C. MOORE & L. A. HUTCHENS.

GATE.

APPLICATION FILED MAY 8, 1913.

1,083,458.

Patented Jan. 6, 1914.

2 SHEETS—SHEET 1.

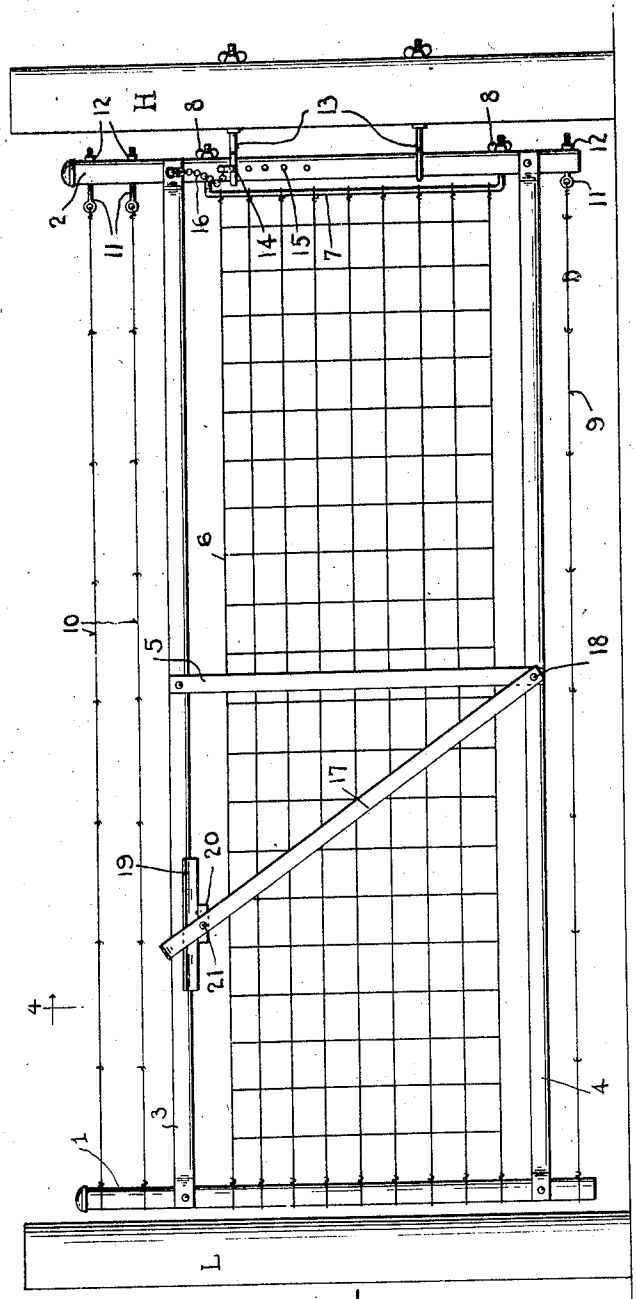


FIG. 1.

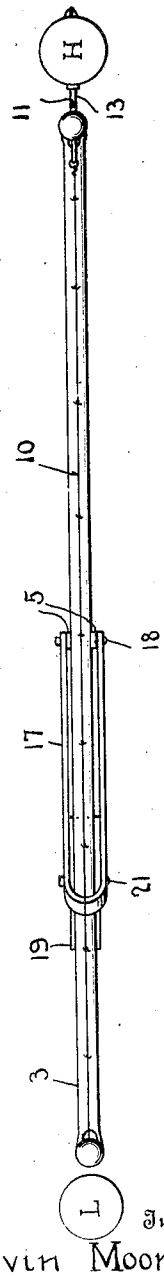


FIG. 2.

Witnesses

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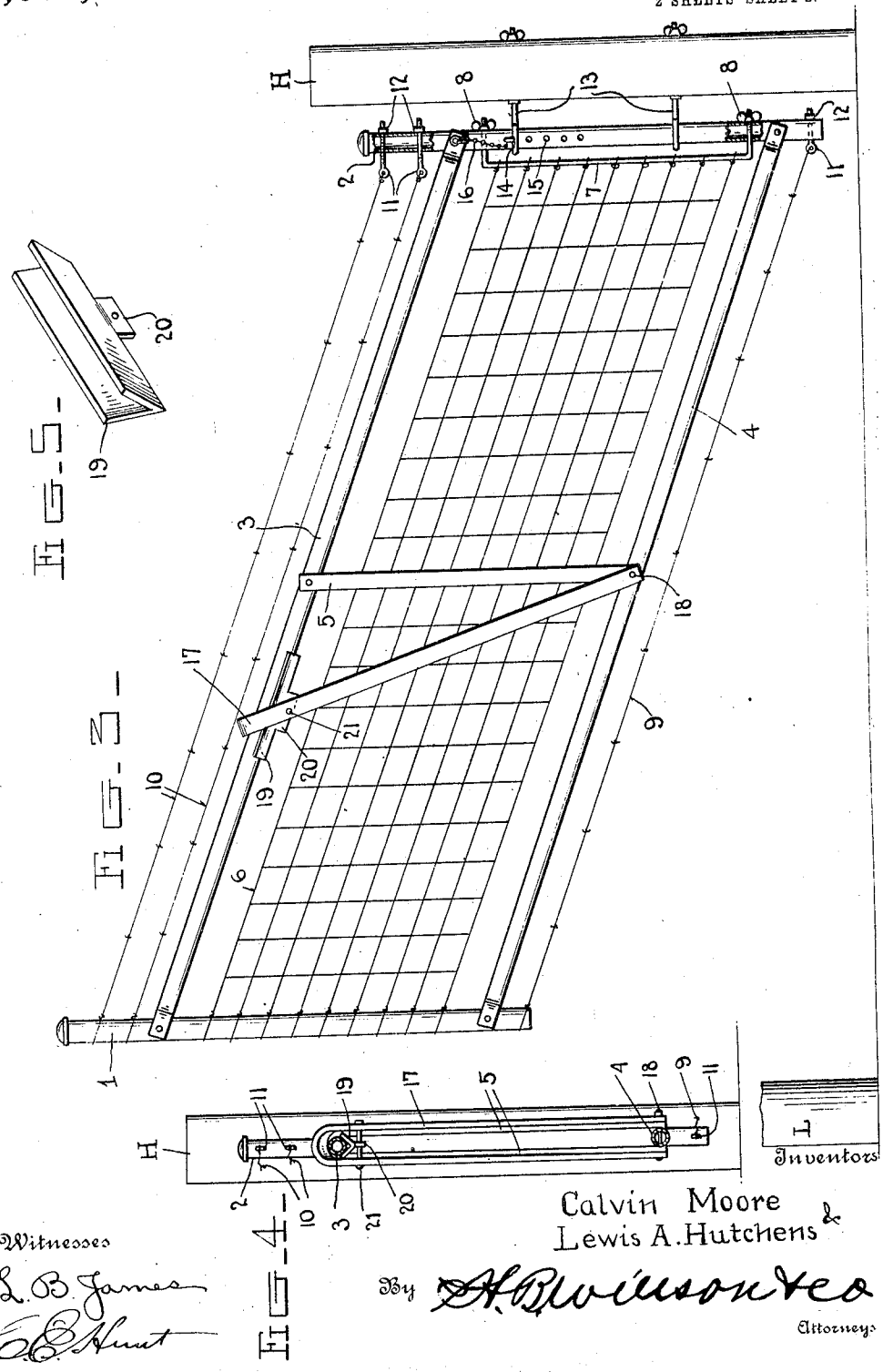


FIG. 5.

FIG. 2.

FIG. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

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GATE.

1,083,458. Specification of Letters Patent. Patented Jan. 6, 1914.

Application filed May 8, 1913. Serial No. 766,379.

To all whom it may concern:

Be it known that we, CALVIN MOORE, of Eldora, in the county of Hardin, State of Iowa, and LEWIS A. HUTCHENS, of New Providence, county of Hardin, and State of Iowa, citizens of the United States, have invented certain new and useful Improvements in Gates; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in gates and particularly to swinging gates.

One object of the invention is to provide a gate of this character adapted to be raised at one end and having an improved adjustable means for holding the gate in its raised position.

With these and other objects in view, the invention consists of certain novel features of construction, and the combination and arrangement of parts as will be more fully described and claimed.

In the accompanying drawings: Figure 1 is a side view of our improved gate showing the same in a closed or lowered position; Fig. 2 is a top plan view thereof: Fig. 3 is a side view showing the gate raised and illustrating the manner in which the same is held in this position: Fig. 4 is a vertical cross sectional view of the gate taken on the line 4—4 of Fig. 1; Fig. 5 is a detail perspective view of the gate engaging member of the mechanism which supports the gate in a raised position.

Referring more particularly to the drawings H denotes the hinge post and L denotes the latch post of our improved gate. The gate comprises vertical end bars 1 and 2 to which are pivotally connected the bifurcated ends of upper and lower longitudinal bars 3 and 4. The bars 3 and 4 are connected substantially midway between their ends by a pair of vertical bars 5 which are pivotally secured to the opposite sides of the longitudinal bars as shown. The space between the end and upper and lower bars of the gate may be provided with any suitable filling of a flexible nature or which will permit the pivotal movement of the bars 3 and 4 on the end bars. In the present instance the space between these bars is provided with a wire netting filling 6 the strands at the outer end of which are preferably coiled around and secured to the end bar 1 while the opposite or inner ends of the strands are fastened to a substantially bail shaped stretching frame 7 the upper and lower right angular ends of which are threaded and engaged with transverse passages in the inner end bar 2 and have thereon thumb nuts 8 which when tightened up will take up any slack in the filling material 6 and keep the same in the stretched condition. The end bars 1 and 2 are also preferably connected below the lower longitudinal bar 4 by a wire 9 and above the upper longitudinal bar 3 by wires 10. The wires 9 and 10 are preferably barbed wires and the outer ends thereof are secured to the end bar 1 while their inner ends are secured to stretching bolts 11 inserted through the inner end bar 2 and which have on their ends adjusting nuts 12 whereby the wires 9 and 10 may be kept stretched.

The gate is hingedly supported on the hinge post H by upper and lower eye bolts 13 with which the end bar 2 is loosely engaged. The gate is supported in the eye bolts by a transverse supporting pin 14 which is arranged above the eye bolt 13 and is adapted to be engaged with one of a vertical series of apertures 15 formed in the end bar 2 whereby the gate may be adjusted vertically and supported in its adjusted position or at any desired elevation on the hinge post as will be readily understood. In order to prevent the gate supporting pin 14 from becoming lost or mislaid, the latter is preferably connected to the gate by a short chain or other flexible connection 16 as shown.

By pivotally connecting the ends of the longitudinal bars 3 and 4 to the end bars of the gate in the manner described it will be seen that the outer end of the gate may be swung upwardly or raised to different heights as clearly shown in Fig. 3 of the drawings to permit the gate to be swung over snow or other obstructions or to permit small stock to pass beneath the same. In order to hold the gate in a raised position, we provide a support 17 which is preferably a flat metal bar bent intermediate its ends into the form of a yoke or bail engaged with the upper longitudinal bar 3 of the gate, while the lower ends are pivotally connected to the lower bar 4 and to the lower ends of the cross bars 5 as shown at 18.

Pivotally secured between the sides of the

support 17 and adapted to be engaged with the lower side of the upper bar 3 is a gate supporting member 19 which is preferably in the form of a V-shaped metal plate of suitable length and having on its lower corner midway between its ends a depending lug 20 which is pivotally connected to the sides of the support 17 by a transverse pivot bolt 21 as clearly shown in Fig. 4 of the drawings. It will be seen that when the outer end of the gate is raised to the desired elevation the support 17 may be swung rearwardly at its upper end thereby bringing the supporting member 19 into engagement with the longitudinal bar 3, said support and member thus forming an adjustable prop or brace which will firmly hold the gate in the position to which it has been raised.

When it is desired to lower the gate it is simply necessary to lift the weight thereof off from the member 19 and support 17 whereupon these parts may be disengaged from the upper bar 3 of the gate and swung forwardly and downwardly to the position shown in Fig. 1 whereupon the gate may be again swung downwardly or lowered or will drop by gravity.

It will be noted that by constructing the supporting mechanism of the gate in the manner described the outer end of the gate may be raised and supported irrespective of the elevation at which the gate is hingedly supported in the eye bolts 13 or in other words, the vertical adjustment of the gate on its hinged connections will not interfere with the raising and lowering of the outer end of the gate in the manner described.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as claimed.

Having thus described our invention, what we claim is:

A gate comprising end bars, upper and lower longitudinal bars pivotally connected at their ends to said end bars to permit the outer end of the gate to be raised and lowered on the inner end bar, centrally disposed vertical cross bars the ends of which are pivotally connected to the upper and lower longitudinal bars, a gate supporting member, means to pivotally connect the gate thereto, a yoke shaped support embracing the opposite sides of the gate and having its lower ends hingedly secured to the lower ends of the cross bars where the same connect with the lower longitudinal bar of the gate, a V-shaped gate supporting member movably secured to the yoke adjacent to its upper end adapted for sliding and detachable engagement with the lower side of the upper longitudinal bar of the gate, whereby the forward end of the latter may be raised to a desired elevation.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

CALVIN MOORE.
LEWIS A. HUTCHENS.

Witnesses:
M. E. Moore,
H. C. Marks.