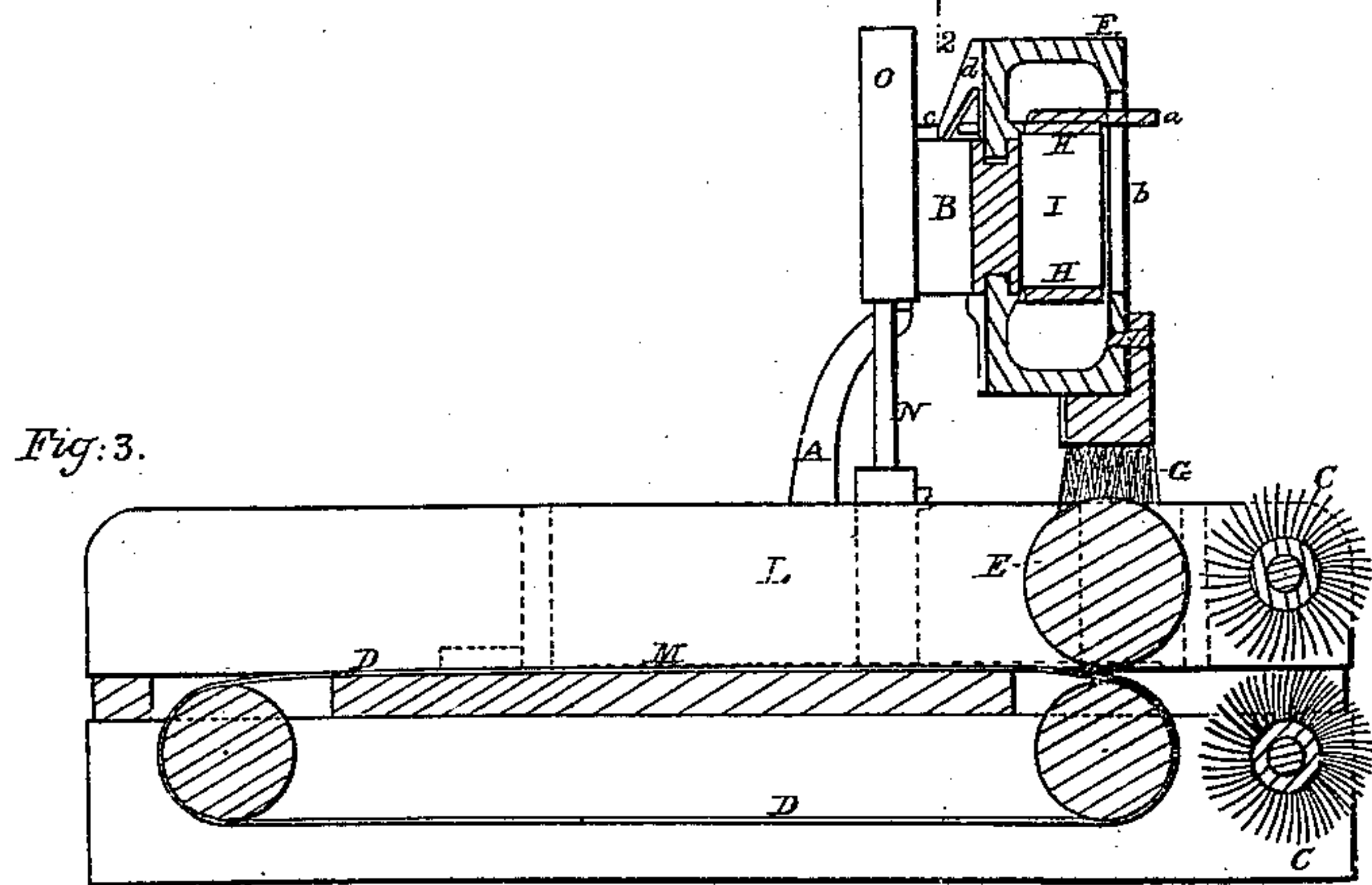
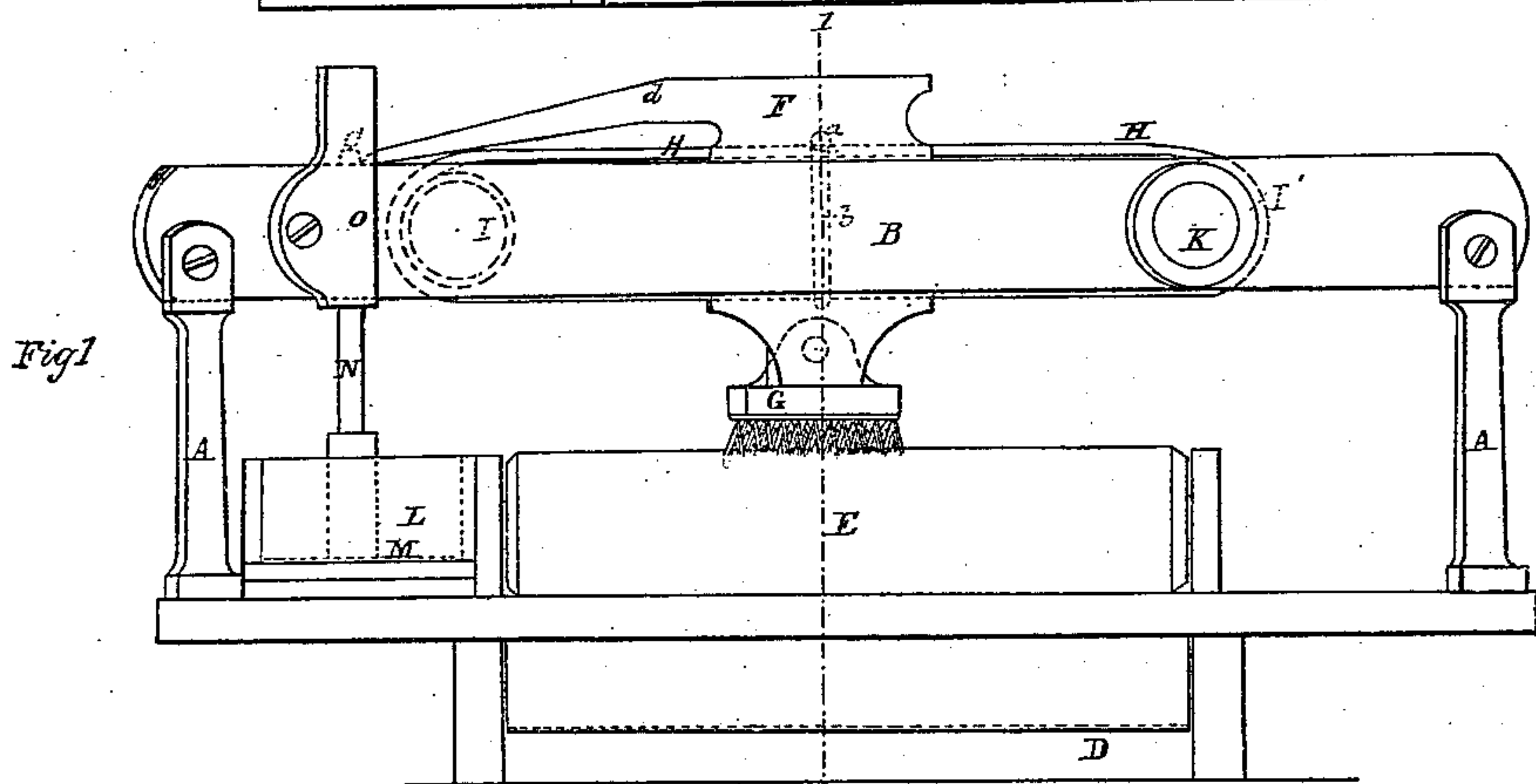
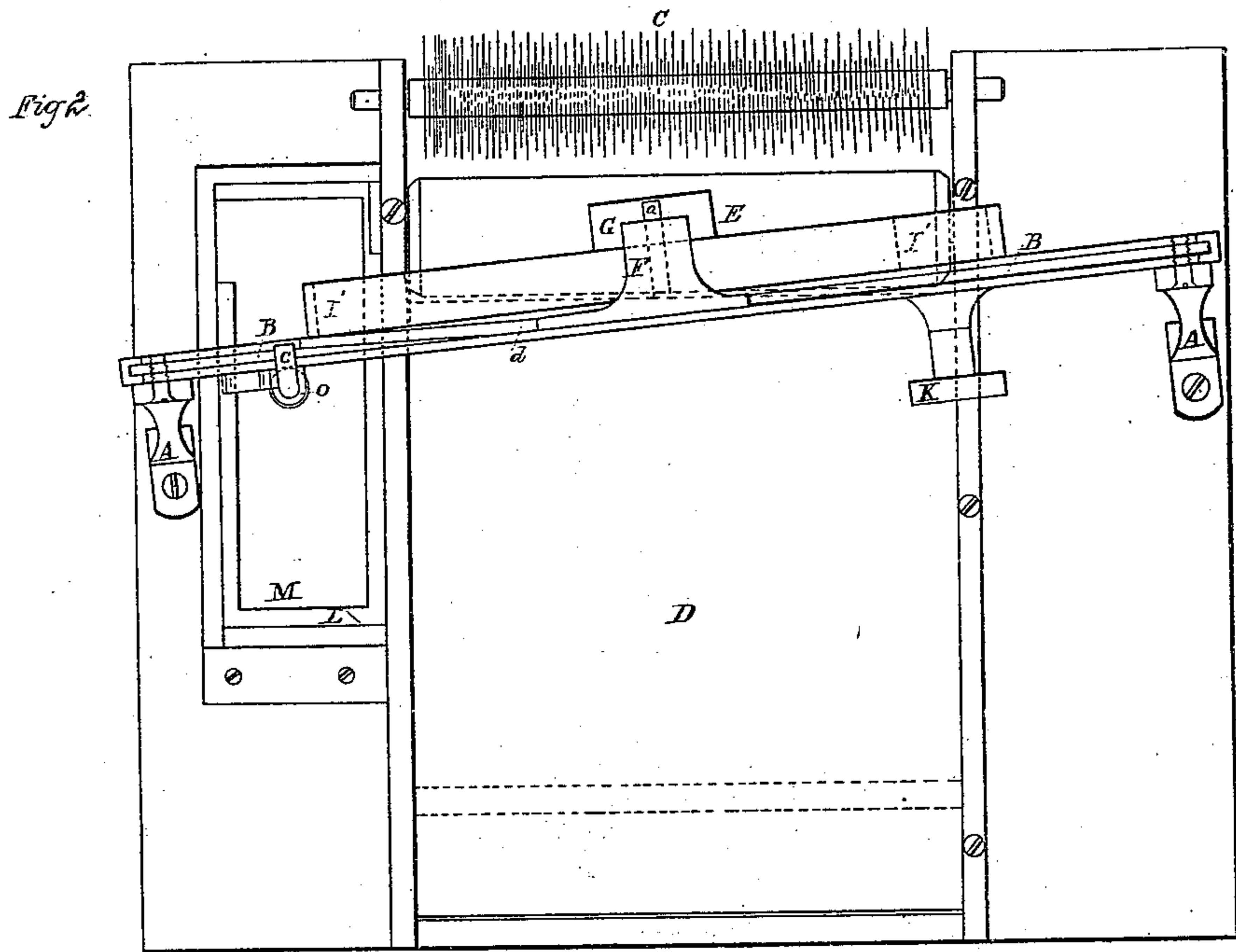


*W. Clissold,  
Wool Oiling Machine.*

*N<sup>o</sup> 36,603.*

*Patented Oct. 7, 1862.*



*Witnesses.  
Thos. R. Roach  
J. B. Tappemacher.*

*Inventor.  
Wm Clissold  
by his attorney  
Sam Crocker*



# UNITED STATES PATENT OFFICE.

WILLIAM CLISSOLD, OF DUDBRIDGE WORKS, STROUD, COUNTY OF GLOUCESTER, ENGLAND.

## IMPROVEMENT IN MACHINERY FOR OILING WOOL.

Specification forming part of Letters Patent No. 36,603, dated October 7, 1862.

*To all whom it may concern:*

Be it known that I, WILLIAM CLISSOLD, of Dudbridge Works, Stroud, in the county of Gloucester, in that part of the United Kingdom of Great Britain and Ireland known as England, patent machine manufacturer, have invented Improved Apparatus for Oiling Wool; and I do hereby declare that the following is a full and exact description of the said invention.

This invention relates to the operation of supplying oil or oleaginous mixtures to wool preparatory to its being submitted to the carding-engine for the purpose of being worked into sliver, the object of this invention being to effect a uniform distribution of the liquid through the mass of fibers under operation, and prevent the waste that is consequent on the ordinary mode of oiling wool. To this end I employ a traveling brush or brushes, which, after receiving oil from a dipping-plate, will transfer the same to a roller mounted above the feed-apron of the carding-engine and pressing upon the wool supplied thereto. The contact, therefore, of this oiled roller with the wool that is passing under it will insure the equal distribution of the oil over the whole surface of the wool.

In the accompanying drawings, Figure 1 represents in front elevation the improved oiling apparatus as applied to a carding-engine. Fig. 2 is a plan view of the same, and Fig. 3 a vertical cross-section in the line 1 2 of Fig. 1.

A A are two standards, which support a horizontal cross-bar, B, set in advance of the feed-rollers C C of the carding-engine. This bar stretches across the feed-apron D of the engine, and is set at an angle to the feed-rolls. Below this bar (and turning loosely by friction of contact with the wool placed on the feed-apron) is a metal roller, E, which has its bearings in the side framing of the engine, and is intended to distribute oil to the wool. The bar B forms a rail for the traverse of a carriage F, which carries a brush, G, by which it is intended to transmit the oleaginous mixture to the oil-distributing roller E.

H is a belt passing over the drums or pulleys I I', having their bearings in the cross-bar B. The driving-wheel K is placed on the

shaft which carries the drum I'. A continuous rotary motion is by this arrangement communicated from the driving-wheel to the endless belt H.

The traverse of the brush-carriage is effected by means of a pin, *a*, fastened to the outside face of the endless belt moving in a slot, *b*, in the back of the carriage F.

I will now describe the manner of supplying the brush with oil. At one side of the engine, and immediately below the pulley I, is a reservoir, L, for containing the oleaginous mixture, and into this reservoir dips a plate, M, which is carried by a rod, N, that slides freely in a guide, O, provided for it on the face of the bar B, and is adjustable vertically upon that rod. The upper end of the rod N terminates in a bent arm, *c*, which projects over the top edge of the bar B, and is raised or lowered by an incline, *d*, attached to the top of the carriage F. As the carriage comes to the end of its traverse, the incline *d* will pass under the bent arm *c* of the rod N, and cause it to rise with the rod until the dipping-plate M has moved out of the oil-mixture and brought up a determinate quantity upon its upper surface. The carriage F, in completing its traverse, will carry the brush over this plate and cause it to take up a charge of oil therefrom. The carriage will then return, and passing diagonally over the rotating roller E, will lay a thin film of oil over the upper surface of the roller, a fresh surface being constantly presented to the traversing-brush. By a continuous repetition of this action the whole periphery of the roller will be evenly and uniformly oiled, and as the roller revolves it will press the oil into the wool that is being fed to the carding-engine in regulated quantities, as is well understood. The friction between the traveling wool and the lower part of the roller will be sufficient to secure a regular axial motion thereto.

I would remark that if found desirable an oil-reservoir and dipping-plate may be provided at both sides of the machine. In such case a double wedge will be required on the brush-carriage to operate alternately on the two dipping-plate rods.

When I use two brushes, I connect them directly to the endless belt.

As the action of the dipping-plate is to plunge into and rise quickly out of the oiling liquid, it will impart to that liquid the requisite agitation for maintaining the intimate admixture of the ingredients.

Having now set forth the nature of my invention, I wish it to be understood that I claim—

The oiling of wool (preparatory to carding the same) by means of a pressure-roller supplied with the oil or oleaginous mixture by a traveling-brush which receives the same from

a dipping-plate or its equivalent, as above described.

In witness whereof I, the said WILLIAM CLISSOLD, have hereunto set my hand and seal this 13th day of June, in the year of our Lord 1862.

WILLIAM CLISSOLD. [L. S.]

Witnesses:

ALFRED SMITH,  
*Cairncross St., Stroud.*

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