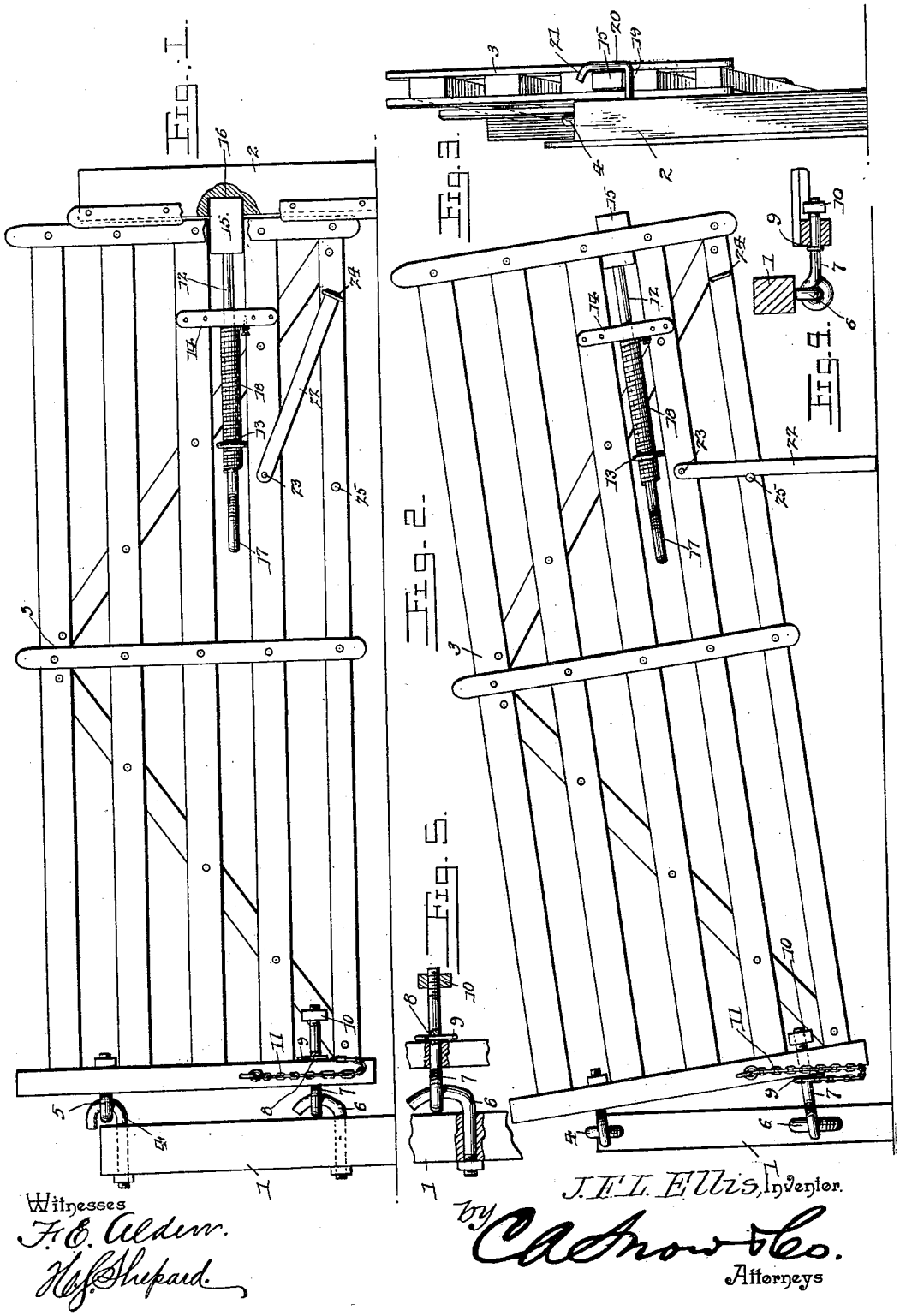
No. 676,429. Patented June 18, 1901.

# J. F. L. ELLIS.

## GATE.

(Application filed Jan. 16, 1901.)

(No Model.)




Witnesses
F. E. Alden.
Hy. Shepard.

J. F. L. Ellis, Inventor.
by Cushman & Co.
Attorneys

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# UNITED STATES PATENT OFFICE.

JOHN F. L. ELLIS, OF BELDEN, PENNSYLVANIA.

## GATE.

SPECIFICATION forming part of Letters Patent No. 676,429, dated June 18, 1901.

Application filed January 16, 1901. Serial No. 43,514. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN F. L. ELLIS, a citizen of the United States, residing at Belden, in the county of Bedford and State of Pennsylvania, have invented a new and useful Gate, of which the following is a specification.

This invention relates to swinging gates, and has for its object to provide an improved gate of this character which is arranged to be adjustably elevated, so as to permit small stock—such as hogs, sheep, and the like—to pass beneath the gate and at the same time prevent the passage of large stock—as, for instance, horses and cattle. It is furthermore designed to preserve the swinging support of the gate in its normal and elevated positions, so that the gate may be readily opened and closed, and also to provide for effectually locking the gate in both of its positions.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a side elevation of an ordinary farm-gate embodying the present invention and disposed in its normal closed position. Fig. 2 is an elevation of the gate in its open position and adjustably elevated. Fig. 3 is an end view of the gate when elevated and closed. Fig. 4 is a detail sectional view illustrating the lower adjustable hinge-support of the gate. Fig. 5 is a similar view taken at right angles thereto.

Like characters of reference designate corresponding parts in all of the figures of the drawings.

Referring to the drawings, 1 and 2 designate, respectively, the hinge and latch posts of an ordinary slatted farm-gate 3, which is mounted between said posts.

The upper hinge connection of the gate comprises a hook-bolt 4, carried by the hinge-post, and an eyebolt 5, carried by the adjacent end bar of the gate and loosely engaging the hook-bolt, so as to permit of a swinging movement of the gate and also an adjustable vertically swinging or tilting movement. The lower hinge connection comprises a similar hook-bolt 6, carried by the post, and a comparatively long eyebolt 7, engaged with the hook-bolt and extending loosely through a corresponding opening in the end bar of the gate. The shank of this long eyebolt is provided with a transverse vertical opening 8, which normally lies at the inner side of the end bar of the gate and is designed to removably receive a pin or key 9, whereby unnecessary looseness of the gate is obviated. A nut 10 is removably fitted to the inner end of the eyebolt, so as to form a stop to prevent displacement of the gate.

To adjustably elevate the gate, the pin 9 is withdrawn and the gate slid outwardly upon the shank of the lower eyebolt, after which the pin is replaced in the opening in the bolt and is located at the outer side of the end bar of the gate, thereby tilting or elevating the outer free end of the gate upwardly, which adjustable tilting is permitted by the loose-linked upper hinged connection or support of the gate. When the free end of the gate is thus elevated, there is sufficient space beneath the same to permit of the passage of small animals—such as pigs, sheep, &c.—and also poultry, and at the same time the gate may be swung laterally upon its hinged connection with the post 1. To prevent loss of the pin, a chain or other flexible connection 11 has one end connected to the pin and its opposite end connected to the adjacent end bar of the gate.

For locking the gate in its normally-closed position there is provided an endwise-slidable latch-bolt 12, which is disposed longitudinally of the gate and works through the opposite guides 13 and 14, carried by certain of the slats or bars of the gate, the latch-bolt being located between said slats or bars. A suitable catch-head 15 is provided at the outer end of the latch-bar and normally projected beyond the free end of the gate, so as to take into a socket 16, formed in the adjacent side of the latch-post and constituting a keeper for the latch. At the opposite inner end of the latch-bolt there is provided a suitable operating-handle 17 for convenience in manipulating the latch. A helical spring 18 embraces the

latch-bolt and has one end connected to the outer guide and its inner end connected to the latch, the spring being normally in its contracted condition.

When the gate is adjustably elevated, it is apparent that the latch will be too high to engage the keeper upon the inner side of the latch-post, and in order that the gate may be locked when elevated there is provided another keeper, as best shown in Fig. 3 of the drawings, comprising a rotatable stem or shank 19, carried by the latch-post and projecting laterally from that side thereof upon which the gate swings. At the outer end of this shank or stem there is provided a lateral keeper 20, having its outer extremity bent or deflected inwardly toward the latch-post, as at 21. The latch of the gate is designed to rest upon the shank portion of the keeper, the lateral portion thereof being normally turned downwardly and afterward turned upwardly, so as to lie at the outer side of the latch and prevent lateral swinging of the gate, with the deflected extremity overhanging the latch, so as to prevent upward movement of the latch and a consequent release thereof.

In the event of the gate being left in its open and elevated position for any considerable length of time it is desirable to brace or support the free end thereof, which is accomplished by means of an arm 22, having its upper end pivotally connected to the gate, as at 23, its lower free end being normally held above the surface of the ground by means of a pivotal keeper 24, mounted upon the gate and designed to embrace the arm. When the gate is thrown open, the keeper 24 is turned so as to release the arm, which then swings downwardly against a suitable stop 25, projecting laterally from the gate, so as to support the arm in a substantially upright position, with its lower end resting upon the ground, thereby forming a support for the outer elevated end of the gate and relieving the hinges thereof of considerable strain.

What is claimed is—

1. The combination with a swinging and tilting gate, having an endwise-movable latch normally projected beyond its free end, of a latch-post provided on its inner face with a keeper to receive the latch in the horizontal position of the gate, and upon its advance side with another keeper located above the former, to receive the latch when the gate is in its elevated position.

2. The combination with a swinging and tilting gate, having an endwise-movable latch normally projected beyond its free end, of a latch-post provided on its inner face with a keeper to receive the latch in the horizontal position of the gate, and upon its advance side with another keeper located above the former to receive the latch when the gate is in its elevated position, and consisting of a rotatable stem projected laterally from the post, and provided at its outer end with a lateral projection to embrace the outer side of the latch and also forming a finger-piece for rotating the stem.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN F. L. ELLIS.

Witnesses:

ALVIN L. LITTLE,

JEROME LEONARD.