

No. 635,459.

Patented Oct. 24, 1899.

L. J. BARD.
PLAITER.

(Application filed June 30, 1898.)

(No Model.)

Fig. 1.

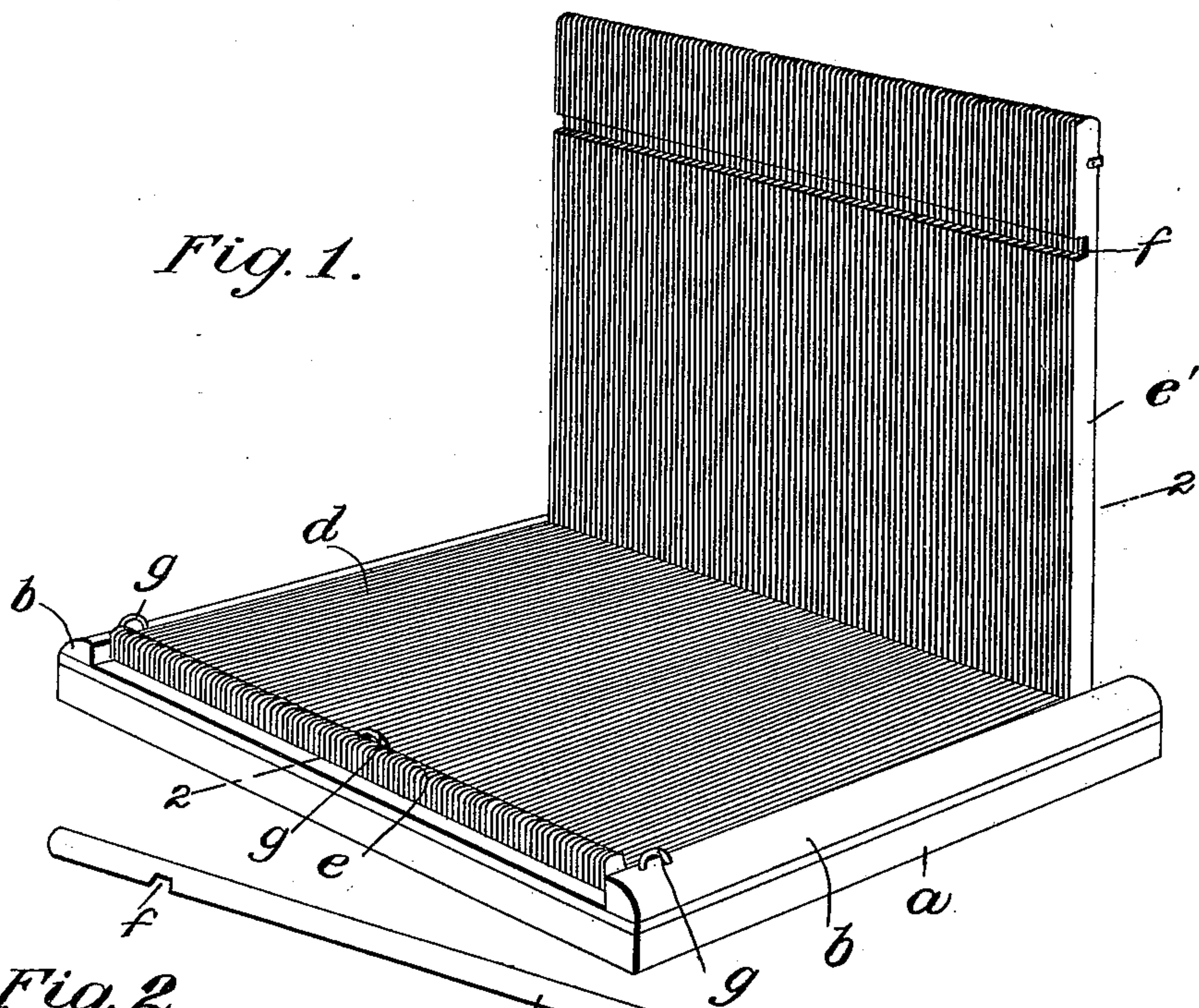


Fig. 2.

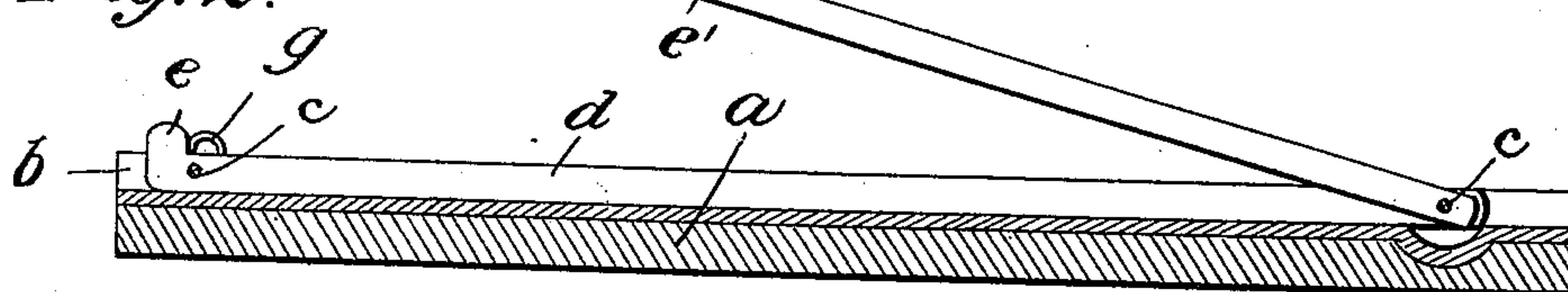
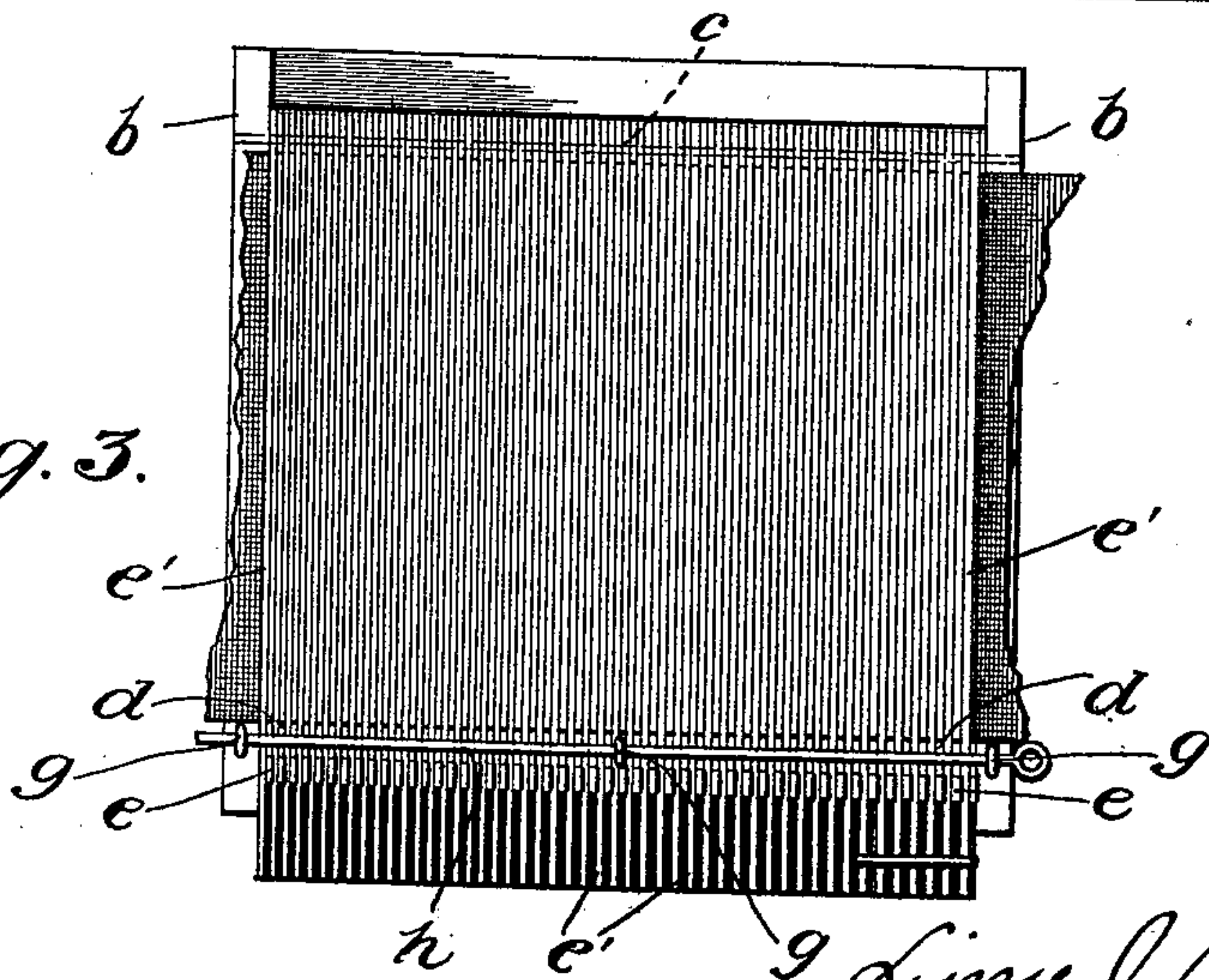


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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PLAITER.

SPECIFICATION forming part of Letters Patent No. 635,459, dated October 24, 1899.

Application filed June 30, 1898. Serial No. 684,803. (No model.)

To all whom it may concern:

Be it known that I, LIZZIE J. BARD, a citizen of the United States, residing at Coatesville, in the county of Chester, State of Pennsylvania, have invented certain new and useful Improvements in Fluters; 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 invention relates to fluters in general, and more particularly to that class intended for the making of flutes and accordion-plaiting in which the flutes or plaits stand side by side in equal folds with a pleasing effect well known to those skilled in the art to which the invention relates.

The object of my invention is to provide a cheap and effective device of this nature which will be so simple of construction and operation that any person without previous experience can readily operate it with the best of results.

In the drawings forming a portion of this specification and in which like letters of reference indicate similar parts in the several views, Figure 1 is a perspective view of my device with bars raised ready for the introduction of the material to be operated upon. Fig. 2 is a section on line 2 2 of Fig. 1, showing the arrangement of the movable bars. Fig. 3 is a top view of the device with the plaited material in place and bars down.

Referring now to the drawings, in operating in accordance with my invention I provide a base *a* of any desired material, at each side of which is arranged a metallic strip *b*, connected at their ends by rods *c*, upon which rods are slidably arranged bars *d*, forming a grille, as shown. The bars *d* are provided with slight upward projections *e* at one end, for a purpose as will be presently explained, and connected pivotally with one rod *c* alternately of the bars *d* and farthest from the turned-up ends of bars *d* are a second series of bars *e'*, independently movable on the said rod. These bars *e* are adapted to be brought to lie intermediate of their respective bars *d* and are each provided with a notch *f* to receive the second rod *c* when they are lowered between bars *d*. As will be noted upon reference to the drawings, the ends of bars *e'*

project slightly beyond the ends of bars *e* in order that they may be more readily grasped for raising.

In order to hold the bars *e'* in a lowered position, I form a projecting loop *g* upon each strip *b* and a third loop intermediate and in alinement therewith, which loops are adapted to receive a bar *h*, which, bearing upon the upper surfaces of the bars, holds them in place.

When desired, I cover the upper surface of the base *a* intermediate of the strips *b* with sheet metal, preferably copper.

In operating my device I lay the material to be treated upon the bars *d* after having first lifted bars *e* to the position shown in Fig. 1 of the drawings. The upturned ends of the bars *d* then enable the ready manipulation of the said bars in the bringing of bars *e* successively between them, the material being gradually drawn up during the operation. The bars *e* having all been lowered, the material is held between them and the bars *d* in the form of an accordion-plait with sharp edges peculiar to this style of plaiting, and by then placing a protecting-cloth over the device and applying a hot iron the material is set in the form thus secured. The employment of metallic strips *b*, as also the formation of bars *d* and *e* of metal, enables the ready distribution of heat, as will also the arrangement of the metallic covering for the base intermediate of the strips. A bast- ing-thread is then run through the successive plaits or flutes, after which the bars *e'* are raised into the position shown in Fig. 1 of the drawings and the material is removed from the device, when it is found that the proper result is secured.

It will be readily understood that I may alter the construction as herein specifically described and that I may employ any material that may prove advantageous without departing from the spirit of my invention.

In order to more easily manipulate the pivoted bars, they may be connected in groups, as shown in the drawings, it being practicable to seat a number of said bars between the slidable bars at one time, the cloth sliding to compensate for the take-up.

Having thus described my invention, what I claim is—

1. A flutter comprising a base having raised portions at its sides, rods connecting the raised portions, a series of flat bars slidably arranged upon the rods and having upturned ends, and a second series of bars pivotally connected with one of the rods and alternating with the first-named rods, whereby they may be raised and lowered to lie intermediate the first-named rods. 15
2. A flutter comprising a base having raised portions at its sides, rods connecting the raised portions, a series of flat bars slidably arranged upon the rods, and a second series of flat bars pivotally connected with one of the rods and alternating with the first-named bars, whereby they may be raised or be lowered to lie intermediate the first-named bars, the second series of bars being connected in groups, and a metallic covering for the base intermediate the raised portions. 20

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

LIZZIE J. BARD.

Witnesses:

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GEO. H. CHANDLEE.