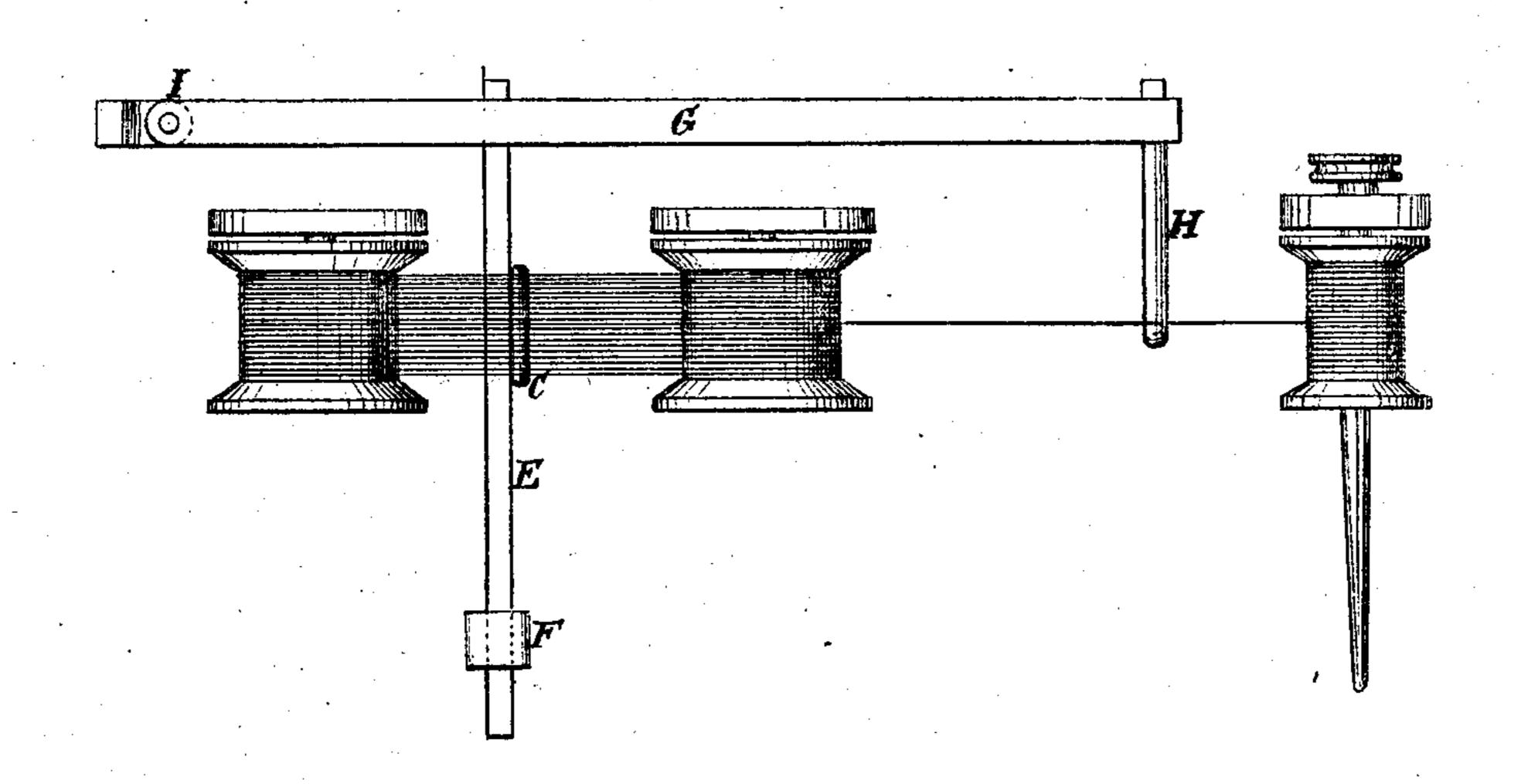
JAMES MACFARLANE.

Improvement in Silk-Winding Apparatus.

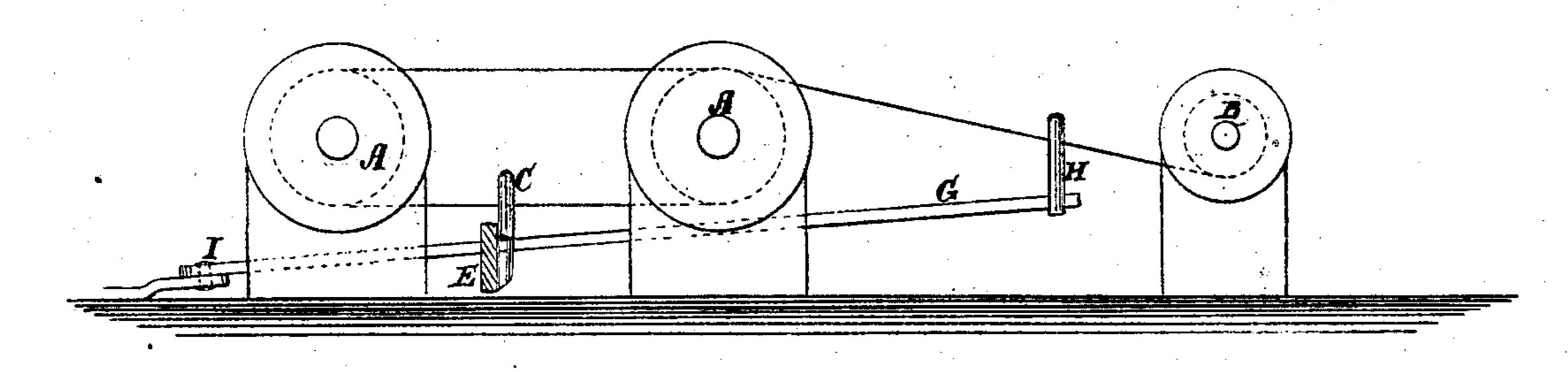
No. 116,203.

Patented June 20, 1871.

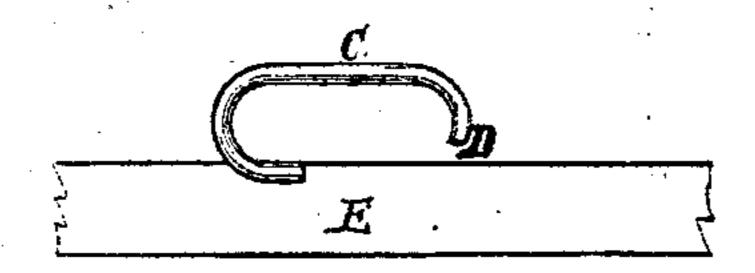
Jiq.1.



Jig.2



\$iq.3.



ATituongos:

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PER

Attorneys.

United States Patent Office.

JAMES MACFARLANE, OF MANSFIELD, CONNECTICUT.

IMPROVEMENT IN SILK-WINDING APPARATUS.

Specification forming part of Letters Patent No. 116,203, dated June 20, 1871.

To all whom it may concern:

Beit known that I, James Macfarlane, of Mansfield, in the county of Tolland and State of Connecticut, have invented a new and Improved Silk-Winding Apparatus; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to improvements in apparatus for winding "soft" silk, or the raw silk after being colored, upon spools, from the hanks or skeins; and it consists in an arrangement, with the spools or rollers on which the hank is stretched; also, with the traversing guide for the spool on which the silk is wound, of a traversing guide, by which the tendency of the hank to run sidewise on the spools or over the flanges will be counteracted, the arrangement being such that the operating devices for working the thread-guide are also utilized for operating this guide, with the addition of a few inexpensive parts.

Figure 1 is a plan view of my improved apparatus; Fig. 2 is a side elevation of the same; and Fig. 3 is a front elevation of the guide.

Similar letters of reference indicate corresponding parts.

A represents the rollers or spools on which the hank is stretched to be held for winding onto the spool B. C is a guide, consisting of a bent wire; or it may be any equivalent therefor, suitably shaped, for the shank to work through it, in the way threads work through the ordinary guides; and it is also so arranged that the endless threads of the hank may be introduced through a space at one end of the

wire, as indicated at D. This guide is attached to a bar, E, suitably arranged in supports F for traversing, and connected at one end to the lever G, which is pivoted at one end, as shown at I, to any support, and connected at the other to the traversing bar H of the threadguide, for the spool B, so as to be worked by it, to impart a slow and short traversing movement to the guide C, so that each end will act against the hank so as to keep it in the center, or thereabout, of the spools A, and prevent it working up and over the flanges thereof.

Heretofore the spools have been shifted at either end so as to increase or diminish the distance of the ends of one spool from another to control the action of the skein, the said shifting being done by automatic mechanism; but this is objectionable on account of the expense of the operating apparatus, which it is the object of this invention to avoid.

I do not claim the arrangement, with the spools A, of a traversing guide merely, but I consider my invention to be the arrangement, with the said spools and the thread-guide bar H, of the traversing guide C, the arrangement being such that said bar H affords the means of operating the said guide, and saves the expense of specially-provided operating devices therefor.

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

The arrangement, with the spools A and the yarn-guide-operating bar H, of the guide C, bar E, and lever G, substantially as specified.

JAMES MACFARLANE.

Witnesses:

FRANK D. FENTON,
JAMES A. H. BOWERS.