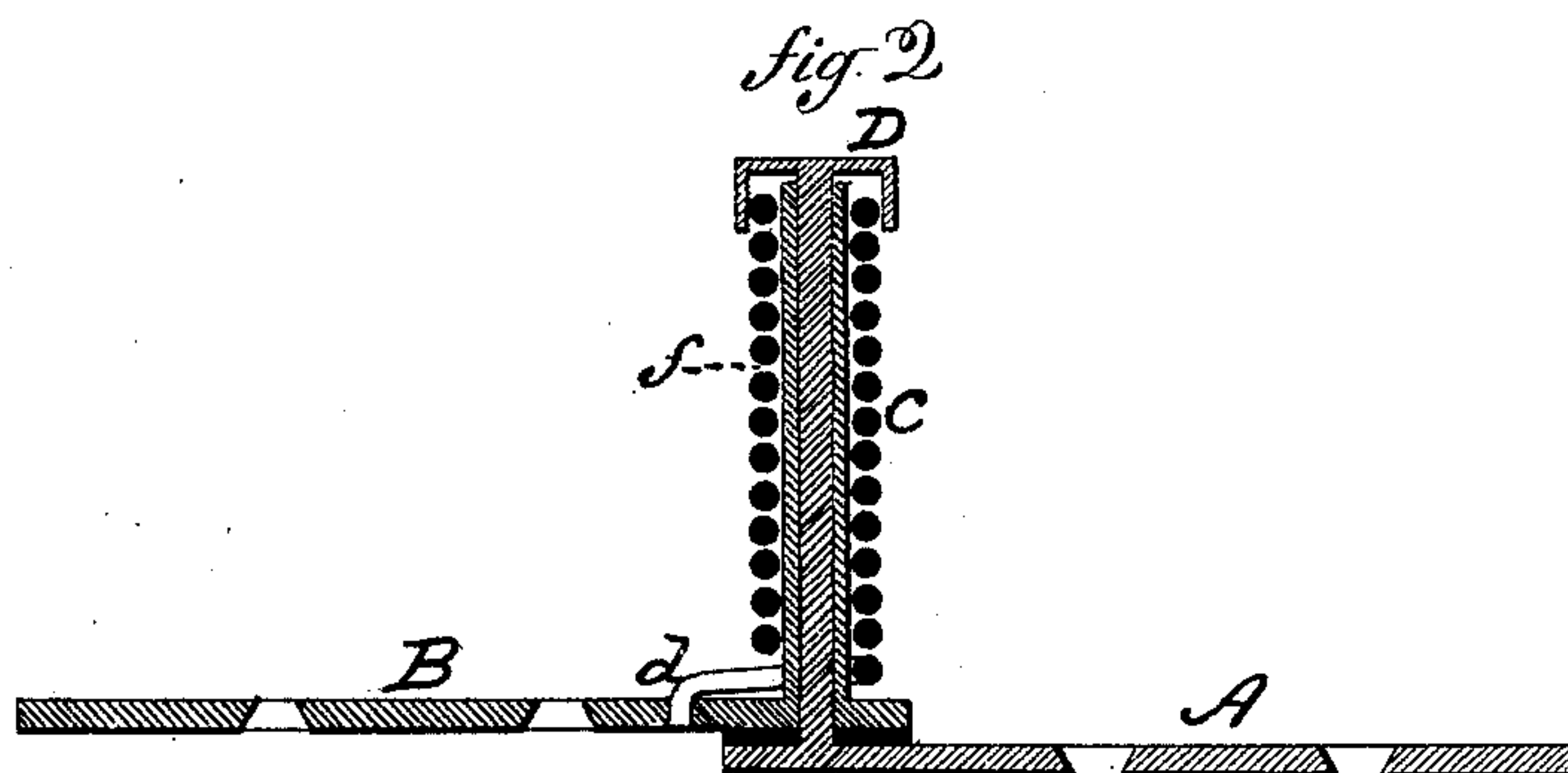
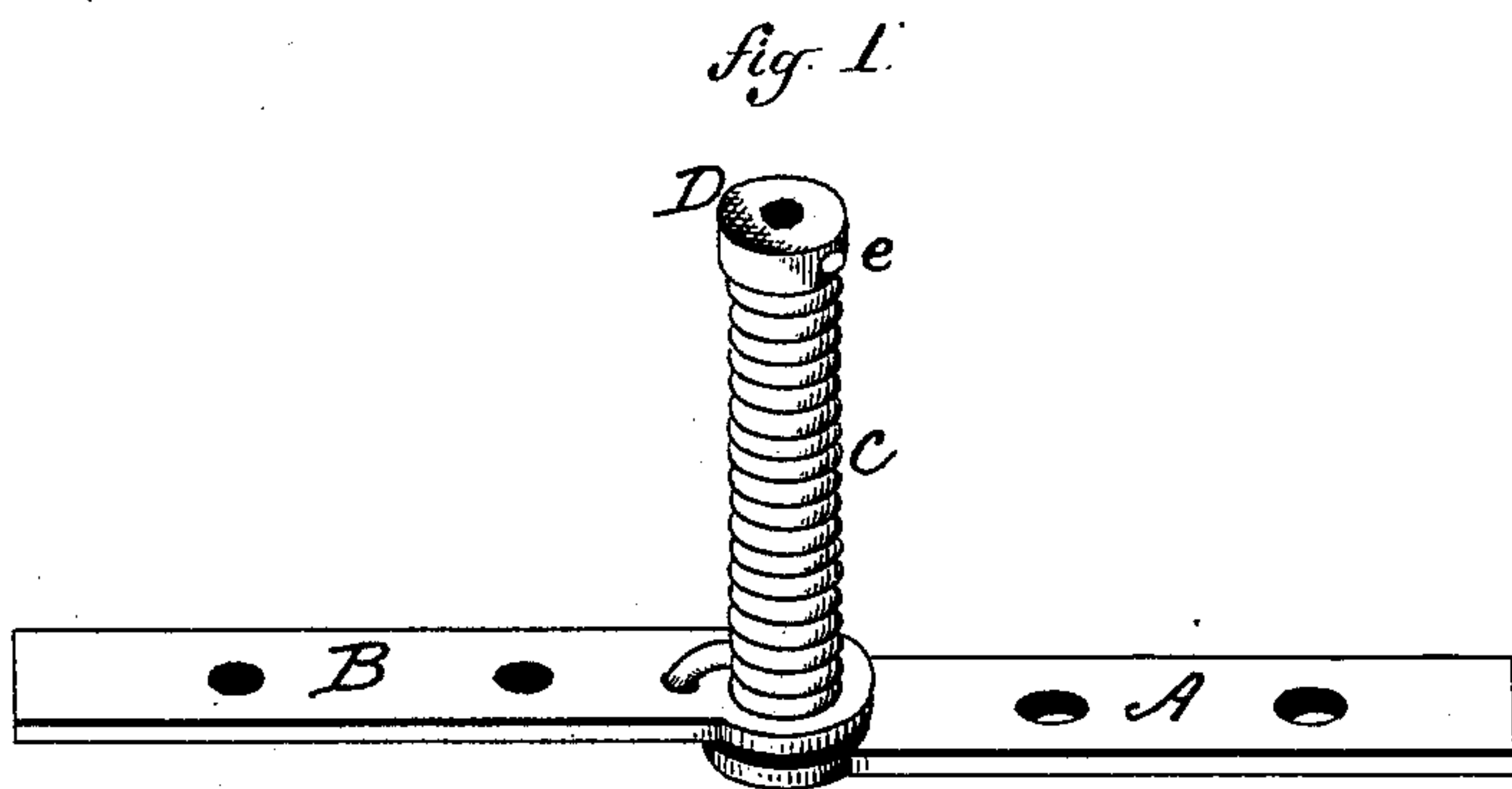


J. SPRUCE.  
Spring-Hinge.

No. 208,770.

Patented Oct. 8, 1878.



Witnesses.

*J. H. Shumway*  
*W. A. Kilsdonk*

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By atty  
*J. M. O'Connell*

# UNITED STATES PATENT OFFICE.

JAMES SPRUCE, OF WATERBURY, CONNECTICUT, ASSIGNOR TO SCOVILLE MANUFACTURING COMPANY, OF SAME PLACE.

## IMPROVEMENT IN SPRING-HINGES.

Specification forming part of Letters Patent No. **208,770**, dated October 8, 1878; application filed September 9, 1878.

*To all whom it may concern:*

Be it known that I, JAMES SPRUCE, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new Improvement in Spring-Hinges; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view, and in Fig. 2 a vertical central section.

This invention relates to an improvement in that class of hinges used for the doors of counter show-cases, but applicable to other purposes where a similar hinge is required. In this class of show-cases springs are applied in various ways to close and hold the doors.

The object of this invention is to combine the spring as a part of the hinge; and it consists in the construction as hereinafter described, and more particularly recited in the claim.

A is one arm of the hinge, and B the other, made of the usual form for this class of hinge. On the part A is a stationary spindle, *a*, at right angles to the plane of said part, and in length according to the extent of spring required. This spindle is located at the pivotal point, and, as here represented, forms the pivot.

Around this spindle a spiral spring, C, is arranged, one end, *d*, of which is secured to the arm B, and the other end, *e*, to the end of the spindle, here represented as, by means of a cap, D, made fast to the end of the spindle.

Preferably a sleeve, *f*, is introduced around the spindle, within the spring; and the best result will be attained by attaching one end of the sleeve rigidly to the arm B.

The hinge is applied, one arm to the end of the door and the other to the case.

If both the hinges are required to have the spring applied, then they should be made one right-hand and the other left; but in many cases the single spring will answer the purpose; then the common two-arm hinge will answer for the other end.

I claim—

The herein-described spring-hinge, consisting of the two arms A B, with a stationary spindle, *a*, at right angles to the plane of the one part, and in line of the pivot of the two parts, combined with a spiral spring around said spindle, one end attached to the spindle, the other end to the other arm, substantially as described.

JAMES SPRUCE.

Witnesses:

M. L. SPERRY,  
W. B. MERRIMAN.