

No. 619,791.

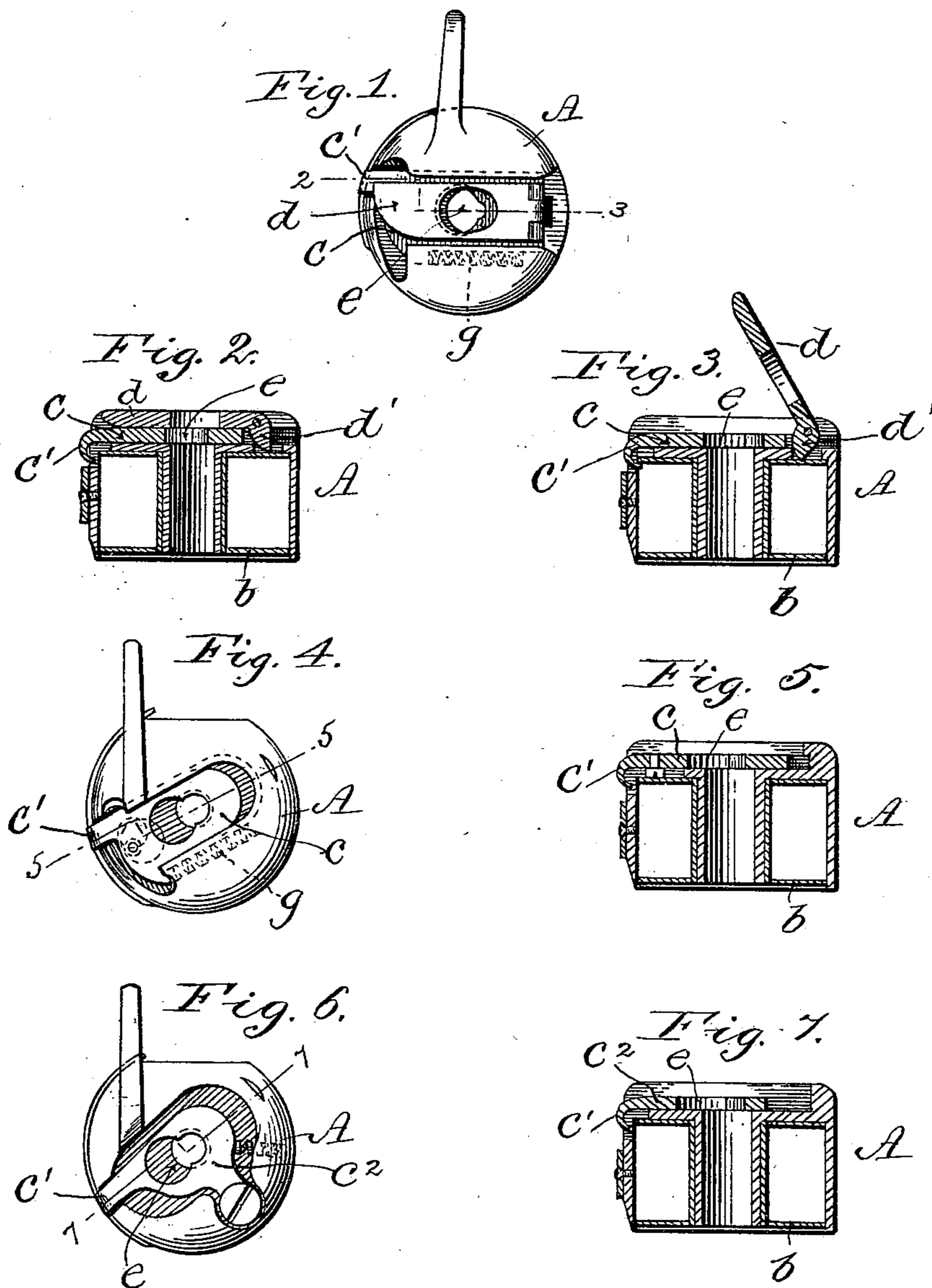
Patented Feb. 21, 1899.

O. H. RUDOLPH.

BOBBIN CASE FOR SEWING MACHINE SHUTTLES.

(Application filed Apr. 11, 1898.)

(No Model.)



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UNITED STATES PATENT OFFICE.

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BOBBIN-CASE FOR SEWING-MACHINE SHUTTLES.

SPECIFICATION forming part of Letters Patent No. 619,791, dated February 21, 1899.

Application filed April 11, 1898. Serial No. 877,172. (No model.)

To all whom it may concern:

Be it known that I, OTTO HENRY RUDOLPH, a citizen of the United States, residing at Nashville, in the county of Davidson and State of Tennessee, have invented certain new and useful Improvements in Bobbin-Cases for Sewing-Machine Shuttles, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention has for its object to provide a bobbin-case for sewing-machine shuttles with a bobbin-retaining device which will prevent the bobbin from accidentally falling out of the bobbin case or holder when the same is being handled by the attendant in being inserted in or removed from the sewing-machine. To this end the bobbin case or holder is provided with a movable device or hook which is normally out of contact with the bobbin, so that the latter may rotate freely as its thread is unwound, but which is adapted to be forced into engagement with the bobbin when the bobbin case or holder is to be removed from the machine, so that the bobbin will be retained within the case at such times during the handling of the bobbin-case by the attendant as may be desirable.

30 In the accompanying drawings, Figure 1 is an elevation of one form of bobbin-case embodying the invention. Figs. 2 and 3 are sectional views of the same on line 2 3 of Fig. 1, Fig. 2 showing the bobbin-retaining device disengaged from the bobbin, while Fig. 3 shows the bobbin-retaining device in position to hold the bobbin in the bobbin-case. Figs. 4, 5, 6, and 7 illustrate slight modifications of the invention.

40 In the drawings, A denotes a bobbin-case adapted for the reception of a disk bobbin b. The bobbin-case is preferably provided with a spring-pressed slide c, such as is shown in United States patent to Diehl and Brandt, No. 435,924, dated September 9, 1890, or to Brandt, No. 557,547, dated April 7, 1896, and which slide when in its normal position engages a pin on the shuttle, and thus serves to retain the bobbin-case within the shuttle, as fully shown and described in said patents.

50 In the form of the invention shown in Figs. 1, 2, and 3 the slide c has pivoted to it a latch or finger-lever d, which has adjacent to

its pivot a toe-piece or cam d', arranged to engage a fixed portion of the bobbin-case when the said latch or finger-lever is lifted or swung outward, said toe-piece or cam thereby forcing the slide backward against the stress of its spring g to permit the larger part of the hole or opening e, with which the said slide is provided, to be brought into register with the shuttle-pin, and thereby disengage the said slide from said pin, so that the bobbin-case may be removed from the shuttle. The slide c is movable transversely to the axis of the bobbin and is provided with a bobbin-retaining device movable with said slide and consisting, preferably, of a hook or projection c', which is normally out of contact with the bobbin, but which when the latch or finger-lever d is lifted or swung outward and the slide is thereby moved to disengage it from the shuttle-pin will be forced inward, so as to engage one of the flanges of the bobbin b, and thereby retain the said bobbin within the bobbin-case so long as the said finger-lever d is in its raised or outwardly-swung position. This finger-lever d is intended to serve as a convenient handle in inserting the bobbin-case into the shuttle when the latter is in the machine or in removing it therefrom, and so long as said latch or finger-lever remains lifted or swung outward, as shown in Fig. 3, in being utilized as a handle for the bobbin, it is obvious that the bobbin will be retained in said case by the hook or projection c'.

80 In the form of the invention shown in Figs. 4 and 5 the slide c, which carries the bobbin-holding projection or hook c', is constructed to be forced back against the stress of its co-operating spring simply by the pressure of the thumb or finger nail of the attendant, while in the form of the invention shown in Figs. 6 and 7 the movable device c², carrying the bobbin-retaining hook or projection c', is pivoted to the bobbin-case, so as to swing when pressed upon by the attendant to release the bobbin-case from the shuttle-pin. These slight modifications render the invention applicable to the forms of bobbin-case-locking devices shown in the Diehl and Brandt patent, No. 435,924, hereinbefore referred to.

100 While the invention is herein shown and described as being applied to a sliding or

swinging device, which also serves to retain the bobbin-case in the shuttle, it will be understood that it is not necessarily thus applied, but might be used in connection with
5 other forms of bobbin-cases or bobbin-holders than those herein shown. It will therefore be understood that the invention is not necessarily limited to the details of construction herein illustrated and described.

10 Having thus described my invention, I claim and desire to secure by Letters Patent—

1. The combination with a bobbin case or holder, of a spring-pressed device which is
15 movable transversely to the axis of the bobbin and which, when in its normal position, is located to be out of contact with the bobbin, said spring-pressed device being provided with a bobbin-retaining device to be
20 forced into engagement with a flange of a bobbin when the said movable device is displaced from its normal position.

2. The combination with a sewing-machine bobbin case or holder provided with a latch or
25 finger-lever to serve as a handle, of a spring-pressed device movable transversely to the

axis of the bobbin and connected with the said latch or finger-lever, said spring-pressed device being provided with a bobbin-retaining device which is so placed as to be forced
30 into engagement with a bobbin when the said latch or finger-lever is in a lifted or outwardly-swung position.

3. The combination with the bobbin-case A provided with a locking-slide *c* having a
35 bobbin-retaining hook or projection *c'*, the latch or finger-lever *d* hinged or pivoted to the said slide and provided with a cam or projection serving to move said slide when the
40 said latch or finger-lever is lifted or swung outward, and a spring which serves to hold the said slide in its normal or locking position, and which spring is compressed when
45 the said latch or finger-lever is lifted or swung outward.

In testimony whereof I affix my signature in the presence of two witnesses.

OTTO HENRY RUDOLPH.

Witnesses:

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