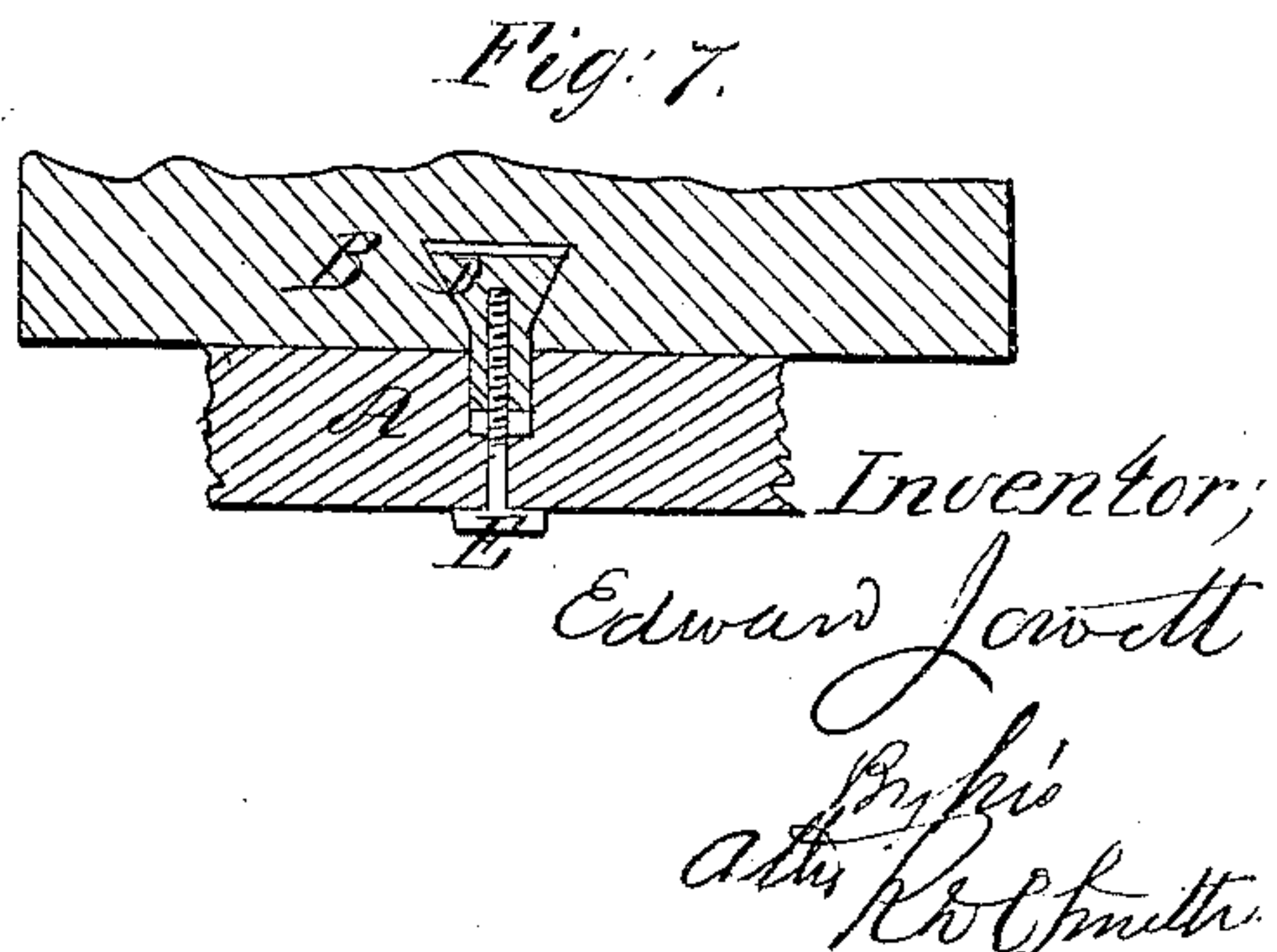
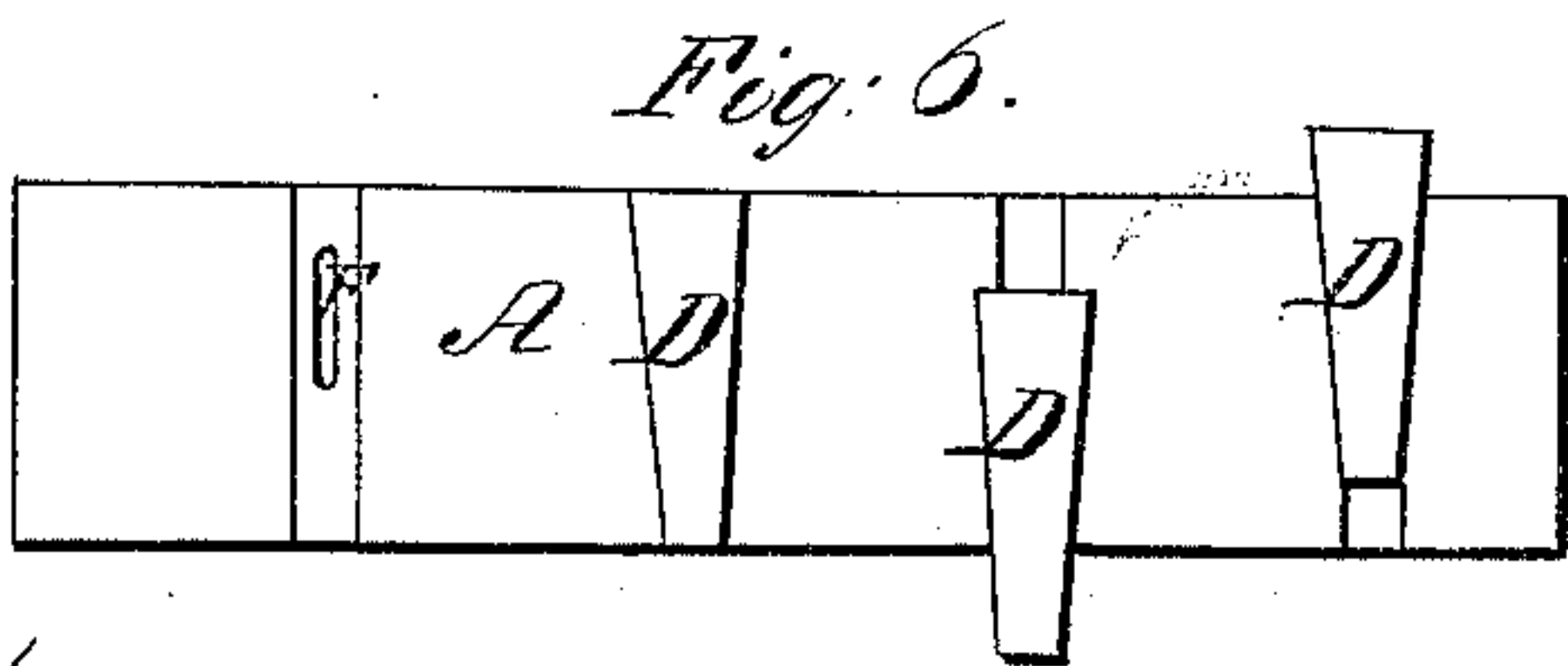
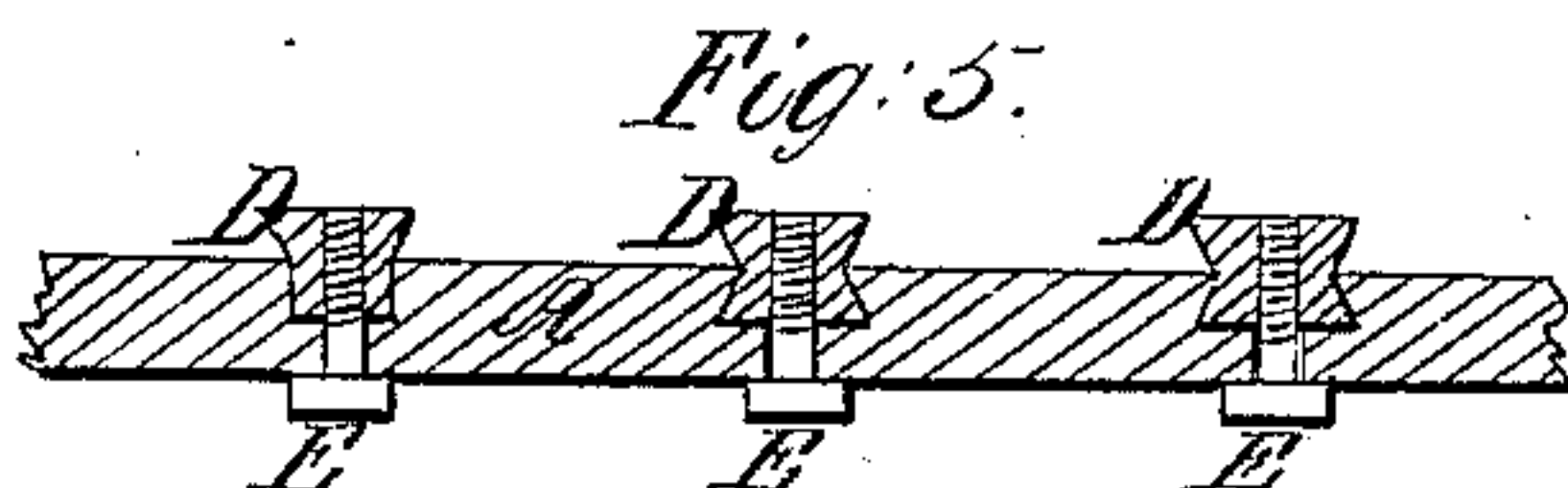
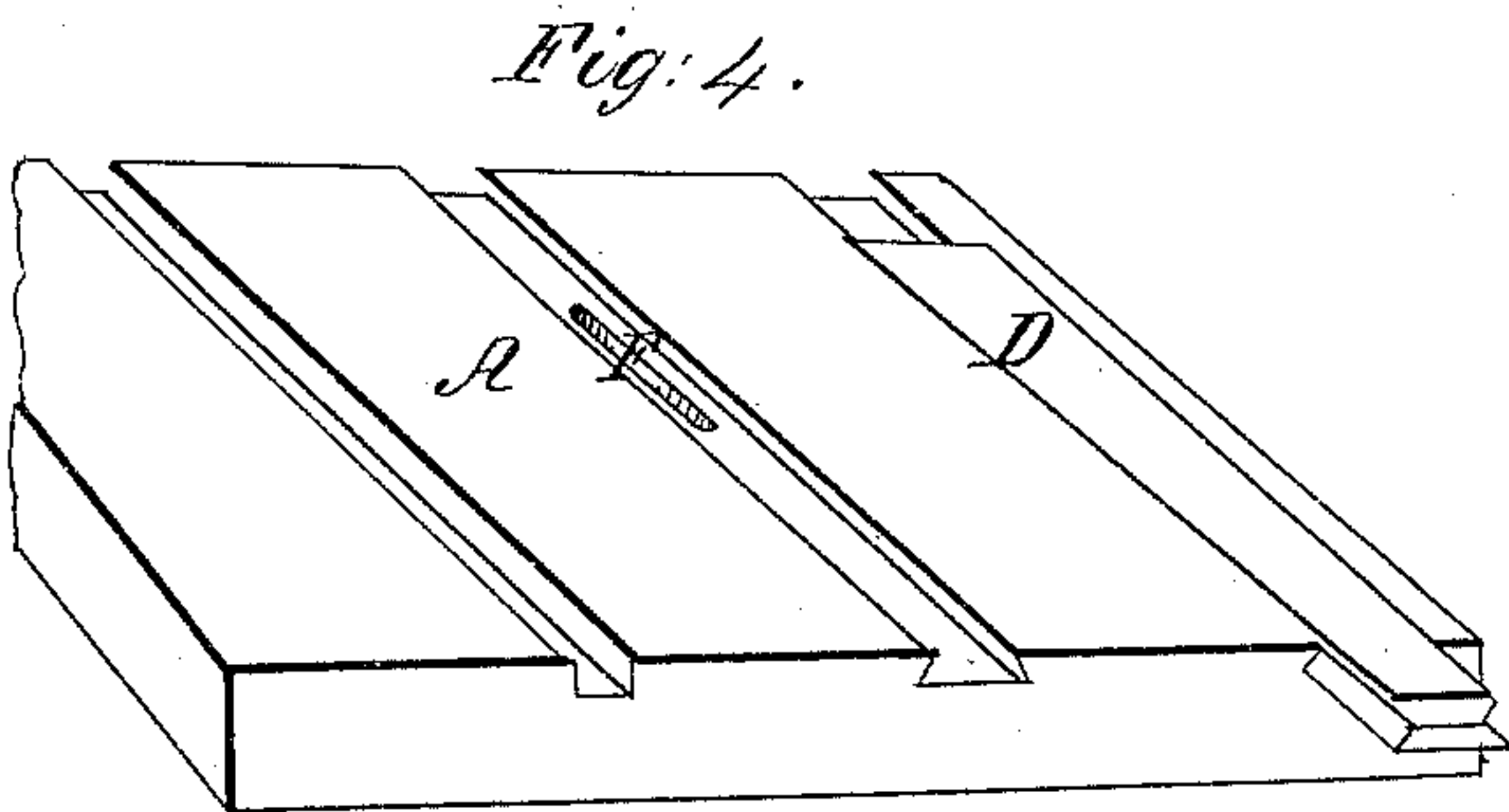
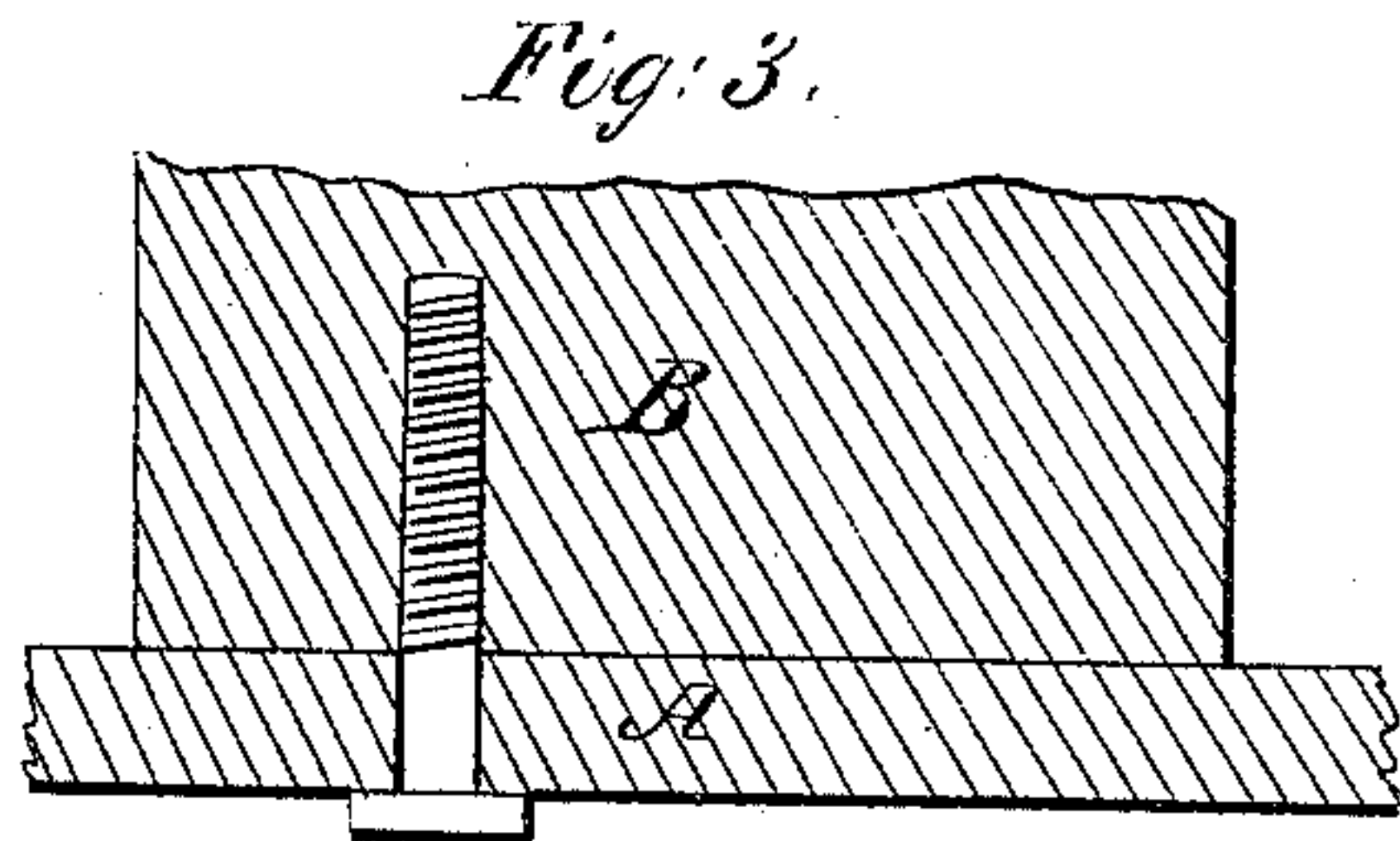
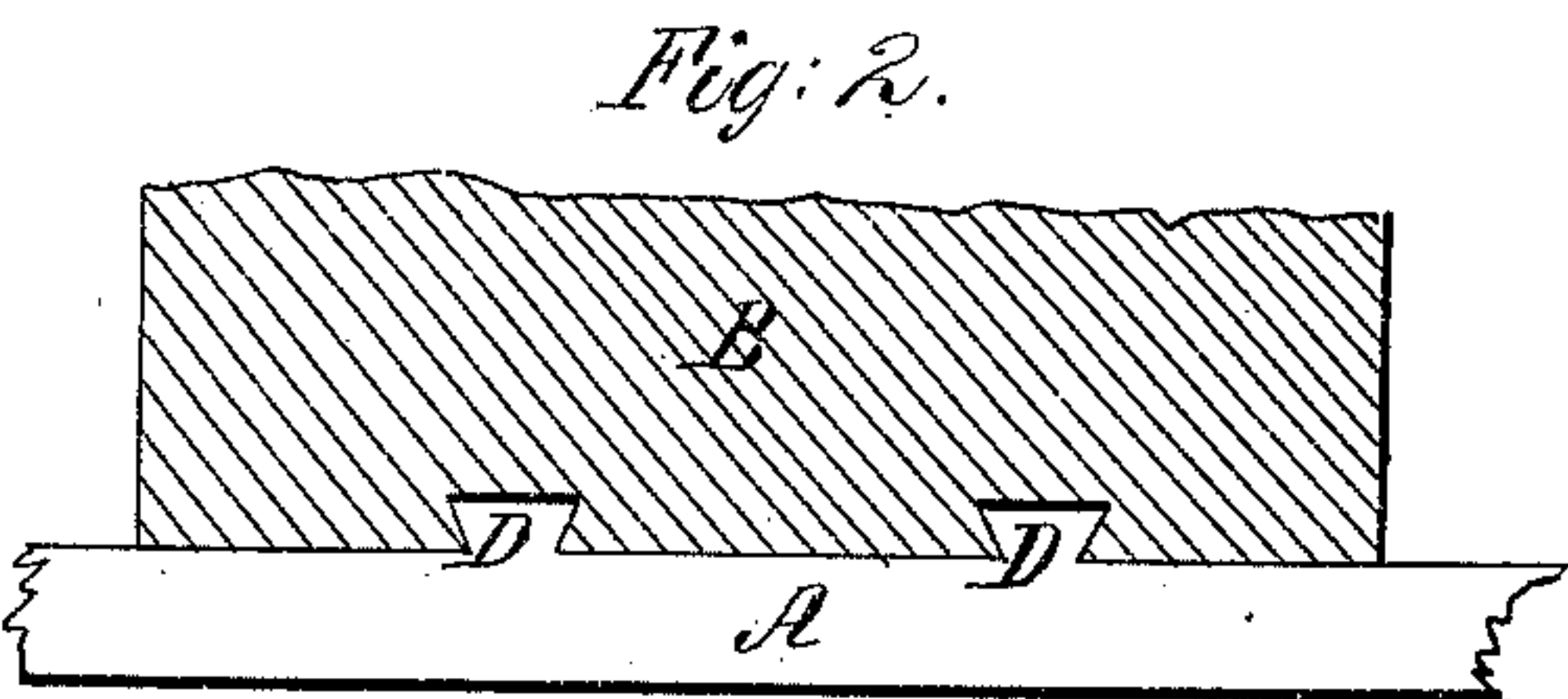
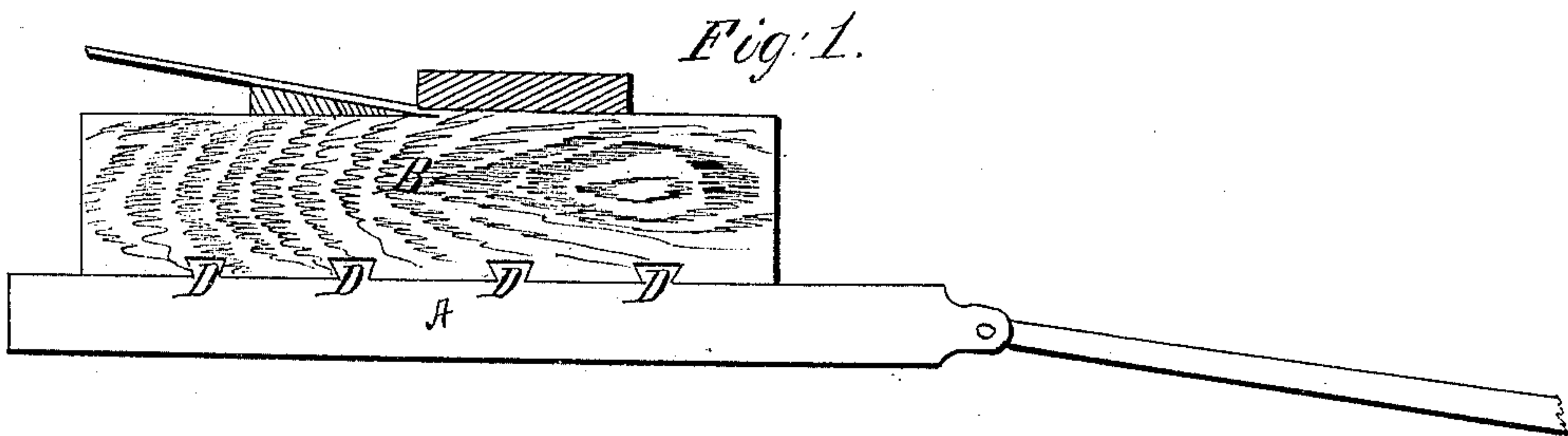


E. Jewett,

Cutting Veneers.

N^o 78,458.

Patented June 2. 1868.



Witnesses;
O. J. Vento
Thos. J. Parker.

Inventor;
Edward Jewett
By his
attys Robt Smith

United States Patent Office.

EDWARD JEWETT, OF RINDGE, NEW HAMPSHIRE.

Letters Patent No. 78,458, dated June 2, 1868; antedated May 18, 1868.

IMPROVEMENT IN VENEER-CUTTING 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, EDWARD JEWETT, of Rindge, in the county of Cheshire, and State of New Hampshire, have invented a new and useful Improvement in Face-Lumber Machines; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which —

Figure 1 is a side elevation, showing the carriage, "bolt," and cutter in position.

Figure 2 is a side elevation, showing the ribs more distinctly.

Figure 3 shows the common method of securing the "bolt" to the carriage.

Figure 4 is a perspective view of a portion of the carriage, showing one rib in position.

Figures 5 and 7 are vertical sections through the carriage and ribs.

Figure 6 is a plan view of the carriage.

My invention relates to the method of securing the "bolt" to the carriage; and it consists in dove-tail ribs projecting from the face of the carriage, and entering corresponding grooves in the face of the "bolt," whereby it is held more securely, and with less loss of time and material than hitherto.

That others may understand the construction, operation, and advantages of my improvement, I will particularly describe it, and the methods in common use for the same purpose.

In describing my machine and its operation, it will, for convenience, be described as cutting veneers, though the term "veneer" might not technically be applicable to its products.

In fig. 1 is represented so much of a working veneer-cutting machine as will exhibit the relative positions of the carriage, "bolt," and cutter. The carriage is reciprocated by a crank and pitman, or by some other effective device. The carriage may be fed toward the knife or the knife toward the carriage, as may be deemed preferable, and this may be accomplished by a screw, lever, or other means.

In all machines of this class at present in use, the "bolt" is secured to the carriage by screws, as shown in fig. 3. These screws are inserted through holes in the carriage, and penetrate to a depth of one and a quarter inch, or more. In cutting veneers; &c., the "bolt" is always thoroughly heated, and moistened by the application of steam, and much time is consumed in attaching it to the carriage, because the holes must be bored and the screws inserted after steaming, so that the temperature is always considerably reduced before it is ready for the application of the knife. This is a material disadvantage in several particulars. The loss of time in attaching the "bolt," the loss of temperature while being attached, and the loss of stock, as that portion of the "bolt" penetrated by the screws is worthless, this latter loss being several dollars in the value of each "bolt" of such woods as are ordinarily cut into veneers.

With my device the "bolt" is not only held more firmly to the carriage, but it may be attached without any loss of time or temperature, and the waste may be reduced to less than one-fifth of what it must be where screws are used.

In the figures, A represents the carriage, B the "bolt," and in fig. 3 is the screw, as commonly used to attach the "bolt" to the carriage. On the face of my carriage, A, are placed several ribs, D, having dove-tail sections, as shown in fig. 2, and these ribs may not project more than one-fourth of an inch above the surface of the carriage. Corresponding grooves are cut in one face of the "bolt," transversely to the grain of the wood, and at intervals to correspond with the distances between the ribs, and when said "bolt" is to be attached to the carriage, it is so introduced as to cause the ribs D to enter their appropriate grooves, and the "bolt" will be securely held in position.

The number of the ribs D is not material, but I think intervals of six inches would be proper when soft woods are to be used, and longer intervals for hard woods.

The grooves in the "bolt" may be made by any instrument capable of "cutting under," in the manner shown, as expanding bits, revolving cutters, &c., and these may be mounted in gangs, with a suitable carriage, so that the whole set of grooves may be made all at one time. They may also be made before the "bolt" is submitted to the steaming process. But it will not always be possible to make these grooves so exact that the

"bolt" will be rigidly attached in this way, and I therefore make the ribs slightly tapering, as shown in figs. 4 and 6, and by the use of a proper guide attached to the carriage of the dove-tail cutter, the grooves in the "bolt" will all be made to correspond with as much ease as they could be made straight. The "bolt" will slip upon these tapered ribs and wedge fast at some point, and there be held perfectly secure.

When thus retained, there can be no danger that the "bolt" will work loose, because every time the knife enters the wood the wedging of the ribs in their grooves will be more firm.

It will frequently occur that it will be desirable to adjust some of the ribs D endways, either so that one or more of them may be set a little in advance of others, to cause them to fill their grooves, or to bring the "bolt" upon particular portions of the carriage. The method of accomplishing this adjustment is clearly shown in figs. 4, 5, and 6, where the ribs are shown as running in grooves cut in the carriage, and "set" at any particular point by means of a set-screw, E, which passes upward through the slots F into the ribs, and clamping them firmly to the table at any desired point.

It may sometimes be desirable to be able to place a "bolt" upon the carriage in the reverse direction, and this may be easily accomplished by reversing the ends of the ribs, which can readily be done by withdrawing them from their grooves and entering their opposite ends.

The grooves in the bolt should be cut to a depth a little greater than the height of the rib, as shown in figs. 1, 2, and 7, so that, in placing the "bolt" upon the carriage, the top surfaces of the ribs shall not come in contact with the "bolt." This will lessen the friction, and difficulty of putting the "bolt" in place, and will also obviate any tendency to split the portion between the ribs away from the main block.

The operation of the inclined sides of the ribs is entirely directed toward that portion of the "bolt" which is opposed to them, and the pressure of one rib against the wood of the "bolt" is counterbalanced by the pressure of the next rib in the opposite direction, and there is therefore no tendency to split the "bolt."

It may be found advantageous to arrange the ribs in the manner shown in fig. 7, in which the rib D may have a slight vertical movement in its groove in the carriage, and may be drawn down into said groove with power by the screw E. If arranged in this way, the rib above the carriage may be made of the same width at the two ends, instead of tapering, and when the "bolt" is placed upon the carriage it may be held there securely by tightening up the screws E, (fig. 7,) which will clamp those portions of the "bolt" which are beneath the inclined sides of the rib.

Springs of rubber, or of wire, may be inserted under the ribs D, (fig. 7,) to keep them lifted as far as the screws E will permit, so as to facilitate the placing of the bolt in position upon the carriage.

Having described my invention, and its mode of operation, what I claim as new, is—

Attaching and securing the "bolt" to the carriage A by means of dove-tailed ribs D D, substantially as and for the purpose set forth.

The adjustable ribs D D, moving in grooves cut in the carriage A, and secured by set-screws, or their equivalent, substantially as and for the purpose set forth.

The vertically-adjustable clamping-rib, (fig. 7,) substantially as and for the purpose set forth.

EDWARD JEWETT.

Witnesses:

R. D. O. SMITH,

D. B. VENTRE, Jr.