

(No Model.)

J. L. LAIRDIESON.

HEDDLE FRAME.

No. 306,264.

Patented Oct. 7, 1884.

Fig. 1.

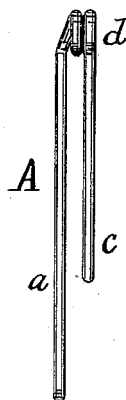


Fig. 5.

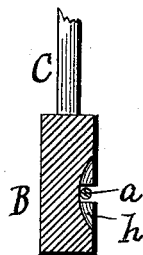


Fig. 2.

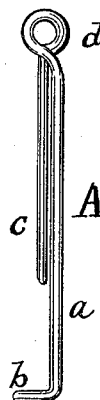


Fig. 3.

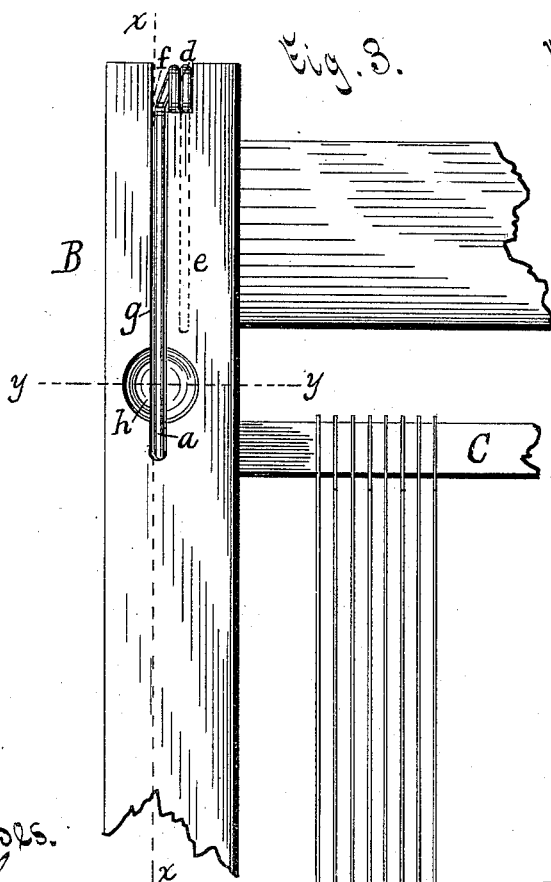
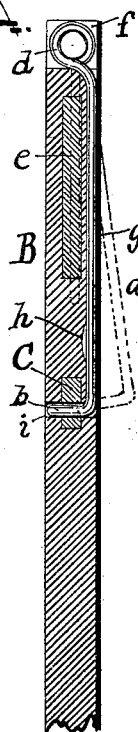


Fig. 4.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN L. LAIRDIESON, OF LOWELL, MASSACHUSETTS.

HEDDLE-FRAME.

SPECIFICATION forming part of Letters Patent No. 306,264, dated October 7, 1884.

Application filed October 9, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN L. LAIRDIESON, of Lowell, in the county of Middlesex and State of Massachusetts, have invented an Improved Heddle-Frame; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

10 Figure 1 is a front view of the lock-catch separate; Fig. 2, a side view of the same; Fig. 3, a side view of one corner of a heddle-frame, showing the catch applied thereto; Fig. 4, a vertical section in a plane indicated
15 by the line *x x*, Fig. 3; and Fig. 5, a cross-section in a plane indicated by the line *y y*, Fig. 3.

Like letters designate corresponding parts in all of the figures.

20 The purpose of my invention is to provide a heddle-frame having an improved fastening for removably holding the heddle bars or rods, the fastening not projecting at all from the surface of the frame, and the frame and
25 fastening being so constructed that the fastening is self-retaining in the frame, and yet readily removed therefrom by hand.

The invention consists in the construction hereinafter described and claimed.

30 I make the catch *A* entirely of a single piece of elastic wire. The main part or body *a* is preferably formed straight, and has the catch part or pin *b* projecting substantially at right angles from the body. The tang or at-
35 taching part *c* is also straight, and is arranged preferably nearly parallel with the body *a*. The tang and body are connected by one or two coils, *d*, of the wire. These coils are not
40 essential, but are desirable to increase the extent of the elastic portion of the catch, and to assist in holding the catch in proper position in the heddle-frame, as shown.

The construction of the frame to receive this catch is substantially as follows: A vertical
45 hole, *e*, is bored in the end of the stile or side bar, *B*, of the heddle-frame to receive the tang *c* of the catch; also, a notch, *f*, is cut in the end of the stile to receive the coils *d* of the catch and sink that part within the outline
50 surface of the stile, and to keep the catch from turning in the hole *e* out of proper position. The body *a* of the catch fits in a groove,

g, of the stile, so as to sink it below the surface thereof, and a cavity, *h*, is also formed in the stile for inserting the ends of the fingers 55 to get hold of the catch when it is to be raised for unfastening the heddle bar or rod. The catch-pin *b* enters a hole, *i*, through the stile *B*, and through the end or tenon of the heddle bar or rod *C*, to be fastened in the mortise 60 of the stile. When the heddle bar or rod has been inserted in place, the catch-pin springs in through it and holds it securely in place, being a complete lock, since it cannot 65 jar nor work out of place. Then, whenever the heddle bar or rod is to be removed, the catch-pin is simply lifted out far enough to relieve the same, and it is ready for removal. It will be seen that there is no part of the catch which projects at all beyond the heddle-frame. The catch is so simple and is so 70 easily made of such cheap material that the whole cost is trifling. The catch-pin *b*, being arranged substantially at right angles to the attaching-tang *c*, holds the whole catch securely in the frame without any other means, 75 and yet the catch can be removed instantly after lifting the pin *b* from the hole in the stile.

I claim as my invention—

1. The combination, with the heddle-bar *C* 80 and the heddle-frame having a groove, *g*, holes *i* and *e*, and cavity *h*, as described, of a heddle-bar-locking catch, *A*, composed of a body, *a*, catch-pin *b*, tang *c*, and coil *d*, the said parts fitting respectively in the groove *g*, 85 holes *i* and *e*, and notch *h* of the heddle-frame, whereby every part is adapted to lie within the surface of the said heddle-frame, substantially as and for the purpose herein specified.

2. The combination, with the heddle-frame 90 having holes *i* and *e*, of a heddle-bar-locking catch, *A*, having a catch-pin, *b*, and a tang, *c*, substantially at right angles to each other and fitting respectively in the holes *i* and *e* of the heddle-frame, similarly located in respect 95 to each other, whereby the catch is securely held in the heddle-frame without additional means, substantially as specified.

In testimony whereof I have signed my name in presence of two witnesses.

J. L. LAIRDIESON.

Witnesses:

GEORGE E. METCALF,
WISNER B. BISBEE.