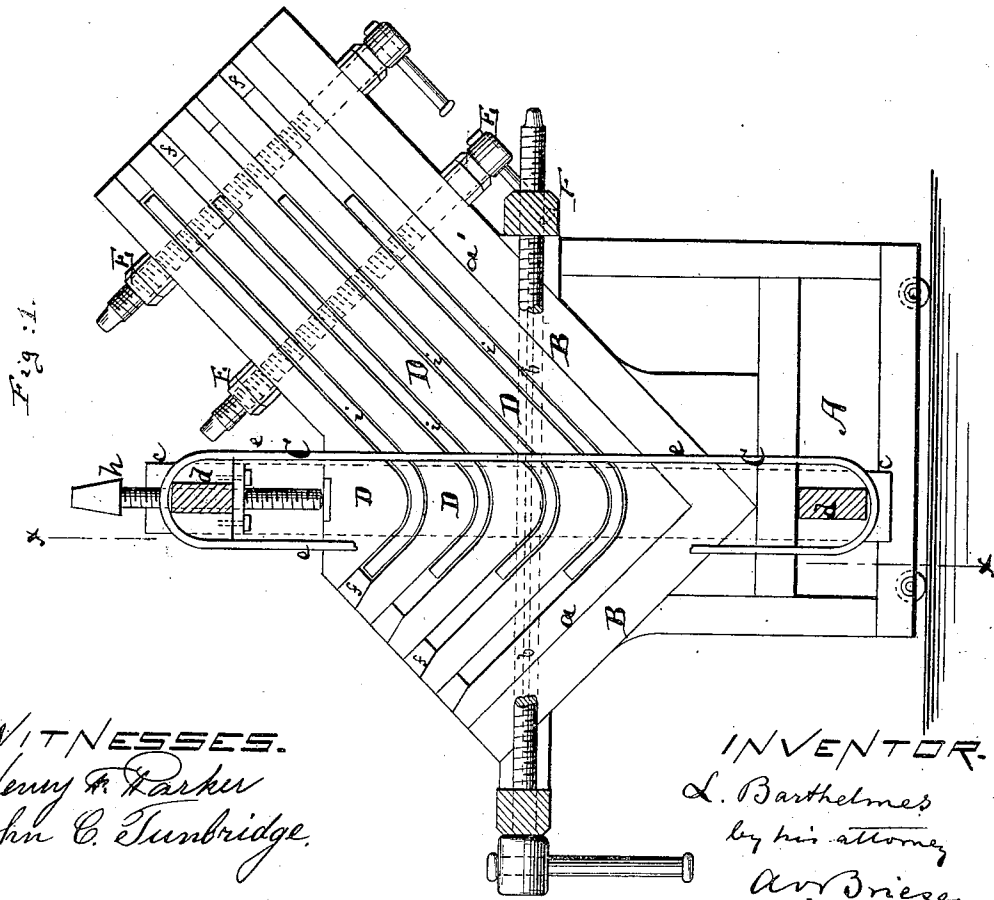
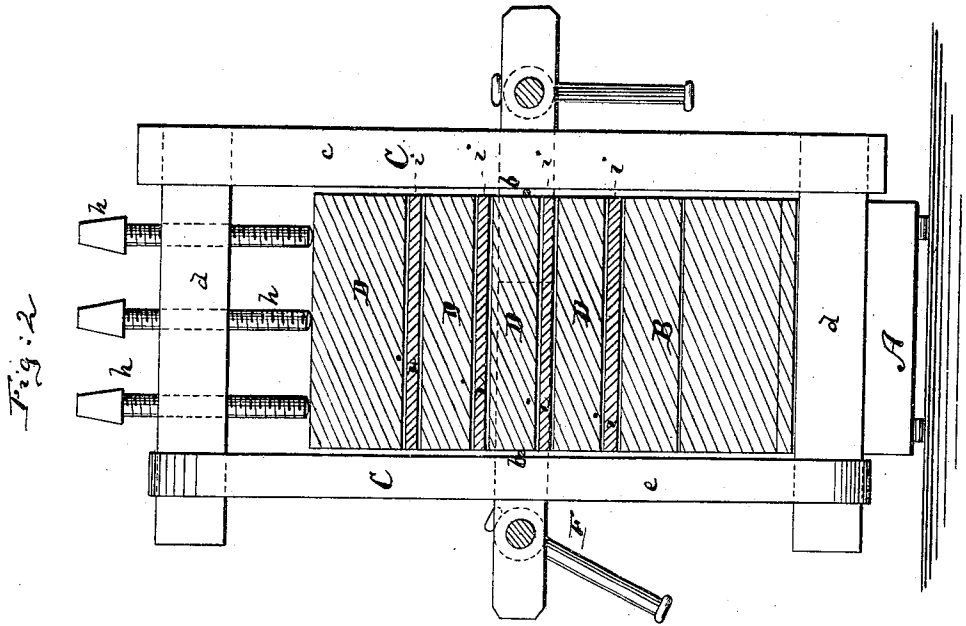


(No Model.)

L. BARTHELMES.
Wood Bending Machine.

No. 242,249.

Patented May 31, 1881.



WITNESSES.
Henry A. Parker
John C. Tunbridge.

INVENTOR.
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UNITED STATES PATENT OFFICE.

LUDWIG BARTHELMES, OF ASTORIA, NEW YORK.

WOOD-BENDING MACHINE.

SPECIFICATION forming part of Letters Patent No. 242,249, dated May 31, 1881.

Application filed September 16, 1880. (No model.)

To all whom it may concern :

Be it known that I, LUDWIG BARTHELMES, of Astoria, in the county of Queens and State of New York, have invented a new and useful
5 Improvement in Wood-Bending Machines or Presses for Bending and Veneering Piano-Forte Rims, of which the following is a specification.

The object of my invention is to construct a
10 press for bending rims of piano-fortes to the shape required, and at the same time veneering the rims, by which press a number of the rims may be operated on at once.

My invention consists in a press bed of rectangular form having combined with it loose
15 presser-blocks of the shape to which the rims are to be pressed, and fitted with clamping shackles and screws for compressing and holding the rims, which are placed between the
20 blocks in the press.

The improved press is shown in the accompanying drawings, wherein Figure 1 is a side elevation. Fig. 2 is a vertical section on line
25 *x x* of Fig. 1.

A is the stand of the press supporting the bed B, which consists of the short side portion,
30 *a*, and long side, *a'*, forming the rectangular bed, that is supported diagonally on the frame A. These side pieces, *a a'*, are tied by bolts *b*, and are fixed with the angle at the center of stand A.

Upon the stand A is fitted a shackle, C, composed of a side bar, *e*, end bars, *d d*, and strap
35 *e*, connecting the end bars, *d*. The upper end bar, *d*, is fitted with screws *h h*. The shackle C operates vertically in line with the angle of the rectangular bed B.

D are the angular presser-blocks, made to the shape to which the rims are to be bent,
40 and fitted with blocks *f* at their ends, which

retain the blocks D apart and prevent end movement of the rims.

E are shackles or clamps placed around the long side *a'* of the bed and the blocks D, and fitted with screws for clamping those parts together. Another suitable clamp, F, is placed
45 horizontally around the side pieces, *a* and *a'*.

In using this press the shackles E and the strap *e* of shackle C are first removed, and the blocks D then put in place with the rims,
50 *i*, to be bent between them. The strap *e* and shackles E are then applied and the screws of said shackles turned to bring the blocks tightly together. By these means four or more rims
55 may be pressed at once and the same bend given to each.

The veneering may be applied to the rims immediately before they are placed in the press, and by the bending operation will be pressed tightly to place. The central vertical pressure
60 obtained by my invention is the essential feature of my invention.

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

In a wood-bending machine, the combination of the upright frame A, with the screws
65 *h*, angular fixed bed B, having long side *a'* and short side *a*, rigidly united with each other and with frame A, and placed diagonally upon the frame A point downward, with the upright
70 shackle C and one or more angular presser-blocks, D, each presser-block D being one single angular piece to match the angle of the bed B, substantially as herein shown and described.

LUDWIG BARTHELMES.

Witnesses:

WILLY G. E. SCHULTZ,
JAMES TURK.