

W. D. ORMSBY.
 Knocking-Over Bit for Knitting-Machines.
 No. 215,963. Patented May 27, 1879.

Fig. 1.

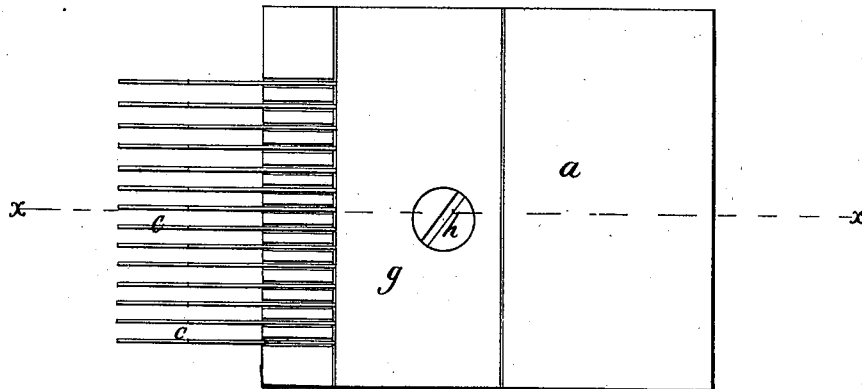


Fig. 2.

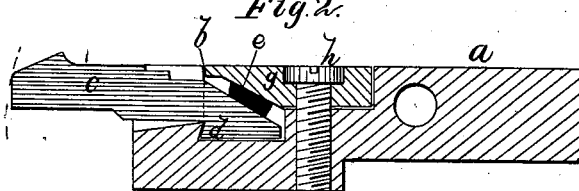


Fig. 3.



WITNESSES:

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WILLIAM D. ORMSBY, OF WALTHAM, MASSACHUSETTS.

IMPROVEMENT IN KNOCKING-OVER BITS FOR KNITTING-MACHINES.

Specification forming part of Letters Patent No. **215,963**, dated May 27, 1879; application filed December 21, 1878.

To all whom it may concern:

Be it known that I, WILLIAM D. ORMSBY, of Waltham, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Knocking-Over Bits for Knitting-Machines, of which the following is a specification.

The invention consists in combining, in a knitting-machine, the slitted and mortised frame, bits having a projection, an elastic block or strip, and a removable bar, as hereinafter described.

In the accompanying drawings, Figure 1 is a plan view of a portion of a bit-holding frame with the bits applied. Fig. 2 is a section on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The bit-holding frame or stock will be made in sections, or in one piece for each stocking, *a* being a section, preferably of brass. In the upper surface thereof a cross-mortise, *b*, is cut, and at the forward edge slits are cut extending through to the mortise *b*, in which slits the thin steel knocking-over bits *c* are held, their outer ends being of usual shape, and projecting in the usual manner.

The end of each bit *c* that is within mortise *b* is formed with a downward-projecting portion, *d*, that takes behind a ledge at the bottom of the mortise *b*, to prevent the bits from coming out endwise, and this ledge also forms a fulcrum on which the bits swing. The upper side of this end of the bit is tapered,

and passes beneath a rubber block or strip, *e*, that is retained in place by a removable strip or bar *g*. This bar *g* is retained in place in mortise *b* by a screw, *h*, so that it can be removed when the bits are to be taken out or replaced.

The rubber strip *e* exerts an elastic pressure upon the bits, which retains them in their normal positions, and permits them to rock upon the verge or fulcrum when pressure is put upon them at each course of the knitting. This movement of the bits permits the stitches to be thrown off at every course as the inequalities may pass the bits, thereby preventing the formation of double stitches and cutting of the yarn. In addition, the frame and bits described may be used with a coarser grade of yarn than could be used with the bits as heretofore constructed.

In Fig. 3 a bit, *c*, is shown in a slightly modified form.

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

In a knitting-machine, the combination, with the slitted and mortised frame *a*, of bits *c*, formed with a projection, *d*, the elastic block or strip *e*, and removable bar *g*, substantially as described and shown, and for the purposes specified.

WILLIAM DANIEL ORMSBY.

Witnesses:

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