

S. E. Harrington,

Spring Hinge.

N^o 42,764.

Patented May 17, 1864.

Fig: 1.

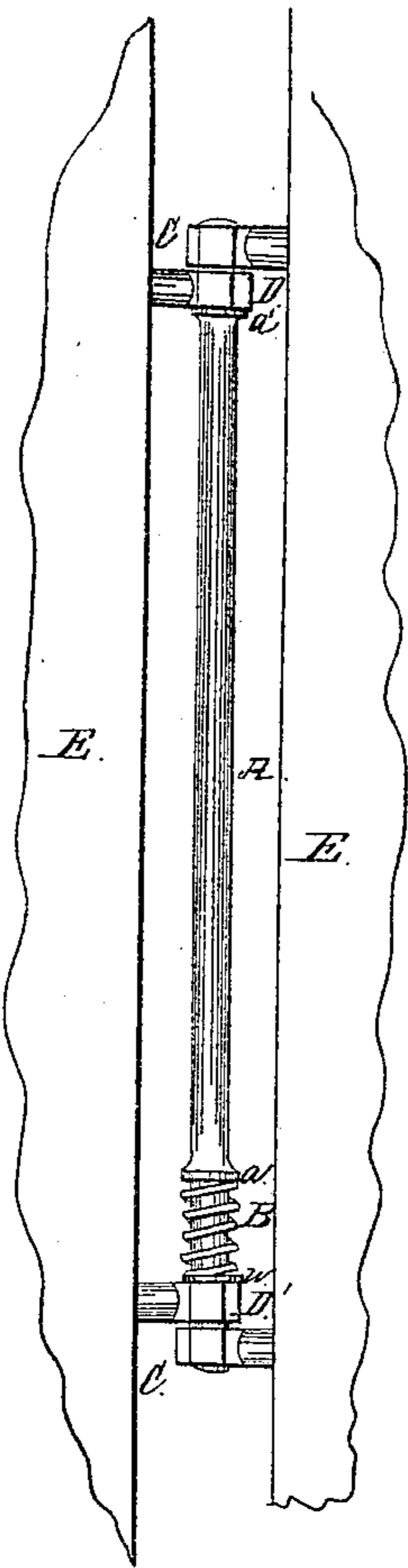


Fig: 4.

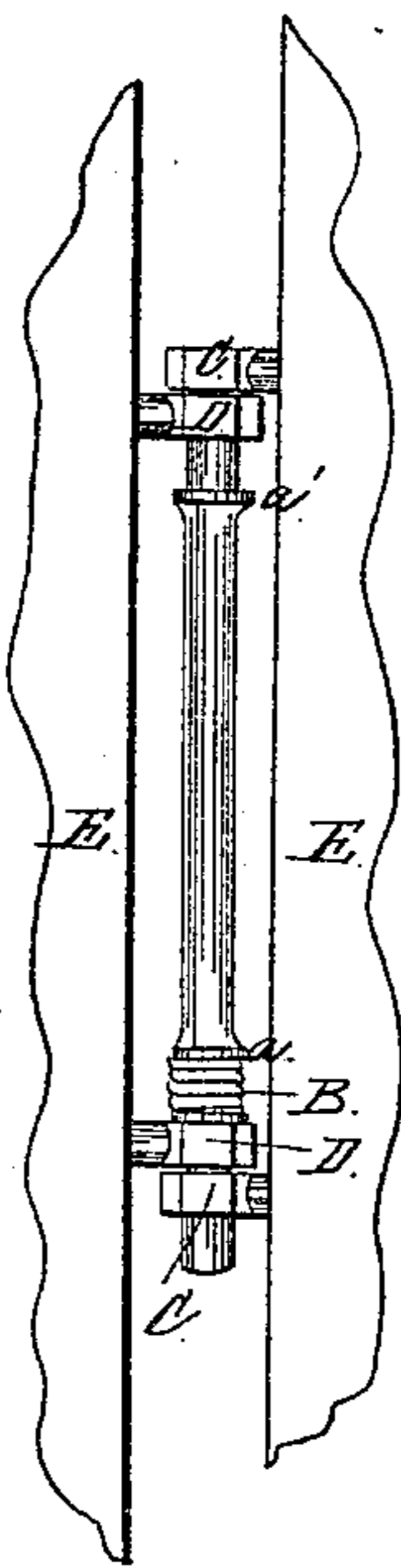


Fig: 2.

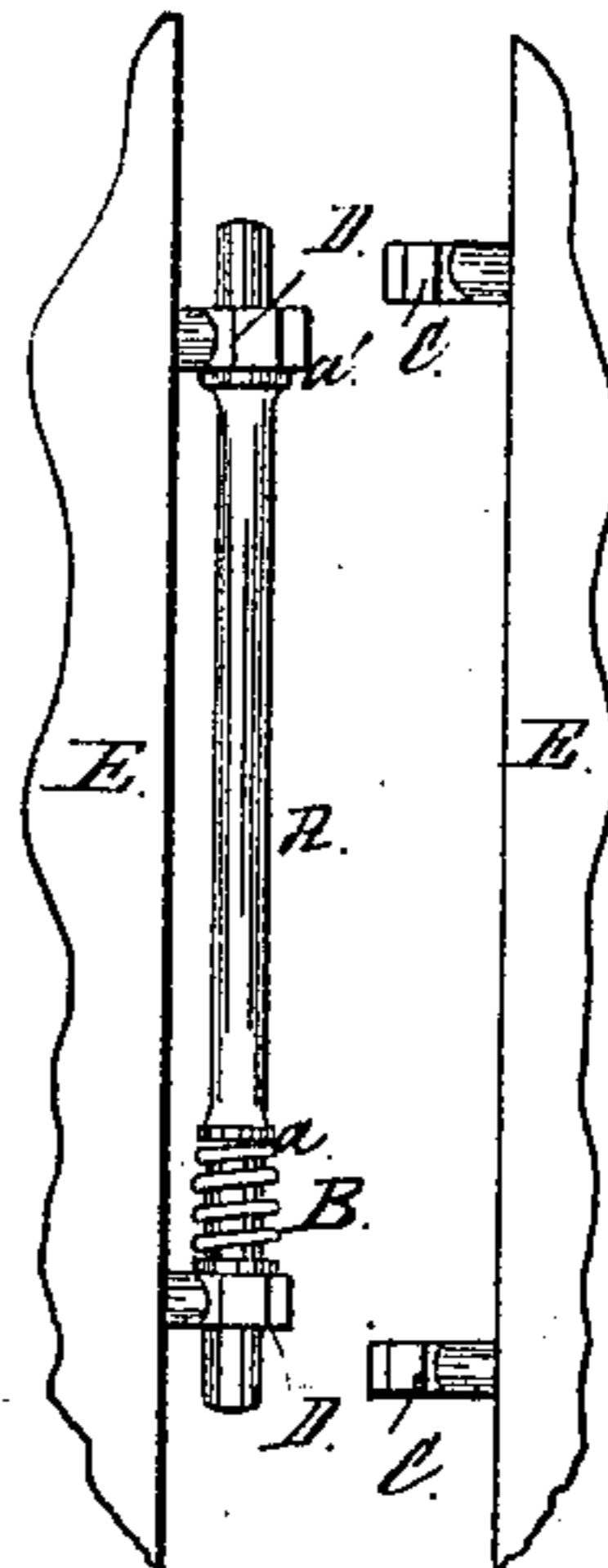
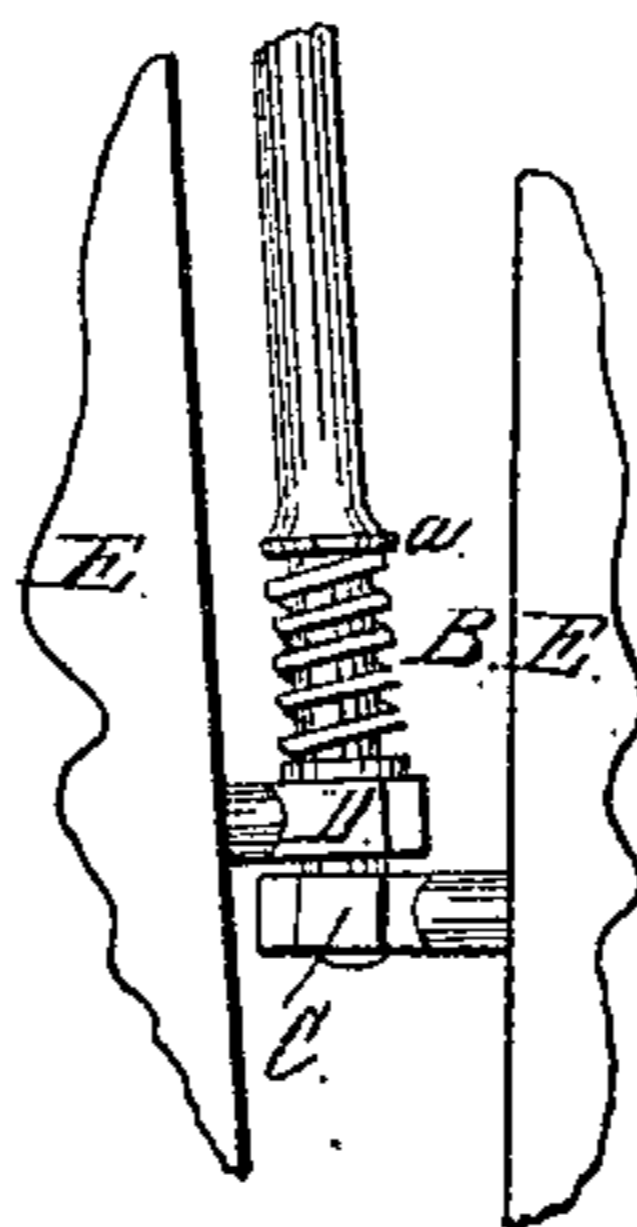


Fig: 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

SAMUEL E. HARRINGTON, OF GREENFIELD, MASSACHUSETTS.

IMPROVEMENT IN HINGES.

Specification forming part of Letters Patent No. 42,764, dated May 17, 1864.

To all whom it may concern:

Be it known that I, SAMUEL E. HARRINGTON, of Greenfield, in the county of Franklin and State of Massachusetts, have invented a new and Improved Coupling-Hinge; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a view of my device with the two parts attached. Fig. 2 is a view of the same detached. Fig. 3 exhibits the first movement in attaching the two parts. Fig. 4 exhibits the last operation and the attachment of it to be completed.

The nature of my invention consists in so constructing a hinge or coupling that the two parts of the same may be readily detached from each other without removing nuts or keys, and at the same time secure a permanent and reliable coupling not liable to become deranged.

That others may understand the construction and operation of my device, I will particularly describe it.

A is the pivot-bolt. B is a spring attached to one end of A to hold it in position. C C' are two eyebolts or staples set in one of the parts, and D D' are two eyebolts or staples set in the other part of the apparatus to be connected, the two parts of which are represented by E E.

The bolt A may be of greater or less length, according to the position it is to occupy. It should be provided with two shoulders, *a a'*, the distance from the end of one shoulder being considerably greater than the other. It should also be provided with a washer, *w*, though this latter is not imperative. Above the shoulder which is farthest from the end the spring B is placed, and upon it the washer *w*. The two ends of the bolt A then being passed through the eyes D and D', said eyes are put in their places and secured, and the

bolt is securely held between them, as shown in Fig. 2, with the extreme ends of A projecting far enough to answer the requirements hereinafter to be stated. The two eyes C and C' are secured in the opposite part in such position as will allow the eyes D D' barely to slip between them, as shown in Figs. 1 and 4.

In order to couple the two parts E and E together, the spring end of the bolt A is passed through one of the eyes C, as shown in Fig. 3. The bolt then may be slipped endwise sufficient to allow the opposite end to pass inside of the other eye C, when, if the bolt be released, the spring shoots the opposite end through the eye C, and the coupling is completed. To uncouple the two parts it is only necessary to reverse this operation.

This device is applicable in very many places where bolts secured by nuts are now used, and completely obviates the inconveniences attending the removal of nuts, and also the dangers attending the use of bolts so secured, as nuts frequently become loose and come off, when the bolt may drop from its place at a critical moment. It is impossible also to lose or misplace any of the parts, as they are all permanently attached to one or the other part of the apparatus to be coupled.

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

A sliding pivot-bolt passing through and confined in two eyes or bearings attached to one of two objects to be coupled together, and held in position by a spring, in combination with two eyes or bearings attached to the other of said objects, and through which the ends of said pivot-bolt are made to pass when the coupling is completed, substantially as described, and for the purposes set forth.

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Witnesses:

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