

WITNESSES:

INVENTOR: 6. m. millens

## United States Patent Office.

CAREY McMILLEN, OF NEW GUILFORD, OHIO.

## FARM AND OTHER GATES.

SPECIFICATION forming part of Letters Patent No. 281,544, dated July 17, 1883.

Application filed December 12, 1882. (No model.)

To all whom it may concern:

Be it known that I, CAREY McMILLEN, of New Guilford, in the county of Coshocton and State of Ohio, have invented certain new and useful Improvements in Farm and other Gates, of which the following is a full, clear, and exact description.

This invention consists in a gate, mainly designed for farm use, in which wood and metal or wire are combined in a novel manner to produce a gate which may be cheaply made by unskilled labor, and combines lightness with durability, substantially as hereinafter described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a side elevation of a gate embodying my invention, and Fig. 2 a transverse vertical section on the line x x in Fig. 1. Fig 3 is a horizontal section in part on the line y y in Fig. 1.

A B indicate the two end uprights of the frame of the gate. These upright or frame pieces are made of wood, and are connected at a suitable distance below their upper ends by a wooden rail or bar, C. D is an oblique wooden brace connecting the lower end of the front upright, A, with the rail or bar C at any desired angle or distance from said upright. The pieces A B C D constitute the wooden frame and wooden brace portion of the gate.

35 G G are a series of wires, which serve as rails or bars, connecting the uprights A B both above and below the wooden rail C, and in parallel relation with it.

H is an iron brace or support, connecting the wooden rail C with the upper end portion of the rear upright, B, and fixed eye of the hinge b of the gate.

I is a stay for keeping the wires G from spreading, or keeping them at their proper distances apart.

J is the post in the ground on which the gate is hung.

The wooden brace D holds the front upright, A, in place, and keeps it from spring-

50 ing when tightening up the wires G. The rear upright, B, may be made sufficiently

heavy to need no such lower brace. The rod H is fastened to the rail C where the lower brace, D, joins said rail, and one bolt, d, secures both braces D H and the rail C together. 55 Said upper brace, H, which is fastened at its upper portion by a staple or fastening, e, to the rear upright, B, is provided at its upper end with a loop, h, through which the pintle n of the upper hinge, b, passes, as shown in 60 Figs. 1 and 3, the pintle n also passing through the eye of the eye-plate c, secured to the post J, near its upper end, and forming a part of the upper hinge, b. The arrangement of the braces D H relatively to the two uprights A 65 B and wooden connecting-bar C, which should be at about two-thirds of the height of the gate, more or less, and be sufficiently stout to resist springing, restrains the uprights from being drawn out of place when tightening up 70 the wires G.

The gate is of such simple construction that it may easily be put together by an unskilled hand, and very cheaply when only a rough or plain farm-gate is required, a rail or two and 75 a small bundle of wire forming the main portion of the materials used, and in putting the parts together all that is necessary is first to secure, by nails or bolts, the uprights A B, bar C, and brace D together, and then to apply and 80 fasten the wires G and rod H. Said gate will not only be found durable, but so light that it may easily be handled, and there will be but little liability of its sagging on the post on which it is hung. Consequently the front end 85 of the gate will be prevented from dragging on the ground and racking the structure.

I am aware that a gate-frame composed of vertical end bars connected by a central horizontal bar provided with a re-enforcing plate 90 and horizontal wire rods above and below the central bar, and provided with short braces connecting the central bar with the end bars above and below the central bar, and having a brace connecting the central bar with the 95 upper end of the inner end bar, has heretofore been employed, and I therefore lay no claim to such invention. In my construction the lower brace is secured to the cross-bar and to the lower end of the upper brace-rod, of 100 which it forms a continuation, by the same bolt, and the upper end of the rod is looped

for the passage of the pintle of the upper hinge, thus rendering my construction much simpler, lighter, and cheaper than that disclaimed.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a gate, the combination, with the wooden en end pieces,  $\Lambda$  B, horizontal connecting-bar

10 C, inclined brace D, and connecting wires G,

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of the eye-plate c, secured to the post J, rod H, having eyes at each end, staple e, pintle n, passing through the upper eye of the rod H and the eye of the plate c, and the bolt d, passing through the lower eye of the rod H, 15 bar C, and brace D, substantially as described. CAREY McMILLEN.

Witnesses:

ALFRED B. WILSON, RUSSELL S. WILSON.