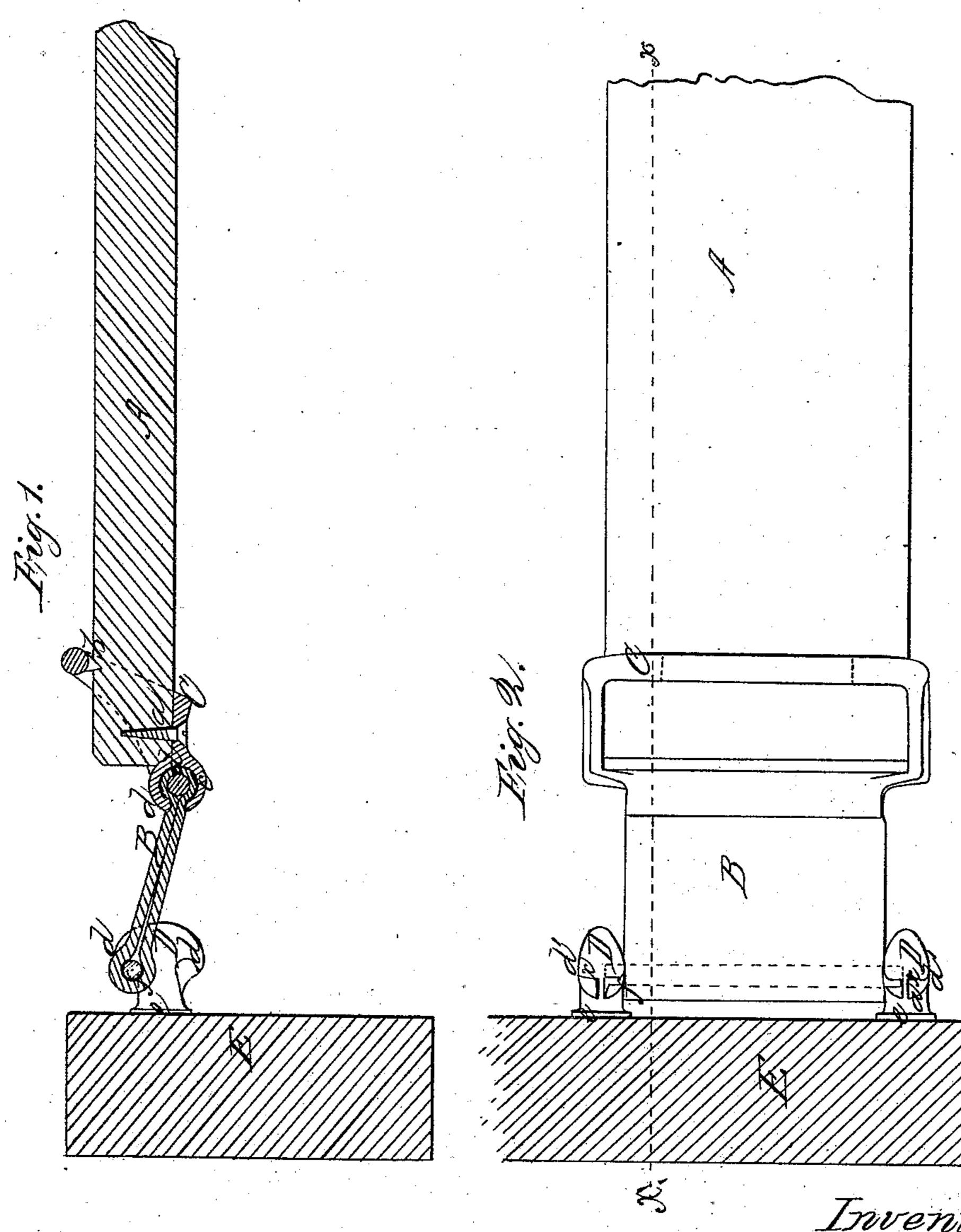
## E. Hennessey, Bed Bottom, Patented Oct. 1, 1861.



Witnesses.

Edward Hennessy Milliam To.

## United States Patent Office.

EDWARD HENNESSEY, OF WATERVILLE, ASSIGNOR TO CYRUS BRETT, OF STRONG, MAINE.

## IMPROVED SPRING BED-BOTTOM.

Specification forming part of Letters Patent No. 33,417, dated October 1, 1861.

To all whom it may concern:

Be it known that I, EDWARD HENNESSEY, of Waterville, in the county of Kennebec and State of Maine, have invented a new and useful Improvement in Spring Bed-Bottoms; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a longitudinal vertical section of a slat and one spring shown attached to a rail of the bedstead. Fig. 2 is a plan or top view of the same.

Similar letters of reference indicate corre-

sponding parts in the two figures.

This invention relates to an improvement in that class of spring bed-bottoms in which slats are connected by elastic loops to the end rails of the bedstead.

The invention consists in a novel and imslats, whereby a firm connection is obtained throughout the entire width of the elastics and slats, the elastics not only being prevented from being casually detached from the slats under the weight to which the bed-bottom may be subjected, but also made to have each thread or portion subjected to an equal strain or pull, thereby increasing the efficiency of the elastics.

The invention further consists in an improved way of connecting the elastics to the end rails of the bedstead, whereby the elastics may be very readily attached to and detached from the rails.

To enable those skilled in the art to fully understand and construct my invention, I will

proceed to describe it.

A represents a wooden slat of a bedstead, and B is an elastic band constructed in the usual way—to wit, a piece of elastic web being cut into suitable and equal lengths, with their ends connected together in any suitable way. The slats A may be of any suitable wood, and to each end of each slatthere is affixed a metal loop C. These loops may be of malleable cast-iron of rectangular form and sufficiently large internally to receive the ends of the slats A by one or more screws a, and the upper parts of the loops are provided each with two spurs b b, which sink into the upper surfaces of the slats. (See Fig. 1.) The outer ends c of the loops C are at the bottoms of the slats, and are of tubular form, with longitudinal slots d extending their whole length.

The elastic bands B are secured in the loops C as follows: The former are inserted in the tubular ends c of the loops C, and a cylin. drical key d is passed through each band or loop in its tubular end  $\dot{c}$ , and the keys are cemented in the tubular ends of the loops, any suitable glue or cement being used. By this arrangement a perfect and durable connection of the elastic bands to the slats is obtained. The former can not draw from the latter, and the slats are secured to the bands at all points of their width, so that the bands will be subjected to an equal strain throughout.

The bands B are connected to the end rails E of the bedstead as follows: In the inner sides of the rails E hooks D are driven or proved way of securing the elastics to the screwed. These hooks are double—that is to say, each head has a hook d' at opposite sides of it, as shown in Fig. 1. This double-hook arrangement is essential, for in case of screws being used on the tangs of the hooks a halfrevolution of the tangs at the most is only required to bring a hook in proper position, whereas if one hook were only employed, as usual, nearly an entire revolution of the tangs might be required, and this frequently cannot be given them, as the shoulders e of the tangs might come in contact with the rails E just after the hooks have passed a vertical position.

> The hooks D are placed at suitable distances apart to receive the ends of rods f, which are passed through the elastic bands B, the ends of the rods being fitted in the hooks. In order to keep the rods f in proper position or prevent any longitudinal movement thereof, the hooks D may be provided with projections or lips  $a^*$ . (See Fig. 2.)

> The metal loops Cadmit of quite thin slats A being used; but in cases where thick slats may be used holes could be made transversely in the slats to receive the cylindrical keys d. This plan, however, would be very inferior, as the wooden slats would be liable to split, and in case of the breaking of a slat it could not be conveniently replaced, as the services of a mechanic would be required. The loops

C, however, admit of the ready replacement of a slat when broken, as the loops may be easily detached from a broken slat and secured to a new one.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. Securing the elastic bands B B to the slats A by means of keys d, fitted in tubes c

at the outer ends of metallic loops C, attached to the slats, substantially as described.

2. Connecting the elastic bands B to the rails E of the bedstead by means of the double hooks D and the rods f, as herein set forth. EDWARD HENNESSEY.

Witnesses:

EDWIN N. FLETCHER, SOLYMAN HEATH.