

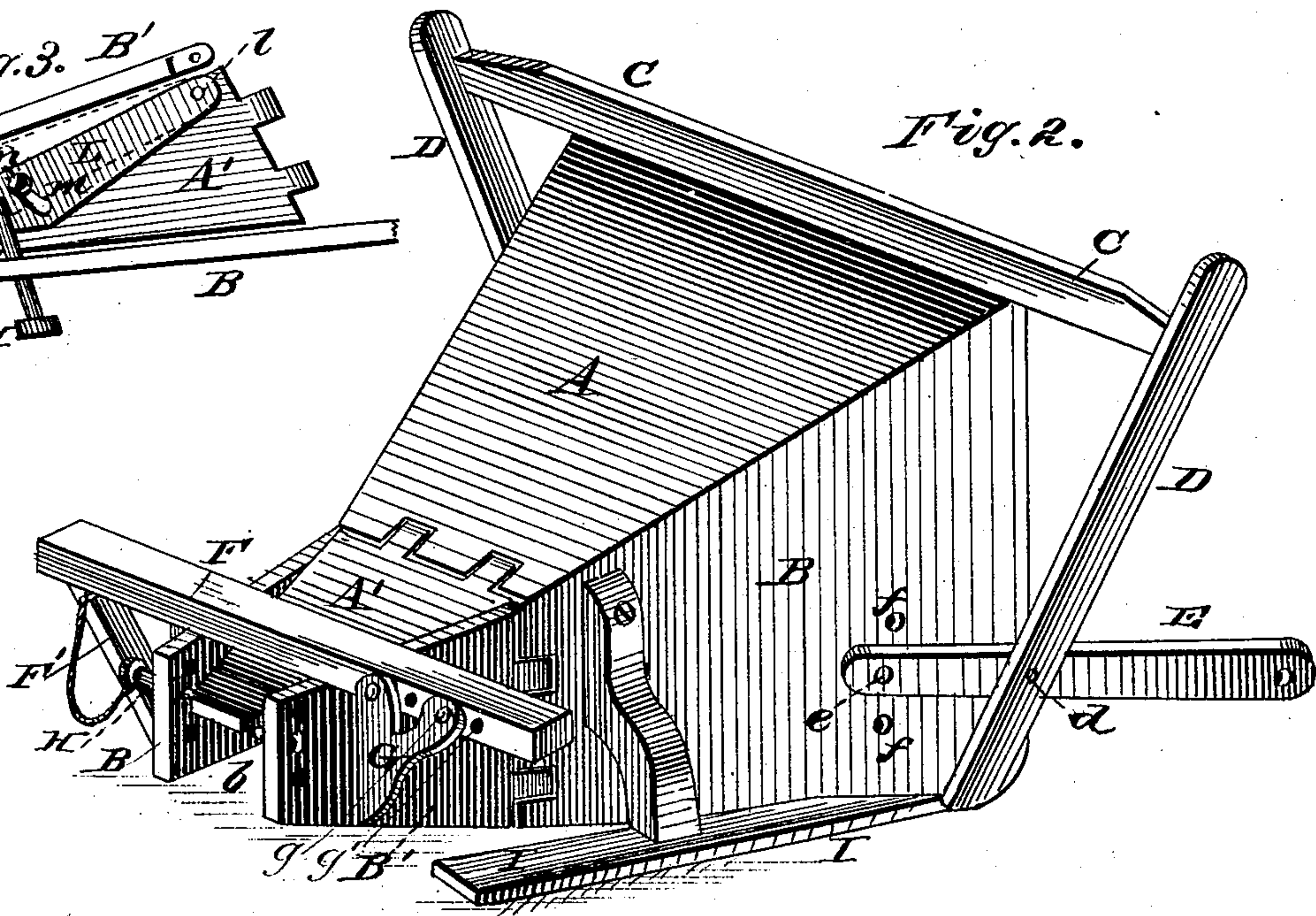
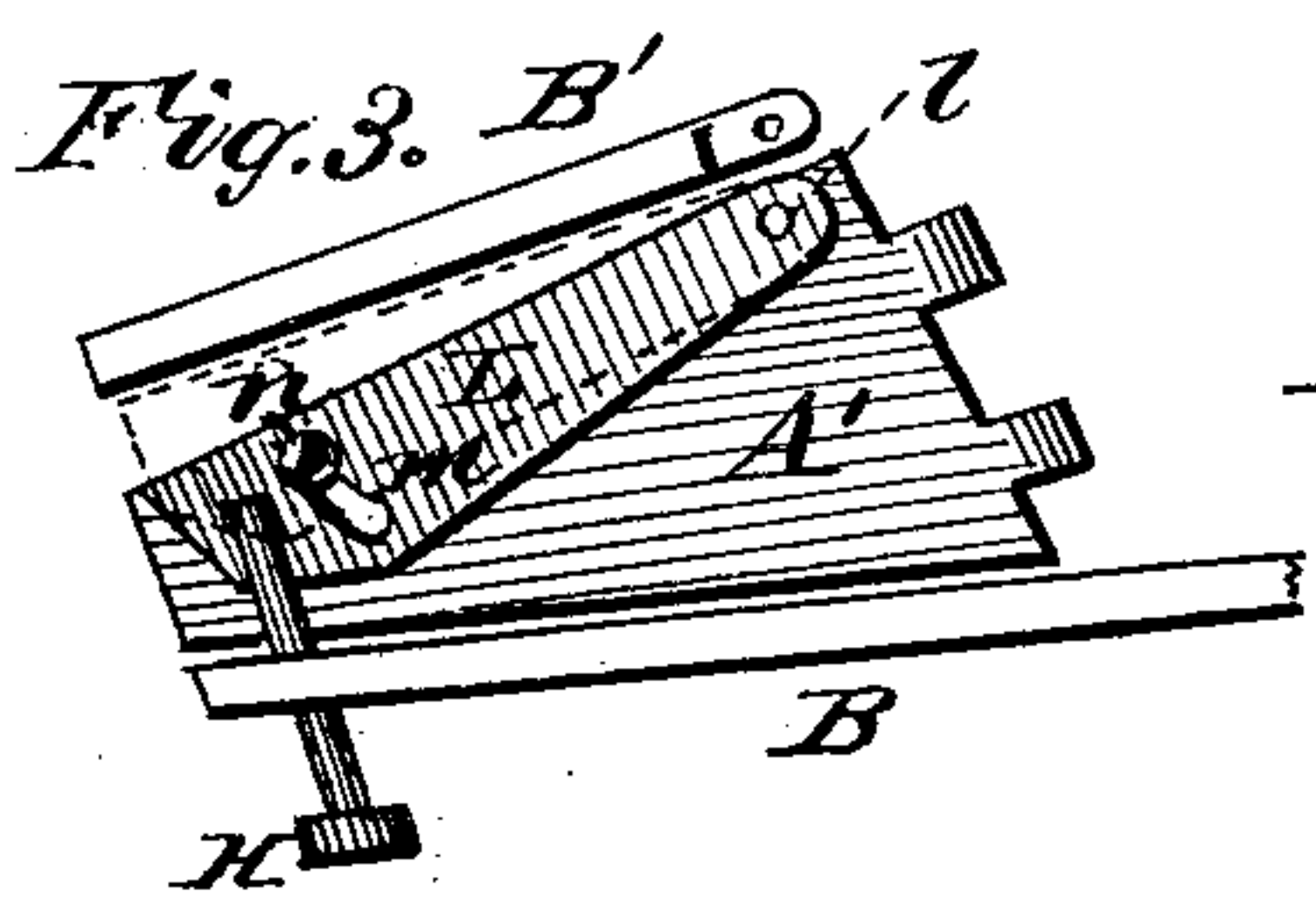
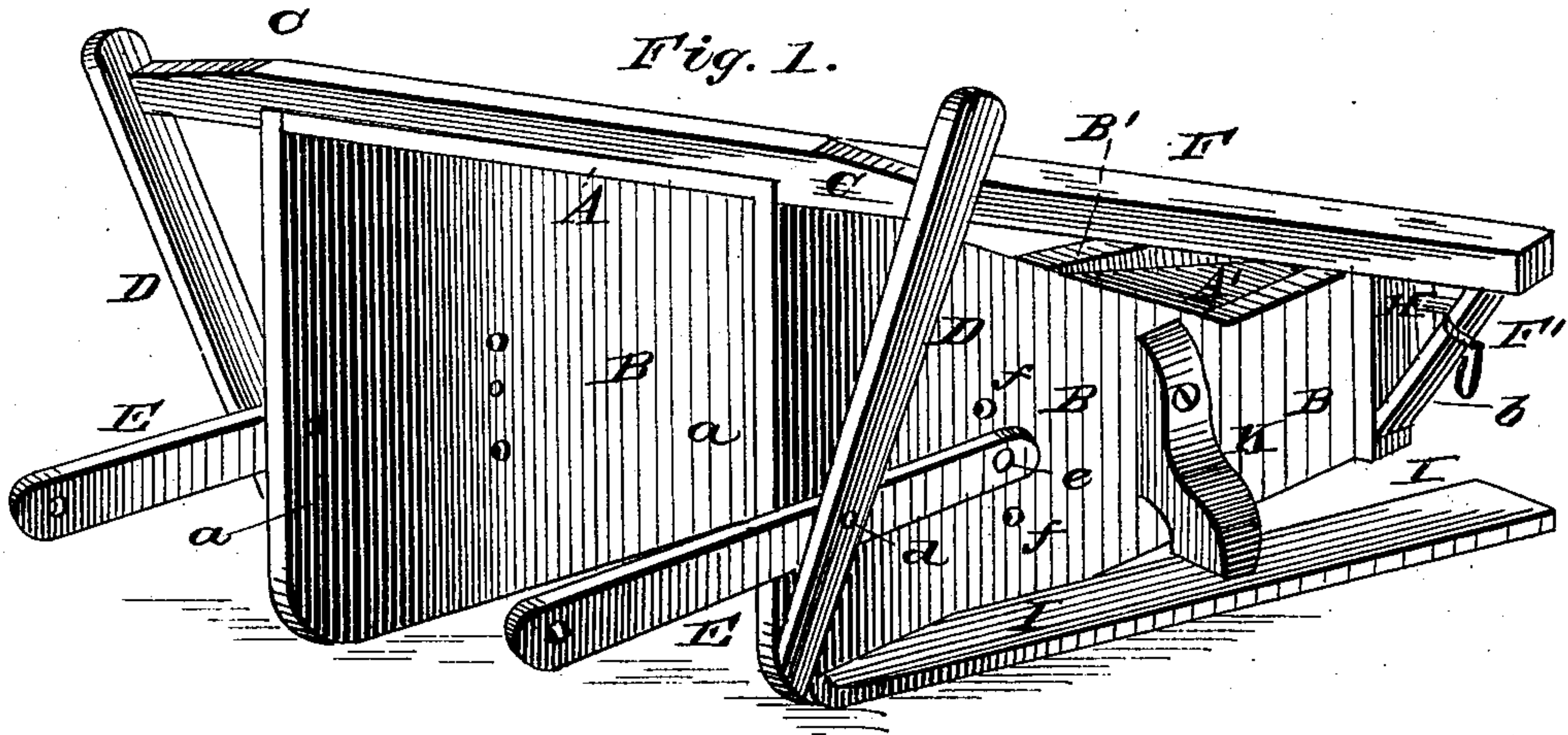
(No Model.)

B. J. DOWNING.

MACHINE FOR TRAINING HEDGES.

No. 247,024.

Patented Sept. 13, 1881.



WITNESSES

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UNITED STATES PATENT OFFICE.

BURTON J. DOWNING, OF SEELY, KANSAS.

MACHINE FOR TRAINING HEDGES.

SPECIFICATION forming part of Letters Patent No. 247,024, dated September 13, 1881.

Application filed May 17, 1881. (No model.)

To all whom it may concern:

Be it known that I, BURTON J. DOWNING, of Seely, in the county of Cowley and State of Kansas, have invented certain new and useful Improvements in Machines for Training Hedges; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective front view of the machine. Fig. 2 is a perspective rear view of the same; and Fig. 3 is a detail view, showing the under side of the adjustable hinged top door at the rear end of the machine.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to machines for training living hedges; and it consists in the construction and arrangement of parts of a machine by the aid of which the hedge is compressed or compacted, so as to adapt it to be tied down with wire or cord suitable distances apart for the purpose of regulating its size and density, substantially as hereinafter more fully set forth.

In the annexed drawings, A represents the top, and B the sides, of the machine or apparatus, which, it will be seen, are inclined or converge toward the rear end, so as to form a large mouth or opening, *a*, in front and a narrow throat or outlet, *b*, in the rear. Over the top of the front end is secured a beam, C, which projects out over the sides, and is connected rigidly at opposite ends to slanting beams or braces D, the lower ends of which are bolted to the lower front corners of the sides B.

E E are the draft-beams, which are pivoted upon bolts *d* inserted through the braces D and sides B, and are provided with bolts *e* at their inner ends, by means of which said ends may be adjusted in any one of a series of holes, *f*, thereby regulating the elevation of the outer ends of the draft-beams.

Transversely across the narrow rear end or throat of the machine is a beam, F, which is secured rigidly to one of the sides B by a bracket, F', and extends out over both sides, as shown. This beam is provided with an adjustable bracket,

G, which may be shifted forward or back upon the beam by means of screws or bolts *g* fitting into holes *g'* in the beam.

The rear end of the machine has a hinged side door, B', and a hinged top part or door, A', the outer end of the former bearing against the bracket G, by adjusting which upon beam F the width of the throat *b* may be regulated. The depth or height of the throat may be regulated in like manner by means of the hinged top A', the outer end of which bears against a rod or bolt, H, which may be inserted through any one pair of a series of holes in the rigid side B and hinged door B' opposite.

The sides of the machine are provided with sills I, one on each side, flush with the bottom and bolted to brackets K. These sills are parallel to one another and slide upon the ground on opposite sides of the hedge in operating the machine. The under side of the inclined top A is sheathed with iron along its middle part, as are also the sides and top of the throat *b*, to prevent too much wear of these parts. In addition to this, the hinged top door, A', is provided on its under side with a sliding shield, L, (see Fig. 3,) pivoted at *l*, and having a segmental slot, *m*, at its wide outer end, by means of which it may be adjusted and held firmly in any given position by a jam-screw, *n*, inserted through the slot. In this manner the width of the hinged top A' may be regulated so as to conform to the adjustment of the hinged side door, B, and leave the throat *b* closed at its sides and top.

If desired, the sides of the machine may be provided with stub-axles, upon which wheels may be placed in carrying it to and from the place where it is to be used, and it may also be provided with a detachable tongue for the better management of the team. The whiffletrees are attached to the outer ends of the draft-beams E.

The operation of the machine is as follows: The hedge to be trained having been reached, the width and height of the throat *b* are adjusted by means of the hinged doors A' and B' in the manner described, according to the width and height which the hedge, when trained, is to have. The draft-beams E E are then adjusted by means of the bolts *e* in their rear ends. If the hedge to be trained is high and stiff, their

forward or outer ends should be elevated, so as to cause a downward draft. If, on the contrary, it is thin and low, the outer ends of the draft-beams are lowered to cause an upward
5 draft on the machine and reduce its downward pressure. This adjustment having been properly effected, the machine is weighted by placing stones or other heavy weights on the top and securing the same in any suitable manner,
10 and, starting at one end of the hedge, the machine is drawn over the top of it, compressing and compacting the hedge in its course. As the compressed hedge escapes at the throat *b*, it is tied down with wire suitable distances
15 apart to retain it in its proper shape.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The described apparatus or machine for training hedges, composed of the frame A B B, 20 converging toward its rear end, and provided with the hinged doors A' and B', sills I I, braced cross-beams C and F, adjustable draft-beams E E, adjustable bracket G, and bolt H, constructed and arranged substantially as and 25 for the purpose herein shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

BURTON J. DOWNING.

Witnesses:

S. M. JARVIS,
R. R. CONKLIN.