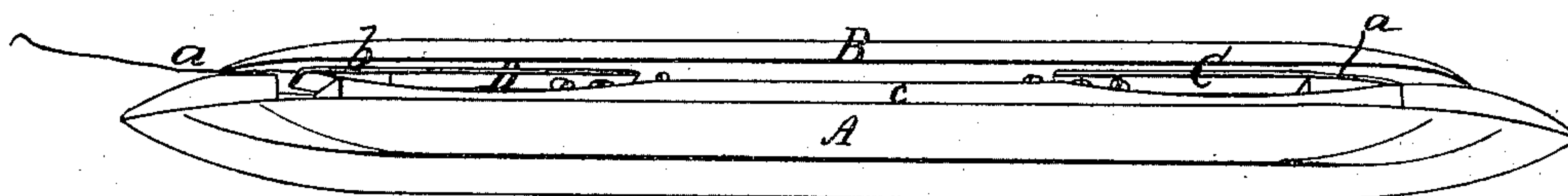


D. S. DEWEY.  
SHUTTLE FOR WEAVING HAIRCLOTH, &c.

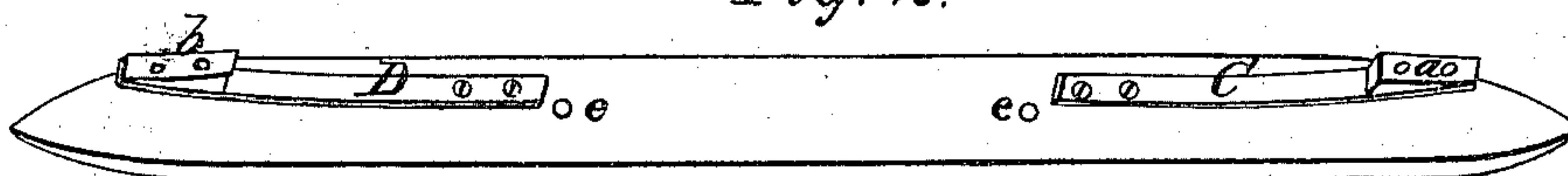
No. 8,902.

Patented Apr. 27, 1852.

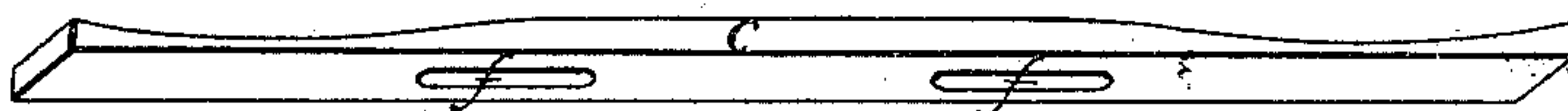
*Fig: 1.*



*Fig: 2.*



*Fig: 3.*





# UNITED STATES PATENT OFFICE.

DANIEL S. DEWEY, OF HARTFORD, CONNECTICUT.

SHUTTLE FOR WEAVING HAIRCLOTH, &c.

Specification of Letters Patent No. 8,902, dated April 27, 1852.

*To all whom it may concern:*

Be it known that I, DANIEL S. DEWEY, of the city and county of Hartford, in the State of Connecticut, have invented a new and useful Improvement in Shuttles; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, which make a part of this specification, in which—

Figure 1 is a perspective view of the whole shuttle, showing the springs, and the bar, or alternate wedge, which works them, in their proper positions for use. Fig. 2 is a perspective view of a longitudinal section of the shuttle, showing the springs, when separate, or free, from the bar, or alternate, or binding wedge. Fig. 3 is a perspective view of the bar, or alternate, or binding wedge, by the sliding of which the springs are pressed, or released.

I make the shuttle of hard wood, or any other suitable material, of the ordinary size, and suitable shape, (as shown at A, Fig. 1,) so that it may be used by hand, in common looms, or by any of the various pick motions of the power looms.

I make a longitudinal slot through the whole thickness of the shuttle, (near one side,) nearly its whole length, as shown at B, Fig. 1, or for convenience of repairing, or altering the spring, etc., it may be made in two parts, and the thin part, shown in Fig. 2, attached with screws, or otherwise. In this slot, and on the thin side, I attach two long flat springs, C, and D, Figs. 1, and 2, in such a position that they will spring out from this thin side, as seen at C, Fig. 1, and C, and D, Fig. 2, sufficiently to receive a hair, or other material, with an inclined plane at, or near, the outer end of each, as seen at *a*, and *b*, Figs. 1, and 2.

I insert a bar, *c*, Figs. 1, and 3, also having inclined planes at each end, the reverse of those on the springs, to work on the inclined planes of the springs, as seen in Fig. 1, so that it will act, alternately, as a wedge on the inclined plane of the springs; so that when the bar, *c*, is forced, by any power, toward one end of the slot it will release the spring at that end, as seen at *a*, Fig. 1, and press the spring at the other end, as seen at *b*, Fig. 1, and vice versa; so that one end of the shuttle will be, by means of the spring and wedge, firmly holding the end of a hair,

as seen at *d*, Fig. 1, to draw it into the open warp, while the other end will be open to receive another hair at the other side of the warp. This bar, *c*, is held in the shuttle by screws, or pins, passing through holes in the thin part *e*, and *e*, Fig. 2, and through slots *f*, and *f*, Fig. 3, in the bar, into the body, A, of the shuttle.

To use the shuttle, the butt end of a hair is placed under one of the springs, and the bar, or wedge, (*c*,) pushed toward the other end of the shuttle, when the inclined plane of the bar will press the spring against the inside of the thin part of the shuttle, and confine the hair, as seen at *d*, *b*, Fig. 1, while the other spring is relieved. The shuttle is then thrown through the open warp, by hand, or otherwise, carrying with it the hair. As the shuttle passes into the shuttle box on the opposite side, a stop strikes the end of the bar, *c*, and forces it toward the other end of the shuttle, which relieves the spring, *b*, and therefore drops the hair to be beat up by the reed, or batten. And as the shuttle arrives in the shuttle box, as before described, before the bar, or wedge, is moved, the butt end of another hair is fed under the spring, *a*, so that the sliding of the bar, *c*, while it releases the hair which has been drawn through, also acts upon the spring, *a*, and secures, or binds, the other hair, which is carried through, in its turn, by the opposite motion of the shuttle, and is released, or dropped, in consequence of the other end of the bar coming in contact with another stop, as before described; so that the alternate motion of the shuttle, by means of the stops, slides the bar, by which means the hairs are alternately confined, to be drawn through, and released, or dropped, when drawn through, ready to be beat up.

The hair may be fed by hand to the shuttle, or by any other convenient method; and the shuttle may be worked by hand, or any other suitable power or machinery.

This shuttle is equally applicable to the weaving of grass, chip, cane, palm leaf, etc., which are woven without selvage, or where the woof does not return, but each crossing is a separate piece. It is also applicable to drawing in and out rods, as in weaving piled fabrics.

The advantages of my improvement consist in making the shuttle in such shape that it may be conveniently used in the manner of a common shuttle, (by hand or any other



power,) and therefore, may be used with much greater rapidity. And, in having the springs and bar so arranged, that the same motion which releases one piece of the woof 5 will bind the next. And, in having the spring to receive the piece of woof, always open where the piece is to be fed.

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

10 The combination of the sliding bar, *c*, with the springs, *a*, and *b*, when used in connection with stops attached to the shuttle boxes, (or other convenient fixtures,) so that the motion of the shuttle will slide the bar in

such a manner that, when one of the springs 15 drops one piece of the woof, or filling, the other spring will receive, and confine, another at the other end; so that the pieces may be carried through, alternately, from each side, and released, or dropped, in the 20 right position to be beat up; when the whole is constructed, arranged, and combined, substantially, as herein described.

DANIEL S. DEWEY.

Witnesses:

A. WILLARD,  
R. FITZGERALD.