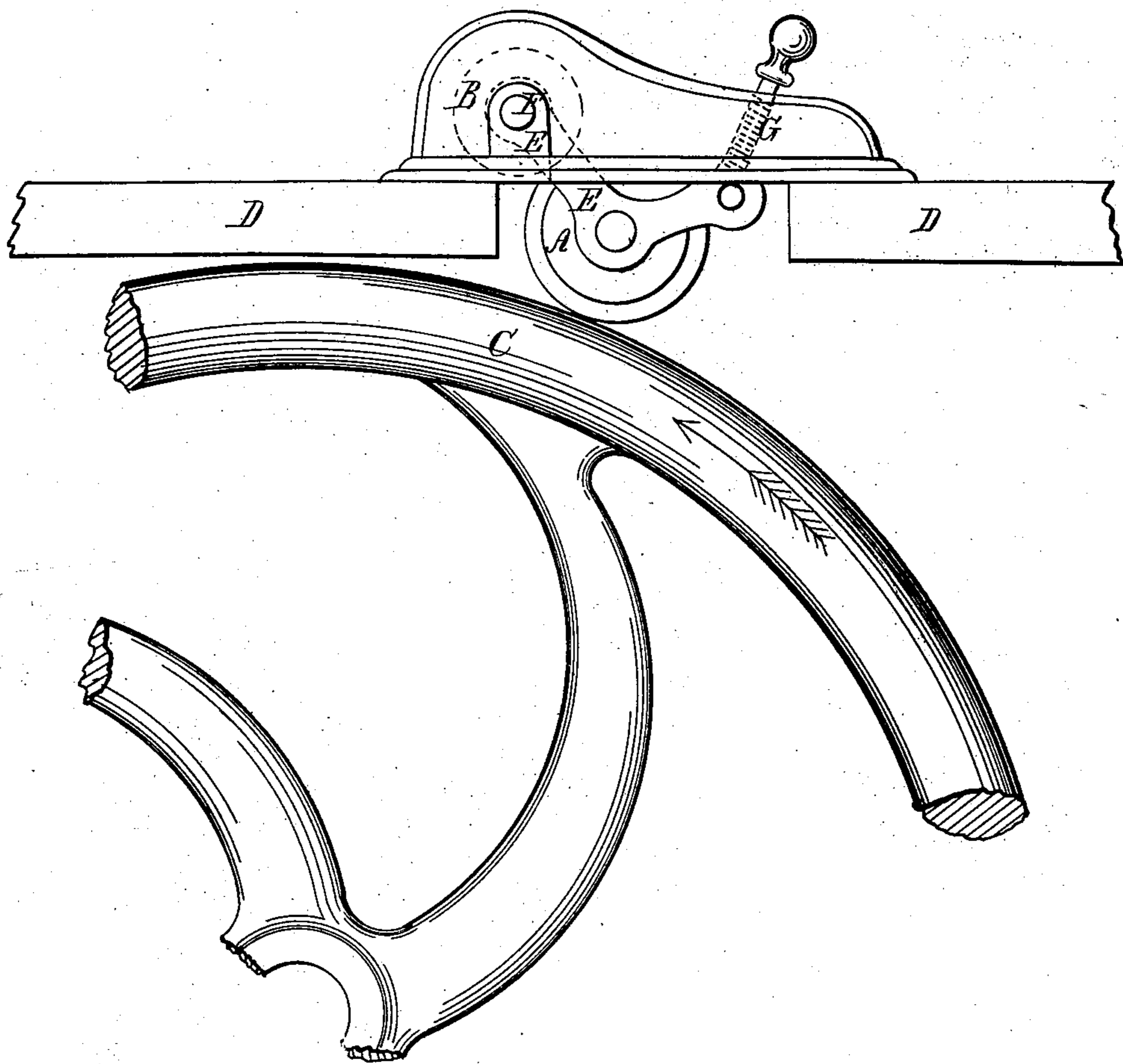


T. Hall,

Bobbin Winders,

Nº 96,692.

Patented Nov. 9. 1869.



Witnesses

J. P. McCune
Frederick Wiebe

Inventor

Thos. Hall

United States Patent Office.

THOMAS HALL, OF BROOKLYN, NEW YORK.

Letters Patent No. 96,692, dated November 9, 1869.

IMPROVEMENT IN BOBBIN-WINDER FOR SEWING-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

Be it known that I, THOMAS HALL, of Brooklyn, in the county of Kings, and State of New York, have invented a new and useful Improvement in Apparatus for Winding Thread on Bobbins for Sewing-Machines, &c., which improvement was partially explained in caveat filed by me in the Patent Office, in April, 1867, and renewed by me on May 22, 1868; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, making part of this specification.

The object of this invention is to simplify the operation of winding thread on the small spools or bobbins of sewing-machines, by making it so as to readily be connected with or disconnected from the working parts of the sewing-machine, and at the same time so arranged that it will only operate when the wheel that drives it is turned in the proper direction.

The annexed drawing shows a section of an ordinary fly or balance-wheel of a sewing-machine, marked C.

D D is the table of the machine, to which is fastened the winder.

It has an opening in it, through which the wheel A projects, so as to touch the wheel C.

The wheel A is hung so as to move around the smaller wheel or pulley B, by the frame or hanger E, and can be always in contact with wheel B, whether in motion or not.

To cause the winder to operate, it is only necessary to allow the wheel A to swing around wheel B, so as to come in contact with wheel C. The friction on wheel C, when turning in the direction indicated by the arrow, will cause the winder to operate.

If the wheel C is turned in the opposite direction, it will only tend to carry the wheel A from the winder-

wheel B, the elongated bearings in the hanger permitting such motion, in which case the winder-wheel B will cease to rotate, thus preventing the thread being wound the wrong way.

G shows a light spring, to keep the wheels A and C in contact while operating.

Through the spring is a wire, connecting the rear end of the hanger E with a knob, outside the casing, by which the wheel A can be drawn out of contact with wheel C, and held, so as to prevent it running when not wanted.

The wheel A is made to come in contact with wheel B, and to close up, as it wears, either by sliding on its hanger E, or the hanger E slides on the fulcrum F, which is the shaft or journal on which B turns.

The frame or case to which these working parts are fixed, can be of any suitable design. In the accompanying drawing, it is represented as covering the wheels, so that only the end of the spindle of wheel B projects on the outside, and the knob, to stop and start with.

The construction is not material, so long as the principal features are preserved, of swinging intermediate wheel around the wheel to be driven, so that it will only operate in the proper direction.

I claim as my invention, and desire to secure by Letters Patent—

The combination of the roller A, winder-wheel B, hanger E, pressure-spring G, and lifting-rod, all arranged for operation, in connection with the driving-wheel C, substantially as set forth.

THOS. HALL.

Witnesses:

J. B. McCUNE, Jr.,
FREDERICK WIEBE.