

(No Model.)

A. D. SHATTUCK.

STRETCHER FRAME.

No. 367,672.

Patented Aug. 2, 1887.

Fig. 1.

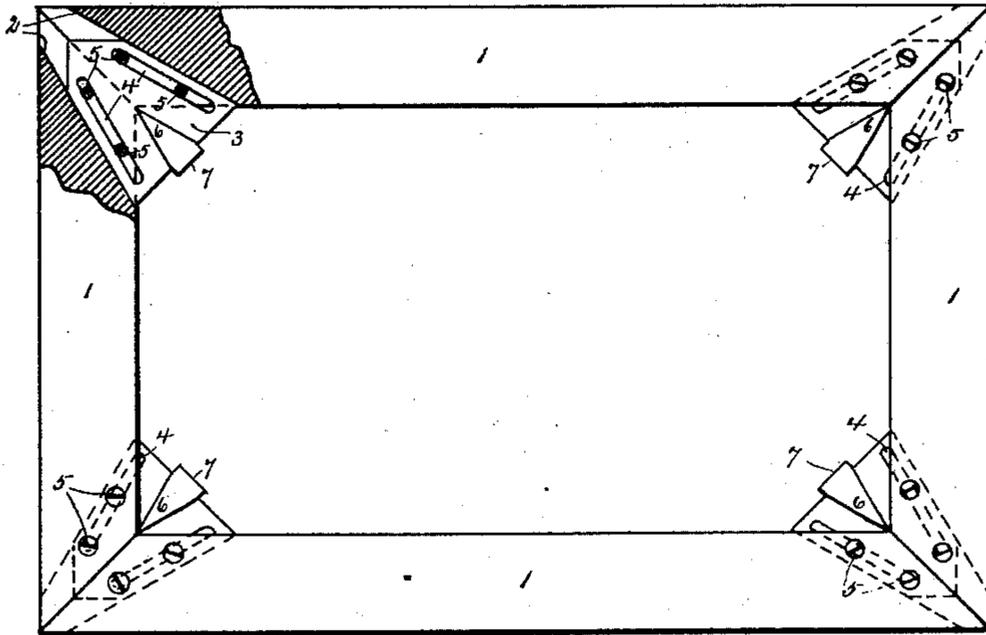


Fig. 2.

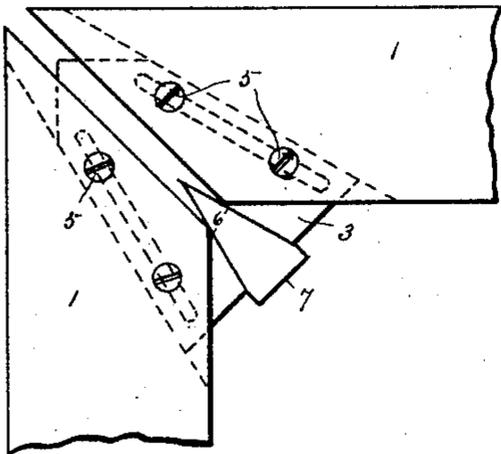


Fig. 3.

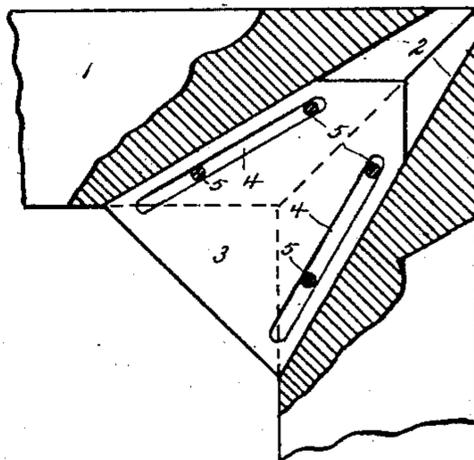
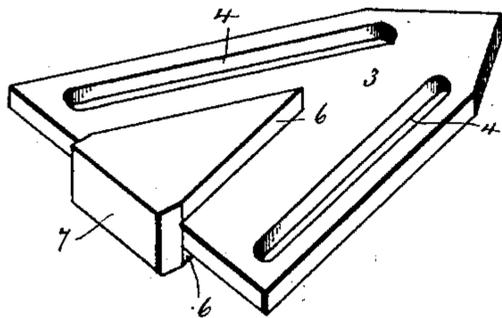


Fig. 4.



Witnesses.
C. E. Ruggles,
E. D. Smith

Inventor-
Aaron D. Shattuck
By
A. M. Wooster
Atty.

UNITED STATES PATENT OFFICE.

AARON D. SHATTUCK, OF GRANBY, CONNECTICUT.

STRETCHER-FRAME.

SPECIFICATION forming part of Letters Patent No. 367,672, dated August 2, 1887.

Application filed March 19, 1887. Serial No. 231,614. (No model.)

To all whom it may concern:

Be it known that I, AARON D. SHATTUCK, a citizen of the United States, residing at Granby, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Stretcher-Frames; 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.

My present invention relates to the class of frames used by artists and others for the purpose of stretching canvas and similar material, illustrated and described in my former patents, Nos. 272,162, dated February 13, 1883, and 320,300, dated June 16, 1885; and it consists in certain details of construction, hereinafter fully described, and specifically pointed out in the claim.

In order that others may understand and use my novel construction, I will now proceed to describe the same, referring by numbers to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view of a frame embodying my invention, one corner being broken away, showing the plate in position ready to be driven forward to expand the frame; Fig. 2, a plan view, on an enlarged scale of one corner of the frame, showing the manner in which the frame is expanded, the position of the plate being indicated in dotted lines; Fig. 3, a view upon the same scale as Fig. 2, the corner of the frame being in horizontal section, illustrating a form of my invention in which the expansion of the frame is produced without a wedge or wedges; and Fig. 4 is a perspective illustrating a plate with wedges detached.

1 denotes the parts of the frame, which are mitered at the ends, as shown.

2 denotes a groove or kerf made at each end of each part of the frame, midway or approximately midway between the opposite sides thereof. The bottoms of these grooves or kerfs are inclined at an acute angle to the inner and outer sides of the frame, as clearly shown in the drawings, so that when the two parts of the frame are placed together at each corner the double groove or kerf is wider at the inner end than at the outer end.

3 denotes the plates of the stretcher-keys, which are provided on each side with a slot,

4, parallel with the outer edge of the plate—that is, converging toward the point of the plate; and 5 denotes screws or pins, which pass through the ends and the parts of the frame on opposite sides of the grooves or kerfs and through the slots in the plates. The kerfs or grooves are ordinarily made of just sufficient depth to receive the plates of the keys in the retracted position, the ends of the frame being placed in contact. This, however, is not essential, as it is obvious that the shape of the plates may be varied to suit the taste of the manufacturer without departing from the spirit of my invention.

The expansion of the parts of the frame is accomplished by the wedge-like engagement of the inner sides of the converging slots with the screws or pins when the plates are driven forward. Four slots instead of two may be used in the plates, if preferred, and any number of screws or pins. In practice, however, two slots and two pins through each slot will ordinarily be found quite sufficient. In order to relieve the strain upon the screws or pins, and the consequent strain upon the wood-work, a wedge, 6, is provided at the rear end of the key, midway between its opposite sides. This wedge is sharp-pointed, preferably straight-sided, and preferably extends a short distance back of the rear edge of the plate, forming a heel-piece, 7, to receive the blows in driving the key forward. The action of the wedge is supplemental to the action of the pins and inclines in expanding the frame when the key is driven forward.

In assembling, the parts of the frame are laid together, the plate laid accurately upon the top of the frame in the retracted position, and holes marked for the screws. The plate is then removed and the screw-holes bored, after which the plate is inserted in the kerf or groove and the screws or pins passed through the holes in the wood-work and through the slots, which completes the frame for use. It will of course be understood that when the plate is in the retracted position the ends of the frame are held close together by the engagement of the pins and slots, as shown in Figs. 1 and 3. As soon as the plate is driven forward the engagement of the screws or pins with the inner sides of the converging slots, and the engagement of the wedge, if used, with

the ends of the parts of the frame themselves, as shown in Fig. 2, open the joints at the corners of the frame and stretch the canvas tightly and evenly in all directions. Should
5 it become necessary to loosen the canvas slightly, it may be readily done at any time by driving the plate backward, which causes the outer sides of the converging slots to engage the pins, thus drawing the ends of the parts of the frame
10 toward each other and lessening the tension upon the canvas.

It will of course be understood that the details of construction may be varied within reasonable limits without departing from the
15 spirit of my invention.

I claim—

The combination, with the parts of a stretcher-frame having kerfs or grooves at their ends, of a plate adapted to lie in said grooves and provided with wedges upon opposite sides thereof,
20 and converging slots, and pins or screws passing through the parts of the frame and the slots in the plate, whereby when said plate is driven forward the frame is expanded and the material upon it is stretched. 25

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

AARON D. SHATTUCK.

Witnesses:

JAMES N. LOOMIS,
MASON M. CLARK.