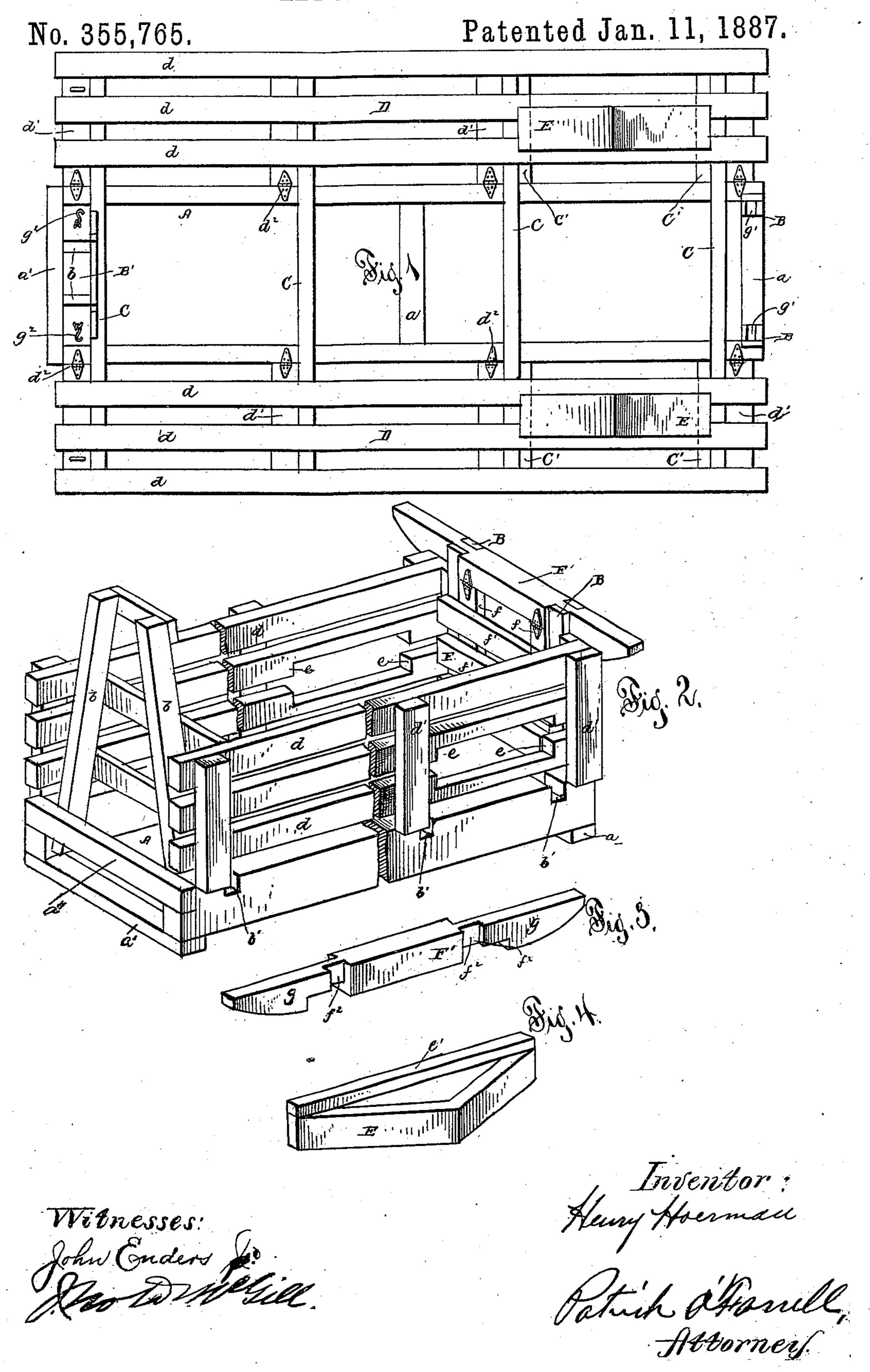
H. HOERMAN.

## HAY AND STOCK RACK.



## United States Patent Office.

## HENRY HOERMAN, OF PALMER, KANSAS.

## HAY AND STOCK RACK.

SPECIFICATION forming part of Letters Patent No. 355,765, dated January 11, 1887.

Application filed November 3, 1886. Serial No. 217,896. (No model.)

To all whom it may concern:

Be it known that I, Henry Hoerman, a citizen of the United States of America, residing at Palmer, in the county of Washington and State of Kansas, have invented certain new and useful Improvements in Hay and Stock Racks, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention pertains to certain new and useful improvements in combined hay and stock racks; and it consists in the detailed construction, combination, and arrangement of the parts, substantially as hereinafter fully set forth, and particularly pointed out in the

claims.

In the accompanying drawings, Figure 1 is a plan view of my invention as employed as a hay-rack. Fig. 2 is a view in perspective, showing the same as a stock-rack; and Figs. 3 and 4 are detail views of my invention.

In carrying out my invention, which is employed in connection with an ordinary running gear or wagon, I employ two longitudinal side bars, A A, connected at one end and at the center by cross-bars aa, and at the other end by cross-bars a'a'', the latter bar being secured in grooves in the outer ends of said side bars.

Secured to the inner sides of the side bars, immediately over the end cross-bar, a, are two oppositely-disposed uprights or standards, BB, the purpose and more minute construction of which will be described hereinafter. To the other end of the side bars are secured the lower ends of two inclined bars, bb, of a ladder, B', said ladder, as usual, having suitable

cross-bars connected to said inclined bars, the

purpose of which is obvious.

At suitable distances apart are formed, in the longitudinal side bars, A, grooves or rerecesses b' b", wherein are secured transverse bars C, said bars being on a plane with the upper surfaces of said side bars. To two of these transverse bars are secured or formed therewith oppositely-disposed right-angular flanged pieces or shoulders C', the purpose of which will now appear.

D D are two oblong frames, consisting each of three or more parallel bars, d d, connected at their ends and at corresponding distances

apart by cross bars d'. To the end of each of these cross bars d' are secured hinges  $d^2$ , said hinges being also secured to the upper edge or surface of each of the longitudinal side 55 bars, A, by means of which the hinging of said frames is effected.

The transverse bars C are so arranged as to allow the parallel bars d of each hinged frame to rest thereon and be supported thereby 60 when said hinged frames are extended or in a

horizontal position.

Two of the parallel bars dd have portions of their opposite surfaces removed, as at ee, to permit the passage upwardly between said bars of a wheel-cover, E, which consists of two inclined bars, connected at their lower distant ends on one side by a cross-bar, e', which latter bar bears against the under surface of one of said parallel bars, and, together with the 70 ends of the inclined bars, rests on the right-angular flanges or shoulders C' of the two forward transverse bars, C. From this it will be seen that the frames D can occupy a parallel position without fear of rubbing of the vehicle-75 wheels against said frames and the contact of the hay with said wheels.

When it is desired to employ my invention as a stock-rack, an end gate, F, is secured in the heretofore open end of the rack. This 80 end gate consists of two vertical bars, ff, having three or more cross-bars, f', said vertical bars being hinged to an inwardly-projecting portion of a clutching-bar, F'. This clutchingbar has formed in its outer rear surface two 85 grooves or recesses,  $f^2$ , and has portions of its under surface removed, forming arms g, curved on their under surface, the purpose of

which will soon appear.

The hereinbefore referred to uprights or 90 standards B B have downwardly-projecting grooves g' g', formed in their upper ends, and within these grooves the clutching-bar F' is secured, the grooves or recesses  $f^2$  on the rear surface of said bar serving to retain the same 95 in position in the grooves in said uprights or standards. In thus securing the clutching-bar F', the end gate, F, is caused to hang on the inner side of the rack, its lower cross-bar being secured between the side bars, A, and the end 100 transverse bar, C, and the uprights or standards B.

By slightly elevating the hinged frames the wheel-covers E E may be removed, and by forcing each of said frames upwardly to a vertical position the end of the upper parallel bar, d, of each frame will be forced in under the curved arms of the clutching-bar F'. The latter, for this purpose, having been slightly raised or elevated, is returned or forced to its lowered normal position. The other ends of the hinged frames are secured to the ladder B' by means of hooks  $g^2$ , the hooked ends thereof entering eyes or staples of the frame A.

It will be understood, of course, that when my invention is employed as a stock-rack the transverse bars C are removed and suitable boards or flooring placed between the side bars, A.

Having thus fully described my invention, what I claim, and desire to secure by Letters 20 Patent, is—

1. The combination, with the side bars and the hinged frames, of the wheel-covers having lower cross-bars and the transverse bars provided with right-angular flanges or shoulders, substantially as shown and described.

2. In a hay and stock rack, the combination, with the hinged frames and the ladder, of the uprights or standards having grooved upper ends, the end gate, and the clutching-bar hinged thereto having curved arms and 30 grooves or recesses, substantially as shown and described, said clutching-bar being secured in the grooved ends of said uprights or standards, as set forth.

In testimony whereof I affix my signature in 35 presence of two witnesses.

HENRY HOERMAN

Witnesses:

FRANK PETERS, FRED ARNDT.