

O. T. OSMUNSON.
GATE HINGE.
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1,194,656.

Patented Aug. 15, 1916

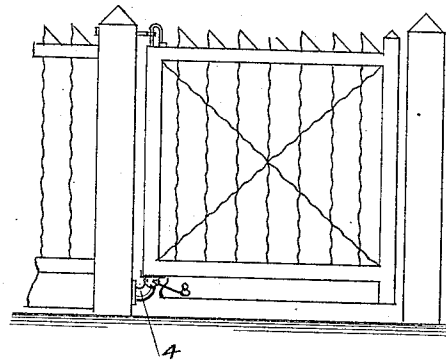


Fig. 1.

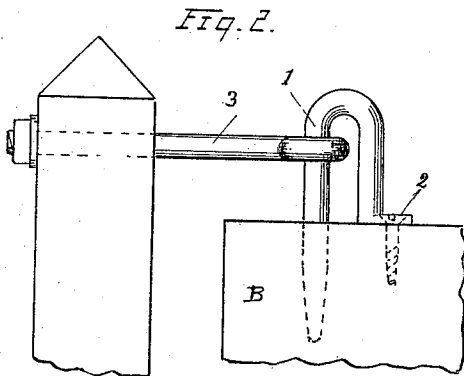


Fig. 2.

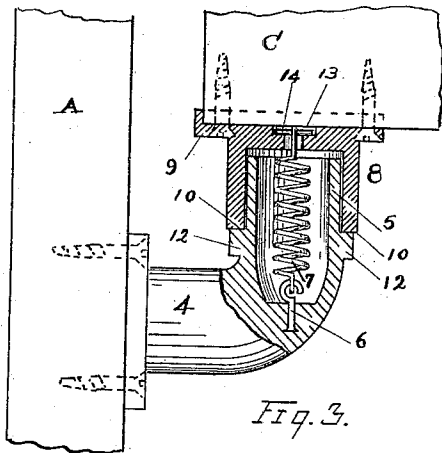


Fig. 3.

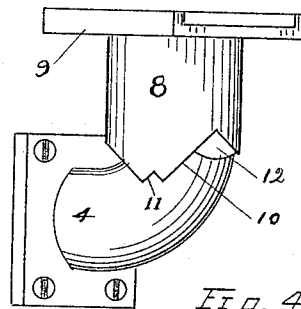


Fig. 4.

WITNESSES:

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GATE-HINGE.

1,194,656.

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To all whom it may concern:

Be it known that I, OLA T. OSMUNSON, a citizen of the United States, residing at Berkeley, in the county of Alameda and State of California, have invented a new and useful Improvement in Gate-Hinges, of which the following is a specification.

My invention relates to gate hinges of the double-swing class; and the object of my invention is to provide a gate hinge that will close by gravity and will remain closed against wind pressure and the like and yet may be opened by hand pressure, and that will remain open at right angles when desired; with these and other objects in view I will describe a gate hinge embodying my invention, reference is had to the accompanying drawing, in which—

Figure 1 is an elevation of a gate with my hinge attached; Fig. 2 a detailed view of the top hinge, one corner of the gate frame and a portion of the hanging post; Fig. 3 the lower part of the hanging post, one corner of the gate and the gravity hinge shown partly in vertical section; and Fig. 4 a three-quarter view of the gravity hinge closed.

Similar characters of reference represent similar parts throughout the several views.

A represents a fence post on the hinge side of the gate; B the top hinge corner of the gate, and C the bottom corner. The top hinge consists of the staple 1, the long leg of which is driven into the wood of the gate frame while the short leg is attached thereto by means of a screw through the lip 2, the usual eye-bolt 3 being used to complete the top hinge as shown.

The bottom hinge consists of the fixed casting 4 attached to the post, the end being turned up to form a hollow pintle 5 having a hook 6 cast therein and a spring 7 connected to the hook. The swivel casting 8 is an inverted cup with a flange 9 to be attached to the gate by screws as shown, the lower edge of the cup is made with two deep serrations 10, diametrically opposite, to form the closing cams, and two shallow serrations 11 to lock the gate open; these cams rest upon the lugs 12 cast integral with the swivel post or pintle 5. The upper part of the casting 8 is provided with the counter-sunk hole 13 through which the upper eye of the spring 7 protrudes where it is held in tension by the pin 14.

In operation, as the gate is opened the cams 10 slide up the incline upon the lugs 12 thus raising the gate as it is opened, if the gate is let go at less than a right angle to the closed position it will immediately close, but if continued to a full right angle the notches 11 will drop over the points of the lugs 12 and hold the gate open; a slight pressure only is required to throw the notches off the lugs and allow the gate to close; the tension of the spring 7 insures the parts remaining in contact and assists gravity to close the gate. The staple sliding through the eye of the bolt 3 allows the gate to rise on the cams, the swivel centers of both hinges being perpendicular to each other.

The pintle 5 is shown hollow in order to house the spring, it is obvious, however, that the spring may be dispensed with and the pintle made solid without departing from the spirit of my invention.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent is:

A gravity hinge, consisting of an elbow casting having a flange at one end adapted to be fixed to a post, the other end forming a hollow pintle adapted to house a spring and cam lugs cast integral with the pintle, an inverted cup casting having closing and locking cams and a flange adapted to be fixed to a gate frame, said cup swiveling upon the pintle and said cams engaging the lugs in a manner to close the gate by gravity and to lock the gate in either open or closed position, substantially as shown.

OLA T. OSMUNSON.

Witnesses:

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C. T. JONES.