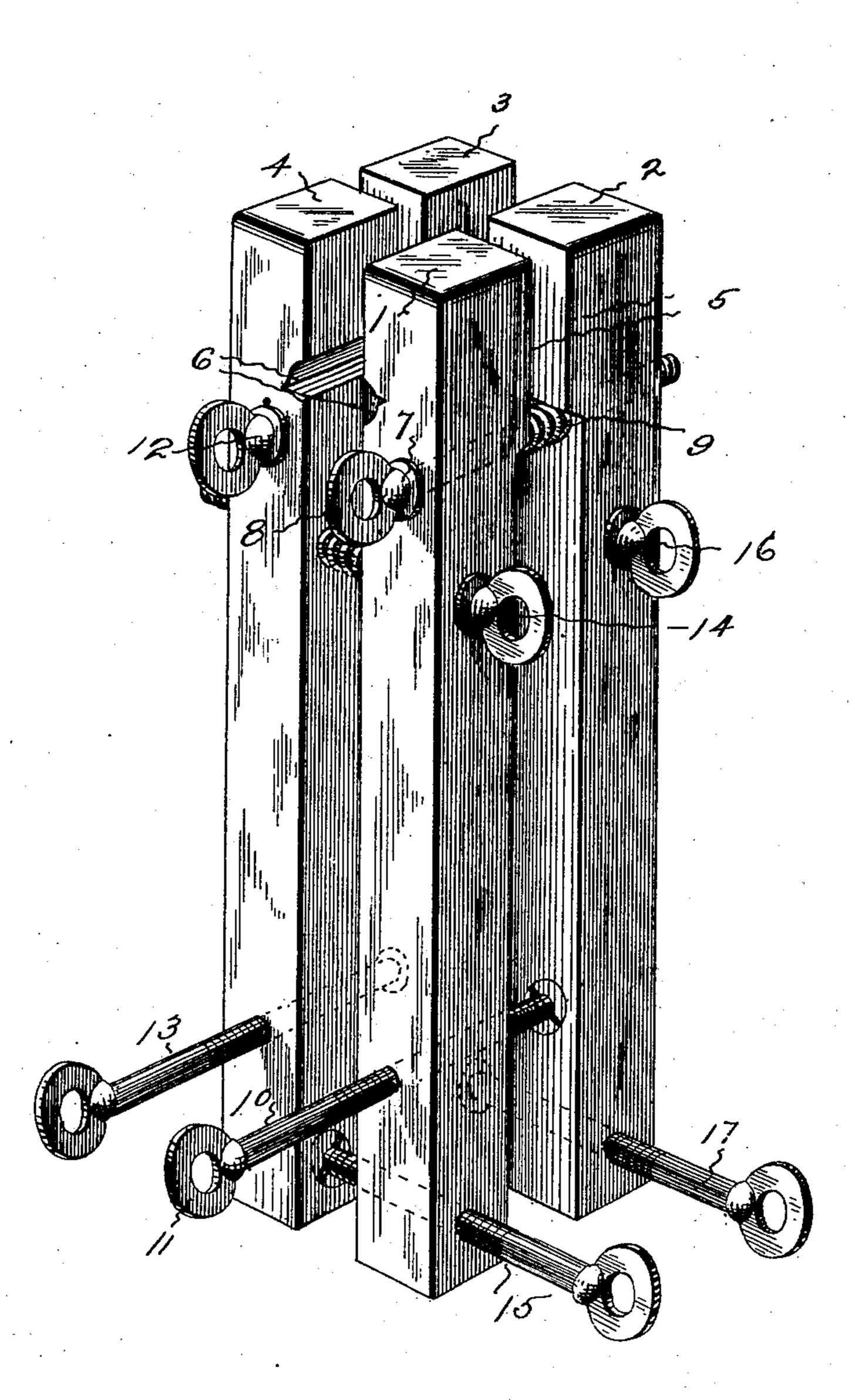
No. 683,184.

Patented Sept. 24, 1901.

## J. P. ROCKWELL. CLAMP.

(Application filed June 27, 1901.)

(No Model.)



Witnesses C. F. Kilgore. V. R. H. boomb. James P. Rockwell, les Adery Milliams Ottorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

## United States Patent Office.

JAMES P. ROCKWELL, OF EAST WINDSOR HILL, CONNECTICUT.

## CLAMP.

SPECIFICATION forming part of Letters Patent No. 683,184, dated September 24, 1901.

Application filed June 27, 1901. Serial No. 66,218. (No model.)

To all whom it may concern:

Be it known that I, JAMES P. ROCKWELL, a citizen of the United States, residing at East Windsor Hill, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Clamps, of which the following is a specification.

This invention relates to those clamps which are particularly designed for forcing together to the glued edges of thin pieces of wood.

The object of the invention is to provide a very simple, inexpensive, and convenient clamp which is so constructed that very thin pieces of wood may be gripped and the abutting ends or edges of new joints, old joints, cracks, or splits extending in the same plane or planes at right angles with each other may be tightly forced together while glue or other adhesive material which has been applied is setting.

The embodiment of the invention that is illustrated by the accompanying drawing has four rectangularly - arranged blocks, each block having a pair of screws extending through each end at right angles with each other, so that each block is connected at each end with both of the adjacent blocks.

The drawing shows a perspective view of

one of the clamps.

The four blocks 1, 2, 3, and 4, which are illustrated, are practically similar in form. These blocks may be made of wood, iron, or any other suitable material, of any desired size, and may or may not be provided with 35 inwardly-extending jaw-faces 5 or grooves 6 in the jaw-faces. A screw 7, with a head 8, passes loosely through a smooth perforation in the block 1 and through a threaded perforation near one end of the block 2. By means of 40 this screw the jaw ends of the blocks 1 and 2 may be drawn toward or opened from each other. A spiral spring 9 is placed upon this screw to thrust these two blocks apart. A screw 10, with a head 11, extends through a 45 threaded perforation near the other end of the block 1 and butts against the block 2. By turning this screw the jaw ends of the blocks 1 and 2 may be forced together or loosened from each other as a common wood-50 clamp. The blocks 4 and 3 are connected together in a similar manner by the compression-screw 12 near one end and expansion-

screw 13 near the other end, so that the jaw ends of these blocks may be forced toward or loosened from each other. The blocks 1 and 55 4 are connected by the compression-screw 14 and expansion-screw 15, so that their jaw ends may be forced toward or loosened from each other, and the blocks 2 and 3 are similarly connected by the compression screw 16 60 and the expansion-screw 17, so that they may be forcibly opened and closed from each other. By means of the screws 7 and 12 the jaw ends of the blocks 1 and 4 may be moved toward or from the jaw ends of the blocks 2 and 3, 65 respectively, and by means of the screws 14 and 16 the jaw ends of the blocks 1 and 2 may be moved toward or from the jaw ends of the blocks 4 and 3, respectively. If it is desired to glue together the ends or edges of 7c two thin pieces of wood to form a new joint or to mend an old joint, one piece, or the piece on one side of the joint or crack, may be clamped between the blocks 1 and 2 by the screws 7 and 10. The other piece, or the piece 75 on the other side of the crack, is then clamped between the blocks 3 and 4 by the screws 12 and 13. Then by means of the screws 14 and 16 and 15 and 17 the two parts are forced together, so that the edges will be joined or the 80 crack closed and held until the adhesive material has become set. If it is desired to fasten one piece at right angles to another piece, one piece may be clamped between the jaws 1 and 2 and the other piece clamped between 85 the jaws 1 and 4 and 2 and 3 against the edge of the piece held between blocks 1 and 2. Round or rectangular pieces may be held by clamping them in the grooves in the jawfaces. Many shapes of thin or thick pieces 90 may be gripped and then forcibly brought together by means of this clamp. Pieces of this wood which have spread apart or which it is desired to draw together edgewise to form a special shape may be readily fastened 95 between the jaws and then brought together by means of this clamp. This clamp is particularly serviceable for mending cracks in such articles as violin sounding-boards and cases which are very thin and of peculiar 100 shape.

I claim as my invention—

1. A clamp consisting of four rectangularlyarranged blocks each of which is connected

with both of the adjacent blocks by a pair of screws, one pair extending at right angles to the other pair, substantially as specified.

2. A clamp consisting of four rectangularlyarranged blocks connected together in pairs by compression and expansion screws and each one of the pairs connected with each

of the other of the pairs by compression and expansion screws, substantially as specified.

JAMES P. ROCKWELL.

Witnesses:

V. R. HOLCOMB, H. R. WILLIAMS.