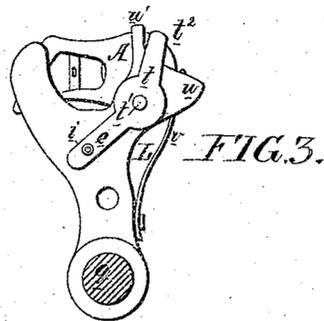
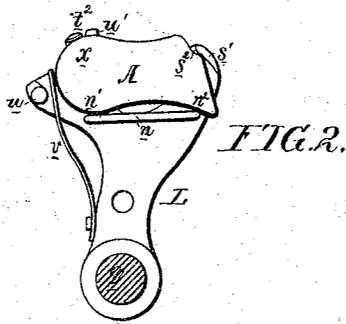
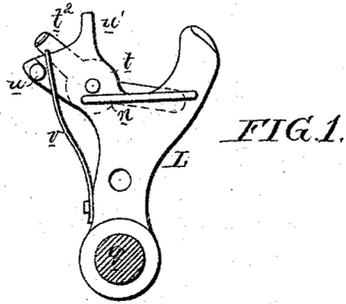


G. REHFUSS.

Sewing-Machines.

No. 137,028.

Patented March 18, 1873.



Witnesses, Harry Smith  
Thomas McSwain

George Rehfuss  
by his attys.  
Hudson and Son

# UNITED STATES PATENT OFFICE.

GEORGE REHFUSS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO  
AMERICAN BUTTON-HOLE OVERSEAMING AND SEWING MACHINE  
COMPANY, OF SAME PLACE.

## IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. 137,028, dated March 18, 1873.

### *To all whom it may concern:*

Be it known that I, GEORGE REHFUSS, of Philadelphia, State of Pennsylvania, have invented certain Improvements in Sewing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a device, described hereafter, for retaining a shuttle in the shuttle-carrier of a sewing-machine.

The carrier may be of any suitable form, that represented consisting of a stem, *L*, forked at the upper end and vibrating on a pin, *q*, which passes through a boss at the lower end of the stem. At the inner side of the carrier is a ledge, *n*, on which bear the points *n*<sup>1</sup> *n*<sup>2</sup> of the shuttle *A*, Fig. 2, and a curved lip, *s*<sup>1</sup>, on one of the arms of the carrier extends into a recess, *s*<sup>2</sup>, of the shuttle. A light spring, *v*, secured at its lower end to the carrier, extends upward between the rear of the shuttle on which it bears and a projection, *u*, by which the play of the spring is limited. A lever, *t*, having two arms is hung to a pin, *t*<sup>1</sup>, at the back of the carrier, the short arm of the lever being bent to form a lip, *t*<sup>2</sup>, which overlaps the rounded end of the shuttle at *x*. The long arm of the lever is elastic, so that it may be drawn out from the carrier and moved until an opening, *e*, in the arm receives a retaining-pin, *i*, on the carrier. When the lever is

in the position shown in Fig. 1 the shuttle may be inserted in its place, but on turning the lever to the position shown in Figs. 2 and 3 the shuttle will be secured, being held up in the proper position by the ledge *n* and prevented from rising partly by the lip *s*<sup>1</sup> and partly by the lip *t*<sup>2</sup> of the lever.

During the operation of the machine the lever is effectually retained in the position to secure the shuttle by the pin *i*, but when the shuttle has to be withdrawn a slight outward pressure will withdraw the elastic arm of the lever from the pin and allow the lever to be turned to the position shown in Fig. 1, when the shuttle is at liberty to be withdrawn. The movement of the lever in both directions is limited by projections *u u'* of the carrier.

### *Claim.*

I claim—

The lever *t*, having a bent arm, adapted to the shuttle and an elastic arm arranged for being locked to and released from the carrier, all substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEO. REHFUSS.

Witnesses:

JOHN WHITE,  
C. B. PRICE.