

E. L. BESSE.  
FIN BOARD.  
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904,598.

Patented Nov. 24, 1908.

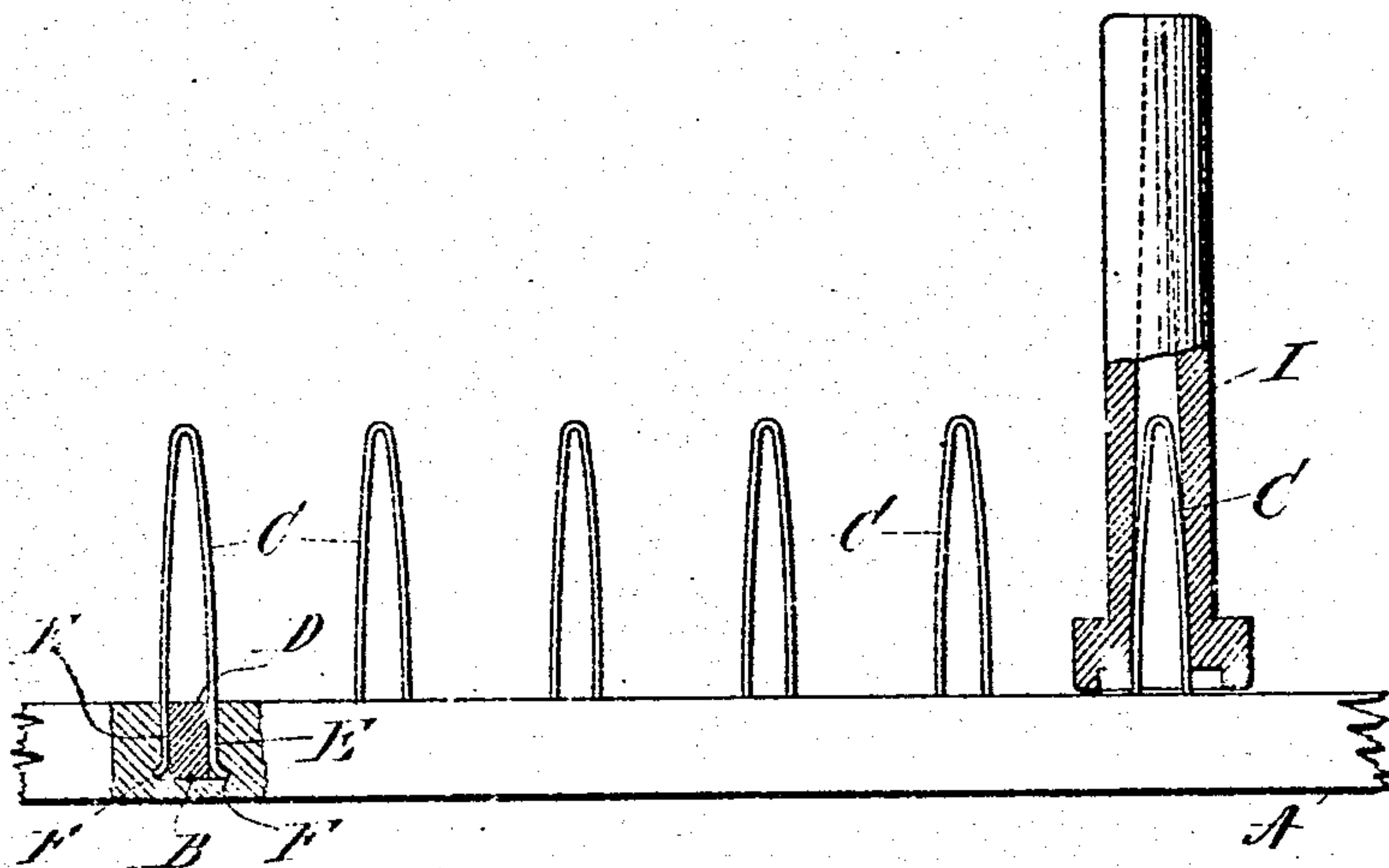


Fig. 1.

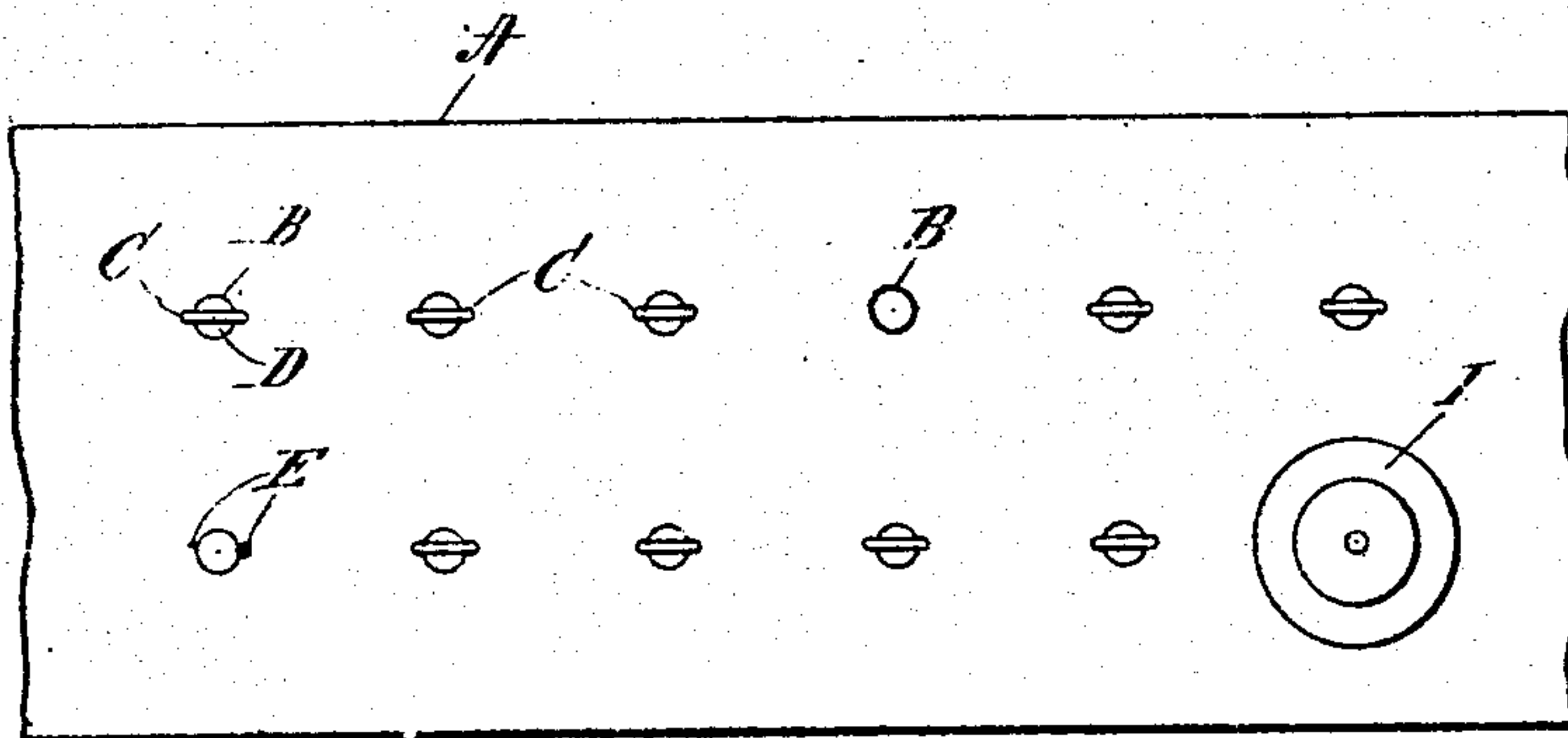


Fig. 2.

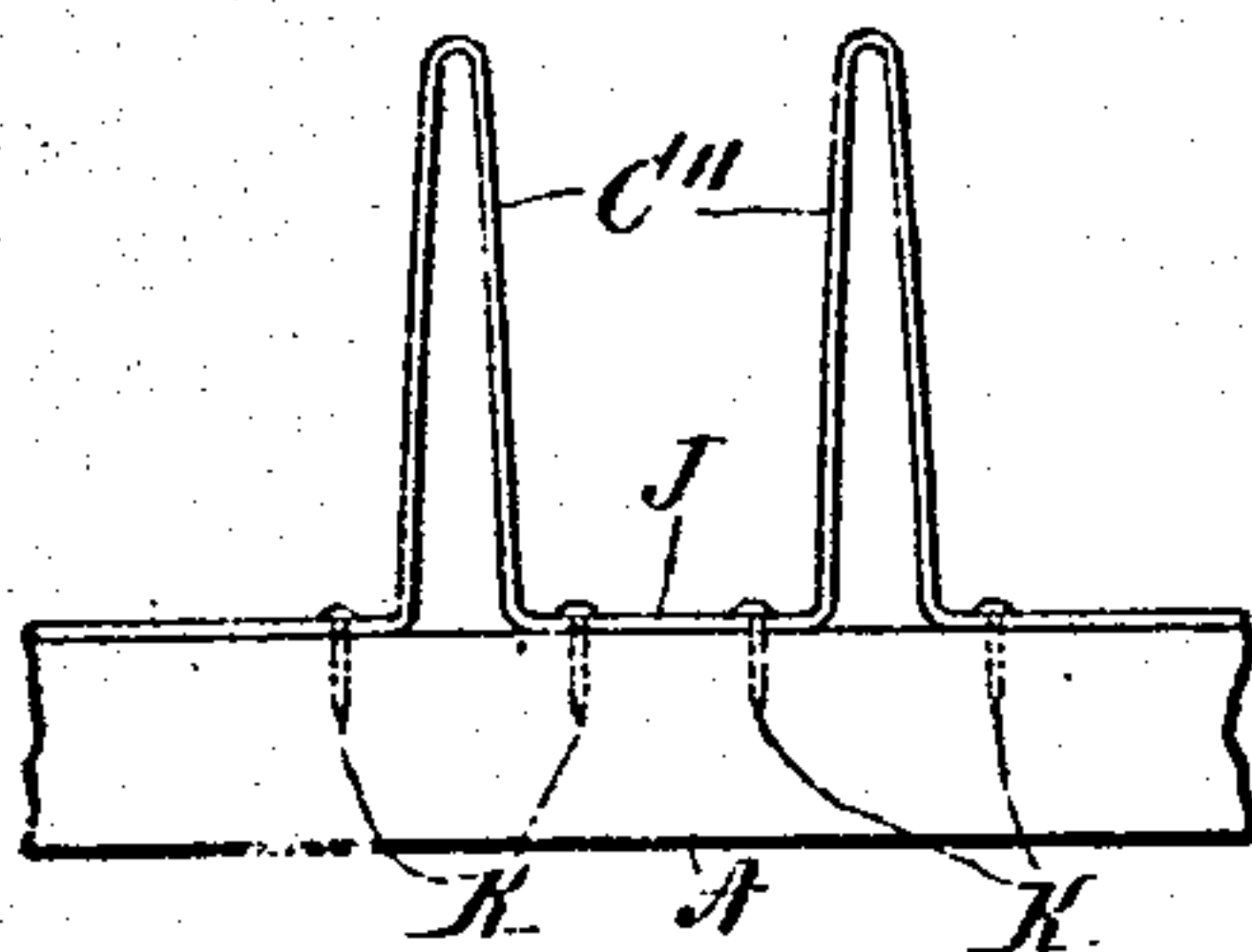


Fig. 4.

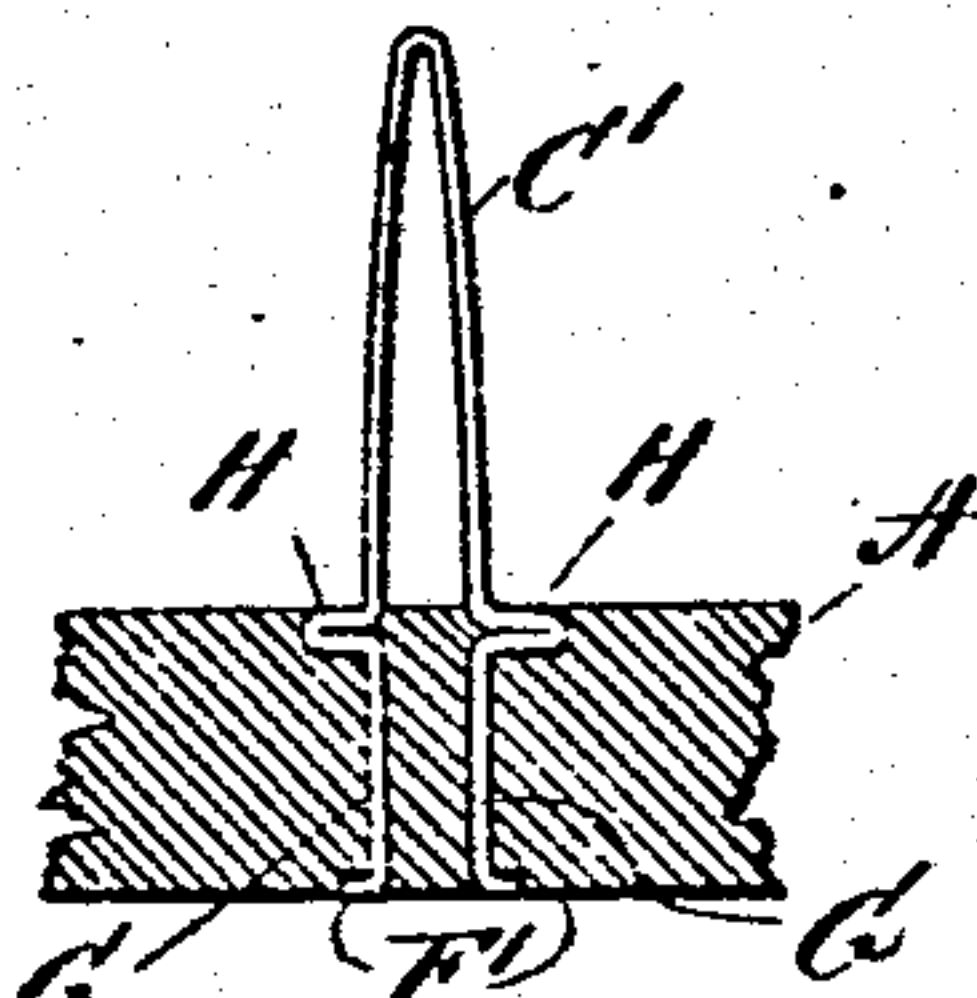


Fig. 3.

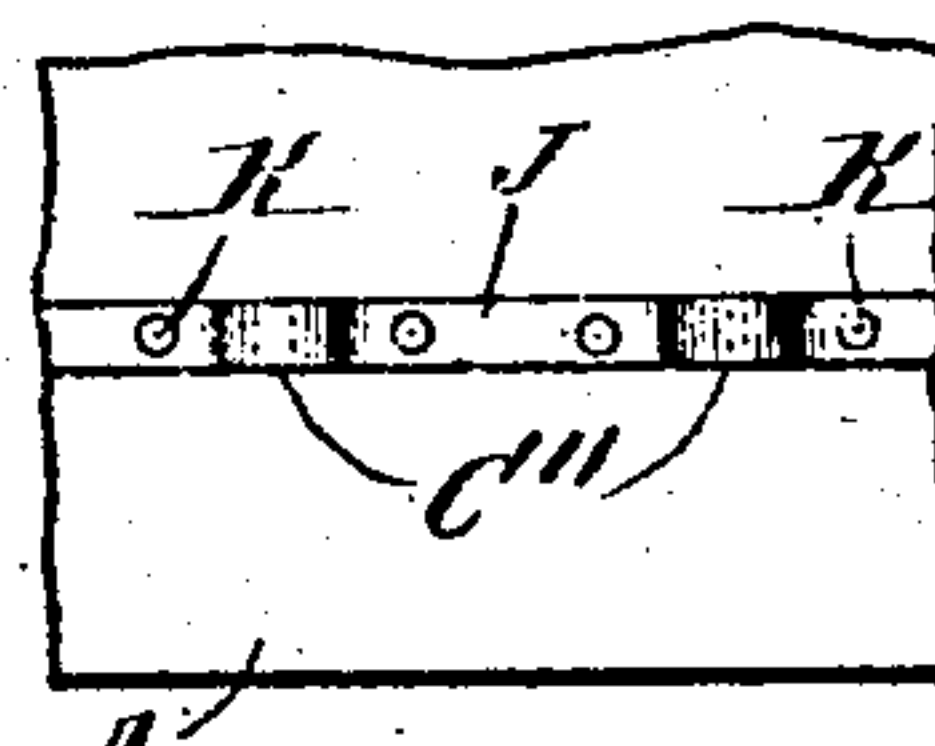


Fig. 5.

WITNESSES:  
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# UNITED STATES PATENT OFFICE.

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## PIN-BOARD.

No. 904,598.

Specification of Letters Patent.

Patented Nov. 24, 1908.

Application filed March 12, 1908. Serial No. 420,562.

*To all whom it may concern:*

Be it known that I, EDWARD L. BESSE, a citizen of the United States, and a resident of Fairhaven, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Pin-Boards, of which the following is a specification.

My invention relates to pin-boards for receiving bobbins of cotton-thread, yarn, etc., and temporarily storing the same after their removal from the machinery.

The pin-boards now in use in thread and cotton mills consist usually of a board provided with a number of upwardly extending wooden pins for receiving the spools. These boards, which are usually about three feet long and a foot and a half wide and which accordingly accommodate a large number of bobbins or spools of thread, yarn, etc., ordinarily weigh, together with their contents, about one hundred and fifty pounds. As the boards become filled, they are removed and stored away in stacks which eventually become of considerable weight. It has been found in practice that during this stacking operation the wooden pins which receive the spools are frequently broken by the operative's act of sliding a board over the top of the spools held by the board next below. In order to overcome this difficulty it was attempted to substitute iron bolts for the wooden pins, but such construction so greatly increased the weight of the pin-boards that its use was abandoned.

The object of the present invention is to provide a pin-board which shall obviate the defects above pointed out by substituting elastic or yielding pins for the stiff and brittle wooden pins of the prior art.

My invention therefore consists in a pin-board having a plurality of elastic pins secured thereto and also in means for securing said elastic pins to the base board so as to prevent the turning of a pin in its hole and the withdrawal of the same therefrom, and also to prevent it from being forced into or through the board.

The drawings which accompany and form a part of this specification show several embodiments of my improved pin-board which have proven efficient in practice; but it will be understood that said drawings serve merely to more fully disclose my invention and that many modifications may be made

by those skilled in the art without departing from the spirit of my invention.

In the drawings, Figure 1 is an elevation, partly in section, of one form of pin-board constructed in accordance with the present invention, and Fig. 2 is a plan view thereof. Fig. 3 is an elevation, partly in section, illustrating one of a number of alternative means that may be employed for securing a pin to a base-board. Fig. 4 is an elevation and Fig. 5 is a plan view of a modification of my invention.

In the figures, A represents a base or base-board which may be of any suitable material and which preferably is made of wood. In that particular embodiment of the present invention shown in Figs. 1 and 2, the base-board is provided with a plurality of holes extending part way therethrough. The elastic pins shown in the drawings consist of the bent wires C, which may be of steel, brass, bronze or other suitable material, and one of these pins is secured in each of the holes B. In the present instance I have shown the pins as having their ends terminating in outwardly extending feet F. Each pin is inserted in a hole and a plug D, which preferably is made of wood, is driven in the hole, thereby forcing a portion of the wire pin into the walls of the hole as shown at E, and also forcing the feet of the pin outwardly at the bottom of the hole B. In this way the pin is prevented from turning in the board and is held from withdrawal therefrom, and also from being forced further into or through the board.

I represents an empty spool or bobbin supported on one of the pins.

It has been found that when a pin-board constructed as above described is completely filled with spools such as shown at I, but carrying yarn or thread, such boards by virtue of the elasticity of the pins C, may be placed on and withdrawn from the stack of pin-boards without breaking said pins, or otherwise injuring the same.

Inasmuch as it is desirable to have the pins retain the bobbins in such manner as to prevent the latter from being jarred from position or dislodged by accident, I prefer to so shape each pin with respect to the central hole passing through said bobbins that the placing of a bobbin over a pin will slightly compress a portion of the pin, al-



though it is to be understood that the friction exerted between a pin and bobbin due to the elasticity of the pin is not to be so great as to prevent the ready removal of the bobbin from the pin by an operative. This advantageous result which is accomplished by my invention cannot be effected by the pin-boards of the prior art in which inelastic wooden or iron pins are employed. As shown in Fig. 1, one simple way of accomplishing this result is to make a portion of the pin a little wider than the diameter of the hole in the bobbin which the pin is to retain. It is not necessary to employ a plug D for securing the pins to the pin-board, for, as shown in Fig. 3, the pin C' may be bent so as to form two lateral extensions or stops H, H and may be inserted in the holes G G, which pass through the base A. The lower ends of the pin may be bent as shown at F' to prevent withdrawal of the pin from said base while the stops H H prevent any further downward movement of the pin. As shown, the base-board should be countersunk so that the stops H, H and the ends F, F may be flush with the surface thereof.

In Figs. 4 and 5, J represents a flat metal strip bent to form the pins C'' and secured to the base A by any suitable means, as by the nails K. In this form of my invention,

the strip of pins, which may be made in desired lengths by machine, may be quickly applied, thereby effecting a saving of labor, and the pins may be automatically spaced apart according to the different conditions of practice to accommodate different sizes of bobbins, etc.

I claim:

1. A pin-board comprising a base provided with a plurality of holes, an elastic pin formed of bent wire for each hole and a plug for securing each pin in its hole.

2. A pin-board comprising a wooden base provided with a plurality of holes, an elastic pin formed of bent wire for each hole and a wooden plug for securing each pin in its hole by forcing a portion of the same into the walls of said hole.

3. A pin-board comprising a base provided with a plurality of holes, an elastic pin formed of bent wire and having its ends terminating in outwardly extending feet for each hole, and a plug for securing each pin in its hole by forcing said feet into the base.

In testimony whereof, I have hereunto subscribed my name this 10 day of March 1908.

EDWARD L. BESSE.

Witnesses:

ELIOT D. STETSON,  
GERRETE GEILS, Jr.