

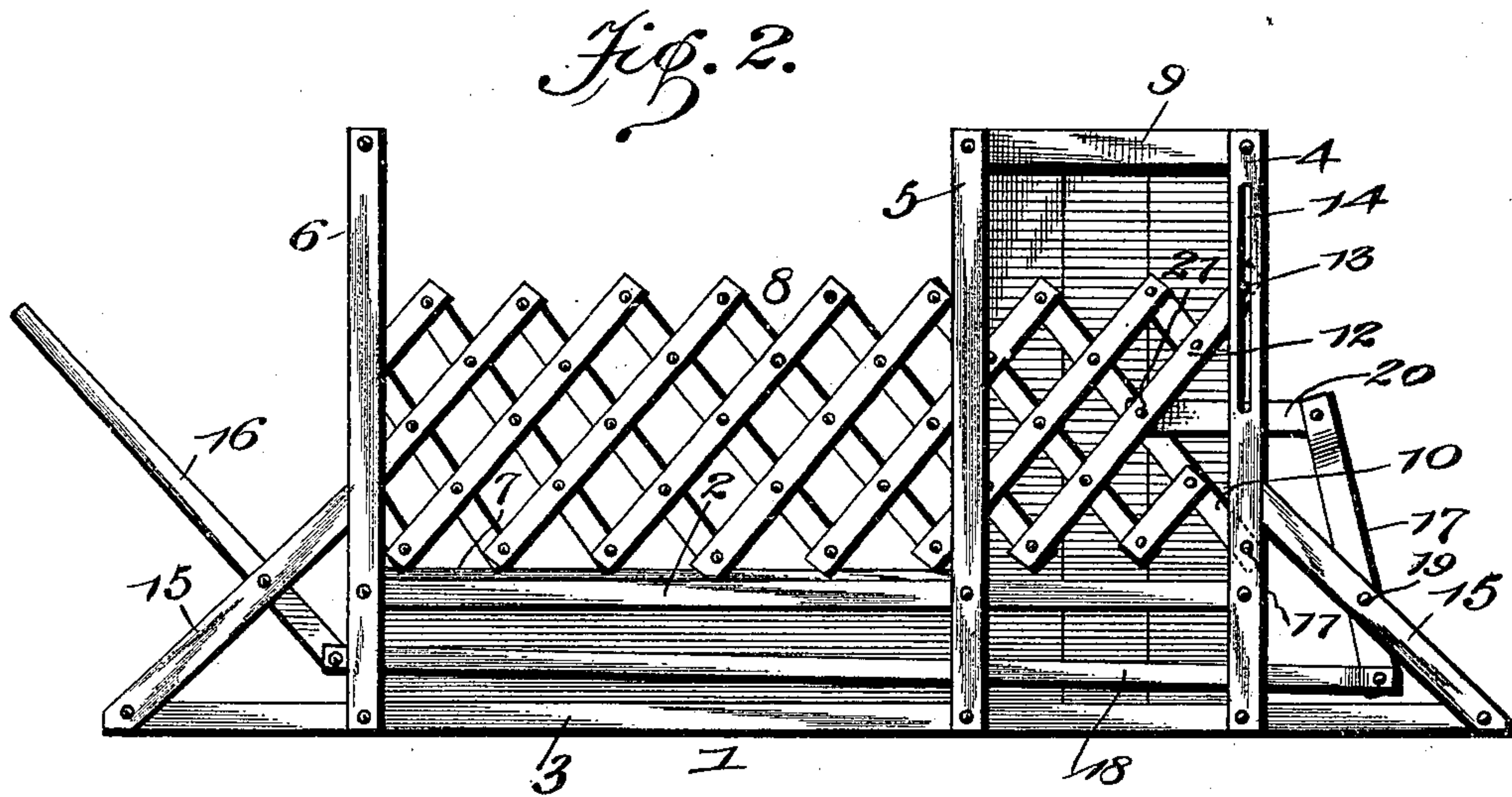
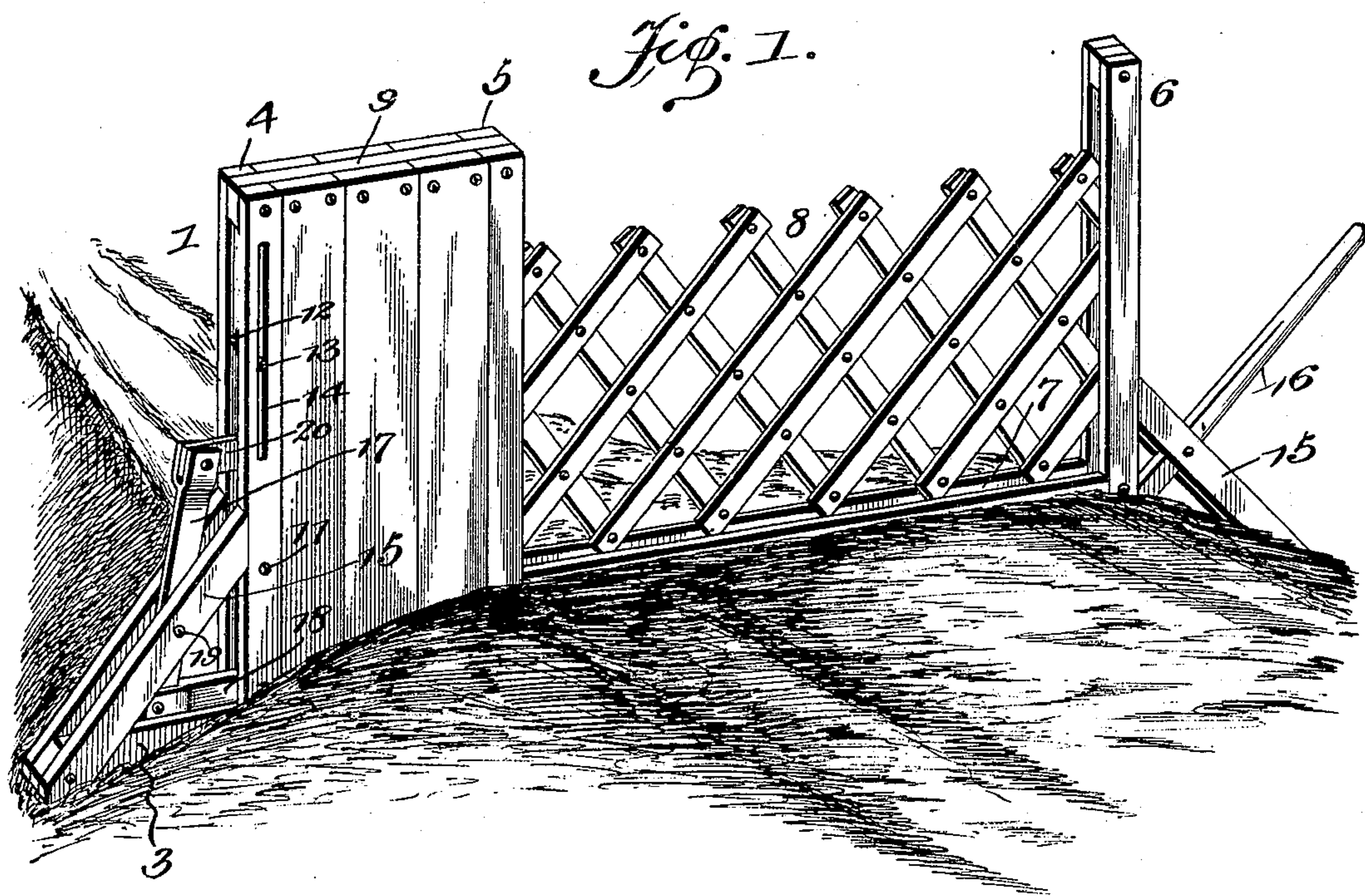
No. 629,706.

Patented July 25, 1899.

T. WORTMAN.
GATE.

(Application filed Mar. 1, 1899.)

(No Model.)



Witnesses
A. Roy Appleman
J. F. Piley

By *his* Attorneys,

Theodore Wortman, Inventor.

Cashnow & Co.

UNITED STATES PATENT OFFICE.

THEODORE WORTMAN, OF CHAMBERLAIN, SOUTH DAKOTA.

GATE.

SPECIFICATION forming part of Letters Patent No. 629,706, dated July 25, 1899.

Application filed March 1, 1899. Serial No. 707,304. (No model.)

To all whom it may concern:

Be it known that I, THEODORE WORTMAN, a citizen of the United States, residing at Chamberlain, in the county of Brulé and State of South Dakota, have invented a new and useful Gate, 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, strong, and durable one adapted to be easily operated without necessitating leaving the latch-post and
15 capable of being opened and closed with one hand, so as to leave the other hand free.

20 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

25 In the drawings, Figure 1 is a perspective view of a gate constructed in accordance with this invention. Fig. 2 is a side elevation of the gate, the supporting-frame being in section.

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

30 1 designates a supporting-frame provided at its base with upper and lower horizontal sills 2 and 3, connected by uprights 4, 5, and 6. The upper horizontal sill 2 is provided at its upper face with a longitudinal groove 7,
35 which forms a guide for a gate 8, consisting of a lazy-tongs system of levers. The uprights are arranged in pairs at opposite sides of the horizontal beams 2 and 3, and the pair of uprights 6 forms the latch-post and is arranged
40 at one end of the supporting-frame. A block is interposed between the upper ends of the uprights 6, and the upper terminals of the uprights 4 and 5, which are located at the other end of the supporting-frame, are con-
45 nected by a horizontal top bar 9, as clearly shown in Fig. 2 of the accompanying drawings. The base of the frame, which is designed to be embedded in the ground, and the space between the uprights 4 and 5 are boarded over
50 to form a casing, the gate 8 being received within the vertical portion of the supporting-

frame formed by the uprights 4 and 5 when it is open.

The lower end of the end lever 10 of the lazy-tongs system is pivoted at 11 between the
55 end uprights 4, and the upper end of the lever 12 is slidably connected with the supporting-frame, being provided with lateral projections 13, arranged to slide in vertical slots 14, formed in the end uprights 4. The
60 end uprights 4 and 6 are supported by inclined braces 15, which are secured at their lower ends to the bottom beam or sill 3, which is extended, as illustrated in Fig. 2.

The gate is opened and closed by an operating-lever 16, located at one end of the supporting-frame, adjacent to the uprights 6, and fulcrumed between its ends on the adjacent inclined braces 15, and the lower end of the operating-lever is connected with an oscillating lever 17 by a longitudinal bar 18, extending through the base of the supporting-frame and arranged within the horizontal
70 portion of the casing or housing. The oscillating lever 17, which is arranged adjacent to the end uprights 4, is fulcrumed between its ends at 19 on the adjacent inclined braces 15, its lower end being connected with the bar 18 and its upper end being pivoted to a
80 short connecting-bar 20, which is pivoted to the gate at 21 at the point of connection of the bars or levers 10 and 12. By this arrangement it will be clear that as the operating-lever is oscillated the lazy-tongs system of levers which form the gate will be expanded
85 and contracted to open and close the gate. When the gate is closed, its free or extended end is arranged within the space between the uprights 6, and it is securely held against lateral movement by the same and by the groove
90 of the base of the supporting-frame.

The invention has the following advantages: The gate, which is simple and comparatively inexpensive in construction, is strong and durable, and it is capable of being
95 readily operated to open and close it without requiring the operator to follow it. The gate may be opened with one hand, and the operating mechanism is housed within the casing of the supporting-frame and is protected by
100 the same.

Changes in the form, proportion, size, and

the minor details of construction within the scope of the appended claims may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What is claimed is—

1. The combination of a supporting-frame, a gate consisting of a lazy-tongs system of levers and connected with the supporting-frame at one end thereof, an operating-lever fulcrumed on the supporting-frame at one end thereof, an oscillating lever arranged at the other end of the frame adjacent to the attached end of the gate, a bar extending beneath the gate and connecting the lower ends of the levers, and a connecting-bar extending from the upper end of the oscillating lever to the gate, substantially as described.

2. The combination of a supporting-frame provided at one end with a vertical casing or housing and having a horizontal casing or housing at its base, the latter being provided with a guide-groove, a gate consisting of a lazy-tongs system of levers attached to the supporting-frame, guided by the groove of the base and arranged to be withdrawn into the vertical portion of the casing, an oscillating lever connected with the gate and arranged at one end of the supporting-frame, an operating-lever mounted on the other end of the supporting-frame, and a connection between the levers housed within the casing at the base of the frame, substantially as described.

3. The combination of a supporting-frame comprising upper and lower horizontal beams

2 and 3, uprights 4 and 5 arranged at one end of the supporting-frame, a latch-post arranged at the other end of the supporting-frame, and means for inclosing the spaces between the uprights and the beams, a gate connected with the uprights 4 and consisting of a lazy-tongs system of levers arranged to fold within the space between the uprights 4 and 5, inclined braces arranged at the ends of the frame and supporting the uprights 4 and the latch-post, the lever 17 fulcrumed on the inclined brace at one end of the frame and connected at its upper end with the gate, an operating-lever fulcrumed on the inclined brace at the other end of the supporting-frame, and connections between the levers arranged within the base of the frame, substantially as described.

4. The combination of a supporting-frame, a gate consisting of a lazy-tongs system of levers and connected with the supporting-frame at one end, a lever fulcrumed at that end of the gate and connected with the latter, the hand-operated lever located at the other end of the gate, and means for connecting the two levers to cause them to work in unison, said means being located beneath the gate, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

THEODORE WORTMAN.

Witnesses:

SCOTT HAYES,
W. F. PHILLIPS.