H. M. MELLOR.

Loop-Wheels for Knitting-Machines.

No. 199,923. Patented Feb. 5, 1878.

Fig. 1

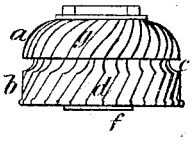


Fig. 6

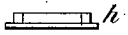


Fig. 2

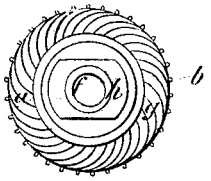


Fig. 7

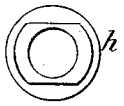


Fig. 3

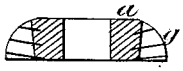


Fig. 5

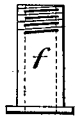
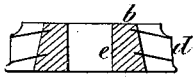


Fig. 4



Witnesses
George D. Ripley
John W. Ripley

Inventor.
Henry Moses Mellor
by S. J. Gordon Atty.

UNITED STATES PATENT OFFICE.

HENRY M. MELLOR, OF NOTTINGHAM, ENGLAND.

IMPROVEMENT IN LOOP-WHEELS FOR KNITTING-MACHINES.

Specification forming part of Letters Patent No. **199,923**, dated February 5, 1878; application filed February 20, 1877; patented in England March 10, 1876.

To all whom it may concern:

Be it known that I, HENRY MOSES MELLOR, (of the firm of Mellor & Sons,) of Nottingham, England, have invented Improvements in Loop-Wheels for Knitting Machinery, which improvements are fully set forth in the following specification, reference being had to the accompanying drawings.

My invention relates to loop-wheels used with knitting machinery, and is designed to make the said loop-wheels adjustable, more durable, and better adapted for the work which they have to perform than those hitherto in use.

In the loop-wheels constructed previously to my invention each blade has been made of one piece of soft steel, and all the blades have been soldered into a brass boss with a steel bush in the center, the object of using soft steel being to enable them to be bent or shaped as required; but as these blades are at one part of their surface exposed to great wear from the thread passing over them, they wear out speedily at this point, and soon become comparatively useless, and have to be replaced.

According to my invention, I construct the loop-wheel in two parts, as shown in the accompanying drawing, which I will now proceed to describe.

Figure 1 is a side elevation of the said loop-wheel. Fig. 2 is a plan or top view of the same. Fig. 3 is a transverse section of one part, and Fig. 4 is a similar section of the other part, of the said wheel. Figs. 5, 6, and 7 show details of the same.

Like letters indicate the same parts throughout the drawing.

a b are the said two parts of the wheel, which are separated from each other by the groove or channel *c*. The bottom or feed part *b*—that is to say, the part which places the thread within the beards of the needles, and which wears away with the greatest rapidity—is provided with blades *d*, of hardened or tempered steel, the said blades being soldered into a brass bush, *e*, surrounding a hollow spindle, *f*.

The top or guide part *a* of the loop-wheel is provided with blades *g*, corresponding in number and shape to those in the bottom part *b*, but which are made preferably of soft steel, in order that they may be easily bent or set to give them any desired shape.

The aforesaid hollow spindle *f* passes through the bottom part *b* of the loop-wheel, and is firmly attached thereto. On this spindle the top part *a* of the loop-wheel is fitted to turn freely, being secured by a washer-nut, *h*, screwed upon a projecting part of the said spindle.

By these means the blades on the bottom or feed part *b* are brought near to those in the top or guide part *a* of the loop-wheel, and can be adjusted exactly as required by turning the part *a* around upon the spindle *f*. This adjustability obviates the necessity for having the blades which are subject to the greatest wear made of soft metal. I therefore obtain a loop-wheel which will be more durable and less liable to injury or derangement by the bending of the blades than the loop-wheels hitherto used.

I claim as my invention—

A loop-wheel made in two parts, *a b*, each part fitting upon a spindle, *f*, and arranged as described, whereby the blades *d* on the one part may be adjusted relatively to the blades *g* on the other part, as desired, by turning one part of the wheel upon the said spindle.

HENRY MOSES MELLOR.

Witnesses:

C. J. APPLETON,

FREDK. BREWSTER.