

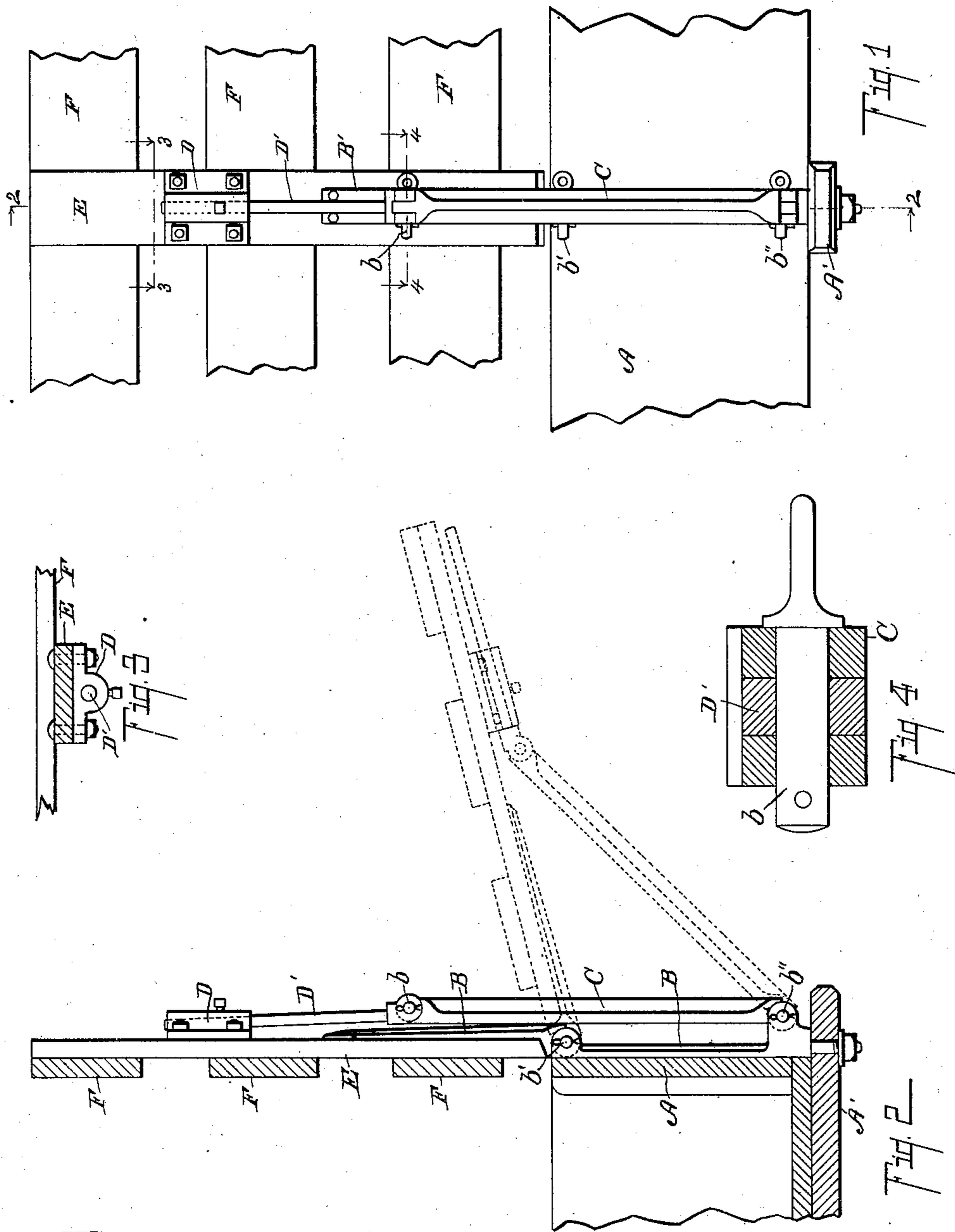
No. 742,364.

PATENTED OCT. 27, 1903.

J. L. STALEY.  
CONVERTIBLE HAY AND STOCK RACK.

APPLICATION FILED MAR. 25, 1903.

NO MODEL.



Witnesses:

*Ethel A. Teller*  
*Otis A. Earl*

Inventor,

*Joseph L. Staley*  
By *Fred L. Chappell*  
Att'y.

# UNITED STATES PATENT OFFICE.

JOSEPH L. STALEY, OF MARTIN, MICHIGAN.

## CONVERTIBLE HAY AND STOCK RACK.

SPECIFICATION forming part of Letters Patent No. 742,364, dated October 27, 1903.

Application filed March 25, 1903. Serial No. 149,463. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH L. STALEY, a citizen of the United States, residing at the village of Martin, in the county of Allegan and State of Michigan, have invented certain new and useful Improvements in Convertible 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 the invention are, first, to provide an improved combination hay and stock rack which may be readily and easily converted from one to the other without the use of tools; second, to provide an improved rack in which the wings of the rack can be adjusted to any pitch desired; third, to provide an improved combination hay and stock rack which is light in weight, economical to produce, strong, and not likely to get out of repair.

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

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

The invention is pointed out in the claims.

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

Figure 1 is a detail side elevation view of a section of a rack embodying the features of my invention adjusted as a stock-rack. Fig. 2 is a detail cross-sectional view taken on a line corresponding to line 2 2 of Fig. 1, portions being shown in full lines to show the structure and the relations of the parts. Fig. 3 is a detail sectional view taken on a line corresponding to line 3 3 of Fig. 1. Fig. 4 is an enlarged detail sectional view taken on line 4 4 of Fig. 1.

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

Referring to the lettered parts of the drawings, the rack box or body A is of the usual or any desired construction and is provided with projecting cross or bed pieces A'. Brack-

ets B, adapted to rest upon the projecting ends of the cross-pieces A', are secured thereto and to the sides of the box. To the upper ends of the brackets B arms B' are secured by suitable pivots, as b'. Secured to the lower ends of the brackets B by pivot-pins b'' are braces C. The braces C are provided with extensions D', which are preferably rod-like in form and are secured to the braces by suitable pivot-pins b'. These pivot-pins are preferably thumb-bolts and are retained by suitable cotter-pins for convenience in assembling or disassembling the parts. The extensions D' are adapted to be inserted through suitable bearings in the blocks D, which are secured to the cross-pieces E of the rack-wings. The inner ends of the rack-wing cross-pieces are secured to the pivoted arms B'. Boards F are secured to the cross-pieces E in the usual or any desired manner. With the parts thus arranged the rack may be adjusted as a stock-rack or as a hay-rack without any adjustment of the parts other than the adjustment of the sides. When adjusted for a stock-rack, the sides are preferably retained by securing in the usual or any suitable manner, and when it is desired to convert the rack into a hay-rack it is only necessary to free the sides and swing them down, as indicated by dotted lines in Fig. 2.

The pitch of the wings of the rack is determined by the placing of the blocks D upon the cross-pieces of the wings, as the farther out they are placed the less the pitch of the rack, and vice versa.

I preferably provide a suitable set-screw for the block D to engage the rod D' to prevent the rattling of the parts and swing of the wings. The blocks D when the rack is adjusted as a hay-rack rest against the shoulders of the brace extensions D', thus forming a very strong support, and there is no danger of the slipping of the parts.

My improved convertible hay and stock rack is very simple in its structure, is strong and durable, and may be readily adjusted for the use required. The wings may be readily removed from or secured in position on the box. I have illustrated and described the same in what I believe to be the preferable form on account of simplicity of construction. I am aware, however, that it is capable of

considerable variation in structural details without departing from my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters

5 Patent, is—

1. In a rack, the combination of a body portion A; projecting bed-pieces A' therefor; brackets B adapted to rest on said bed-pieces secured thereto and to said body portion; 10 arms B' pivotally secured to the upper ends of said brackets; braces C pivotally secured to said brackets; pivoted extensions D' for said braces; blocks D adapted to slidably engage said extensions D'; and cross-pieces E 15 for the sides or wings of the rack secured to said blocks and to said arms, coacting for the purpose specified.

2. In a rack, the combination of a body;

brackets secured thereto; arms pivoted to said brackets; braces pivoted to said brackets; pivoted extensions for said braces; blocks adapted to slidably engage said extensions; and cross-pieces to which said arms and blocks are secured, for the purpose specified. 20

3. In a rack, the combination of a body; wings pivotally secured thereto; braces having hinged extensions pivotally secured to said body; and blocks adapted to slidably engage said braces, secured to said wings, for the purpose specified. 25 30

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

JOSEPH L. STALEY. [L. S.]

Witnesses:

LEE W. SHEPHERD,  
ERNEST W. FENNER.