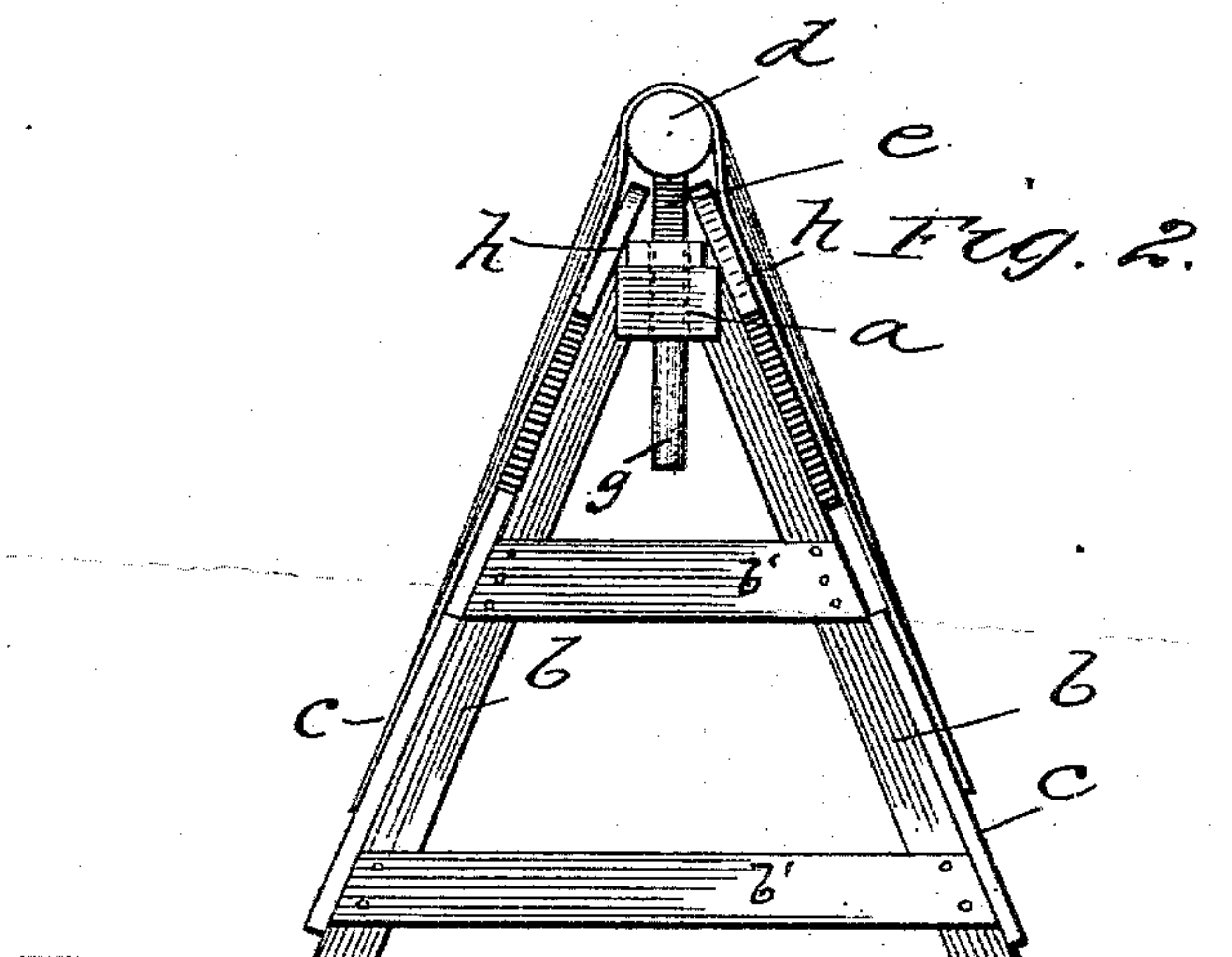
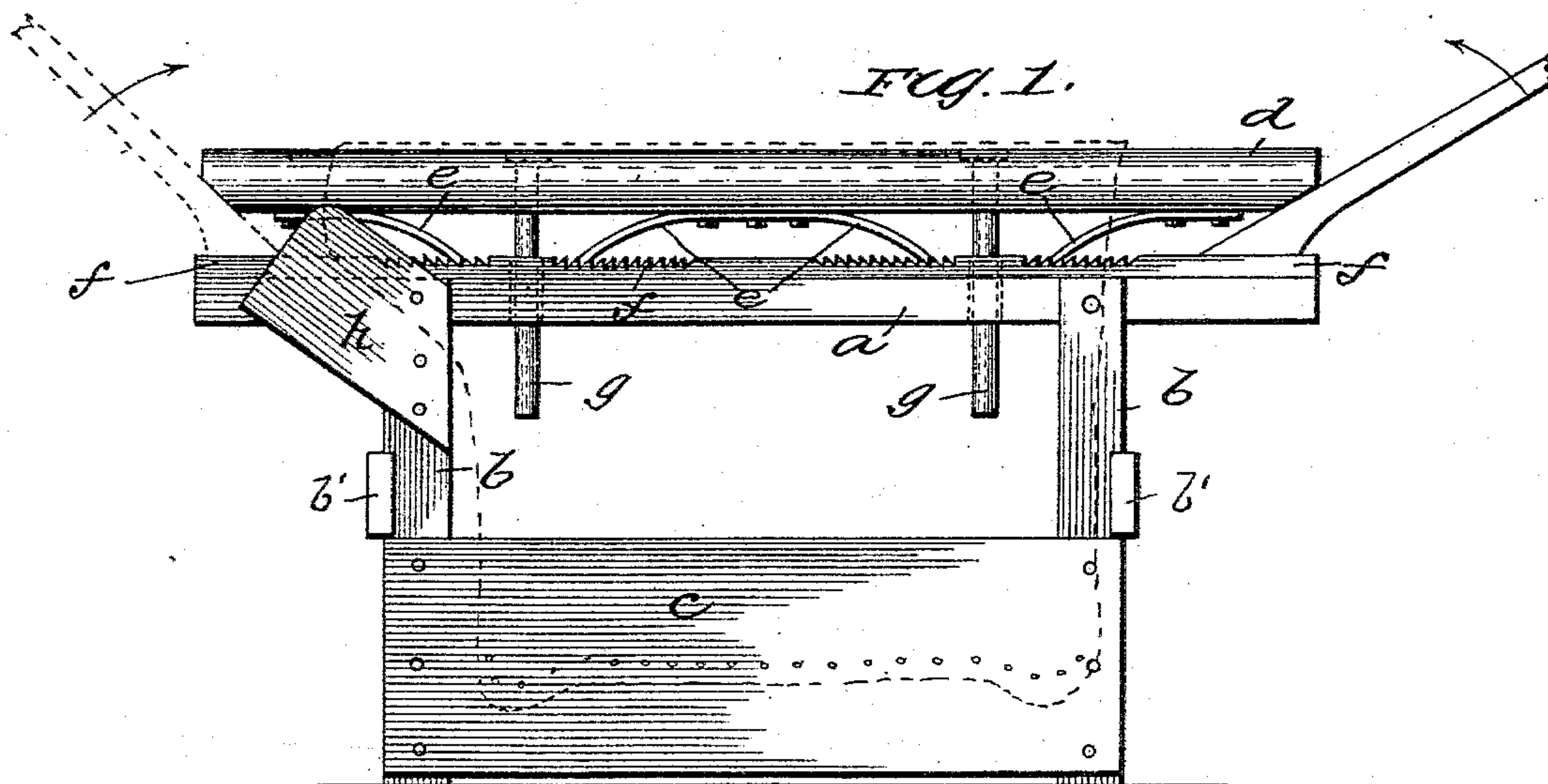


(No Model.)

L. F. CAUFFIELD.
LEATHER FRAME.

No. 490,339.

Patented Jan. 24, 1893.



Witnesses
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UNITED STATES PATENT OFFICE.

LUKE F. CAUFFIELD, OF ASHTABULA, OHIO.

LEATHER-FRAME.

SPECIFICATION forming part of Letters Patent No. 490,339, dated January 24, 1893.

Application filed November 2, 1892. Serial No. 450,752. (No model.)

To all whom it may concern:

Be it known that I, LUKE F. CAUFFIELD, a citizen of the United States, residing at Ashtabula, in the county of Ashtabula and State of Ohio, have invented certain new and useful Improvements in Leather-Frames, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a new and improved leather frame; and it has for its object to provide a frame of simple construction by means of which the leather may be readily stretched, and to provide means for yieldingly retaining it in the stretched position.

The invention consists in the novel combination and arrangement of parts hereinafter described and claimed.

In the drawings:—Figure 1 is a side elevation of my improved frame. Fig. 2 is an end elevation thereof.

Referring to the parts by letter *a* designates the main supporting beam, which is supported at its ends by the diverging legs *b b*. These legs are connected at the ends of the frame by transverse braces *b'* and on both sides of the beam *a*, by longitudinal boards *c* on which the lower edges of the hide to be stretched are tacked or secured in any other suitable manner.

Above the main supporting beam is mounted the stretching beam *d*. This beam is supported by strong spring pawls *e* which are secured to the under side of the stretching-beam, their lower ends engaging the teeth of a ratchet-bar *f* which is secured on the upper side of the main supporting beam. The stretching-beam is held in position over the supporting beam and guided in its up and down movements by depending rods *g g* which extend downwardly from the under side of the stretching beam, at suitable points between its ends, and pass loosely through apertures formed in the bar *f* and supporting beam *a*.

Secured to legs *b b* at one end of the frame, on each side thereof are short upwardly and

outwardly extending boards *h h* to which the neck of the hide may be secured, as shown by dotted lines in Fig. 1.

The operation of my device is as follows:—The leather or hide to be stretched is placed over the stretching beam and the neck portion secured to the boards *h h*, on each side of the beam, the longitudinal edges of the leather being secured to the lower boards *c* as shown by dotted lines in the drawings. The stretching beam is now raised by means of a lever or other suitable device until the required tension on the leather is reached. If a lever is used it is placed under the ends of the beam *d* as shown in the drawings, one lever being used at each end of the beam if desired, thereby raising the beam evenly at both ends. As the beam is raised the pawls *e* spring inwardly, or toward their point of attachment, and slip across the teeth of the ratchet bar *f* and when the beam *d* is released from the levers, the tension of the leather causes their lower ends to immediately engage the teeth on which they are resting at that instant, and effectually prevents the beam *d* being drawn down to the supporting beam *a* by the tension of the leather. Should the leather in drying on the frame contract to such an extent that it would crack or break if it were rigidly held in its stretched position, the increased tension of the leather will cause the spring pawls *e* to give sufficiently to maintain the original tension on the leather. It will thus be seen that the leather will be at a uniform tension throughout the stretching operation.

If it is desired, gravity operated pawls may be used instead of the spring pawls *e*.

Having thus fully described my invention what I claim is:

1. The combination of a frame, carrying a stationary beam *a*, a vertically movable stretching beam *d* supported above the beam *a*, springs interposed between the two beams for normally upholding the upper beam, whereby as the stretched leather dries

the upper beam may yield correspondingly to maintain approximately the original tension, substantially as described.

2. The combination of a frame, supporting a stationary beam, a stretching-beam supported above said beam, a rack-bar carried by one of the beams and a series of spring-pawls secured to the other of said beams and having their free ends normally

engaging said rack bar, substantially as and for the purpose described.

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

LUKE F. CAUFFIELD.

Witnesses:

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A. S. JONES.