Jan. 30, 1923. 1,443,446.

H. L. WATERMANN.

SWINGING FARM GATE.

FILED AUG. 26, 1922. 2 SHEETS—SHEET 1.

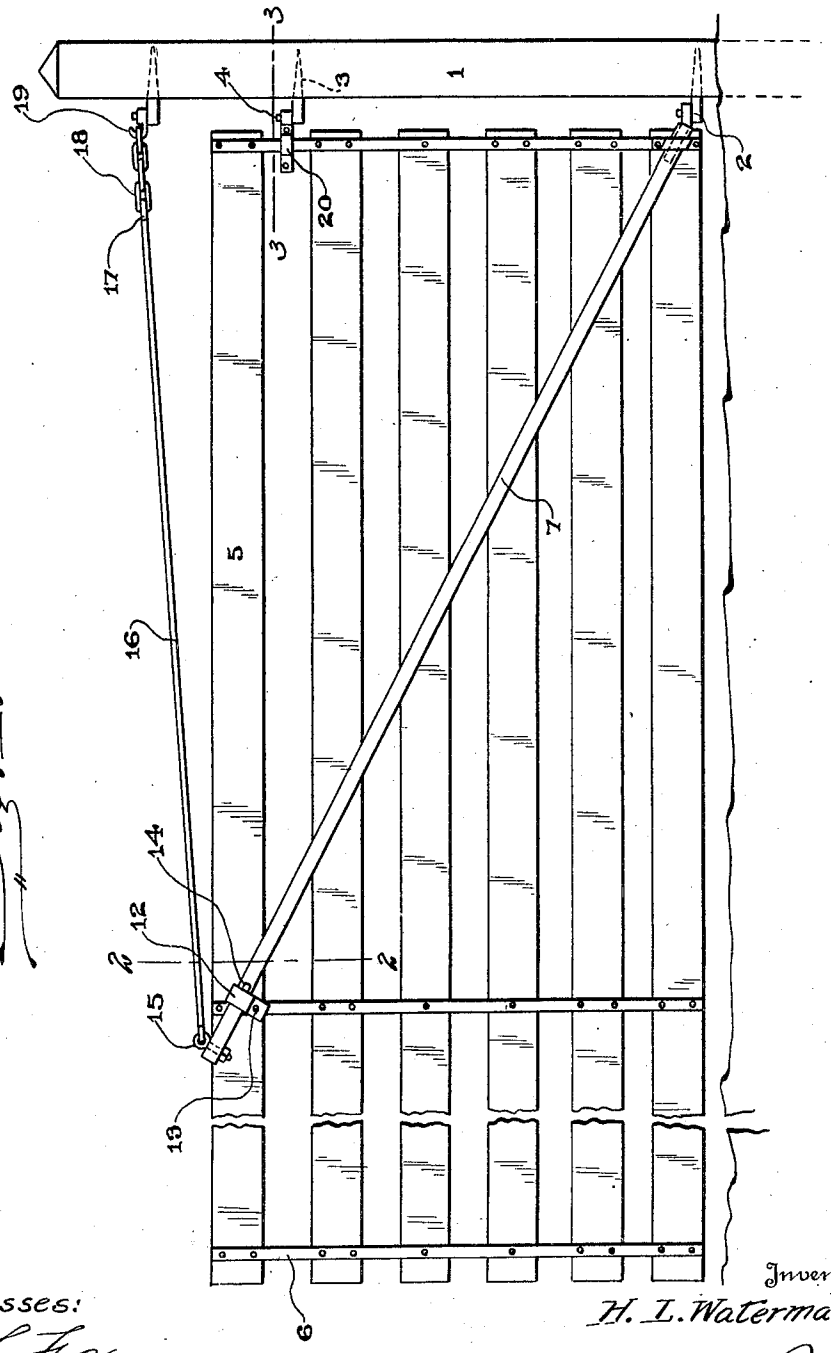


Fig. 1.

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SWINGING FARM GATE.

FILED AUG. 26, 1922. 2 SHEETS—SHEET 2.

Fig. 3.

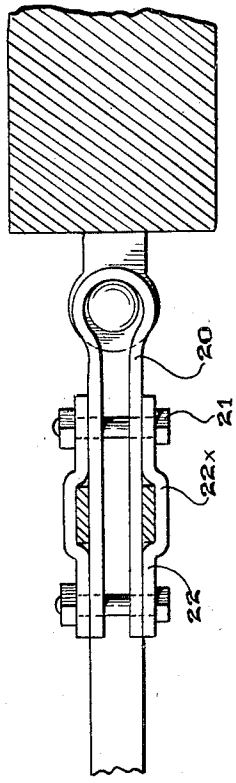


Fig. 4.

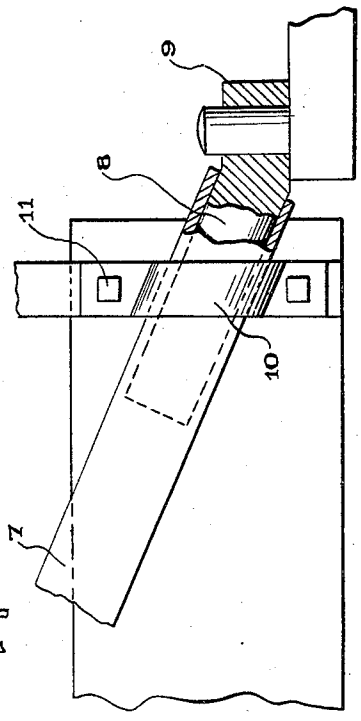
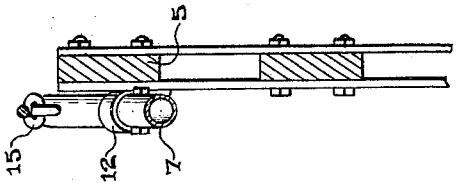


Fig. 2.



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UNITED STATES PATENT OFFICE.

HENRY L. WATERMANN, OF ELWOOD, MISSOURI.

SWINGING FARM GATE.

Application filed August 26, 1922. Serial No. 584,497.

To all whom it may concern:

Be it known that I, HENRY L. WATERMANN, a citizen of the United States, residing at Elwood, in the county of Green and State of Missouri, have invented new and useful Improvements in Swinging Farm Gates, of which the following is a specification.

The object of my said invention is the provision of a swinging farm gate which while simple and inexpensive in construction is well adapted to withstand for an indefinite period the usage to which swinging farm gates are ordinarily subjected, and is possessed of means whereby any tendency of the gate to sag may be expeditiously and easily taken up or compensated so that the gate at all times will freely swing and will present a neat appearance.

To the attainment of the foregoing, the invention consists in the improvement as hereinafter described and definitely claimed.

In the accompanying drawings, forming part of this specification:—

Figure 1 is a side elevation of the gate constituting the best practical embodiment of my invention that I have as yet devised.

Figure 2 is a detail vertical transverse section taken in the plane indicated by the line 2—2 of Figure 1, said view being on an enlarged scale.

Figure 3 is an enlarged horizontal section taken on the line 3—3 of Figure 1.

Figure 4 is a fragmentary view, partly in side elevation and partly in vertical section showing the mounting of the inner lower corner of the gate.

Similar numerals of reference designate corresponding parts in all of the views of the drawings.

The gate post is designated by 1, and is equipped with hinge members 2, each of the said members 2 comprising a pointed shank 3 and an upstanding pintle 4.

My swinging gate includes among other elements a vertical series of horizontal spaced slats 5, of wood, bound together through the medium of pairs of metallic straps 6, the said straps being bolted to the slats 5 which are spaced apart and are arranged in parallelism, and one pair of straps 6 being located adjacent to each end of the gate, while the third pair of straps is arranged at an intermediate point in the length of the gate, but nearer the free or outer end of the gate.

In addition to the elements stated my novel gate includes an oblique truss 7, of tubular form. The said truss 7 receives in its lower end a forging 8 which terminates in an eye mounted on and adapted to turn about the lowermost pintle 4 and to bear on the lowermost hinge member 2. Near its lower end the truss is secured to the innermost pair of straps 6 by a clasp 10, secured by bolts 11. At 12 is a sleeve which is connected at 13, preferably in pivotal manner to the intermediate pair of straps 6. The said sleeve 12 receives the truss 7, and serves to hold the truss alongside of and in close proximity to the slats, and in order to prevent sagging, a bolt 14 is arranged transversely in the truss immediately below the sleeve or clasp 12. Adjacent to its upper end the truss 7 is equipped with an eye 15, and connected to the said eye 15 is a rod 16. At its end remote from the eye 15 the rod 16 is provided with a hook 17, engaged with which is a section of chain 18 which is also engaged with a hook 19 mounted on the uppermost hinge member 2 and adapted to swing about the pintle thereof. The chain section 18 is made up of open links, and is provided in the relation stated in order that the connection between the eye 15 and the hook 19 may be made shorter whenever it is desired to take up sag of the gate.

In combination with the intermediate hinge member 2 I employ a hinge member 20 which as best shown in Figure 3 is in the form of a loop which straddles and is adapted to turn about the pintle of the intermediate hinge member 2 and has its arms bolted at 21 at points at opposite sides of the adjacent pair of straps 6, the said bolts 21 being also carried through strengthening plates 22 which are equipped with offsets 22ª whereby they straddle and securely hold the hinge member 20 through the said slats 6. It will be apparent from the foregoing that notwithstanding the simplicity and inexpensiveness of its construction, my novel gate may without the employment of skilled labor or tools be made to work freely and to present a neat appearance for an indefinite period of time.

I have entered into a detailed description of the construction and relative arrangement of the parts embraced in the present and preferred embodiment of my invention in order to impart a full, clear and exact understanding of the said embodiment. I

do not desire, however, to be understood as confining myself to the specific construction and relative arrangement of parts inasmuch as in the future practice of the invention various changes and modifications may be made such as fall within the scope of my invention as defined in my appended claims.

Having described my invention, what I claim and desire to secure by Letters-Patent, is:—

1. The combination of a gate post, hinge members fixed thereto and arranged one above the other in spaced relation and having vertically alined pintles, a gate made up of horizontal slats in spaced and parallel relation and metallic straps arranged at opposite sides of and bolted to the slats at points adjacent to the ends of the gate and also at an intermediate point in the length of the gate, a tubular oblique truss arranged alongside the gate and connected therewith and provided with means to support the upper intermediate portion of the gate on the truss, a forging loosely or telescopically arranged in the lower end of the truss and having an eye mounted on the pintle of the lower horizontal member, a hinge member connected with the gate adjacent to the upper inner corner thereof and mounted on the pintle of the intermediate hinge member of the post, a rod connected to the upper portion of the truss, and a detachable chain section of open links connected at one end with a hinge member mounted on the pintle of the uppermost hinge member of the post.

2. The combination of a gate post, hinge members fixed thereto and arranged one above the other in spaced relation and having vertically alined pintles, a gate made up of horizontal slats in spaced and parallel relation and metallic straps arranged at opposite sides of and bolted to the slats at points adjacent to the ends of the gate and also at an intermediate point in the length of the gate, a tubular oblique truss arranged alongside the gate and connected therewith and provided with means to support the upper intermediate portion of the gate on the truss, a forging loosely or telescopically arranged in the lower end of the truss and having an eye mounted on the pintle of the lower hinge member, a hinge member connected with the gate adjacent to the upper inner corner thereof and mounted on the pintle of the intermediate hinge member of the post, a rod connected to the upper portion of the truss, and a detachable chain section of open links connected at one end with a hinge member mounted on the pintle of the uppermost hinge member of the post; the support of the intermediate upper portion of the gate on the truss being effected through the medium of a sleeve or clasp connected to the intermediate pair of straps and the upper slat and receiving the truss, and an abutment carried by the truss and arranged immediately under the said sleeve or clasp.

3. The combination of a gate post, hinge members fixed thereto and arranged one above the other in spaced relation and having vertically alined pintles, a gate made up of horizontal slats in spaced and parallel relation and metallic straps arranged at opposite sides of and bolted to the slats at points adjacent to the ends of the gate and also at an intermediate point in the length of the gate, a tubular oblique truss arranged alongside the gate and connected therewith and provided with means to support the upper intermediate portion of the gate on the truss, a forging loosely or telescopically arranged in the lower end of the truss and having an eye mounted on the pintle of the lower hinge member, a hinge member connected with the gate adjacent to the upper inner corner thereof and mounted on the pintle of the intermediate hinge member of the post, a rod connected to the upper portion of the truss, and a detachable chain section of open links connected at one end with a horizontal member mounted on the pintle of the uppermost hinge member of the post; the said hinge member adjacent to the inner upper corner of the gate including a metallic loop receiving the pintle of the intermediate hinge member of the post, metallic plates arranged at opposite sides of the arms of the said loop and having offsets straddling the adjacent metallic straps of the gate, and bolts extending through and connecting the said loop arms and plates.

In testimony whereof, I affix my signature.

HENRY L. WATERMANN.