P. W. GREEN.
Loom.

No. 217,610. Patented July 15, 1879.

Fig. 1.

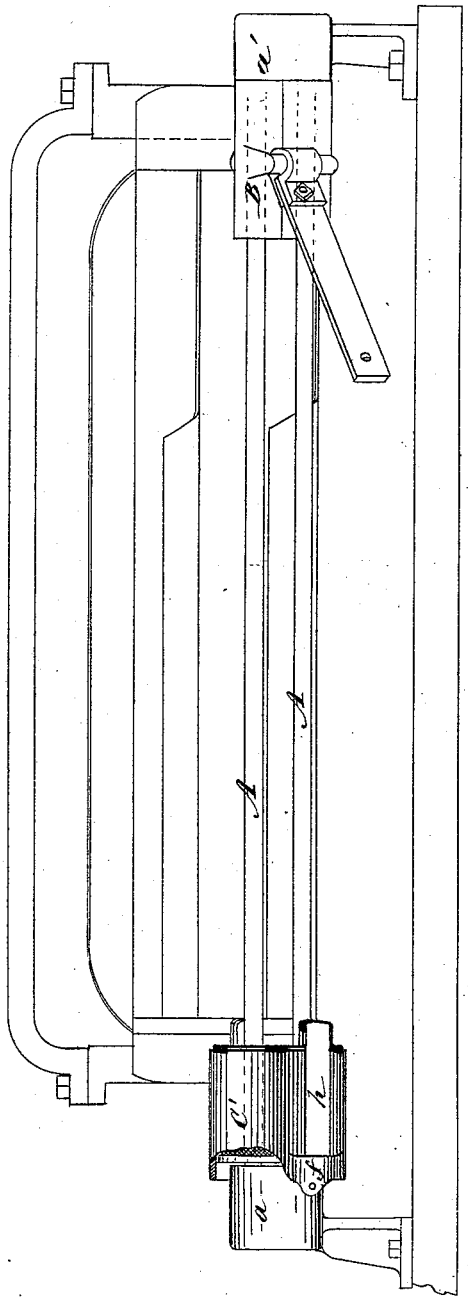


Fig. 4.

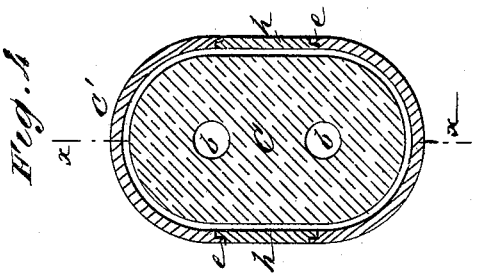


Fig. 5.

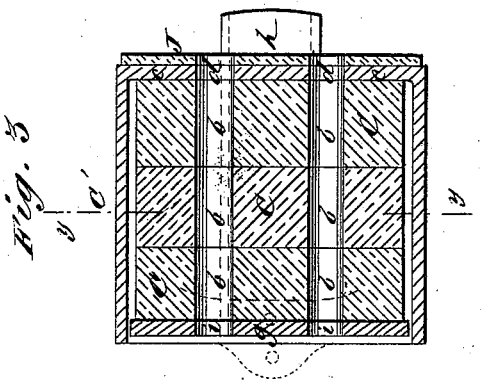
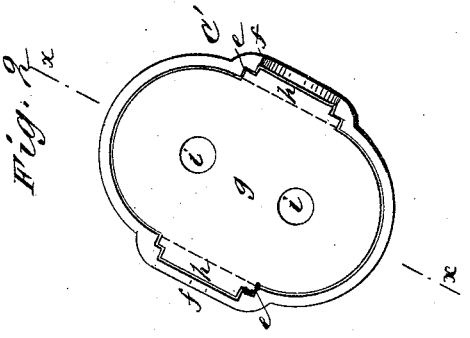


Fig. 2.



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UNITED STATES PATENT OFFICE.

PAUL W. GREEN, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN LOOMS.

Specification forming part of Letters Patent No. **217,610**, dated July 15, 1879; application filed March 12, 1879.

To all whom it may concern:

Be it known that I, PAUL W. GREEN, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new Improvement in Looms, of which the following is a specification.

This invention relates to a box for holding the springs or cushions that receive the impact of the picker in throwing the shuttle and devices connected therewith; and the object thereof is to increase the durability of the springs or cushions.

It consists of a box adapted to fit over the rods on which the picker moves, and to receive the elliptical rubber springs or cushions having at one end a solid bottom and at the opposite end, adjacent to the heads in which the rods are held, a movable bottom adapted to slide within it, and a spindle-supporting bracket of a construction to permit the necessary movement of said bottom. The springs are held between the two bottoms, and the box slips over the movable bottom when struck by the picker.

In the accompanying drawings, Figure 1 is a front elevation of the picker guides or rods, with spring-box in position and the shuttle-race beyond. Fig. 2 is an end view of the box. Fig. 3 is a longitudinal section of the same on line *x x;* and Fig. 4 is a cross-section of the device on line *y y*, Fig. 3.

Similar letters of reference indicate corresponding parts.

My invention is designed to prevent the rapid destruction of the springs, and also to enable those that have already been thrown aside to be utilized.

Referring to the drawings, A A are the picker rods or guides, having their ends confined in the heads *a a'*, which form a part of the bracket that supports the spindle or rod.

B is the picker, adapted to run on the rods A. At the opposite end from which the picker starts or is thrown the rubber springs or cushions C are placed. These consist of elliptical disks, with holes *b b* through them for the rods A A.

C' represents the box for holding the springs. It is made of metal, elliptical in form, and large enough to receive the cushions. One end is closed by a bottom, *c*, which is turned toward the picker, and has holes *d d* through it for the rods A A, coinciding with the holes in the springs. In the sides of the box opposite each other are longitudinal slots *e e*, running from the raised keepers *f f*, at the open end of the box, through the opposite or closed end, and the edges of these slots are rabbeted.

In the open end of the box is fitted loosely a movable end piece or bottom, *g*, adapted to slide freely in the box, and having projecting from it at right angles and on opposite sides arms *h h*, with rabbeted edges. Said arms pass under the keepers into the slots *e e*, forming a rabbet-joint therewith and sliding freely therein, to allow the movable piece *g* to pass within the box. The piece *g* has likewise holes *i* for the rods A A.

The invention is applied as follows: The movable end piece, *g*, is placed on the rods A, adjacent to the head *a*, bearing against it. Then the rubber cushions or springs are slipped over the rods or placed next to *g*, and the box C' placed over them, with the arms *h* entered in the slots, as clearly shown in Figs. 1 and 3. A disk of leather, *j*, is placed outside the end *c*, to receive the direct blow of the picker, and thus deaden it to some extent. When thus placed it will be observed that the piece *g* furnishes a bearing for the springs at the open end of the box, keeping them incased. At the same time, however, the elasticity of the springs is not interfered with, as under pressure the box slips over the piece *g*, and thus the picker in its movement or throw impinges upon the end *c*, and this is cushioned by the elliptical rubber springs C behind it, and the same effect is produced as when the impact is directly upon the springs. As, however, the box holds the springs within it, they do not wear so fast as when unconfined, and in case they break out from the holes they are not injured to the extent of rendering them of no further use. Aside from this they are much more durable in other respects.

I am aware that a disk of leather, a disk of rubber, and a layer of hair have been secured in a metallic box which was attached to picker-rod by a screw; but

What I claim is—

1. The combination, with a rod, A, and the

spindle-supporting bracket having the projecting head *a*, of the cushion C, having holes *b*, the box C′, having holes *d*, and the end piece, *g*, having holes *i* and arms *h*, fitting grooves *e* of case, as shown and described.

2. The box C′, having holes *d* and grooves *e*, and provided with an end piece, *g*, having arms *h* and holes *i*, to adapt it to receive cushions C, having holes *b*, as shown and described.

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Witnesses:

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