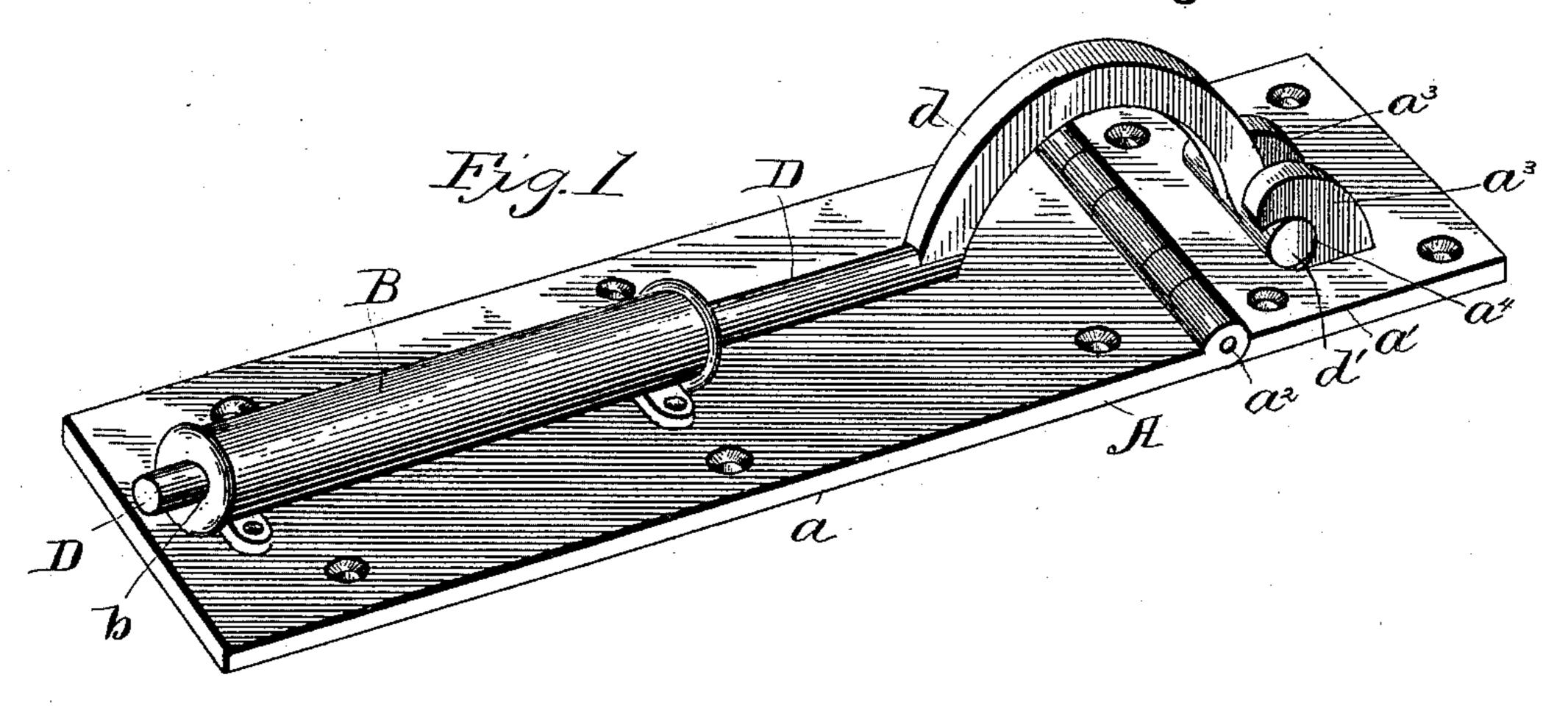
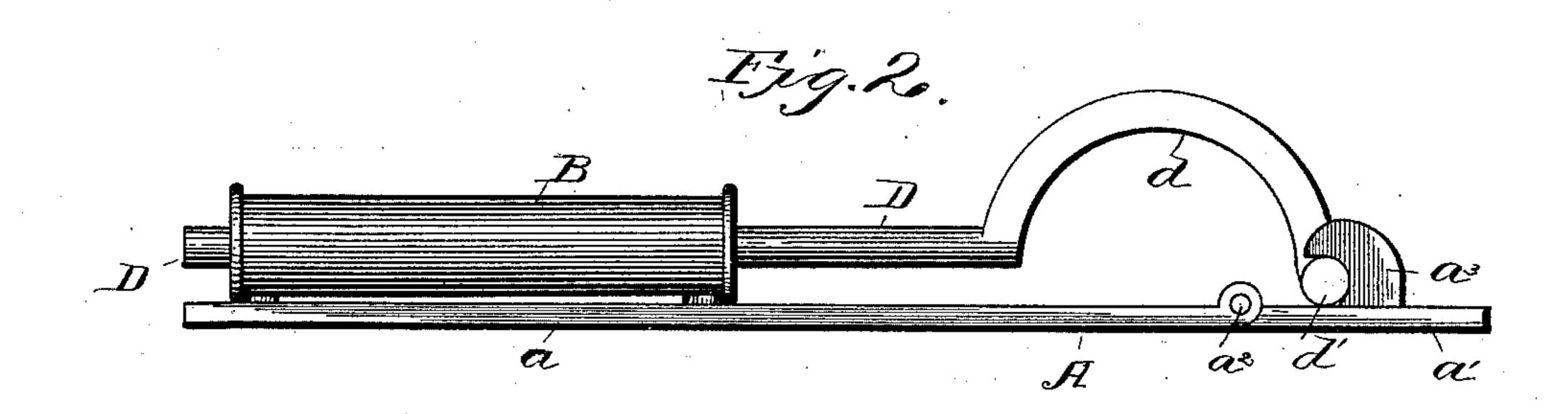
(No Model.)

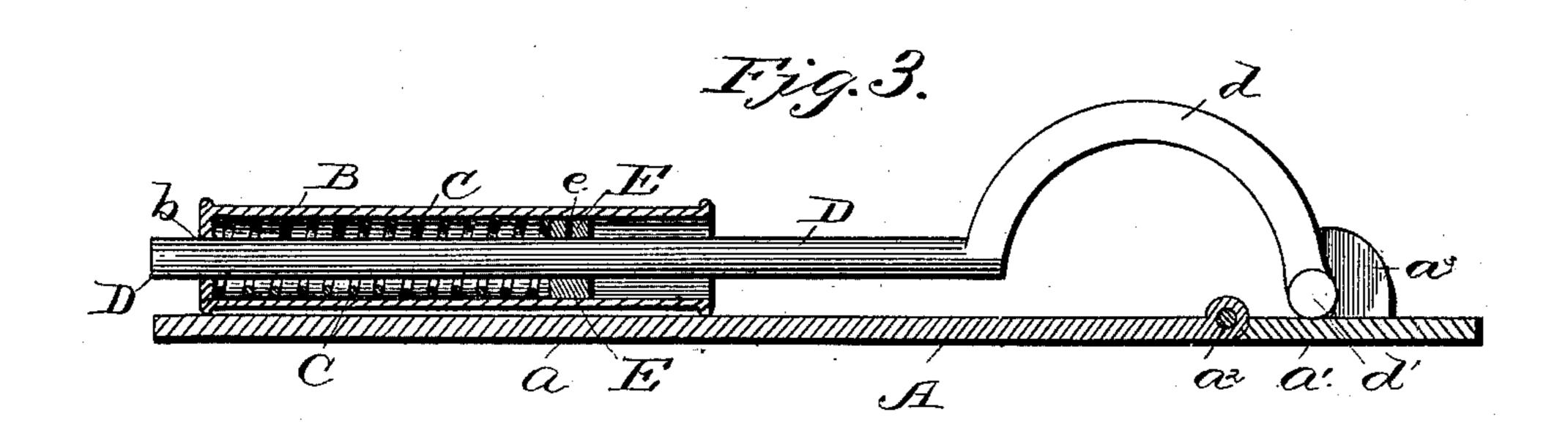
J. W. PIERCE. SPRING HINGE.

No. 409,371.

Patented Aug. 20, 1889.







Wifnesses

By Kis Atlangeys,

Inventor

Jesse W. Pierce.

United States Patent Office.

JESSE W. PIERCE, OF BELTON, TEXAS.

SPRING-HINGE.

SPECIFICATION forming part of Letters Patent No. 409,371, dated August 20, 1889.

Application filed May 31, 1889. Serial No. 312,739. (No model.)

To all whom it may concern:

Be it known that I, Jesse W. Pierce, a citizen of the United States, residing at Belton, in the county of Bell and State of Texas, have invented a new and useful Spring-Hinge, of which the following is a specification.

The invention relates to improvements in

spring-hinges.

The object of the present invention is to provide a spring-hinge of simple and inexpensive construction, in which the tension of the spring may be regulated, and in which the spring may be entirely removed from the hinge when desired.

The invention consists in the construction and novel combination and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a hinge embodying the invention. Fig. 2 is a side elevation, and Fig. 3 is a lon-

gitudinal sectional view.

Referring to the accompanying drawings, A designates a hinge composed of a long leaf a and a short one a', which are connected together by a pintle a². The leaf a is provided with a cylindrical casing B, which is preferably formed integral with the leaf and incloses a spiral spring C. The spring C has its bearing against the rear side of said casing, which is provided with an opening b, through which passes the end of a rod D, which has an adjustable collar E. The adjustable collar may be moved along the rod D to diminish or increase the tension of the spring C, and it is provided with a set-screw e to engage the rod and prevent the collar

slipping.
The front of the rod D has a curved por-

tion d, the end of which is provided with trunnions d', that engage projections a^3 formed integral with the leaf a'. The projections a^3 are curved toward the leaf a and form recesses a^4 in their sides, which serve as bearings for the trunnions d' of the rod D. By this construction the rod may be withdrawn from the bearings a^4 and turned upon its side and removed from the casing. The spring may then be taken out of the casing, and the 50 hinge is adapted for ordinary use.

From the foregoing description and the accompanying drawings the construction, operation, and advantages of the invention will

readily be understood.

What I claim is—
1. The combination of a hinge having one of its leaves provided with a casing and the other with projections a^3 , a spring arranged within the casing, and the rod passing through 60 the casing and engaging the spring and having trunnions at its ends removably engaging the said projections, substantially as described.

2. The combination of a hinge having one 65 of its leaves provided with a casing and the other provided with curved projections, the spring arranged in the casing, and the rod engaging said spring and having the curved portion provided with trunnions engaging 70 the said projections, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JESSE W. PIERCE.

Witnesses:
JOHN H. SIGGERS,
E. G. SIGGERS.