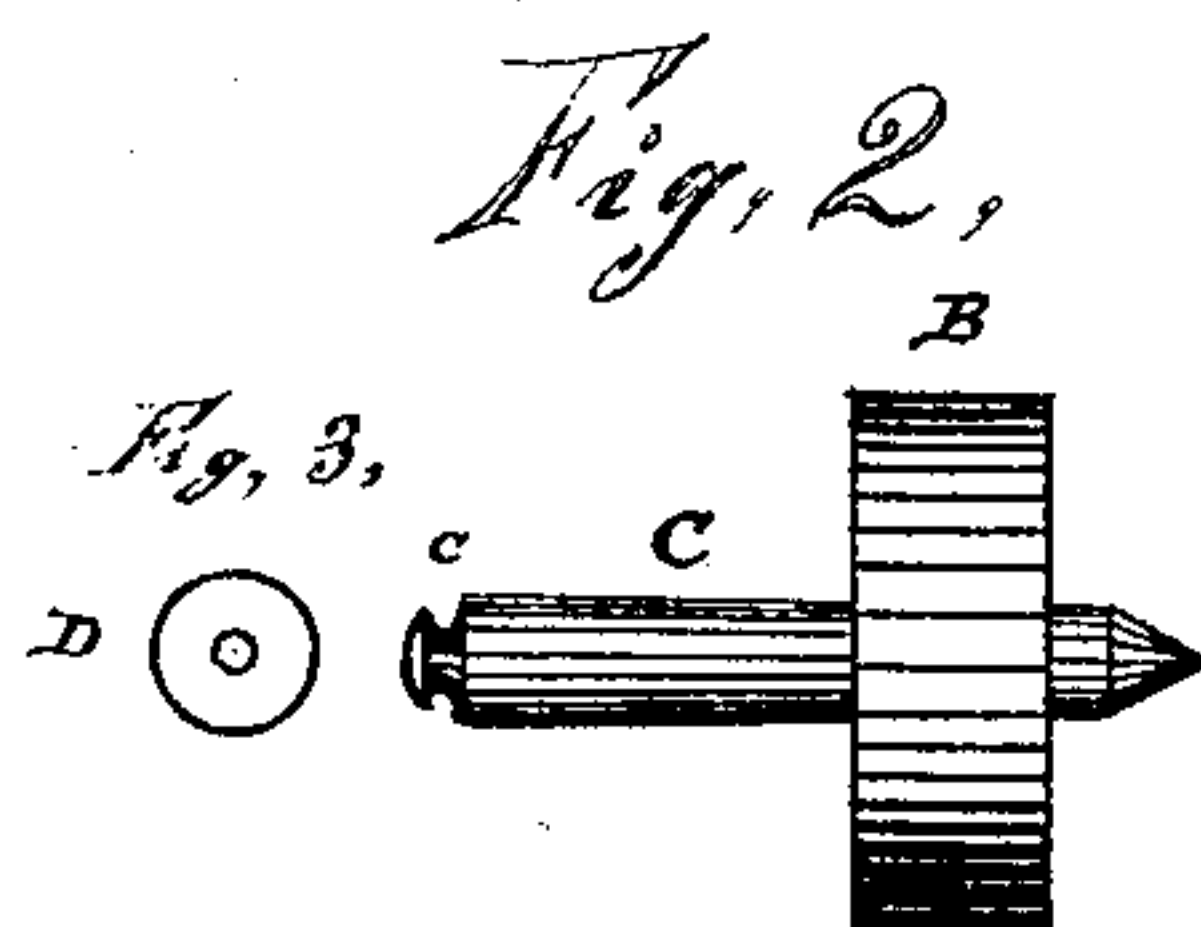
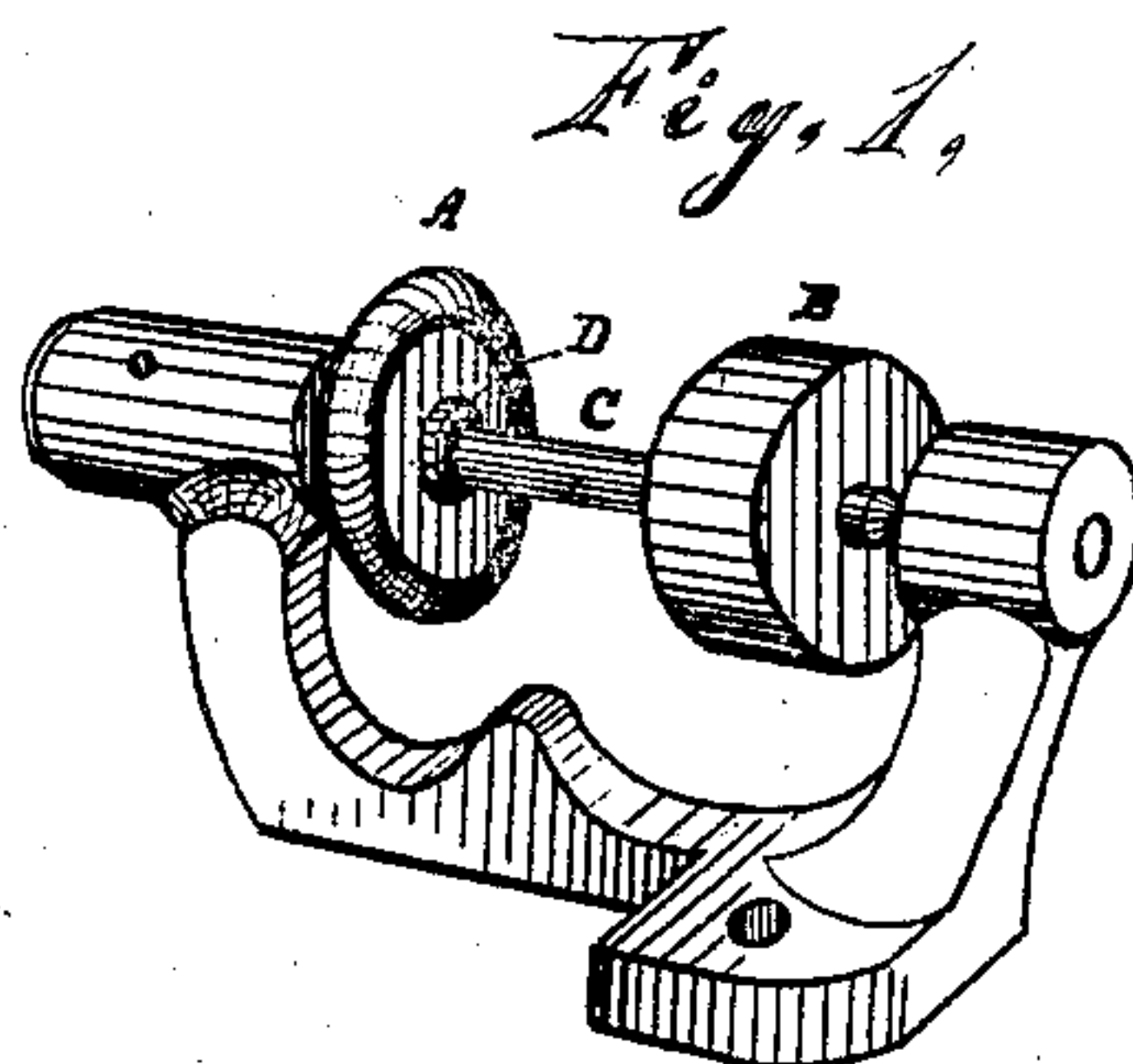


J. N. WILKINS.

Needle-Grinding Attachments for Sewing-Machines.

No. 128,518.

Patented July 2, 1872.



WITNESSES

J. H. Brown
F. F. Warner.

INVENTOR

John N. Wilkins

UNITED STATES PATENT OFFICE.

JOHN N. WILKINS, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN NEEDLE-GRINDING ATTACHMENTS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 128,518, dated July 2, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, JOHN N. WILKINS, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Needle-Grinding Attachments for Sewing-Machines, of which the following is a full, clear, and exact description, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing, and forming a part thereof, and in which—

Figure 1 represents a perspective view of a needle-grinding attachment provided with my improvement; Fig. 2, a side elevation of the grinder and its spindle, showing one end of the spindle constructed for the reception of the washer or packing which I employ, and Fig. 3 a side elevation of said washer and packing.

An objectionable feature in the operation of devices of the class referred to as now made is that, when sufficient pressure is applied to the grinder by the needle in order to sharpen the latter, such pressure causes the rotation of the grinder to cease, owing to the fact that the spindles of the grinder have a bearing against metallic surfaces, and are rotated by means of the pressure of the driving-bearing against one end of the spindle; the pressure of the needle on the grinder frequently overcoming the pressure of the driving-bearing on the spindle. I obviate said objections by interposing a rubber, leather, or other suitable packing between the driving-bearing of and the spindle, so as to increase the friction between these parts, thereby allowing of a greater pressure of the needle upon the grinder without causing the motion of the latter to cease. My invention consists in adapting the end of the spindle to receive and retain the washer, and of the said spindle, washer, and grinder, as a new article of manufacture.

In the drawing, A is the driving-wheel, rotated by means of its friction against the running-gear of the sewing-machine. B is the grinding-roller, and C its spindle. D is a suitable friction-washer interposed between the driving-wheel A and the spindle C, as shown in Fig. 1. The driving-wheel has heretofore been provided with a small depression, in which the end of the spindle adjacent thereto rests; the former being compressed against the latter by means of a spring resting on the outer end of the driving-wheel arbor; this spring yielding so that the grinding roller and its spindle may be readily removed and replaced. The washer which I employ may be used with a grinding attachment constructed in this manner; but to render its use more effectual, as well as to render the attachment of the washer to the spindle more certain, the end of the spindle to which the washer is applied, especially when a rubber washer is used, may be provided with an annular groove, as shown at c, Fig. 2, and the washer stretched over the head of the spindle so formed.

I arrange the said spindle, washer, and grinder together, and so as to be readily adapted to the frame of bobbin-winding attachments for sewing-machines, but more especially for the "Singer" sewing-machine.

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

A new article of manufacture, consisting of the spindle C provided with the annular groove c, washer D, and grinder B, constructed and arranged as specified.

The foregoing specification signed by me this 27th day of February, A. D. 1872.

JOHN N. WILKINS.

Witnesses:

N. C. GRIDLEY,
F. F. WARNER.