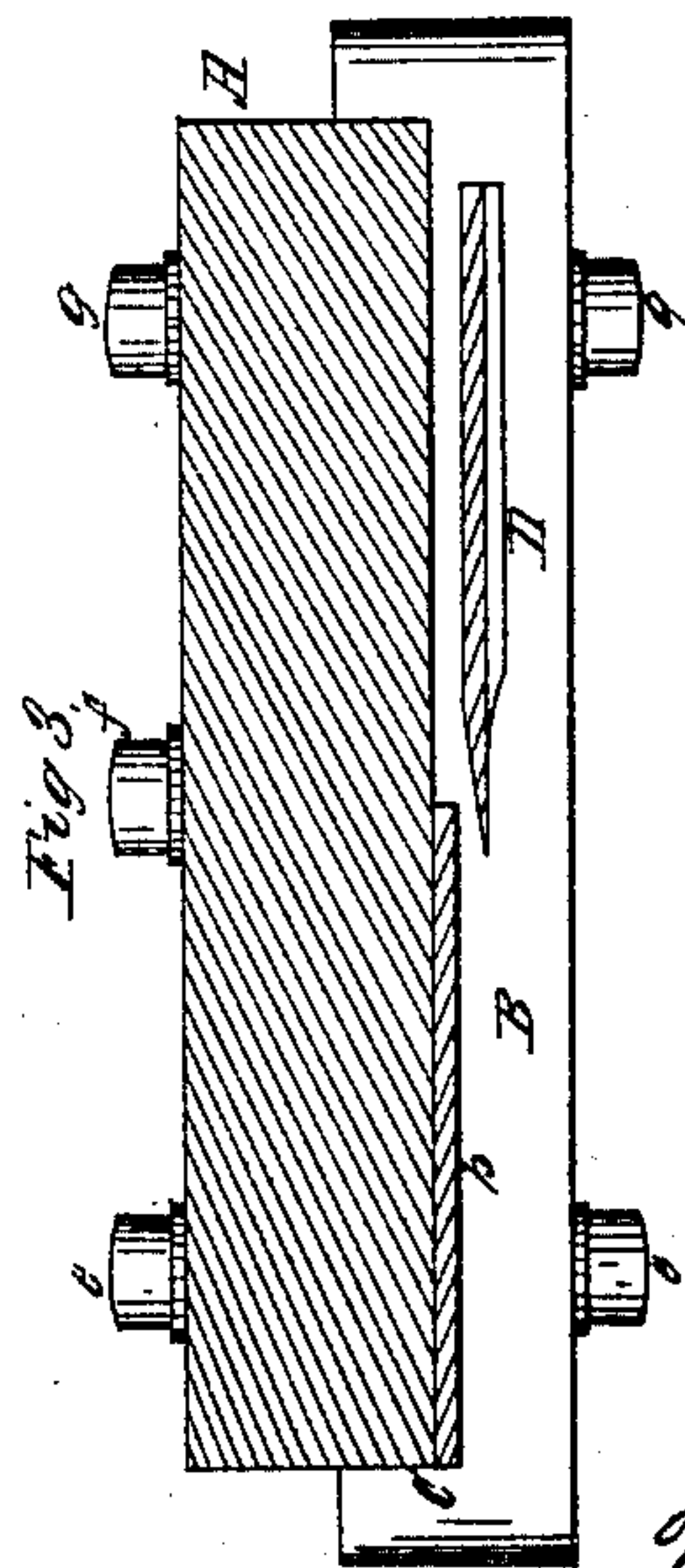
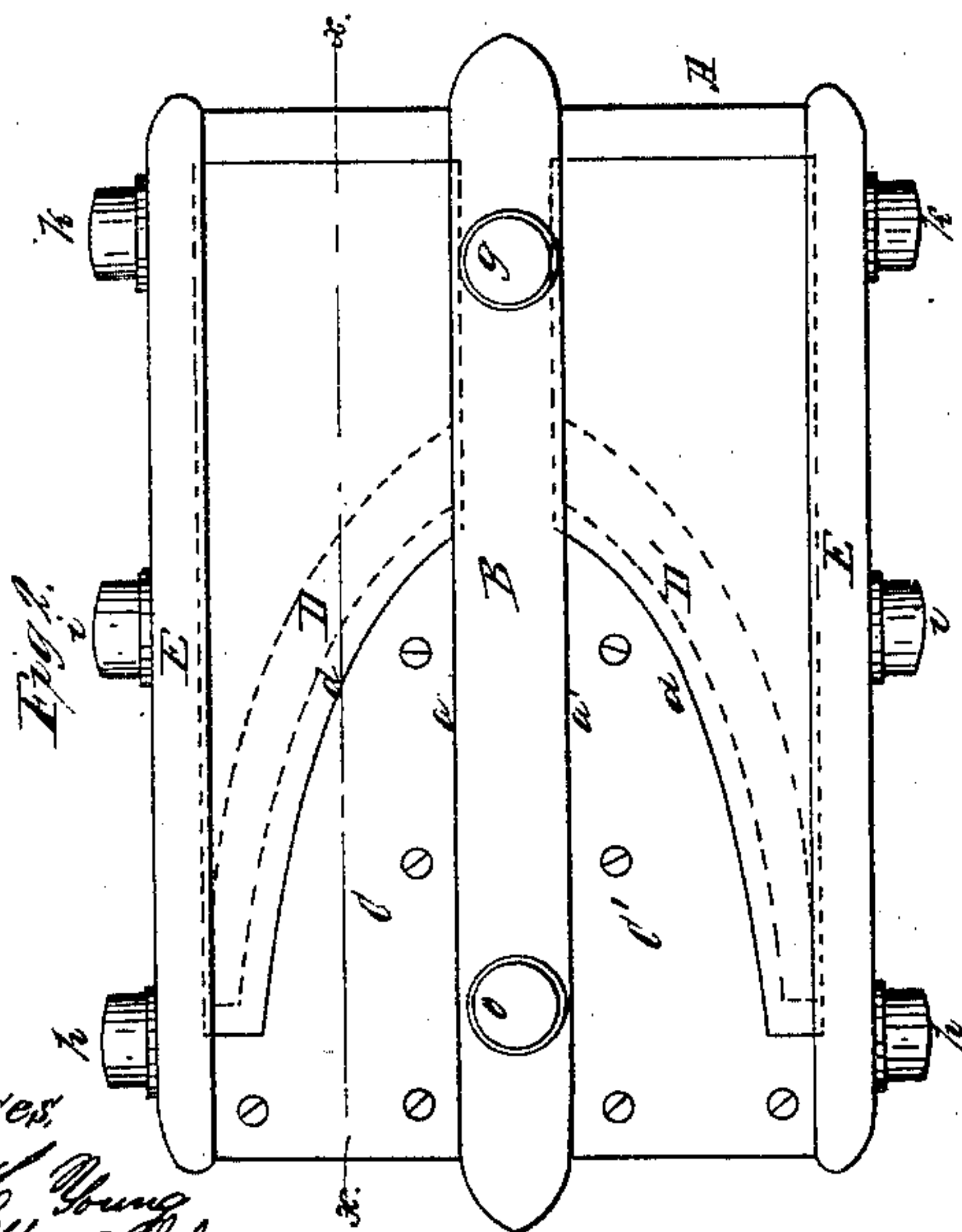
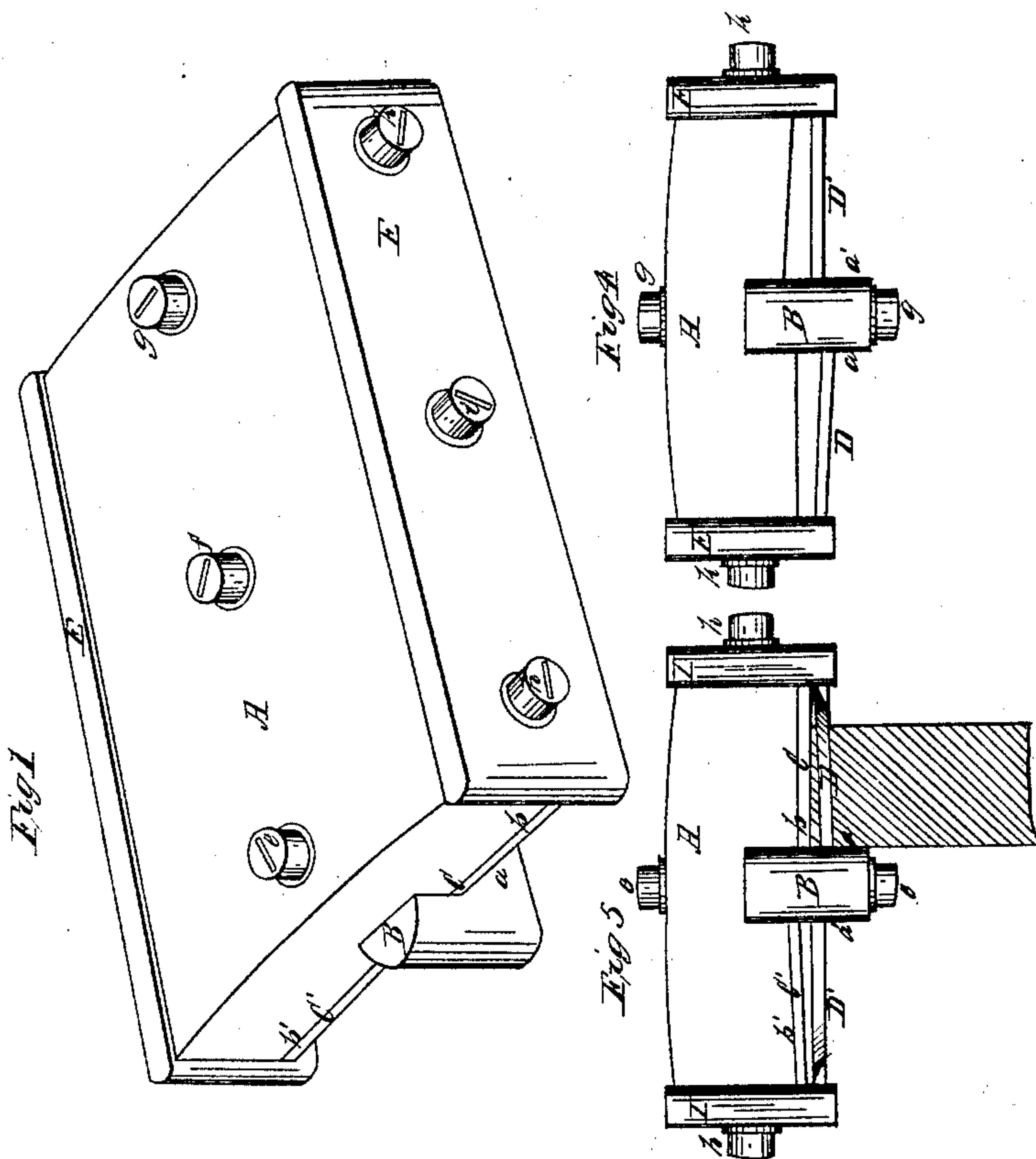


W. Baker,
Making Hoops.
Patented Aug. 2, 1859.

N^o 24,917.



Witnesses
Charles H. Young
Charles W. Ashley

Inventor.
W. Baker

UNITED STATES PATENT OFFICE.

WILLIAM BAKER, OF EAST TEMPLETON, MASSACHUSETTS.

TOOL FOR RIVING HOOPS.

Specification of Letters Patent No. 24,917, dated August 2, 1859.

To all whom it may concern:

Be it known that I, WILLIAM BAKER, of East Templeton, in the county of Worcester and State of Massachusetts, have invented a
5 certain new and useful Improvement on Tools for Riving or Cutting Barrel and other Hoops, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing,
10 which forms part of this specification, and in which—

Figure 1 represents a view in perspective of a hoop riving tool constructed according to my improvement; Fig. 2 an inverted plan
15 or face view thereof; Fig. 3 a longitudinal section of the same, through the line $x x$ in Fig. 2; Fig. 4 a back end view of said tool; and Fig. 5 a front end view of the same.

The hoop riving tool represented in the
20 accompanying drawing, and which is designed to cut hoops for barrels or kegs of various kinds or sizes, is formed in part of a stock (A) the back of which may be arranged to lie uppermost when the tool is in
25 use. The inner or under side of the stock is provided with a longitudinal and central or intermediate projecting strip (B) designed to form guiding surfaces (a, a') on
30 either side of it to direct and steady the tool in its run along or over the edge of a plank or other piece of stuff. On opposite sides of this strip (B), or on either side of the guiding
35 surfaces (a, a'), the under portion or face of the stock (A) is constructed to form guiding surfaces or faces differing in direction to each other or to the guiding surfaces
40 (a, a') of the strip (B) with which they are designed to act in concert. These stock faces (b, b') may be made by suitably cutting or
45 shaping the stock itself, or they may be formed by smooth metallic or other plates (C, C') secured to the inner face or faces of the stock.

Supposing the sides or guiding surfaces
45 (a, a') of the strip (B) to be parallel to each other, and the strip (B) to project in relation to the stock as shown in the drawing, then the one stock face (b) should be situated or shaped so as to be at right angles
50 or thereabouts to the guiding surface (a) of the strip which is adjacent to it, and the other stock face (b') be arranged to occupy a slightly inclined position to that guiding
55 surface (a') of the strip which is adjacent to it. Occupying a reverse set to these stock faces (b, b'), and at a suitable distance from

or below them, are knives (D D') of oblique or curved form along their front edges (d, d') to secure to them a drawing cut. These knives may rest along their inner sides or
60 edges in the sides of the projecting strip (B) and be carried along their outer sides or edges by side pieces (E E) to the frame or stock, and these several knife carrying parts or pieces, including the intermediate guiding
65 strip, may be so connected with the stock by means of slots and suitable screw fastenings (e, f, g , and h, i, k) as to be adjustable to permit of the knives being arranged closer
70 to or farther from the stock faces (b, b') according to the thickness of hoop or hoops required to be cut. By reverse set of the knives to the stock faces is meant their situation across the stock and relatively to the
75 guiding surfaces (a, a') of the intermediate strip. Thus to accord with the disposition of the guiding surfaces of the intermediate strip and stock-faces shown in the accompanying drawing, the knife (D), which is
80 below the stock face (b) that lies at right angles to the guiding surface (a) of the strip, is not parallel to said stock face but lies obliquely to it and parallel to the adjoining stock-face (b') on the other side of
85 the strip; and the other knife (D'), which is below the stock face (b') that lies in an inclined direction to the guiding surface (a') of the strip, is arranged at right angles to said guiding surface and parallel to the
90 adjoining stock-face (b) on the other side of the strip. From this description of construction or arrangement of parts, it will readily be seen that such combination of
95 double knives with double stock-faces, essentially differs from a mere arrangement of straight or oblique cutters and corresponding stock-faces as found in rabbeting planes and other cutting implements, and neither
100 disposition of the cutters is here claimed separately, nor yet the mere use of a guiding strip which is common to many kinds of
105 planes some of which employ knives of a sloping form or drawing cut. This distinction and the peculiar novelty of the combination here referred to will be made yet more apparent from the following description of the operation of the tool.

Various appliances may be used for working the tool but whatever the propelling power adopted I prefer to connect it with
110 the tool at or about the center screws in the side pieces (E E) of the stock, to secure an

accommodating action of the implement to work upon a plank that is not straight. The tool is first run over the edge of an ordinary plank with its straight stock face (b) resting thereon. This causes the obliquely set knife (D), which lies below said straight stock-face, to cut off a hoop with its one edge thick and its other edge thin to suit the "swell" of the keg or barrel. This leaves the edge of the plank on a bevel corresponding to the inclination or set of the adjoining stock face (b') that, in the next operation of the tool, is made to rest on the plank; this causes the straight knife (D') immediately below the oblique stock-face (b') to cut off a further hoop or strip with its one edge thick and its other edge thin, and leaves the edge of the plank straight ready again for the first named stock-face (b) and its cutter (D); and so on in succession for either cutter and stock-face till the plank is cut up or as many hoops cut from it as required. By such a combination of knives and stock-faces, with suitable guiding surfaces, there need be no waste of material and hoops of equal or

corresponding tapering thickness may be cut in rapid succession with but little or no liability to breakage while being cut and the hoops delivered as smooth and straight or perfect as desired ready for use or bending. Of course the obliquity or set of the knives and stock-faces may be varied to suit different "swells" required in the cask or barrel and according to a greater or less deviation from a straight line of the guiding surfaces (a a') depthwise. These guiding surfaces may be, as here, on the opposite sides of one strip (B); or each stock-face and its cutter may have a guiding strip of their own.

I claim—

A hoop riving tool formed of a stock (A) provided with suitable guiding surfaces (a a') and differently arranged or set stock-faces (b b') and knives (D D'), for operation essentially as herein set forth.

In testimony whereof, I have hereunto subscribed my name.

WM. BAKER.

Witnesses:

CHARLES H. YOUNG,
CHARLES H. ASHLEY.