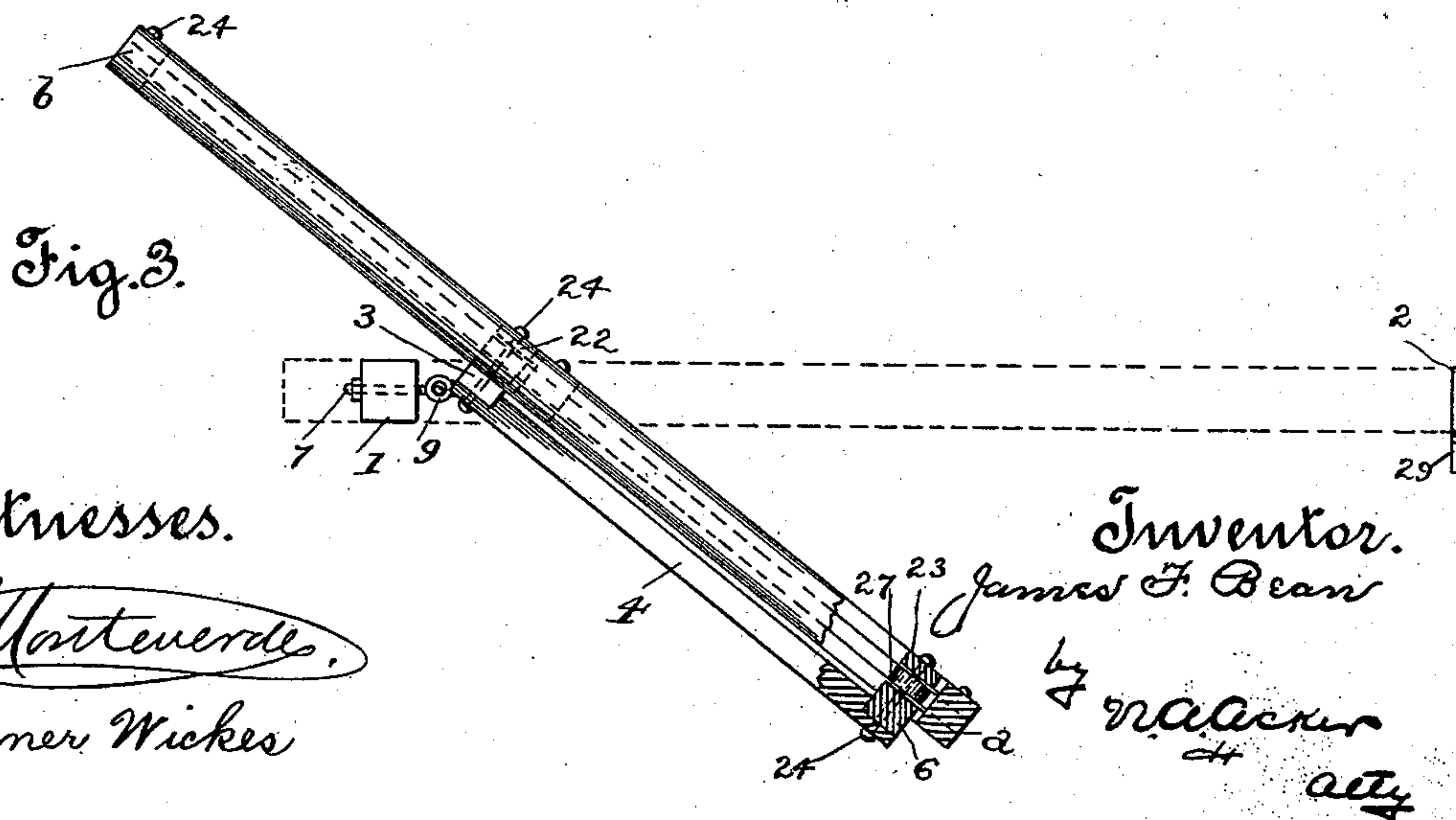
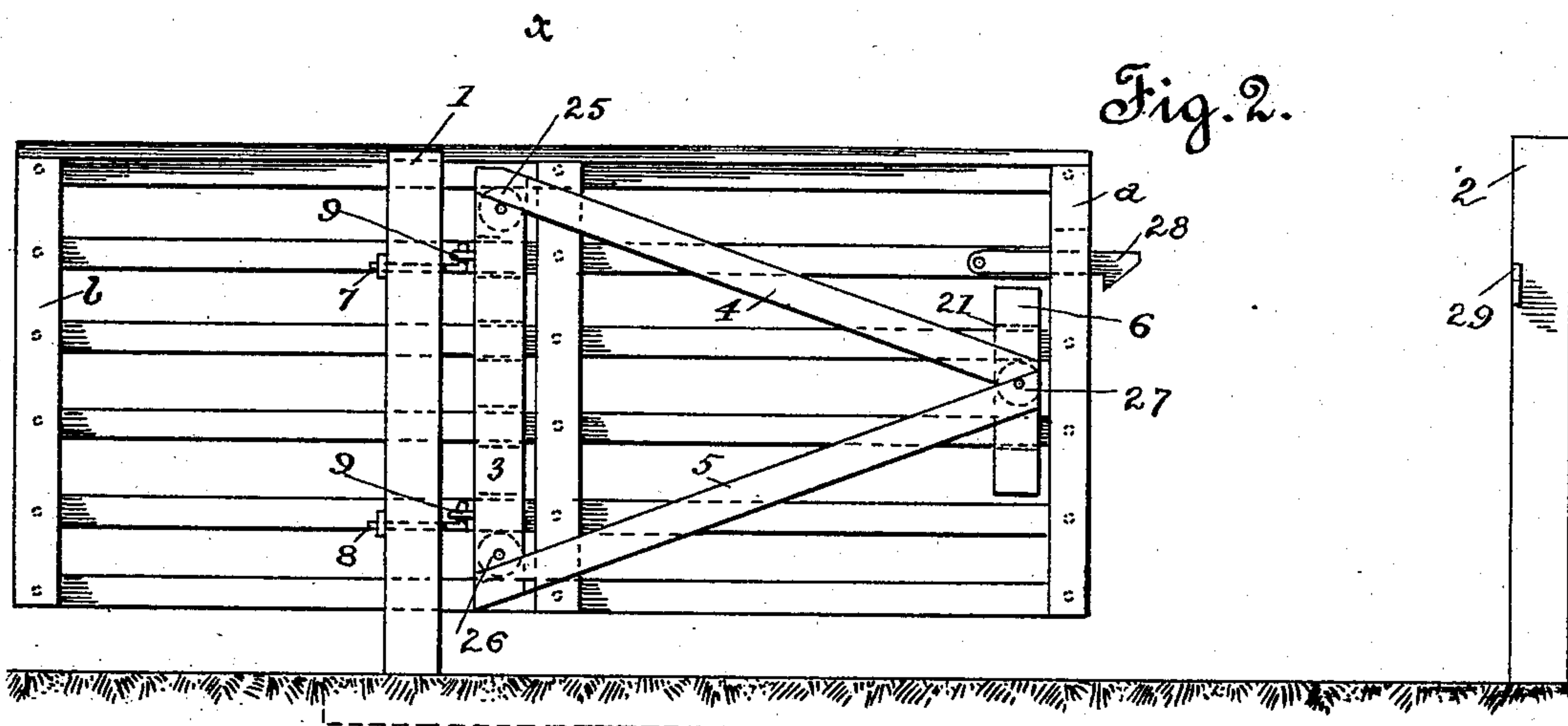
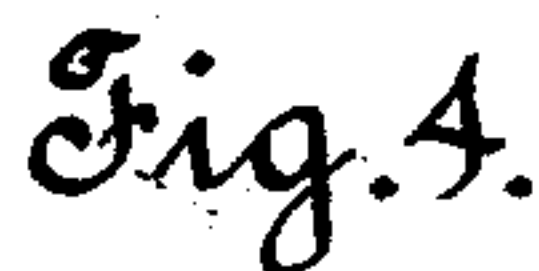


Patented May 28, 1895.



Witnesses.

Elmer Wickes

Inventor.

James F. Bean

by Wacker

UNITED STATES PATENT OFFICE.

JAMES F. BEAN, OF MARTINEZ, CALIFORNIA.

GATE.

SPECIFICATION forming part of Letters Patent No. 539,787, dated May 28, 1895.

Application filed June 19, 1894. Serial No. 515,005. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. BEAN, a citizen of the United States, residing at Martinez, in the county of Contra Costa and State of California, have invented certain new and useful Improvements in Gates; and I do hereby declare the following to be a full, clear, and exact description of said invention, such as will enable others skilled in the art to which it most nearly appertains to make, use, and practice the same.

The present invention relates to certain new and useful improvements in swinging gates, which consists in the arrangement of parts and details of construction as will be hereinafter more fully set forth in the drawings, described and pointed out in the specification.

The object of my invention is to relieve the gate post of lateral strain thereon when the gate stands open and at the same time provide a gate which shall be equally counterpoised when opened, whereby the same may be swung to and fro with the slightest pressure.

In order to more thoroughly understand my invention reference must be had to the accompanying sheet of drawings, wherein—

Figure 1 is a view in elevation showing the gate closed. Fig. 2 is a similar view showing the position of the gate when rolled or moved inward upon the hinged section. Fig. 3 is a top plan view of the gate when opened; and Fig. 4 is a vertical section of the gate, taken on line X X, Fig. 1.

My invention consists in a sliding section or frame and a hinged and swinging section through which the sliding section works, said section moving or sliding upon friction rolls located within the hinged or swinging section.

In the drawings the numeral 1, indicates an ordinary gate post, to which the swinging section is hinged, and 2, the opposite gate post with which the gate moves into locked engagement when the gate is closed.

The swinging section of the gate consists of a triangular frame, which consists of the upright 3, and the brace bars 4 and 5 which are mortised to the upright 3, at each end thereof, and run at an angle thereto until their ends meet, when they are secured to the short upright 6. This triangular brace or support

frame of the gate is in length equal to about one-half the length of the gate proper.

To the gate post 1, are secured the pintles 7 and 8 to which the swinging frame is secured by eyelets 9, which fit over the pintles and by means of which said section is hinged to the gate post 1.

The slide section of the gate is composed of the parallel longitudinal bars or rails 10, 11, 12, 13, 14 and 15, secured at their ends to the vertical pieces *a*, *b*, the top of the section being ornamented by a rounded top rail or piece.

Within the outer face of the upright or vertical piece 3, I channel or cut away so as to provide a series of grooves 17, 18, 19 and 20, and the outer face of vertical upright 6 is cut away or channeled so as to provide the groove 21.

The slide section is secured to the swinging section by the rails thereof fitting within the grooves or channels cut within the uprights 3 and 6. After being fitted to the swinging section the slide section is held in place by means of the face strips 22 and 23, which are secured to the outer face of the vertical uprights, the bars or rails of the slide section being located within the channels cut within the vertical uprights, consequently between the outer face of said uprights and the inner face of the face strips.

The face strips are connected to the uprights by means of the bolts 24. These bolts preferably, hold the bearing rolls 25, 26 and 27 in place. Roll 25 is located within groove or channel 17 and upon the same bears rail or bar 10. Within channel or groove 20 is secured roll 26, upon which bears bar or rail 14; while roll 27 is secured within the channel cut in the outer face of upright 6, and upon the same bears rail or bar 12. These rolls receive the weight of the slide section and permit the same to be moved in or out with least possible friction.

To the slide section I have shown the ordinary catch bar 28 secured, which engages with staple 29 fastened within gate post 2. However, any style of catch may be used, the same forming no part of my invention.

By means of my triangular swinging frame the slide section is prevented from dragging

when the gate is unlocked or said section is being moved, and by the rollers, upon which said section bears, the slide section may be moved in or out by the slightest pressure, in
5 fact by a mere child.

In order to open the gate it is only necessary to slide the movable section until the vertical end piece *a*, meets the front edge of upright 6. The section will then have moved
10 just about one-half its length and the gate will be balanced. When in this position the gate may easily be opened its full width by very little power and the same will swing freely, for the gate being balanced, the hinged
15 section will readily swing to or fro.

By this manner of constructing a gate, the excessive lateral strain, when the gate stands open, is removed from the gate post, for the gate being balanced when open, the weight is
20 equally distributed to each side of the gate post. Consequently the post and adjoining portion of fence is not loosened.

The triangular swinging frame not only answers to swing the gate to or fro, but serves
25 to maintain the gate or sliding frame in perfect line and prevent its sagging at its free end when partially opened.

In forming the rollers 25, 26, and 27, I preferably make them of a diameter less than the
30 width of the upright 3, and end piece 6, and mount the same directly in the center. By this means the rollers are held from contact with vertical portions of the movable gate. This I regard as an important feature for the
35 reason that should the gate be violently forced

back or forward the impact between the same and its support would be received by the uprights 3 and 6, whereas were the rollers of sufficient diameter to project beyond the parts 3 and 6 the shafts thereof would be driven
40 from their bearings and the rollers otherwise injured by the impact.

I do not wish to be understood as claiming broadly a sliding gate working upon rollers, nor simply a swinging gate, for such I know to
45 be old and in common use, but

What I do claim as new, and desire to secure protection in by Letters Patent, is—

A gate comprising a fixed supporting post, an upright hinged thereto having a notched
50 inner edge, oppositely inclined braces 4 and 5 rigidly secured at opposite ends of the upright and united at their outer ends, a notched upright 6 fixedly secured on the sides of the
55 outer ends of the braces, the slidable gate having its longitudinal bars passing through the notches in the uprights, rollers 25, 26 and 27 mounted in the opposite ends of the hinged
upright and in the upright 6 and of a diameter less than the width of the uprights, and
60 the cleat secured to the hinged upright spanning the notches therein, substantially as described.

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

JAMES F. BEAN.

Witnesses:

WM. S. WELLS,
G. E. CARTER.