D. Bowen,

Making Fellies.

No. 15,216. Patented July 1, 1856.

Fig: 1.

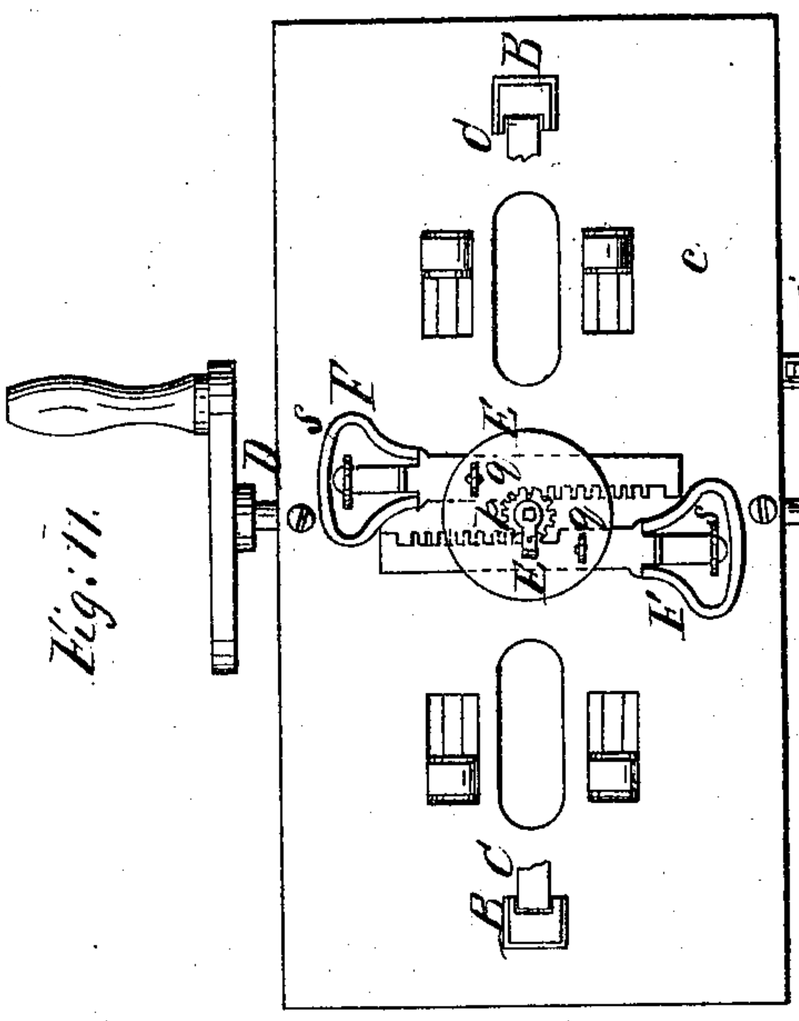


Fig: 3.

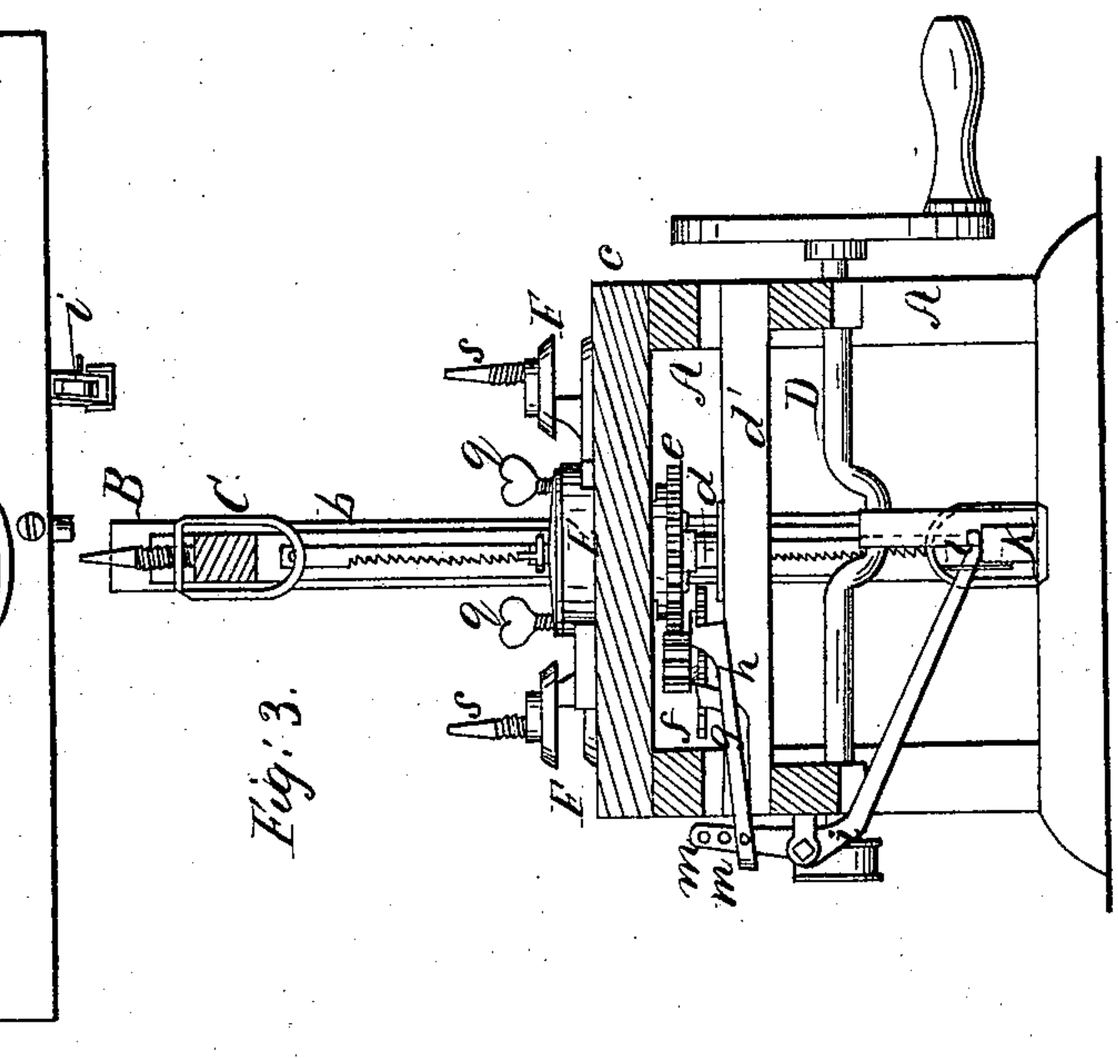


Fig: 2.

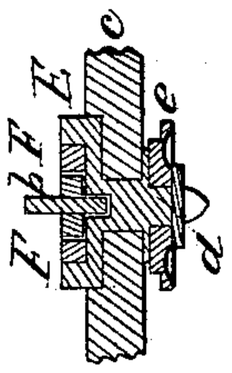
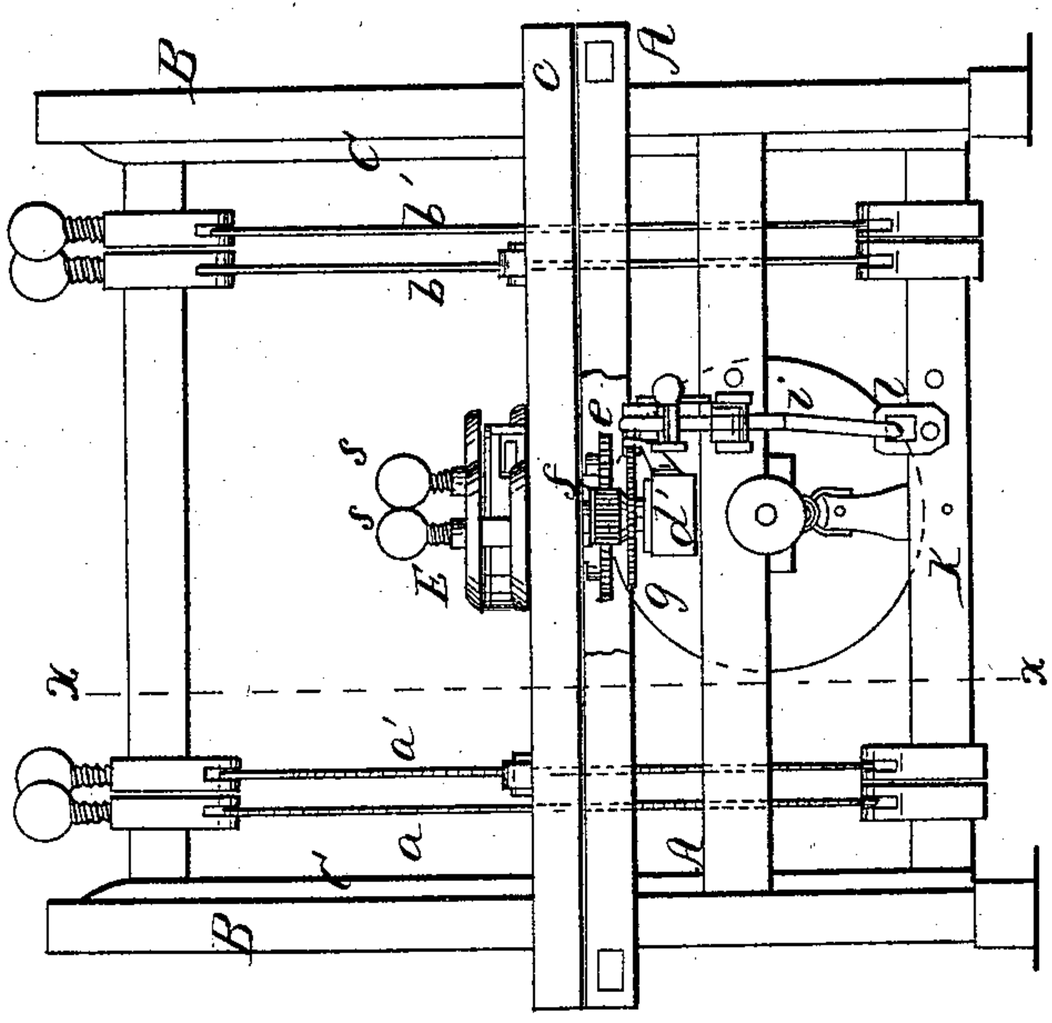


Fig: 4.



UNITED STATES PATENT OFFICE.

DAVID BOWEN, OF WADESVILLE, VIRGINIA.

MACHINE FOR SAWING FELLIES.

Specification of Leters Patent No. 15,216, dated July 1, 1856.

To all whom it may concern:

Be it known that I, DAVID BOWEN, of Wadesville, in the county of Clark and State of Virginia, have invented a new and useful Improvement in Machines for Sawing Fellies; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, forming part of this specification, in which—

Figure 1 is a side elevation of the machine. Fig. 2 is a top view with saw gate removed. Fig. 3 is a transverse section on *x x*.

Similar characters of reference in the several figures, denote the same part.

The nature of my invention consists in combining two flank clamps, adjustable simultaneously in opposite directions, with certain mechanism connecting said clamps with the saw gate; so that by the movement of the saw gate a circular motion of the clamps is produced, feeding the plank in opposite directions, to the saws at the opposite ends of the gate; as will be hereinafter set forth.

In the drawing A is frame of the machine, between the uprights B of which moves the saw gate C, by connection with crank shaft D. In this gate are strained the saws *a a'*, *b b'*; the teeth of each pair being on opposite sides of the gate.

In the middle of platform *c* of frame A is the clamp box E, from whose bottom runs a shaft *d* which rests in bridge piece *d'* of frame. On this shaft *d* is a cog wheel *e* meshing with pinion *f*. On the shaft of pinion *f* is a ratchet wheel *g*, whose pawl *h* is attached to lever *i*, the long arm of which runs to the botom cross piece *k* of the saw gate and is attached thereto by the eye *l*. So that the said arm of lever *i* will rise and fall with the saw gate. The depression of this arm of lever causes the pawl *h* to move the ratchet *g* a distance depending on the point of connection between said ratchet and lever. Several holes *m* are made in the lever to adjust this motion of the ratchet.

Running through box E are the clamps F F, the cogged shanks of which mesh with the pinion *p*, by which a simultaneous adjustment of the clamps in opposite directions, is effected. Screws *q* secure the clamps in position.

The upper plate of the clamp jaw is secured upon the plank by a screw *s*, so as firmly to hold the plank within the jaw.

The operation of the machine is as follows: A plank is secured in each clamp, and the saws tightened in the frame in such position as to give the requisite width of felly and radius of the same. Motion is then given to the crank shaft, which reciprocates the saws, and feeds the plank contained in the opposite jaws, toward the opposite cutting edges of the saws, as above set forth.

When the cuts are completed, the clamps are moved outward from the case, as before, and the operation of sawing recommenced, with same result. In this manner the operation continues until the planks are sawn into fellies.

Having described my improvement and the operation thereof, what I claim as new and desire to secure by Letters Patent is—

The herein described plank clamps, simultaneously adjustable in opposite directions, in combination with the mechanism connecting their case with the saw gate, arranged and operating substantially as, and for the purposes set forth.

In testimony whereof, I have hereunto signed my name before two subscribing witnesses.

DAVID BOWEN.

Witnesses:
GEO. PATTEN,
ARCHIBALD BOWEN.