No. 622,320.

Patented Apr. 4, 1899.

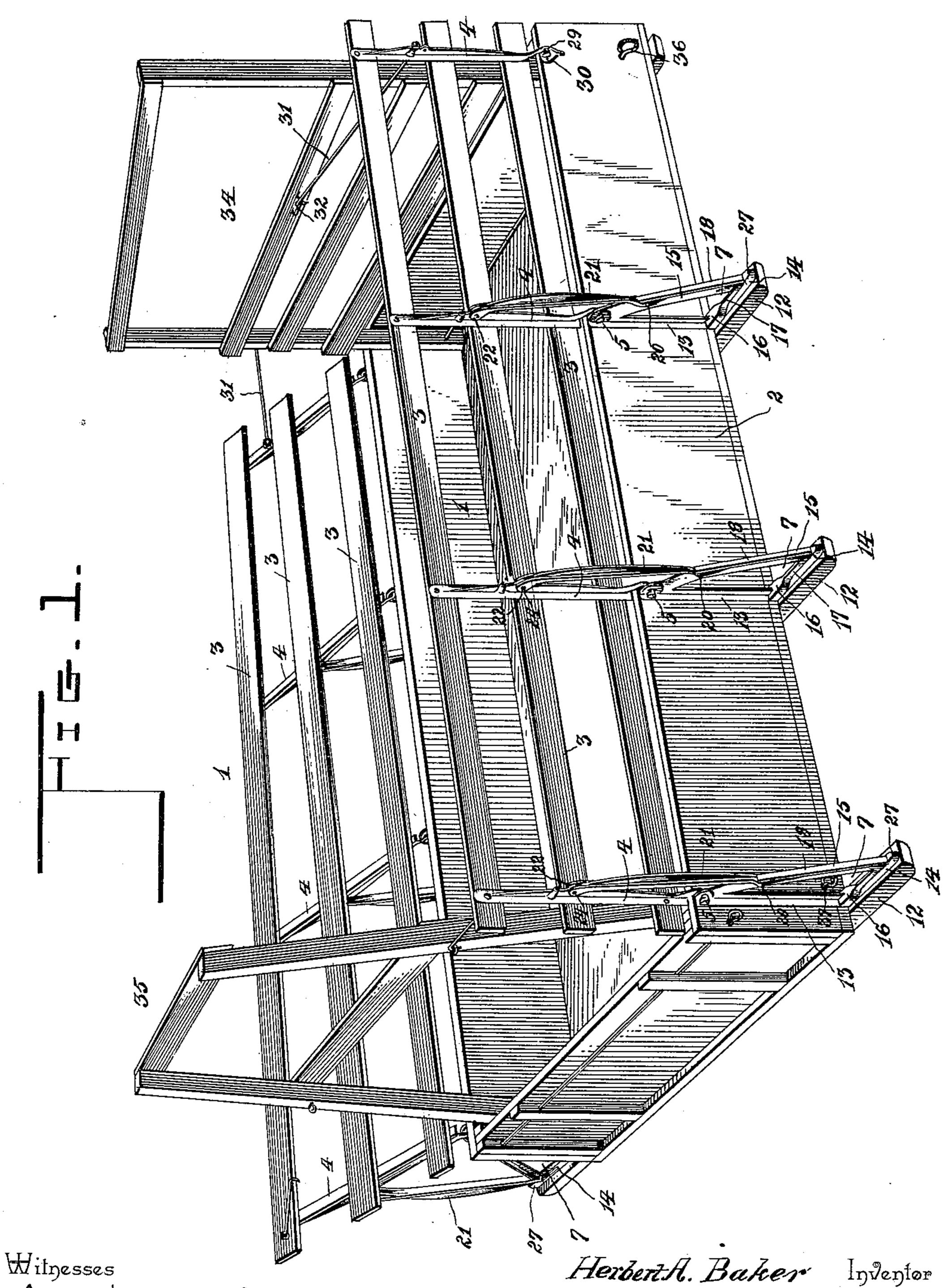
H. A. BAKER.

COMBINED STOCK AND HAY RACK.

(Application filed Sept. 13, 1898.)

(No Model.)

2 Sheets-Sheet 1.



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COMBINED STOCK AND HAY RACK. (Application filed Sept. 13, 1898.) 2 Sheets—Sheet 2. (No Model.) 31 **34** *32* · By his Attorneys, Herbert A. Baker,

United States Patent Office.

HERBERT A. BAKER, OF MOSHERVILLE, MICHIGAN.

COMBINED STOCK AND HAY RACK.

SPECIFICATION forming part of Letters Patent No. 622,320, dated April 4, 1899.

Application filed September 13, 1898. Serial No. 690,895. (No model.)

To all whom it may concern:

Be it known that I, HERBERT A. BAKER, a citizen of the United States, residing at Mosherville, in the county of Hillsdale and State 5 of Michigan, have invented a new and useful Combined Stock and Hay Rack, of which the following is a specification.

The invention relates to improvements in

combined stock and hay racks.

The object of the present invention is to 10 improve the construction of hay and stock racks and to provide a simple, inexpensive, and efficient one adapted to be applied to an ordinary wagon body or bed and capable of 15 being readily arranged to form either a hay or a stock rack.

A further object of the invention is to enable the sides of the rack to be readily removed when desired and to provide a simple 20 interlocking connection which will effectually prevent the sides from becoming accidentally detached from the wagon bed or body when they are arranged to form either a hay or stock rack.

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 claims hereto appended.

In the drawings, Figure 1 is a perspective view of the combined hay and stock rack constructed in accordance with this invention, one of the sides being in an inclined position and the other being vertical. Fig. 2 is a trans-35 verse sectional view, the parts being arranged to form a hay-rack. Fig. 3 is a similar view, the parts being arranged to form a stock-rack. Fig. 4 is a detail perspective view of one of the brackets. Fig. 5 is a detail perspective 40 view of one of the hinged arms. Fig. 6 is a similar view of one of the braces. Fig. 7 is a detail perspective view of one of the supplemental front brackets.

Like numerals of reference designate corre-45 sponding parts in all the figures of the draw-

ings.

1 1 designate the sides of a combined hay and stock rack, which is adapted to be applied to an ordinary wagon body or bed 2 and 50 which is capable of being readily arranged to form a hay-rack, as illustrated in Fig. 2 of the accompanying drawings, and a stock-rack,

as shown in Fig. 3. Each side consists of parallel longitudinal bars 3 and transverse arms or cross-pieces 4, preferably constructed of 55 flanged metal and provided at their inner ends with laterally-projecting pintles 5, which are detachably arranged in eyes 6 of triangular brackets 7, whereby the sides of the hay-rack may be readily removed from the wagon-body 60 when desired. The arms are provided at intervals with perforations to receive fastening devices for securing them to the longitudinal bars 3. The pintles, which are connected with the inner ends of the bars by shanks 8, are 65 arranged at right angles to the same, the shanks being located adjacent to one of the longitudinal edges of the arms. The outer end of each pintle is provided with a lug or projection 9, adapted to pass through a re- 70 cess or notch 10 at one side of the eye 6 when the arm 4 is swung inward beyond a perpendicular position. The lug or projection 9 is adapted to engage one side of the bracket when the arm 4 is in its normal position and 75 arranged to form either a hay-rack or a stockrack. The recess or notch 10, which is preferably tapering to conform to the configuration of the lug or projection 9, is shown arranged at the inner side of the eye 6, near the 80 top thereof; but it may be arranged at any other desired point, as will be readily understood.

Each side of the wagon body or bed is preferably provided with three triangular brack- 85 ets, which are mounted upon the projecting ends of bottom cleats 12 and secured to the same and to the outer faces of the body or bed. Each bracket is composed of a vertical inner portion 13, a horizontal bottom portion 90 14, and an inclined outer portion 15, extending from the outer end of the bottom portion to the upper end of the vertical portion. The vertical portion is provided with a central vertical flange, and the horizontal bottom portion 95 14 is enlarged or thickened at its inner end at 16 and is provided with a longitudinal rib or flange 17. The inclined outer portion of the bracket is provided at its outer edge with ways consisting of opposite longitudinal 100 flanges 18, extending upward from the bottom of the bracket and terminating short of the top of the bracket to provide open spaces 19 to permit the passage of a pair of inwardly-

extending studs 20 of a hinged brace 21, which supports the sides of the rack in an inclined position when the parts are arranged to form a hay-rack, as illustrated in Fig. 2 of the 5 drawings. The brace 21, which is constructed of flanged metal, is provided at its upper end with perforated ears 22, which are pivoted at opposite sides of a perforated ear or portion 23 by a pintle 24. The studs 20 extend in-10 ward from a pair of flanges 25, located at the lower end of the brace and extending inward therefrom. The inner ends of the studs are spaced apart to provide an opening to receive the body portion of the inclined outer part 15 15 of the bracket, and when the parts are arranged to form a hay-rack the brace 21 is disposed at an inclination and the studs are interlocked with the flanges 18, the lower end of the brace resting upon a thickened projec-. 20 tion 27 of the bracket. The flanges 18 are of sufficient length for the studs to remain in engagement with them when the sides of the rack are arranged either in a vertical or an inclined position; but when the sides are swung 25 inward beyond a perpendicular position to bring the lug or projection 9 opposite the recess or notch 10 the studs are lifted clear of the flanges 18 and may be readily disengaged from the bracket.

The arms at the front ends of the sides of the rack engage eyes 29 of supplemental brackets 30, which are secured to the outer faces of the sides of the wagon body or bed, and the ends of the sides of the rack are provided 35 with hooks 31, having elongated shanks and adapted to engage eyes 32 and 33 of the front standard 34. The eyes 32 are arranged near the center of one of the cross-bars of the standard 34 and are in engagement with the 40 same when the sides of the rack are disposed in a vertical position, and the other eyes 33, which are arranged at the sides of the standard 34, receive the hooks when the sides of the rack are inclined, the hooks or hooked 45 rods serving to support the front ends of the sides of the racks.

The front and rear standards 34 and 35 are pivoted at their bottoms to the sides of the wagon-body by transverse rods 36 and 37 and 35 are adapted to fold downward within the wagon body or bed and also to be removed therefrom by withdrawing the rods. The rear ends of the sides of the rack may be secured in any suitable manner when the parts are arranged to form a stock-rack.

The invention has the following advantages: The combined hay-rack and stock-rack is simple and comparatively inexpensive in construction and capable of being applied to a wagon body or bed. It is capable of being quickly arranged to form either a hay or a stock rack, and the sides of the rack are detachably interlocked to the sides of the wagon body or bed and may be entirely removed therefrom when desired. The devices for interlocking the sides of the rack with the sides of the body are simple and effective and

the sides cannot become accidentally disconnected when in use.

Changes in the form, proportion, and minor 70 details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What I claim is—

1. In a device of the class described, the 75 combination of a bracket designed to be secured to a wagon-body and provided at the top with an eye and having longitudinal flanges extending upward from the bottom of the bracket, the latter being provided at its 80 top with open spaces, an arm hinged to the bracket and engaging the eye thereof detachably, and a brace hinged to the arm and provided with inwardly-extending studs interlocked with the flanges of the bracket and 85 adapted to pass through the open spaces at the top thereof, substantially as described.

2. In a device of the class described, the combination with a wagon-body, and a hay-rack side hinged to the wagon-body, an in-90 clined portion or member mounted on the body and provided with longitudinal flanges projecting from opposite sides thereof, said inclined portion or body being provided at its top with openings, and a brace hinged at its opper end to the rack side and provided at its lower end with inwardly-extending studs slidingly mounted on the inclined part or member and interlocked with the flanges thereof, substantially as described.

3. In a device of the class described, the combination of a triangular bracket provided at its top with an eye and having a recess at one side thereof, said bracket being composed of a vertical inner portion, an inclined outer portion and a horizontal bottom portion, an arm provided at its inner end with a laterally-disposed pintle arranged in the eye of the bracket and provided with a lug or projection adapted to pass through the recess of the proceeding to the arm and having its lower end slidingly mounted on and detachably interlocked with the inclined portion of the bracket, substantially as described.

4. In a device of the class described, the combination of an inclined brace provided at its lower end with inwardly-extending flanges and having studs projecting from the inner face thereof, a bracket provided at its bottom 120 with a projection arranged to receive the lower end of the brace, said bracket being provided above the projection with oppositely-disposed flanges interlocked with the studs, and a hay-rack side connected with the 125 brace and with the bracket, 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.

HERBERT A. BAKER.

Witnesses:
John J. Riggs,
E. H. Riggs.