(No Model.)

W. G. & J. L. RAWBONE.

STRETCHER AND FASTENER FOR FRAME JOINTS.

No. 368,236. Patented Aug. 16, 1887.

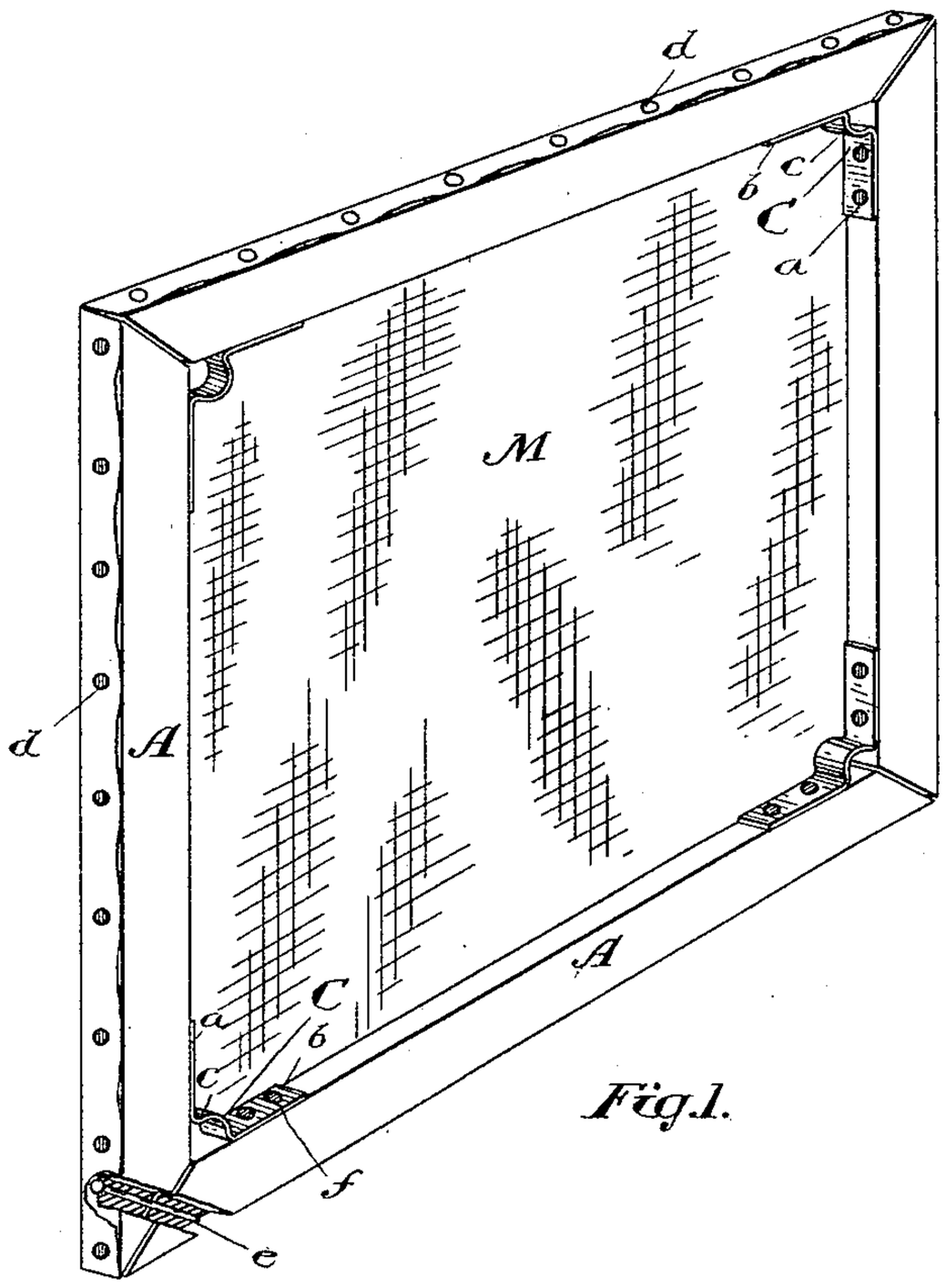

Fig. 1.

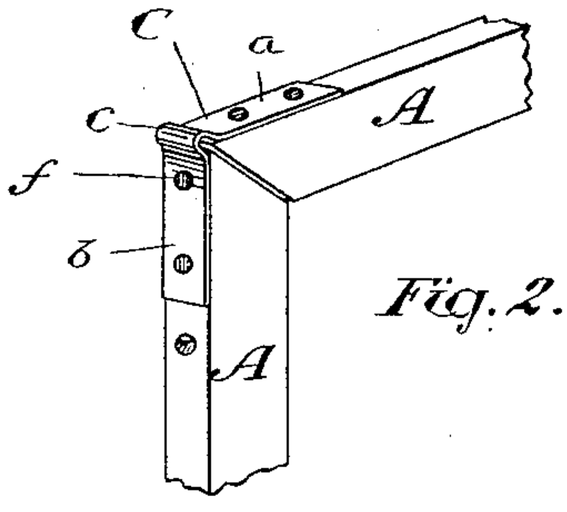

Fig. 2.

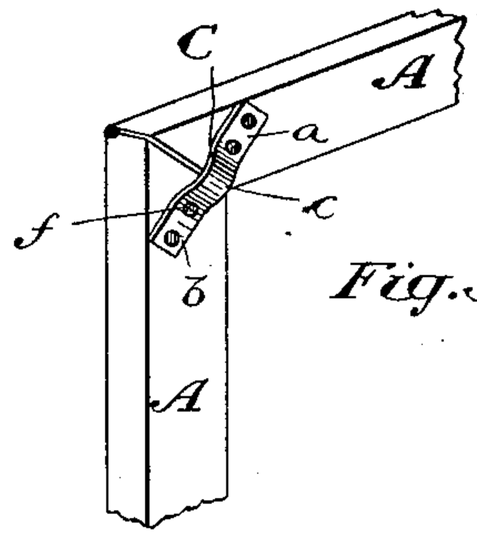

Fig. 3.

Witnesses.

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UNITED STATES PATENT OFFICE.

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STRETCHER AND FASTENER FOR FRAME-JOINTS.

SPECIFICATION forming part of Letters Patent No. 368,236, dated August 16, 1887.

Application filed June 20, 1887. Serial No. 241,932. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM GEORGE RAWBONE, gunsmith, and JOSEPH LOXTON RAWBONE, artist, both of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented a certain new and useful Stretcher and Fastener for Frame-Joints, of which the following is a specification.

The object of the invention is to provide a stretcher and fastener for frame-joints which can be cheaply made, readily applied, and effective in action; and it consists of a band formed of a single piece of metal and having a circular or angular bridge between the arms thereof, and preferably attached to the inner corners of the frame and below the plane of the back surface thereof, and so shaped that when caused to spread it carries with it and retains in position when spread the sides of the frame, the inner edges of which become slightly sprung back from the under surface of the material stretched on the frame, and whereby no extra space is required for or taken up by them when a number of frames are packed, nor can the fasteners on one frame rub against or injure the canvas on an adjoining frame when so packed for shipping or other purposes.

Figure 1 is a perspective back view of the covered frame, showing joint-fasteners in position. Fig. 2 is an alternative form of joint-fastener. Fig. 3 is also an alternative form.

In Fig. 1, A is a frame, the sides of which are made separate and held together by the nails *e*, so as to prevent twisting of the frame when the sides are spread. One of the corners is broken away, so as to exhibit one of the corner nails, which is embedded in the sides. When the sides are caused to spread by the spreading of the arms of the fastener, they are slightly drawn from this nail, which holds the sides from twisting. The covering material M is attached to the outside edges of the sides at *d*, being turned over the edge for this purpose. C is our fastener, made of a single piece of metal, which is preferably shaped and located as shown in Fig. 1. *a* and *b*, the arms of this bracket-shaped fastener, are perforated to receive nails, that portion joining the arms together being bridged at *c*, and forming a circular or angular projection, which is adapted to cause the arms to spread under the influence of blows or pressure on the bridge *c*. Having fitted our fasteners into the inner corners of the frame, as indicated in Fig. 1, and nailed by nails *f* the arms thereof, *a* and *b*, to the inner sides of the frame, we then tack on the canvas or covering material by tacks *d* around the four sides. For the purpose of stretching the canvas more completely, we strike the angular or circular bridge *c*, formed between the arms of the fastener, a blow or succession of blows, which causes the arms *a* and *b* to spread, carrying with them the sides of the frame, to which they are nailed, and thereby fully stretching the canvas or covering material M. The degree of tightness can of course be regulated by the extent to which the arms of the fasteners are caused to spread under the influence of blows or pressure.

It will be seen that as the canvas or covering which is tacked to the outer edges of the sides of frame is caused to stretch the inner edges of the sides of the frame are sprung slightly back from the canvas and out of contact therewith, so that no "wood line" can be formed on the canvas or covering material when stretched; and it can be also seen that, owing to the location of the joint-fasteners, they are out of the way and cannot interfere with or rub against so as to injure the canvas on an adjoining frame when a number of them are packed together for the purpose of shipping or otherwise. This form of fastener is specially adapted for frames for stretching artists' canvas.

In Fig. 2, which is an alternative form, the joint-fastener is nailed by its arms to the outer corners of frame. A blow or blows on the angular or circular bridge *c* will cause the sides of frame to spread and retain in position the sides so spread and completely stretch the canvas or covering material tacked to the edges of frame.

Fig. 3 shows another form, being a flat fastener with the angular or circular bridge *c* between the arms, which are nailed on at the corner joints on the flat back sides of frame. A blow or blows on this bridge *c* will cause

the sides to spread in a similar manner and stretch the canvas or covering material tacked at *d* to the four outer edges of frame. In neither of the forms shown in Figs. 2 and 3 will the fasteners be out of the way when the frames are packed for shipping.

The various forms of bridge are intended to cover any other form of bridge which may be adapted to cause the arms of the fastener to spread under the influence of blows or pressure, though the form shown in Fig. 1 is the preferable one.

The joint-fastener is preferably made of "mild" steel, but may also be formed of any other suitable material.

What we claim as our invention is—

1. A joint-fastener bridged between the arms, which are adapted to spread under the influence of blows on said bridge, substantially as specified.

2. A joint-fastener formed of a single piece of metal, and having a circular or angular bridge formed at its center and between the arms thereof, which are adapted to spread under the influence of blows on the said bridge, substantially as specified.

3. A joint-fastener, C, having arms *a* and *b*, and a circular or angular bridge, *c*, between said arms, in combination with a frame, A, held together by nails *e*, substantially as described, and for the purpose specified.

4. The combination, with the frame A, of a joint-fastener, C, applied to the frame A at the corners thereof, and having a bridge, *c*, formed between its arms *a* and *b*, which are perforated to receive nails to attach it to the frame A, substantially as described, and for the purpose specified.

5. The combination of a joint-fastener, C, rigidly attached at the joints to the inner sides of the frame A, and below the plane of the back surface thereof, and having an angular or circular bridge, *c*, between its arms and at the angle of the joint-fastener adapted to cause the sides of frame to spread, as desired, and the covering material M, attached to the outer edges of the sides of said frame, substantially as specified.

6. A fastener for joints rigidly secured to the edges of the frame and at the corners thereof, the arms of the said fastener, to which the sides of the frame are attached, being adapted to spread under blows or pressure applied to an angular or circular bridge between the arms and carry with them the sides of the frame, so as to stretch the covering material secured on said frame, substantially as specified.

7. An extensible joint-fastener rigidly secured to the inner corners of a frame, and so formed that it may be caused to spread, as desired, carrying with it and retaining in position when spread the sides of the frame, to the outer edges of which a covering has been secured, substantially as specified.

8. An extensible joint-fastener rigidly secured to the inner corners of a frame and below the plane of the back surface thereof, in combination with the sides of a frame, the inner edges of which are sprung slightly back from the covering material when the joint-fastener is caused to spread, so as to stretch the covering material secured to the outer edges of the sides of frame, substantially as specified.

Toronto, June 6, 1887.

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JOSEPH L. RAWBONE.

In presence of—
CHARLES C. BALDWIN,
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