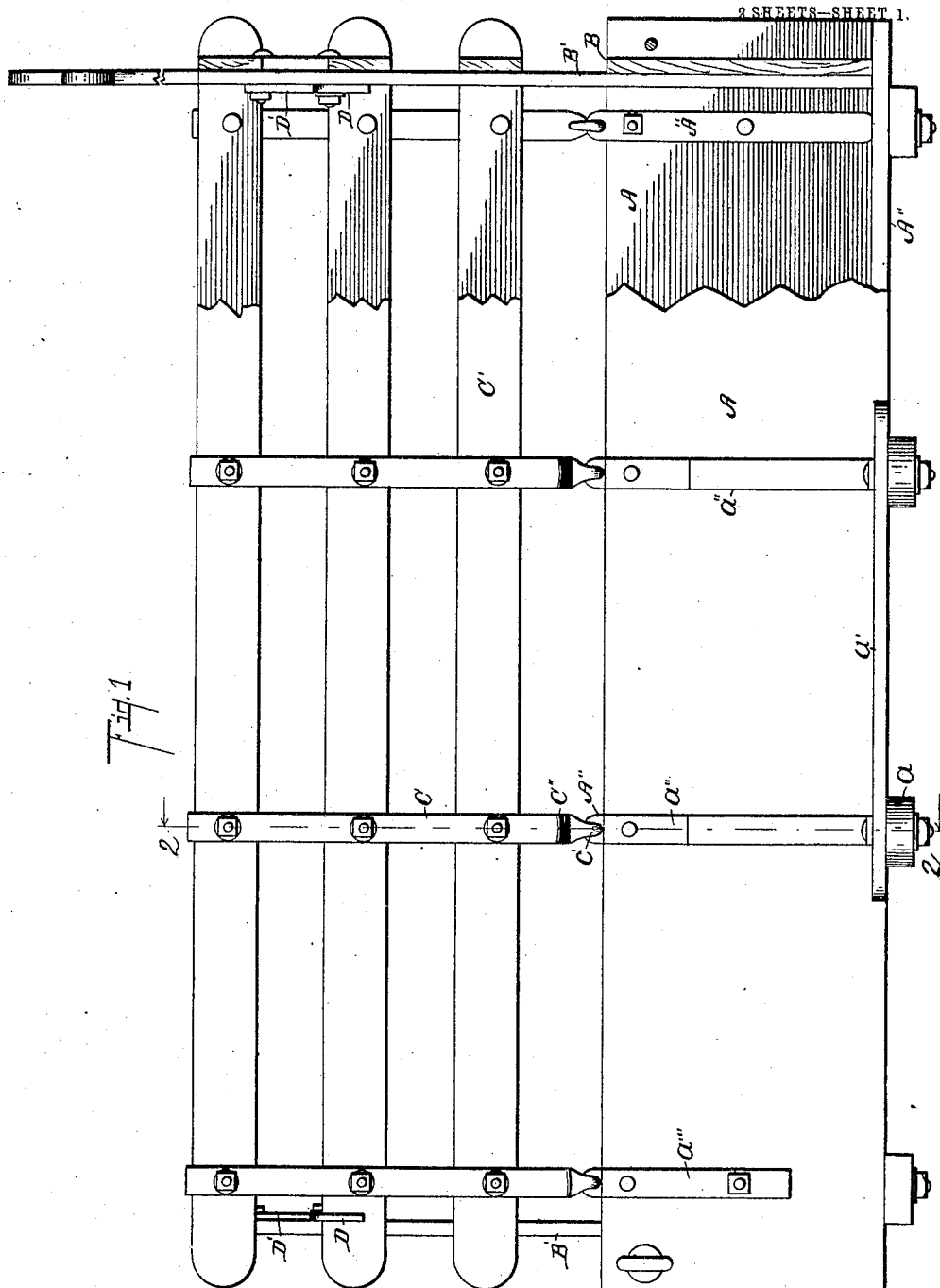


No. 851,777.

PATENTED APR. 30, 1907.

D. L. RYDER.
HAY AND STOCK RACK.
APPLICATION FILED MAR. 6, 1905.



Witnesses:

Edna A. Teller
W. C. Morgan

Inventor,

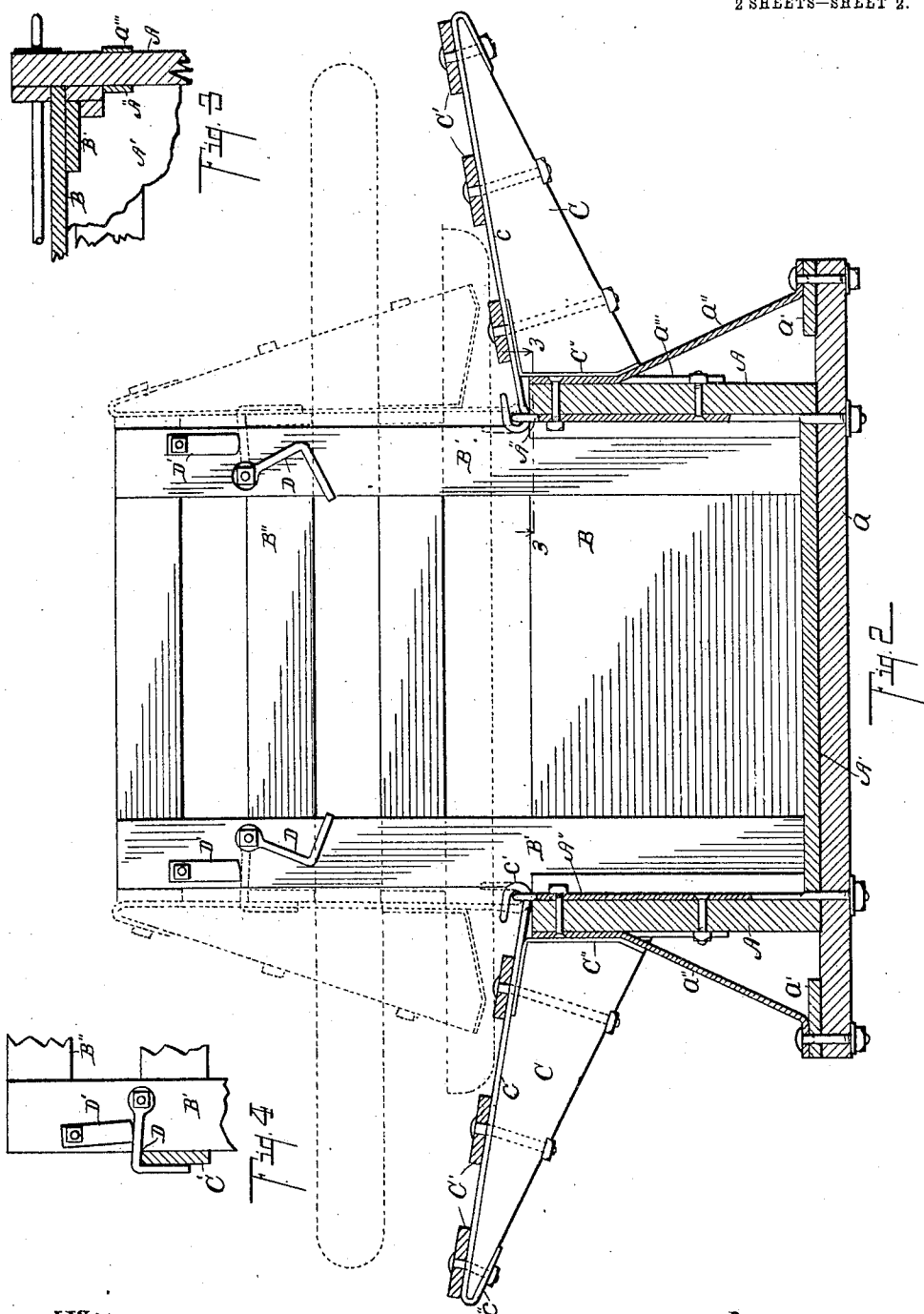
Dudley L. Ryder
By *Chapman & Earl*
Att'y's

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2 SHEETS—SHEET 2.



Witnesses:

Etzel A. Teller
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Inventor,

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UNITED STATES PATENT OFFICE.

DUDLEY L. RYDER, OF PAW PAW, MICHIGAN.

HAY AND STOCK RACK.

No. 851,777.

Specification of Letters Patent.

Patented April 30, 1907.

Application filed March 6, 1905. Serial No. 248,595.

To all whom it may concern:

Be it known that I, DUDLEY L. RYDER, a citizen of the United States, residing at the city of Paw Paw, county of Van Buren, State of Michigan, have invented certain new and useful Improvements in Hay and Stock Racks, of which the following is a specification.

This invention relates to improvements in combination hay and stock racks.

The objects of this invention are—First, to provide an improved combination hay and stock rack which is very simple and economical in structure and at the same time very strong and durable. Second, to provide an improved combination hay and stock rack which may be readily and quickly converted from a hay to a stock rack or vice versa; or, the rack sides or wings be attached to or removed from the body without the aid of tools.

Further objects, and objects relating to the structural details will definitely appear from the detailed description to follow.

I accomplish the objects of my invention by devices and means described in the following specification.

The invention is clearly defined and pointed out in the claims.

A structure embodying the features of my invention is clearly illustrated in the drawings accompanying forming a part of this specification, in which—

Figure 1 is a detail side elevation view of a structure embodying the features of my invention, portions being broken away to show the arrangement of the parts. Fig. 2 is a transverse sectional view taken on a line corresponding to 2 2 of Fig. 1; the sides or wings of the rack being shown by dotted lines adjusted as a stock rack. Fig. 3 is an enlarged detailed view taken on a line corresponding to 3 3 of Fig. 2, showing the details of construction. Fig. 4 is an enlarged detailed view showing means for securing the sides or wings in position when the rack is adjusted as a stock rack.

In the drawings similar letters of reference refer to similar parts throughout the several views, and the sectional views are taken looking in the direction of the little arrows at the ends of the section lines.

Referring to the drawing, A A are the sides of the rack body and B the end boards thereof. The rack body is provided with suitable transverse bed pieces *a* for the bottom A'.

Straps A'' having eyes in their upper ends and having bolts formed on their lower ends are provided. The bolt portions of these straps A'' are arranged through the bottom of the body and through the bed pieces *a* and secured by suitable nuts. The eye portions of these straps project above the sides A of the body. On the outer faces of the sides A arranged oppositely to the straps A'' are metal plates or straps *a''* and *a'''*. These plates or straps receive the bolts by which the straps A'' are secured to the sides A. This enables the use of comparatively light side boards A and at the same time they are strong and durable. The straps *a''* are bent outwardly at their lower ends to form braces.

The rack ends are made up of suitable side pieces B' and cross-pieces or slots B''. These side pieces B' are adapted to fit within the end boards B and are held detachably in position by suitable cleats.

The wings of the rack are made up of cross-pieces or arms C and the longitudinal boards or bars C'. Supporting straps *c* having downwardly and inwardly turned hooks at outer ends adapted to receive the outer ends C are provided. These straps are secured to the arms by which the boards C' are secured thereto. The inner ends of the straps *c* are formed into hook extensions *c'* adapted to engage the eyes in the upper ends of the straps A''. The wings are thus pivotally secured to the wagon body so that they may be swung up into vertical position for adjusting the rack as a stock rack, or down into a substantially horizontal position for adjusting the rack as a hay rack. The inner ends of the arm C are provided with binding straps C''. When the arms are in their extended position these binding straps bear against the plates *a''* and *a'''*.

When the rack is adjusted as a stock rack, the arms are held in their vertical position by hooks D which are pivoted on the rack ends. (See Figs. 2 and 4.) These hooks D are adapted to engage over one of the boards C' of the wings, as clearly appears in the drawing. Buttons D' are provided for locking these hooks in their engaging position.

From the foregoing description, it will be apparent that my improved combination hay and stock rack is very readily adjusted from a hay rack to a stock rack, or vice versa, or the wings may be quickly and easily removed or put in position. In removing or attaching to wagons, the rack end pieces B are re-

moved and the wings placed on a box or body
 of the rack face down, in which position the
 hooks *c'* can be readily engaged in the eyes in
 the straps *c*. The wings are then swung to
 5 their outer position and the end pieces of the
 rack inserted. If desired, the end piece can
 be widened by the extension boards which
 are arranged between the cross-pieces *B''*
 thereof as indicated by the dotted lines in
 10 Fig. 2. These extension boards are espe-
 cially desirable where the rack is to be used
 for hauling baskets of grapes and like small
 articles.

Having thus described my invention, what
 15 I claim as new and desire to secure by Let-
 ters Patent is:

1. In a rack, the combination of a body
 portion; straps having eyes in their upper
 ends arranged on the sides of said body so
 20 that their eyes project above the tops there-
 of; rack wings on the sides, consisting of
 cross-arms, adapted to shoulder against the
 sides of said body when the rack is adjusted
 as a hay rack; supporting straps for said
 25 arms provided with downwardly turned
 hooks at their outer ends engaging over the
 outer ends thereof, and with hook extensions
 at their inner ends adapted to engage the
 eyes of the straps on said body; longitudinal

boards or bars on said arms; end pieces for 30
 said racks; hooks pivoted on said end pieces
 adapted to engage the longitudinal bars of
 said rack when the sides or wings are adjust-
 ed as a stock rack; and a button for locking
 said hooks in their engaging position, for the 35
 purpose specified.

2. In a rack, the combination of a body
 portion; straps having eyes in their upper
 ends, arranged on the sides of said body;
 rack wings on said sides consisting of cross- 40
 arms, supporting straps for said arms with
 hooks at their inner ends adapted to engage
 the eyes of the straps on said body, and lon-
 gitudinal boards on said arms; end pieces for
 said racks; hooks pivoted on said end pieces, 45
 adapted to engage the longitudinal bars of
 said rack when the sides or wings are adjust-
 ed as a stock rack; and buttons for locking
 said hooks in their engaging position, for the
 purpose specified. 50

In witness whereof, I have hereunto set
 my hand and seal in the presence of two wit-
 nesses.

DUDLEY L. RYDER.

Witnesses:

DANIEL SPICER,
 WM. KILLEFER.