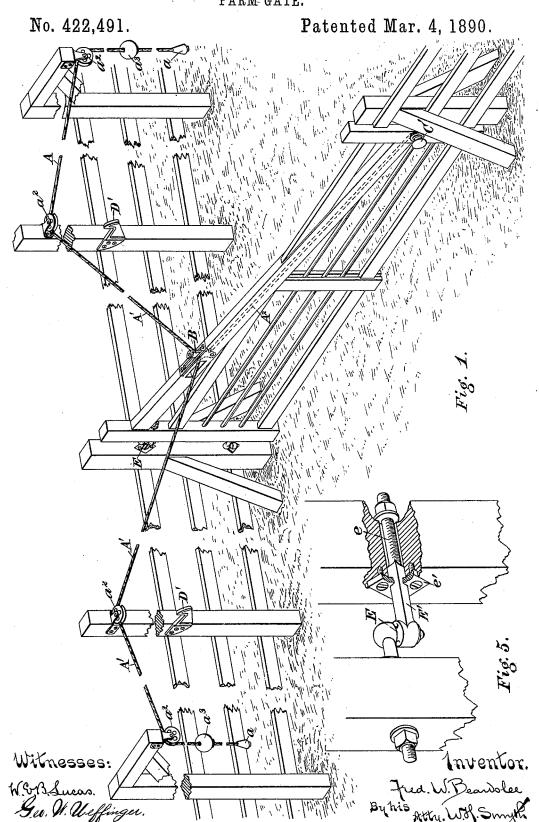
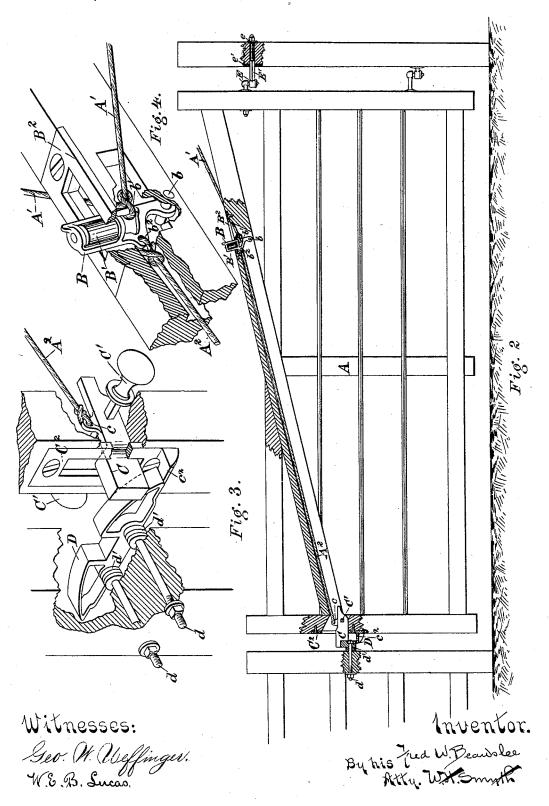
F. W. BEARDSLEE. FARM GATE.



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No. 422,491.

Patented Mar. 4, 1890.



UNITED STATES PATENT OFFICE.

FREDERICK W. BEARDSLEE, OF BERKELEY, CALIFORNIA.

FARM-GATE.

SPECIFICATION forming part of Letters Patent No. 422,491, dated March 4, 1890.

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To all whom it may concern:

Be it known that I, FREDERICK W. BEARDS-LEE, a citizen of the United States, residing in Berkeley, in the county of Alameda and 5 State of California, have invented an Improved Farm-Gate; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to certain improve-10 ments in the construction of that class of self-closing farm-gates in which the gate may be opened without the necessity of alighting

from a vehicle.

The objects of my invention are, first, to 15 provide a farm-gate of simple, durable, and cheap construction, which can be opened from a passing vehicle without the necessity of alighting; second, to arrange it so that the shrinkage of the gate from the seasoning ef-20 fect of the weather can be adjusted so as not to interfere with the operation of the latching device; third, to provide means in the device whereby the sagging of the outer end of the gate may be counteracted; fourth, to provide 25 means for preventing unlatching by the bodily lifting of the gate. I accomplish these objects by means of the devices illustrated in the accompanying drawings, in which-

Figure 1 is an isometrical view of the gate 30 in position showing the arrangement of the rope. Fig. 2 is a front elevation, portions being broken away to illustrate my invention more clearly. Fig. 3 is an isometrical view of the latching device with the means of compensating for the contraction of the gate. Fig. 4 is an isometrical view of the unlatching

device. Fig. 5 is an isometrical view showing the manner in which the sag of the gate is counteracted.

Like letters refer to similar parts in the various views.

Referring to the accompanying drawings, A is the gate.

A' is a rope by means of which the gate is 45 opened; A2, cord or wire for operating the latch; aa, handles on the ends of rope A; a^2 , guide-rollers for rope A'; a³, weight or counter-balance; B, pivoted lever; B', friction-roller in B; B³, slotted plate-guide for B'; b,

50 pivot-pin for B; b', hole in B for attachment of rope A'; b^2 , hole in B for attachment of nearest the gate, having a square hole through latch-cord; C, pivoted latch; C', pivot of which the bolt passes, the square part of the

latch; c, lug on latch; D, sneck or eatch; D' D', snecks or hooks to secure the gate when open; dd, bolts for securing sneck; d', 55 adjusting-washers; E, hinge; E', square shank of hinge; e, threaded extension of shank; e', guide-plate for E'; C2, slotted guide plate for

latch; c^2 , projecting lug on guide-plate.

The operation of my device is as follows: 60 When the rope A' is pulled, its first action is to draw the pivoted lever B backward, the friction-roller B' causing the lever to work easily. The lever B being attached to the latch by means of a wire or cord, as shown at C 65 in Fig. 3, the motion of the lever B raises the latch out of the sneck or catch. The latch being raised to its limit of motion, the further pulling of the rope A' causes the gate to open toward the approaching vehicle. When the 70 gate is opened to its fullest extent, the latch c engages with the sneck or hook D', and so secures the gate in this position. When the vehicle has passed through and it is desired to close the gate, by pulling on the other end 75 of the rope the lever B is drawn back and the latch again raised, thereby allowing the gate to swing closed, which it immediately does by reason of the upper hinge being set farther out from the post than the lower one. The 80 sneck or catch D being double-ended permits the latch to operate from either side. The sneck or catch D is secured to the gate-post by two bolts, which pass completely through the post. These bolts are furnished with a 85 number of washers, which, when the gate is first put up, are on the end of the bolt farthest from the gate; but as the gate shrinks their position is reversed, one or more, as the amount of shrinkage requires, being placed 90 between the sneck or catch and the post, thereby carrying the sneck into correct position for engaging with the latch.

The upper hinge or pivot is secured to the gate-post by means of a threaded bolt or stud, 95 which passes completely through the post, its end being furnished with a nut and washer. A portion of its length, commencing from its hinge-pivot, is made square, the hole through which it passes being also made square to fit 100 the square portion of the bolt. A plate or shield is attached to the post on the side nearest the gate, having a square hole through

bolt fitting snugly into it. By means of this device the sag which invariably takes place at the outer end of a gate is counteracted by simply drawing the hinge E nearer to the post by means of the nut. The lower hinge being stationary, the end of the gate is thereby

It is evident that when the rope A' has pulled the gate open to such a position that to the pull of the rope is at right angles to the gate its action on the latch ceases, and the latch being of considerable weight falls to its normal position, being thus ready to engage with the sneck or hook D' when the gate is drawn full open. The lug c² at the lower end of slotted guide-plate C² prevents the opening of the gate through other means than the tilting of the latch.

Having now described my invention, what 20 I claim as new, and desire to secure by Let-

ters Patent, is-

1. In a self-closing gate, the combination of the gate A, the pivot of the upper hinge of which is located forward of a vertical line 25 passing through the pivot of the lower hinge, the double-ended sneck or catch D, with its bolts d d and adjusting-washers d', pivoted latch C, with its lug c, the slotted guide-plate C^2 , with its lug c^2 , cord A^2 , pivoted lever B, with its friction-roller B', the rope A', with its 30 guide-rollers suitably supported on posts, and its counter-weights a a and handles a a, sub-

stantially as described.

2. In a self-closing gate, the gate A, the pivot of the upper hinge of which is located 35 forward of a vertical line passing through the pivot of the lower hinge, the adjustable hinge E, with its shield or guide-plate e', the rope Λ' with its counter-weights a a, handles a a, and guide-rollers a^2a^2 , suitably supported, the 40 pivoted lever B, with its friction-roller B' and guide-plate B², pivoted latch C, guide-plate C², with its lug c³, cord A², connecting pivoted lever B with latch C, the double-ended sneck or eatch D with its bolts d d and adjusting- 45 washers d' d', and the snecks or hooks D' D', all arranged and operating substantially as described.

FREDERICK W. BEARDSLEE.

Witnesses:

GEO. W. WEFFINGER, W. E. B. Lucas.