(No Model.)

D. J. REARDON.

RATCHET PAWL.

No. 493,944. Patented Mar. 21, 1893.

Fig. 1.

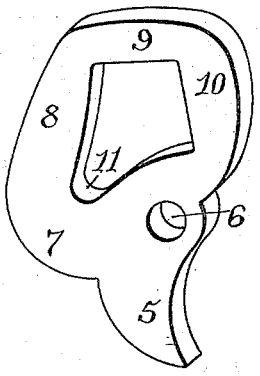
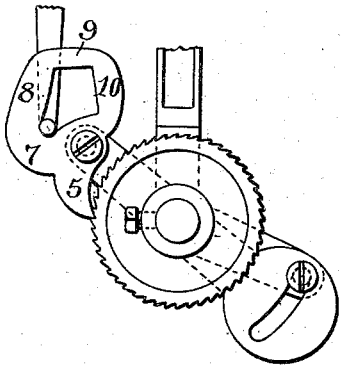


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

DANIEL J. REARDON, OF WESTERLY, RHODE ISLAND.

RATCHET-PAWL.

SPECIFICATION forming part of Letters Patent No. 493,944, dated March 21, 1893.

Application filed November 25, 1892. Serial No. 453,031. (No model.)

To all whom it may concern:

Be it known that I, DANIEL J. REARDON, of Westerly, in the county of Washington and State of Rhode Island, have invented certain new and useful Improvements in Ratchet-Pawls; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention has reference to improvements in ratchet pawls or catches which are particularly adapted for use on the ring-rail controlling-ratchets of spinning-machines.

The object of the invention is to produce a ratchet-pawl which shall be more positive in its action when operated by an independent arm than those as heretofore constructed.

The invention consists in forming a pawl having an enlarged-tooth, a counterbalance-shoulder, and a peculiar frame adapted to surround the end of the operating-rod which is free to move therein to an extent dependent on the internal size and shape of the frame.

Figure 1 represents a view of the improved ratchet-pawl. Fig. 2 represents a view of the same when used in a spinning-frame, the ring-rail controlling-ratchet and its immediate co-operating parts being shown.

Similar numbers of reference designate corresponding parts throughout.

In carrying my invention into effect I form a ratchet-pawl having the downwardly extending tooth 5, the upper portion of which is perforated as at 6 to receive a pivot on which the pawl may turn; extending from the upper outward curve of the tooth 5 is the counterbalancing shoulder 7, which is connected by the upwardly-extending member 8 with the cross-bar 9, the opposite end of which is connected by the bar 10 with the upper portion of the pawl-tooth. The counterbalancing-shoulder 7 is furnished with the internal-socket 11, from which the edge forming the upper portion of the pawl-tooth curves sidewise and upward, forming a surface on which the bent finger which operates the pawl rides when shifting the pawl.

When used in a spinning-machine and the arm 12 is operated to engage the pawl-tooth with the ratchet, the pawl is positively held in the position shown in Fig. 2 of the drawings, from which no accidental blow will release the pawl, thus preventing irregular building of the yarn on the bobbins. The improved pawl is, however, useful wherever the operation of the same is caused by an independent-arm which would be apt to slip off from an external-shoulder.

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

A ratchet-pawl, consisting of the engaging-tooth 5 the base of which is perforated at one side as at 6, the counterbalancing-shoulder 7 extending from the base of the tooth, the member 8 and the bars 9 and 10 surrounding an opening the lower end of which forms a socket 11 extending into the counterbalancing-shoulder, as described.

DANIEL J. REARDON.

Witnesses:
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