L. T. JONES.

CAMS FOR SEWING MACHINES.

No. 178,159. Patented May 30, 1876.

Fig. 1.

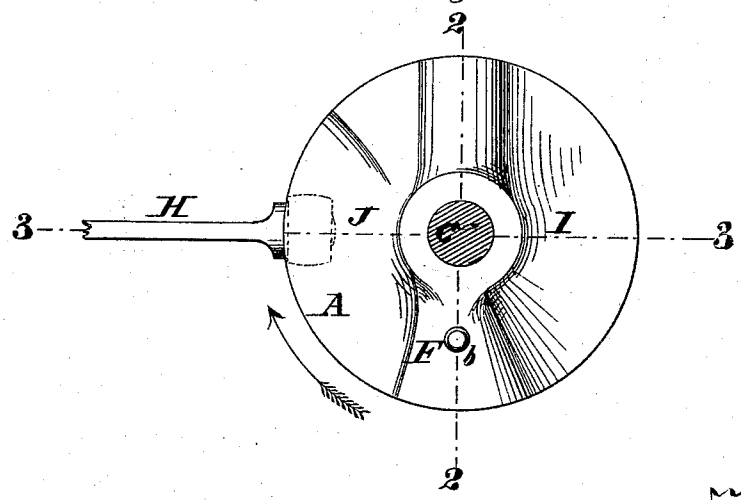


Fig. 2.

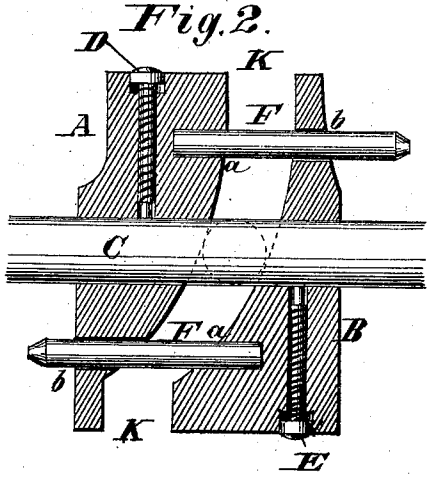
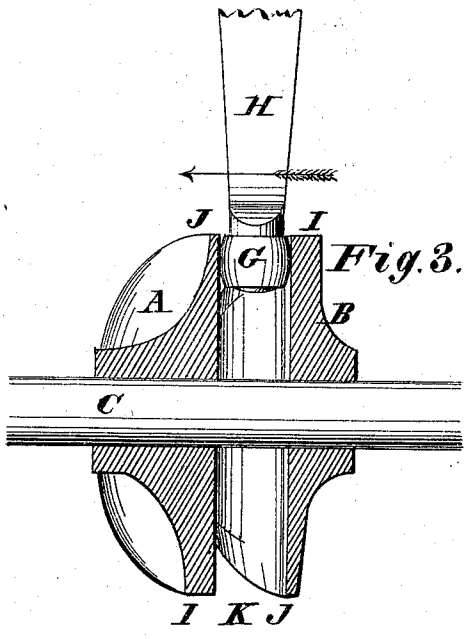


Fig. 3.



WITNESSES

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LEVIN T. JONES, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN CAMS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **178,159**, dated May 30, 1876; application filed May 16, 1876.

To all whom it may concern:

Be it known that I, LEVIN T. JONES, of Baltimore, in the State of Maryland, have invented a certain new and useful Improvement in Cams for Sewing-Machines, of which the following is a specification:

The subject of my invention is a cam consisting of two members adjustable relatively or independently on the driving-shaft, and fixed in any position they may be placed in by set-screws. One or more steady-pins are permanently fixed in one member, and extend through apertures in the other member, so as to prevent any torsional movement between them in the act of adjustment.

In the accompanying drawing, Figure 1 is an elevation of my improved adjustable cam. Fig. 2 is a longitudinal section of the same on the line 2 2, Fig. 1. Fig. 3 is a longitudinal section on the line 3 3, Fig. 2.

A and B represent two heads or parts of a cam, and C the driving-shaft on which they are mounted. D E are set-screws threaded in the cam-heads A B, and binding on the shaft C, so as to fix the said heads in any position to which they may be set. F F represent steady-pins, of which one, two, or more may be used, each pin being fixed permanently in one head of the cam, as at *a*, and passing freely through an aperture, *b*, in the other head. G represents the customary anti-friction roller running on the end of the driving-lever H, which is operated by the cam. The pressure of the roller G is sustained alternately by the cam-heads A and B, by each during one half revolution, and never by both at one time. The cam-heads are, therefore, made of greater thickness and strength at the parts I, where the wear is received, and quite thin at the parts J, which sustain no wear and receive no contact from the roller G, unless the shaft is inadvertently turned backward. The lever is driven first in one direction by one side and then in the opposite direction by the other side. The sides J J, which receive no pressure, might be entirely dispensed with but for the danger of disconnection by occasional reversal of the motion.

Operation: The heads A B are set at the proper distance asunder to form between them a groove, K, adapted to the diameter of the roller G, so that the said roller may travel in the groove in customary manner, but without any lost motion. As the roller becomes worn the head B is set up toward the head A, so as to correspond with the reduced diameter of the roller.

The invention affords facility for the repairing or renewing of the faces of the driving-cam, in the event of the same wearing, so that all the parts are kept in proper accurate working condition without the necessity of renewing the roller or replacing it with the larger one when it becomes worn or reduced in size.

I am aware that driving-cams have before been constructed in various ways with separate members, so that the working-faces may be adjusted one toward the other. I do not, therefore, claim this broadly.

Having thus described my invention, the following is what I claim as new and desire to secure by Letters Patent:

The combination of the independently-adjustable heads A B, driving-shaft C, radial set-screws D E, and longitudinal steady pin or pins F, permanently fixed in one head of the cam, and sliding freely through an aperture in the other head, as shown and described.

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Witnesses:

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