F. McCORMICK.
Loom-Picker Check.

No. 210,136. Patented Nov. 19, 1878.

Fig. 1.

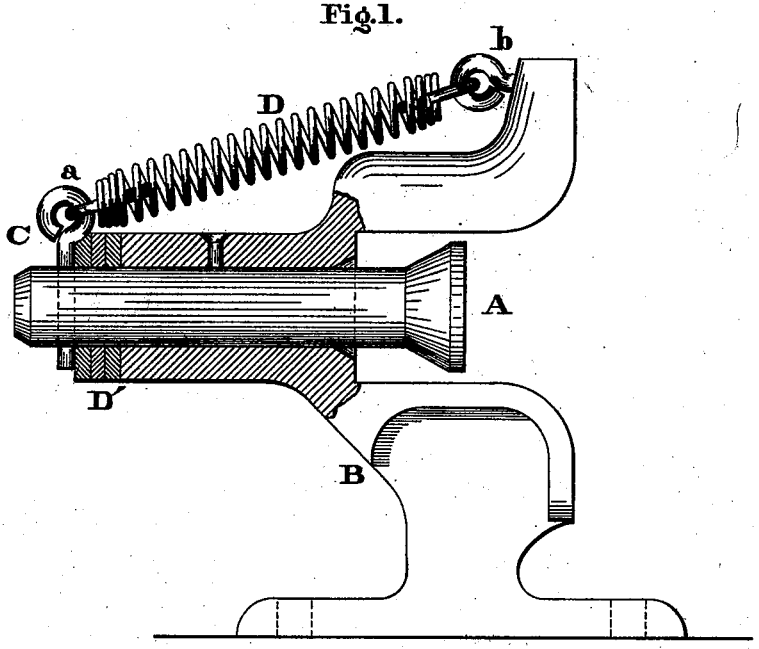
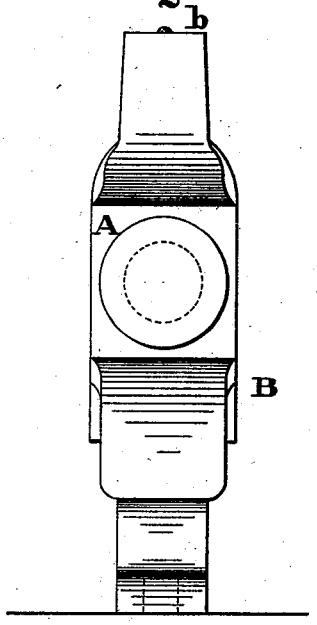


Fig. 2.



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FRANCIS McCORMICK, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN LOOM-PICKER CHECKS.

Specification forming part of Letters Patent No. **210,136**, dated November 19, 1878; application filed July 18, 1878.

To all whom it may concern:

Be it known that I, FRANCIS McCORMICK, of city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Loom-Picker Checks, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation, partly sectional, of the device embodying my invention. Fig. 2 is a face view thereof.

Similar letters of reference indicate corresponding parts in the two figures.

My invention consists of a spring-plunger arranged to receive the blows of the shuttle on the picker. Provision is made for adjusting the throw of the plunger, readily connecting the spring, and also applying the latter without increasing the dimensions of the plunger and support, and causing the shuttle to rebound from the plunger to permit the working of the boxes.

Referring to the drawings, A represents a plunger, which is horizontally fitted to and guided in a stock or support, B, secured to the frame of a loom, or elsewhere, in such position that the head of the plunger is in the path of the picker, especially of box-looms.

C represents a pin, which is inserted in the outer end of the plunger B, and having a hooked or other shaped head, *a*, for attachment of one end of a spiral spring, D, whose other end is connected to a hooked or other fastening, *b*, at the upper end of the stock B.

On the plunger A, interposed between the pin C and the outer wall of the opening of the stock in which the plunger is fitted, there are placed washers or nuts D′, whose object is to adjust or regulate the throw of the plunger and ease the return motion of the same, the extent of adjustment being produced by either increasing or decreasing the number of washers, the application or removal whereof is accomplished by withdrawing the pin C, thus leaving the outer end of the plunger free for the reception or displacement of the washers.

It will be seen that the blows of the shuttle are imparted to the plunger B, whose yielding nature, controlled by the spring D, eases the force of the blows and prevents fracture or breakage of relative parts.

After the plunger is forced in by the action of the shuttle, which strikes the picker resting against the head of the plunger, the spring D causes the plunger to return to its first position, whereby the shuttle flies from the head of the plunger sufficiently to allow the boxes to work.

It will also be seen that the spring D is connected to the plunger outside of the stock. Consequently the effective power of the spring is preserved without increasing the length of the plunger, whereby, also, only a short plunger and small stock need be employed.

I am aware that picker checks or stoppers are not new; but I am not aware that any of them make a sharp, short, and full throw, in order to impart the necessary sharp and quick blows to the shuttle, in the manner presented by me.

The plunger must be short, guided throughout most of its length, and be controlled by a powerful spring, which several features are possessed by my construction.

A spring surrounding the plunger necessitates lengthening the latter, in order to admit the spring of proper length, and it deprives the plunger of some of its bearing-surface on the stock. This is also objectionable, for the reason that the plunger must have a large bearing-surface, in order to move with precision, as blows on its head are often received irregularly, whereby there is a tendency to impart side motions to the plunger. These defects are remedied by me. Moreover, the displacement of the plunger and spring is readily accomplished in my case simply by removing the pin C.

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

The plunger A, provided with the hooked pin C *a*, the stock B, provided with the hook *b*, and the spring D outside of the plunger and stock, combined and operating substantially as and for the purpose set forth.

FRANCIS McCORMICK.

Witnesses:
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