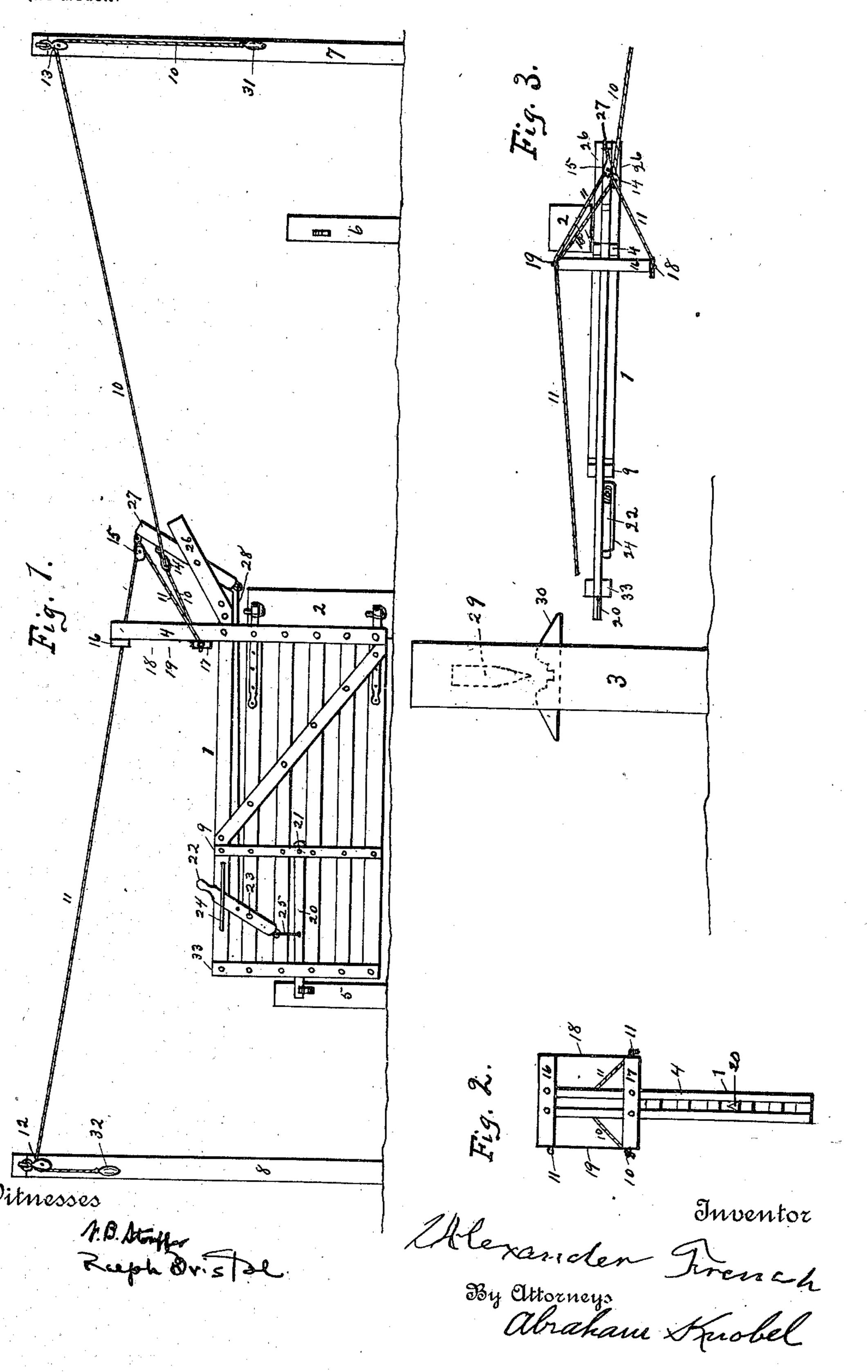
A. FRENCH. ROAD GATE.

(Application filed Apr. 4, 1902.)

(No Medel.)



United States Patent Office.

ALEXANDER FRENCH, OF ELIZABETHTOWN, KENTUCKY, ASSIGNOR OF ONE-HALF TO B. F. COLLINS, OF ELIZABETHTOWN, KENTUCKY.

ROAD-GATE.

SPECIFICATION forming part of Letters Patent No. 709,214, dated September 16, 1902.

Application filed April 4, 1902. Serial No. 101,420. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER FRENCH, a citizen of the United States, residing at Elizabethtown, in the county of Hardin and State of Kentucky, have invented a new and useful Gate, of which the following is a specification.

My invention relates to improvements in gates adapted to swing open in both directions from the latch-post and to be operated by means of handled lines suspended from posts at one side of the road; and the objects of my improvement are, first, simplicity of construction; second, strength; third, effectiveness; fourth, inexpensiveness of construction; fifth, to provided a gate which can be made of materials which are common and do not have to be specially manufactured for the purpose, and, sixth, ease of operating. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the gate open, with its line-posts, secondary latchposts, and its main latch-post in the foreground; Fig. 2, an edge elevation of the gate looking from the latch end, and Fig. 3 a plan view.

Similar reference-numerals refer to similar 30 parts throughout the several views of the drawings.

The gate 1 is of the ordinary construction, except that the hinge-stile 4 extends upward beyond the top rail. It is swung to the hinge-35 post 2 by ordinary stock hinges. The usual main latch-post 3 and secondary latch or stop posts 5 and 6 and tall line-posts 7 and 8 at either side of the gate along the roadway are used. The latch 20 is of the ordinary 40 pivoted drop type, and the latch-plate 30 consists of a flat board with top edges sloping at both ends, notched at the middle, and nailed onto the inner face of the main latch-post 3. Just above the notch in the latch-plate 30 is 45 secured a vertical tapering piece 29, smaller downward, which serves to stop the gate by arresting the latch and causing it to sink into the notch in plate 30. The latch-keepers on the stop-posts 5 and 6 are simple notched 50 pieces of board inserted into or nailed onto the adjacent sides of the posts. The line-

posts 7 and 8 may have cap-pieces extending slightly outward toward the road, and ordinary awning or clothes-line pulley-blocks swung therefrom by means of staples or awn-55 ing-hooks, or the pulley-blocks may be fastened with staples or awning-hooks to the side of the post facing the road. The latch 20 may be operated either with the hand-lever 22 or with the lines 10 and 11. The lever 22 is piv- 60 oted to one of the upper rails of the gate by means of a bolt 23, and its handle extends beyond the top rail. The lower end is connected with the latch 20 by means of a link 25, which may be made of wire or of a strip of 65 metal with a hole punched in each end. Just above the pivot-bolt 23 lever 22 is pierced with a hole, through which wire 28 is passed and pivotally secured. Wire 28 passes backward in the space between the rails to the lower end 70 of lever 27, where it is secured pivotally by means of a staple or awning-hook or through a hole in the end of the lever. Lever 27 is pivoted in a guide-bracket 26, made by securing two flat pieces, one on either side, to 75 the rearward extension of the top rail and spacing the outer end by bolting a block between the pieces. At the upper end of lever 27, quite near together, are secured two pulleys 14 and 15. On the upward extension of 80 hinge-stile 4 is made a deflecting-frame for throwing lines 10 and 11 off the dead-center when the gate is open, as shown. This deflecting-frame is made by bolting or nailing the cross-pieces of wood 16 and 17 across stile 85 4 at a suitable distance apart and bridging the space between the ends with the wires 18 and 19, making the frame long enough to always engage the lines 10 and 11, however slack they may be. Referring to Fig. 1, the 90 line 10 (preferably a thin tinned or galvanized wire rope) is passed through pulley 13 on the near side of lever 27, through pulley 14, and secured to the far end of cross-piece 17. The line 11 is passed through pulley 12, in con- 95 tact with wire 19 on the far side of the deflecting-frame, through pulley 15, and secured to the near end of cross-piece 17.

The mode of operating will now be understood. If one has passed through the gate 100 from post 7 to post 8 and wishes to close it, he grasps handle 32, and thereby pulls line 11,

which draws top of lever 27 forward and its lower end backward, wire 28 and top of lever 22 are drawn backward, and the lower end of lever 22 is drawn forward and upward, and 5 latch 20 upward by means of link 25. The gate being thus unlatched from the stop-post 5, on account of the pressure of line 11 against wire 19 of the deflecting-frame, swings across the road till latch 20 strikes the stop 29 and sinks into the notch of plate 30. When the gate is closed and it is desired to open it, by pulling either of the lines 10 and 11 the latch will be raised and the gate swung in the direction away from the line that is pulled. 15 The equestrian and the pedestrian may use the hand-lever 22.

It will be seen that the materials used in the construction of this gate are lumber and stock hardware, which may be procured in ordinary stores, and the construction is simple and inexpensive.

Having described my invention so that any one skilled in the art pertaining thereto may make and use it, I desire not to be confined to the construction described in minute detail, nor do I wish to claim all the parts described,

broadly; but

What I do claim as my invention, and desire

to secure by Letters Patent, is-

1. In a road-gate, the combination of an upward extension of the hinge-stile and a rectangular, flat, line-deflecting frame the plane

of which is vertical and at right angles to the plane of the gate secured on said upward extension, substantially as specified.

2. In a road-gate, the combination of an upright combined unlatching and gate-swinging lever, a rearwardly-extending bracket in which said combined unlatching and gate-swinging lever is housed and pivoted, and 40 pulleys, adapted to receive operating-lines, secured to the upper end of said combined unlatching and gate-swinging lever, substantially and gate-swinging lever, substantially and gate-swinging lever, substantially and gate-swinging lever.

tially as specified.

3. In a road-gate, the following combination: a line-deflecting frame on the upward extension of the hinge-stile, the two lines 10 and 11 attached one to each side of said line-deflecting frame, the upright unlatching and gate-swinging lever 27, the pulleys 14 and 15 50 secured near the upper end of said lever 27, the rearwardly-extending bracket 26, the wire 28 for transmitting motion from lever 27 to lever 22, the hand latch-lever 22 pivoted on bolt 23 on one of the upper rails of the gate, 55 and the link 25 communicating between lever 22 and latch 20, all substantially as and for the purposes specified.

Signed at Louisville, in the county of Jef-

ferson and State of Kentucky.

ALEXANDER FRENCH.

Witnesses:

F. B. STOUFFER, RALPH BRISTOE.