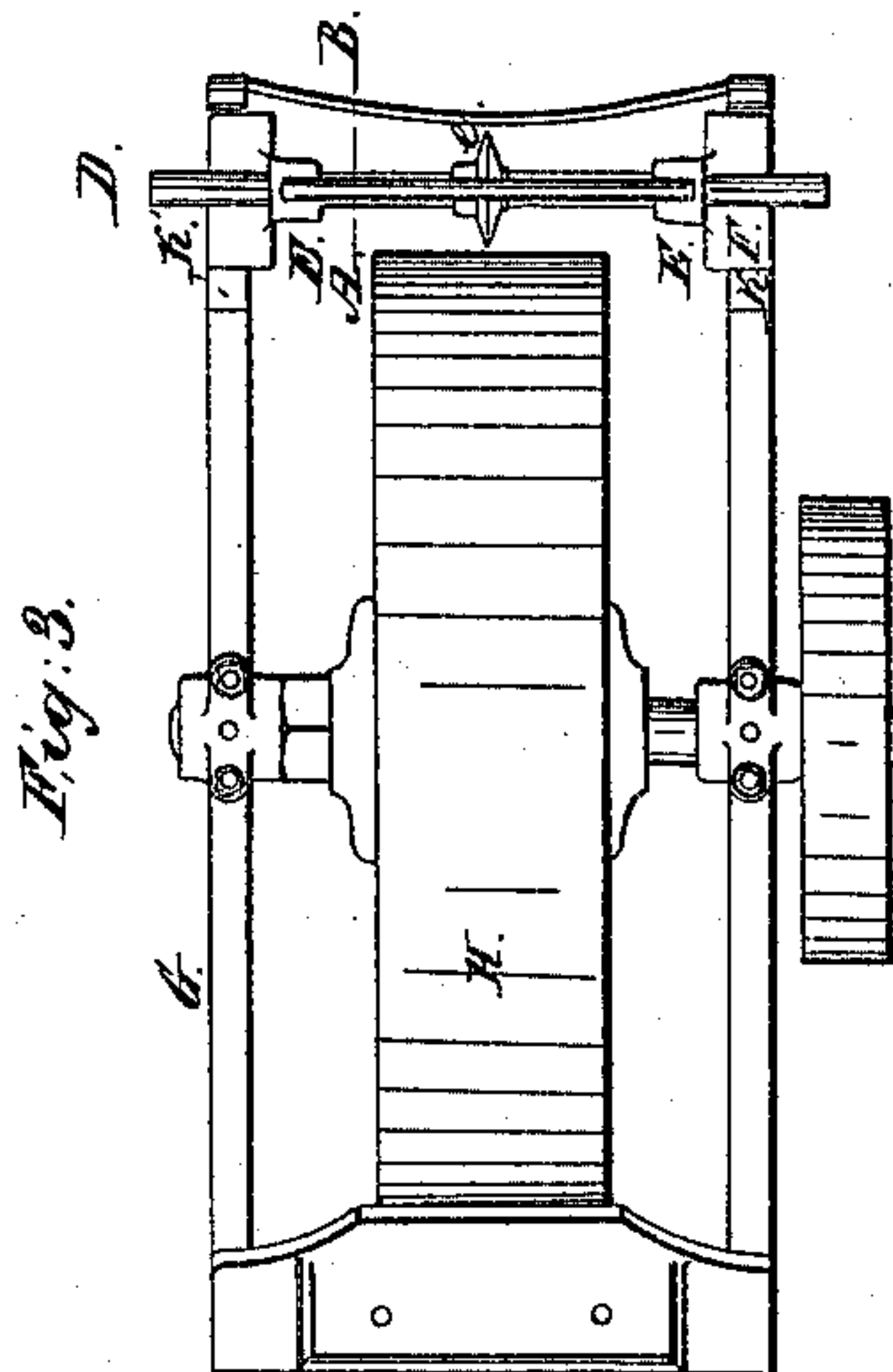
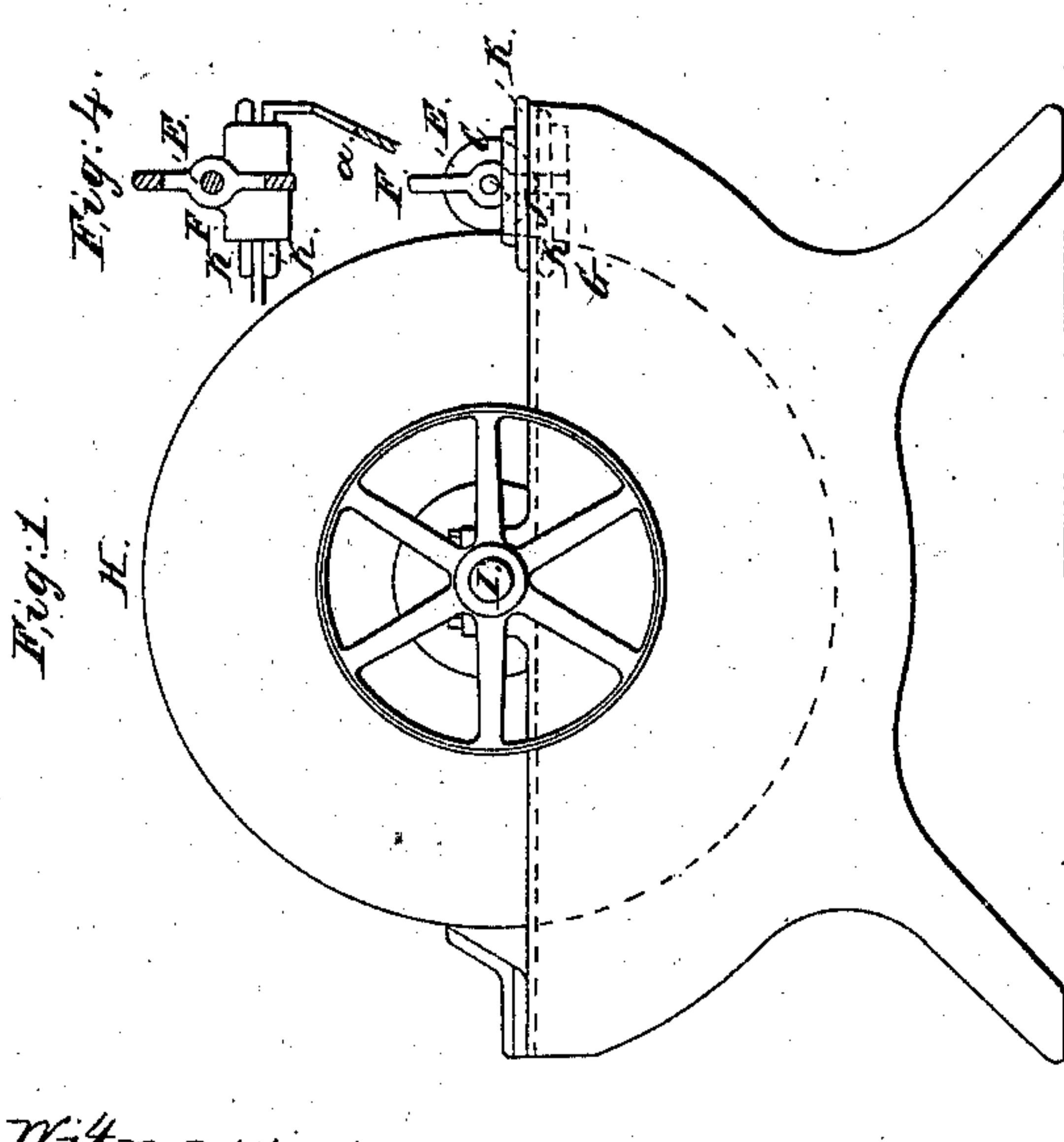
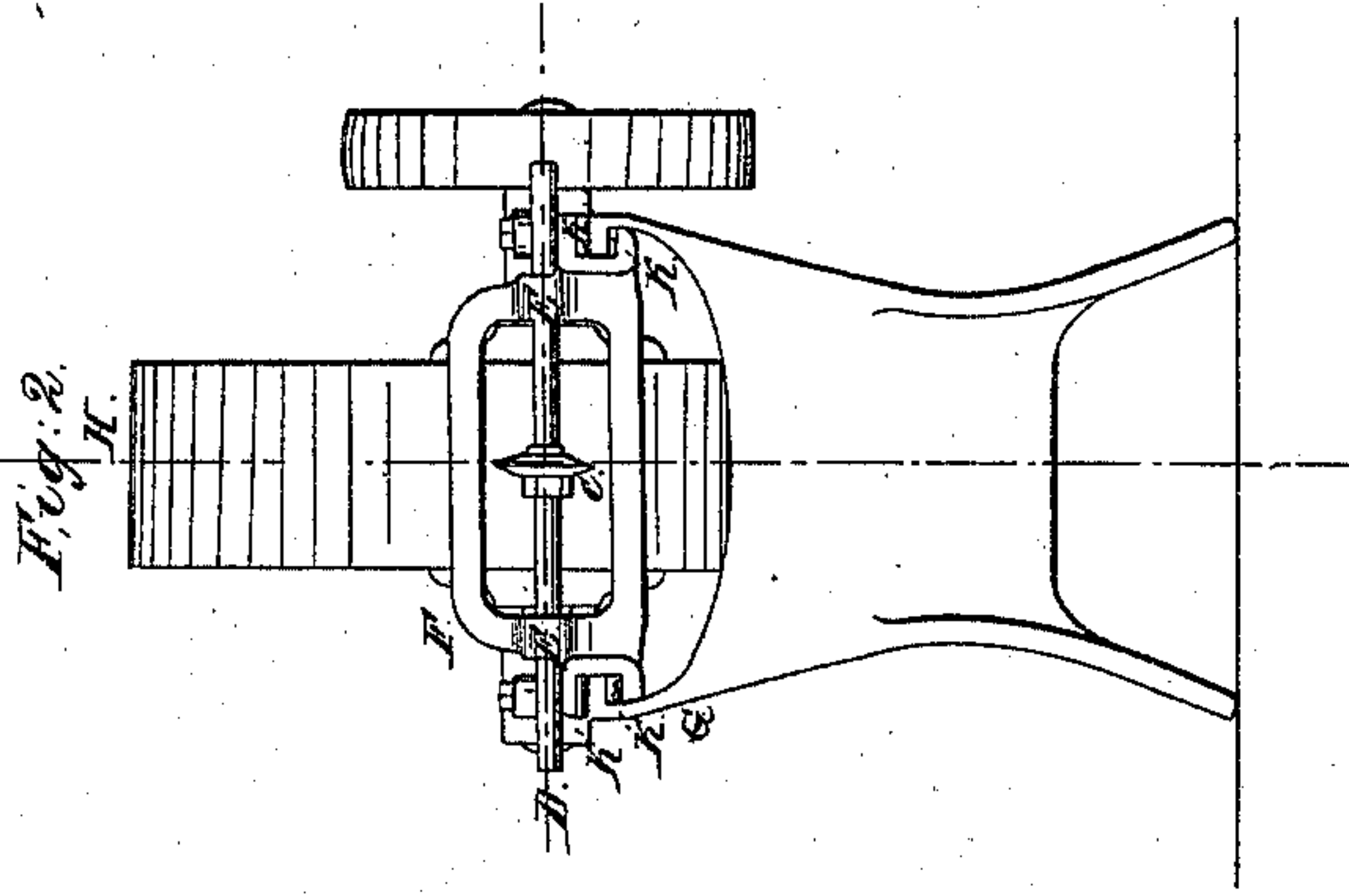


*J. Thierry,
Dressing Stone.*

Nº 35,553.

Patented June 10, 1862.



Witnesses:
Henry Dickens
L. J. J. J.

Inventor:
James Thierry

UNITED STATES PATENT OFFICE.

JAMES THIERRY, OF AURORA, ILLINOIS.

IMPROVEMENT IN MACHINES FOR TURNING OFF GRINDSTONES.

Specification forming part of Letters Patent No. 35,553, dated June 10, 1862.

To all whom it may concern:

Be it known that I, JAMES THIERRY, of Aurora, in the county of Kane, in the State of Illinois, have invented a new and useful Machine for Turning Off Circular Grindstones; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in combining a circular cutting-tool with a spindle fitting loosely into a couple of boxes attached to a frame so constructed that it may be properly fixed to that of a grindstone by means of wedges or screws so disposed as to allow said spindle to form a greater or lesser angle with a plane passing through two points of the axis of said grindstone and through one point of the axis of said cutting-tool, the machine resulting from this combination operating through the contact of said cutting-tool with the surface to be turned off at the circumference of a revolving grindstone, and on account of the inclination of said spindle with the axle of said grindstone.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I take a circular disk, C, of hardened steel and sharpened at its circumference, and fix the same to a spindle, D, passing through its center by means of a nut or its equivalent, the said spindle fitting loosely into a couple of boxes, E E', cast in one jet with a frame, F, constructed as described above.

Operation: Said machine being firmly fixed to the frame G of a grindstone, H, to be turned off, before operating it is necessary that said machine be adjusted in such a manner as to make said cutting-tool turn off a chip of the

required depth and thickness, the depth being regulated by varying the distance between I and J, (centers of grindstone and of cutting-tool,) while the proper thickness is obtained by adjusting the inclination of said spindle with the axle of said grindstone, as shown in Figure 2. Should said spindle and axle be parallel to each other, said cutting-tool would keep stationary, and merely cut a groove into said grindstone when in operation. Said machine being adjusted, as described, for proper operation, and the grindstone made to revolve as usual, it will suffice to push said cutting-tool against the side of said grindstone, either from right to left or left to right, according to the direction in which the same will be revolving, when said cutting-tool will be immediately engaged by said grindstone and forced to revolve by its contact with the revolving surface of the same grindstone, cutting a spiral groove (like the thread of a screw) around the same, (on account of said inclination of said spindle,) that will make said circular cutting-tool advance, and thus operate the turning off of a grindstone.

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

The combination of a circular cutting-tool, C, a spindle, D, and a frame, F, together with the wedges K K' K'' K''', or their equivalents, with a grindstone-turning machine, so constructed that it will operate by the joint effects of its contact with a grindstone in motion and the inclination of said spindle in relation to said grindstone, substantially as described above.

JAMES THIERRY.

Witnesses:

JAS. G. BARR,
A. H. ALBERS.