

(No Model.)

G. W. WOLFE & J. A. GIBSON.
GATE.

No. 542,180.

Patented July 2, 1895.

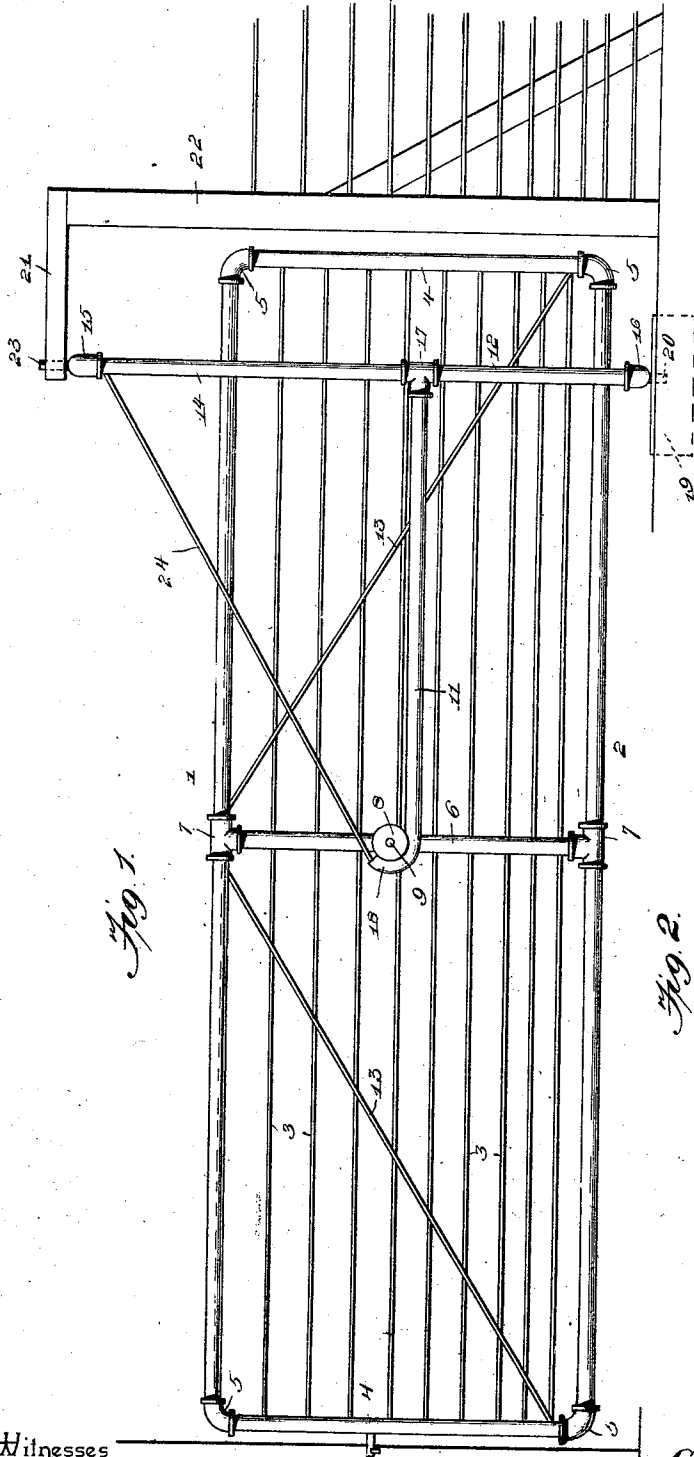


Fig. 1.

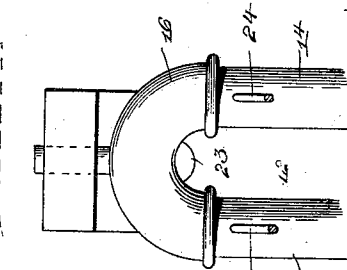


Fig. 3.

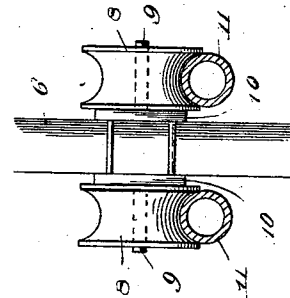


Fig. 2.

Inventors

Witnesses

John C. Shaw
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By their Attorneys.

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UNITED STATES PATENT OFFICE.

GEORGE W. WOLFE AND JAMES A. GIBSON, OF NORTH BALTIMORE, OHIO.

GATE.

SPECIFICATION forming part of Letters Patent No. 542,180, dated July 2, 1895.

Application filed April 25, 1895. Serial No. 547,166. (No model.)

To all whom it may concern:

Be it known that we, GEORGE W. WOLFE and JAMES A. GIBSON, citizens of the United States, residing at North Baltimore, in the county of Wood and State of Ohio, 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 swinging gates and to provide a simple and inexpensive one, which will be strong and durable, and which may be swung in either direction.

15 A further object of the invention is to provide a sliding and swinging gate, which will be evenly balanced, and which may be readily moved on its hanger without friction to facilitate opening.

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 side elevation of a gate constructed in accordance with this invention and shown closed. Fig. 2 is a detail view of the rollers of the gate. Fig. 3 is a similar view illustrating the construction 30 of the standard of the hanger of the gate.

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

1 designates a sliding and swinging gate, 35 which may be constructed of any suitable material, either wood or metal, and which may be composed of the ordinary horizontal rails and vertical bars; but the gate preferably consists of a rectangular frame 2 and a series of horizontal fence-wires 3. The rectangular frame 2 of the gate is supported by 40 diagonal bracing-wires 13, and consists of top and bottom bars, constructed of suitable material, preferably gas-pipe or tubular metal, and end bars 4, constructed of gas-pipe or 45 other tubular metal, and connected at their terminals with the ends of the top and bottom tubular bars by couplings 5. The wires 3 have their terminals passed through perforations of the ends 4 of the rectangular frame 2 of the gate, and suitably secured to the 50 same; but the wires 3 may be arranged in any

other suitable manner to form the body of the gate.

The rectangular frame of the gate is centrally braced by a vertical tubular bar 6, 55 connected at its ends by T-shaped couplings 7, and provided at its center at opposite sides of the center of the gate with vertically-disposed rollers 8. The rollers 8 are mounted 60 on journals 9 of plates 10, and have grooved peripheries arranged on tubular horizontal arms 11 of a hanger or crane 12. The plates 10 are bolted, clipped, or otherwise secured 65 to the central tubular bar 6, and by being located at the center of the gate the latter will not sag and may be easily and frictionlessly moved along the arms 11 of the hanger.

The hanger 12 of the gate is composed of a vertical standard 14 and a pair of horizontal 70 arms 11. The standard 14 is composed of parallel vertically-disposed tubular bars, connected at their upper and lower ends by curved couplings 15 and 16, which are disposed at opposite sides of the gate. The arms 75 11 are constructed of tubular metal, and are connected at their inner ends with the sides of the standard by T-shaped couplings 17, and have their outer terminals 18 curved upward, forming stops to limit the forward 80 movement of the rollers 8.

The standard 14 is journaled on a support or foundation 19 of stone or any other suitable material, and is provided with a depending journal 20, arranged in a socket or 85 bearing of such support or foundation. The upper end of the standard is journaled on a horizontal arm 21 of an upright 22 by means of a bolt of pin 23.

The upright 22 may form a portion or be the 90 end post of an adjacent fence, and the gate, which may be provided at its front end with any suitable construction of latch, is adapted to slide along the horizontal arms 11 of the hanger, and to be swung in either direction 95 to complete the operation of opening.

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 capable of being readily opened 100 and closed.

It will also be apparent that, by arranging the rollers 8 centrally of the gate, the latter is balanced and may be readily handled to

move it back and forth along the arms of the hanger, and that, as the plates which carry the rollers are adjustable, the gate may be accurately mounted at the proper elevation.

5 The hanger of the gate is strengthened and supported, and the horizontal arms are prevented from sagging, by inclined tie rods or braces 24, extending upward from the curved outer terminals of the horizontal arms 11
10 and secured to the top of the hanger, and the tie-rods or braces 24 are located at opposite sides of the gate.

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

What we claim is—

1. The combination with a gate provided at opposite sides with centrally arranged rollers, of a hanger comprising a vertical stand-
20 ard, journaled at its top and bottom, having vertical tubular sides provided with couplings connecting their terminals, and a pair of horizontal arms located at opposite sides
25 of the gate having their inner ends coupled

to the standard, and their outer ends curved upward, said arms receiving and supporting the rollers of the gate, substantially as described.

2. The combination of a gate provided with
30 a central vertical bar, plates secured to opposite sides of the central bar and provided with journals, rollers mounted on the journals, and a hanger comprising the vertical
35 standard having parallel sides, connected at their ends by couplings, and the horizontal arms 11, constructed of tubular metal, having their inner ends secured to the sides of the
40 standard, and their outer ends curved upward, and the inclined braces extending from the outer ends of the arms to the top of the standard, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

GEORGE W. WOLFE.

JAMES A. GIBSON.

Witnesses:

W. A. GRAHAM,

B. L. PETERS.