

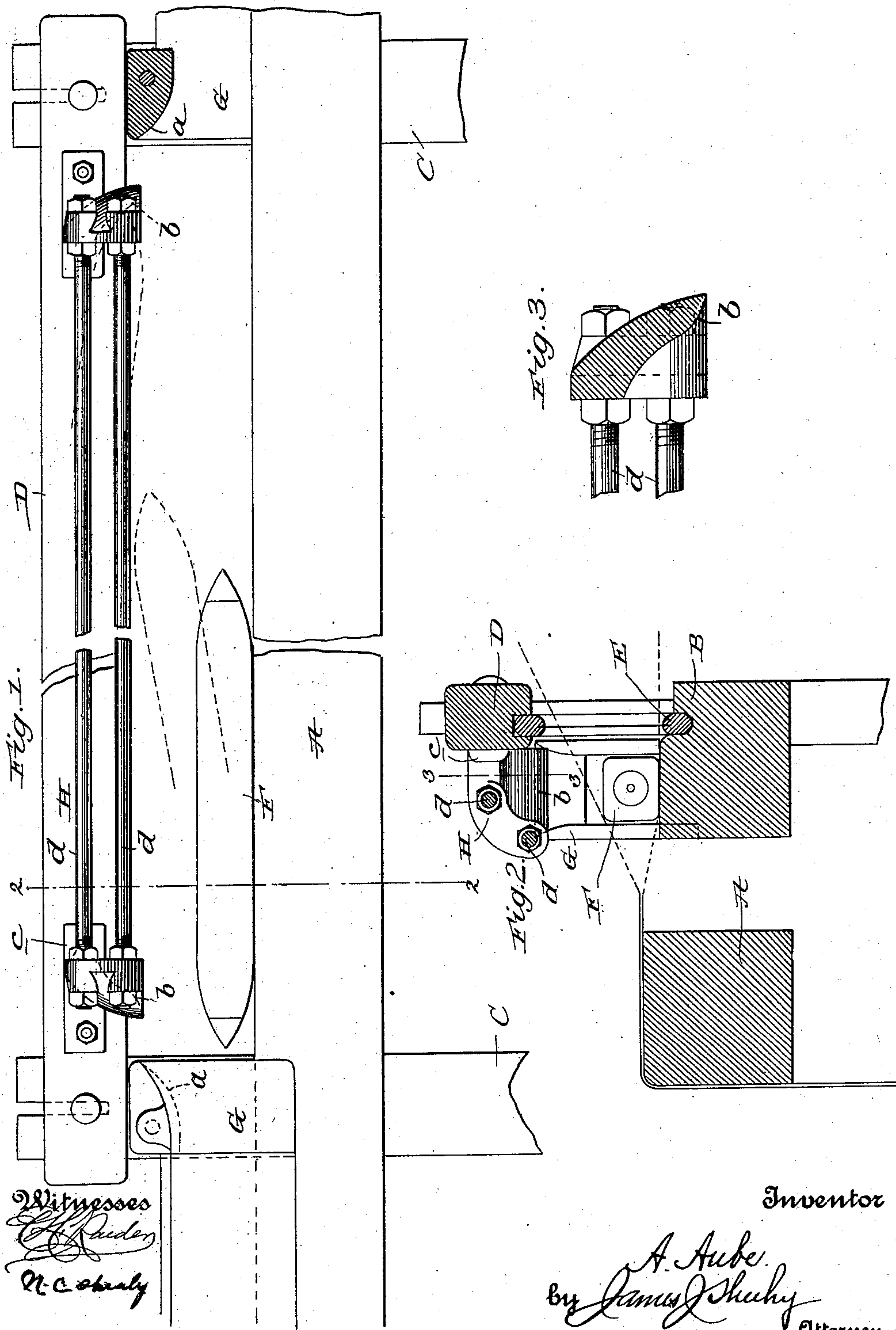
No. 741,612.

PATENTED OCT. 20, 1903.

A. AUBE.
SHUTTLE GUARD.

APPLICATION FILED MAR. 9, 1903.

NO MODEL.



Witnesses
[Signature]
A. C. Shady

Inventor
A. Aube.
by *[Signature]*
Attorney

UNITED STATES PATENT OFFICE.

ADJUDEUR AUBE, OF WOONSOCKET, RHODE ISLAND.

SHUTTLE-GUARD.

SPECIFICATION forming part of Letters Patent No. 741,612, dated October 20, 1903.

Application filed March 9, 1903. Serial No. 146,928. (No model.)

To all whom it may concern:

Be it known that I, ADJUDEUR AUBE, a citizen of the United States, residing at Woonsocket, in the county of Providence and State of Rhode Island, have invented new and useful Improvements in Shuttle-Guards, of which the following is a specification.

My invention pertains to looms; and it has for its object to provide a simple and inexpensive shuttle-guard readily applicable to a loom of the ordinary type and adapted in the event of a shuttle flying out of the warp to retain the shuttle in the loom and guide it into the shuttle-box.

With the foregoing in mind the invention will be fully understood from the following description and claims when taken in connection with the accompanying drawings, in which—

Figure 1 is an elevation, partly in section, of a portion of a loom equipped with my improved guard; Fig. 2, a section taken at right angles to Fig. 1 and in the plane indicated by the broken line 2 2 of said figure, and Fig. 3 a detail section taken in the plane indicated by the broken line 3 3 of Fig. 2 and illustrating one of the shuttle-deflectors of the guard.

Similar letters of reference designate corresponding parts in all of the views of the drawings, referring to which—

A is the breast-beam of a loom; B, the lay; C C, the swords or lay-supports; D, the reed-bar; E, Fig. 2, the reed; and F the shuttle. These parts may be, and preferably are, of the construction common to looms extant.

G G are shuttle-boxes arranged on the lay, preferably with their mouths alongside the swords C, Fig. 1, and having the upper walls of said mouths flared, as indicated by *a*, and H is my improved shuttle-guard. This latter is arranged longitudinally above and parallel to the lay B, so as to retain and guide the shuttle when the same flies out of the warp, (see dotted lines in Fig. 1,) and it is provided at its ends with downwardly-extending deflectors *b*, the purpose of each of which is to turn the shuttle downwardly, and thereby assure the same entering the adjacent shuttle-

box. In addition to extending downwardly the deflectors *b* extend outwardly in the direction of the length of the guard, so as to guide the shuttle into the boxes G.

In accordance with my invention the guard H is made up of brackets *c*, fixedly connected to the face of the reed-bar D and having the deflectors *b* integral therewith, and longitudinal rods *d*, extending between and connected to the brackets. The brackets are preferably curved downwardly, as best shown in Fig. 2, and one of the longitudinal rods is connected to the lower portions thereof, this latter in order to preclude lateral displacement of the shuttle when it flies up against the guard.

In practice it will be observed that in the event of the shuttle flying out of the warp (shown by dotted lines in Fig. 2) it will strike against and be retained in the loom by the longitudinal bars of the guard; also, that the shuttle will move along in engagement with the bars until it reaches one of the deflectors *b*, when it will be turned downwardly, and thereby caused to enter the adjacent shuttle-box. From this it follows that the shuttle is effectually prevented from forcibly leaving the loom and injuring a bystander, as frequently happens when no means is provided for retaining the shuttle in the loom.

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

1. In a loom, the combination with the reed-bar; of downwardly-curved brackets connected to and disposed at right angles to the reed-bar, and having deflectors *b*, extending downwardly and also outwardly, in the direction of the length of the guard, and longitudinal rods connected to and extending between the brackets; one of said rods being arranged at the outer, lower ends of the brackets, and the other at an intermediate point in the length thereof.

2. In a loom, the combination with a lay, a reed-bar, and shuttle-boxes, the upper walls of the mouths of which are flared; of downwardly-curved brackets connected to and disposed at right angles to the reed-bar, and hav-

ing deflectors *b*, extending downwardly and
also outwardly in the direction of the length
of the guard, and longitudinal rods connected
to and extending between the brackets; one
5 of said rods being arranged at the outer, lower
ends of the brackets, and the other at an in-
termediate point in the length thereof.

In testimony whereof I have hereunto set
my hand in presence of two subscribing wit-
nesses.

ADJUDEUR AUBE.

Witnesses:

BELLE SMITH,
GEO. W. SPAULDING.