No. 803,106. PATENTED OCT. 31, 1905.

J. A. KING & E. B. LINSLEY.

RACK.

APPLICATION FILED OCT. 17, 1904.

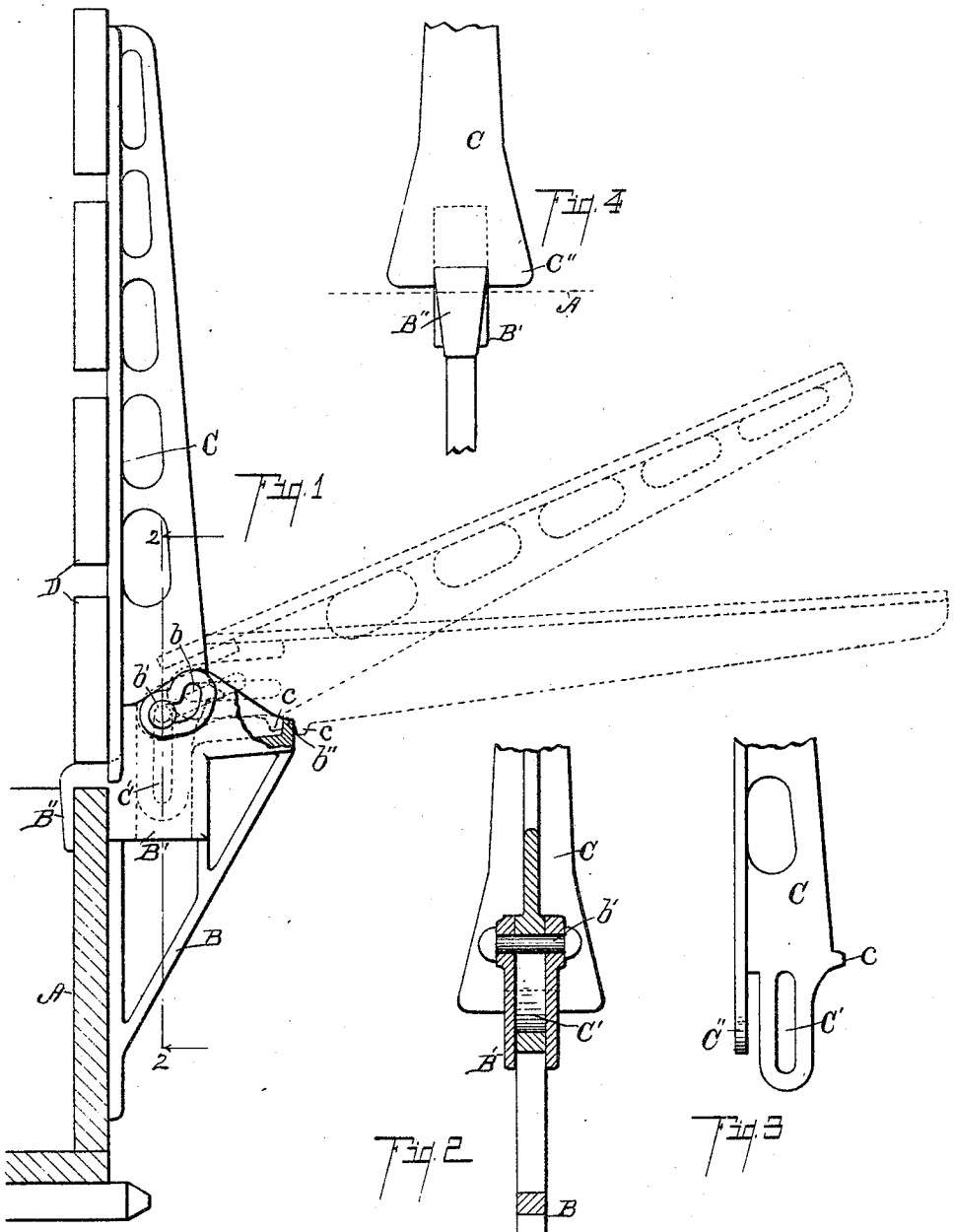


Fig. 1

Fig. 4

Fig. 2

Fig. 3

Witnesses:

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UNITED STATES PATENT OFFICE.

JAMES A. KING AND EDWARD B. LINSLEY, OF THREE RIVERS, MICHIGAN.

RACK.

No. 803,106. Specification of Letters Patent. Patented Oct. 31, 1905.

Application filed October 17, 1904. Serial No. 228,808.

To all whom it may concern:

Be it known that we, JAMES A. KING and EDWARD B. LINSLEY, citizens of the United States, residing at the village of Three Rivers, county of St. Joseph, State of Michigan, have invented certain new and useful Improvements in 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 may be readily and quickly converted from a hay-rack to a stock-rack, or vice versa, without the use of tools; second, to provide an improved hay and stock rack which is simple in structure and economical to produce and at the same time strong and durable.

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

We accomplish the objects of our invention by the 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 the invention is clearly illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a detail transverse sectional view through a rack embodying the features of our invention, one side only of the rack being illustrated and the positions of the wings of the rack when adjusted for use as a hay-rack or the like being indicated by dotted lines. Fig. 2 is a detail sectional view taken on a line corresponding to line 2 2 of Fig. 1 looking in the direction of the little arrows at the ends of the section-lines removed from the rack-body. Fig. 3 is a detail side elevation view of one of the arms C. Fig. 4 is a detail inside elevation view of one of the brackets B with the arm C in its vertical position.

Referring to the drawings, the rack body or box A is of the usual or any desired construction. Brackets B, having hooks B″ thereon adapted to engage over the side boards of the box, are secured to the sides of the box. We have illustrated but one of these brackets, although in practice three or four for each side of the rack are used, depending upon the length of the rack.

The brackets B are provided with upwardly-projecting side plates B′ and upwardly-projecting stops *b*″. These side plates B′ are provided with outwardly and upwardly curved slots *b*, in which the pivot-pins *b*′ for the adjustable arms C are arranged.

The arms C are provided with longitudinal slots C′ at their inner ends, through which the pivot-pins *b*′ are arranged. The side plates B′ form sockets in the brackets, into which the arms C drop when elevated to a vertical position. The boards D are secured to the arms C, thus forming the adjustable wings of the rack. This arrangement of parts permits the adjustment of the wings of the rack into a substantially horizontal position or to an inclined position, as is indicated by the dotted lines in Fig. 1. When it is desired to adjust the wings of the rack to the horizontal position, the arms C are pulled outwardly until the pivot-pin engages in the outer end of the slots *b* in the side plates. The arms are dropped downwardly, and the lugs or stops *c* on the lower edges thereof engage over the upwardly-projecting stops *b*″ on the brackets B. This holds the wings in position. When it is desired to adjust the wings of the racks to an inclined position, the pivot-pin *b*′ is forced to the inner end of the slot *b*, and the stops *c* of the arms are engaged on the inner sides of the stops *b*″, as clearly appears in Fig. 1. When it is desired to adjust the rack as a stock-rack, the wings are elevated to a substantially vertical position and dropped downwardly into the sockets in the brackets.

The arms C are provided with inwardly-projecting plates C″, which engage the inner faces of the brackets B to aid in retaining the arms in their elevated positions.

By arranging the parts as we have illustrated and described we secure a rack which may be very quickly and easily adjusted as a stock-rack or as a rack having inclined or substantially horizontal sides without the use of tools. The parts are very simple in structure and economical to produce, although they are strong and durable and are securely retained in their adjusted positions without the use of bolts, screws, or the like.

We have illustrated and described our improved combination hay and stock rack in the form which we believe to be the most simple and economical. We, however, are aware that it may be varied in structural details without departing from our invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In a rack, the combination of a body por-

tion; a bracket secured thereto, having a vertical socket therein and upwardly-projecting side plates, said side plates having outwardly and upwardly curved slots therein; an arm arranged between said side plates having a longitudinal slot therein, said arm being arranged to drop into said socket in said bracket when adjusted to its vertical position; a pivot for said arm, arranged through the slot therein and in the slots in the side plates of said bracket; an upwardly-projecting stop on said bracket; a downwardly-projecting stop on said arm, adapted to engage the stop on said bracket when said arm is adjusted to its outer position; and a hook on said arm adapted to engage over said bracket when said arm is adjusted to its vertical position, for the purpose specified.

2. In a rack, the combination of a body portion; a bracket secured thereto, having a vertical socket therein and upwardly-projecting side plates, said side plates having outwardly and upwardly curved slots therein; an arm arranged between said side plates having a longitudinal slot therein, said arm being arranged to drop into said socket in said bracket when adjusted to its vertical position; a pivot for said arm, arranged through the slot therein and in the slots in the side plates of said bracket; an upwardly-projecting stop on said bracket; and a downwardly-projecting stop on said arm, adapted to engage the stop on said bracket when said arm is adjusted to its outer position, for the purpose specified.

3. In a rack, the combination of a body portion; a bracket secured thereto, having a vertical socket therein and upwardly-projecting side plates, said side plates having outwardly and upwardly curved slots therein; an arm arranged between said side plates having a longitudinal slot therein, said arm being arranged to drop into said socket in said bracket when adjusted to its vertical position; a pivot for said arm, arranged through the slot therein and in the slots in the said side plates of said bracket; an upwardly-projecting stop on said bracket; and stops for said arm when adjusted to its outer position, for the purpose specified.

In witness whereof we have hereunto set our hands in the presence of two witnesses.

JAMES A. KING.
EDWARD B. LINSLEY.

Witnesses:
JEFFERSON P. MCKEY,
CHARLES W. THOMS.