(No Model.)

A. E. GARDNER.

BUTTON DISPLAY BOARD.

No. 414,515. Patented Nov. 5, 1889.

Fig. 1

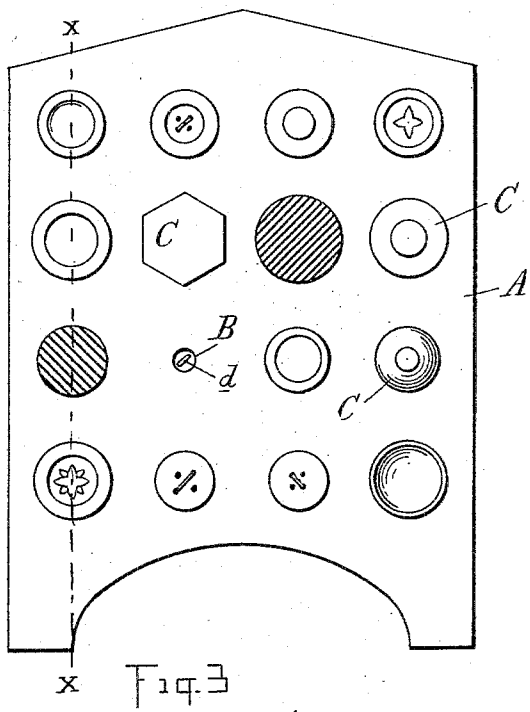


Fig. 2

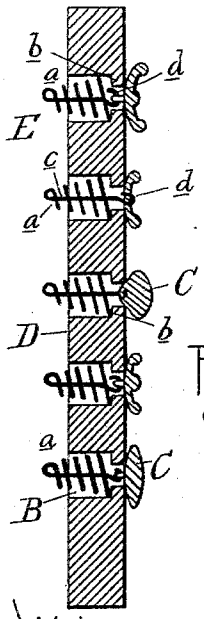


Fig. 3

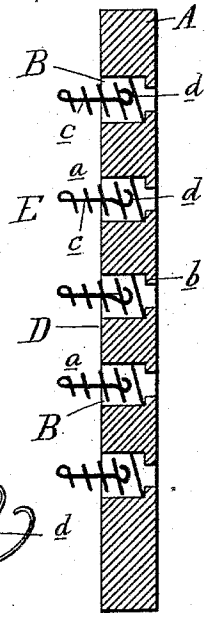


Fig. 5

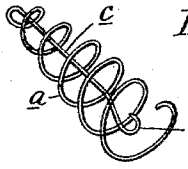
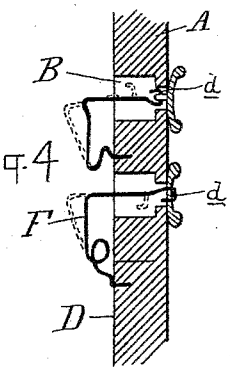


Fig. 4



Witnesses:

P. M. Hulbert

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UNITED STATES PATENT OFFICE.

ADDISON ELY GARDNER, OF MILAN, MICHIGAN, ASSIGNOR OF ONE-HALF TO ROBT. SWAZEY, FRANK STEVENS, AND ALBERT HAYDEN, OF SAME PLACE.

BUTTON-DISPLAY BOARD.

SPECIFICATION forming part of Letters Patent No. 414,515, dated November 5, 1889.

Application filed November 10, 1888. Serial No. 290,475. (No model.)

To all whom it may concern:

Be it known that I, ADDISON ELY GARDNER, a citizen of the United States, residing at Milan, in the county of Washtenaw and State of Michigan, have invented certain new and useful Improvements in Button-Display Boards, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in button-display boards; and the invention consists in the peculiar construction, arrangement, and combination of the spring attaching device for holding the buttons in their positions on the board, so that, while they are firmly held in their positions, they may be suitably withdrawn to allow of the inspection of the under side of the button and of attaching and detaching the buttons with little trouble, all as more fully hereinafter described.

In the present state of the art buttons are usually attached to display-boards by sewing them upon a suitable fabric secured thereon. This construction requires considerable labor and does not permit of the ready inspection of the buttons without detaching them from the board, and in order to replace them requires that they should be again sewed into their positions.

In the drawings which accompany this specification, Figure 1 is a front elevation of the button-display board to which my device is attached. Fig. 2 is a vertical cross-section thereof on line X X. Fig. 3 is a similar section showing the buttons detached. Fig. 4 is a similar section showing the modifications of the spring, and Fig. 5 is a perspective view of one of the spiral springs detached.

A is a display-board of any suitable construction, preferably of wood, and provided with a series of perforations B, which preferably are arranged in rows to give an orderly appearance to the buttons C to be displayed.

Upon the back face D of this display-board I attach a spring-connection E, preferably of the following construction:

a is a conical solenoid, having its coils of a suitable diameter to enter the perforations in the board and with its lower coils resting upon the shoulder *b*, formed within the perforations.

The arm *c* is provided at its inner end with a hook *d* of suitable shape to engage the eye of the button which it is desired to secure in position. The tension of this spring tends to normally retract the hook *d*.

In practice, the parts being arranged substantially as described, with the specific construction of spring shown in Fig. 2, they are intended to operate as follows: A display-board of suitable size (and provided with a requisite number of perforations B) being formed, the springs E are inserted into the back of the perforations with their lower ends abutting against the shoulder *b*, and the lower coil of this spring is made of suitably large diameter to hold it from accidental displacement when forced into the perforations. The hook *d* is in the position shown in Fig. 3 at a suitable distance from the face of the board, so that pressure and collapse of the spring is necessary to cause it to pass through the aperture B. To engage a button upon this arm of the spring, the operator compresses the spring E, so that the hook *d* will protrude sufficiently to allow of the engagement thereon of the button, either through the shank or the eye of the button, as may be desired. The tension of the spring when released will then draw the button and tightly seat it against the face of the board. By a suitable pull upon the button it may be drawn out sufficiently to allow of the inspection of the shank or eye without detaching it.

It is obvious that many different constructions of spring may be used to retain the button in its position, as shown. For instance, in Fig. 4 are shown two modifications of the spring which will accomplish the same purpose. The spring F in Fig. 4 is shown of suitable shape to engage into a button which is not provided with a shank.

The essential element of my invention consists in providing the perforated board with a spring having an arm adapted to engage with the shank or eye of the button and normally hold it to its seat upon the board.

What I claim as my invention is—

1. In a device for the purpose described,

an apertured board, combined with a spring working in an aperture in said board, with an arm having a hooked end extending through the aperture to detachably engage with a button or its shank, substantially as described.

2. In a device of the kind described, a board provided with perforations B, having the shoulders *b*, and the spiral spring E, having the arm *c*, normally retracted and adapted to engage into the button, substantially as described.

3. In a device of the kind described, a board A, provided with the perforations B, having the shoulder *b*, the coil-spring having its inner coil of larger diameter than the perforation B and provided with the arm *c*, normally retracted, and hook *d*, adapted to engage with the button or its shank, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 29th day of October, 1888.

ADDISON ELY GARDNER.

Witnesses:
P. M. HALBERT,
ED. MCBREARTY.