(No Model.)

S. S. CRAWFORD.

WAGON END GATE.

No. 572,869. Patented Dec. 8, 1896.

Fig. 1.

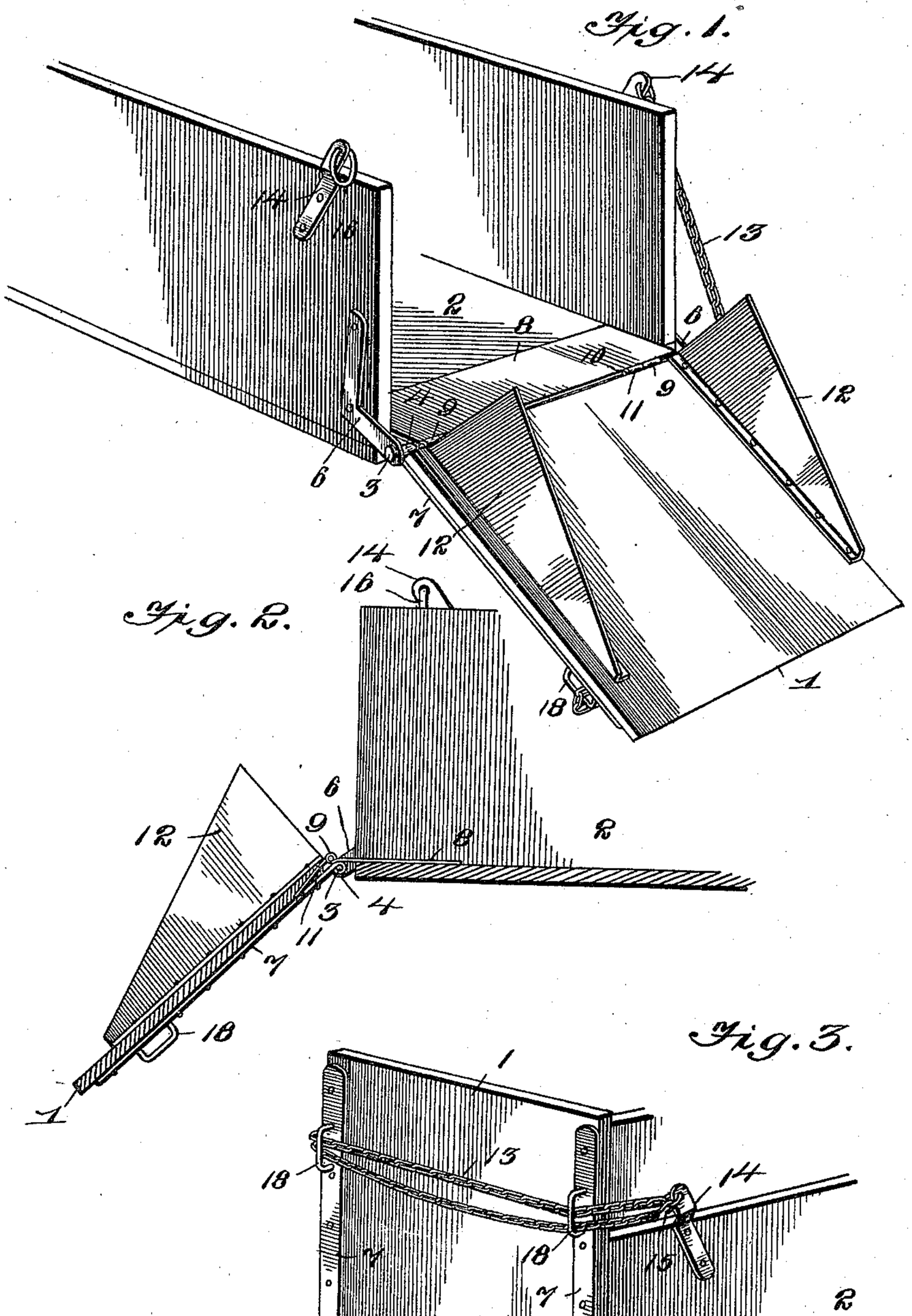

Fig. 2.

Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

SAMUEL S. CRAWFORD, OF HOLT, MISSOURI.

WAGON END-GATE.

SPECIFICATION forming part of Letters Patent No. 572,869, dated December 8, 1896.

Application filed April 27, 1896. Serial No. 589,258. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL S. CRAWFORD, a citizen of the United States, residing at Holt, in the county of Clay and State of Missouri, have invented a new and useful End-Gate, of which the following is a specification.

The invention relates to improvements in end-gates.

The object of the present invention is to improve the construction of end-gates and to provide a simple, inexpensive, and efficient one adapted to be readily mounted on and removed from a wagon-body and capable of ready adjustment to arrange it at any desired elevation or inclination to lengthen the bottom of a wagon body or bed, to form a shoveling-board, and to operate as a skid, in order that stock, barrels, and the like may be readily transferred from the ground or other support to a wagon-body, and vice versa.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a perspective view of a portion of a wagon-body provided with an end-gate constructed in accordance with this invention and arranged to form a skid. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a perspective view, the end-gate being closed.

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

1 designates an end-gate constructed of any suitable material and detachably hinged at its lower edge to a wagon body or bed 2 at the bottom thereof by a removable transverse rod 3, arranged in suitable eyes 4 of the end-gate and in perforations 5 of bearing brackets or plates 6 of the wagon-body. The eyes 4 are located at the side edges of the end-gate and are preferably formed of metal straps 7, bolted or otherwise secured to the outer face of the end-gate and serving as cleats to support the same and prevent an end-gate from splitting when constructed of wood. The bearing-plates 6 are substantially L-shaped. They are bolted or otherwise secured to the outer faces of the sides of the wagon-body, and the arms, which are provided with the bearing perforations, extend rearward from the sides of the wagon-body for the reception of the said rod 3, the rod being provided at one end with an eye or head and having its other end threaded for the reception of a nut or the like.

The point of hinging of the end-gate is offset slightly rearwardly from the wagon-body in order to permit the end-gate to spring downward from a perpendicular position when it is closed to a horizontal position or to a downwardly-inclined position for forming a skid, chute, or the like, or to be arranged at any intermediate point, and the hinge which connects the end-gate to the bottom of the body has its upper face arranged in substantially the same plane as the upper face of the bottom of the body. In order to prevent corn or other material from escaping through the space between the lower edge of the end-gate and the bottom of the wagon-body when the former is arranged in position for shoveling, a rectangular shield or apron 8 is provided. The rectangular shield consists of a piece of sheet metal or other suitable material. It is provided at its rear edge with eyes 9, and it is hinged to the lower edge of the end-gate by a pintle 10, passing through the said eyes 9 and through similar eyes 11 of the end-gate. The shield extends entirely across the bottom of the wagon-body, and the hinge connection between it and the end-gate will permit the end-gate to swing upward or downward, as desired. The pintles of the hinges of the rectangular shield or apron 8 are located slightly above the pintle-rod 3 of the end-gate, and the swinging of the end-gate moves the pintles of the apron or shield inward and outward. The rise and fall of the pintles 10 are so slight that they do not materially affect the position of the shield or apron, and there is sufficient play of the parts to permit the shield or apron to rest flat upon the bottom of the wagon-body when the end-gate is in a vertical, horizontal, or inclined position. The shield is also adapted to protect the bottom of the wagon-body from being cut by the scoops employed in shoveling.

The end-gate is provided on its inner faces with substantially triangular sides or wings 12, constructed of sheet metal or similar material, arranged to fit snugly against the in-

ner faces of the sides of the wagon-body when the end-gate is closed or in position for shoveling, and capable of protecting the sides of the wagon from being cut or otherwise injured by scoop-shovels.

The end-gate is secured, when closed, by a chain 13, which is also adapted to support the end-gate in its various adjustments. One end of the chain is linked into an eye of one of a pair of bars or plates 14, which are secured to outer faces of the sides of the wagon-body and which project above the same, and the other end of the chain is provided with a hook 15, adapted to engage a ring 16 of the other plate or bar 14 when the end-gate is in a horizontal position, or to engage the end link of the chain when the end-gate is closed. The hook is also adapted to engage the chain at any desired point to support the end-gate at any adjustment. The end-gate is provided on its outer face with loops 18 for the reception of the chain, and when it is closed the chain is doubled, being passed through the link or ring 16 and returned around the end-gate, passing through the loops 18 and having its hook engaging the end link or ring of the chain.

It will be seen that the end-gate is simple and comparatively inexpensive in construction, that it is capable of ready adjustment to arrange it vertically at the back of a wagon-body or at a downward inclination to form a skid or chute or at any intermediate point, and that when it is arranged to form a skid or chute stock, barrels, or other objects may be readily transferred from the ground or other supports to the wagon-body, and vice versa. It will also be apparent that the plate or shield is adapted to prevent the contents of the wagon-body from escaping through the space at the hinge-joint, and that with the wings it is adapted to protect the bottom and sides of the wagon-body from being cut or otherwise injured by scoops employed in shoveling.

Changes in the form, proportion, and minor details of the construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

What I claim is—

The combination of a wagon-body provided with rearwardly-extending bearing-plates, an end-gate provided at its bottom with eyes having their upper edges arranged in substantially the same plane as the upper face of the bottom of the body, a pintle-rod arranged in the eyes and the bearing-plates and hinging the end-gate to the body in substantially the same plane as the upper face of the bottom thereof, a shield hinged at its rear edge to the end-gate at a point immediately above the said pintle-rod and having its lower face arranged contiguous to the pintle-rod, said shield being loosely arranged on the upper face of the bottom of the body and adapted to slide backward and forward thereon when the end-gate is opened and closed, and being arranged flat upon the upper face of the bottom of the body when the end-gate is in a vertical, a horizontal or a downwardly-inclined position, and wings mounted on the end-gate adjacent to the inner faces of the sides of the wagon-body, substantially as described.

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

S. S. CRAWFORD.

Witnesses:
B. L. McGEE,
WM. A. McGEE.