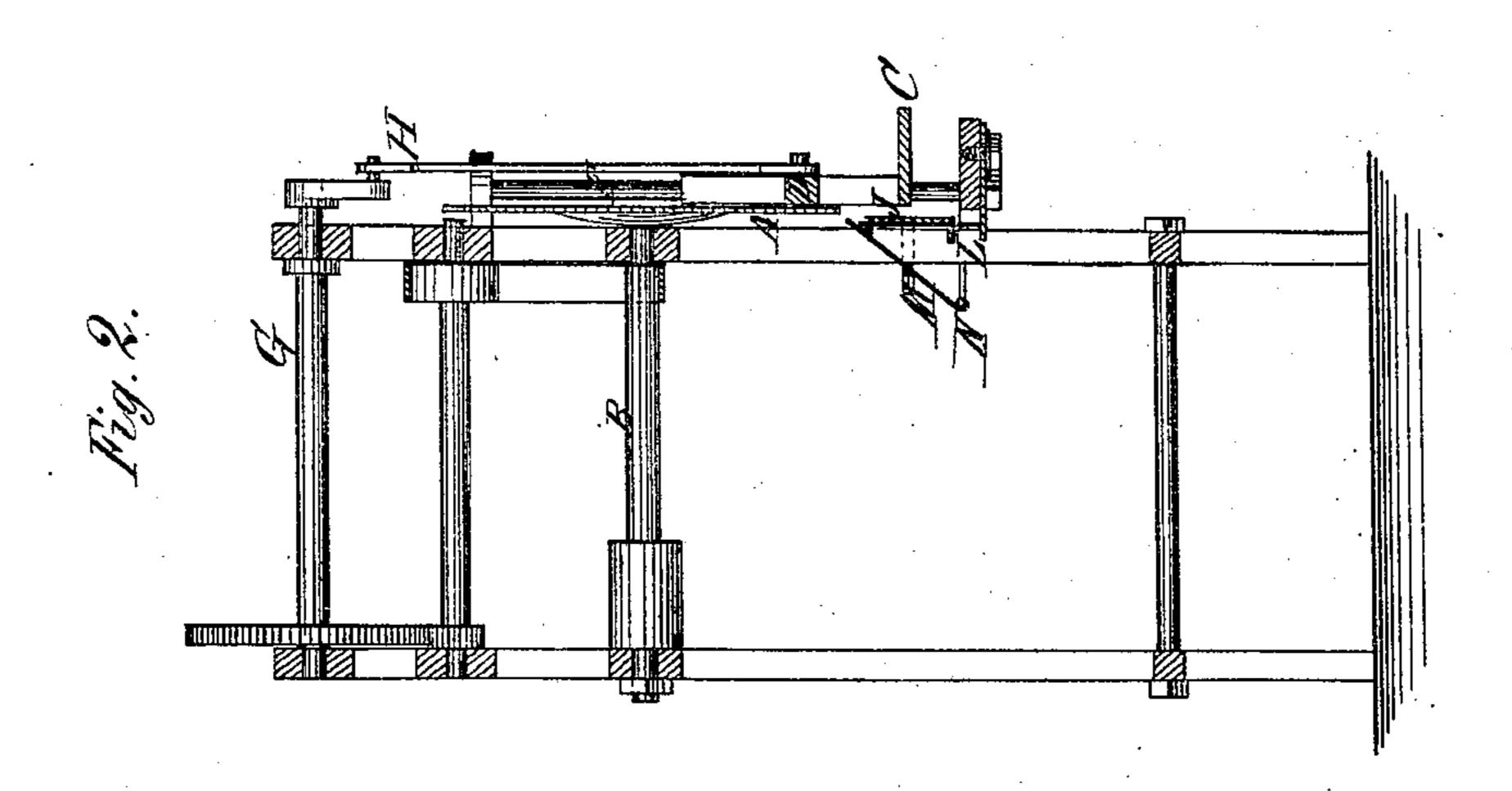
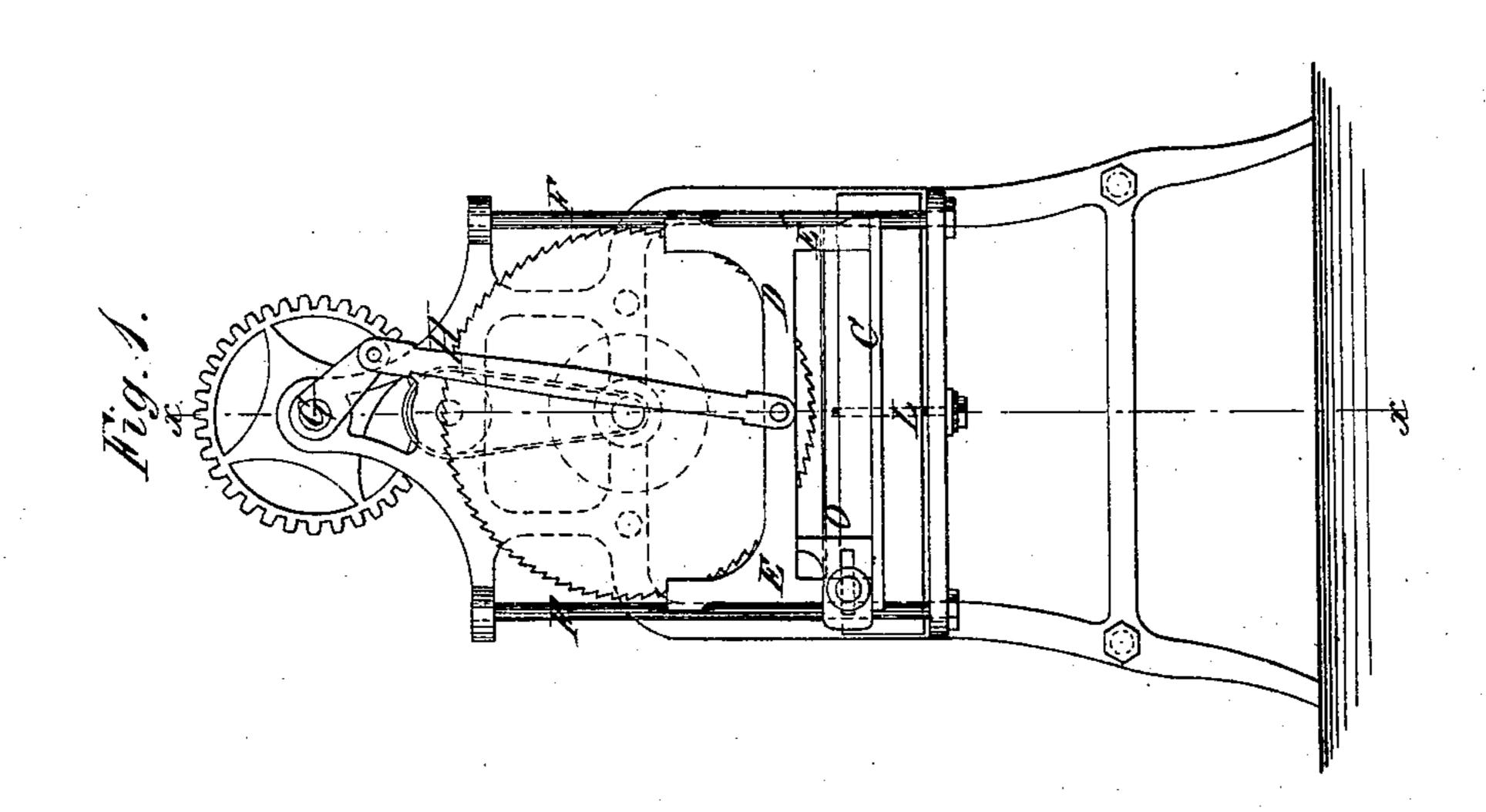
E. P. KIDDER.

MACHINES FOR SAWING-SHINGLES.

No. 179,568.

Patented July 4, 1876.





WITNESSES:

He Strydguist. John Goethals

ATTORNEYS.

United States Patent Office.

ERASTUS P. KIDDER, OF NEW ALSTEAD, NEW HAMPSHIRE.

IMPROVEMENT IN MACHINES FOR SAWING SHINGLES.

Specification forming part of Letters Patent No. 179,568, dated July 4, 1876; application filed May 9, 1876.

To all whom it may concern:

Be it known that I, ERASTUS P. KIDDER, of New Alstead, Cheshire county, New Hampshire, have invented an Improvement in Machines for Sawing Shingles, of which the fol-

lowing is a specification:

This invention consists of a carriage working vertically, and presenting the block to the under side of the saw, together with a tilting gage to regulate the thickness and taper, and a discharging-chute, which the shingle being cut off pushes out of the way to pass by it, and which falls back to catch and discharge the shingle.

By feeding the block upward to the saw it can be held on the carriage without dogs, and is more convenient to manipulate on the car-

riage.

Figure 1 is a front elevation of my improved shingle-machine, and Fig. 2 is a sectional elevation on the line x x.

Similar letters of reference indicate corre-

sponding parts.

A is the saw, which I prefer to make about three feet in diameter, or of any convenient size larger than the length of the bolt and fit it on the mandrel B at the extreme end. C is the carriage, on which the bolt rests for being presented to the saw, said carriage being connected at the ends to cross-head D by bars E, which are also slides running on the rods F, up and down which the carriage is worked by the crank-shaft G and connecting-rod H, which are geared with the saw-arbor,

or may be operated in any other way. J is the gage by which the thickness of the shingles is regulated, and it also gages the taper by being pivoted at the center L, so that it will tilt forward and backward at the ends to shift the block to cut heads and points in opposite directions alternately. M represents the discharging chute, which is located back of the saw, to catch the shingles when they drop from the block and throw them off. It slopes downward from the lower edge of the saw, and is hinged at N, to be raised by the shingle and drop back into the place after the shingles pass it.

The bolt lies on the carriage C, with one end against the gage O, where it is held by the attendant. It can be first trimmed on one side, and then turned upon the trimmed side to be sawed, by which the shingle will

have one side dressed.

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

The combination, with saw A, arranged on the mandrel B, as shown and described, of the centrally-pivoted gage J and the carriage C, connected with cross-head D by vertically-sliding bars E, as and for the purpose set forth.

ERASTUS P. KIDDER.

Witnesses:

WILLARD H. HOWARD, BOLIVAR LOYELL.