

(No Model.)

C. C. EMMONS.
PLASTER BLADE.

No. 473,303.

Patented Apr. 19, 1892.

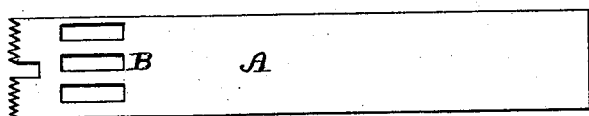


Fig. 2.

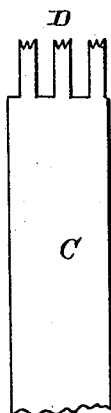


Fig. 3.

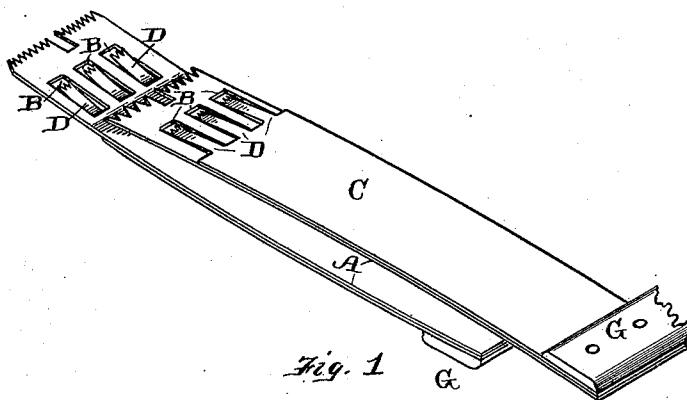


Fig. 1

WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES C. EMMONS, OF PITTSBURG, PENNSYLVANIA.

PLAITER-BLADE.

SPECIFICATION forming part of Letters Patent No. 473,303, dated April 19, 1892.

Application filed December 28, 1891. Serial No. 416,306. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. EMMONS, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Plaiter-Blades; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in plaiter-blades for plaiter sewing-machines; and it consists in the construction and arrangement of parts which will be fully described hereinafter, and particularly referred to in the claims.

The object of my invention is to provide specially-constructed shields, which are placed to receive the goods acted upon between them and between the plaiter-blades proper and the goods, whereby only the points of the blades come in contact with the goods, and are automatically made to recede from the goods by the shields, thus allowing them to engage with the goods positively as they move forward, but be disengaged therefrom when they reach the end of their stroke and begin to move back.

In the drawings, Figure 1 is a detached perspective view of shields and plaiter-blades which embody my invention complete, showing them in operative position. Fig. 2 is a plan view of one of the shields. Fig. 3 is a plan view of one of the plaiter-blades proper.

G indicates hangers, which are connected in any suitable manner to a reciprocating means of the plaiting-machine, as will be readily understood, to be moved back and forth therewith. Secured to these hangers at their inner sides are the plaiter-blades, which have their outer ends slotted to form any desired number of prongs D, as shown. Secured, also, to the hanger inside of the blades C are the shields A, which consist of blades, as shown, which are preferably perfectly or substantially straight and parallel. These shields are placed to receive the goods to be operated upon between them, and thus serve to separate the blades from the goods, except at their pronged

ends, which latter pass through a corresponding number of slots or openings B made in the shields. The ends of the blades are made to pass through the slots B and engage the goods, as will be understood, and the blades are formed of any suitable spring metal, in order to allow the prongs to recede or be forced back through the slots, as will presently appear. The goods being operated upon, passing between the shields, are engaged by the outer ends of the blades only, which extend through them, so that as the blades and shields are reciprocated the outer end of one shield disengages the teeth D of the other shield from the goods by engaging therewith as it passes over it, causing the teeth to recede. In this manner the teeth of each blade are made to positively disengage the goods at the proper time and are held out of engagement therewith by the shields.

While I here show the ends of the blades provided with several prongs, it will be understood that they may merely have their ends reduced in size and passed through a corresponding opening in the shields, if desired, without departing from the spirit of my invention, and I do not, therefore, limit myself to the precise construction here shown, for it may be varied and the object accomplished—viz., one blade disengaged from the goods by the shield of the other blade. This construction relieves the goods from all pressure, while at the same time the blade is allowed to engage the goods as firm and rigid as the shield itself as soon as any forward movement is made and pressure brought upon their fronts.

The shields may be either rigid or elastic and made from any desired material, while the blades are made elastic in order to readily recede through the shields and to pass back through them to engage the goods.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A plaiter-blade having prongs forming teeth, combined with a shield rigidly secured to the blade and moving therewith, the shield being longer than the blade and provided with openings through which the teeth of the blade pass, substantially as described.

2. The combination, with two plaiter-blades,
of two shields, which are placed inside of the
blades and between which the teeth of the
blades project, the shields being constructed
5 to allow the teeth of the blades to pass through
them, whereby one shield disengages the teeth
of the other blade from the goods, as specified.

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

CHAS. C. EMMONS.

Witnesses:

N. C. AVERY,

D. H. BOYNTON.