

No. 898,060.

PATENTED SEPT. 8, 1908.

C. N. MOGNET.

GATE.

APPLICATION FILED AUG. 16, 1906.

2 SHEETS—SHEET 1.

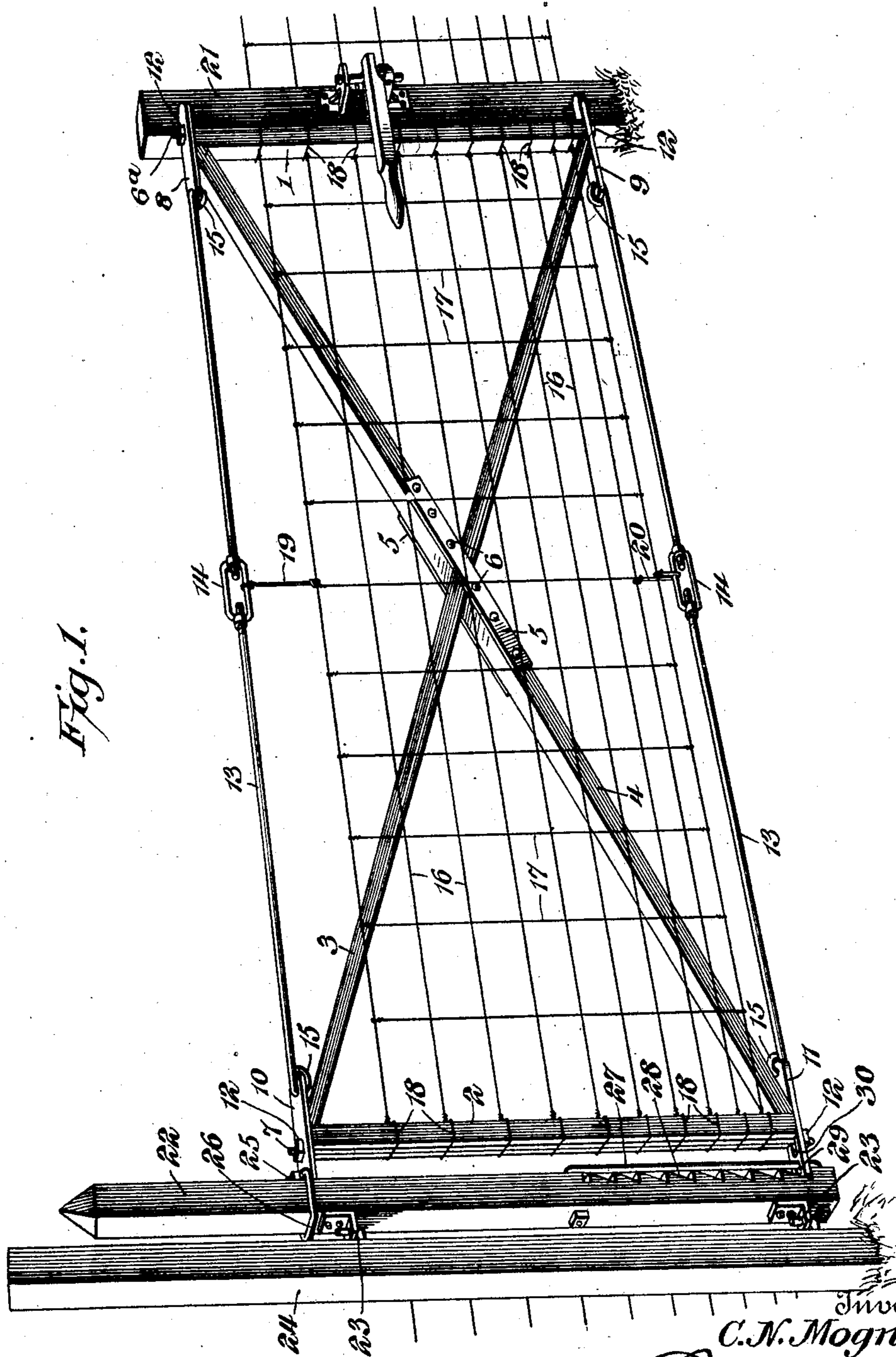


Fig. 1.

Witnesses
Howard D. Orr.
J. H. P. Piley

By

Inventor,
C. N. Mognet,
C. G. Siggers
Attorneys

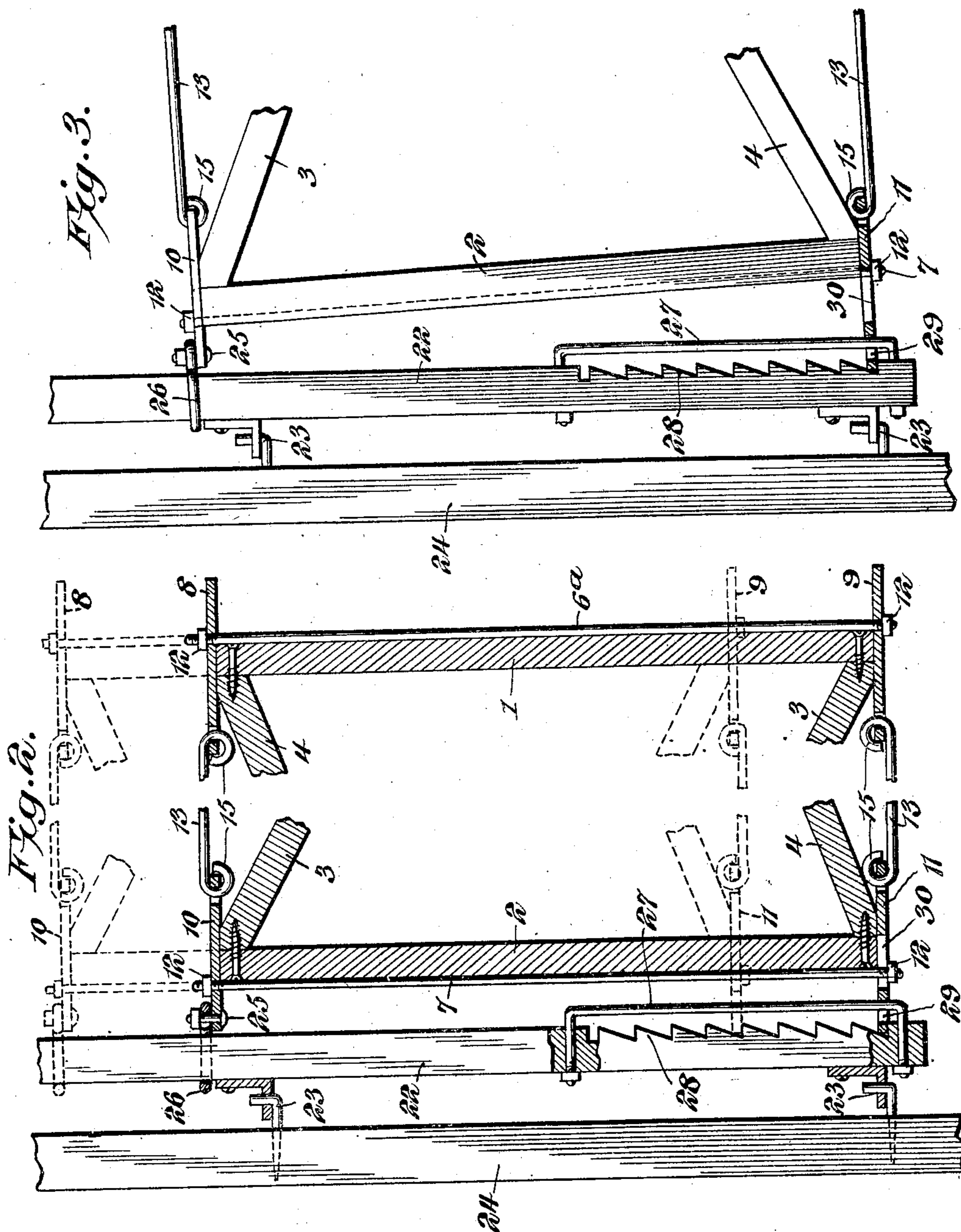
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C. N. Mognet, Inventor,

By

E. J. Siggers
Attorneys

Witnesses

Howard D. Carr

J. F. Riley

UNITED STATES PATENT OFFICE.

CHARLES N. MOGNET, OF TRENT, PENNSYLVANIA.

GATE.

No. 898,060.

Specification of Letters Patent.

Patented Sept. 8, 1908.

Application filed August 16, 1906. Serial No. 330,903.

To all whom it may concern:

Be it known that I, CHARLES N. MOGNET, a citizen of the United States, residing at Trent, in the county of Somerset and State of Pennsylvania, have invented certain new and useful Improvements in Gates, of which the following is a specification.

The invention relates to improvements in gates.

10 The object of the present invention is to improve the construction of gates, and to provide a simple, inexpensive and efficient one of great strength and durability, which will offer little resistance to the wind and
15 which will not catch or drag snow, and which will also be effectually prevented from sagging.

A further object of the invention is to provide a gate of this character, which will be
20 capable of either a vertical sliding movement or a vertical tilting movement to arrange it at the desired elevation, and to enable it to swing clear of various obstructions and to adapt it for use on hill sides.

25 With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims
30 hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing
35 any of the advantages of the invention.

In the drawings:—Figure 1 is a perspective view of a gate constructed in accordance with this invention. Fig. 2 is an enlarged vertical sectional view, illustrating the construction of the end portions of the gate.
40 Fig. 3 is an enlarged side elevation, partly in section, of one end of the gate, illustrating the tilting adjustment of the same.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

50 The gate, which is in the form of a fence panel, is provided with front and rear vertical end bars 1 and 2 and diagonally arranged braces 3 and 4, consisting of bars, centrally connected and tapered from the center to the ends, which are fitted against

the inner edges of the end bars 1 and 2 at the terminals thereof. The bars or braces 3 and 4 are oppositely recessed at their centers, and are fitted together, as shown, being
55 secured in such interlocked relation by means of side straps or plates 5, arranged at the side edges of the bar or brace 4, and fastened to the same by means of bolts 6, or
60 other suitable fastening device.

The end bars are provided at their outer edges with vertically disposed marginal grooves in which are arranged vertical tie rods 6^a and 7, and the latter are provided
65 with threaded terminals, which pierce corner plates 8, 9, 10 and 11 and which are secured to the same by nuts 12. The corner plates 8, 9, 10 and 11 are connected by marginal top and bottom horizontal rods 13 having turn
70 buckles 14, whereby the gate is adapted to be tightened to the desired extent. The top and bottom horizontal rods 13 are provided at their outer ends with eyes 15, which are linked into perforations of the inner ends of
75 the corner plates of the gate. The rods, which form a marginal frame around the panel, cooperate with the diagonally arranged bars or braces to provide a trussed gate, and there is no liability of the gate set-
80 tling or sagging by reason of any looseness of the parts of the panel.

The gate is provided with a woven wire body portion, preferably consisting of horizontal wires 16 and vertical wires or ties 17,
85 suitably connected with the horizontal wires. This woven wire body portion may be of any preferred design, and the terminals of the horizontal wires are secured to the end bars of the gate and provide loops 18, which bind
90 the tie rods 6 and 7 in the grooves of the end bars 1 and 2.

The turn buckles 14 of the horizontal top and bottom rods are connected with the woven wire body portion of the panel by
95 means of short top and bottom connections 19 and 20, which maintain the wire body portion of the gate in proper position, and at the same time prevent the turn buckles from accidentally unscrewing. The wire body por-
100 tion of the gate is connected with the same at the ends, and also at the centers of the top and bottom wires by the short connections 19 and 20.

The corner plates are arranged horizontally and the front ones 8 and 9 project beyond the front or free end of the gate, and are adapted to abut against the contiguous side face of a latch post 21 for preventing the gate from swinging past the said latch post.

The inner or rear end of the gate is slidably connected with a hinged support 22, which is connected by suitable hinges 23 with a hinge post 24, or other suitable support. The hinges 23 are arranged at the top and bottom of the gate, and thereby reduce the strain to a minimum. The hinged support or bar 22 is squared, and the rear top plate 10, which projects rearwardly beyond the end bar 2, is loosely connected by means of a bolt 25 with a loop 26, which embraces the upper portion of the support 22 and which is slidable thereon. The loop or slide 26 is provided with a perforation or eye through which the bolt 25 passes, and the connection between the top of the gate and the support 22 permits the gate to tilt in a vertical plane to adapt it for use on hill sides, as hereinafter more fully explained.

The bottom of the inner or rear end of the gate is slidably and adjustably connected with the hinged support by means of a vertical guide 27 and a vertical ratchet 28, arranged in spaced relation. The terminals of the guide rod 27 are bent at right angles and are passed through the support 22, being secured to the same by means of nuts or other suitable fastening devices. The vertical ratchet 28 consists of a series of shoulders or teeth, which are adapted to support the bottom plate 12, and the latter is provided with a slot or opening 29 to receive the vertical guide 27. The slot or opening 29 affords sufficient movement of the lower portion of the gate to carry the bottom plate 11 into and out of engagement with the vertical ratchet 28. This construction enables the gate to be adjusted vertically and to be supported at the desired elevation, and the weight of the gate will maintain the rear bottom plate 11 in engagement with the ratchet of the hinged support 22.

The vertical adjustment of the gate through its sliding connection with the hinged support will enable the gate to swing clear of various obstructions, and in order to enable the gate to be adjusted for operation on hill sides, the rear bottom plate 11 is provided with a longitudinal slot 30, which receives the lower end of the rod 7 and which permits the lower rear corner of the gate to be adjusted toward and from the hinged support 22, whereby the gate is adapted to be held, as illustrated in Fig. 3 of the drawings. This adjustment also enables the front or outer end of the gate to be arranged below a horizontal position when desired. The turn buckles of the bottom rods will permit the necessary lengthening or shortening of the

same to correspond to the tilting adjustment of the gate.

When the gate is hinged directly to a fixed hinge post, the tilting adjustment may be secured by the rear bottom plate 11, which is adapted to constitute one of the elements of the lower hinge by engaging the lower pintle with the opening 29. As this will be perfectly obvious, illustration thereof is deemed unnecessary.

It will be seen that the gate is exceedingly simple and inexpensive in construction, that it possesses great strength and durability, and that it is adapted to swing clear of obstructions and is capable of adjustment to enable it to be advantageously used on hill sides. Furthermore it will be apparent that the gate will not drag or collect snow, and that it will not offer any resistance to the wind, so that its opening and closing movements will not be affected by the same.

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

1. The combination of a hinged support provided with a vertical ratchet, and a gate provided with vertical and horizontal rods connected by corner plates, one of which engages the ratchet.

2. The combination of a hinged support provided with a vertical ratchet, a gate, and common means for engaging the ratchet to raise and lower the gate and for also moving the gate toward and from the ratchet to set the gate either in a horizontal position or at an inclination.

3. The combination of a hinged support provided with a vertical ratchet, a gate provided with vertical and horizontal marginal rods, a corner plate connecting the said rods and projecting rearwardly from the gate and engaging the ratchet for adjusting the gate vertically, said plate being also provided with a longitudinal slot adjustably receiving one of the rods, whereby the gate is adjusted toward and from the ratchet to arrange the said gate either in a horizontal or an inclined position.

4. The combination of a hinged bar provided at the lower portion with a ratchet, a loop having a guiding portion spaced from the ratchet, a gate provided with vertical and horizontal rods, a corner plate connecting the rods and provided with spaced slots, one of the slots receiving the loop and permitting the plate to be moved into and out of engagement with the ratchet, and one of the rods being extended through the other slot and provided with means for adjustably securing the plate to the gate to tilt the latter.

5. The combination of a hinged support provided with a vertical ratchet, a gate, a bottom corner plate engaging the ratchet to adjust the gate vertically, and adjustably secured to the gate to move the bottom of

the same toward and from the hinged bar,
whereby the gate may be set either in a hori-
zontal or an inclined position, a bottom mar-
ginal rod connected with the corner plate,
5 and means for adjusting the rod to vary the
length of the same to permit the adjustment
of the corner plate.

In testimony whereof I have affixed my
signature in presence of two witnesses.

CHARLES N. MOGNET.

Witnesses:

WILLIAM J. KIMMEL,
HERMAN S. GROSS.