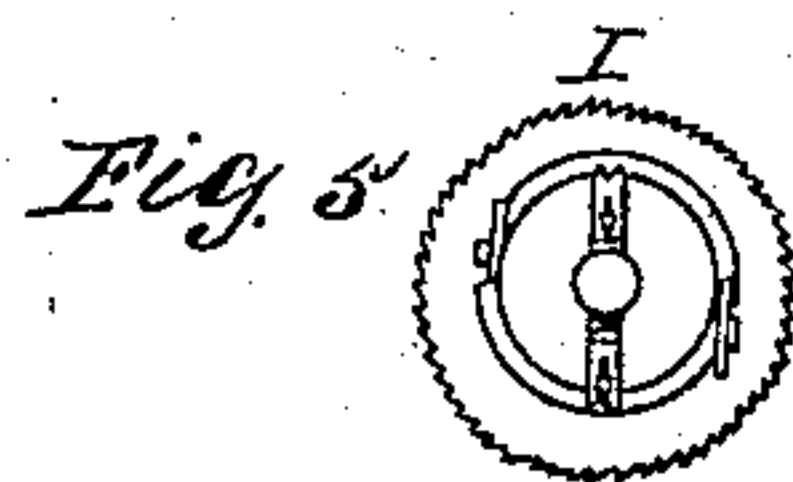
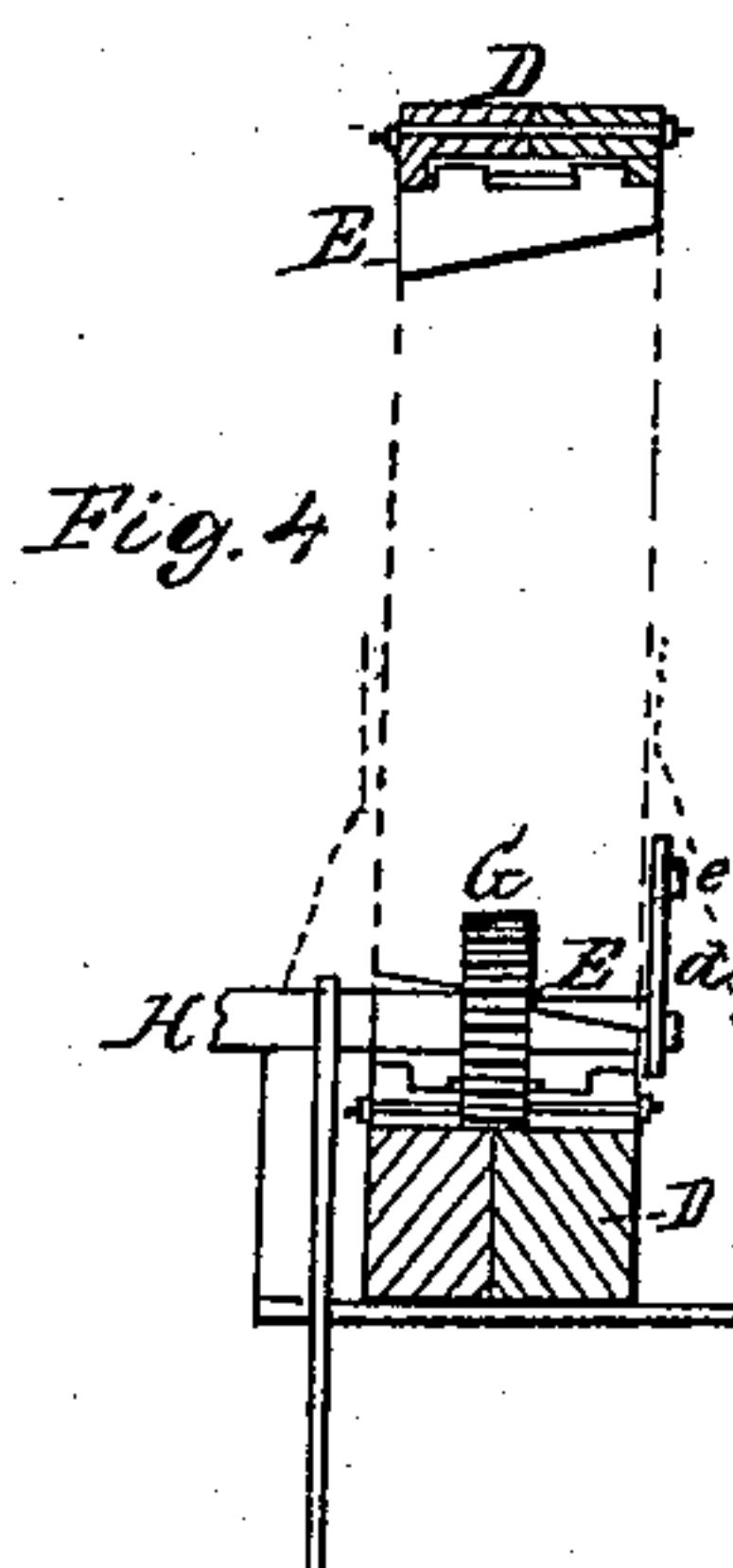
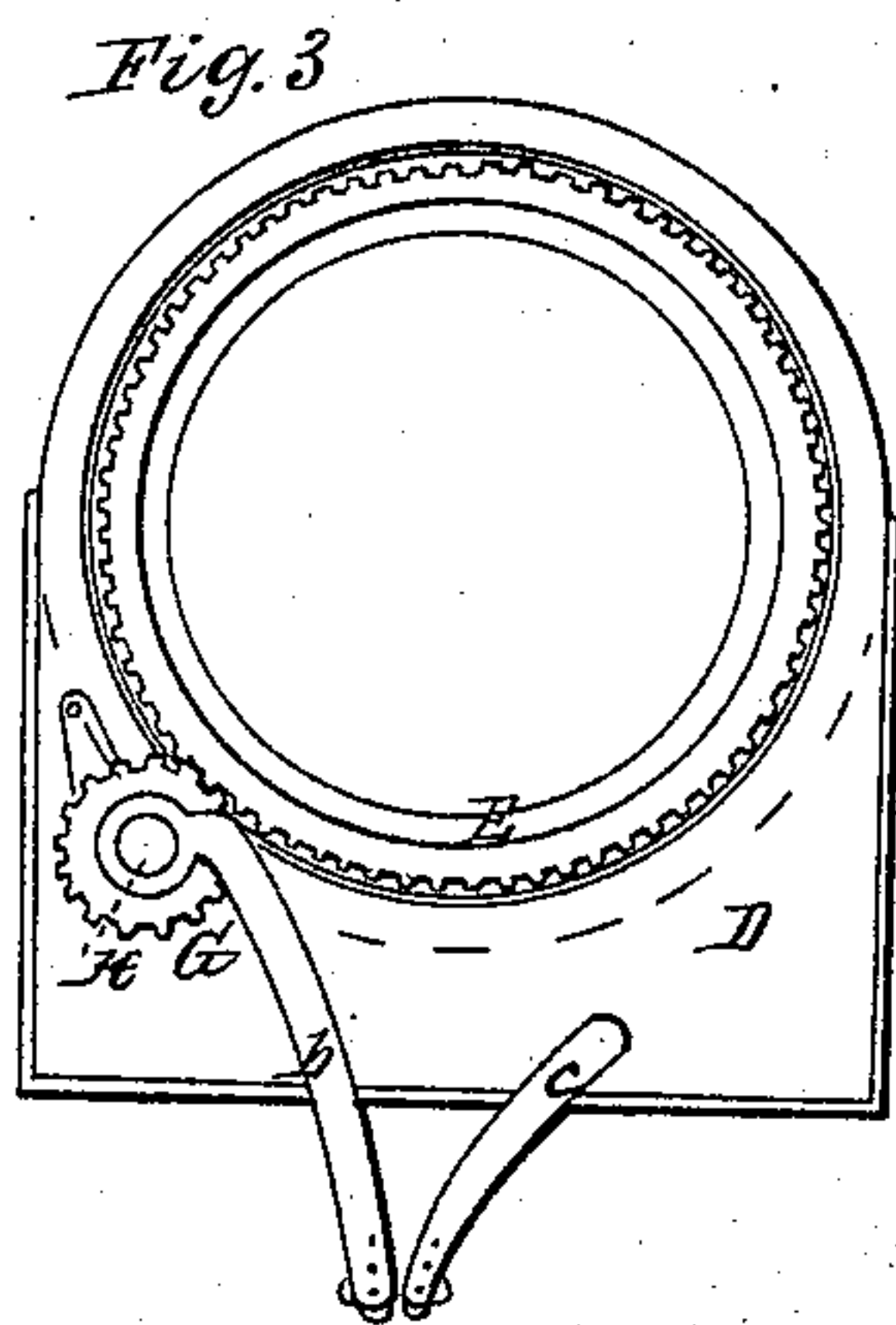
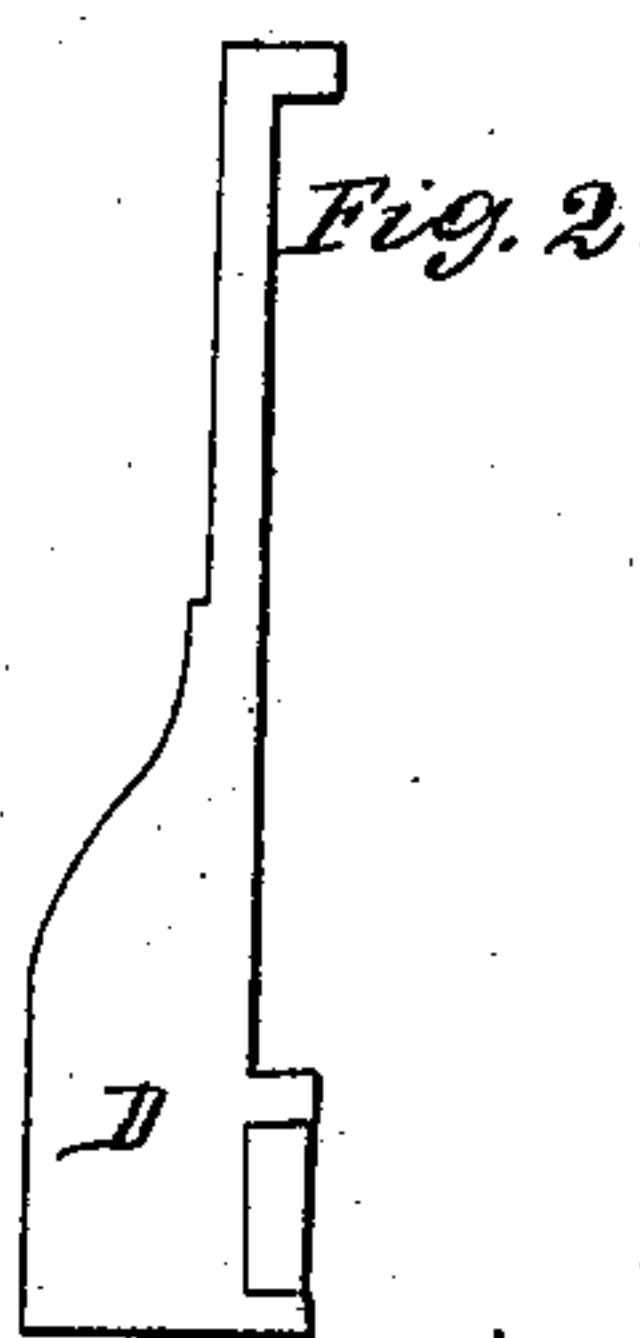
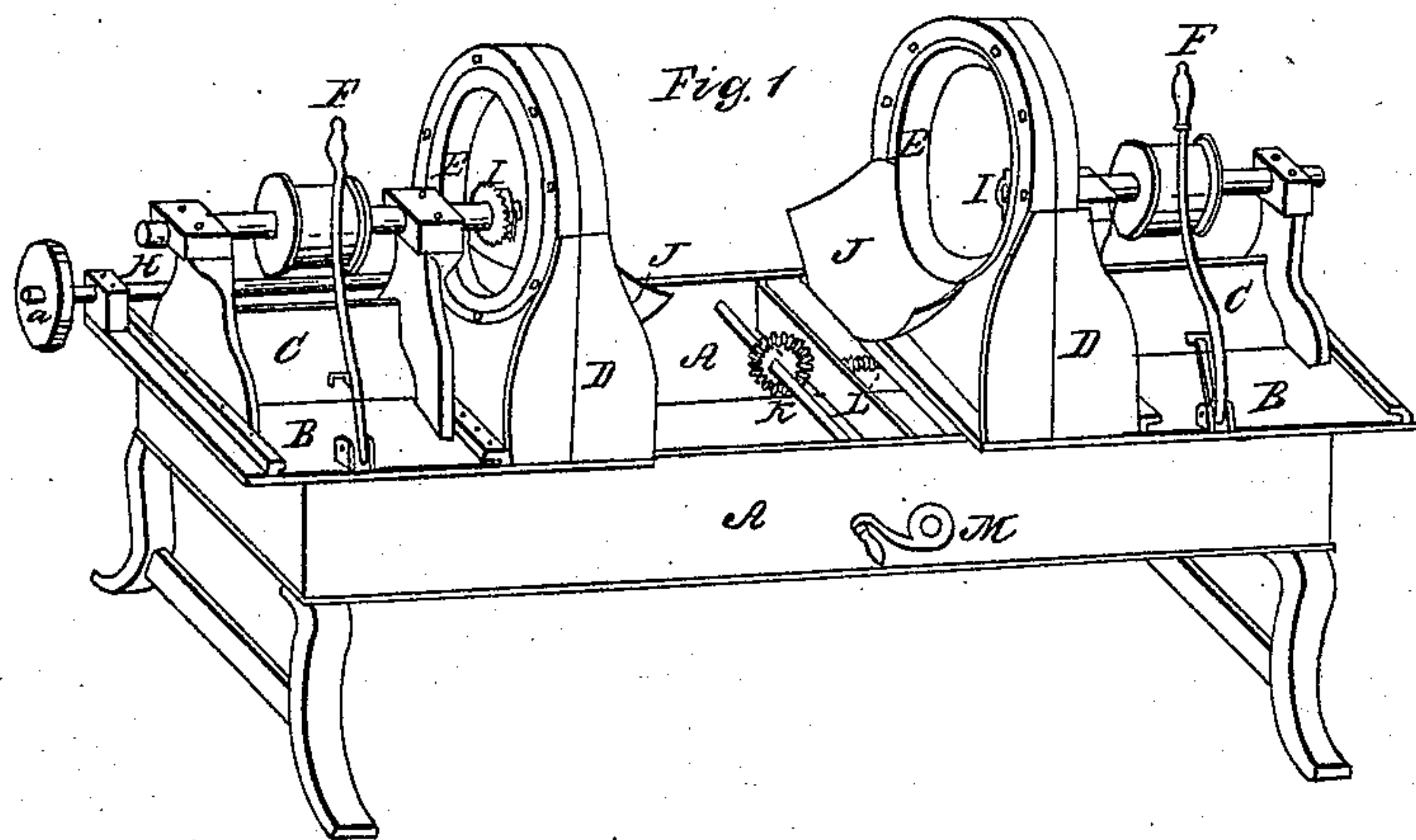


*H. Wilde,
Crozing Staves.*

N^o 36,186.

Patented Aug. 12, 1862.



*Witnesses;
Wm. M. Gooding
Chas. H. Skinner*

*Inventor;
Henry Wilde*

UNITED STATES PATENT OFFICE.

HENRY WILDE, OF NEWARK, NEW JERSEY.

IMPROVED CHAMFERING AND CROZING MACHINE.

Specification forming part of Letters Patent No. 36,186, dated August 12, 1862.

To all whom it may concern:

Be it known that I, HENRY WILDE, of the city of Newark, in the county of Essex and State of New Jersey, have invented certain Improvements in Machines for Chamfering and Crozing Barrels or Casks; and I do declare the following to be a full and exact description thereof, reference being had to the drawings which accompanying this specification and make part of the same.

The nature of my invention consists in facilitating the chucking of a barrel or cask, in a peculiar way of holding and operating the cask, and in constructing, combining, and operating the necessary cutting-tools.

In the drawings, Figure 1 is a perspective view of the whole machine. Fig. 2 is an edge view of one-half of one stationary ring, two of which bolted together form the bearings of the revolving ring that carries the barrel or cask. Fig. 3 is a sectional flat view of the revolving ring in its bearings and of the provision made for stopping and starting its motion. Fig. 4 is a sectional end view of the same; Fig. 5, an edge and a flat view of the cutters.

The same letters refer to the same parts in each figure.

A shows the main frame of the machine; B, bed-plates movable lengthwise the frame; C, lathe-heads movable on bed-plates B transverse the frame; D, stationary circular bearings for revolving rings E; E, the revolving rings; F, levers to move the lathe-heads on the bed-plates; G, pinion to revolve the rings E; H, the shaft for the pinion; I, the cutters; J, curved inclines attached to the heads D; K, bevel-wheels to operate the screw L; L, screw to move the bed-plate B; M, crank to move wheels and screw.

The two stationary bearings B are formed by castings from the same pattern reversed and bolted together, making a recess in which the revolving rings E are securely held, and at the same time have room to move with ease, excluding all chips and dirt. The outsides of the rings E are toothed, and the pinion G, which gears in with them, is brought in gear or put out by means of the levers *b* and *c*, Fig. 3. One end of *b* is on the shaft H, and the upper end of *c* is attached to the lathe-head C on the bed-plate B, the two lower ends of the levers being so connected as to allow of adjustment. The end of the pinion-

shaft H works in a bearing, *d*, Figs. 3 and 4, that is suspended on the pin *e*, which allows it to advance or retreat as the lathe-head is moved into or out of gear in a slot. (Shown by dotted lines in Fig. 3.)

The lathe-heads are held in position when brought up by the levers F to their work either by a spring-catch or by cord and weight, as the kind of work may require, and in some cases a roller is put on the end of the mandrel that holds the cutters, which insures an equal depth of croze in irregular staves.

The barrel, being set up, is put upon the curved inclines J, and then by the crank, bevel-wheels, and screw or rack and pinion the heads D are brought nearer together, and the cask is forced into the beveled inside of the rings E, in one of which there are dog-points to insure the revolving of the barrel with the ring.

I deem as new and important improvements the inclined curves J, affixed to the movable lathe-heads, which insure the correct chucking of the barrel or cask, inclosing the gearing with the ring-mandrels, and employing rotating cutters to croze and chamfer the cask after the cask or barrel has been set up or raised, and operating while the barrel or cask is in motion. Cutters affixed to an arm on a rotating shaft operating while the cask is held stationary have been tried, but do not work satisfactorily and are going out of use.

The advantages of these improvements are that both ends of the barrel or cask are operated at one time. The high speed is given to the cutters instead of being imparted to the barrel in the ordinary way, one slow revolution of the cask being sufficient for the needed squaring, crozing, and chamfering the ends. It is a cheaper and more expeditious manner than any other now in use, one person with this machine being able to do as much work as three in the ordinary manner of doing it.

What I claim, and desire to secure, is—

The inclined curves, the inclosed gearing, and revolving cutters, when constructed, arranged, and combined substantially in the manner and for the purpose hereinabove set forth.

HENRY WILDE.

Witnesses:

WM. M. GOODING,
CHAS. H. SKINNER.