

L. Y. WILLIAMS.
MACHINE FOR CUTTING HEAD LININGS FOR BARRELS.
APPLICATION FILED SEPT. 12, 1907.

909,045.

Patented Jan. 5, 1909.

2 SHEETS—SHEET 1.

FIG. 1.

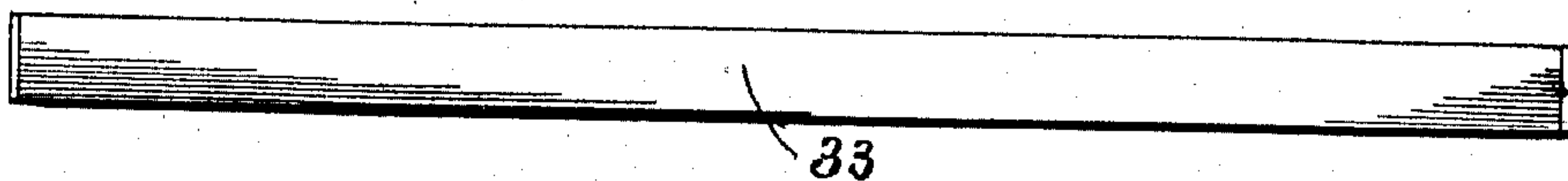


FIG. 4.



FIG. 2.

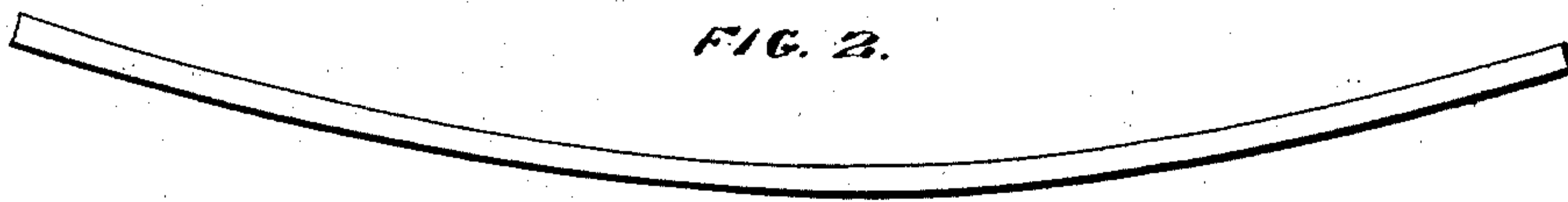


FIG. 3.



FIG. 5.

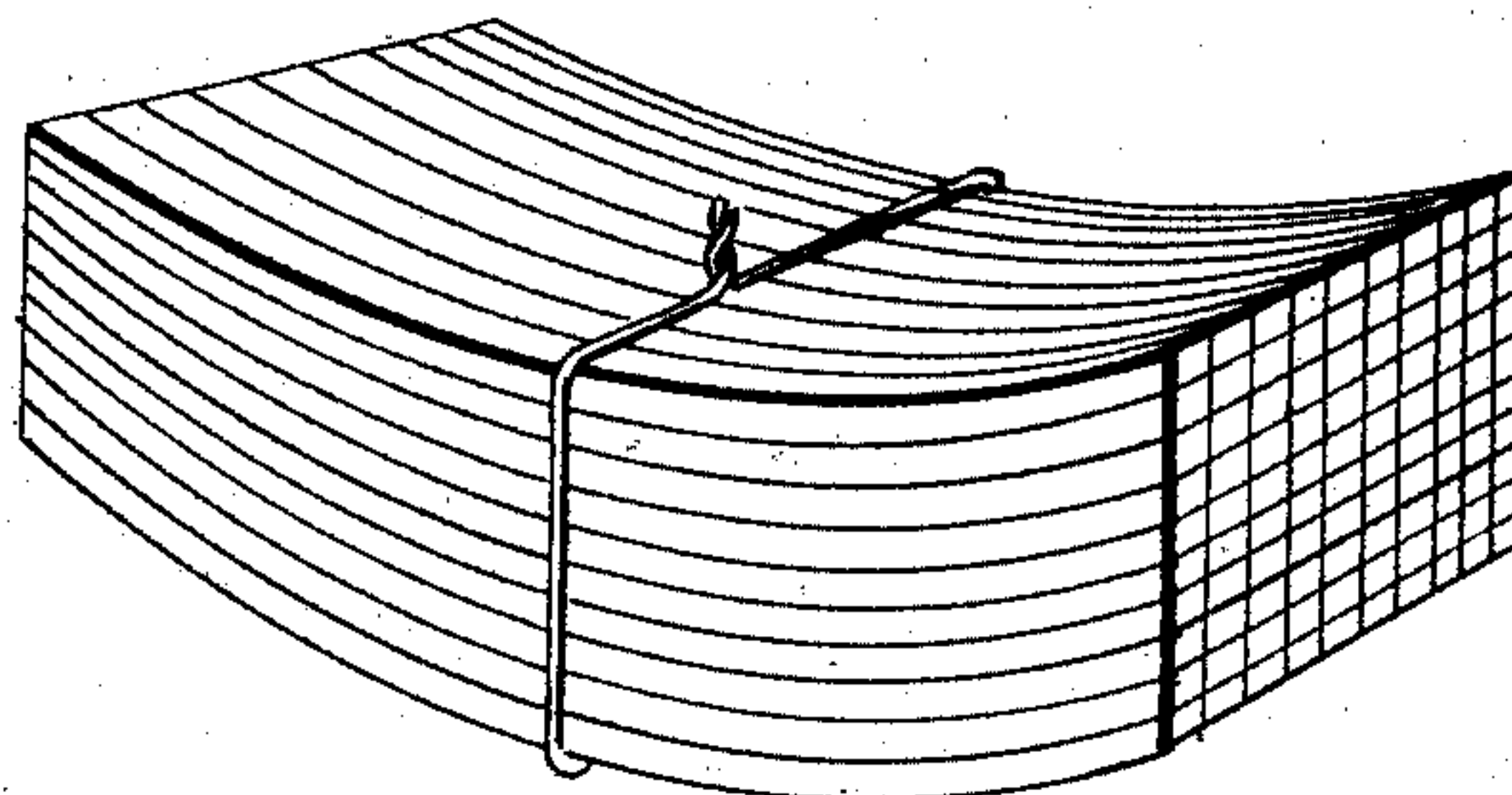


FIG. 6.

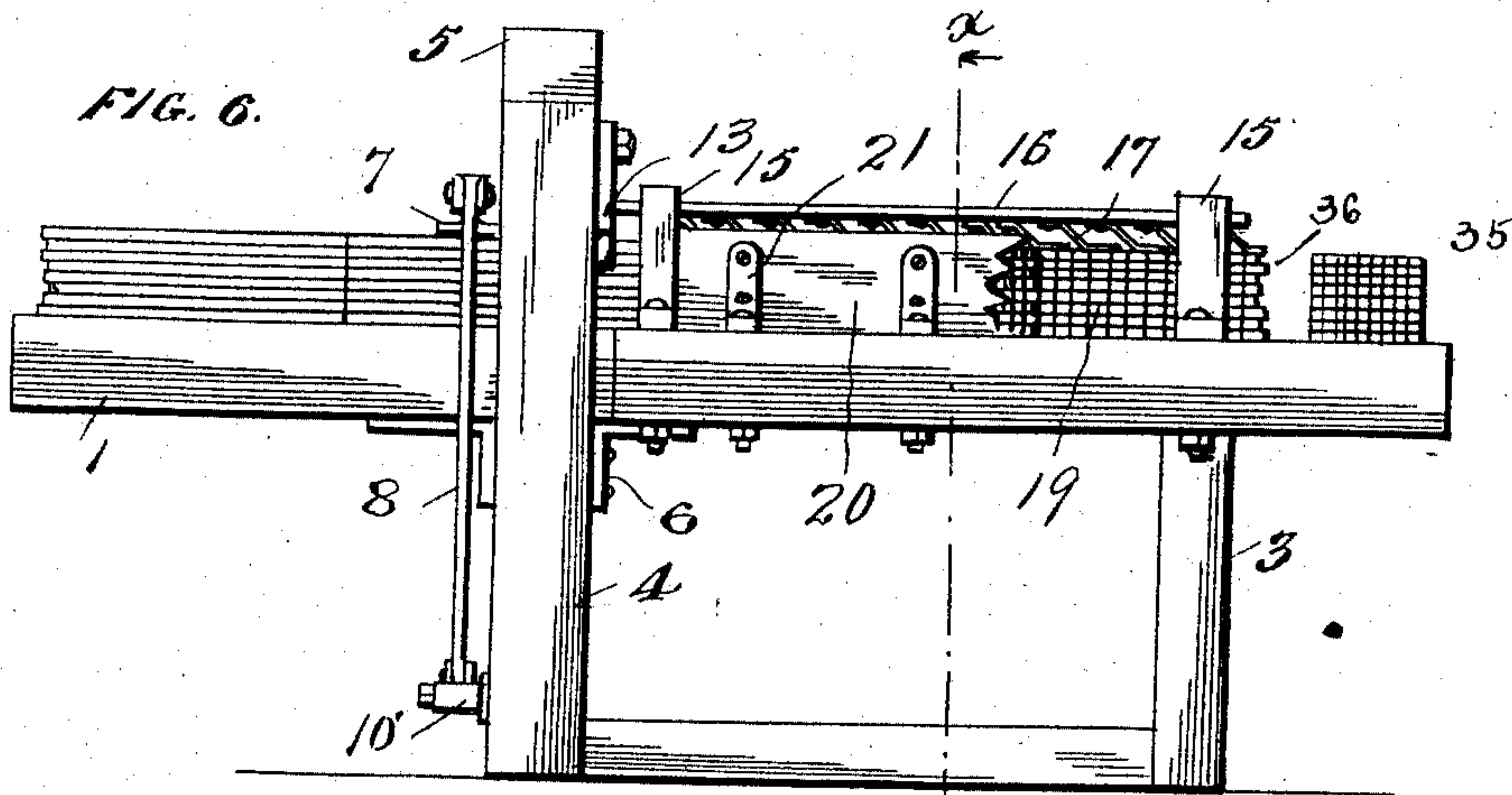
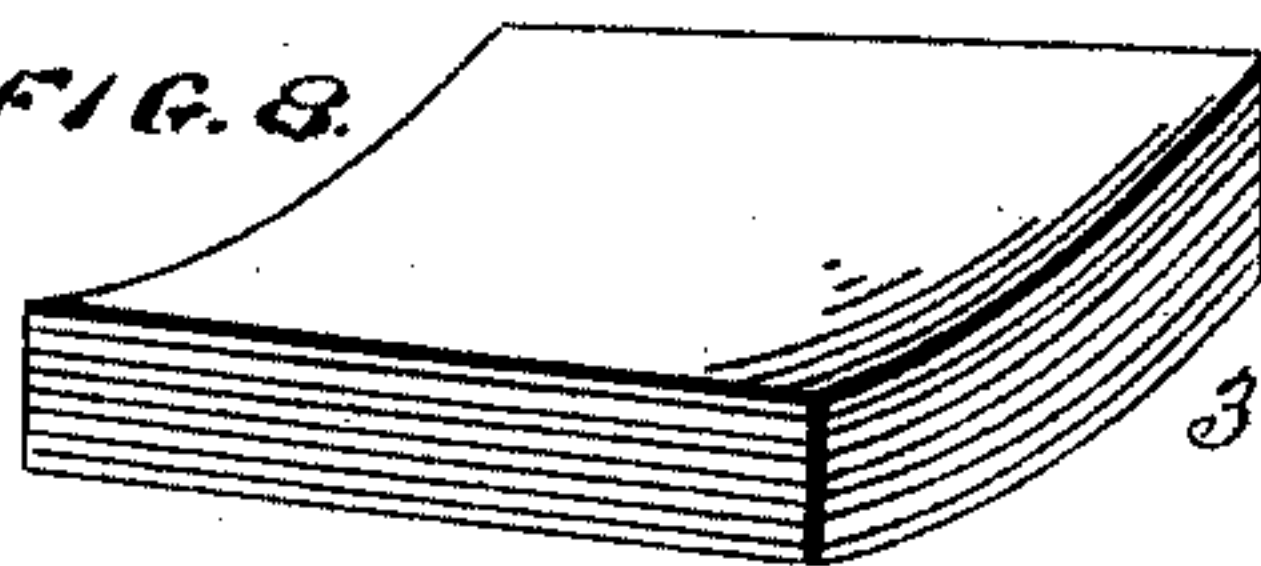


FIG. 8.



WITNESSES

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INVENTOR

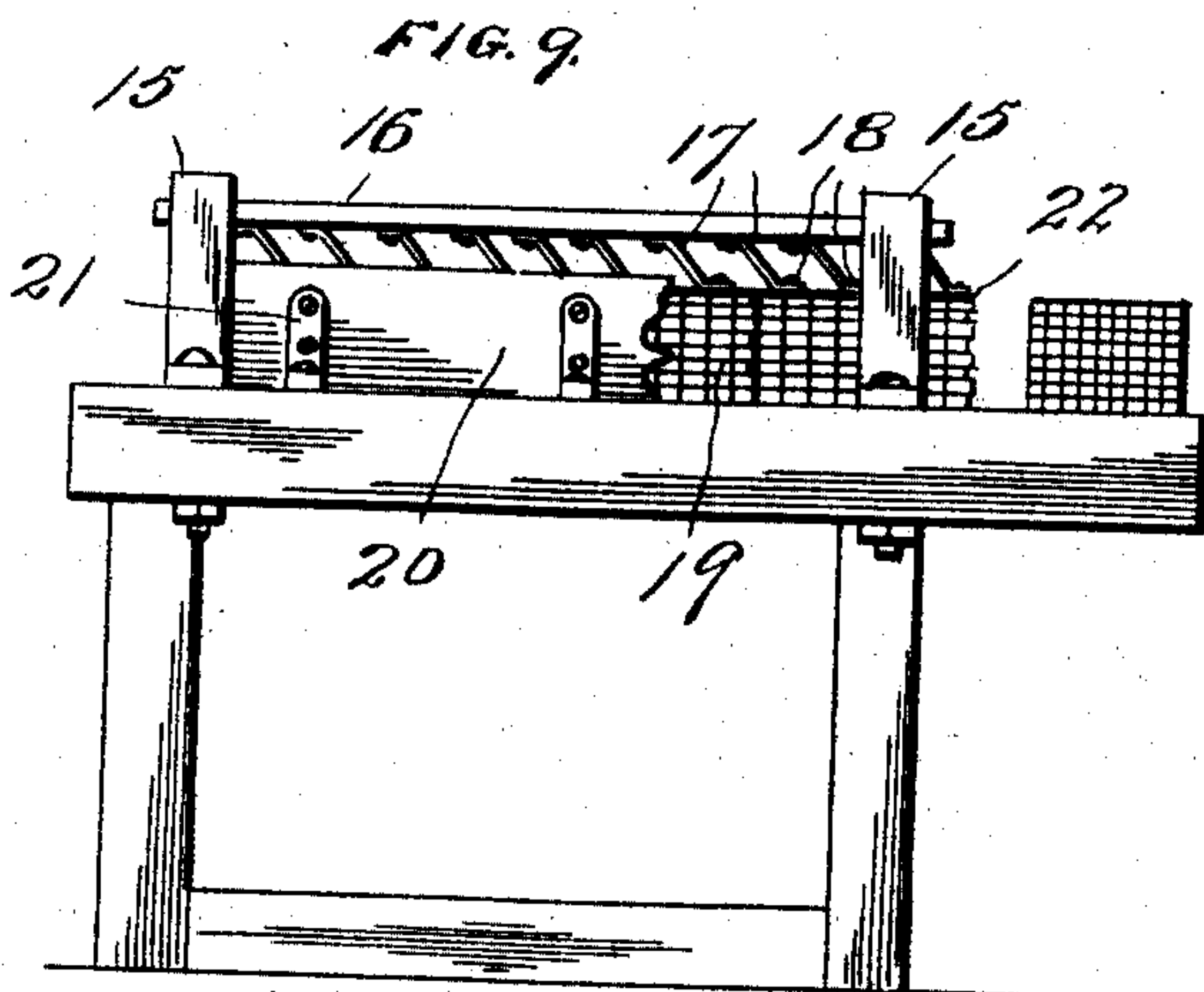
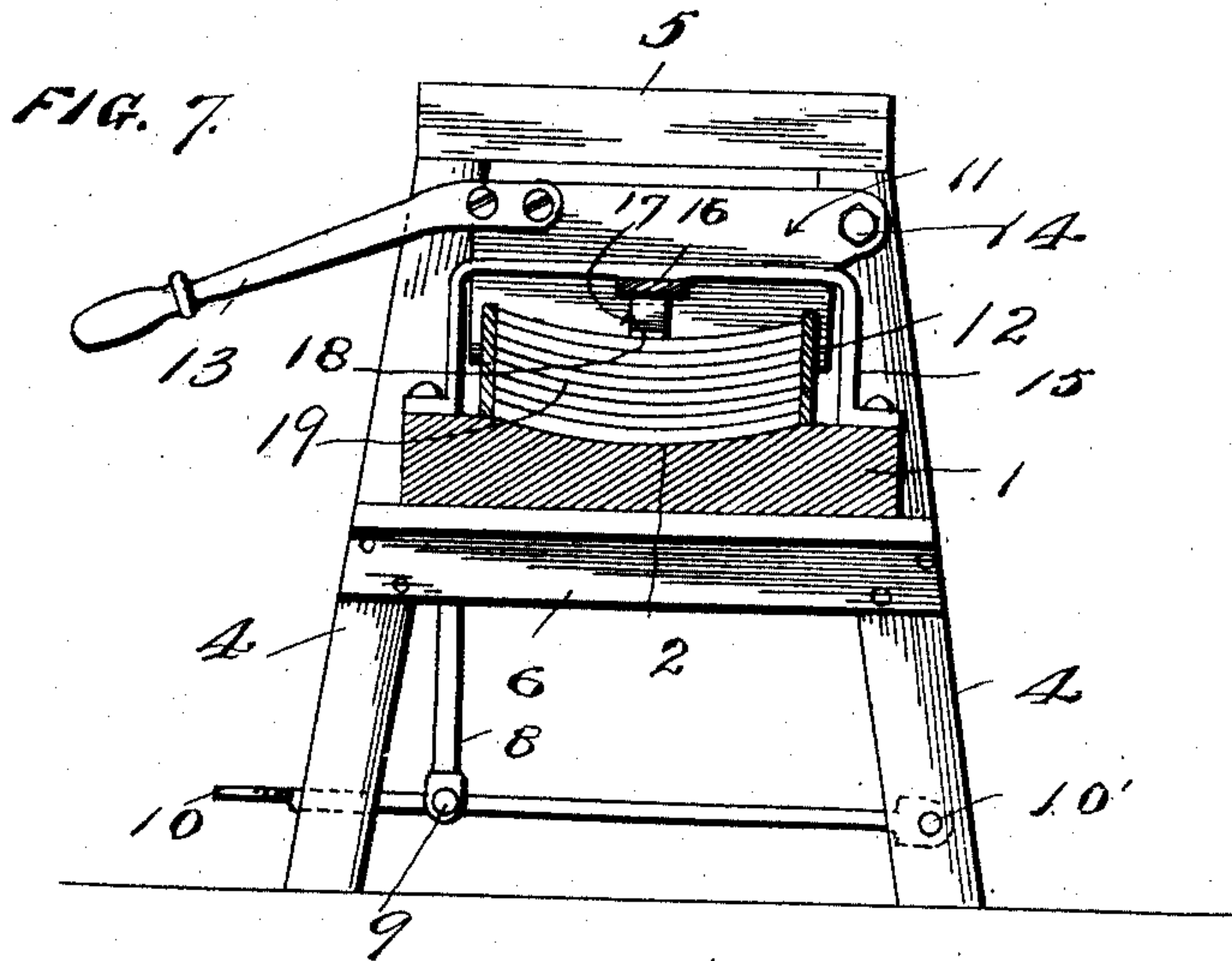
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2 SHEETS—SHEET 2.



WITNESSES
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UNITED STATES PATENT OFFICE.

LACEY Y. WILLIAMS, OF TOLEDO, OHIO.

MACHINE FOR CUTTING HEAD-LININGS FOR BARRELS.

No. 909,045.

Specification of Letters Patent.

Patented Jan. 5, 1909.

Application filed September 12, 1907. Serial No. 392,526.

To all whom it may concern:

Be it known that I, LACEY Y. WILLIAMS, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented new and useful Improvements in Machines for Cutting Head-Linings for Barrels, of which the following is a specification.

My invention relates to machines for the manufacture of head-linings for barrels, the object being the provision of a machine by which linings may easily and cheaply be produced.

A further object is the provision of means for holding the cut linings in their normal parallel positions so they can readily be secured in bundles, thus obviating the necessity of sorting and handling each lining which would be necessary should they be allowed to fall promiscuously after being cut.

The invention consists in certain novelties of construction and combinations of parts hereinafter set forth and claimed.

The accompanying drawings illustrate one complete example of the invention and a modification of the delivery bed or table constructed according to the best modes I have so far devised for the practical application of the principle.

Figure 1 is a plan view of a single head lining. Fig. 2 is an edge view. Fig. 3 is an end view of Fig. 2. Fig. 4 is a cross section. Fig. 5 shows a bundle of head linings prepared for shipment. Fig. 6 is a side view of a machine for cutting the linings from a plurality or multiple of concavo-convex sheets of wood or other suitable material. Fig. 7 is a section on line $x-x$ of Fig. 6 looking in the direction of the arrow. Fig. 8 shows a plurality of concavo-convex sheets of wood arranged to be simultaneously cut into head linings. Fig. 9 is a side view of a modified type of delivery table for the cut linings, the same being made separate from the receiving portion of the table or bed.

The machine shown by Figs. 6 and 7 consists of a table or bed 1 with a receiving end at the left and a delivery portion at the right, both having concave top surfaces 2, legs 3 near one end, uprights 4, 4 with a cross piece 5, a cross piece 6 below the bed and upon which the bed rests, as shown; a presser-foot 7 carried by an upright 8 which latter is bolted at 9 to a pedal 10, which pedal is pivoted to one of the uprights 4 at the point 10' in any suitable manner; a

knife 11 having a convex beveled edge 12, a handle 13, and pivoted at 14 to one of the uprights so the plane of its reciprocating movement is at right angles to the top surface of the receiving end of the bed or table; and means for holding the cut linings embracing two U-shaped straps 15 with their ends secured to opposite sides of the table, a bar 16 with its ends located beneath the central portion of the straps, as shown, and a series of springs 17 each fastened at one end to the under surface of the bar and with their free ends 18 frictionally bearing upon the top surfaces of the cut head linings 19 so as to hold them in line with each other. Guides for the ends of the cut linings may also be provided and such guides are shown consisting of vertical boards 20 secured by angle irons 21 to the bed or table.

Fig. 9 illustrates a modification of the delivery end of the table or bed. It is made detachable from the receiving portion and frame which carries the knife. The lower ends of the springs 17 are fastened to a metallic strip 22 which strip bears upon the top surfaces of the cut linings.

The machine is used as follows: First, a block of suitable timber, cut to the desired shape, is steamed or soaked in water; secondly, the said block is sawed into thin sheets or boards or severed by a reciprocating knife operating longitudinally of the grain of the wood; thirdly, the thin sheets are passed between rollers or otherwise bent or pressed to a concavo-convex shape; fourthly, the bent sheets may be placed in a former till set or sufficiently dried to maintain their concavo-convex shapes; fifthly, the sheets are arranged in layers, Fig. 8, and placed upon the concave surface 2 of the receiving end of the bed or table 1 of the machine, the edges projected a suitable distance beyond the plane of the knife 11, the presser foot 7 forced down upon the sheets so as to hold them firmly and the projecting edges clipped off or severed from the main bodies of the sheets by the reciprocating knife which moves in a plane at right angles to the top surface of the receiving end of the bed or table. The sheets of wood are repeatedly fed and cut longitudinally of the grain and the several cut strips or linings 19 in layers, held in line by the action of the springs 17, are forced along the bed or delivered by the

advancement under the knife of the sheets in the rear. Each lining is of the shape shown by Figs. 1 to 4 of the drawings, that is, each has a concave surface 33, a convex surface 34, and is substantially rectangular in cross section, as shown by Fig. 4.

By the common method of making head linings they are cut from a flat strip of wood by saws and fed between rollers to give them concavo-convex shapes. From the rollers they fall in a promiscuous heap without order. The individual linings are then collected and united in bundles which operation involves much labor and time. By my method of cutting the linings in multiple and maintaining them in their upright parallel and regular relative positions they can be removed from the table *en masse*, as shown at 35 in Fig. 6, the waste material 36 being discarded and the linings united to form a bundle, see Fig. 5, ready for shipment and with very little labor.

Means for holding the cut linings shown by Fig. 9 are substantially the same as illustrated in Figs. 6 and 7. The metallic strip 22, however, is in frictional contact with the top surfaces of the linings so that a continuous bearing surface is provided.

It will be observed that the top surface of the receiving end of the table is at right angles to the plane of the path of the knife and that the head linings are rectangular in cross section, and that the machine is especially adapted for cutting such linings. However, the means for retaining the cut linings in their proper relative positions is of special importance and the same may be used in connection with machines for cutting linings of other shapes and configurations.

What I claim is:

1. The combination in a machine for cut-

ting head linings, of a bed or table having a receiving portion and a delivering portion; a knife or cutter located between said portions suitably supported and movable in a plane at right angles to the plane of the receiving portion of the table to clip strips from the sheets of material; and means in connection with the delivering end of the table or bed for frictionally engaging the surfaces of the cut linings to hold them substantially in alinement.

2. The combination in a machine for cutting head linings, of a bed or table having a receiving portion and a delivering portion; a knife or cutter located between said portions suitably supported and movable in a plane at right angles to the plane of the receiving portion of the table to clip strips from the sheets of material; means for holding said sheets while being cut; and means in connection with the delivering portion of the table adapted to yieldingly engage the surfaces of the cut linings and to hold them substantially in alinement.

3. The combination in a machine for cutting head linings, of a bed or table having a receiving portion and a delivering portion; a knife or cutter located between said portions suitably supported and movable in a plane at right angles to the plane of the receiving portion of the table to clip strips from the sheets of material; and means in connection with the delivering portion of the table comprising springs adapted to press against the cut linings to hold the same substantially in alinement.

In testimony whereof I affix my signature in presence of two witnesses.

LACEY Y. WILLIAMS.

Witnesses:

PEARL MYGATT,
R. W. BARTON.