

No. 863,244.

PATENTED AUG. 13, 1907.

A. L. WESTON.
FENCE GATE.

APPLICATION FILED MAY 6, 1907.

Fig. 1

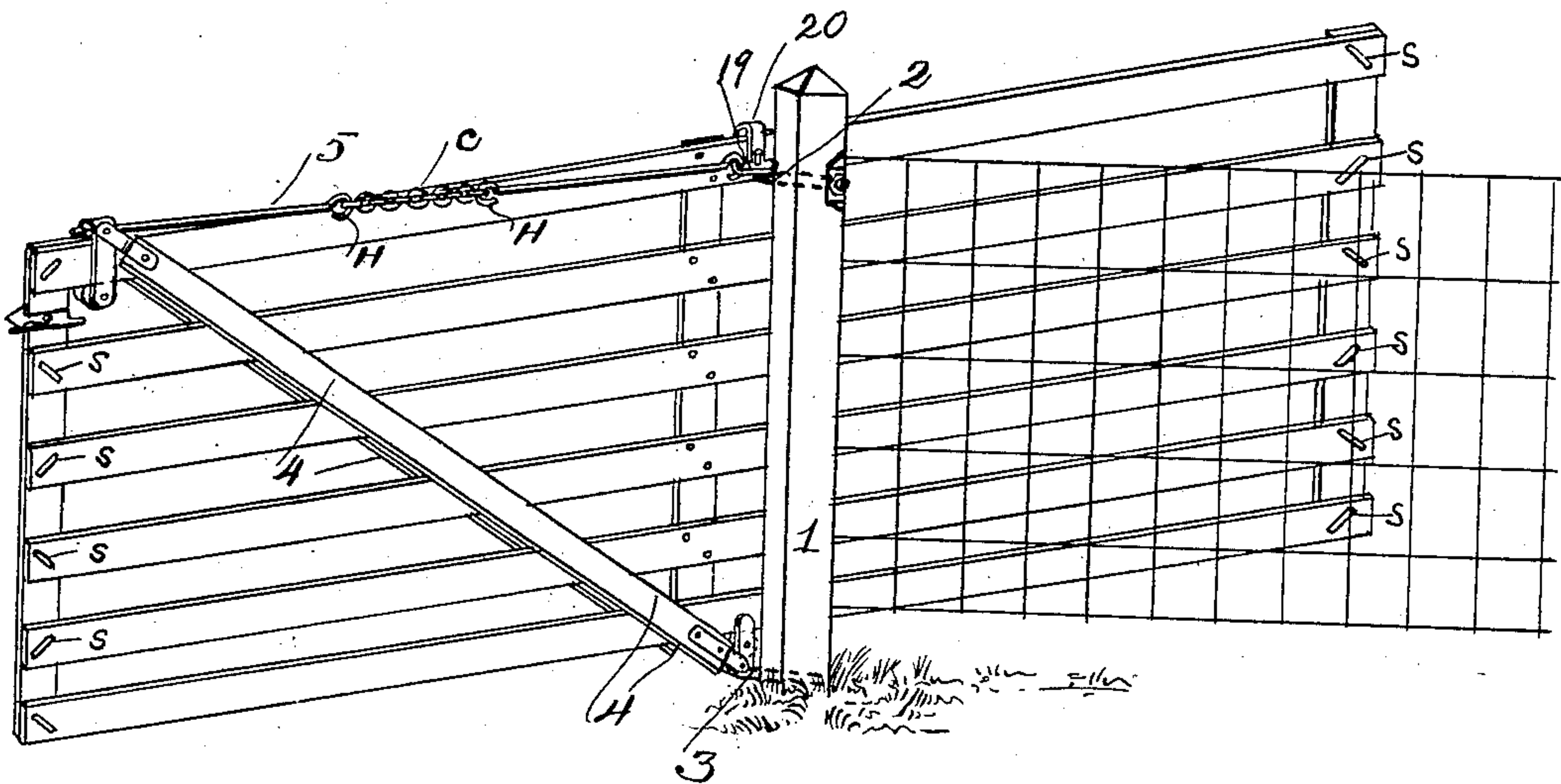


Fig. 2.

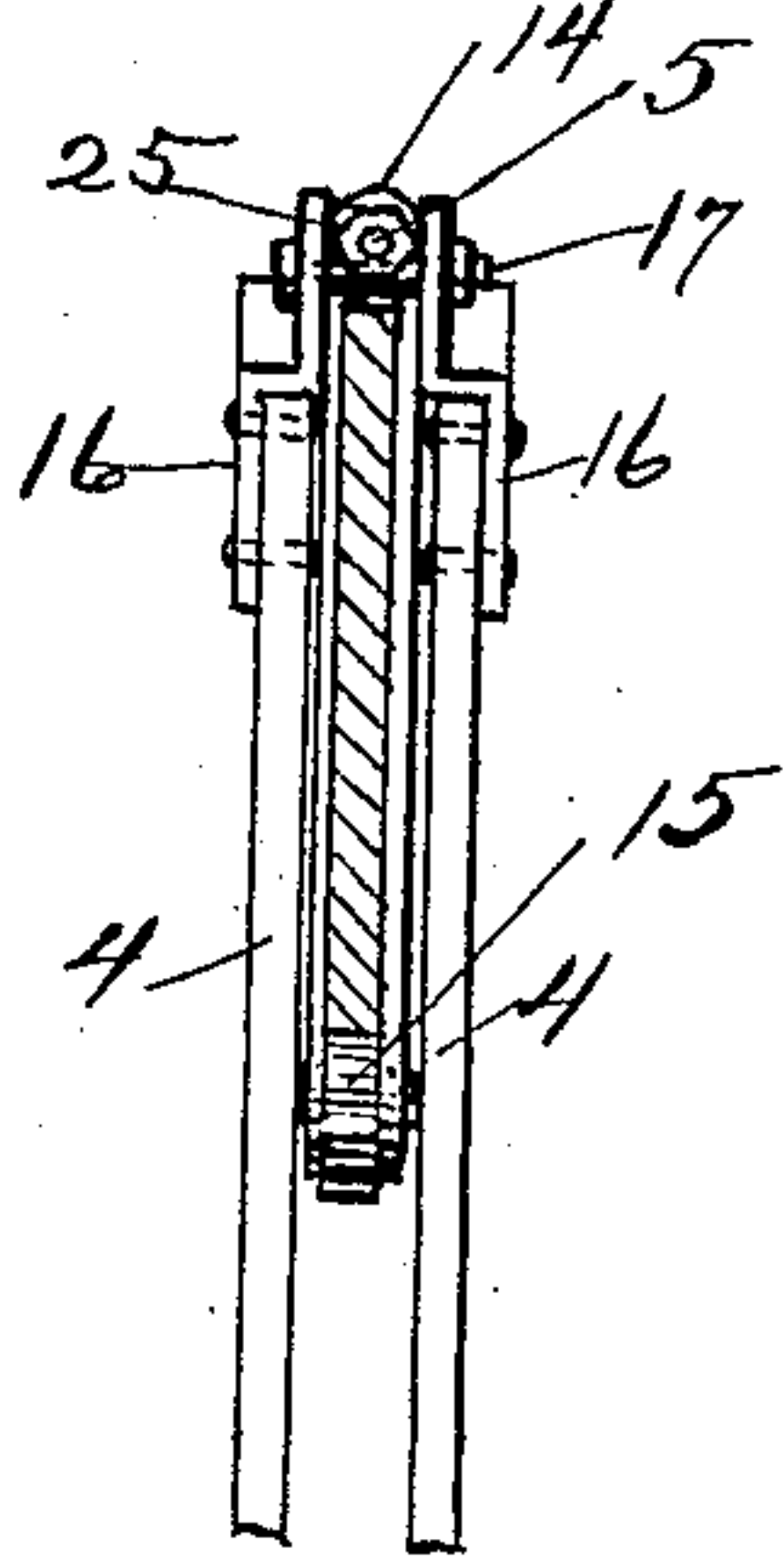


Fig. 4

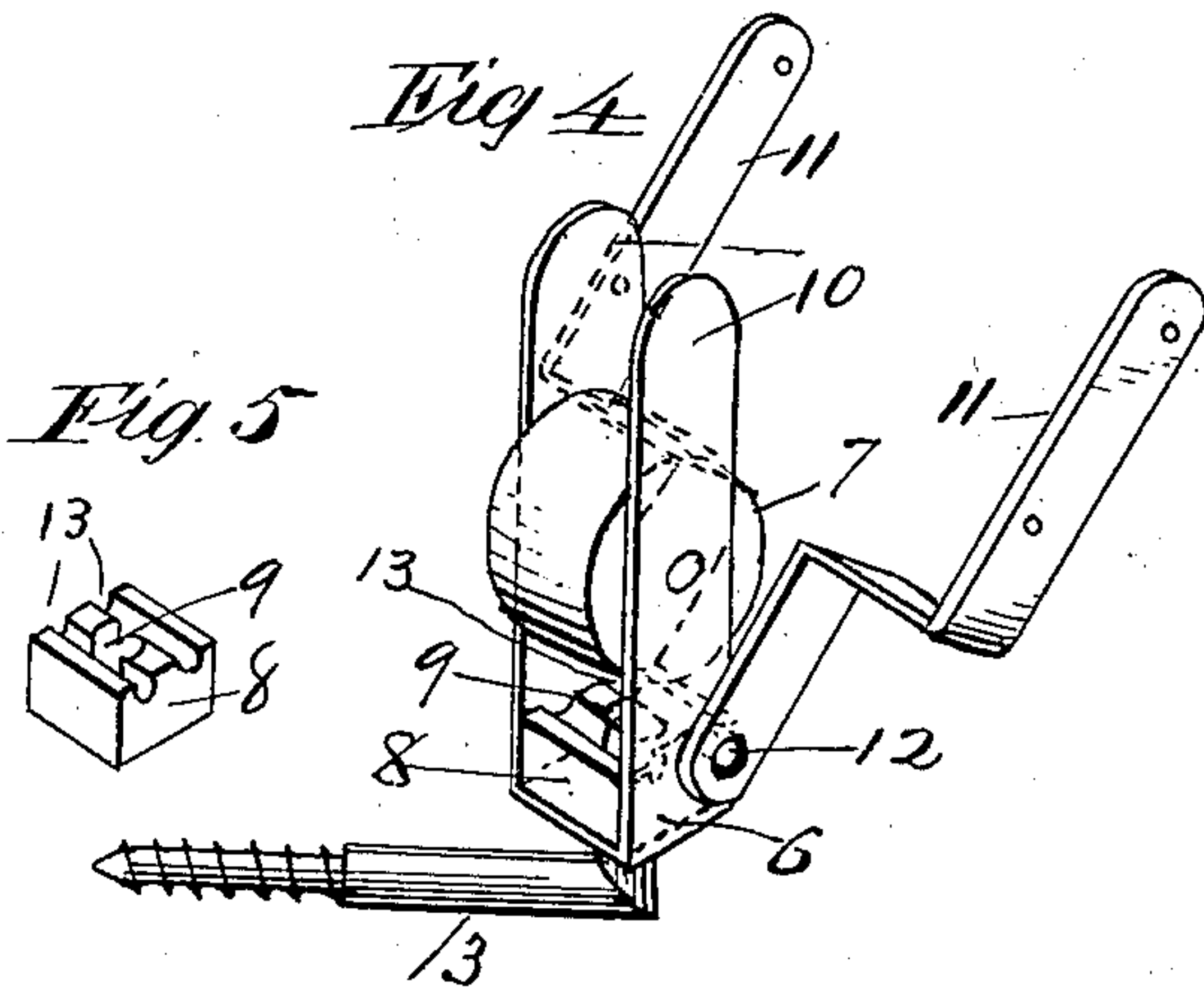


Fig. 5

Fig. 3.

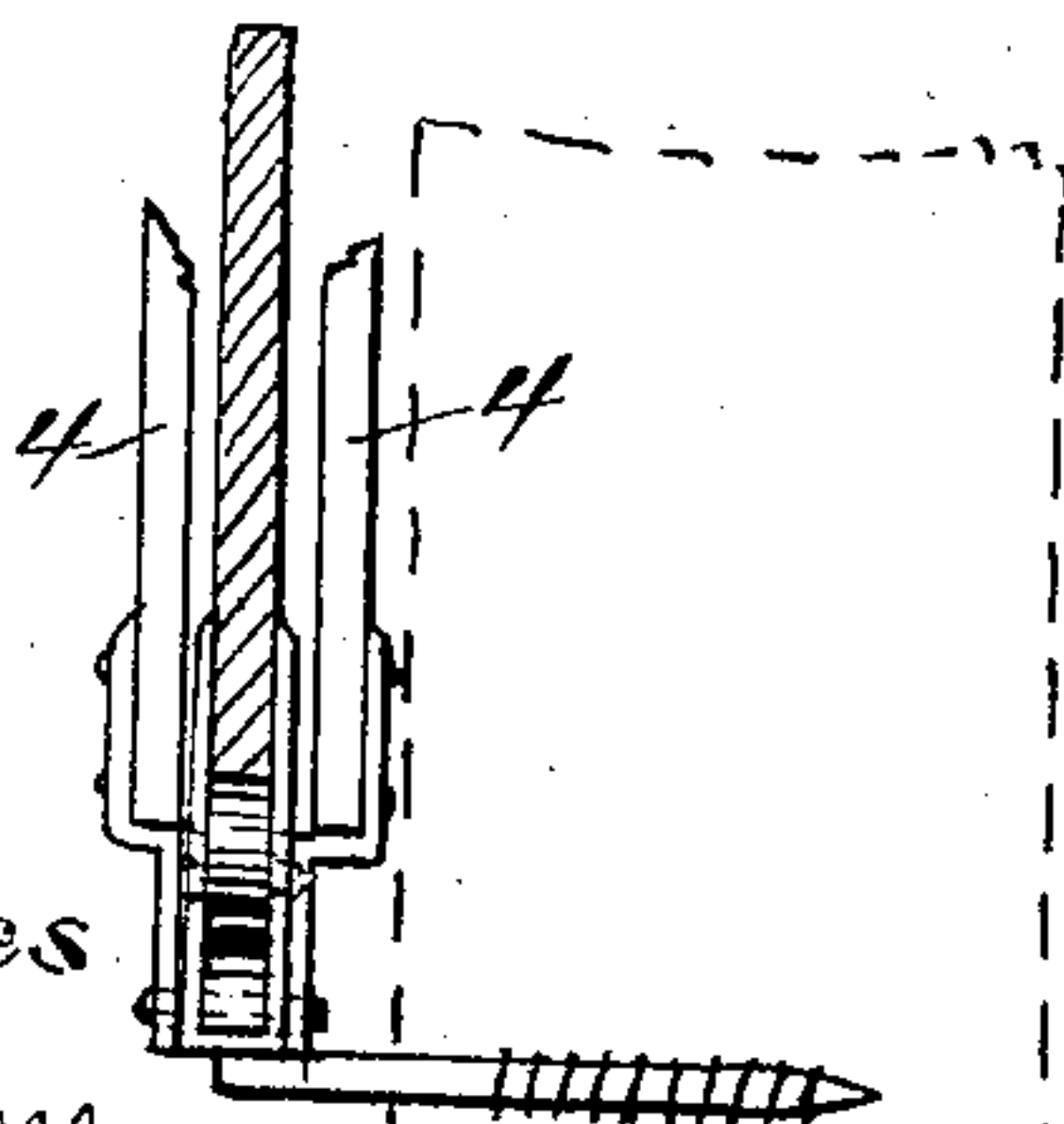


Fig. 6.

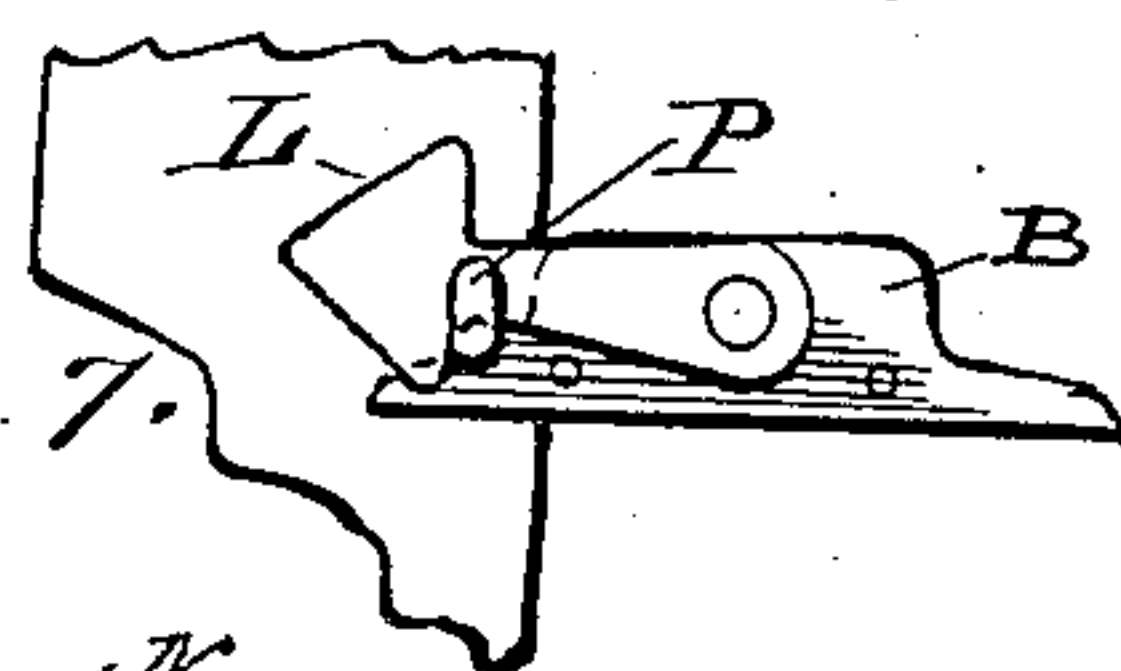
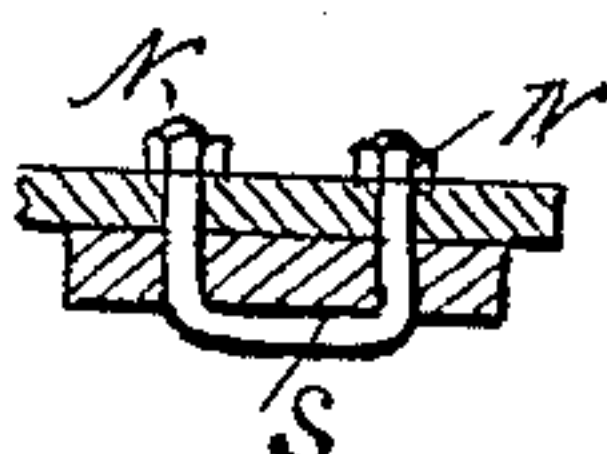


Fig. 7.



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UNITED STATES PATENT OFFICE.

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FENCE-GATE.

No. 863,244.

Specification of Letters Patent.

Patented Aug. 13, 1907.

Application filed May 6, 1907. Serial No. 372,099.

To all whom it may concern:

Be it known that I, ASA L. WESTON, a citizen of the United States, and a resident of North Dover, county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Fence-Gates, of which I hereby declare the following to be a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

The objects of the invention are to provide improved instrumentalities for hanging and constructing a gate such as is described in former Letters Patent granted to me on June 27th, 1905, bearing number 793,485. In that device I showed a gate supported at a central point upon a roller and mounted in a triangular frame, comprising a post, a strut upon one side of the gate, and a tension rod located on one side of the gate and connecting the upper ends of the strut and post, and also I showed therein appliances for pivotally supporting the lower end of the strut upon the post, and for attaching the tension rod to the strut.

The present device is designed to obtain a greater degree of efficiency and practicability as well as strength and durability in use than the aforesaid device.

The location of the strut at one side of the gate, and the unequal distribution of weight occasioned thereby was productive of bending the supporting irons and of twisting the gate out of line and did not afford that perfect balance of parts requisite to maintain the alinement thereof and the gate itself was not as rigid as it could be made.

In the present device to obviate these disadvantages and to provide a rigid balanced support and rigid construction of gate, I have employed the forms of construction and combination and arrangement of parts, hereinafter described, shown in the accompanying drawings and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of the improved gate balanced in its supporting frame; Fig. 2 is a transverse section of the upper gate bar showing the central roller support therefor, the metal yoke in which the roller is mounted, the angle plates to which the upper ends of the duplicate strut bars are attached, and the extremity of the tension bar centrally secured in the loop of the yoke over the upper gate bar; Fig. 3 is a similar transverse section through the lower gate bar showing the pintle yoke, the supporting roller therein and angle plates to which the lower ends of the strut bars are secured; Fig. 4 is a perspective view of the yoke, angle plates, pintle rod and roller shown in Fig. 3; Fig. 5 is a perspective view of the pintle block which is inserted in the pintle yoke; Fig. 6 shows a preferred form of latch employed to fasten the gate when closed, and Fig. 7 shows the staples employed to secure the bars of the gate together.

In these views 1 is the post to which the frame comprising the gate support is hung by means of the pintles

2 and 3. This frame comprises duplicate strut bars 4, 4, one arranged on each side of the gate so as to afford a perfect balance therefor, and the tension rod 5 connecting the upper ends of the said struts with the upper pintle 2.

60 6 is the lower pintle yoke formed of a metal loop, in which the roller 7 is pivoted. Upon this roller the lower edge of the gate rolls to prevent friction in opening and closing it. A reinforcing block or plate 8 is inserted in the loop of the yoke and through a hole 9 in this block and in the loop of the yoke the pintle is inserted and bears upon the lower surface of the loop. The upper ends 10 of the yoke extend on each side of the lower gate bar and serve as guides to keep it upon the roller. On each side of the yoke is pivoted one of the angle plates 11 to which are secured the strut bars. This pivotal means of attachment of the angle plates to the yoke permit of vertical adjustment of the struts to allow for different sizes and heights of gates. The pivot bolt 12 passes through a groove 13 in the upper surface of the block 8 and retains it in place. These parts are so made as to be adjustable and interchangeable from left to right so that the gate can be placed in any position or hung at either end. The upper yoke 14 with the friction roller 15 wholly incloses the upper bar of the gate, and angle plates 16 on each side are pivoted thereto by means of a pivotal bolt 17 and to these angle bars the upper ends of the strut bars are secured, thus supporting the gate on both sides, so that it will be perfectly balanced on the said roller 15. The tension rod 5 is secured to the reversible tie plate 19 in which the upper pintle pin 2 bears and which is provided with the overhanging guide plate 20 just as described, in my said former patent. This tension rod passes through the loop of the upper yoke 14 and is adjustably secured thereto by means of the terminal nut 25, so that it lies immediately over the top bar of the gate and the center of gravity of the gate will lie underneath the rod, thus preventing any twisting or bending of the gate and supporting parts.

95 In connection with the pivotal means of support of the strut bars, the tension rod 5 is made adjustable in length in any convenient way, so that the outer ends of the struts and the upper yoke can be raised for a higher gate or lowered for a low gate and struts of any required length can be used. The manner of obtaining this adjustment is unimportant and in Fig. 1 this is shown as a chain *c* in the links of which terminal hooks *H* in the adjacent ends of the divided rod are inserted, and they can be inserted in any desired links in the chain.

100 To obtain a sufficiently rigid gate, in which the members are so securely fastened together as not to separate under severe usage, staples *S* are employed to secure the longitudinal bars and vertical bars together. These staples have screw threaded extremities and are provided with terminal nuts *N*.

105 A peculiar form of latch is employed which is reversi-

ble and self latching and shows an arrow headed latch L pivoted upon a projecting bar B and so arranged that when latched over the pin P the gate cannot be lifted by any domestic or wild animal.

- 5 Having described the invention what I claim as new and desire to secure by Letters Patent is:

10 In combination with a gate and a hinge post therefor, a central support for said gate in which said gate is vertically balanced in all directions, comprising duplicate inclined strut bars, one on each side of the gate, a yoke and roller therein on which the upper gate bar rests, pivoted angle plates to which the struts are severally attached, a lower yoke and roller therein on which the lower

gate bar rests, a reinforcing block in the looped end of the lower yoke, said looped end and plate having a vertical opening, a pintle in the said post entering said opening, angle bars pivoted upon said lower yoke to which the lower ends of said struts are secured, a tension rod, adjustable in length and having one end secured to said upper yoke and to the loop thereof directly over said upper gate bar, an upper pintle in said post and a tie plate connecting said rod and pintle, substantially as described. 15 20

In testimony whereof I hereunto set my hand this 11th day April, 1907.

ASA L. WESTON.

In presence of—

WM. M. MONROE,
GEO. S. COLE.