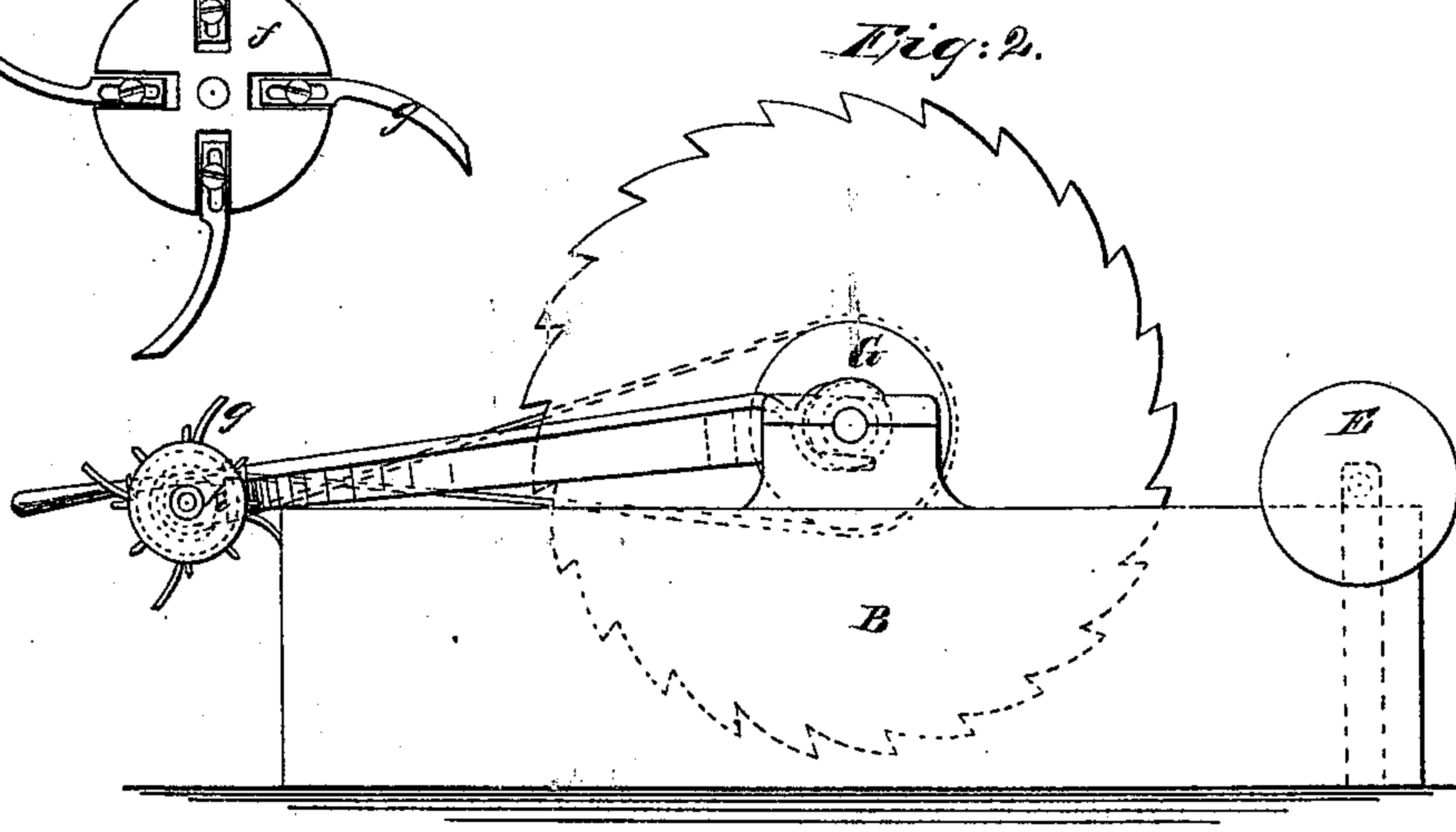
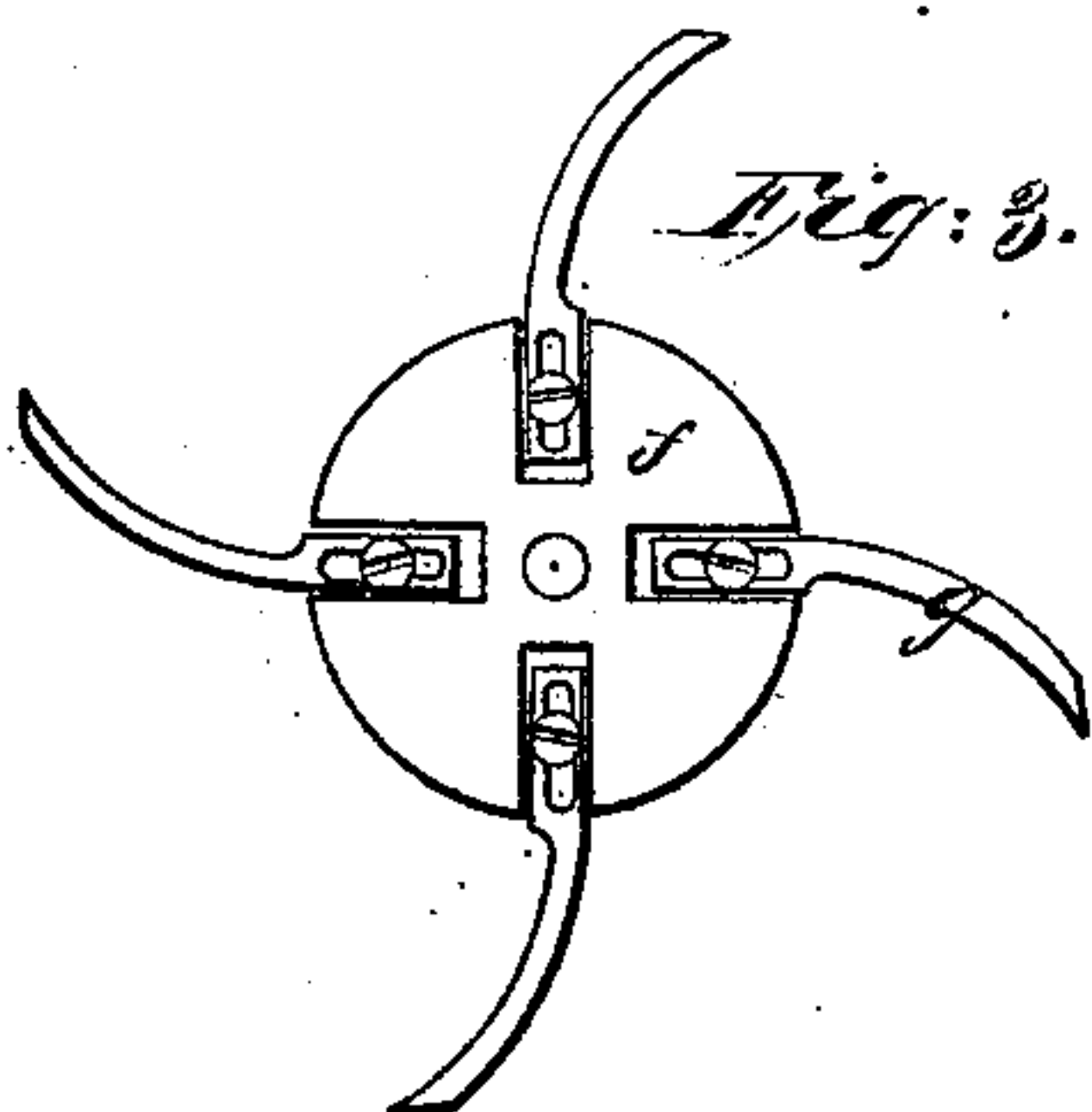
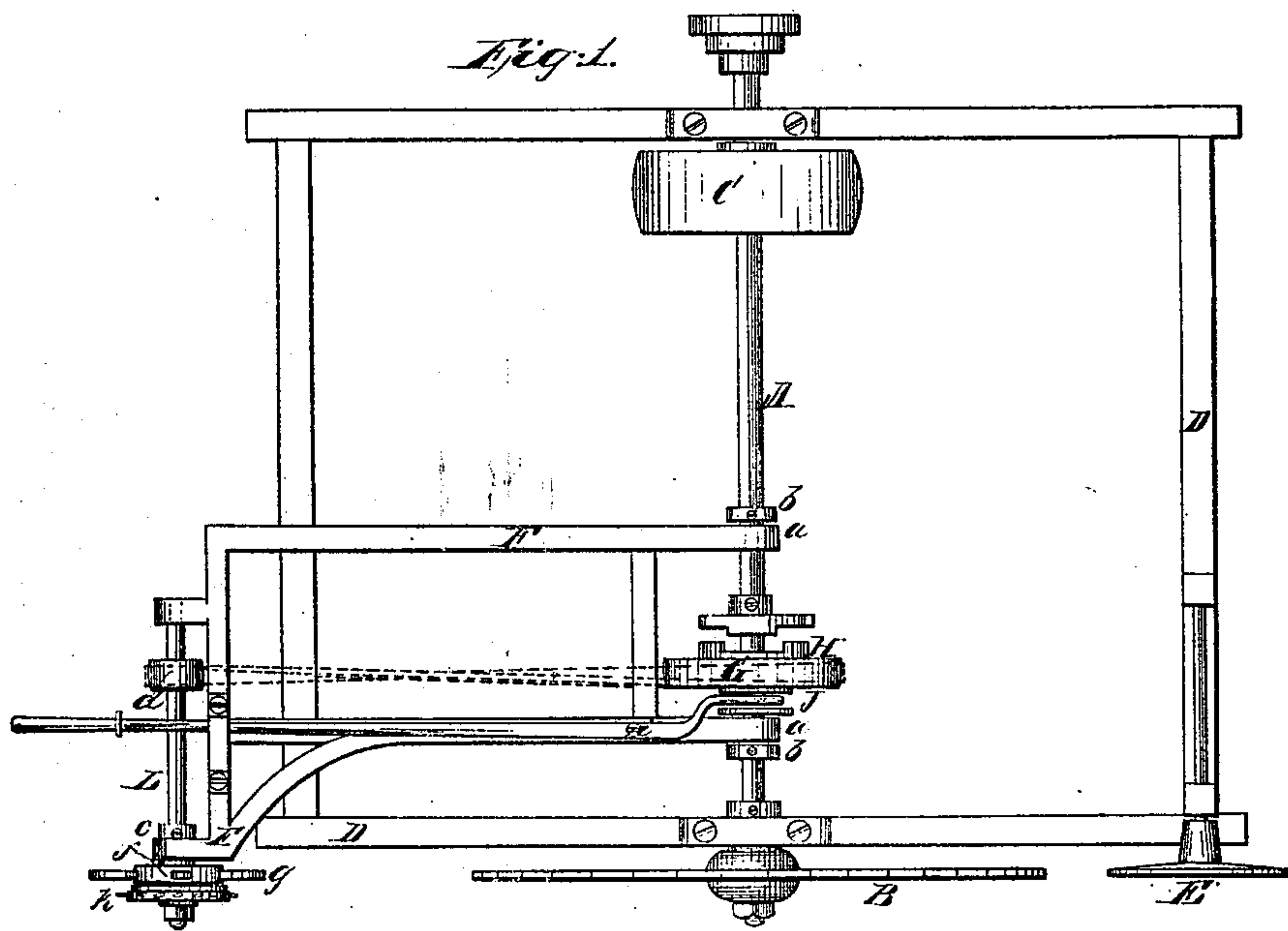


W. B. Nojes,
Rossing Saw-Logs.

N^o 62,436.

Patented Feb. 26, 1867.



Witnesses:
Edgar H. Boyd
N^o Otto Groden

Inventor:
Walter B.

United States Patent Office.

WALTER B. NOYES, OF DORCHESTER, NEW HAMPSHIRE.

Letters Patent No. 62,436, dated February 26, 1867.

IMPROVEMENT IN ROSSING SAW-LOGS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WALTER B. NOYES, of Dorchester, in the county of Grafton, and State of New Hampshire, have invented a new and useful Improvement in Rossing Saw-Logs; 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.

The object of my invention is to facilitate the operation of sawing lumber from saw-logs through a device by which the ross and sand and gravel on the log are removed from before the saw; and the invention consists in arranging cutters on a rotating wheel, and in a guiding wheel with spurs or points, both of which shall precede the mill saw and clear a channel for the saw, the same being attached to an adjustable frame, as will be hereinafter described.

Figure 1 represents a plan or top view of my device attached to the saw-shaft or arbor.

Figure 2 is a side view of the same.

Figure 3 represents the cutters attached to the cutter-wheel.

Similar letters of reference indicate like parts.

A is the saw shaft or arbor, B is the saw, C is the driving-pulley. The saw-shaft is supported by a frame in the usual manner. D represents the frame. E is the spreader. There is nothing peculiar required in the construction of a circular-saw mill to adapt it to my improvement; all that is required is a space on the shaft to attach the adjustable frame and pulleys. F is the frame, which is attached to the shaft A by boxes at *a a*. *b b* are collars fastened by keys or set-screws to the shaft. G is a pulley, loose on the shaft, from which my cutters are driven. H is one part of a coupling attached to the pulley G. I is the other part of the coupling, which is fast to the shaft. J is a grooved sleeve attached to the pulley, and K is a lever, forked at the end, the forks entering the groove. The fulcrum of this lever is at *i* on the frame. By this lever the pulley is thrown into gear with the fast portion of the coupling I, when the cutters are revolved. L is a shaft attached to the adjustable frame F. *d* is a pulley by which the shaft is driven by a belt from the pulley G. The cutter-wheel *f* is made fast to the shaft near its outer-end. *g* are the cutters, which lie in recesses or grooves in the side of the wheel. These cutters have long slot holes through the ends which lie in the grooves, and they are fastened to the wheel by screws or bolts, as seen in the drawing. This arrangement allows them to be removed from the wheel for grinding as well as to be set out from the periphery of the wheel. Turning loosely on the shaft there is a guide-wheel, *k*, with points or spurs inserted in its periphery. This wheel rolls along in the log, while the spurs penetrate the bark or wood and guide and support the cutters in their place. *m* is a nut on the end of the shaft, to keep the wheel *k* in place. *c* is a collar, fastened by a set-screw, to prevent lateral motion in the shaft.

All the different parts of my invention being attached to the adjustable frame F, it will at once be seen that it can be adjusted to the inequalities of the surface of the log; the design being that the cutters shall cut a channel through the bark before the saw, removing thereby all substances that would be likely to injure the saw. The whole machine is entirely under the control of the attendant. It may be lowered down below the log or raised up above it, and it is thrown out or into gear at pleasure.

I do not confine myself to the particular manner of construction herein described; there may be cutters of other shapes and attached to the cutter-wheel; *k* may be modified in form, and possibly dispensed with, or some other method may be devised to guide the cutters, and to construct other portions of the machine.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The cutter-wheel *f*, cutters *g*, guide-wheel *k*, provided with points, when constructed and arranged to operate as and for the purpose specified.

The above specification of my invention signed by me this 5th day of October, 1866.

WALTER B. NOYES.

Witnesses:

WM. F. McNAMARA,

ALEX. F. ROBERTS.