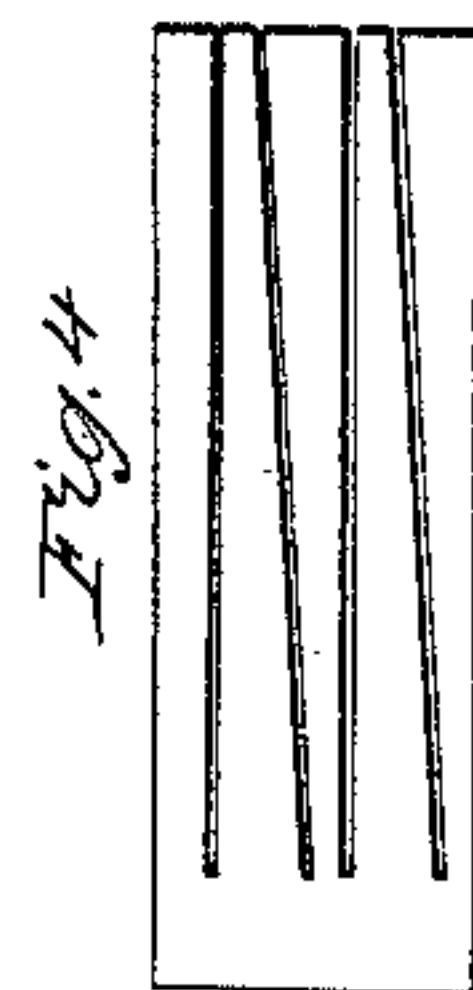
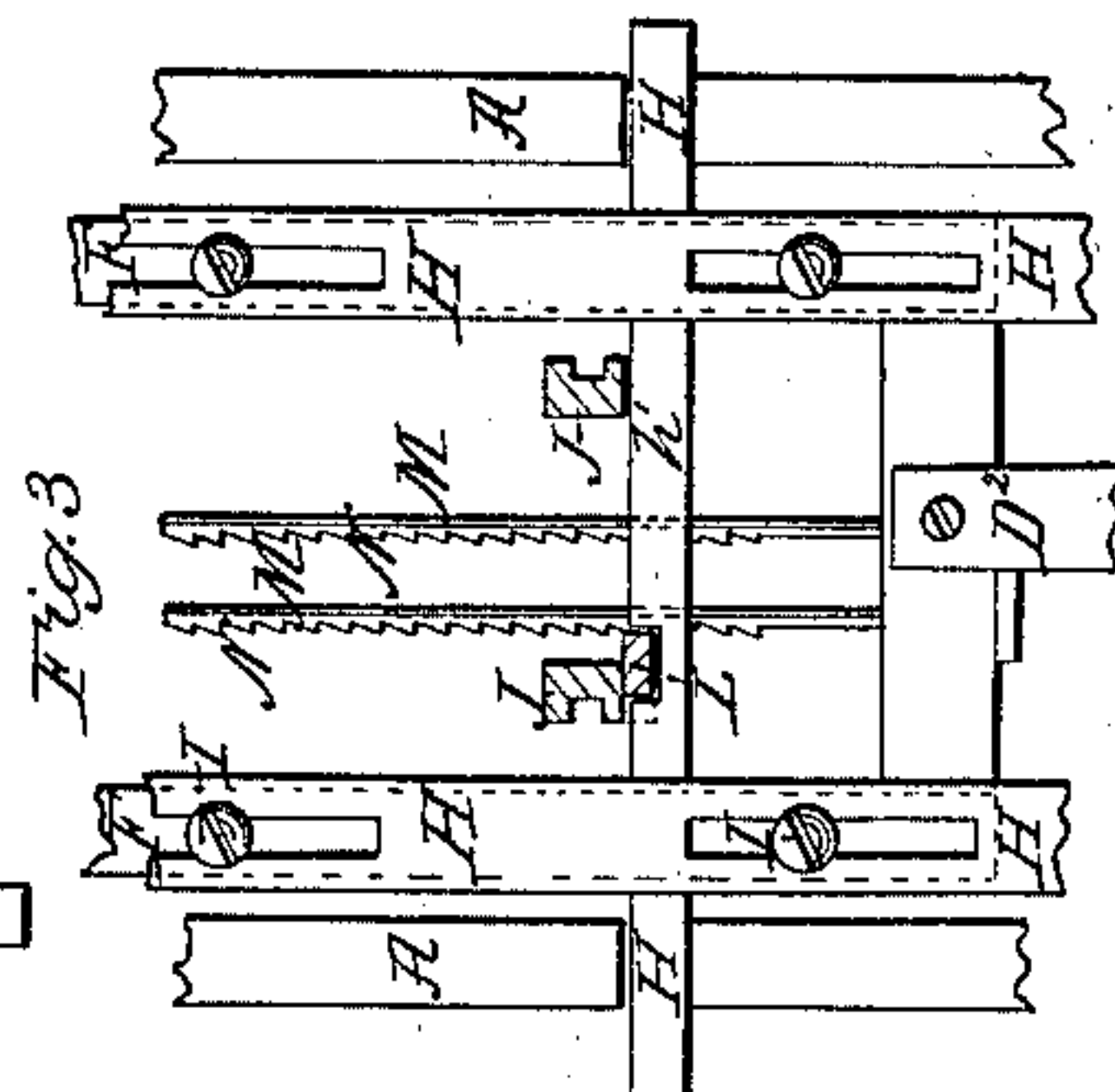
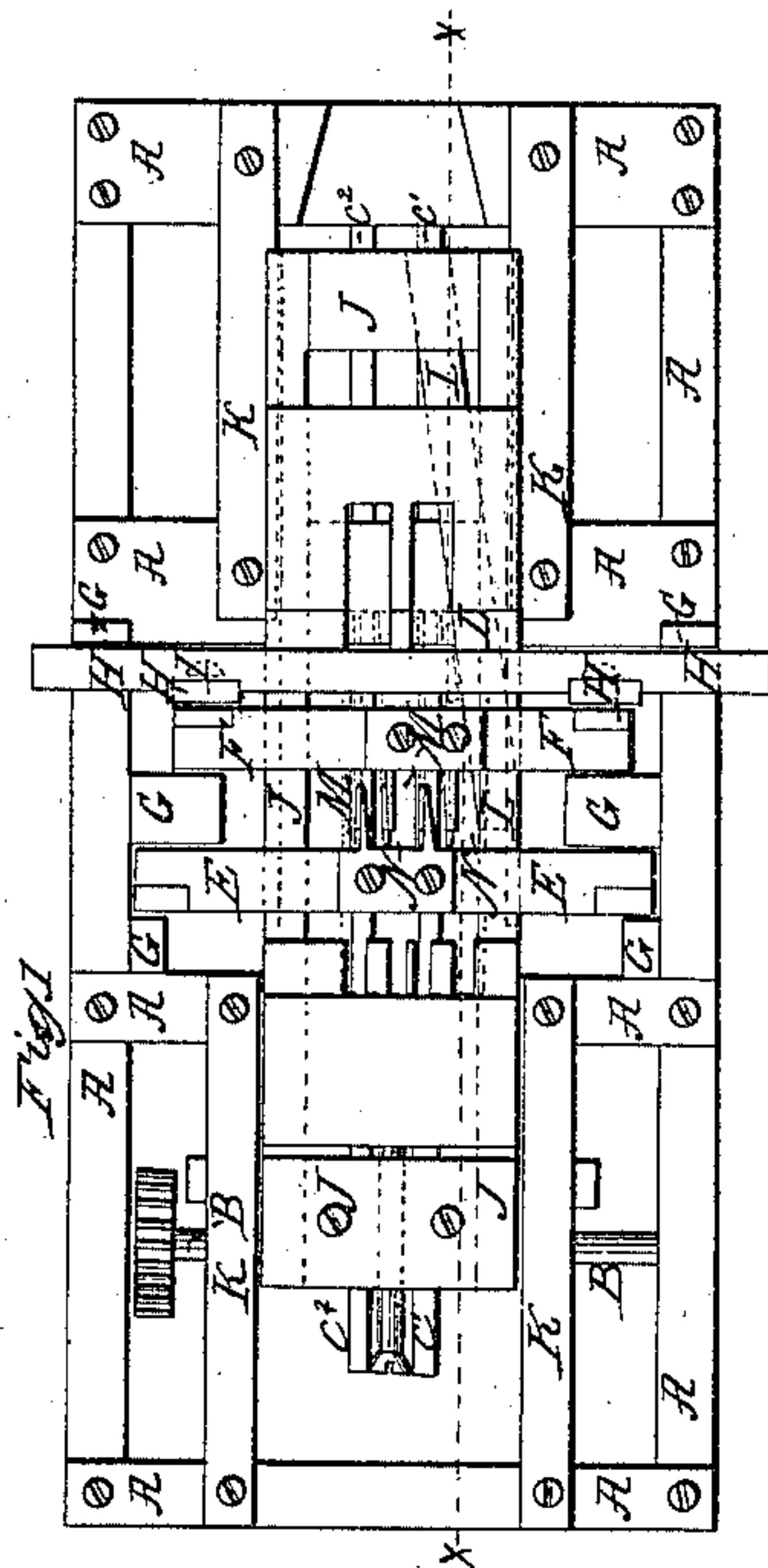
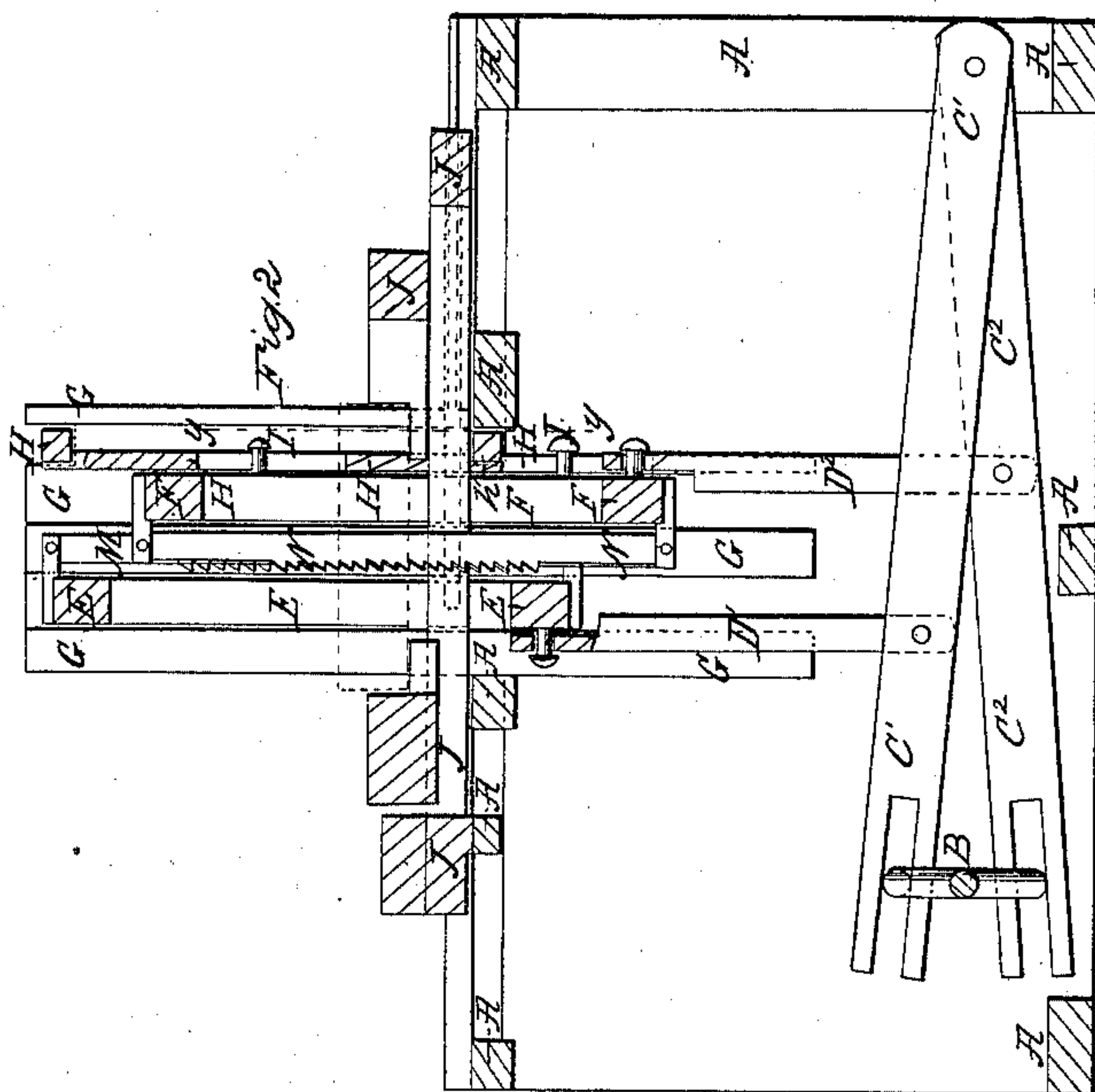


E. Conger,
Sawing Shingles,

Nº 63,860,

Patented Apr. 16, 1867.



Witnesses:

Thos. Fische
Wm. Furris

Inventor

Enoch Conger
Per [Signature]
Attorney

United States Patent Office.

ENOCH CONGER, OF LEXINGTON, OHIO.

Letters Patent No. 63,860, dated April 16, 1867.

IMPROVEMENT IN SHINGLE MACHINES.

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, ENOCH CONGER, of Lexington, in the county of Richland, and State of Ohio, have invented a new and improved Machine for Sawing Shingles; 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 is a plan or top view of my improved machine.

Figure 2 is a vertical longitudinal section of the same, taken through the line *x x*, fig. 1.

Figure 3 is a detail sectional view, taken through the line *y y*, fig. 2.

Figure 4 represents a block sawn into shingles by my improved machine.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved machine, by means of which one or more tapering shingles may be sawn from a block at one operation; and it consists in the combination, in a shingle machine, of two saw-sashes, placed one behind the other, and to one of which a lateral movement is given, for the purpose of giving a taper to the shingles sawed; in the combination of a sliding frame with the saw-sash, and with the carriage of the machine, for the purpose of giving a lateral movement to the said sash; and in setting the saws of the sash, to which a lateral movement has been given, at such an angle with the saws of the other sash as will give the required taper to the shingles.

A is the frame of the machine. B is the crank-shaft. C¹ C² are levers, the rear ends of which are pivoted to the frame A of the machine; and their forward ends have horizontal slots formed in them, in which the cranks of the shaft B work. D¹ D² are pitmans, the lower ends of which are pivoted to the levers C¹ C², and their upper ends are pivoted to the saw-sashes E and F, so that the said saw-sashes may both be operated by the crank-shaft B. The saw-sash E moves up and down in grooves in the vertical frame G of the machine. The saw-sash F moves up and down in the grooves, one side of which is formed by the said vertical frame G, and the other sides by the sliding frame H, to which the sash F is connected by the guide-pins I, working in slots in the said sliding frame H, so that the sash F may be moved laterally in either direction by the movement of the said sliding frame H. J is the carriage, which is moved back and forth upon the ways K in the ordinary manner. L is a guide-bar, securely attached to the under side of the carriage J in an inclined position, as shown in dotted lines in fig. 1, and which moves back and forth in an inclined notch or groove in the lower cross-bar *h* of the sliding frame H, so that, as the carriage J is moved back and forth, the inclined guide-bar L may move the sliding frame H laterally, carrying with it the sash F. M are saws, any desired number of which may be attached to the sash E. The saws M are attached to the rear side of the sash E in a vertical position, and at right angles to the plane of the said sash E. N are saws, any desired number of which may be attached to the sash F. The saws N are attached to the front of the sash F in a vertical position, and at such an angle with the saws M as will give the desired taper to the shingles. The saws N and guide-bar L should have the same inclination, so that the saws N may make their cut in a straight line, and move back and forth without binding. By this arrangement the saws M and N will all enter the block at the same time; but, if desired, the saws M and N may be placed in the middle of their respective sashes, so that the one set may enter the block in advance of the other set. In cases where sufficient power is not available to drive a sufficient number of saws to cut up a whole block at once, a smaller number of saws may be used. In this case the saws may be attached to the sashes in the manner hereinbefore described; or, they may be arranged at the sides of the sashes, so as to cut one or more shingles from the sides of two blocks at the same time.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a shingle machine I claim the two saw-sashes E and F, placed one behind the other, and to one of which a lateral movement is given, for the purpose of giving a taper to the shingles sawed, substantially as herein shown and described.

2. The combination of the sliding frame H with the saw-sash F, carriage J, to whose under side is secured the inclined bar L, working in the inclined groove of the cross-bar *h* of the sliding frame H, for the purpose of giving a lateral movement to the said sash, substantially as herein shown and described.

ENOCH CONGER.

Witnesses:

L. D. ARNOLD,
J. M. STEVENS.