

(No Model.)

M. WILDER.

GATE FOR RAILWAY CROSSINGS.

No. 351,552.

Patented Oct. 26, 1886.

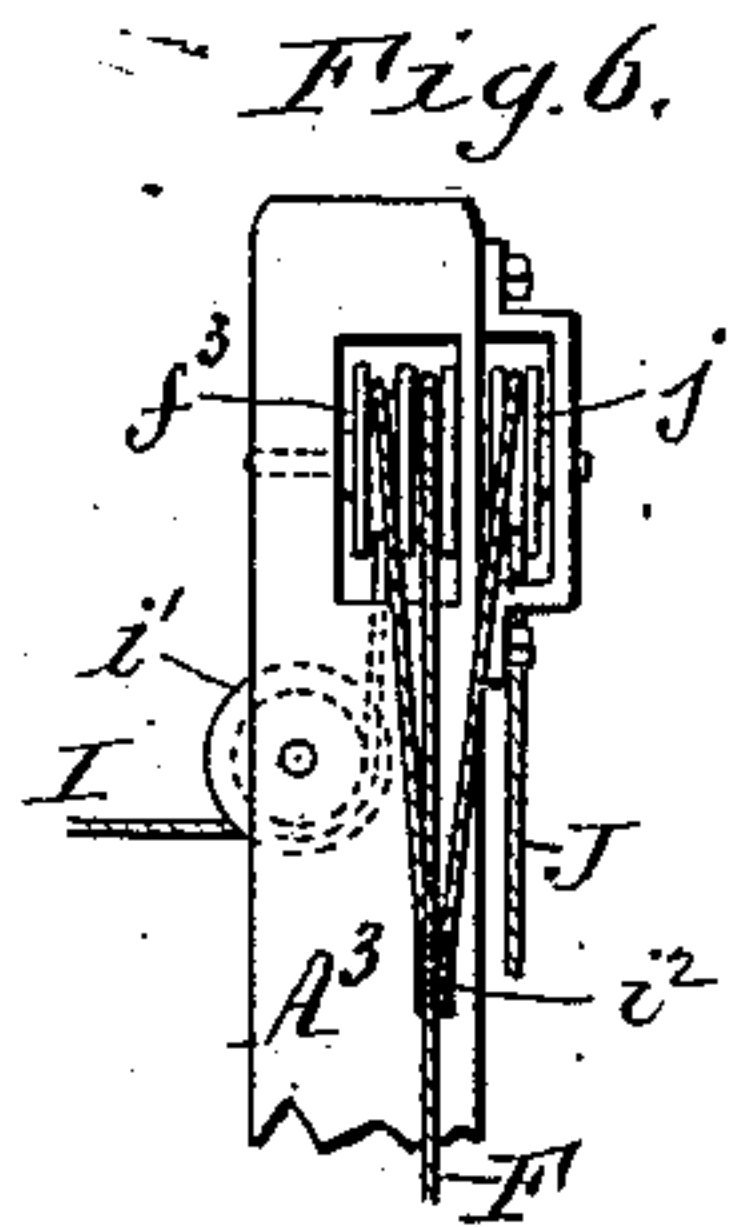
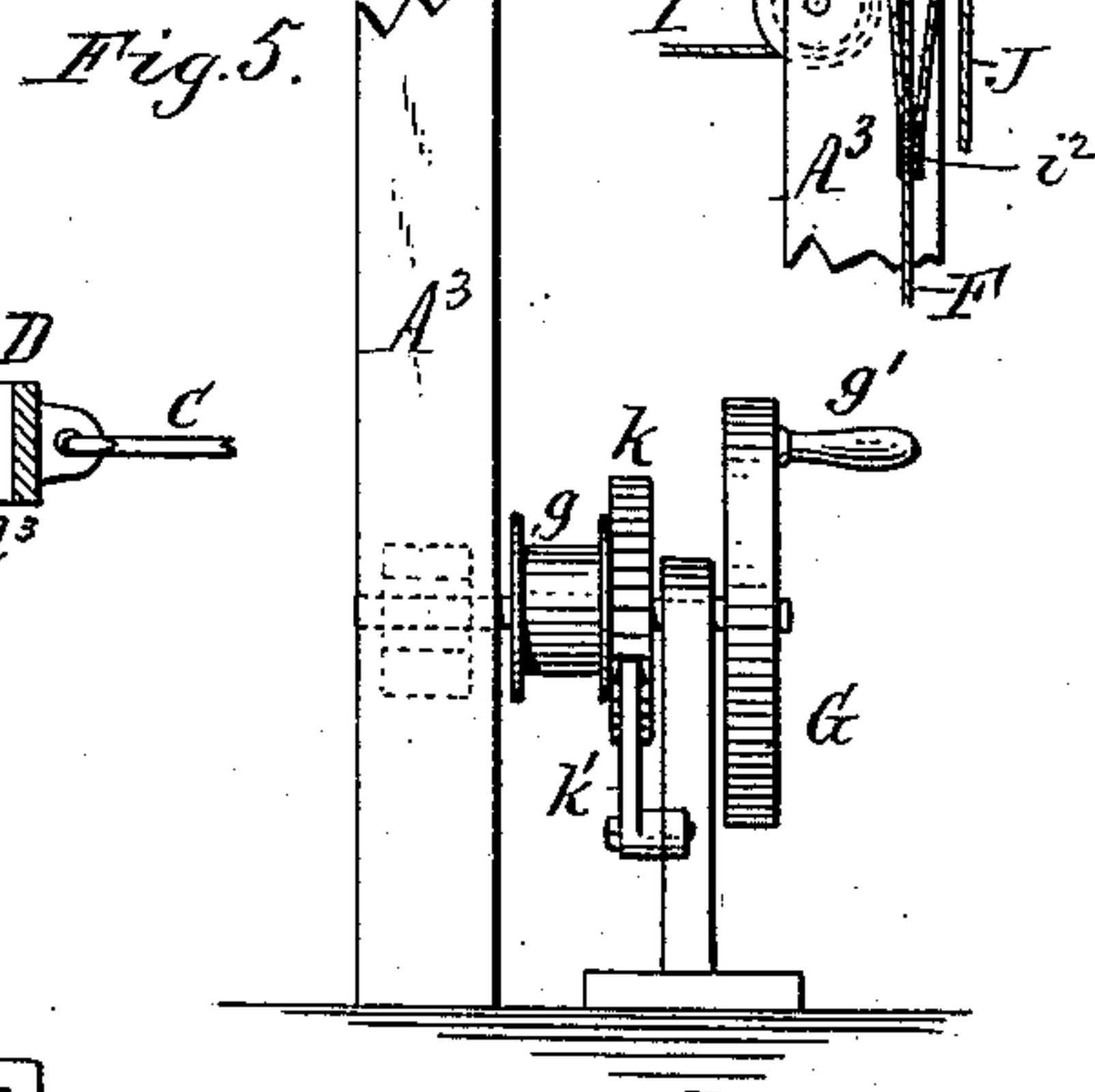
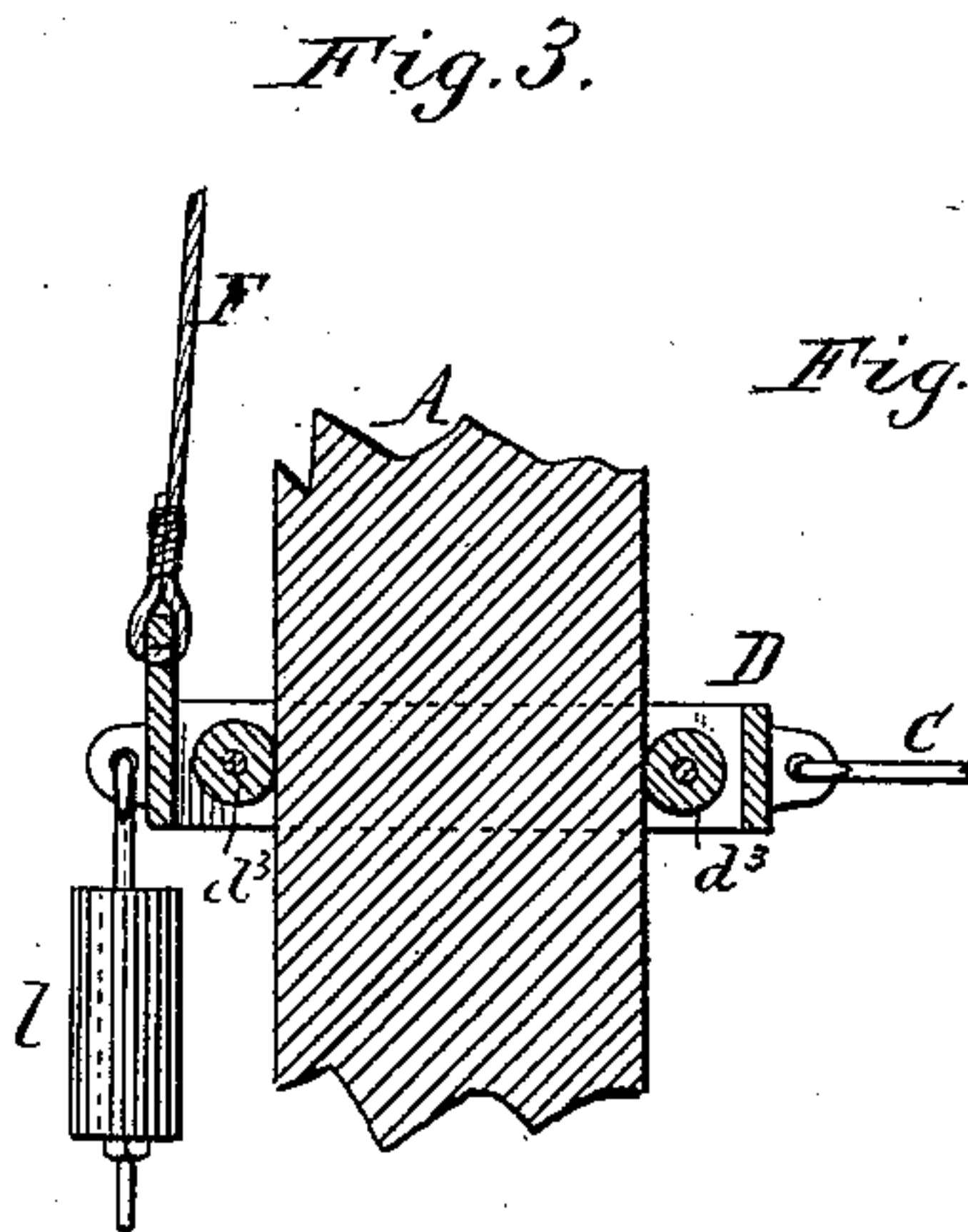
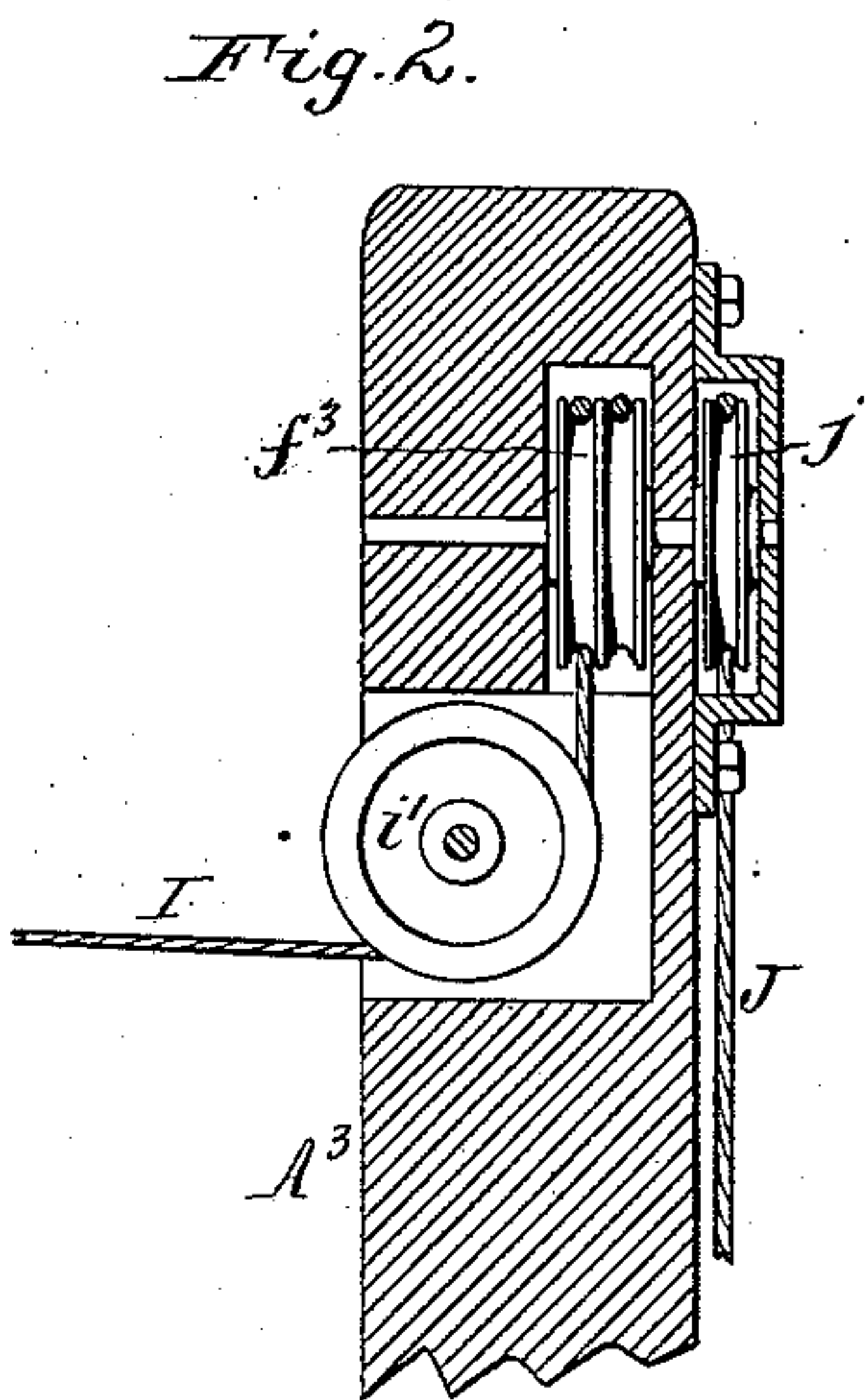
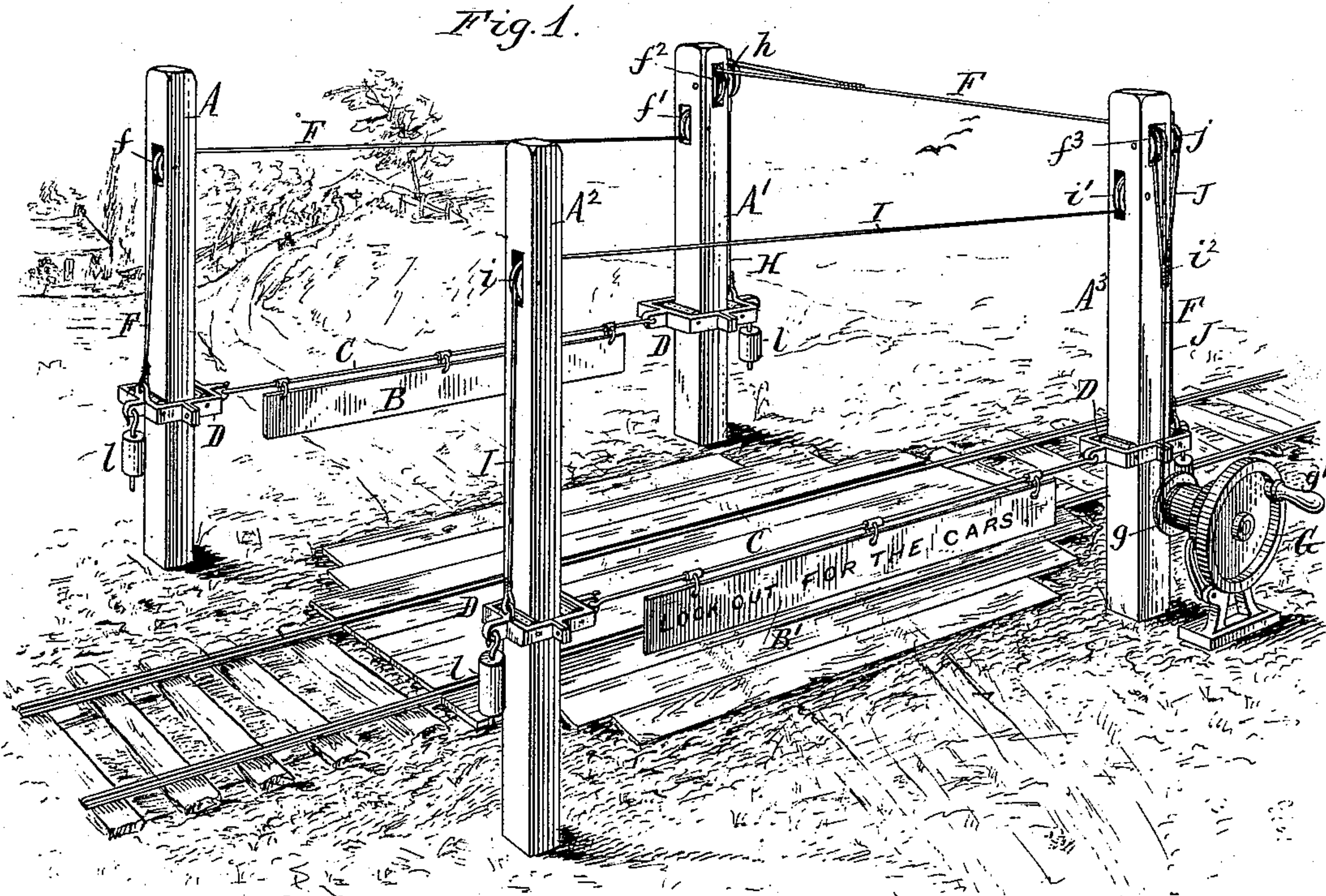
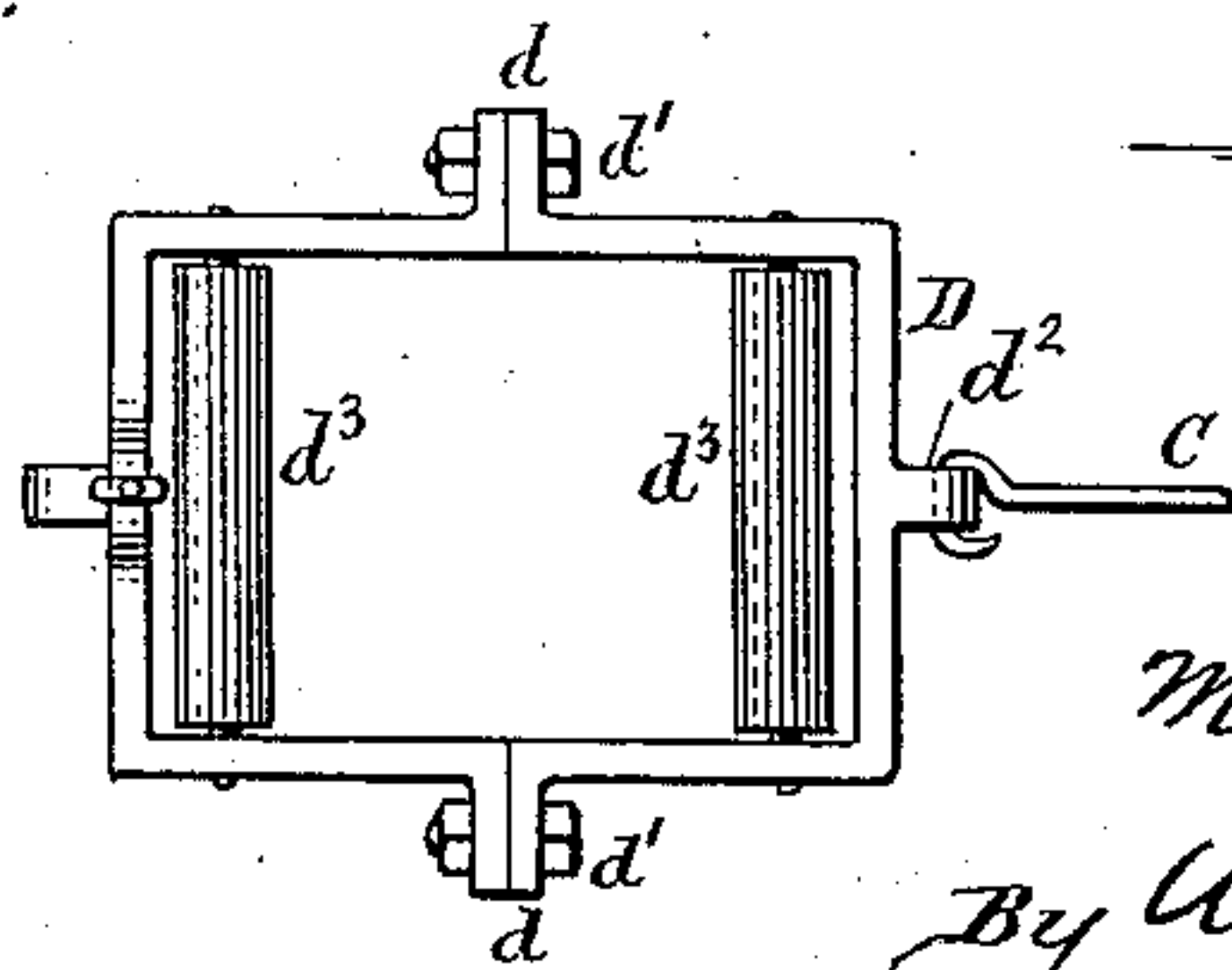


Fig. 4.



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UNITED STATES PATENT OFFICE.

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GATE FOR RAILWAY-CROSSINGS.

SPECIFICATION forming part of Letters Patent No. 351,552, dated October 26, 1886.

Application filed March 10, 1886. Serial No. 194,693. (No model.)

To all whom it may concern:

Be it known that I, MONROE WILDER, of the city of Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Gates for Railway-Crossings, of which the following is a specification.

This invention relates to an improvement in the gates which are employed at railway-crossings, whereby the street or passage is closed during the approach or passage of a train at the crossing.

The object of my invention is to provide simple means for raising and lowering the gates and for operating the gates on opposite sides of the crossing simultaneously; and the invention consists of the improvements which will be hereinafter fully described, and pointed out in the claim.

In the accompanying drawings, Figure 1 represents a perspective view of a railway-crossing provided with my improved gates. Fig. 2 represents a fragmentary vertical section of the upper end of one of the supporting-posts, showing the arrangement of the guide-pulleys. Fig. 3 represents a longitudinal vertical section of one of the sliding frames to which the gates are attached. Fig. 4 represents a top plan view of said frame. Fig. 5 represents a side elevation of the windlass whereby the gates are raised. Fig. 6 represents a fragmentary front elevation of the upper portion of one of the posts.

Like letters of reference refer to like parts in the several figures.

A¹ A² A³ represent four upright supporting-posts, which are arranged at the four corners of the railway-crossing, two posts being arranged on each side of the crossing, as shown.

B B' represent the gates, which are arranged on opposite sides of the railway-crossing, and are each suspended across the street or road between two of the supporting-posts. The gates each consist of a board or plate bearing a cautionary sign, as shown; or if preferred, the gates may be made of wire-netting, or in the form of a fence constructed of longitudinal stringers and upright pickets in a well-known manner. The gates are attached to horizontal rods or cables C, which are secured to frames or loops D, which surround the posts and slide

on the same. These frames or loops are preferably constructed in two parts, which are secured together by ears *d* and bolts *d'*, as shown in Fig. 4. The frames D are provided at their inner ends with a perforated lug or ear, *d''*, in which the ends of the rods or cables C are secured.

*d*³ represents anti-friction rollers arranged within the frames or loops D, and bearing against the outer sides of the posts, whereby the friction between the parts is reduced.

F represents a wire rope or cable, which is secured at one end to the sliding frame D on the post A, and runs upward over a grooved pulley or sheave, *f*, arranged in a recess formed in the upper end of the post A. The cable F passes from the pulley *f* to a similar pulley, *f'*, arranged in a recess in the upper end of the post A' on the same side of the crossing, and over a pulley, *f''*, arranged above the pulley *f'*, at right angles thereto, and thence to a pulley, *f*³, at the upper end of the post A³ on the opposite side of the crossing. The free end of the cable F then passes downwardly, and is secured to the drum *g* of a windlass or hoisting-machine, G.

H represents a short cable or rope secured to the sliding frame D on the post A', and passing upwardly over a guide-pulley, *h*, secured to the outer side of the post A' at its upper end. The free end of the cable H is secured to the main cable F between the posts A' and A³, so that by turning the drum *g* in the proper direction by means of the crank *g'* the frames D D and the gate B, secured thereto, will be raised on the posts A A'.

I represents a rope or cable fastened at one end to the sliding frame D on the post A², and running upward over a guide-pulley, *i*, arranged in a recess in the upper end of the post A². The cable I passes from the pulley *i* around a pulley, *i'*, at the upper end of the post A³, and thence over the pulley *f*³, over which passes the main cable F, the pulley *f*³ being provided with two grooves for this purpose. The free end of the cable I is attached to the main cable F after passing around the pulley *f*³, as shown at *i*².

J represents a short cable attached with one end to the frame D on the post A³, and running upward around a guide-pulley, *j*, secured

to the outer side of the post A^3 at the upper end thereof. After passing over the pulley j the cable J is secured to the main cable F at i^2 . By this means the sliding frames on the several posts are connected together, and by turning the drum of the windlass G in the proper direction the sliding frames and the gates $B B'$, attached thereto, are raised simultaneously, thus leaving the railway-crossing unobstructed and permitting free passage over the same.

The drum g of the windlass G is provided with a ratchet-wheel, k , and detent-pawl k' , whereby the gates can be held in an elevated position.

If desired, the windlass G may be provided with suitable gearing for increasing the speed of the drum.

l represents counterbalancing-weights attached to the outer ends of the sliding frames D , for the purpose of retaining the same in a horizontal position and preventing them from binding against the posts. The weights l also

assist in lowering the gates when they are released.

The mechanism whereby the gates are raised and lowered, being arranged above the ground and in sight, can be readily repaired and kept in working order at very little expense.

I claim as my invention—

The combination, with two pairs of posts, $A A'$, $A^2 A^3$, arranged on opposite sides of the track, of frames D , surrounding the posts, gates $B B'$, attached to the frames D , a windlass, G , a main lifting-rope, F , attached to the windlass, branch ropes $H I J$, connecting the main lifting-rope with the frames D , and guide-pulleys $f, f', f^2, h, i, i', f^3$, and j , attached to the posts, substantially as set forth.

Witness my hand this 6th day of March, 1886.

MONROE WILDER.

Witnesses:

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