

Rooney & Kershaw.

Spring Hinge.

N^o 25,585.

Patented Sep. 27, 1859.

Fig: 1.

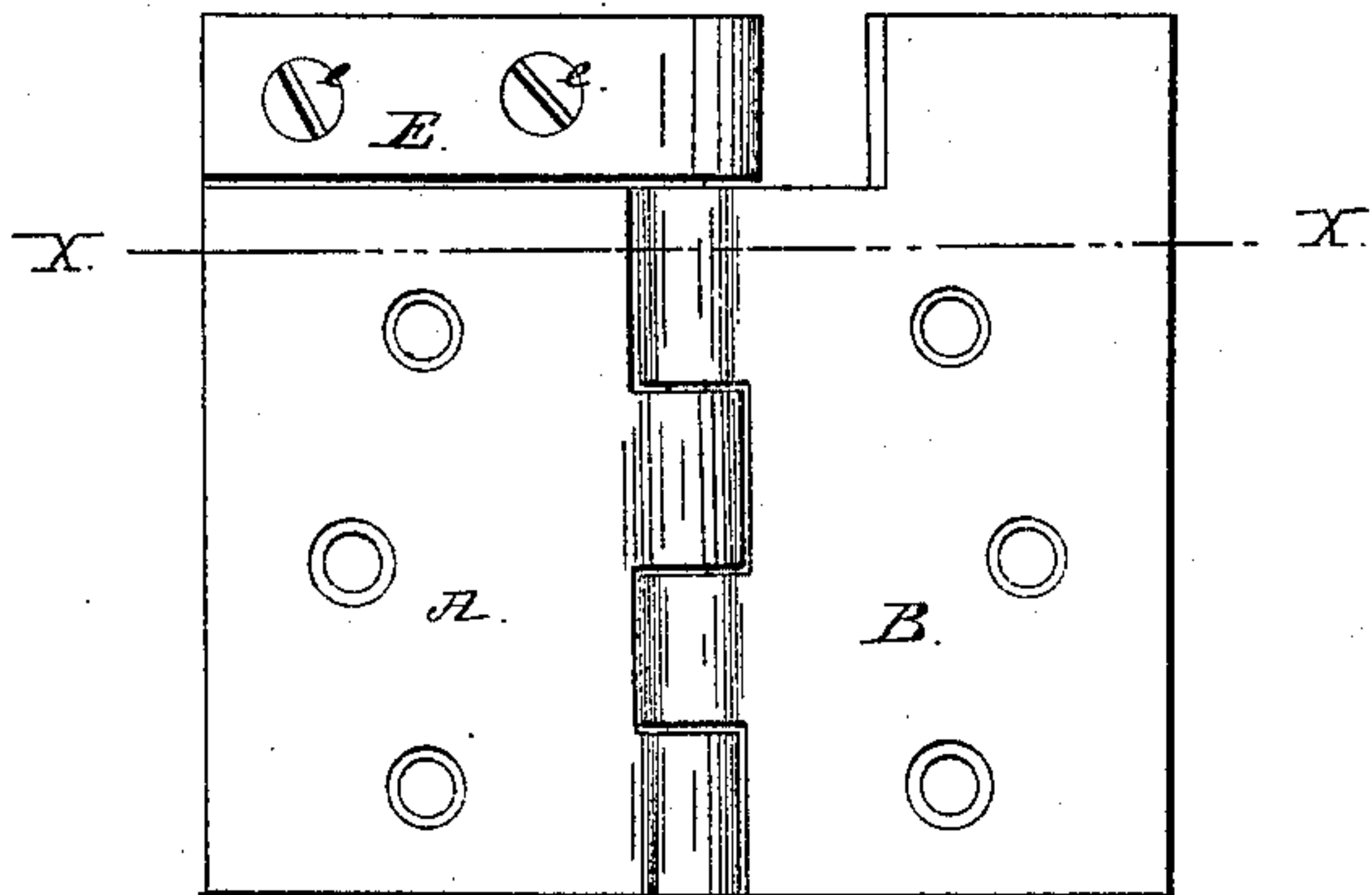


Fig: 2.

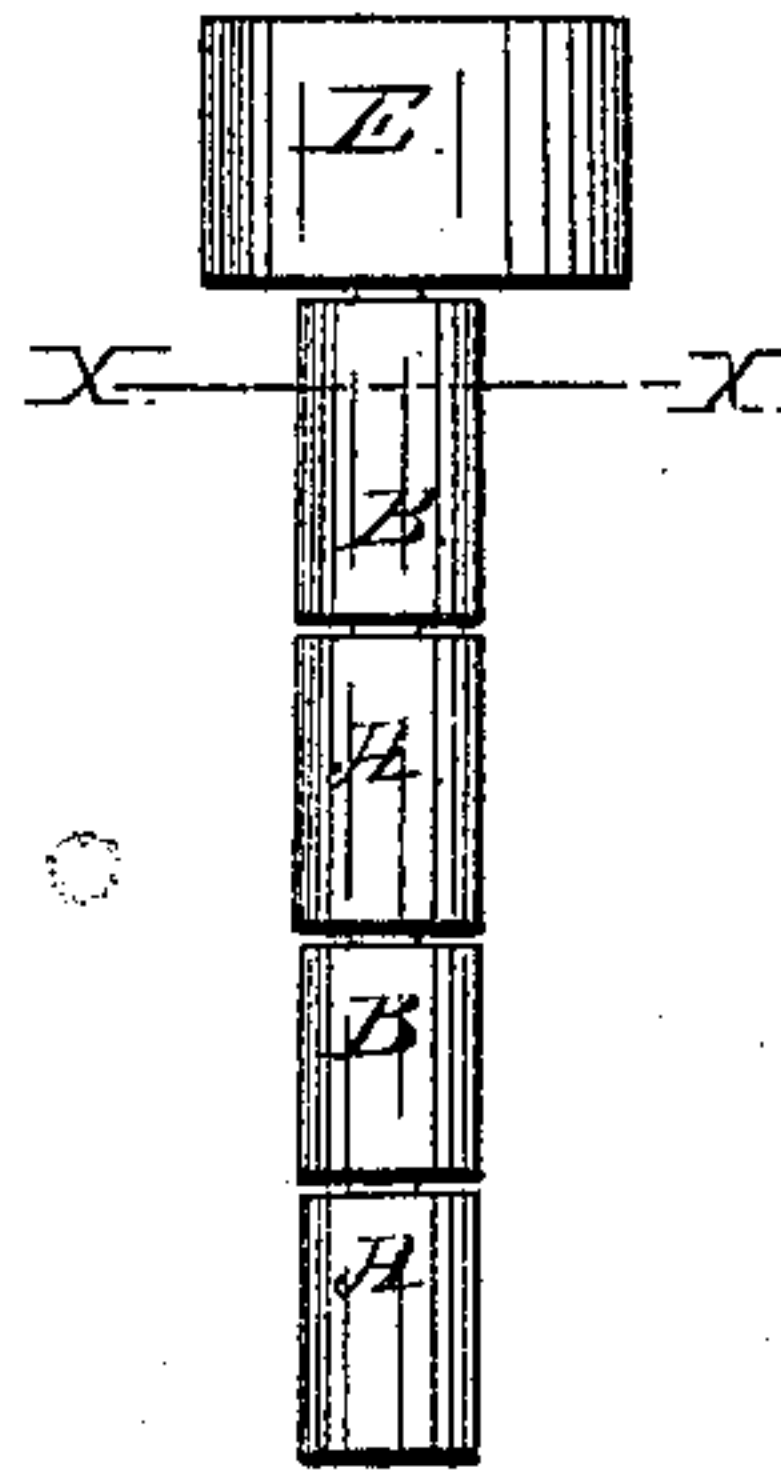


Fig: 3.

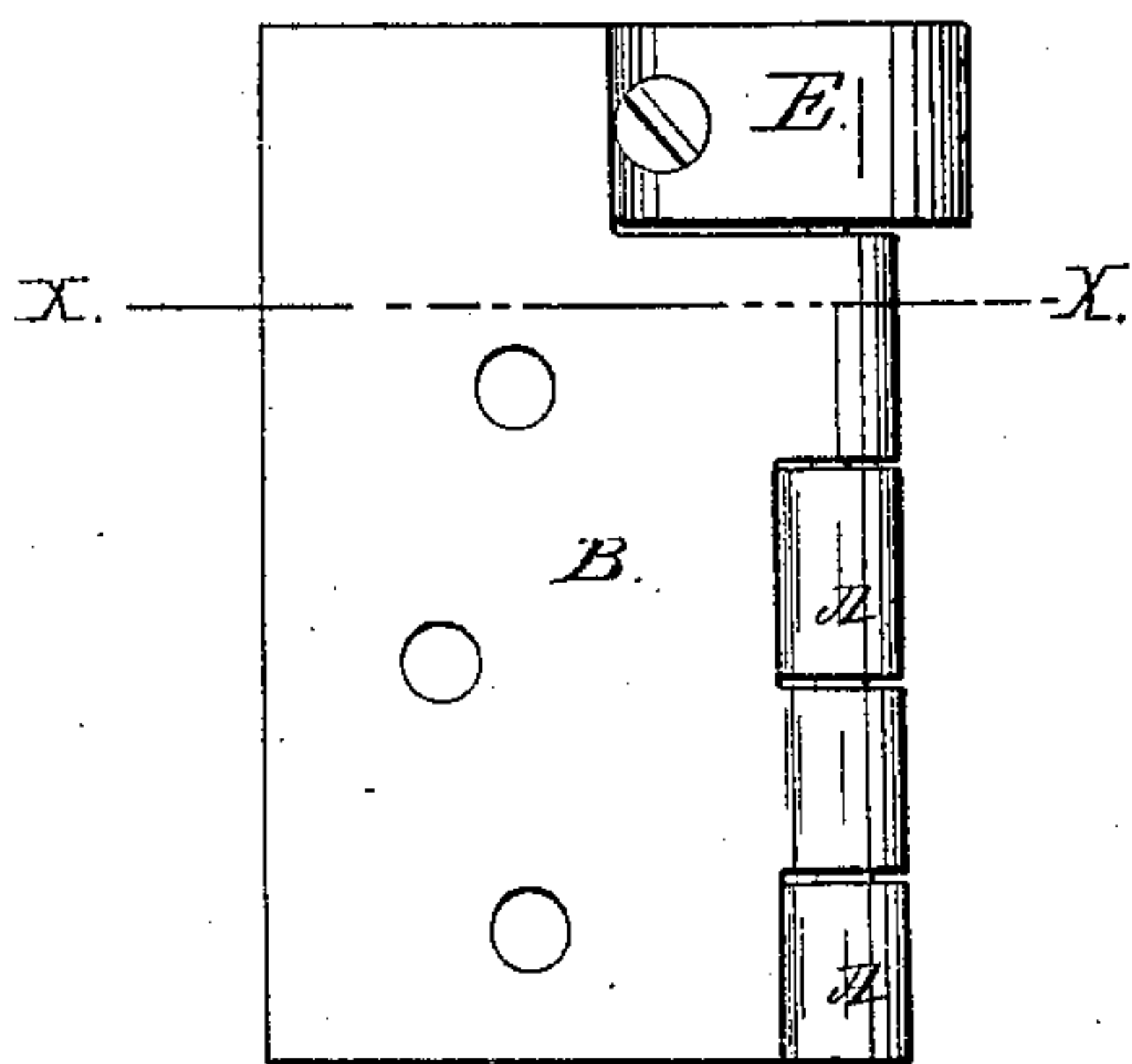


Fig: 4.

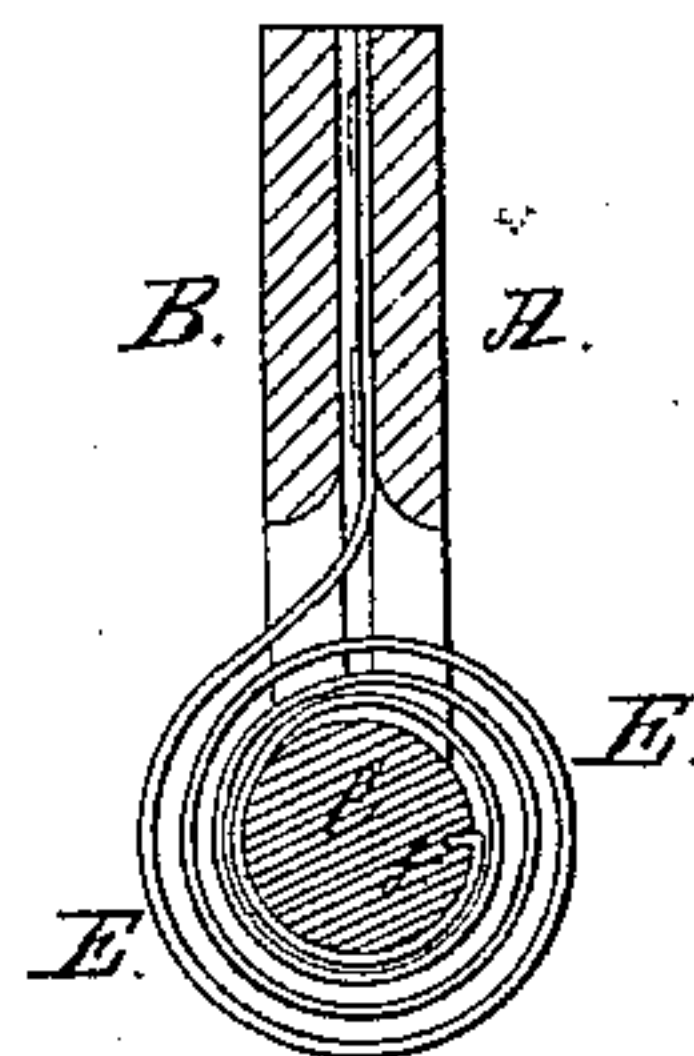
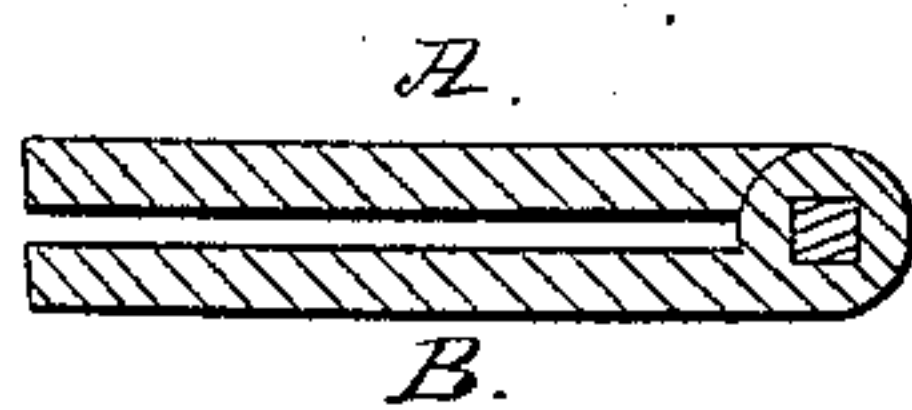


Fig: 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

C. J. ROONEY AND D. RENSHAW, OF NEW YORK, N. Y.

SPRING-HINGE.

Specification of Letters Patent No. 25,585, dated September 27, 1859.

To all whom it may concern:

Be it known that we, CORNELIUS J. ROONEY and DAVID RENSHAW, both of New York, in the county of New York and State of New York, have invented an Improvement in Spring Door-Hinges, the construction and operation of which we have described in the following specification and illustrated in its accompanying drawings with sufficient clear-
10 ness to enable competent and skilful workmen in the arts to which it pertains or is most nearly allied to make and use our invention.

Our said invention consists in the manner
15 hereinafter described of combining and arranging the spring and the parts of the hinge in connection with each other, by which the removal and replacement of a broken spring without interfering with the
20 connection of the parts of the hinge or its attachment to the door is facilitated, and the hinge made much more convenient to use and to graduate, as more fully described below.

25 The accompanying drawings illustrate our invention as follows:—

Figure 1 is an elevation of the inside of the hinge when opened. Fig. 2 is a back elevation of the hinge when closed. Fig. 3
30 is a side elevation. Fig. 4 is a plan of the hinge when closed. Fig. 5 is a section through the line XX on Figs. 1, 2, and 3, showing the manner in which the spindle or shaft is connected to one of the parts of
35 the hinge.

A and B are the sides or wings of the hinge. C is the spindle or axis by which they are connected. The upper part of the sides is cut away around the axis as shown,
40 to receive the spring E, the inner end of which fits by an abrupt turn into a groove *f* in the side of an enlarged portion of the spindle, and the other or outer end of it is fastened to the leaf A by means of screws
45 *e, e*. The spindle *c*, where it fits into the upper remaining section of the joint, is made square, and this upper section of the joint, being part of the wing B, and having a square socket to receive the shaft, furnishes
50 the other terminus or extremity of the attachment of the spring, by which the necessary resistance to the act of opening the hinge is attained. It will be observed that

by this arrangement the shaft of the hinge may be so turned as to bring the slot *f* upon
55 any side of it with reference to the other parts of the hinge, by which the force of the spring upon the hinge may be varied to suit the service it is intended to perform. The arrangement of parts described also
60 furnishes the means of removing a broken spring without taking the hinge apart or disturbing its attachment to the door upon which it is placed, or its attachment to the jamb or casement. To do this, the door is
65 opened, the screws *e, e*, drawn, and the pieces of the broken spring removed, which is done without trouble; the new spring is then coiled sufficiently close to allow it to be introduced so as to bring its ends in proper
70 position; and having then been slid into place upon the shaft so as to properly enter its inner end into the groove intended for its reception, the outer end is brought into place upon the leaf A, and secured by the
75 screws *e, e*, as represented on the drawings. Should the spring be found upon trial to give with the adjustment it has received, either too much or too little force, its action
80 may be modified by raising the shaft C till its square part is above the socket in the upper section of the joint, and turning said shaft so as to bring the slotted or grooved side upon any side relatively to the other
85 parts that will give the required adjustment.

We are aware that a spring has been combined with a door hinge before, and this we do not claim as our invention; but in all the cases of such combination with which we
90 are acquainted the parts are not so combined as to allow the facilities of removal and adjustment which it is the purpose and result of our invention to give.

The particular improvement which we claim as constituting our said invention is—
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The arrangement of the coiled spring E, shaft C, and wings A and B, in combination with each other as described for the purposes stated, when the parts are constructed substantially as herein set forth.

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Witnesses:

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