T. Smith,

Spring Hinge.

No. 99,999. Patented Feb. 15. 1870.

Fig. 1.

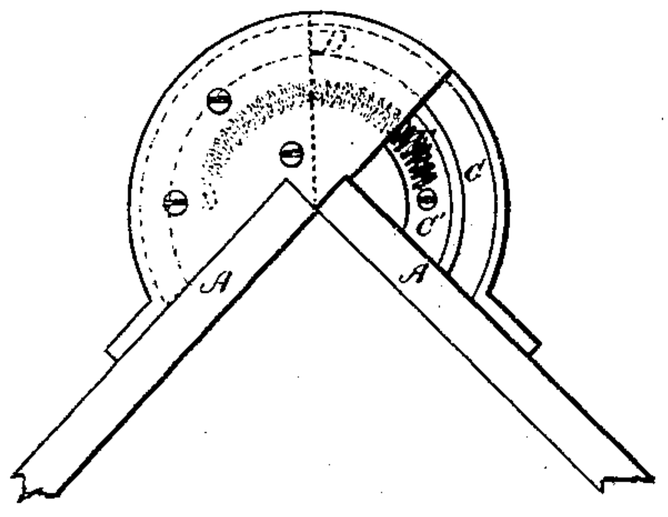


Fig. 2.

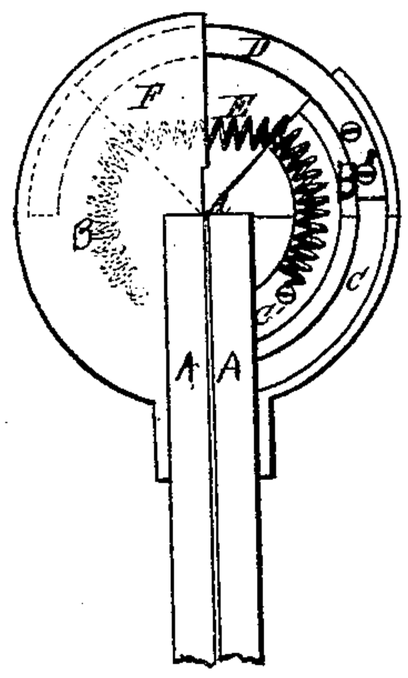
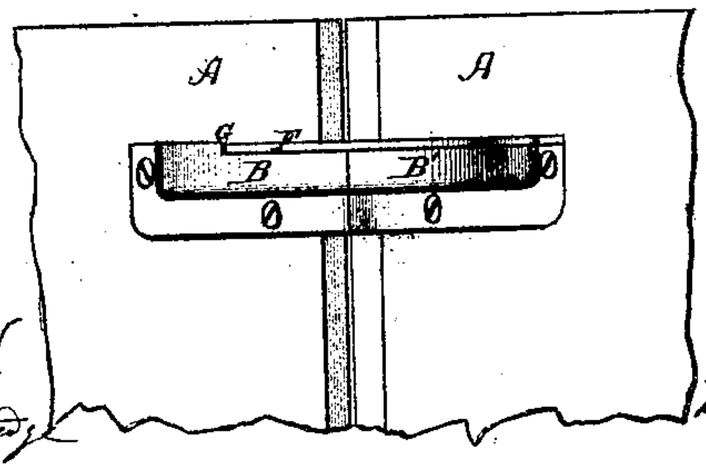


Fig. 3.



Witnesses.
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TIMOTHY SMITH, OF BOSTON, MASSACHUSETTS.*

Letters Patent No. 99,999, *dated February* 15, 1870.

IMPROVEMENT IN HINGES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, TIMOTHY SMITH, of Boston, in the county of Suffolk, and State of Massachusetts, have invented an Improved Spring-Hinge; and I do hereby declare the following to be a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings and letters of reference marked thereon, in which—

Figures 1 and 2 represent plan views of my invention in different positions, and

Figure 3, an end elevation of the same.

The object of this invention is to provide a hinge so constructed that when opened to the widest extent the parts connected will be at right angles with each other, to which end certain details of construction are employed, which will be more fully described hereinafter.

A A represent the parts connected by the hinge, which consist of the segmental pieces B B′ containing the curved grooves C C′ in which are attached the curved slide D and spiral spring E.

To the piece B′ is attached the semicircular plate F, one side of which projects over the same, as shown in fig. 3, and when the hinge is in its natural position, rests against the shoulder G of the piece B.

When the parts A A are at right angles with each other, as shown in figs. 1 and 3, they are held in position by the spiral spring E, which is attached at each end to the pieces B B′, and is sufficiently depressed below the surfaces thereof as not to come in contact with the plate F.

The parts A A are prevented from opening wider than at right angles by the plate F which comes in contact with the shoulder G.

The curved slide D is attached to the piece B, and forms the arc of a circle whose center is the point *d;* it rests in a similar groove in the piece B′, and constitutes the hinge proper, the other parts being accessory to the same.

The slide D may be longer than represented if necessary to give more firmness to the device when in the position shown in fig. 2; also, any suitable elastic material may be substituted for the spiral spring E, and the whole device may be inclosed in a casing similar to the pieces B B′, the same general idea and construction being observed in all cases.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The hinge described, consisting substantially of the pieces B B′, slide D, spiral spring E, and plate F, arranged and operating substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

TIMOTHY SMITH.

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