June 2, 1925. 1,540,622

R. M. HARRIS

MEASURING AND SQUARING DEVICE FOR SASH AND DOOR CLAMPING MACHINES

Filed Oct. 31, 1924

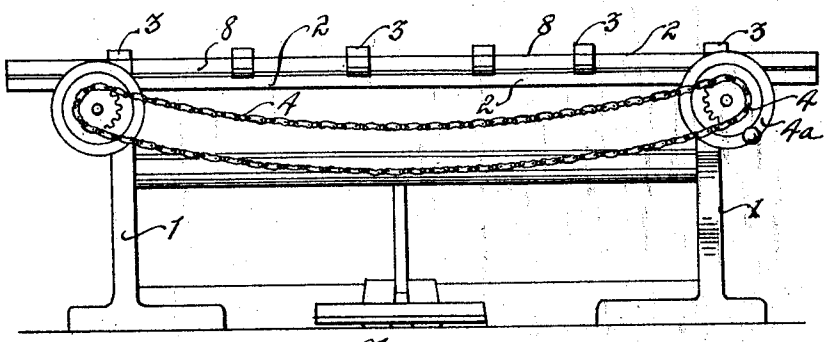


Fig. 1.

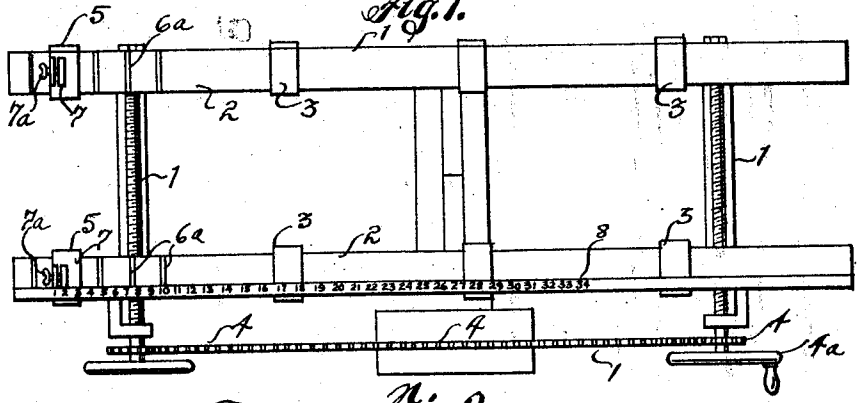


Fig. 2.

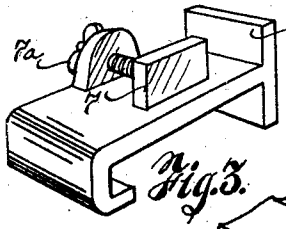


Fig. 3.

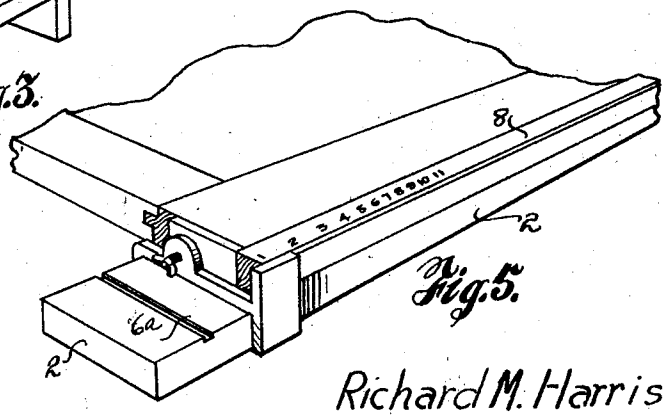


Fig. 5.

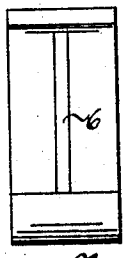


Fig. 4.

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UNITED STATES PATENT OFFICE.

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MEASURING AND SQUARING DEVICE FOR SASH AND DOOR CLAMPING MACHINES.

Application filed October 31, 1924. Serial No. 746,954.

To all whom it may concern:

Be it known that I, RICHARD M. HARRIS, a citizen of the United States, residing at Dallas, in the county of Dallas and State of Texas, have invented certain new and useful Improvements in Measuring and Squaring Devices for Sash and Door Clamping Machines, of which the following is a specification.

This invention relates to certain new and useful improvements in window sash and door clamping machines and refers more particularly to an arrangement of parts adapted to be used in connection with such window sash and door clamping machines, whereby positive alinement and exact measurement may be had in squaring said window frame and doors.

The primary object of the invention is the provision of such measuring devices which will obviate the necessity of employing the use of squares and other means of measurement, for the frames, such measurement being accomplished while the window frame or door remains within the machine which is obviously a great time saver in the construction of such window frames and doors.

Another object of the present invention provides such a means, which may be applied to a machine of this character without the necessity of altering the machine in any way and such application may be made in a minimum of time.

The above and other objects and advantage are attained by the mechanism and devices illustrated in the supplemented drawings accompanying this description wherein;

Figure 1 represents a clamping machine,

Figure 2 represents a top plan view thereof showing the invention in attachment thereupon.

Figure 3 is a detail view of the preferred form of corner dog adapted to clamp the frames in the machine;

Figure 4 is a view of the dog showing the projection beneath the same which projection is adapted to hold the same substantially in position upon the machine.

Figure 5 illustrates a portion of the machine showing the applied position of the corner dog illustrated in Figure 3 and its association with a measuring rule.

In the course of the following detailed description, similar characters of reference are used to indicate various new and novel features of the invention throughout the different views; wherein; 1 is adapted to represent a door clamping machine of the usual type.

Heretofore in the progress of constructing window and door frames, due to the fact that no established means of measurement had been provided, such measurements necessarily had to be made by a square, or other means, therefore it is very evident that a machine wherein the necessary measurements are made during the clamping process, much time is conserved, which in turn increases the production of the machine.

The usual clamping machine consists primarily of a pair of tracks or rails 2—2. The window sash or door is adapted to be in flush upon these rails and is held in position thereupon by a series of dog 3—3. These rails are movable toward one another in order to clamp a door therein and square the same. This is accomplished by means of the chain and sprocket mechanism 4—4, which latter is operable by a wheel 4ª. This invention consists primarily of a dog 5, illustrated in detail in Figure 3 which is applied on either side at the lower corner of preferably a window sash when the same is placed upon the machine, beneath this dog is a longitudinal ridge or projection 6, illustrated in Figure 4, which ridge is adapted to conform with the grooves 6ª in the rails 2—2, which arrangement is adapted to hold these dogs rigid in such position.

In Figure 5 it is seen how these window sashes are measured in the machine. An enumerated rule 8 of any suitable construction and length is placed lengthwise at the side of the sash, and interpositioned between the said sash and the dogs 3—3. The rule, it will be observed, also serves to prevent possible disfiguration upon the surface of the sash by being clamped between the dogs 3—3 on either side.

The specially constructed end or corner dog 5, which is mentioned as a part of the invention is provided with an adjustable lug 7 one side thereof which lug is adjustable by means of a set screw 7ª, this lug is applied against the end of the sash as an auxiliary clamping means in order to insure perfect alinement of said sash with the rule. Therefore, after the clamping process and the sash is removed from the

machine, a perfectly squared and alined sash frame is the result.

It should be understood however, that minor changes may be made in the invention, such as a modification in form of the dog 5 as fall within the meaning and scope on what is herein claimed:

What is claimed is—

1. In a sash and door-clamping machine, a pair of supporting rails, adjustable side-clamping lugs thereon, means for moving said rail toward and away from each other, and adjustable end-lugs at the ends of the rails with mechanism for applying pressure at the ends of the rails to the sash or door, and a scale rule disposed between the sash or door and said side-clamping and end-lugs.

2. In a measuring and clamping device for sash and doorclamping machines, a pair of supporting rails, adjustable clamping lugs on the sides and at the ends of said rails, the end lugs having mechanism for providing end pressure to the object in the machine; a longitudinal projection beneath said end lugs conformably receivable in grooves in each of the two supporting rails, and a scale rule between the end and side lugs and the object in the machine for the purpose of measuring and preventing disfiguration of the object.

In testimony whereof I have signed my name to this specification.

RICHARD M. HARRIS.