

(No Model.)

G. W. PHILLIPPI.
GATE FOR RAILWAY CROSSINGS.

No. 526,941.

Patented Oct. 2, 1894.

Fig. 3.

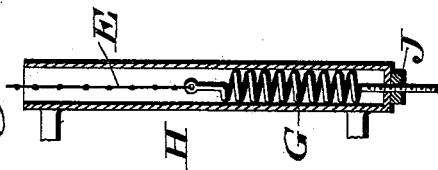


Fig. 1.

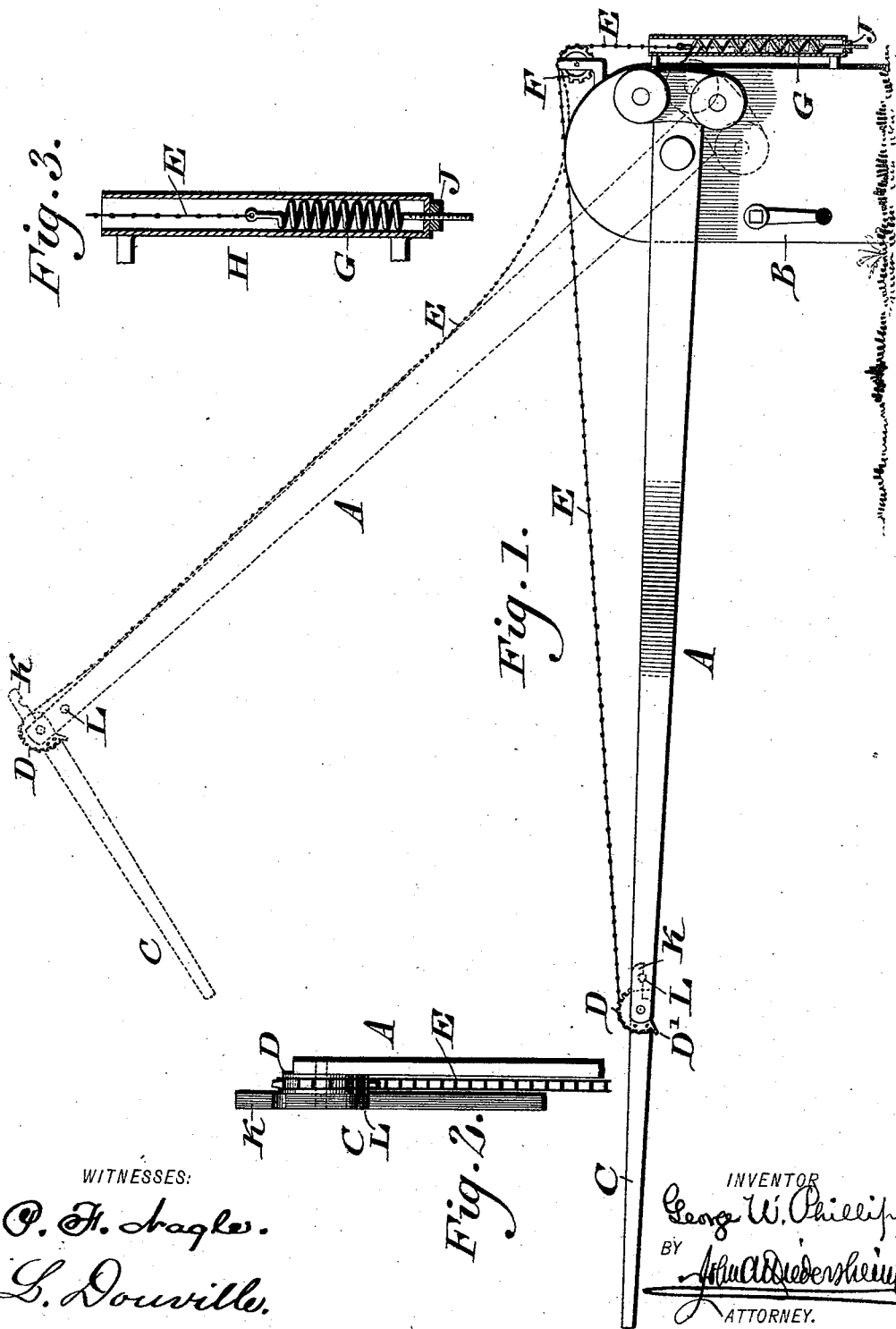
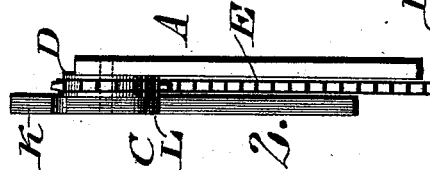


Fig. 2.



WITNESSES:

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GATE FOR RAILWAY-CROSSINGS.

SPECIFICATION forming part of Letters Patent No. 526,941, dated October 2, 1894.

Application filed October 17, 1893. Serial No. 488,373. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. PHILLIPPI, a citizen of the United States, residing at Reading, in the county of Berks, State of Pennsylvania, have invented a new and useful Improvement in Gates for Railway-Crossings, which improvement is fully set forth in the following specification and accompanying drawings.

10 My invention consists of a gate for a railway crossing, adapted to be reduced in length in order to clear electric wires and other obstacles overhead when the gate is raised, the construction and operation of parts being
15 hereinafter set forth and claimed.

Figure 1 represents a partial side elevation and partial vertical section of a gate for a railway crossing embodying my invention. Fig. 2 represents a top or plan view of a portion of the same. Fig. 3 represents a vertical
20 section of the spring of the gate and connected parts thereof.

Similar letters of reference indicate corresponding parts in the several figures.

25 Referring to the drawings: A designates a gate for a railroad crossing, and B designates the standard or box on which the same is mounted, which parts excepting the features of my invention applied thereto are of well
30 known form.

C designates an extension of the gate, the same being pivoted to the outer end of said gate, so as to increase the length of the same.

35 Connected with the axis of the extension C is a toothed segment D, around which passes the chain E, whose end is secured to said segment, said chain also passing around a sprocket wheel F, and having its adjacent end connected with the spring G, which is
40 guided in a casing H, secured to the box B, the tension of said spring being adjustable by means of a nut J, which is fitted on the end of said spring, said end being threaded and passing through the bottom wall of said
45 casing against which said nut tightens.

The sprocket wheel F is mounted on the box B at a center different from that of the gate A, as clearly shown in Fig. 1.

The axial end of the extension C has a
50 tongue K thereon, the same extending upwardly and being adapted to rest on the pin

L on the gate A, to limit the motion of the extension when the gate is in operative position.

The operation is as follows: When the gate 55 is lowered, the extension C increases the length of the same for evident purposes. In this case the chain E is taut, or comparatively taut, and subjected to the tension of the spring G, whereby the extension C is held 60 out horizontally as a continuation of the gate A proper, and prevented from dropping. When the gate is raised, the spring contracts and takes up part of the slack of the chain E, but as the sprocket wheel F carries said 65 chain on a center eccentric to that of the gate, the slack of the chain increases, so that the extension C is relieved of the draft or drawing action of the chain, and thus said extension drops and folds against the gate A, 70 thus shortening the gate and permitting it to pass under electric wires and other obstacles. When the gate is lowered, owing to the distance between the segment D, and spring G, and the position of the sprocket wheel F, the 75 chain is subjected to draft, the spring expanding to prevent injury to said chain, while however exerting tension upon the same. Consequently the segment D is subjected to said draft, and it is accordingly rotated 80 thus straightening-out the extension C, and causing it again to lengthen the gate as requisite for proper action at a crossing. Again, by having a spring fastening for the end of the chain E, with the controlling or 85 regulating nut thereon, instead of a fixed or rigid fastening, provision is made for an adjustment of the chain necessary for any expansion or contraction of the same due to temperature. 90

The segment D guides the portion of the chain E passing over it, and has the end of the chain secured to it as at D', but the segment may be dispensed with if so desired.

In lieu of the chain E, I may use a rope or 95 cord in which case, the sprocket wheel F may be replaced by a pulley, but such change is non-essential, as it is believed that a sprocket wheel and chain are more advantageous, as the chain will not slip in its op- 100 erations.

Having thus described my invention, what

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

1. A gate for railway crossings having a pivoted main part provided with a pin near
5 its outer end, an extension C pivoted to said outer end and having a toothed segment connected with its axis, and a rearwardly extending tongue K adapted to be supported on
10 said pin, the box B in which said main part is pivoted, the sprocket wheel F mounted in said box B, the chain E having one end secured to said segment and passing around the same, and a spring secured to the other
15 end of said chain for taking up the slack of the same, said parts being combined substantially as described.

2. A gate for a railway crossing having a swinging extension mounted thereon, pro-

vided with a tongue adapted to rest on a pin on the gate proper, a toothed segment on the
20 axis of said extension, a sprocket chain connected at one end with said segment, and passing over the same and over a sprocket wheel having a different center from the axis
25 of the main part of the gate, a casing attached to the gate post, a coiled spring in said casing secured to said sprocket chain, and a nut outside of said casing on a threaded
30 end of said spring for adjusting the tension of said spring, said parts being combined substantially as described.

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Witnesses:

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