

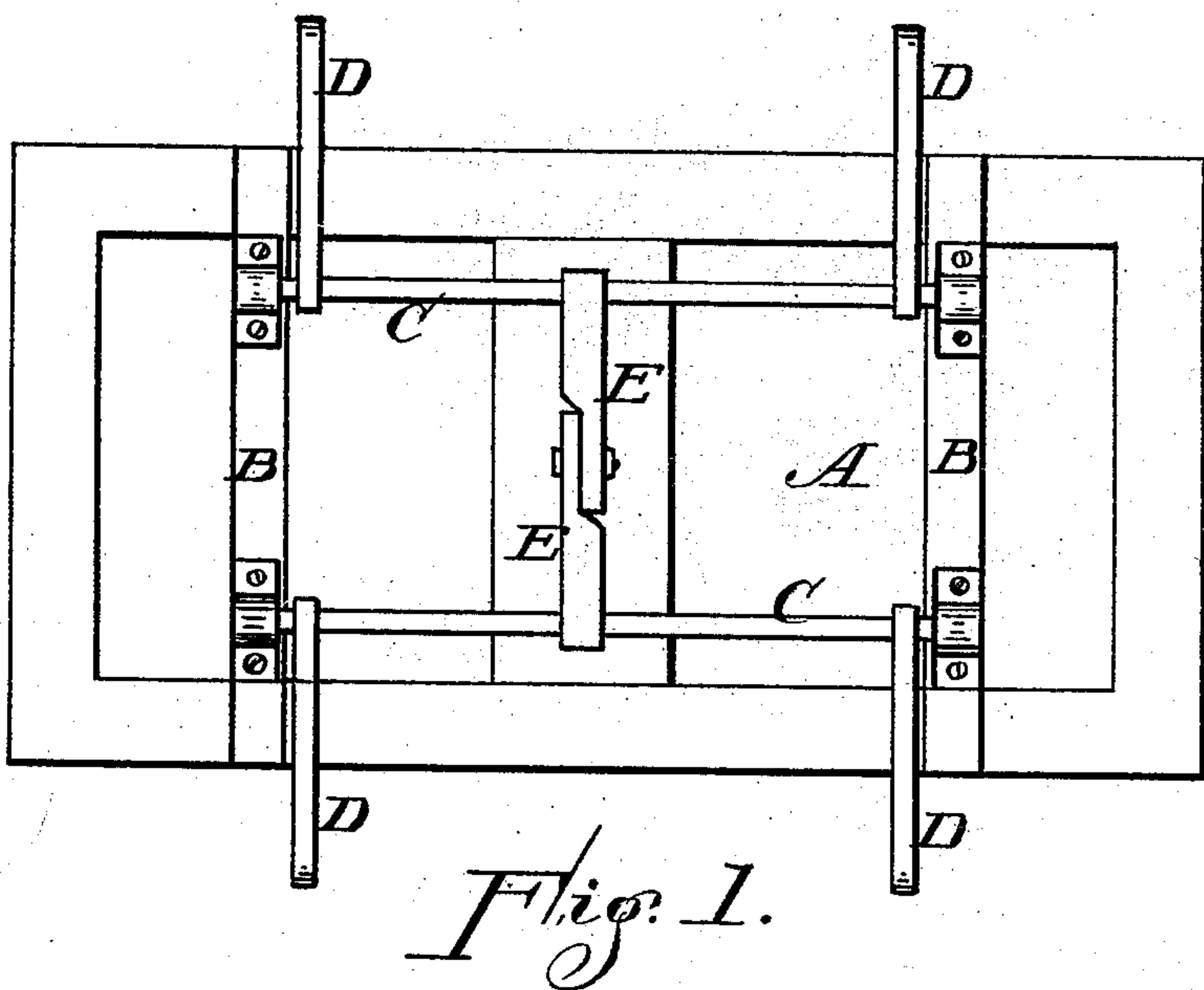
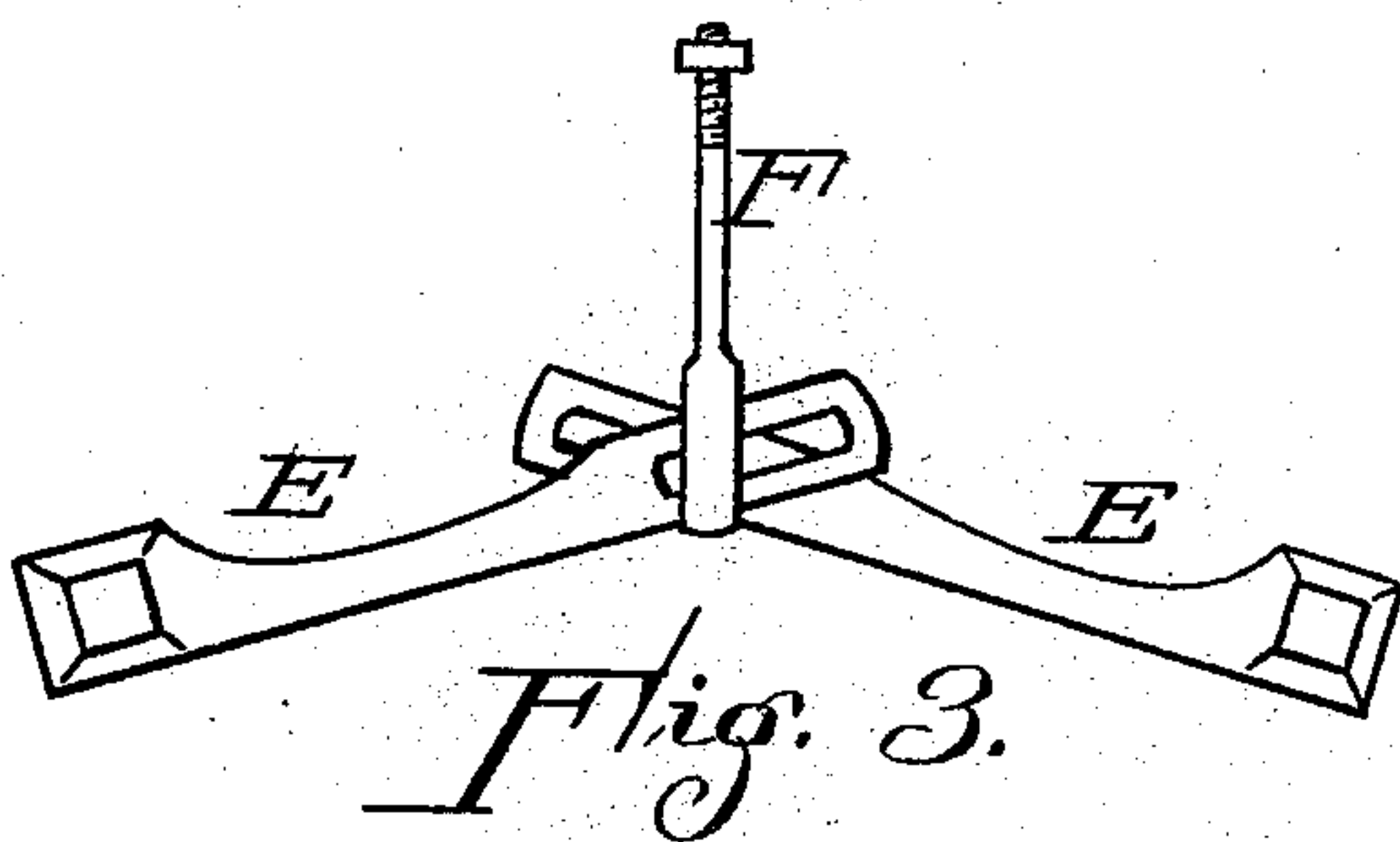
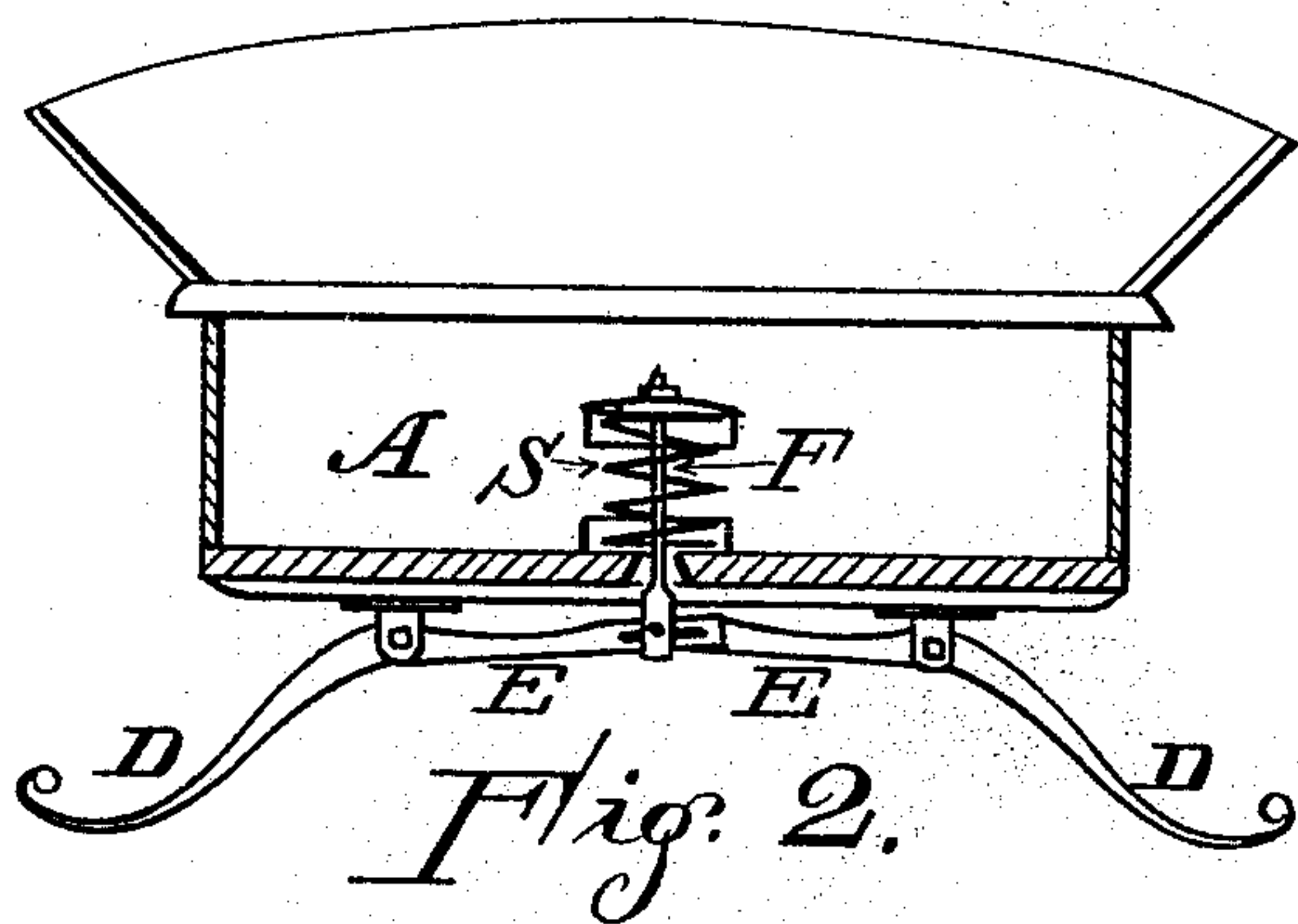
(No Model.)

S. H. RAYMOND.

VEHICLE SPRING.

No. 376,161.

Patented Jan. 10, 1888.



WITNESS,
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UNITED STATES PATENT OFFICE.

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VEHICLE-SPRING.

SPECIFICATION forming part of Letters Patent No. 376,161, dated January 10, 1888.

Application filed October 25, 1887. Serial No. 253,385. (No model.)

To all whom it may concern:

Be it known that I, SILAS H. RAYMOND, of Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Vehicle-Springs, of which the following is a specification.

This invention relates to vehicle-springs; and it consists in the peculiar construction and combination of parts comprising my improvement, as hereinafter described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is an under side view of vehicle-body, showing the adaptation of my improvement to the same. Fig. 2 is a cross section of the vehicle-body, illustrating the same. Fig. 3 is a detached and enlarged view of the equalizing-levers, showing their connection with the spring.

A represents a vehicle-body, and B B are cross-sills, to which the spring mechanism is attached.

C C are rock-shafts journaled in suitable boxes secured to the said sills. Near the ends of said rock-shafts are attached spring-levers D D, by means of which the body is supported on the side bars of the running gear (not shown) of a vehicle.

E E are two inwardly-projecting levers attached near the central part of the said rock-shafts C C, their inner ends having slots *e e*, and are lapped over each other and united by a bolt passed through said slots.

F is a vertical rod having a yoke or bifur-

cated end which straddles the said levers, and is joined to them by the same bolt, thus providing a sliding joint for the play of the said rod in a direct vertical line, while the levers have a curved rocking motion. Through a cross-piece, G, in the bed-frame of the body A is made a hole, through which the rod F projects upward into the body, and is connected to a spring, S, the lower end of which rests on the bottom of the body and inside of a ring, R. On the upper end of the spring is placed a cap, P, through which the rod F passes, and is secured by a nut.

From the foregoing it will be seen that the spring supports the weight of the body and that my construction provides a simple and cheap means of attaching the levers E E to the rod F, whereby the said levers, which have curvilinear movement, admit of direct vertical movement to the rod F.

Having described my invention, I claim—
In combination, the body A, rock-shafts C C, journaled to said body and provided with supporting spring-arms D D and inwardly-extending and lapping arms E E, and connected to vertical rod F, attached to spring S, the ring R, and the cap P, attached to top or rod F, all arranged to operate substantially as specified.

SILAS H. RAYMOND.

Witnesses:

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