

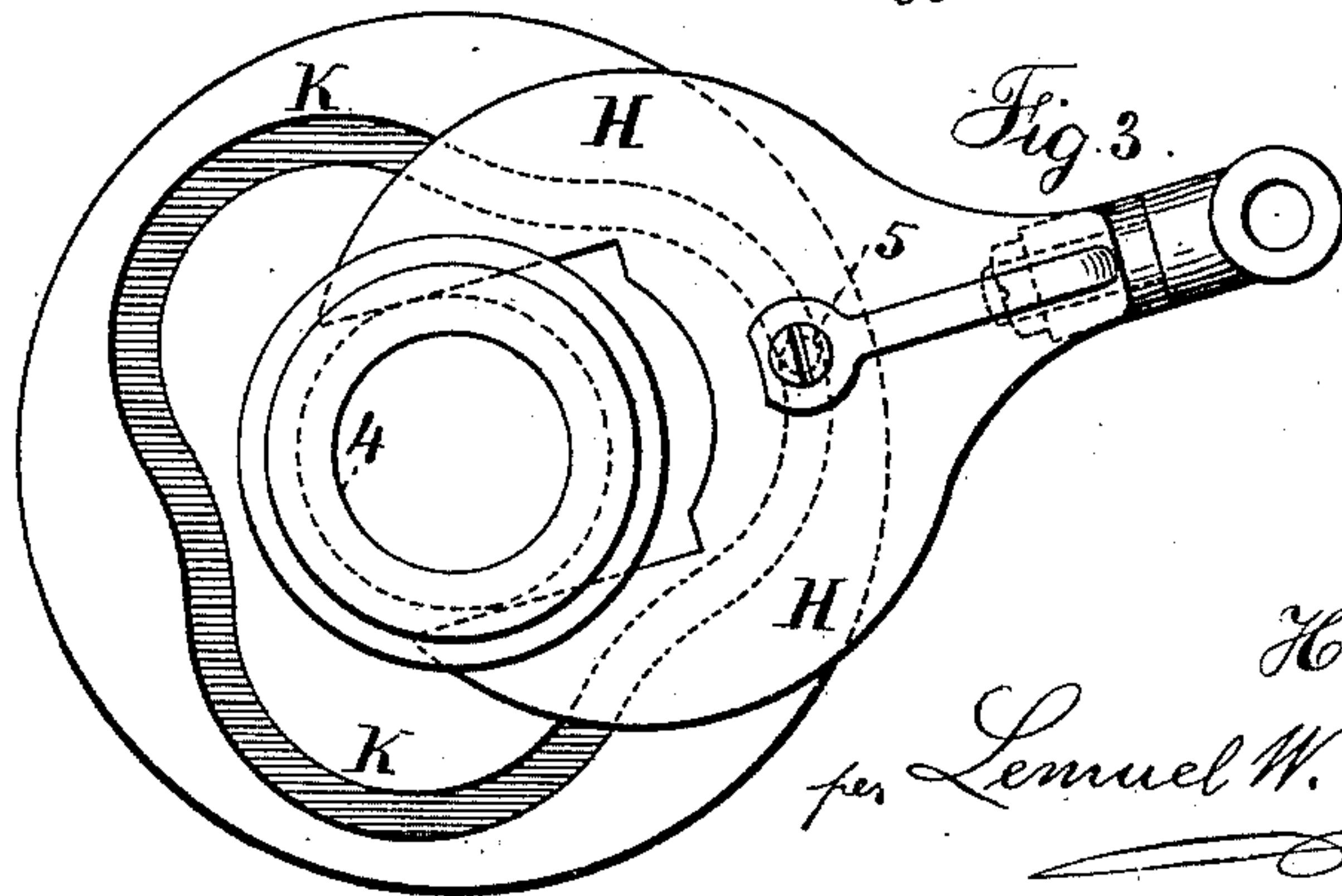
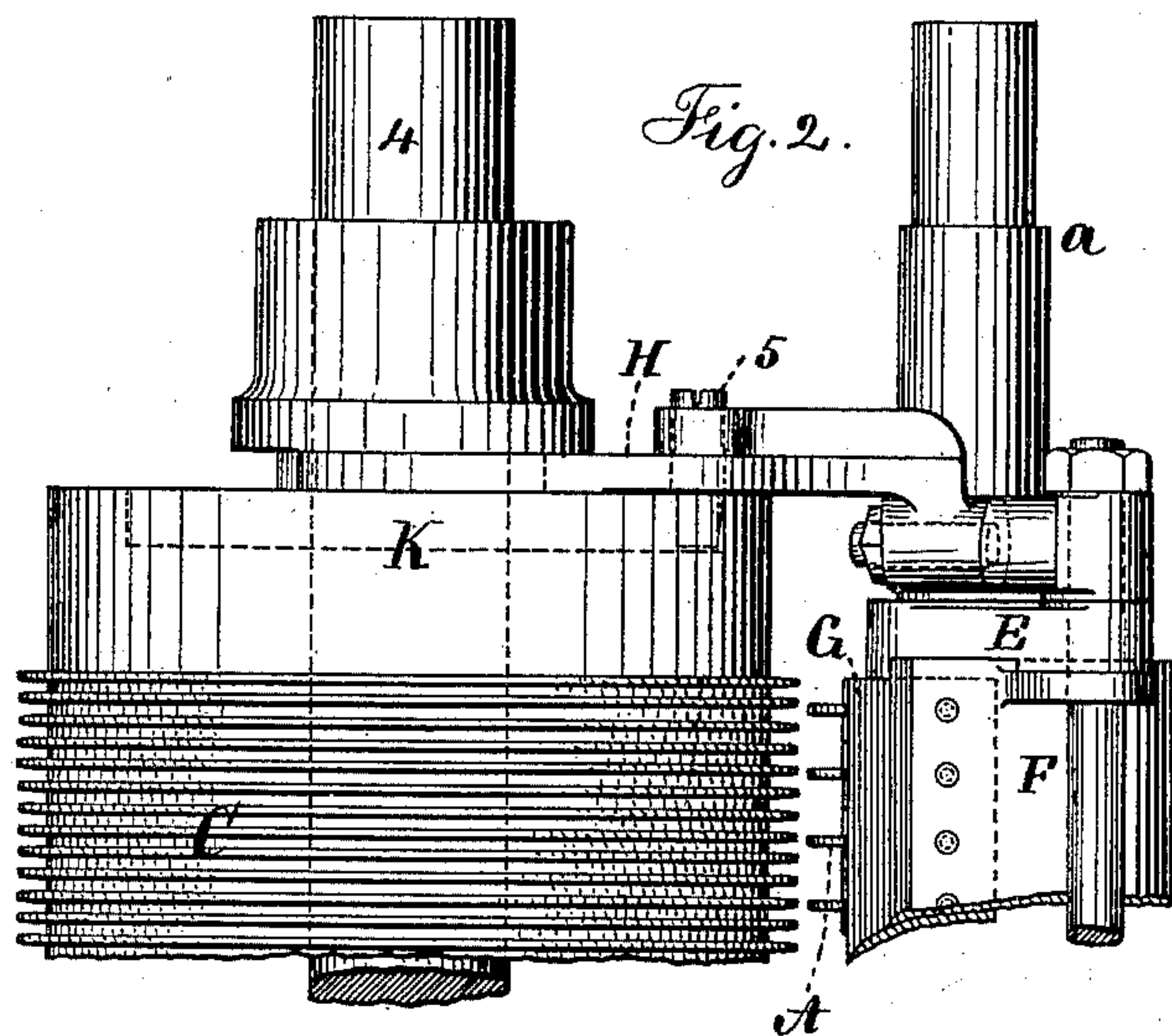
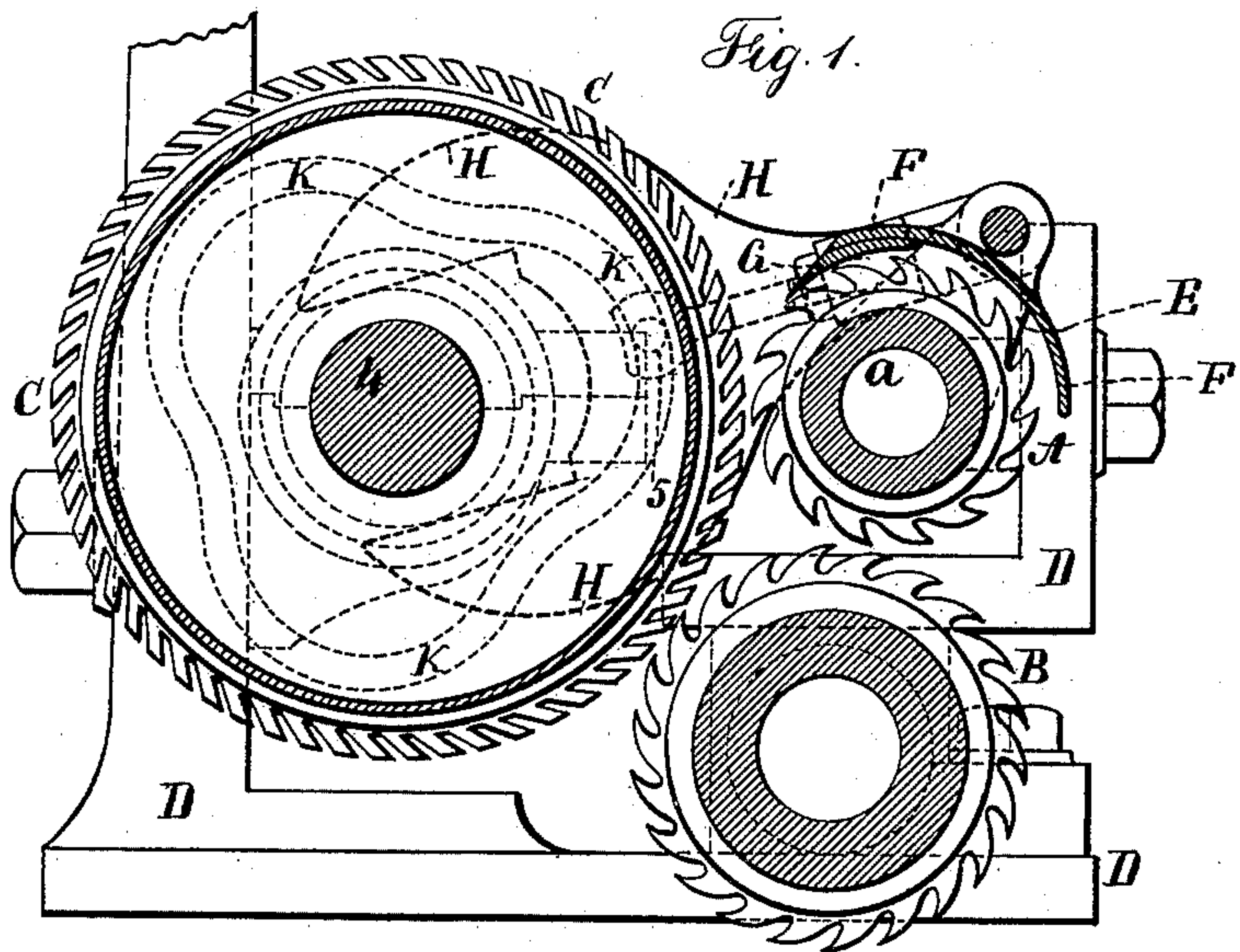
(No Model.)

H. TINDELL.

MECHANISM FOR CLEANING TOOTHED FEED ROLLS.

No. 378,739.

Patented Feb. 28, 1888.



Witnesses:
J. Stail.
Chas. H. Smith.

Inventor:
Henry Tindell.
per Lemuel W. Ferrell, atty.

UNITED STATES PATENT OFFICE.

HENRY TINDELL, OF HARRISON, ASSIGNOR TO EMILY R. PARKHURST, OF
MONTCLAIR, NEW JERSEY.

MECHANISM FOR CLEANING TOOTHED FEED-ROLLS.

SPECIFICATION forming part of Letters Patent No. 378,739, dated February 28, 1888.

Application filed July 11, 1887. Serial No. 243,970. (No model.)

To all whom it may concern:

Be it known that I, HENRY TINDELL, of Harrison, in the county of Hudson and State of New Jersey, have invented an Improvement in Mechanism for Cleaning Toothed Feed-Rolls, of which the following is a specification.

The feed-rolls made use of in burring and picking machines have sometimes been made with tapering hook-shaped teeth, as seen in Letters Patent No. 309,978, granted to S. R. Parkhurst, and the teeth of the lower feed-roll have been cleaned by the action of the burring or picking cylinder; but the teeth of the upper feed-roll retain the wool to a greater or less extent.

My present invention relates to a cleaner for the teeth of the upper feed-roll; and it consists in the combination, with the toothed feed-roll, of a head carrying a cleaning-blade, links supporting the same and vibrating on the shaft of the feed-roll, and cams upon the shaft of the picking or burring cylinder, and sliding end plates extending to the head that carries the cleaning-blade, so that said cleaning-blade is reciprocated several times during each revolution of the picking or burring cylinder, and cleans the teeth of the upper feed-roller toward the points of the teeth, so that the wool or other fiber is taken away with facility by the picking or burring cylinder.

In the drawings, Figure 1 is a section of the feed-rolls and the burring-cylinder. Fig. 2 is a plan view of the parts at one end of the same, and Fig. 3 is a detached view of the cam-plate and end plate.

The feed-rolls A B are provided with tapering hook-shaped teeth, and the picking or burring cylinder C is also provided with teeth of any usual character; and at D, I have represented a portion of the frame and journal boxes or bearings for the respective shafts of the rollers A B and cylinder C.

At the ends of the roller A are links E, having eyes that surround the shaft *a* of said roller A, and to the outer ends of these links the head-piece F and cleaning-blade G are attached, the blade G being riveted or otherwise

secured to the head-piece F, which is connected at its ends to the links E by bolts or pins. Upon the shaft 4 of the cylinder C is a cam, K, formed of a plate having a groove with two, three, or more leaves or undulations. The end plates, H, have rollers or studs 5 for the cams to act against, and said plates are bifurcated, so as to be supported by the shaft, and at the same time they can be moved forward or backward in a radial line, or nearly so, by the undulations of the cam. The outer ends of these plates are connected to the links E at the ends of the cleaner-blade G, preferably by a pivot-bolt passing through holes in the respective parts, so that the proper movement will be given to swing the links E and move the cleaner-blade back and forth across the teeth upon the upper feed-roll, and in doing this any burrs or lumps of fibrous material that may become embedded between the teeth of the upper feed-roll are pushed toward the points of the teeth and are taken away by the cylinder C. As the cams K are made with two or more leaves or undulations, the cleaner-plate receives a reciprocation that is sufficiently rapid to freely clear the teeth of the upper roll, and there is but little wear upon any of the parts, because the studs or rollers upon the end plates that enter the grooves of the cam are easily lubricated and can be replaced when worn out.

I claim as my invention—

The combination, with the feed-roller having tapering hook-shaped teeth and the toothed cylinder, in a burring or picking machine, of a cleaner-blade, the links to which the blade is connected at its ends, the bifurcated end plates guided by the shaft of the toothed cylinder, and the cam having two or more leaves or undulations and acting upon studs or rollers on the end plates, substantially as set forth.

Signed by me this 1st day of July, A. D. 1887.

HENRY TINDELL.

Witnesses:

MOSES J. DE WITT,
L. F. DICKERSON.