

(No Model.)

S. H. DYER.
SHUTTLE FOR SEWING MACHINES.

No. 583,793.

Patented June 1, 1897.

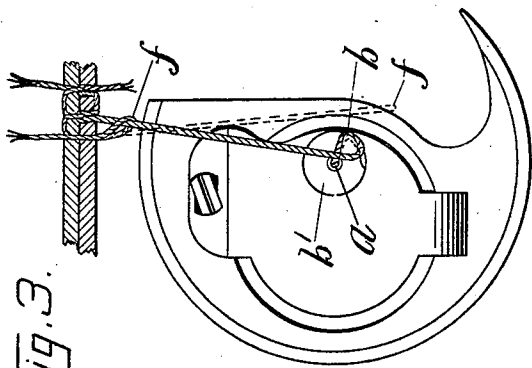


Fig. 3.

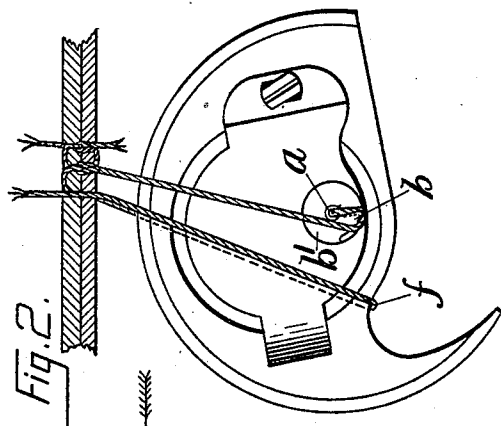


Fig. 2.

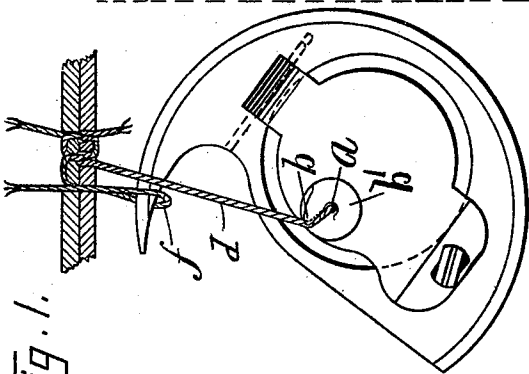


Fig. 1.

WITNESSES:

John R. Snow.
H. P. Guillo

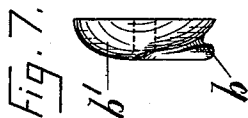


Fig. 7.

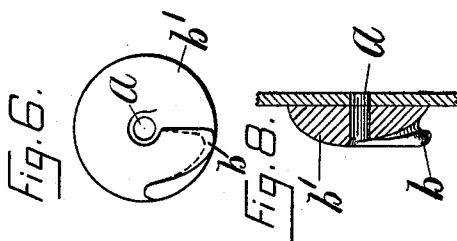


Fig. 6.

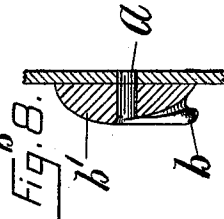


Fig. 8.

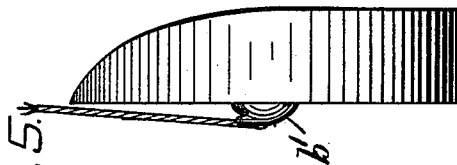


Fig. 5.

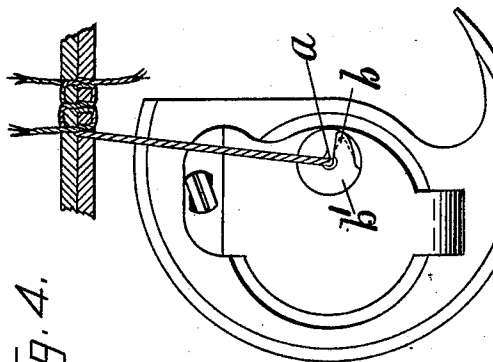


Fig. 4.

INVENTOR

Silas Henry Dyer
BY *J. E. Maynard*
ATTORNEY.

UNITED STATES PATENT OFFICE.

SILAS HENRY DYER, OF PAWTUCKET, RHODE ISLAND, ASSIGNOR TO THE CAMPBELL MACHINE COMPANY, OF SAME PLACE.

SHUTTLE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 583,793, dated June 1, 1897.

Application filed April 5, 1895. Serial No. 544,527. (No model.)

To all whom it may concern:

Be it known that I, SILAS HENRY DYER, of Pawtucket, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Shuttles for Sewing-Machines, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figures 1, 2, 3, and 4 are elevations of a shuttle embodying my invention, illustrating its operation. Fig. 5 is an edge view of Fig. 1, as indicated by the arrow. Figs. 6, 7, and 8 are detached views, on a larger scale, of the slack-forming finger and boss.

My invention relates to providing slack thread between the shuttle and the work. A variety of contrivances have been heretofore devised for doing this, but most of them depend upon the varying distance from the work of an eye in the shuttle through which the thread passes.

In my invention the shuttle has a delivery-eye *a* coincident with the axis of the shuttle and a thread-finger *b*, so placed with relation to the eye *a* that as the shuttle revolves the finger will engage the shuttle-thread *d* and form a slack, as illustrated in Figs. 1, 2, and 5, as soon as the finger *b* sheds the thread, which it does when the shuttle is in position to shed the loop *f* of needle-thread, as illustrated in Fig. 3, in which figure the dotted line indicates the loop of needle-thread just before that loop is brought by the stitch-tightening devices to the position shown in full lines in that figure.

The finger *b* is a thread catching and re-

leasing hook, for during a portion of its revolution about the delivery-eye of the shuttle it catches the shuttle-thread extending from the delivery-eye to the work, forms a bight, and carries that bight about the delivery-eye, thereby drawing thread from the bobbin, and at the proper point of its revolution releases that bight, thereby slacking the thread. This thread catching and releasing hook is best formed as a part of a boss *b'*, as clearly shown in the drawings, especially in the enlarged views, Figs. 6, 7, and 8; but my invention will be embodied in any combination of discoidal shuttle with a hook which moves around the delivery-eye of the shuttle to catch and form a bight in the shuttle-thread and elongate and shed that bight by the motion of the hook around the delivery-eye of the discoidal shuttle.

I am aware of Patent No 465,557 to Diehl, dated December 22, 1891, and Patent No. 479,839 to Pearson, dated August 2, 1892, and disclaim all that is shown in them.

What I claim as my invention is—

In combination with a discoidal shuttle a thread catching and releasing hook to form a bight in the shuttle-thread between the delivery-eye of the shuttle and the work, and to shed that bight, and means to revolve that hook about the delivery-eye of the shuttle; substantially as and for the purpose specified.

SILAS HENRY DYER.

Witnesses:

DANIEL MCNIVEN,
GEORGE O. EVERETT.