

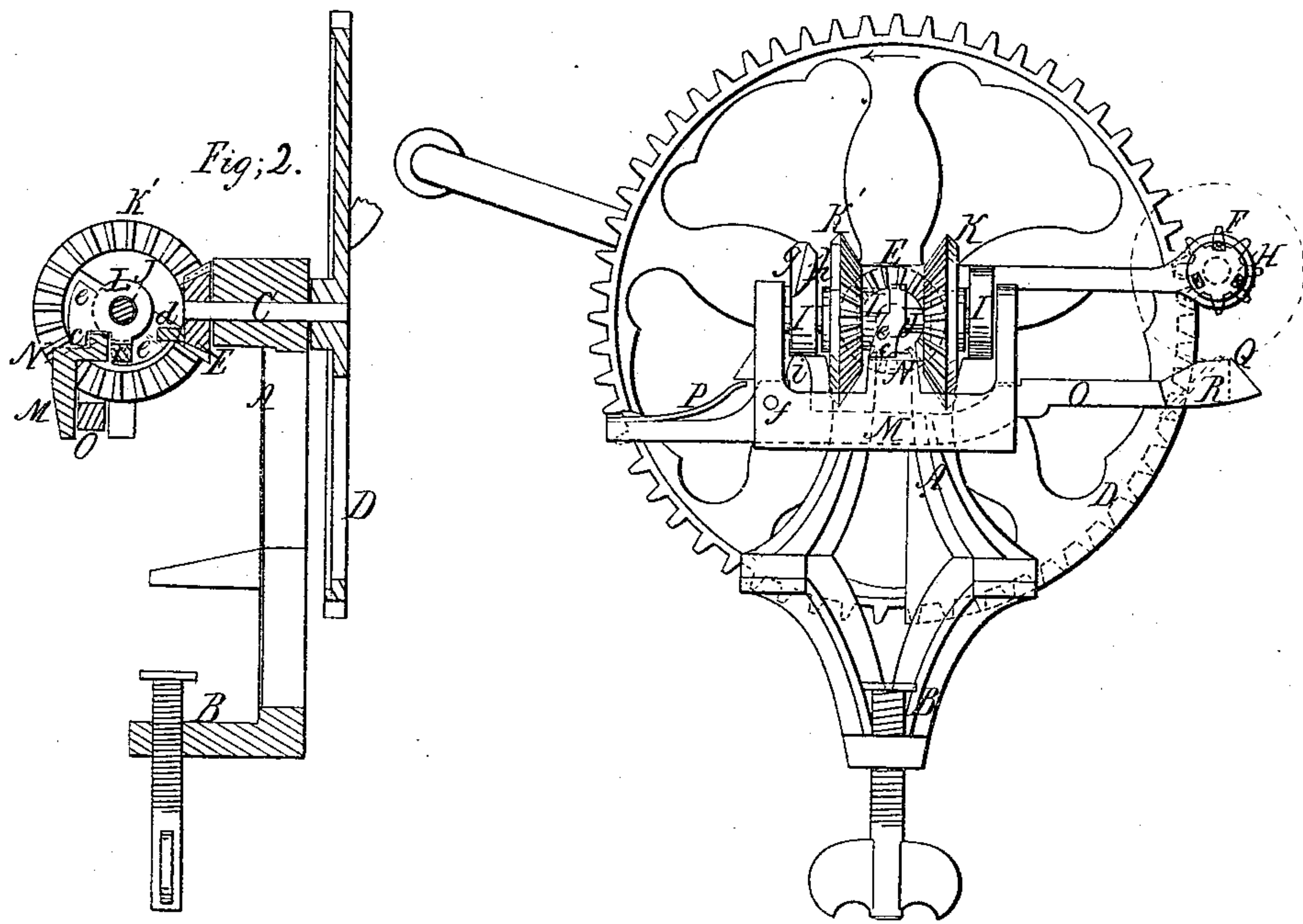
S. S. Hersey,

Apple Parer,

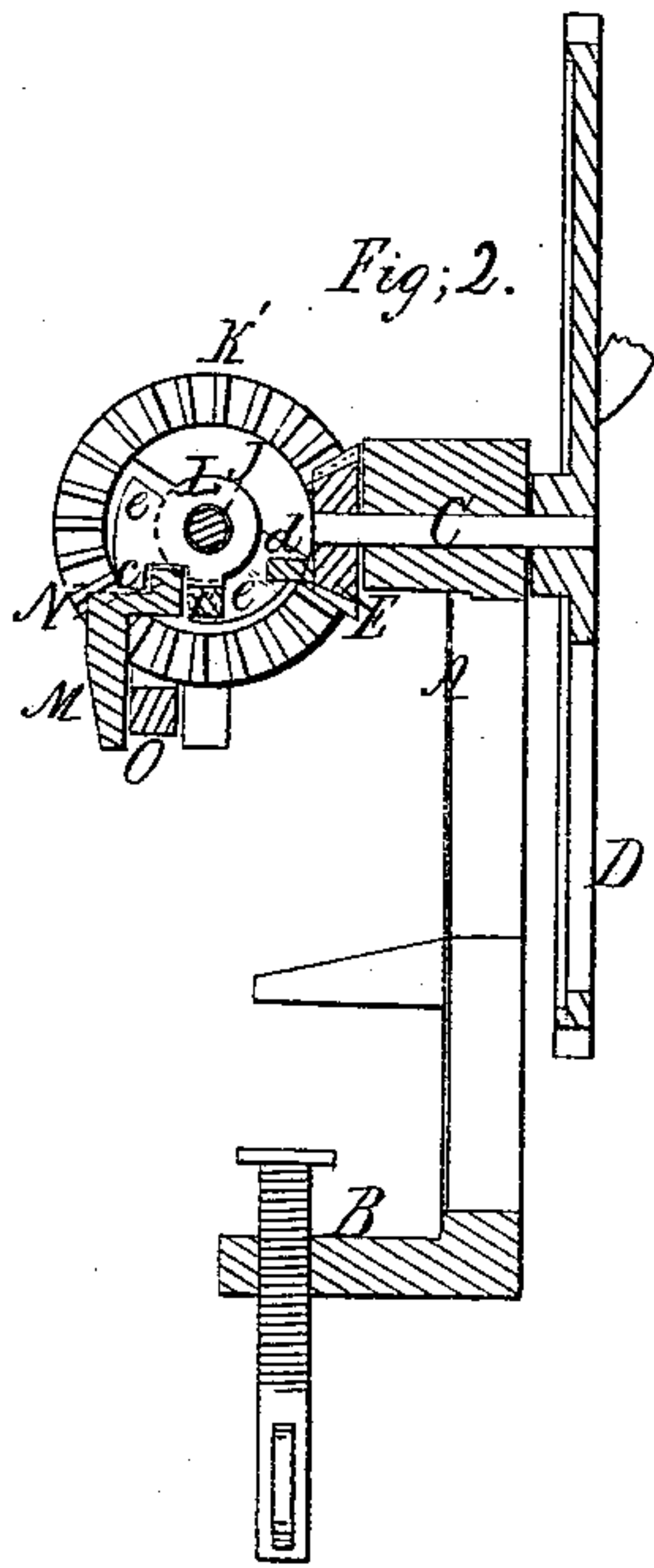
N^o 43,990,

Patented Aug. 30, 1864.

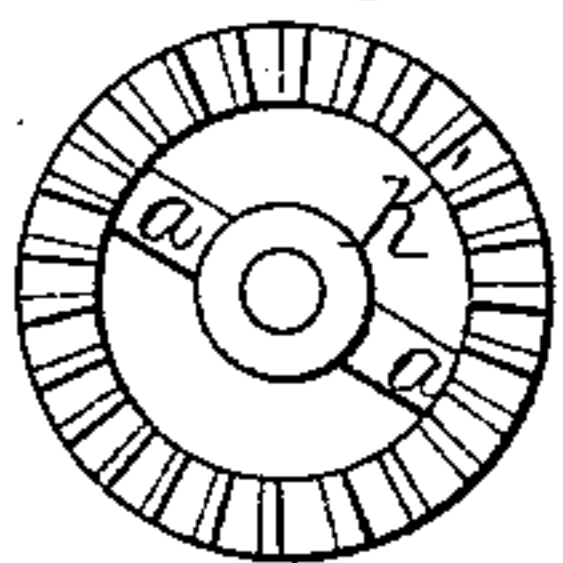
Fig; 1.



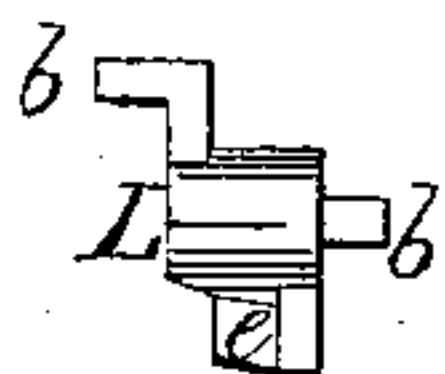
Fig; 2.



Fig; 4.

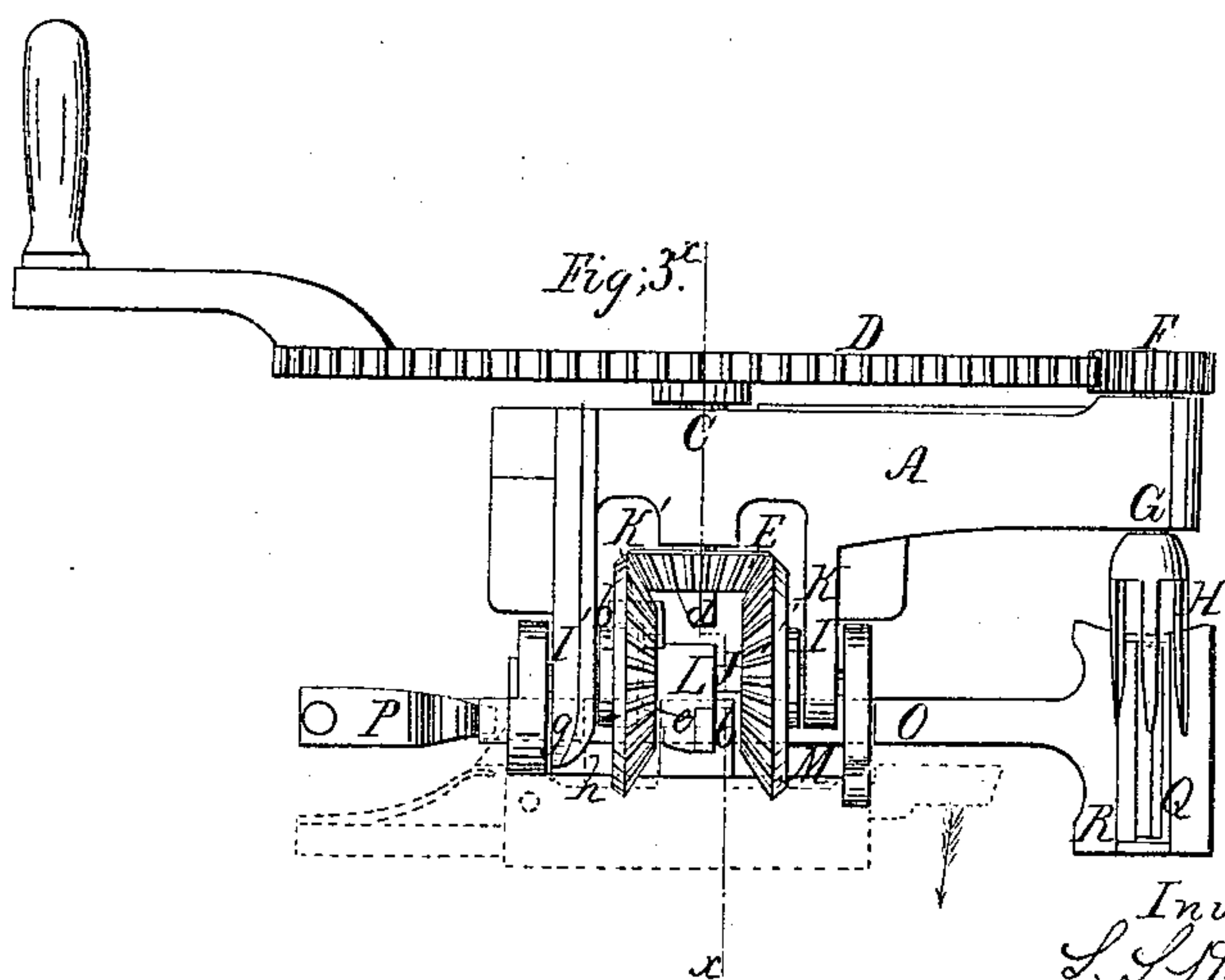


Fig; 5.



Witnesses.
C. L. Topple
Henry Morris

Fig; 3rd.



Inventor.
S. S. Hersey
per Munn & Co
attorneys

UNITED STATES PATENT OFFICE.

S. S. HERSEY, OF FARMINGTON, MAINE.

IMPROVED APPLE-PARER.

Specification forming part of Letters Patent No. 43,980, dated August 30, 1864.

To all whom it may concern:

Be it known that I, S. S. HERSEY, of Farmington, in the county of Franklin and State of Maine, have invented a new and Improved Apple-Parer; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a side view of my invention; Fig. 2, a vertical section of the same, taken in the line *x x*, Fig. 3; Fig. 3, a plan or top view of the same; Fig. 4, a detached face view of a toothed wheel pertaining to the same; Fig. 5, a detached view of a clutch pertaining to the same.

Similar letters of reference indicate like parts.

This invention consists in a novel manner of operating the cutter or knife, whereby the same is made to act upon the apple while moving in both directions—that is to say, while passing from the butt to the point of the fork, and vice versa—due time being allowed for the removal of a pared apple from the fork, and the placing of an unpared apple upon it under a continuous motion of the driving-wheel of the machine.

A represents the frame of the machine, provided with a clamp, B, at its lower end for the purpose of securing the device to a bench, table, or any other suitable fixture.

C is a shaft placed horizontally in the upper part of the frame A, having a toothed wheel, D, at one end and a pinion, E, at the opposite end. The wheel D gears into a pinion, F, on a shaft, G, having a fork, H, at one end of it, on which the apple to be pared is placed.

I I are two parallel bars at the upper part of the frame A, said bars being parallel with the fork H, cast with and forming a part of the frame A.

J is a shaft, which has its bearings in the bar I I', and has two toothed wheels, K K', placed loosely upon it, each wheel having two openings, *a a*, in it at opposite sides of the center. (See Fig. 4.) The pinion E gears into both of these wheels K K', and the latter consequently rotate in reverse directions.

On the shaft J, between the two wheels K K', there is a clutch, L, which is simply a

slide, having an arm, *b*, projecting from each end of it, to pass alternately into the openings *a a* of the wheels K K'.

M is a swinging or oscillating frame, which is hung on the shaft J, and is connected with the clutch L by having a projection, N, at its inner edge fitted between lips *c c* on the clutch, as shown in Fig. 2.

On the face of the pinion E there is a spur or projection, *d*, which acts against lips *e e* on the clutch, and moves the clutch L on the shaft J, first in one direction, then in the other, so that the arms *b b* will pass into the openings *a a* of the wheels K K', and be alternately connected to said wheels, and thereby communicate a reciprocating or oscillating motion to the frame A.

O is a knife-bar, which is attached by a pivot, *f*, to the frame M, and has a spring, P, bearing against its outer end, said spring having a tendency to keep the knife-bar in a slot in the frame M and about parallel with the outer edge of the frame M.

The outer end of the bar I' of the frame A projects rather farther outward than the other one, I, as shown at *g*, and it is rounded and is beveled at one side, *h*, in order to act as a stationary cam against a projection, *i*, on the knife-bar O.

The knife Q is fitted in a head, R, at the end of the knife-bar O, and is arranged in the usual way.

The operation is as follows: The apple to be pared is placed on the fork H, and the wheel D turned in the direction indicated by the arrow in Fig. 1, the knife Q at the commencement being at the under side and rear end of the fork H, and the clutch L engaged with the wheel K', which causes the frame M to move upward and the knife Q to pass in the arc of a circle from the butt of the fork outward to the front end of the apple, the spring P acting upon the knife-bar so as to cause the knife to bear upon the apple. This movement of the knife pares the apple, and at this point of the operation the projection *i* on the knife-bar O comes in contact with the beveled and rounded end of the bar I', and the knife Q is consequently moved outward from the apple, and remains in this outward position while completing the upward portion of its semicircular movement, and when the knife is thus thrown off from the pared apple it is re-

mov. d and another apple placed on the fork. As the knife Q completes this upward movement, free from the apple, the projection *d* on the pinion E comes in contact with one of the lips *e*, and throws the clutch in contact with the wheel K and releases wheel K'. This causes the knife to move in a reverse direction, and when it arrives at the front part of the apple the projection *i* of the knife-bar O leaves the end of the arm I', and the spring P throws the knife in contact with the apple, and the knife then pares the apple while completing the lower part of its semicircular movement from the front part of the apple to the butt of the fork H. Thus it will be seen that by a continuous movement of the wheel D apples may be pared, removed from the fork when pared, and unpared apples placed thereon, the knife operating while moving in both directions—to wit, from the butt of the fork outward, and vice versa.

Having thus described my invention, I claim

as new and desire to secure by Letters Patent—

1. An apple-paring machine having its knife-bar arranged and operated so as to move or describe a semicircle and pare the apple while moving in the lower part of the semicircle in either direction, and the knife be thrown out from the apple while the knife-bar is moving in the upper part of the semicircle, substantially as set forth.

2. The swinging or oscillating frame M, clutch L, and wheels K K', in connection with the knife-bar O, attached to the frame M and provided with a spring and arranged with a projection, *i*, to operate with a stationary cam on the bar I' of the frame A, or other equivalent device for throwing out the knife from the apple, substantially as described.

S. S. HERSEY.

Witnesses:

L. KEITH,

CHAS GREENWOOD.