to be held firmly in position by friction in the manner shown in Fig. 3. The coil-springs being of round wire present a large smooth holding-surface while the bobbin is positioned.

By our construction and arrangement of parts we produce a bobbin-holder that is simple, durable, and inexpensive to manufacture.

What we claim, and desire to secure by Letters Patent, is—

1. The herein-described bobbin-holder, comprising a disk having outer upwardly-extending integral flanges which are each provided with a row of perforations and said disk having a central hub provided with an opening therethrough, and coil-springs surrounding the upper portion of the flanges of said disk, and each of said springs having its wire wound through the perforations in the flanges thereof.

2. The combination, with a spindle, of a bobbin-holder, comprising a disk member centrally secured to the spindle and having outer upwardly-extending integral flanges which are each provided with a row of perforations, and coil-springs whose wire is wound through the perforations in the flanges of said disk and arranged to grasp the exterior surface of the bobbin-head, substantially as set forth.

In testimony to the foregoing we have subscribed our names in the presence of two witnesses.

PATRICK J. DUGGAN.

JOSEPH J. McCARTHY.

Witnesses:

E. F. JAMESON,
F. I. SHERMAN.