E. M. Stevens.

Shuttle Guard.

No. 64,261. Patented Apr. 30, 1867.

Fig: 2.

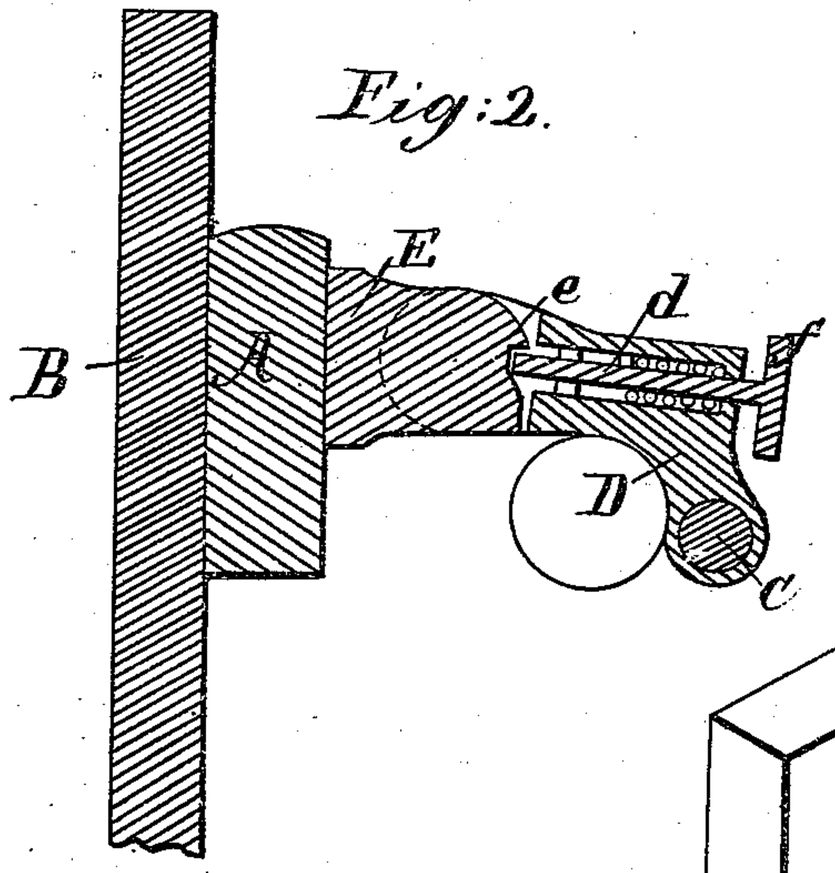
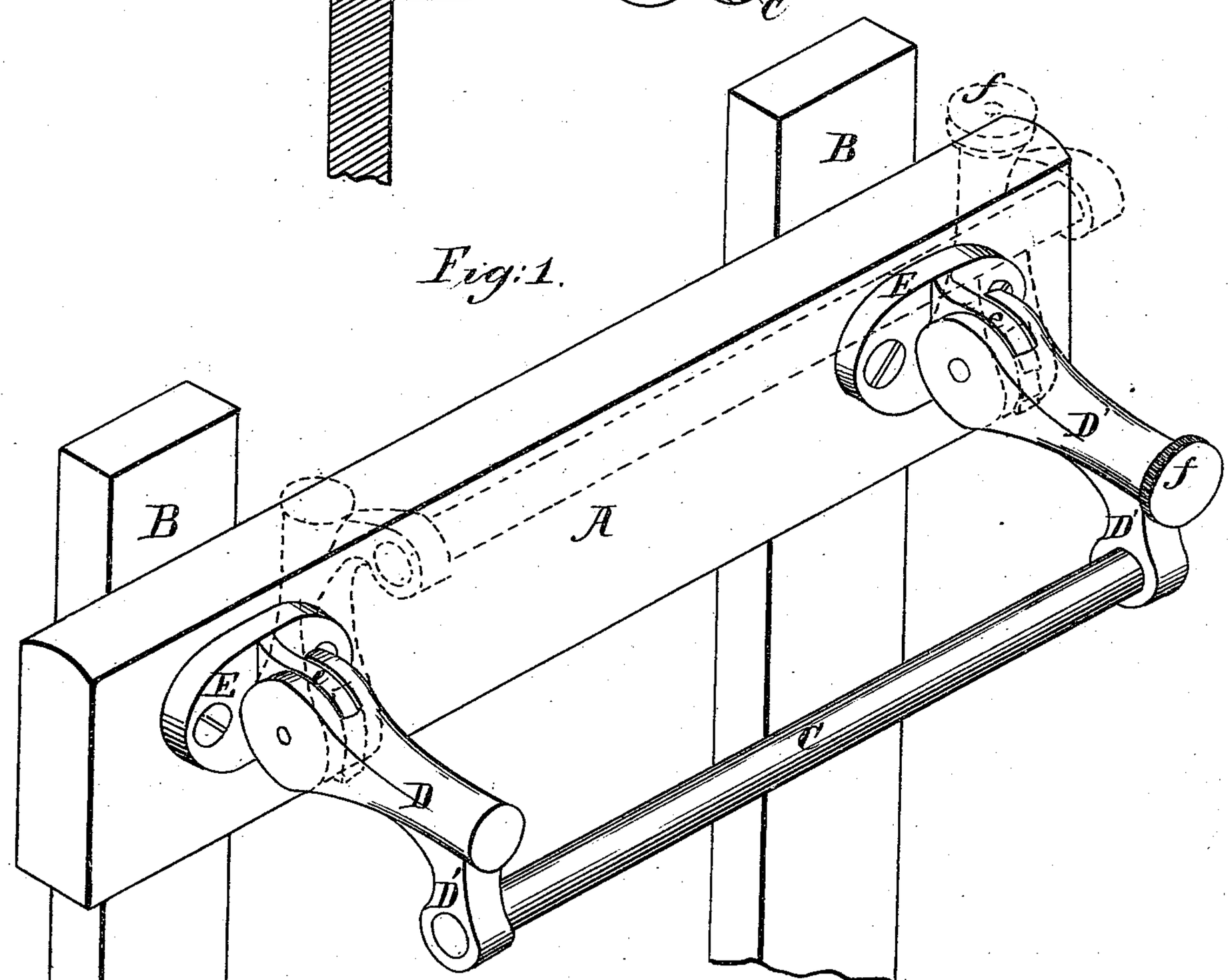


Fig: 1.



Witnesses;
Louis Stallecker.
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Inventor;
E. M. Stevens
Per J. H. Adams Atty

UNITED STATES PATENT OFFICE.

E. M. STEVENS, OF BOSTON, ASSIGNOR TO ALFRED B. ELY, TRUSTEE, OF NEWTON, MASSACHUSETTS.

IMPROVEMENT IN SHUTTLE-GUARDS FOR LOOMS.

Specification forming part of Letters Patent No. **64,261**, dated April 30, 1867.

To all whom it may concern:

Be it known that I, EDGAR M. STEVENS, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Shuttle-Guards, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a perspective view of a shuttle-guard with my improvement, and Fig. 2 is a transverse section of the same.

The object of my invention is to provide a shuttle-guard for looms which shall effectually prevent the shuttle from flying or escaping from the loom during the operation of weaving, and at the same time admit of the said guard being readily thrown up out of the way by the operative for access to the shuttle or threads when necessary; and the invention consists of a bar extending across the loom, and attached to projecting arms hinged or pivoted to the lay, in such a manner that when the loom is in operation the said guard will be securely held or locked in position for preventing the shuttle from escaping, by means of a spring-catch, or its equivalent, and so that the latter may be readily unlocked and thrown up by the operative when desired.

It is a matter of very frequent occurrence in the operation of looms that the shuttle, in its passage across the warp, will be diverted from its course and fly out from the loom in consequence of the breaking of a thread or other cause, and thus cause accidents of a serious nature to the operative, the end of the shuttle being of iron and sharp-pointed, and moving with great rapidity and force. It is believed that by my invention the shuttle will be effectually prevented from flying out, and the consequent effects occasioned thereby be certainly avoided.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Referring to the drawings, A represents the lay, constructed and operating in the usual manner. C represents a metallic rod or guard extending across the warp, and placed very near the same, at a sufficient distance from the lay to admit of the free passage to and fro of the shuttle across the warp. The bar C is secured at each end to a bent arm extending outwardly and downward from the lay, and which is provided with a hinge or joint at *e*, secured to the lay by a plate or other convenient method. The projection or arm D is made hollow, and contains a spring-rod, *d*, properly supported, and passing through an opening in the outer end of the arm D, where it is provided with a thumb-piece, *f*. The inner end of the rod *d* fits within a recess or notch in the projecting plate *e*, forming a catch, and serving to hold the arm D in a downward position, as shown.

When it is desirable to obtain access to the shuttle or threads the spring-catch *d* is retracted, so as to withdraw it from the notched hinge, which can be done in an instant by the operative, when the guard can be immediately thrown up out of the way, and as soon as the necessary repair is completed the guard C can be instantly brought down and automatically locked in position.

I do not confine myself to the particular form of arm for holding the guard C, or the method of locking it; but

What I claim as new, and desire to secure by Letters Patent, is—

The hinged guard, in combination with a positive self-locking device which shall hold the same in position, when down, against any blow of the shuttle, while it may be readily unlocked and thrown up by the operative when desired, substantially in the manner and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

E. M. STEVENS.

Witnesses:

J. H. ADAMS,

DAVID KELLEHER.