W. Foster,

Cutting Veneers,

No. 3,252, Patented Sept. 1, 1843.

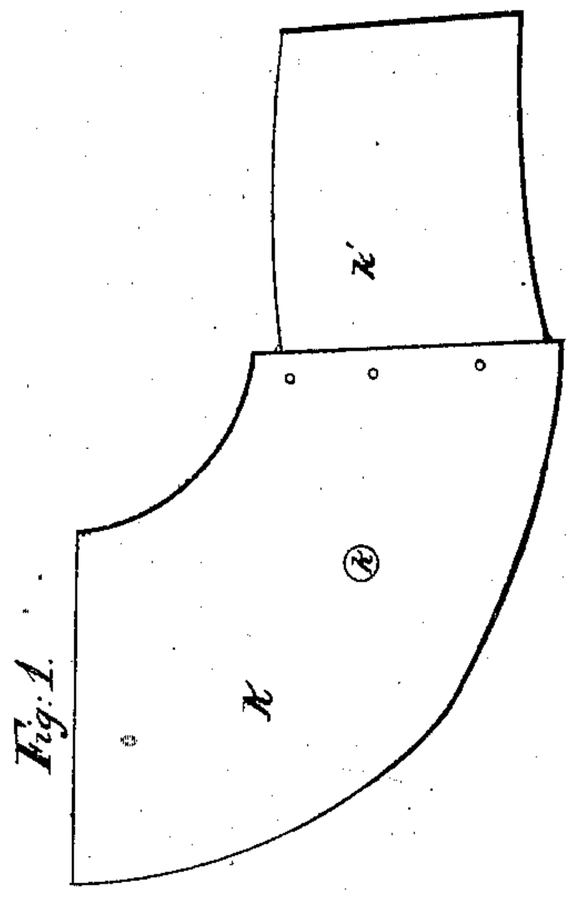

Fig. 1.

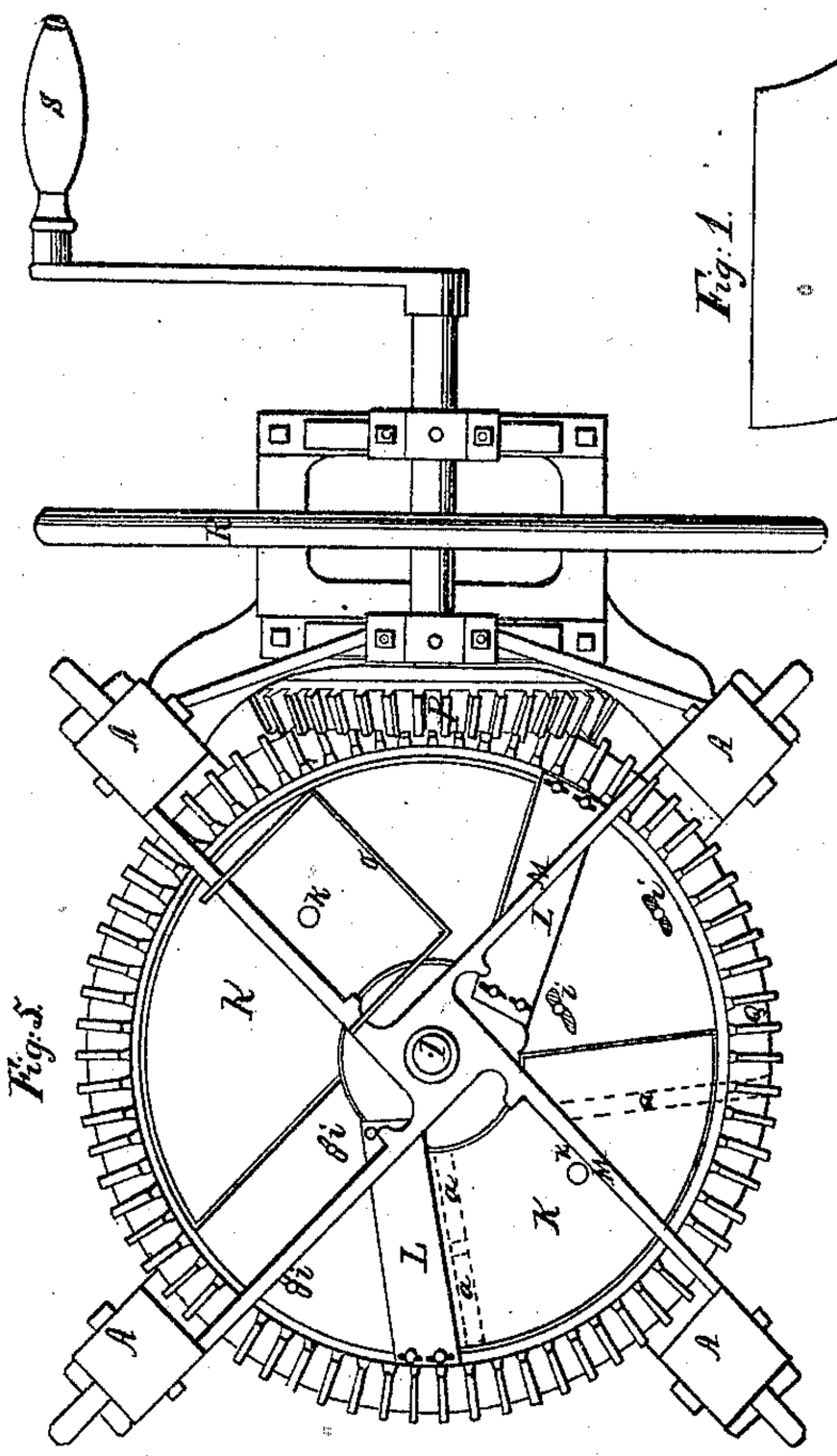

Fig. 5.

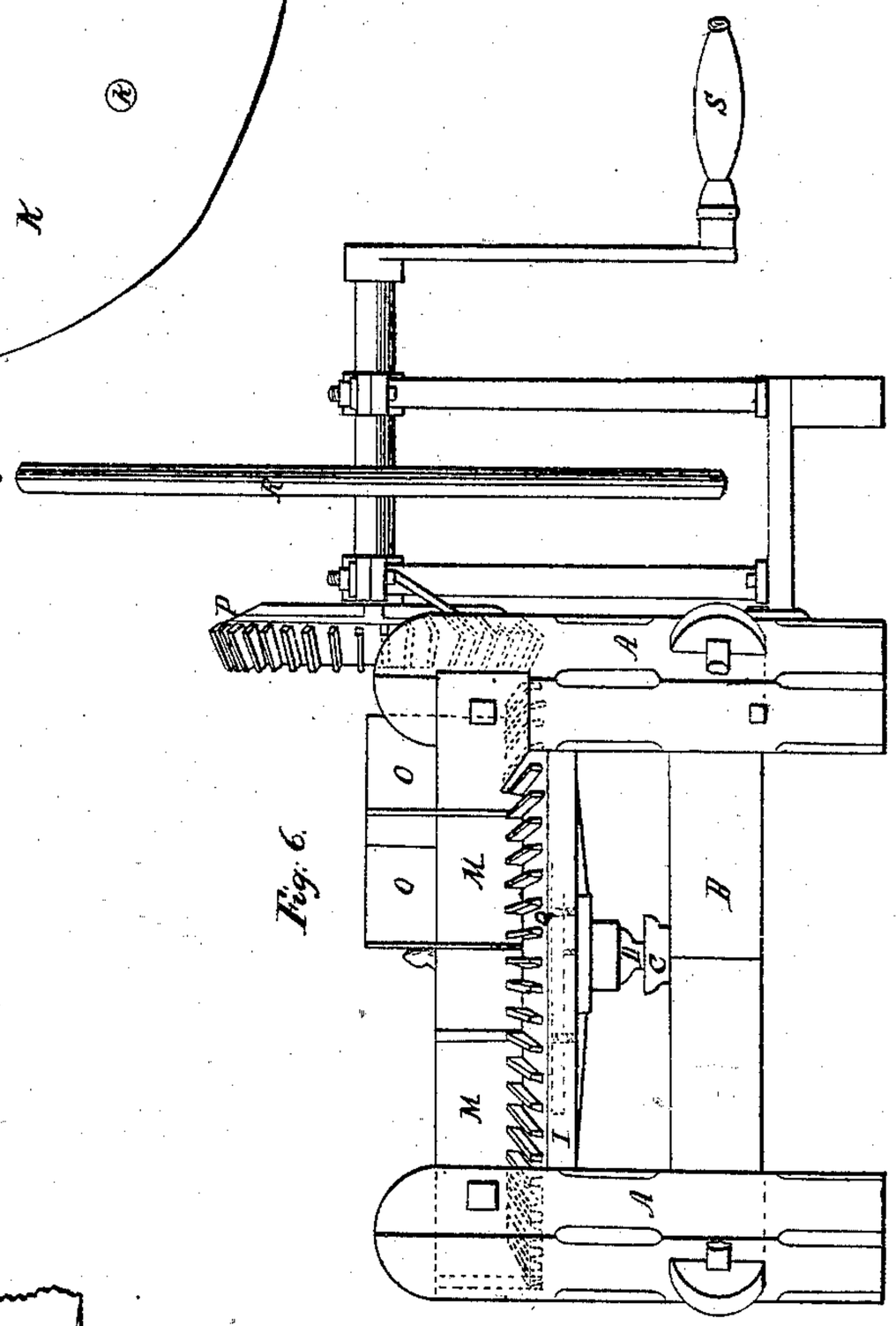

Fig. 6.

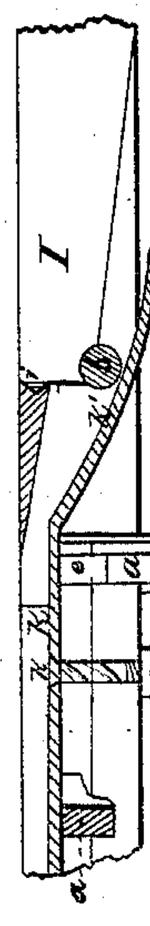

Fig. 3.

Fig. 4.

Fig. 2.

Inventor.
William Foster.

UNITED STATES PATENT OFFICE.

WILLIAM FOSTER, OF NEW YORK, N. Y.

MACHINE FOR CUTTING VENEERS.

Specification of Letters Patent No. 3,252, dated September 1, 1843.

To all whom it may concern:

Be it known that I, WILLIAM FOSTER, of the city, county, and State of New York, have invented a new and useful Improvement in Machinery for Cutting Veneers and other Thin Sheets of Wood; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification, in which—

Figure 1 is a top plan of the gage plate K detached, Fig. 2 section showing the wedges, Fig. 3 section showing the relative position of the gage plate or adjustable bed and the straightening rollers, Fig. 4 modification of the straightening rollers, Fig. 5 top view of the wheel and other machinery complete, Fig. 6 side elevation.

The nature of my invention consists in the method of bracing and regulating the bed plate and knife and combining therewith the apparatus for straightening the wood as it is cut.

The frame is composed of four upright posts A joined at the bottom by two cross bars B, in the center of which there is an ink C, in which the end of the shaft of the cutting wheel runs; at the top of the posts are cross bars M, which at their junction in the center form a bearing for the upper end of the above named shaft and against them the wood to be cut is placed sustained by a hopper O.

I is a horizontal disk or wheel supported on a vertical shaft D; in the upper face of this disk there is an annular recess, and on opposite sides of the shaft a slot is cut through the wheel extending radially across the recess. Over this shaft a knife L is placed the ends of which are fastened by bolts to the outer and inner rim on each side of the recess. Said bolts pass through slots and down through the wheel and are confined by nuts underneath. Directly behind the knife there is a segment of iron I′ just filling the recess at that place and coming up flush with the face of the wheel, and upper surface of the knife. This segment is also bolted to the wheel, the bolts passing through slots (*i*) in it so as to render it adjustable. There is a rib *i′* on the front edge of this segment which supports the knife that having a groove in its back that fits the rib and as the knife is ground off and set up the segment can be brought up to it. In the space in front of the edge of the knife is placed a gage K which is a segment plate, made movable so as to be elevated or depressed at pleasure by means of wedges (*a*) in the wheel underneath (these are shown by dotted lines in Fig. 5, and more clearly represented in sections.) The plate is held down by a single bolt (*k*) passing through it and the wheel, and fastened underneath by a nut and screw. The end of the plate next the edge of the knife has a projection (*k′*) on it that curves down through the throat of the wheel under the knife and which is concave on its upper side. Just under the knife there is a roller (*b*) under which also this concave projection passes leaving space enough to allow the wood as it is cut from the block to pass down between them, by which means it is straightened, after being curved in the process of cutting. (This is most clearly shown at Fig. 3.)

The plate K has on its under side a rib (*c*) which is gradually tapered from the center to each end. This rib is directly under the edge of the knife and serves to strengthen the plate at the cutting point. At this place two wedges (*a*) are placed, one projecting from the periphery, the other toward the shaft, the wheel being cut out at the center and attached by arms to the shaft. These wedges have studs projecting down through slots under the wheel which can be acted on to elevate and depress the gage plate. A third wedge is placed back of the bolt (*k*) above named. Around the outer edge of the wheel I there is a bevel gear Q which gears into a bevel pinion P on a horizontal shaft on which there can also be a fly wheel R. If necessary this shaft may be driven by a crank S, the shaft being sustained by suitable brackets from the posts of the frame.

It will readily be seen that the raising of the gage plate K will also gage the space between the concave and the roller. Another modification of this is shown in Fig. 4, where two rollers (*m* and *n*) are substituted for the curved plate. These by being attached to the gage plate can also be adjusted with it.

What I claim as my invention and desire to secure by Letters Patent is—

1. The adjustable segment piece I′ in

combination with the wheel and knife in the manner and for the purpose described.

2. I also claim in combination with the adjustable gage plate K the projecting concave guide attached thereto, for straightening the wood after it is cut; and in combination therewith, the roller (*b*) in the manner and for the purpose substantially as herein set forth.

WM. FOSTER.

Witnesses:
THOMAS D. BURRALL,
J. J. GREENOUGH.