

R. TOMLINSON & J. SMITH.

Pawl and Ratchet.

No. 159,124.

Patented Jan. 26, 1875.

Fig. 1.

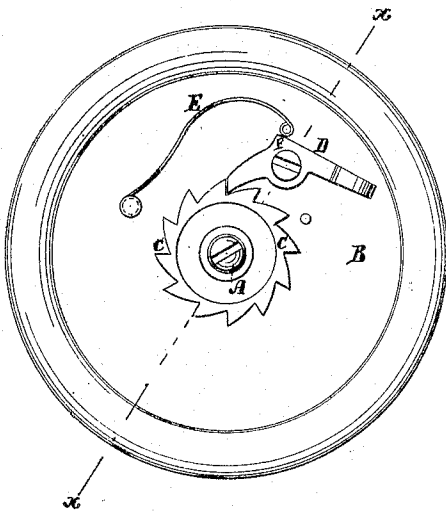


Fig. 2.

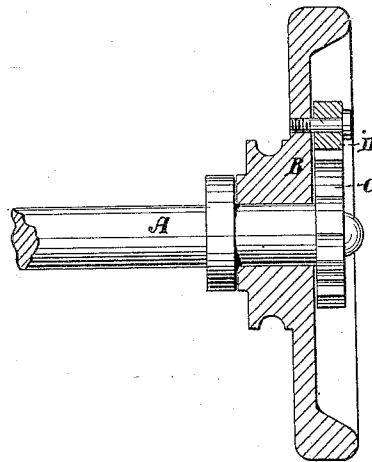
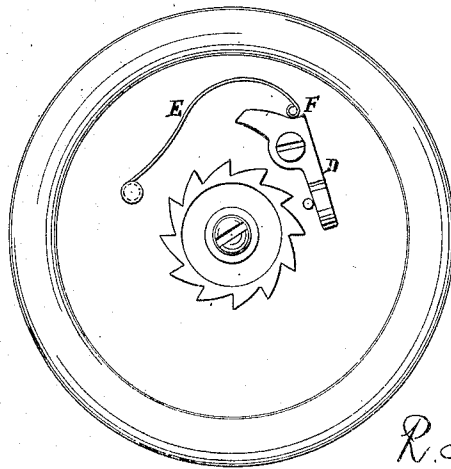


Fig. 3.



WITNESSES:

A. Remmele
A. F. Terry

INVENTOR:

R. Tomlinson
BY *J. Smith*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

RALPH TOMLINSON AND JOSEPH SMITH, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN PAWLS AND RATCHETS.

Specification forming part of Letters Patent No. **159,124**, dated January 26, 1875; application filed December 19, 1874.

To all whom it may concern:

Be it known that we, RALPH TOMLINSON and JOSEPH SMITH, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement on Sewing-Machines, of which the following is a specification:

The invention will first be fully described, and then pointed out in the claim.

Figure 1 is an end elevation of the shaft and pulley, showing the pawl engaged with the ratchet for turning the shaft. Fig. 2 is an end elevation, showing the pawl adjusted for allowing the wheel to run without turning the shaft for winding the bobbins; and Fig. 3 is a sectional elevation of Fig. 1 on the line *xx*.

Similar letters of reference indicate corresponding parts.

A is the shaft; B, the pulley; C, the ratchet; D, the pawl, and E the spring. The pulley is loose on the shaft, the ratchet is keyed to it,

and the pawl is fixed on a pivot at or about the middle, and it has a projection, F, with relation to which and the pivot of the pawl the spring is so arranged that it will hold the pawl either in or out of connection with the ratchet, according to which way it is shifted.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The combination, with loose pulley B and shaft A, having end ratchet, of the pawl D and spring E, the former having the projection F, as shown and described, whereby said spring may hold the pawl either in contact with or away from the ratchet.

RALPH TOMLINSON.
JOSEPH SMITH.

Witnesses:

ENDIX T. SWIFT,
DUNCAN BRADFORD.