

(No Model.)

W. BRANDT.
SHUTTLE FOR SEWING MACHINES.

No. 557,547.

Patented Apr. 7, 1896.

Fig. 1.

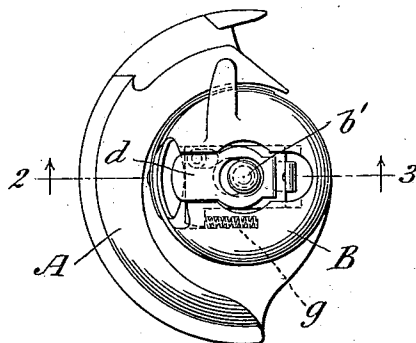


Fig. 2,

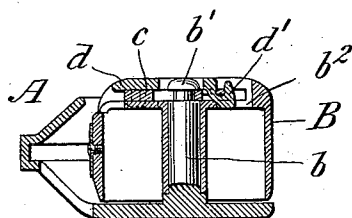


Fig. 3,

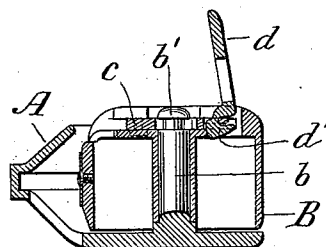
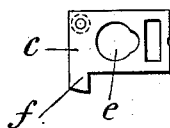


Fig. 4.



WITNESSES:

C. E. Ashley
C. M. Sweeney

INVENTOR:

William Brandt
By his Attorney
Henry Calver

UNITED STATES PATENT OFFICE.

WILLIAM BRANDT, OF ELIZABETH, NEW JERSEY, ASSIGNOR TO THE
SINGER MANUFACTURING COMPANY, OF NEW JERSEY.

SHUTTLE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 557,547, dated April 7, 1896.

Application filed July 15, 1895. Serial No. 555,985. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BRANDT, a citizen of the United States, residing at Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Sewing-Machine Shuttles, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to an improvement in the sewing-machine shuttle covered by United States Patent No. 435,924, dated September 9, 1890. In the shuttle shown by said patent the bobbin-case is locked to a pin or stud on the shuttle by a spring-pressed slide, and to remove the bobbin-case from the shuttle said bobbin-case is seized between the thumb and finger nails of the operator, so that pressure on said slide against the stress of its spring will release it from engagement with the said stud or pin, and then the bobbin-case, held by the thumb and finger nails, can be withdrawn from the shuttle; but when the shuttle is in the machine, and particularly if the nails of the operator be very short, more or less difficulty has been experienced in removing these bobbin-cases from the shuttles, and this difficulty I have obviated by providing a small lever or pivoted latch, having a portion constructed and arranged to engage a fixed part of the bobbin-case, so that when the free end of said lever or latch (which is readily engaged by the finger of the operator) is lifted or swung outward said slide will be forced out of locking engagement with the shuttle pin or stud, and the said lever or latch will then serve as a handle by which the bobbin-case can be conveniently removed from the shuttle and by which it can be held while the bobbin is being removed or inserted.

15 In the drawings, Figure 1 is a face view of a shuttle embodying my invention. Figs. 2 and 3 are sections of the same on line 2 3 of Fig. 1, the lever or latch being lifted in Fig. 3 to show the slide disengaged from the pin or stud of the shuttle. Fig. 4 is a detail view of the slide.

20 A denotes the shuttle provided with the pin or stud *b*, having a reduced portion or

neck formed by an annular groove in said pin or stud, and beyond said neck is a head *b'*, the outer surface of which is rounded.

B is the bobbin-case having a central sleeve fitting over the pin *b* of the shuttle and having in its outer face an undercut recess receiving a locking-slide *c* and a lever or latch *d*, which may be pivoted to said slide by being hooked thereto and which has adjacent to its pivot a small projection or portion *d'*, which enters a slot or recess *b''* in the bobbin-case. The slide *c* has an opening *e* of proper size to admit of the easy passage of the head *b'* of the pin *b*, said opening being made smaller at one end, so as to cause said slide to engage the neck or reduced part of the said pin when the slide is forced forward into locking position by the spring *g*, which is housed in a recess in the shuttle and which presses against a lug *f* on said slide.

When the bobbin-case is to be removed from the shuttle, the operator, by the pressure of the finger on the free end of the latch or lever *d*, turns the latter outward or upward to the position shown in Fig. 3, and the part *d'* of said latch or lever bearing against the inner wall of the slot *b''* forces the slide backward against the stress of the spring *g* and brings the larger part of the opening *e* in said slide into register with the head *b'* of the pin *b*, so that the bobbin-case is now free to be removed from the shuttle, the latch or lever *d* serving as a handle by which the said bobbin-case may be conveniently pulled out and held.

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

1. The combination with a sewing-machine shuttle provided with a pin or stud, of a bobbin-case having a slide, a spring which forces said slide into engagement with said pin or stud to lock said bobbin-case to the shuttle, and a lever or pivoted latch which is operatively connected with said slide and which serves, when lifted, to disengage the latter from said pin or stud and thus permit said bobbin-case to be removed from the shuttle.

2. The combination with the shuttle A having the pin *b*, of the bobbin-case having a

recess in its outer face and provided with a sleeve loosely fitting said pin, the spring-pressed slide *c* housed in said recess and adapted to engage said pin to lock the bobbin-case to the shuttle, and the latch or lever 5 *d* and having a portion *d'* received in a recess in the bobbin-case and serving, when said latch or lever is lifted or turned outward, to force said slide out of locking en-

gagement with said pin, said latch or lever 10 also serving as a handle for said bobbin-case.

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

WILLIAM BRANDT.

Witnesses:

PHILIP DIEHL,

JOSEPH F. JAQUITH.