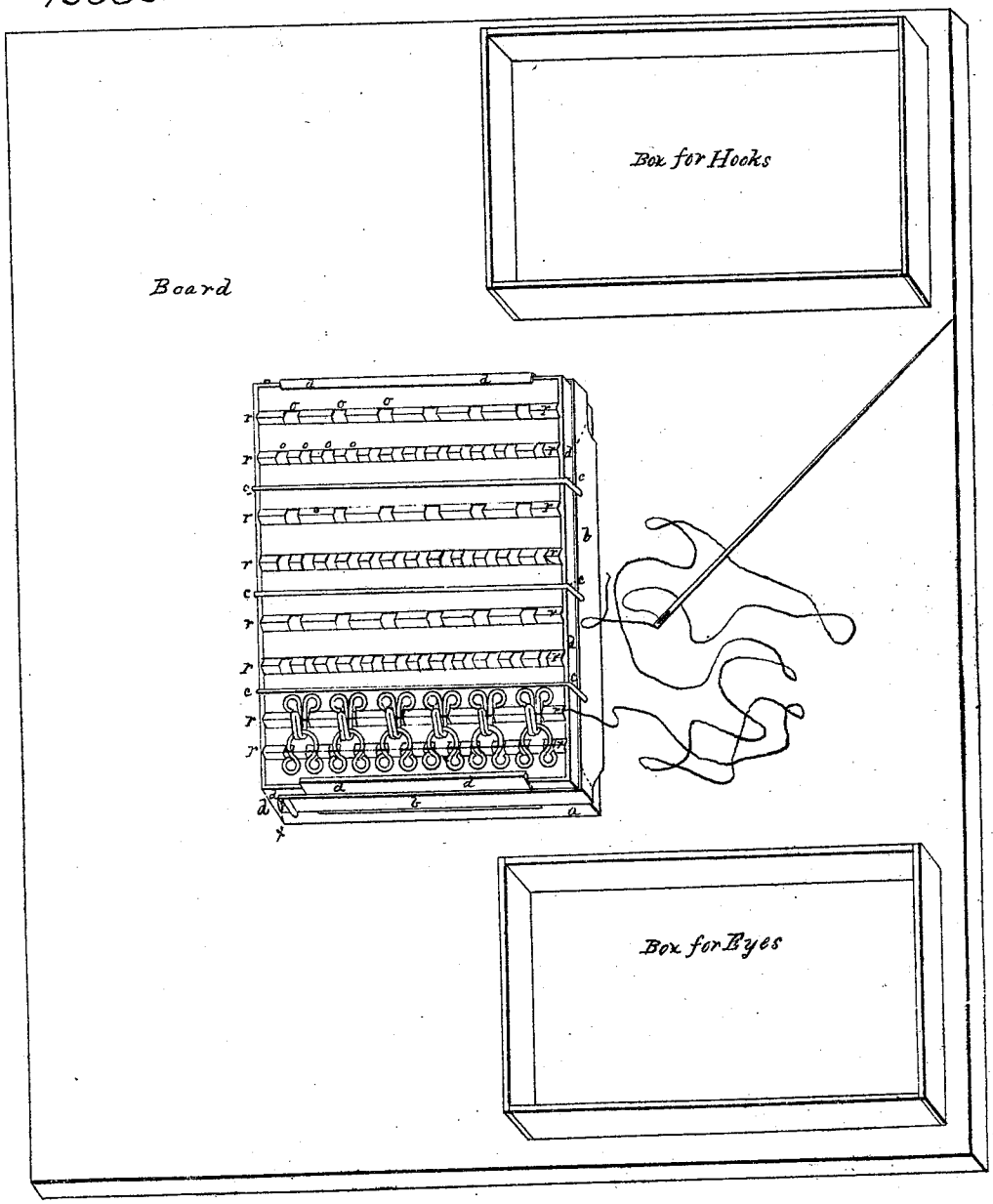
C. Atwood.

Carding Hooks & Eyes.

No. 10330. Patented Dec. 20. 1853



UNITED STATES PATENT OFFICE.

CHARLES ATWOOD, OF BIRMINGHAM, DERBY, CONNECTICUT.

ATTACHING HOOKS AND EYES TO CARDS.

Specification of Letters Patent No. 10,330, dated December 20, 1853.

To all whom it may concern:

Be it known that I, CHARLES ATWOOD, of Birmingham, Derby, New Haven county, State of Connecticut, have invented a new and Improved Mode of Attaching Hooks and Eyes to Cards.

The nature of my invention consists in fastening hooks and eyes with thread, small splints of wood or other suitable material to crimped cards which have been pierced with holes suitable for laying them in or passing them through; and also in the process of attaching them to cards by the aid of suitable apparatus.

To enable others skilled in the art to which this invention appertains to make and use the same I will describe it more particularly; to wit:

Cards of a suitable size are pierced with transverse rows of rectangular or mortise-like holes,—first, with six of a size suitable to receive the hooks, say about $\frac{2}{10}$ of an inch long by $\frac{1}{8}$ of an inch wide, and then with a parallel row of twelve similar holes to receive the sides of the bows of the eyes as they lie hooked into the hooks, say about $\frac{2}{10}$ of an inch long by $\frac{1}{32}$ of an inch wide, thus making a pair of rows of holes. About $\frac{3}{8}$ of an inch from these is another similar pair of rows of holes, and so on, the length of the card, there being generally four pairs of rows of holes. The sizes of the holes and the distances apart vary to suit the size of hooks and eyes. The paper is then so crimped across the center of the holes as to raise ridges, the bases of which do not extend beyond the length of the holes, and high enough to allow a thread or thin splint to pass over the hooks and eyes and under the vertices of the ridges.

The mode of putting on or attaching is by an apparatus of considerable importance to this invention. Thus, a block of wood or other suitable material of the size of a crimped card is provided, and to each end is fixed a thin piece of brass having about a sixteenth of an inch of its upper edge bent to a right angle toward the center of the block, and rising sufficiently above its top to allow the end of the card to enter and leave readily. A clamp, somewhat in the form of the bail of a kettle, extends around three sides of the block; namely across the top from left to right, along the right hand side of the block, and along the lower end to the left corner, being furnished at the ends, with axes set about half an inch from the top. To the left hand side of the block, at points corresponding to the centers of the spaces between the pairs of rows of holes, in three places, three elastic cords are attached by one of their ends about half an inch below the top, and carried directly across to the bail where they are each attached at three corresponding places by the other end, so that when this bail is brought down about to the center of the edge of the block, they press on the top. This bail may be held down by its own weight or by a pin. The block is fixed in the center of a board about 9 inches square having edges slightly raised by a molding. The hooks are put in a small box or parting on one side of the board, and the eyes in another on the other side so as to be convenient to take up to put on.

The mode of operation with this apparatus is as follows: The bail is thrown up and back so as to clear the top of the block. Under each of the brass projections an end of a card is put, thus leaving the card slightly arched. The bail with its cords is brought down upon it, and holds it fast to the block. The hooks and eyes are placed now, in their appropriate notches, (such the holes may now be considered,) and a thread previously fastened by a knot at its end to the corner of the card, is passed, with a long needle under the vertex of the first ridge or rib of the paper over the hooks and out at the opposite side of the card, where it is entered under the vertex of the next rib over the eyes, out at the opposite side, then over the next row of hooks and eyes in the same manner and so on till all are fastened when the end of the cord is tied to the card or a knot is made to retain it. If thin splints are used, as of wood they are to be thrust through in the same place as the thread.

In the drawing *a a a a* represents the block; *b b* is the clamp or bail; *d d*, *d d* are the brass projections; *c c c c* are the cords; *r r r r* are the ridges. One row of hooks and eyes is represented set. *o o o o* are the holes without hooks and eyes. The thread is represented as red by the red lines. *x* is the axis of the bail on the lower end.

I do not here claim the crimping and perforating of cards with mortise-like holes

for the purpose of attaching hooks and eyes to as that was secured to me in a patent dated 25th September 1849. But

I do claim—

1. The crimped and perforated cards combined with thread, or thin splints, to fasten hooks and eyes to them substantially as herein described.

2. I claim also the attaching of hooks by the aid of a block, clamp, and cords, or by means substantially the same, as herein described.

CHARLES ATWOOD.

Witnesses:

EDWIN TUCKER,

GEO. KELLOGG.