HAROLD P. JOHNSON, OF CONCORD, NEW HAMPSHIRE,

PICTURE-FRAME AND DOOR CLAMP.

1,303,626.


To all whom it may concern:

Be it known that I, HAROLD P. JOHNSON, a citizen of the United States, residing at Concord, in the county of Merrimack, State of New Hampshire, have invented certain new and useful Improvements in Picture-Frame and Door Clamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a picture frame and door clamp.

An object of the invention resides in the provision of a clamp of this character by means of which the corners of a door or picture frame may be drawn tightly together.

A further object of the invention resides in the provision of a clamp which may be very readily operated by one man.

A still further object of the invention resides in so constructing the clamp that it will adapt itself, as it is tightened, to the particular door or frame on which it is used.

A still further object of the invention resides in so constructing the holding means for the corners of the door or frame that the mitered joints will be forced together to facilitate the adhesion of the glue.

With these and other objects in view such as will appear as the description progresses, my invention comprises the combination and arrangement of parts as set forth in and falling within the scope of the appended claim.

In the drawing: Figure 1 is a plan view of a clamp constructed in accordance with my invention, showing the same applied to a picture frame. Figure 2 is a side elevation thereof. Figure 3 is a vertical sectional view on line 3-3 of Figure 1, Figure 4 is a similar view on line 4-4 of Figure 1, Figure 5 is an enlarged detail of one of the holding members for the corners with the degree of angularity in connection therewith, and Figure 6 is an enlarged detail showing the manner in which the tightening screws are connected to the adjacent holding members.

In the drawing I have illustrated a picture frame 1, conventionally, and have illustrated my device in place thereon. This device comprises a rod 2 which is rectangular in cross section and is provided from a point adjacent its center to one end with a plurality of notches 3 which are located on the under face of the rod in spaced relation to each other. Slidably mounted on the rod is a sleeve 4 which is provided with a lip 5 adapted to engage in any one of the notches 3 which sleeve has an upwardly extending dove-tailed tongue 6 which fits into a similarly shaped socket in a casting 7 to which a holding member 8 for the frame is pivoted at 9. This holding member 8 is provided with an angular recess 10, at the intersecting sides of which a substantially semi-circular enlargement 11 is formed so that the extreme corner of the frame will not be abraded. The degree of angularity of the recess 10 is less than 90° and is in actual practice 88°. This sleeve 4 is prevented from displacement from the end of the rod 2 by a leg 12 which is held in place upon the rod by a removable pin 13 which may be removed to permit of the withdrawal of the sleeve 4. Slidably mounted on the other end of the rod 2 is a sleeve 14 which is prevented from displacement from the end of the rod by a leg 15. This sleeve 14 is provided with an upwardly extending tongue which has a dove-tailed portion 16 adapted to fit into a complementary socket in the casting 17 and a T-shaped socket 18 in which the end of a screw 19 is mounted, the said end being configured similarly to the socket and passing through a screw threaded opening in the leg 15. This screw is provided with an operating handle 20. Pivoted at 21 to the casting 17 is a holding member 22 which is similar in form to the member 8 and need not here be described in detail. It will thus be seen that when the screw 19 is operated and the sleeve 4 is held in a predetermined position by the engagement of the lip 5 with one of the notches 3, the holding members 8 and 22 will be forced together, and consequently the ends of the frame 1 which are located in recesses 10 in the holding members will be forced together and tightly clamped so that the glue or other adhesive will dry effectively to maintain the portions of the former in position.

A block 23 is slidably mounted on the rod 2 and is provided with pairs of ears 24 which extend from opposite sides thereof. Pivoted between one pair of ears is a rod 25 and between the other pair is a rod 26 which is provided with a plurality of spaced notches 27. A sleeve 28 is slidably mounted on the rod 26 and is provided with a lip which is adapted to engage in one of the
notches 27 and to which sleeve a holding member 29 similar to the holding member 8 is pivoted. This sleeve 28 is prevented from displacement by a leg 30. Slidably mounted on the rod 25 is a sleeve 31 which is provided with a T-shaped socket 32 in which the end of a screw 35 is pivoted which screw passes through and is in screw threaded engagement with a leg 34 and is provided, on its end, with a handle 36. It will be obvious that when the screws 19 and 33 are operated to tighten the holding members on the corners of the frame that the holding members, being pivoted will adjust themselves to the frame, and the rods 25 and 26 being pivoted to the block 23 which is slidable on the rod 2 will assist in this adjustment. Furthermore, the block together with the rods 25 and 26 carried thereby may be removed from the rod 2 and the rod 2 together with the holding members carried thereby used as a door clamp.

While I have illustrated and described a particular embodiment of the invention it has only been for the sake of convenience and I do not wish to be limited to that particular embodiment as it is obvious that numerous changes may be made in the details of construction without departing from the spirit of the invention or exceeding the scope of the claim.

What is claimed is:

The combination with a block, of a rod slidably therethrough, legs on the ends of the rod, bars pivoted to the block and extending in angular relation to the rod, legs supporting the ends of the bars, holding members mounted on the rod and bars and means carried by certain of the legs for adjusting said holding members to and away from each other.

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

HAROLD P. JOHNSON.

Witnesses:
A. Chester Clark,
Rolland R. Gove.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."