

L. DIMOCK.

Drop-Wire for Stopping-Mechanisms.

No. 159,396.

Patented Feb. 2, 1875

Fig. 1.

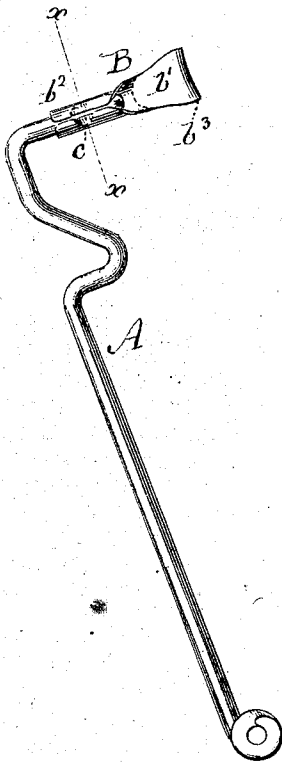


Fig. 2.

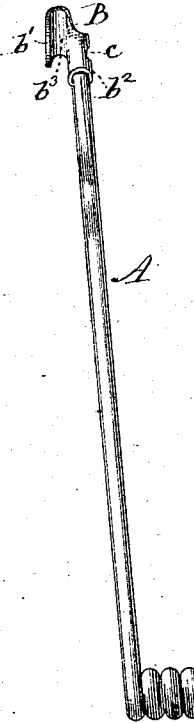


Fig. 3.

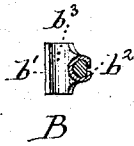
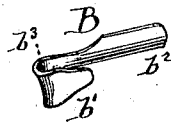


Fig. 4.



Fig. 5.



Witnesses:
John Decker
Fred Haynes

Lucius Dimock
by his Attorney
Brown & Allen

UNITED STATES PATENT OFFICE.

LUCIUS DIMOCK, OF NORTHAMPTON, MASSACHUSETTS.

IMPROVEMENT IN DROP-WIRES FOR STOPPING MECHANISMS.

Specification forming part of Letters Patent No. **159,396**, dated February 2, 1875; application filed December 30, 1874.

To all whom it may concern:

Be it known that I, LUCIUS DIMOCK, of Northampton, in the county of Hampshire and State of Massachusetts, have invented an Improvement in the Drop-Wires of Stop-Motion of Silk-Doubling Frames; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, forming part of this specification.

My invention consists in a removable eye of novel construction, for attachment to the drop-wire, whereby several advantages are obtained.

In the accompanying drawing, Figure 1 is a side view of a drop wire with my improved eye attached. Fig. 2 is a view at right angles to Fig. 1. Fig. 3 is a section taken in the line *xx* of Fig. 1. Figs. 4 and 5 are detail views of the eye.

The drop-wire A is of the usual construction, except that the eye is not formed on the end in the same piece therewith, and said end is left straight, and is somewhat shorter than when the eye is to be formed thereon. My improved eye B is made of sheet metal, preferably steel, or very hard sheet-iron, and is formed by first stamping or cutting a piece of the shape shown in Fig. 4, a portion of which, b^1 , is nearly in the form of an ellipse, to form the eye, and the remaining portion, b^2 , is nearly square or oblong, to form a barrel or socket for attaching it to the drop-wire. The portion b^2 is bent into a cylindrical form, corresponding in size with the end of the wire, so as to be readily placed thereon. The portion b^1 is turned over and bent backward toward the barrel or socket, to form the eye portion for engagement with the thread; and at the point where it is bent the metal is made concavo-convex, with the convex surface on the inner side, so as to present a broad, smooth,

and rounded surface, b^3 , to the thread in its passage through the eye. The eye B thus formed is attached to the wire by inserting the end *a* of the wire into the socket b^2 of the eye, and is secured by striking it with a hammer and suitable tool, so as to form an indentation, *c*, in both the barrel and wire, as shown in Figs. 1 and 2, by which means the eye is held in place securely enough for all practical purposes, and yet may be removed without difficulty when it becomes worn, so as to render it desirable to replace it by a new one.

In eyes of the old construction, the friction resulting from the continuous passage of the thread has the effect of wearing a notch in the eye, which notch has to be effaced by filing away the metal, and after several successive filings the metal is worn so thin as to become useless, and the whole drop-wire has to be replaced. To remedy this evil, glass eyes have been attached in various ways; but the glasses or their attachments are liable to break. All these defects are remedied by my invention. The eye B, constructed as described, is simple, cheap, and durable.

It is readily applied and secured to the drop-wire, and easily removed when necessary to replace it, without the necessity for replacing the whole wire, while the broad rounded surface b^3 presented to the thread enables it to wear longer than the eye of ordinary construction.

What I claim as new, and desire to secure by Letters Patent, is—

The eye B, constructed of a single piece of sheet metal, with the barrel or socket b^2 for attachment to the drop-wire, substantially as herein described.

LUCIUS DIMOCK.

Witnesses:

WM. H. TODD,

SAMUEL T. SPAULDING.