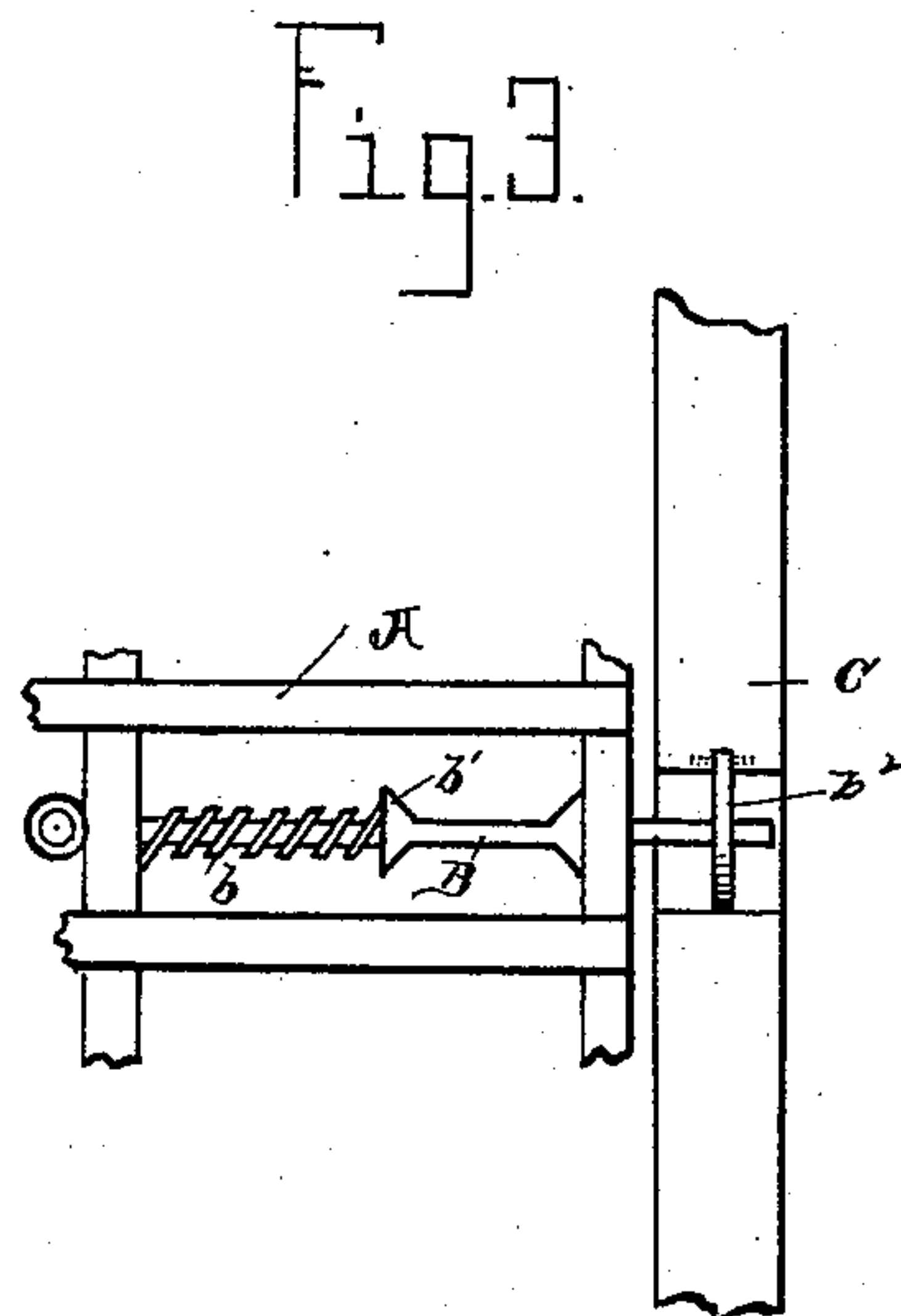
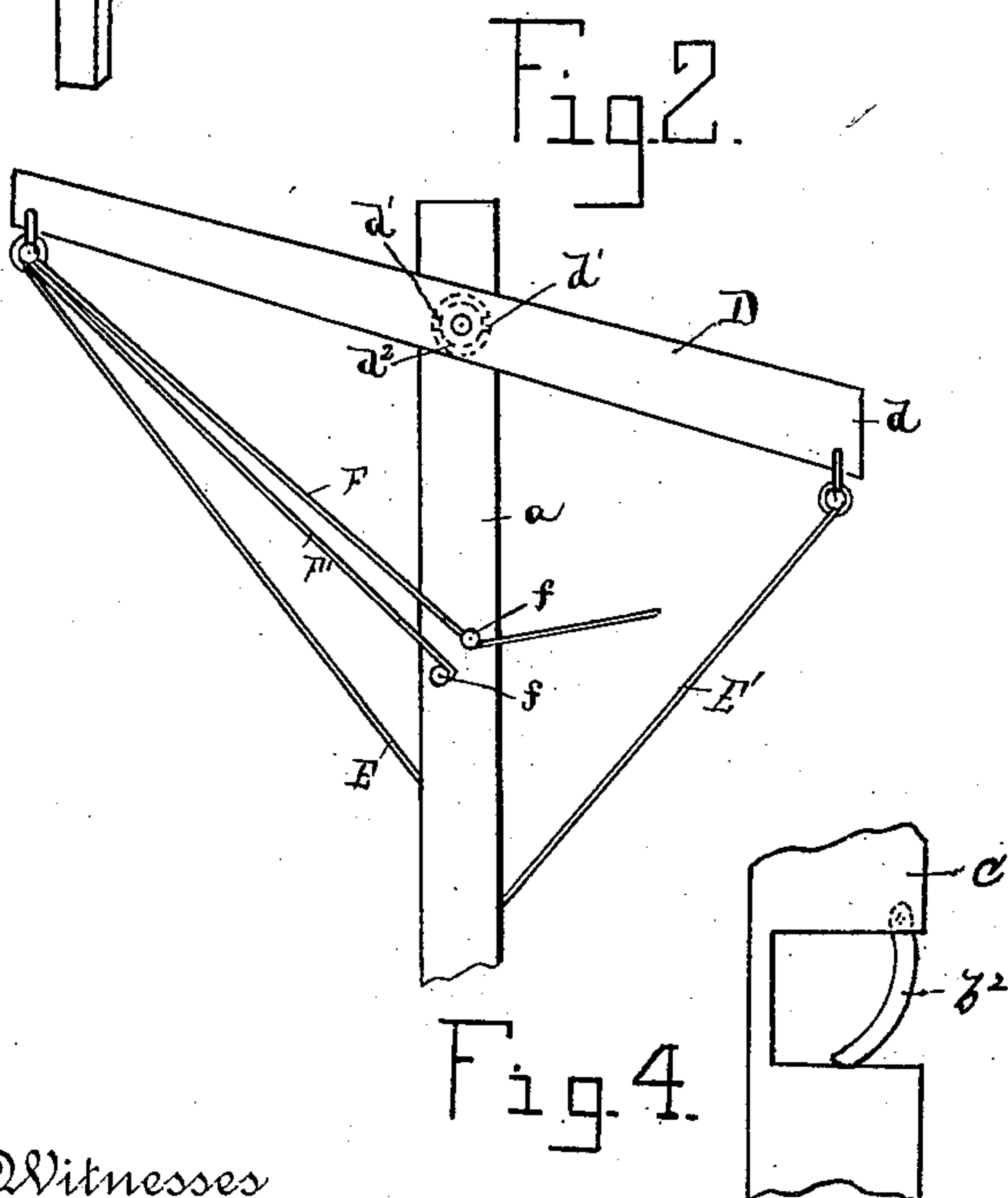
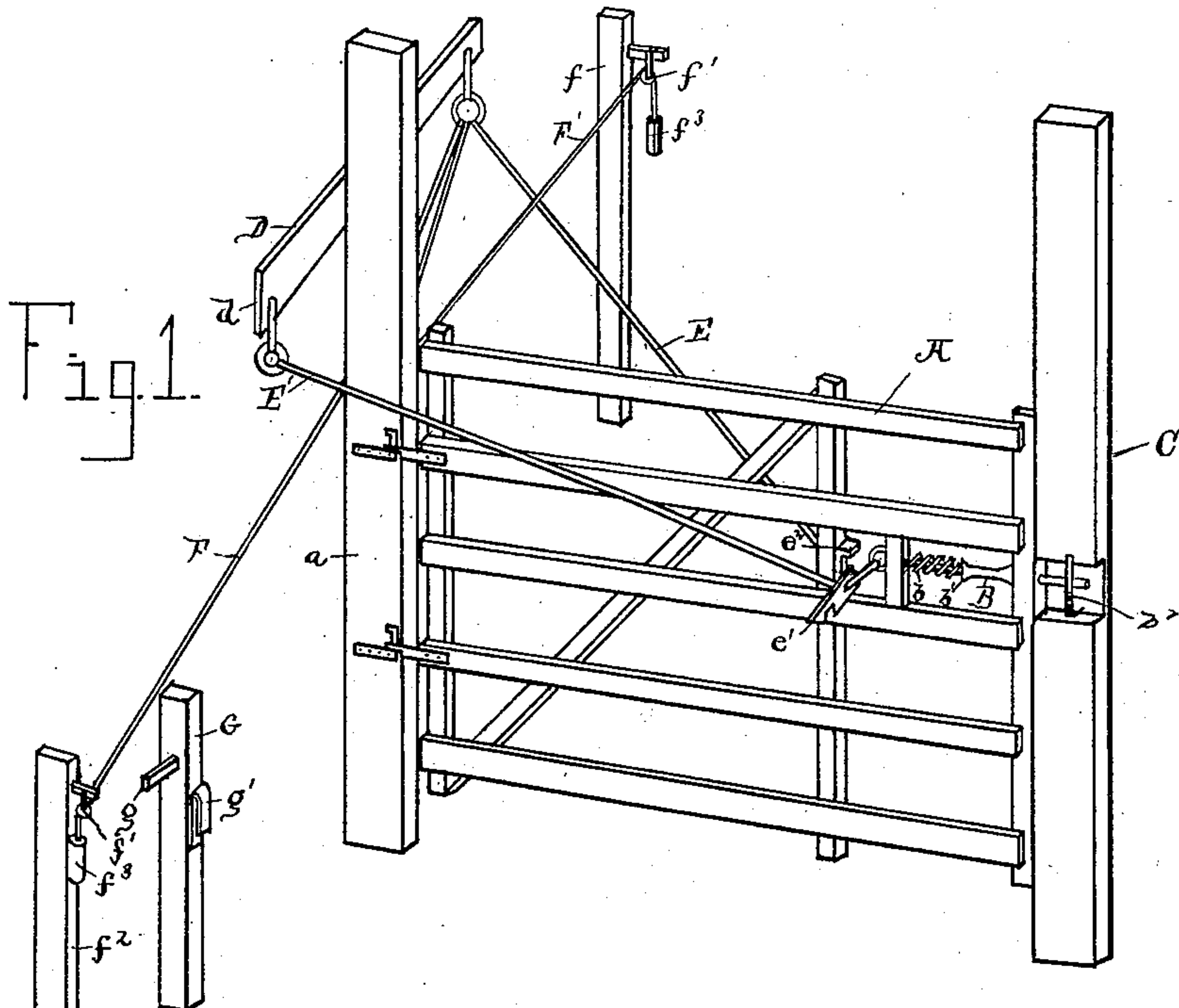


(No Model.)

J. H. TUDOR.
GATE.

No. 400,976.

Patented Apr. 9, 1889.



Witnesses
W^m. S. Hodges.
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UNITED STATES PATENT OFFICE.

JAMES H. TUDOR, OF LEXINGTON, KENTUCKY.

GATE.

SPECIFICATION forming part of Letters Patent No. 400,976, dated April 9, 1889.

Application filed September 26, 1888. Serial No. 286,474. (No model.)

To all whom it may concern:

Be it known that I, JAMES HIRAM TUDOR, of Lexington, in the county of Fayette and State of Kentucky, have invented certain new and useful Improvements in Gates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

10 This invention pertains to certain new and useful improvements in swinging gates, having for its object the provision of simple and highly-efficient means for readily and easily effecting the opening of a gate from either side thereof and to provide for its ready closing.

15 The invention comprises the details of construction, combination, and arrangement of parts, substantially as hereinafter fully set forth, and particularly pointed out in the claims.

20 In the accompanying drawings, Figure 1 is a view in perspective of my improved gate. Fig. 2 is a side view of a portion thereof. Fig. 3 is a detail view of the latch. Fig. 4 is a detail view of the latch-retaining bar.

Referring to the drawings, A designates the gate, hinged at one end to a post, *a*.

30 B is a spring-held latch-rod secured to the gate A, and encircled by a spring, *b*, bearing against a shoulder, *b'*, thereof and a cross-bar of the gate. The outer end of this latch-rod B is designed to engage a pivoted curved arm, *b*², secured in a groove of a latching-post, C.

35 D is a lever tapering to a narrow end from a widened heavy or weighted end, as at *d*. This lever is pivoted at about its center to the post *a*, and the same has secured thereto two small friction-rollers, *d'* *d'*, working in a circular groove, *d*², of said post. By means of 40 these rollers the friction caused by the movement of the lever is greatly reduced. To the narrow and widened ends of this lever D are secured the outer ends of ropes or chains E E'. The inner end of the former is secured to the 45 gate A, while the inner end of the latter, E', is passed through an aperture of a pivoted hooked arm, *e'*, and connected to the inner end of the spring-held latch-rod. The upward movement of this hooked arm *e'* is limited by a stop, *e*², as shown. The rope E serves

to limit the downward movement of the weighted end of lever D.

Two operating ropes or chains, F F', are connected to the narrow end of the lever D, and after being passed around rollers or wheels 55 *f f*, attached to the post *a*, they are extended in opposite directions and passed each over a pulley, *f'*, secured to an outwardly-projecting arm of a post, *f*². The ends of these ropes or chains F F' have small handle-bars *f*³ *f*³ connected thereto, as shown. 60

At a proper distance on one side of the post *a* is located a short retaining-post, G, from one side of which projects a stud or pin, *g*, and to the front of which is secured a bent spring, 65 *g'*. The hooked arm *e'* is designed to engage the stud or pin *g* when the gate is swung open.

In practice, by pulling upon the handled end of either of the ropes or chains F F', the narrow normally-elevated end of the lever D 70 will be drawn upon and lowered, causing the raising of the other heavy or weighted end thereof. This movement of the lever will draw on the rope or chain E', causing the retraction of the spring-held latch-rod and the freeing 75 thereof from contact with arm *b*². The gate will then swing on its bearing, and its hooked arm *e'* will engage the stud or pin *g* and overcome the outward pressure of the bent spring *g'*. Upon grasping either one of the said ropes 80 or chains F F' the hooked arm *e'* will be sufficiently raised to be disengaged from the stud or pin *g*, and the spring *g'*, bearing against the gate, will give the same an initial movement, which will, together with the lowering 85 of the weighted end of the lever, cause said gate to swing to its proper position, when the latch-rod will again engage the pivoted arm *b*².

It will be seen that my invention is free from all complication, and hence is not liable 90 to get out of order, and it will also be observed that the same embodies advantages in point of simplicity, durability, general efficiency, and inexpensiveness.

I claim as my invention—

1. As an improvement in swinging gates, the lever having the friction-rollers projecting therefrom and working in a circular groove or recess of the post to which said lever is pivoted, in combination with the gate, to which 100

said lever is connected, substantially as shown and described.

2. The combination, with the swinging gate and the post to which said gate is secured, of
5 the lever fulcrumed on said post near its upper end and having a weighted end, the ropes or chains connecting said lever to the gate, and the spring-held latch-rod, to the inner end of which one of said ropes or chains is connected,
10 nected, substantially as set forth.

3. The combination, with the swinging gate having the hooked arm, of the retaining-post having a stud or pin and the bent spring secured to said post, substantially as shown and
15 described.

4. The herein-described improved gate, comprising

prising the post having a circular groove, the swinging gate having the spring-held latch-rod and the hooked arm, the lever having a weighted end and provided with friction-rollers working in said circular groove, the ropes or chains, the latching-post having the pivoted arm, and the retaining-post having a stud or pin and a bent spring, substantially
20 as shown and described.

In testimony whereof I have hereunto subscribed my name in the presence of two subscribing witnesses.

JAMES H. TUDOR.

Witnesses:

R. H. COURTNEY,

R. B. ALLEN.