A. W. ELDREDGE.

ROTARY SHUTTLE CARRIERS FOR SEWING-MACHINES

No. 181,158. Patented Aug. 15, 1876.

Fig. 1.

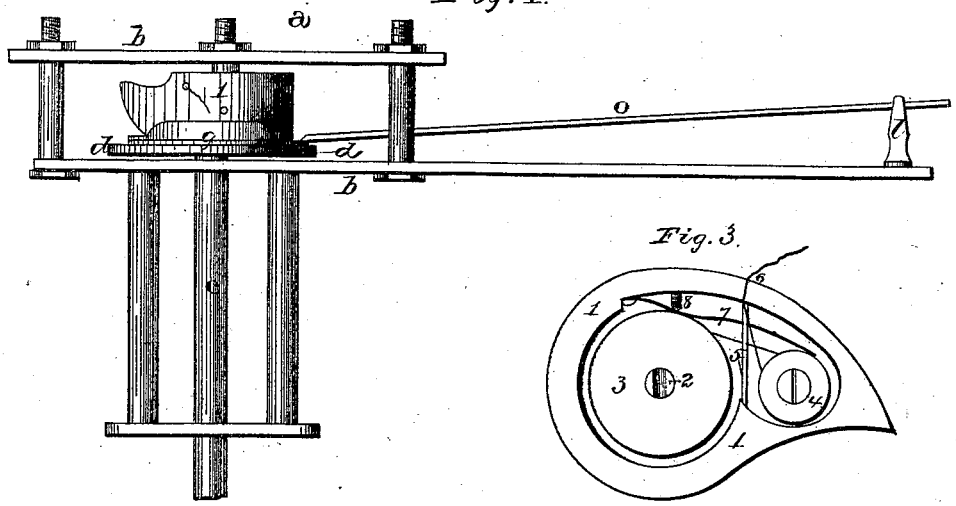

Fig. 3.

Fig. 2.

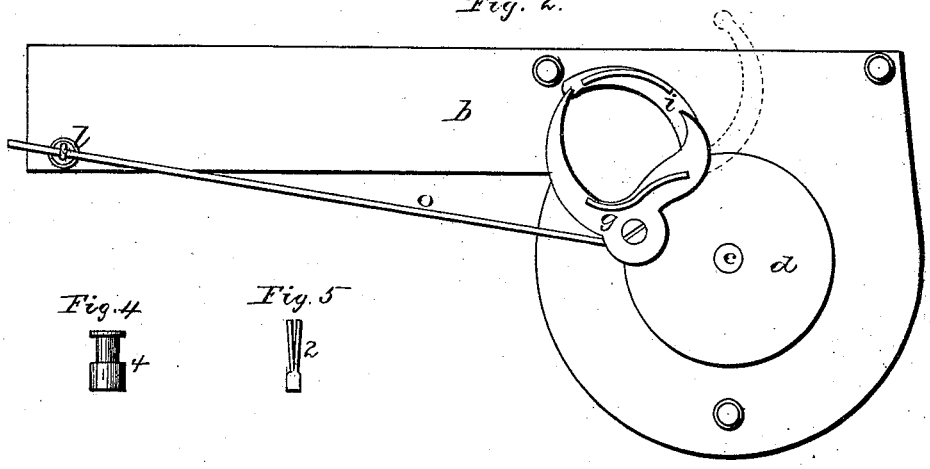

Fig. 4

Fig. 5

WITNESSES.

J. Wm. Garner.

F. M. Burnham.

INVENTOR.

A. W. Eldredge

per

F. A. Lehmann, Atty.

UNITED STATES PATENT OFFICE.

ALONZO W. ELDREDGE, OF BIG RAPIDS, MICHIGAN.

IMPROVEMENT IN ROTARY-SHUTTLE CARRIERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **181,158**, dated August 15, 1876; application filed February 19, 1876.

To all whom it may concern:

Be it known that I, ALONZO W. ELDREDGE, of Big Rapids, in the county of Mecosta and State of Michigan, have invented certain new and useful Improvements in Rotary-Shuttle Carriers and Shuttles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in shuttle-carriers for sewing-machines; and it consists in the peculiar construction of the arms for holding the shuttle to the carrier, whereby, in connection with a regulating-arm, the shuttle is always kept with the same side up in order to prevent the twisting and untwisting of the thread.

The accompanying drawings represent my invention.

a represents a suitable frame, consisting of the two plates *b*, and screw-bolts for holding them together, and at a suitable distance apart. Journaled in the longer one of the plates is the shaft *c*, upon the end of which, between the plates, is secured the disk *d*. Pivoted near the edge of the disk is the double-pronged arm *g*, shaped as shown, and to the inner end of which is pivoted a second arm, *i*, which has a projection formed on its end, and a small flange on its outer side. To the arm *g* is secured a rod, *o*, the outer end of which passes through a guide, *l*, secured to the rear plate *b*, and which rod serves to retain the arms always in the same relative position. Placed in between these arms, and locked in position by the arm *i* and flange on its edge, is the shuttle 1, which is carried round and round by the disk *d*, and held with the same side always up by the arms *g i*. In this shuttle, over the split rod 2, is placed the bobbin 3, the outward pressure of the rod serving to hold the bobbin in position. In the recess in the shuttle is also a small wheel or drum, 4, around which the thread from the bobbin is wrapped one or more times, a bridge or rod, 5, being placed between the bobbin and wheel to keep the thread up around the top of the wheel, and on a level with the hole 6, through which the thread passes in the side of the shuttle. Bearing against the side of the lower part of this wheel or drum is a flat spring, 7, the pressure of which is regulated by the set-screw 8. By means of this spring the tension of the thread is regulated.

Having thus described my invention, I claim—

A rotary-shuttle carrier, consisting of the disk *d*, arms *g i*, and rod *o*, substantially as shown.

In testimony that I claim the foregoing I have hereunto set my hand this 24th day of December, 1875.

ALONZO W. ELDREDGE.

Witnesses:

GEORGE B. IVES,

E. F. DEWEY.