

(No Model.)

H. M. LOUD.
BEVELING MACHINE.

No. 564,435.

Patented July 21, 1896.

Fig 1

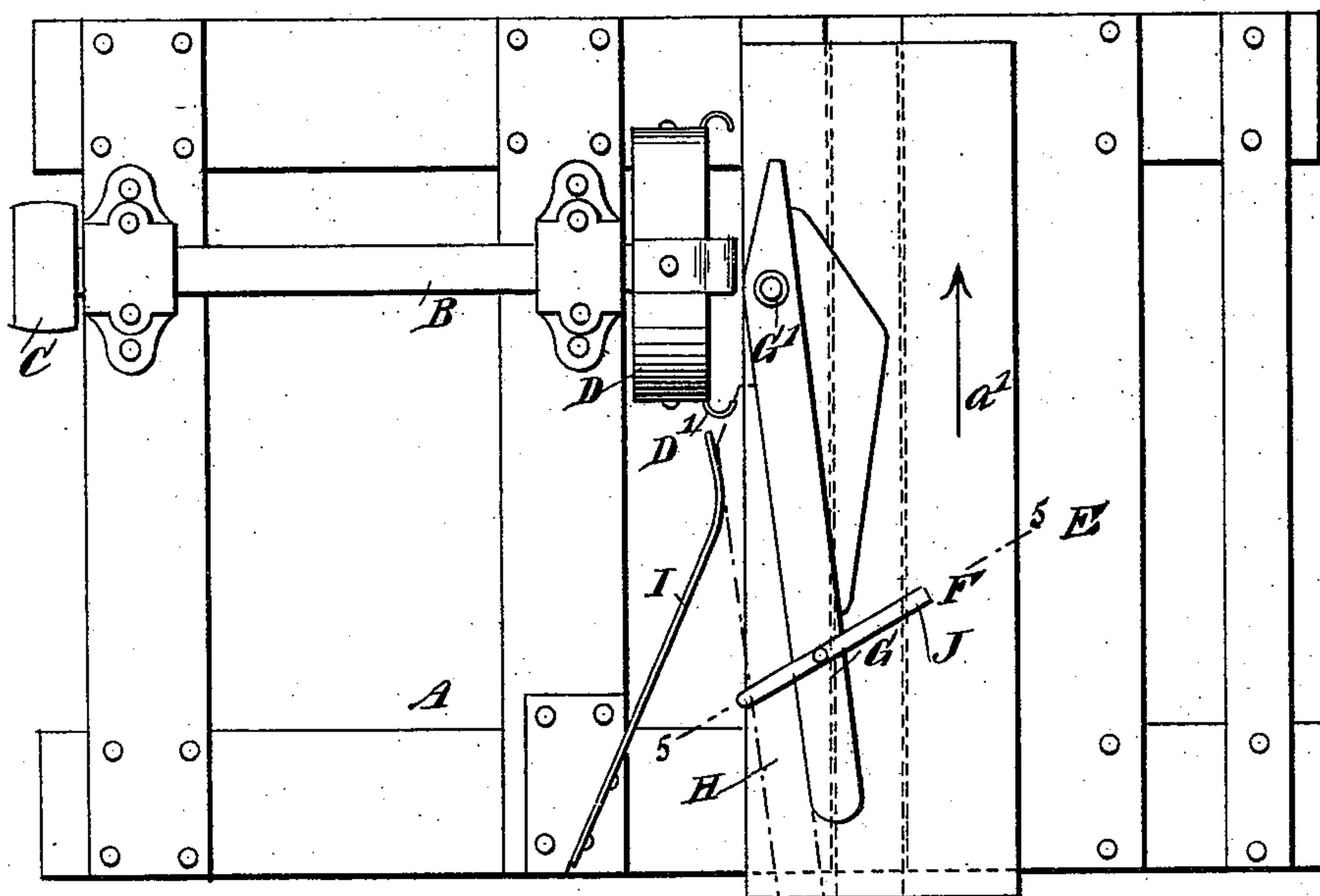


Fig 2

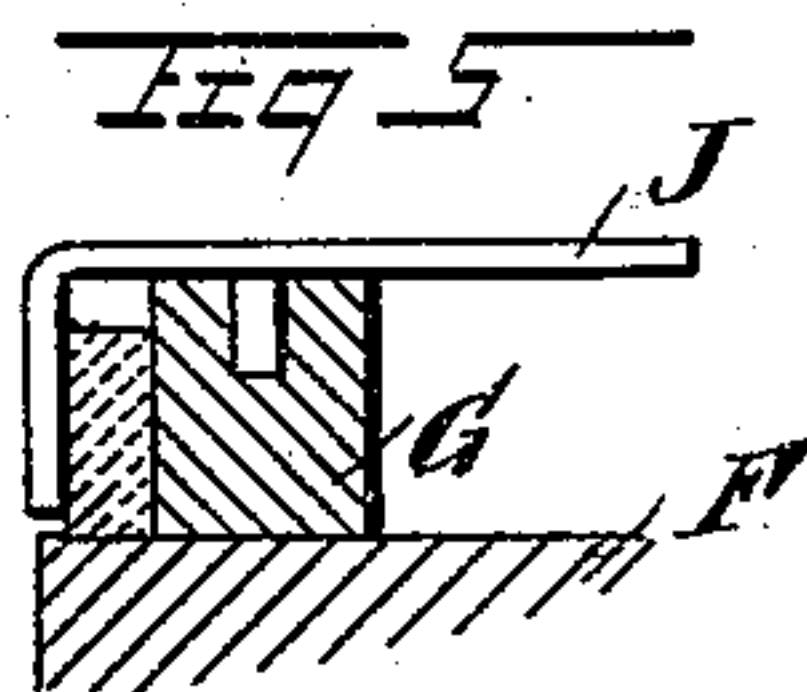
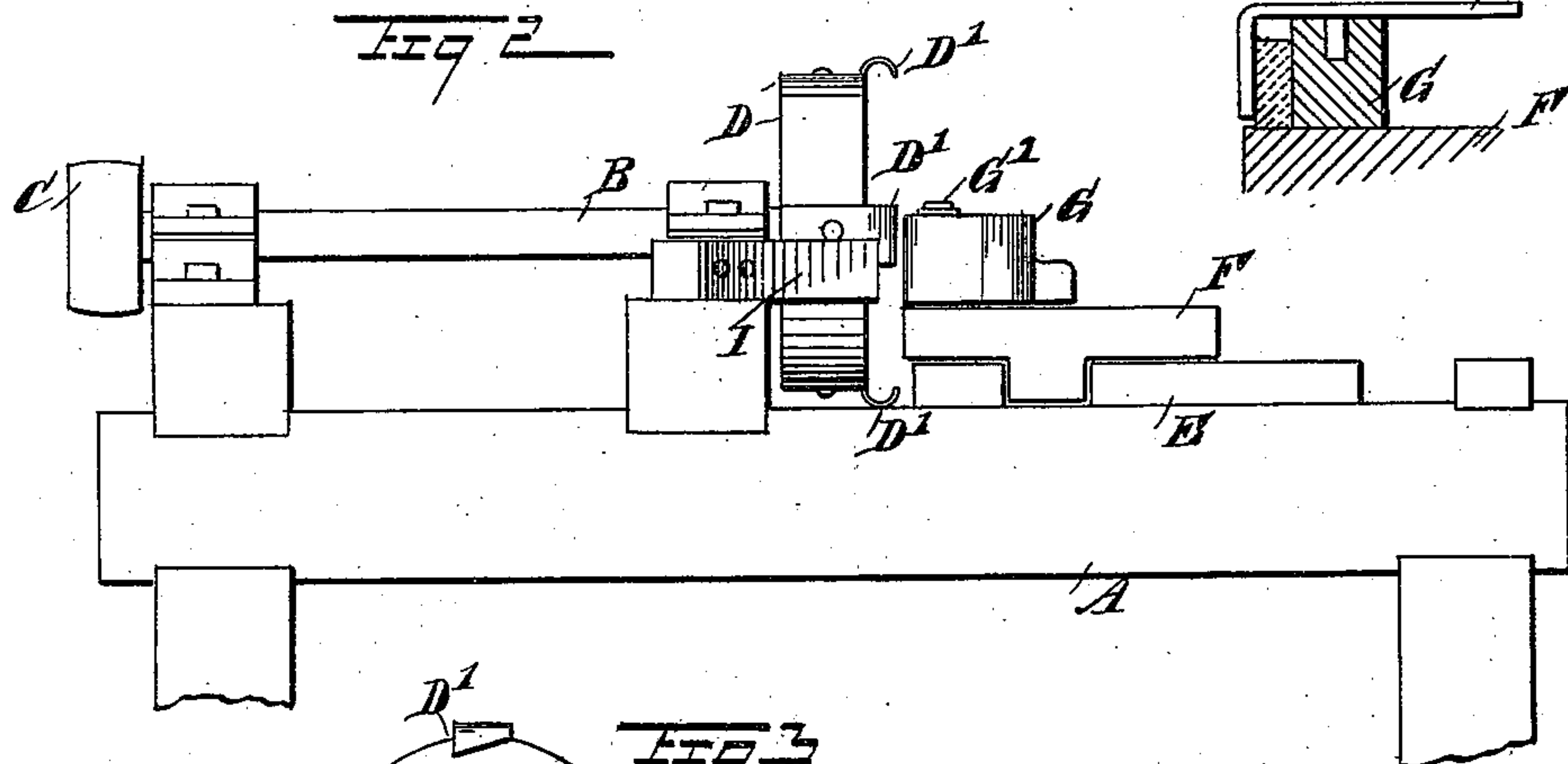
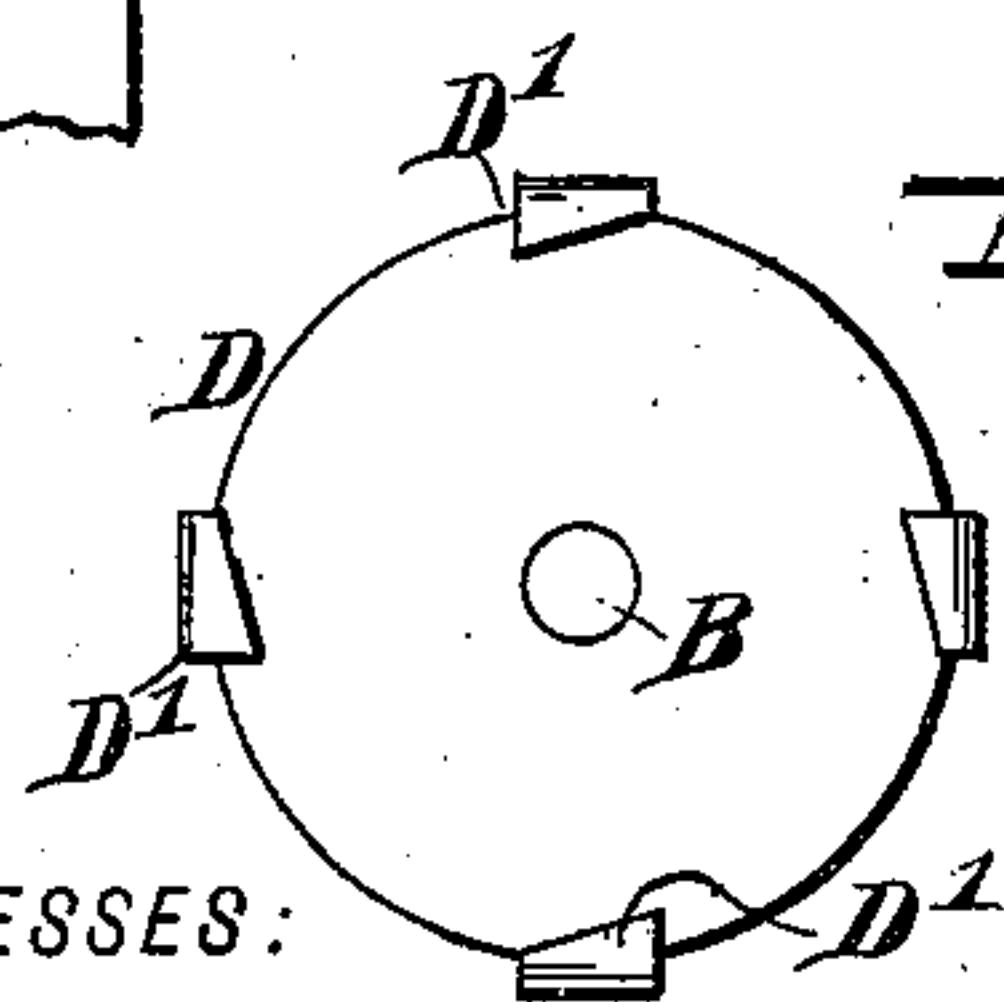


Fig 3

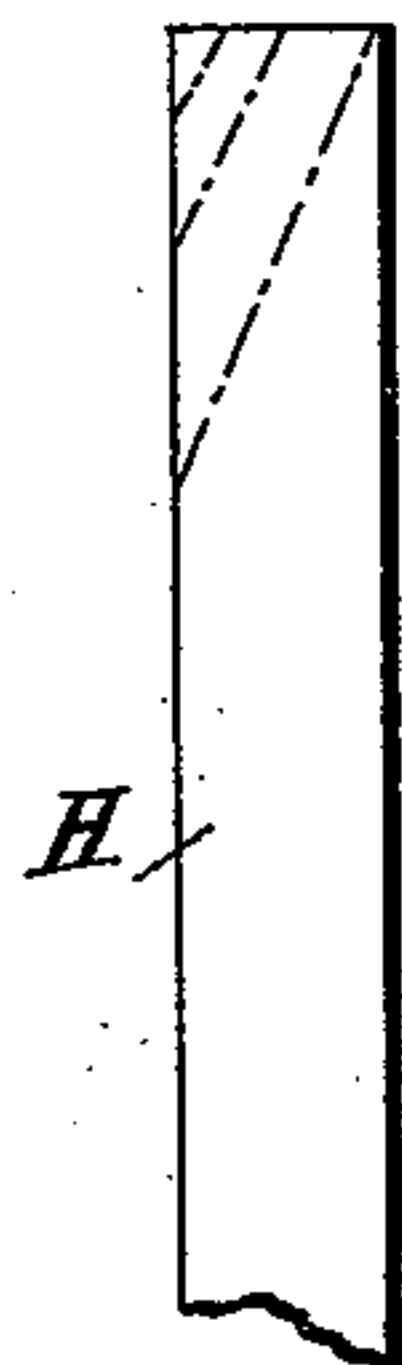


WITNESSES:

H. Walker

Geo. G. Foster

Fig 4



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UNITED STATES PATENT OFFICE.

HENRY M. LOUD, OF AU SABLE, MICHIGAN.

BEVELING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 564,435, dated July 21, 1896.

Application filed September 30, 1895. Serial No. 564,199. (No model.)

To all whom it may concern:

Be it known that I, HENRY M. LOUD, of Au Sable, in the county of Iosco and State of Michigan, have invented a new and Improved Beveling-Machine, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved machine for conveniently, quickly, and accurately forming bevels at the ends of pieces of wood intended for bicycle-rims and other purposes.

The invention consists principally of a revoluble cutter, a slidable table, and a rest pivoted on the said table and on which is adapted to rest the piece of wood to be treated.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the improvement. Fig. 2 is an end view of the same. Fig. 3 is a face view of the cutter. Fig. 4 is a plan view of a piece of wood, showing several bevels; and Fig. 5 is a cross-section of the rest and clamp on the line 5 5 of Fig. 1.

The improved beveling-machine is provided with a suitably-constructed frame A, on which is journaled a shaft B, connected by a pulley C with other machinery for imparting a rotary motion to said shaft. A cutter D is secured on the inner end of the shaft B, and is provided on its face with knives D', arranged in a circle near the periphery of the cutter-disk, the cutting edges being preferably semi-circular, as indicated in the drawings. In front of this revoluble cutter D is arranged a guideway E, secured on the frame A, and on which is fitted to slide transversely or at right angles to the shaft B a table F, on which is pivoted at G' a rest-guide G, against one side of which is placed the piece of wood H to be beveled at its end by the cutter D. A spring I, secured on the frame A, is arranged opposite the rest G, and the free end of this spring is adapted to rest on the outer side of the piece of wood H to hold the latter in contact with the rest G as the slide F is moved transversely to bring the end of the piece of wood

H under the knives D' of the cutter D. The free end of the spring I extends close to the knives of the cutter D and bears against the outer face of the wood H, whereby said wood is held closely pressed with its thinner end against the rest G, so as to prevent splitting of the thin end of the piece of wood by the knives.

The rest G is pivoted to the slide F in such a position that the piece of wood H is supported at its inner part on the slide F, on which it rests, whereby the thin end of the wood is also prevented from being split by the cutters.

In using the machine the piece of wood H is placed on the table F against the inner end of the rest G, as indicated in dotted lines in Fig. 1, the rest being arranged with the side in an angular position relative to the vertical plane in which the knives D' revolve, and consequently when the table F is moved transversely in the direction of the arrow *a'* and the cutter D is rotating, then the knives D' cut the end of the piece of wood H to form a bevel thereon, as will be readily understood by reference to Fig. 1, the degree of the bevel depending on the angular position of the rest G relative to the plane in which the knives D' revolve. Thus only one cut may be needed if a steep bevel is required on the end of the piece of wood H; but if a very long bevel is required two or more cuts may be necessary to produce the desired result. (See dotted lines in Fig. 4.)

It is understood that for each bevel the rest G is moved into such an angular position as the bevel requires, after which the rest G is moved transversely to move the end of the piece of wood in engagement with the knives D, so that the latter form a bevel on the piece of wood. On the rest or guide G is pivoted a clamp J, having its opposite ends projecting beyond opposite sides of the rest G at the top thereof, one end of said clamp J being bent down, as clearly seen in Fig. 5, and adapted to engage the piece of wood H to securely clamp the latter to the rest. The opposite end of the clamp J forms a convenient handle for the clamp and serves as a handpiece for conveniently moving the table on its guideways E.

When the handle of the clamp J is grasped

in order to bring the table F back after a piece of wood has been operated on by the cutters, it is obvious that said clamp will be swung on its pivot in such a way as to loosen the piece
5 of wood and render the same readily removable, while when the said handle is operated to move the table in the opposite direction, a fresh piece of wood having been inserted, it is obvious that the clamp J will be swung in
10 the opposite direction on its pivot, so as to securely hold the wood in place.

The device is very simple and durable in construction and accurately forms the desired bevel on the wood. Pieces of wood formed
15 with bevels at the ends can be readily overlapped and bent to form bicycle-rims and like articles.

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

A machine of the character described, com-

prising a frame, a revoluble cutter, a table mounted to slide transversely to the axis of rotation of the cutter, a rest pivoted at one end on the table and adapted to support a
25 piece of wood in position to be operated on by the cutter, and a clamp-bar pivoted at its central portion to the top of the free end of the rest and having its opposite ends projecting beyond opposite sides of the rest, one end
30 of said clamp-bar being bent down in position to engage and hold the piece of wood against the rest, the opposite end of said clamp-bar forming a handle, whereby the clamp-bar may
35 be operated to clamp and release the wood and to simultaneously slide the table into and out of operative position, substantially as set forth.

HENRY M. LOUD.

Witnesses:

THEO. G. HOSTER,
JNO. M. RITTER.