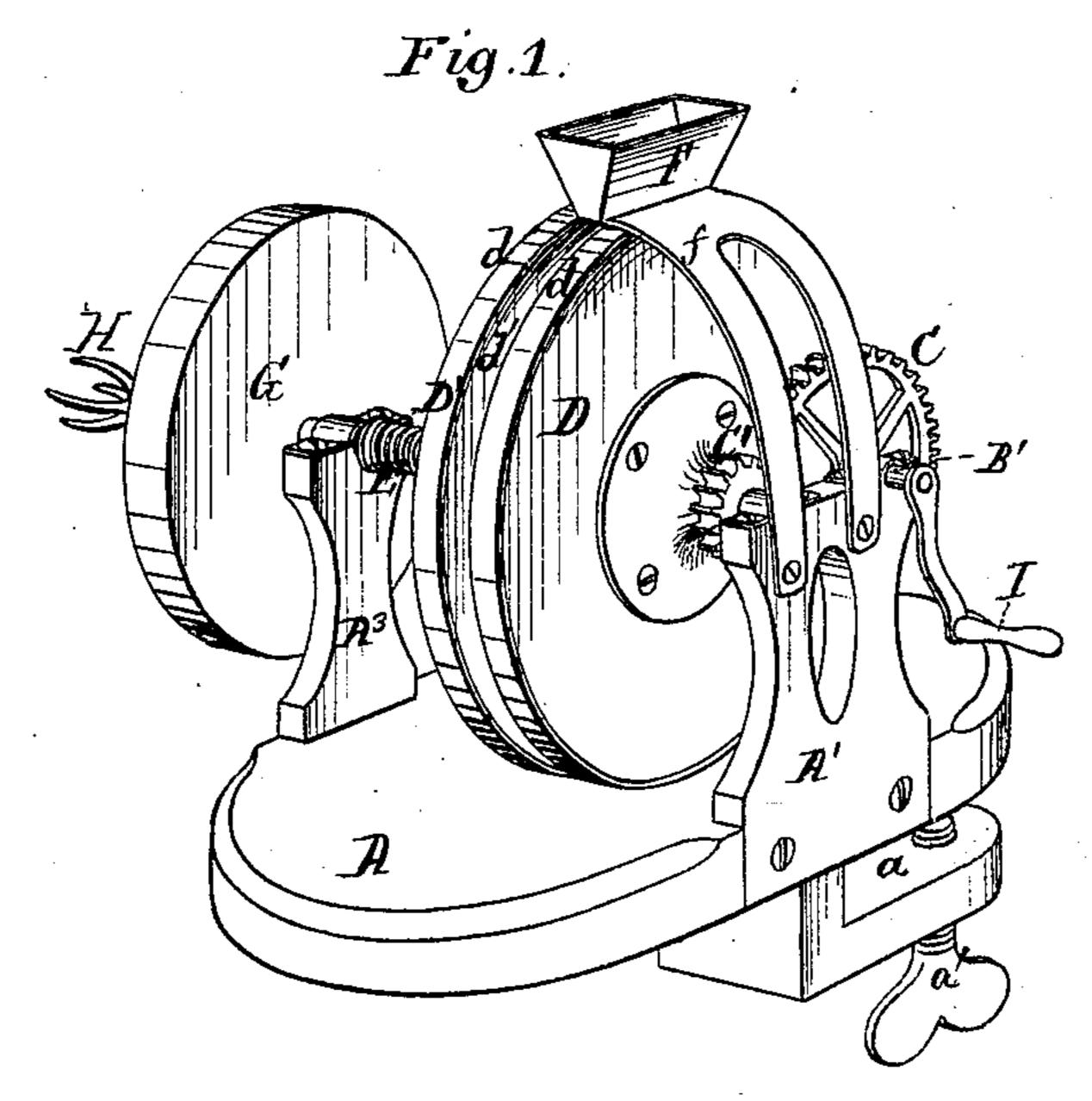
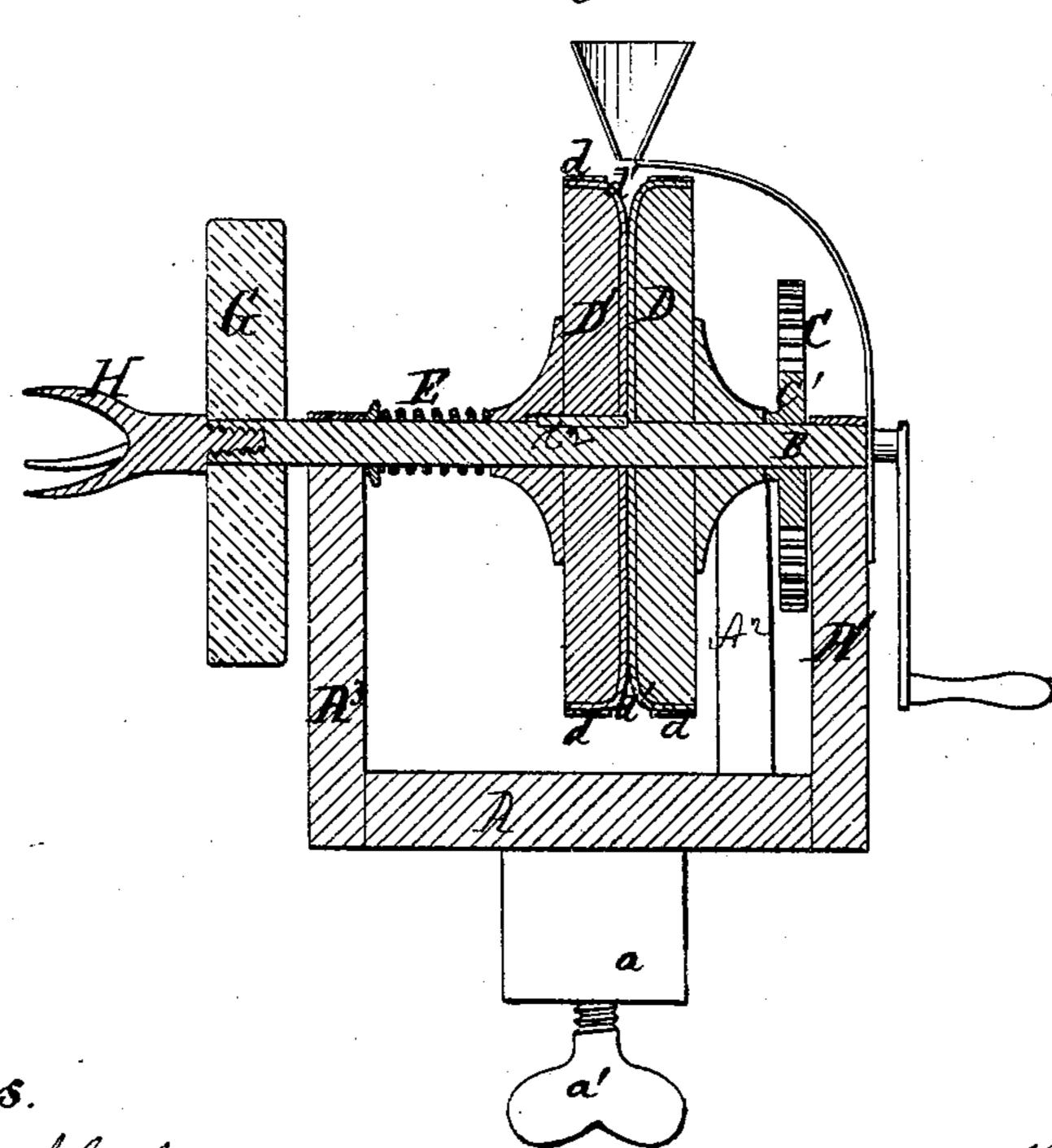
## H. J. WATTLES.

Improvement in Knife-Polishers.

No. 132,339.

Patented Oct. 15, 1872.





Witnesses. HHDoubleday NB Smith

Inventor.

## UNITED STATES PATENT OFFICE.

HIRAM J. WATTLES, OF ROCKFORD, ILLINOIS, ASSIGNOR TO HIMSELF AND BRADLEY S. ATTWOOD, OF SAME PLACE.

## IMPROVEMENT IN KNIFE-POLISHERS.

Specification forming part of Letters Patent No. 132,339, dated October 15, 1872.

To all whom it may concern:

Be it known that I, HIRAM J. WATTLES, of Rockford, in the county of Winnebago and State of Illinois, have invented a new and useful Improvement in Knife-Polishers; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

Figure 1 is a perspective view, and Fig. 2 is

a vertical longitudinal section.

Similar letters of reference denote corre-

sponding parts in both figures.

The invention consists in combining with the polisher and grinder an apple-parer, connected to the outer end of the main shaft by means of a screw or its equivalent, whereby it can be removed when the machine is used

for grinding or polishing.

the frame provided upon its under side with a clamp, a, by means of which the frame may be secured to a table or shelf, being held firmly thereto by means of a thumb-screw, a', passing up through the lower side of clamp a. The frame A is provided with uprights A<sup>1</sup> A<sup>2</sup> A<sup>3</sup>, upon which the gearing and other parts of the machine are supported. These supports together with the clamps a are in practice cast in one piece with the frame A. The standard A1 is made wider than the others, so as to support the main shaft B and the shaft B', on which the gear-wheel C is mounted, the other end of this shaft being supported on an intermediate upright, A<sup>2</sup>, the main shaft B being supported at the other side of the frame in upright A3. C' is a smaller gear-wheel, mounted on main shaft B and driven from wheel C. DD' are the scouring disks or polishers, cast in the form shown and mounted on shaft B; one of these disks, D, is stationary upon shaft B, the other, D', being key-seated, so that the wheel can revolve with the shaft, but having free end play for the purpose of allowing it to accommodate itself to any thickness of blade to be polished. These disks are rounded slightly at their inner sides or edges,

as shown at  $d^1$ , to conform to the usual shape of the knife-blade near the handle, and to permit them to clean the blade close up to the handle, and are padded and covered on their adjacent faces with leather, cloth, or any other suitable material, which is secured to them by means of bands dd, or in any other convenient manner.  $d^2$  is the key or feather, which may be either formed with the main shaft or inserted into the seat in the shaft B and polisher D', after said polisher has been placed on the shaft. E is a spiral spring, mounted on shaft B, and between upright A3 or a collar on the main shaft and the hub of disk D', for holding the disk up closely to the knife when being polished. F is a hopper, which is supported above the disks D D' through support f connected to upright A1; this hopper contains the emery or brick-dust to be fed to the disks, the amount of feed being regulated in In the accompanying drawing, A represents | any convenient manner. G is the grindstone, mounted upon the end of the main shaft which projects beyond the upright A3. H is a fork attached to the outer end of and rotating with the main shaft, being connected with said shaft by means of a screw or equivalent device, so that it will move with said shaft.

The operation of the apple-parer is as follows: The apple is placed upon the fork, and the operator turns the crank I, through which motion is communicated through the gearwheels C C' to the main shaft B on which the fork is mounted; a knife is then applied by hand to the apple, and as it (the apple) revolves with the fork the knife removes the skin. The operation of the other parts will be fully understood without further description.

What I claim as new, and desire to secure

by Letters Patent, is—

The combination, with the grinder and polisher, of a removable fork or apple-parer, substantially as described.

This specification signed and witnessed this

10th day of June, 1872.

HIRAM J. WATTLES.

Witnesses:

G. W. FORD, CHAS. S. FORD.