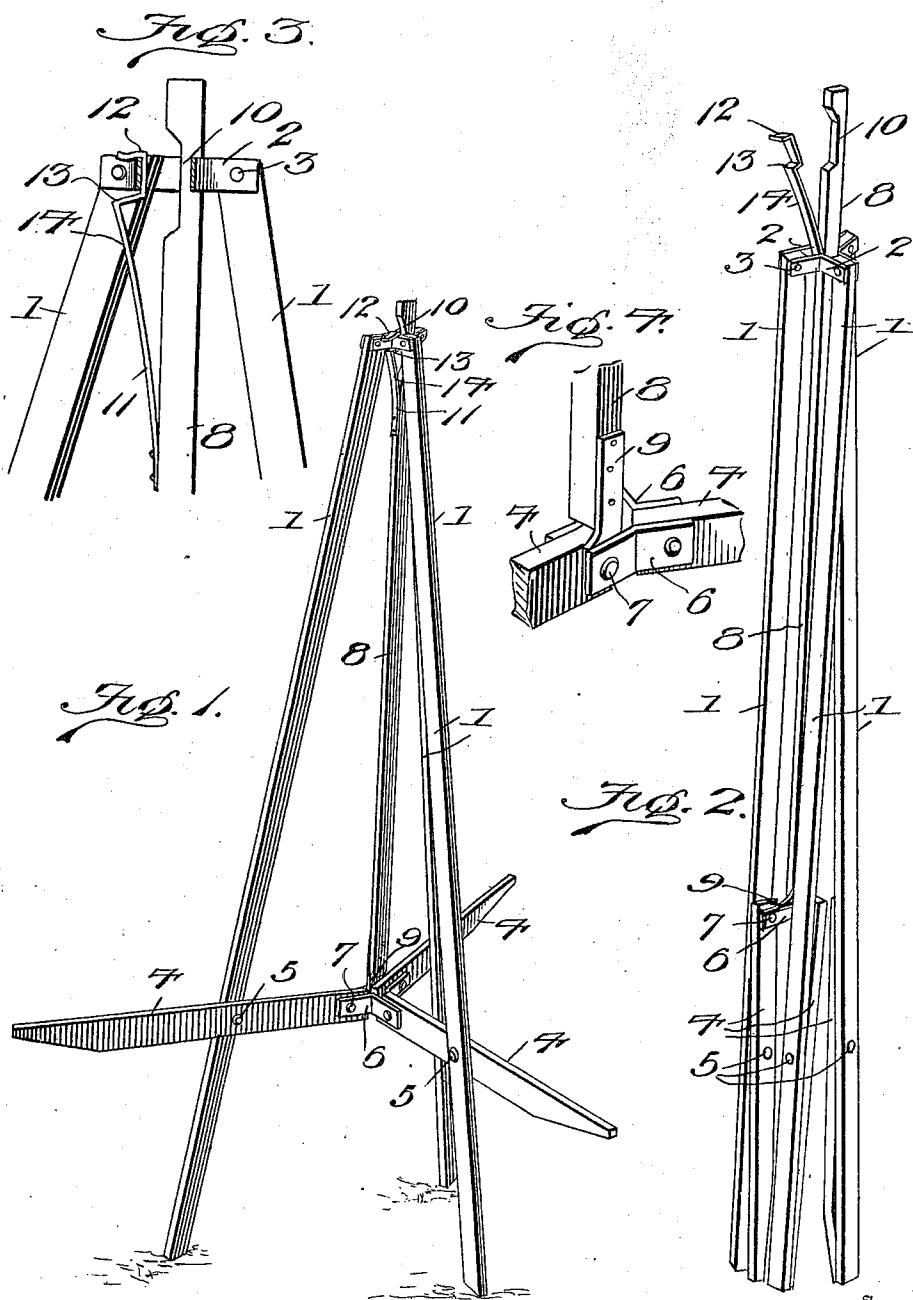


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HAY RACK.
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996,524.

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Witnesses

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HAY-RACK.

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To all whom it may concern:

Be it known that I, WILLIAM A. RAUDABAUGH, a citizen of the United States, residing at Powhatan, in the county of Powhatan and State of Virginia, have invented new and useful Improvements in Hay-Racks, of which the following is a specification.

This invention relates to hay racks, and particularly to a hay-rack ventilator and stock-bottom designed for use in supporting shocks and stocks of hay made of alfalfa, pea-vines, sorghum, red clover or other leguminous material, affording ventilation to facilitate the process of curing the material, and holding the same slightly out of contact with the ground to prevent it from becoming damaged thereby.

The object of the invention is to provide a device of this character which is simple of construction, adapted to be readily set up and taken down, and also adapted to be folded compactly for storage or transportation.

The invention consists of the features of construction, combination and arrangement of parts hereinafter fully described and claimed, reference being had to the accompanying drawings, in which:—

Figure 1 is a perspective view showing the rack set up for use. Fig. 2 is a similar view showing the rack folded for storage or transportation. Fig. 3 is a detail perspective of the upper end of the rack, one of the legs or bars being omitted, showing the manner in which the latch interlocks with one of the upper pivot brackets. Fig. 4 is a detail showing the pivotal connection between the arms and center staff.

The improved rack forming the subject-matter of my invention comprises a plurality of supporting legs or bars 1, which may vary in number as desired, three or four being customarily employed. These legs or supporting bars are pivotally connected at their upper ends by angle brackets 2, said brackets being of L-form to fit the angles between the bars and being pivotally fastened to their opposing faces by transverse pivot pins or bolts 3, the construction being such that the bars may be spread out at their lower ends to form an upwardly tapering rack frame, as shown in Fig. 1, and folded in substantially parallel relation, as shown in Fig. 2.

Arranged adjacent the lower ends of the legs or bars 1 are supporting arms 4, said

arms being pivotally connected intermediate of their ends to the respective bars by pivots 5, and adapted to project horizontally in use beyond the bars and to extend inwardly between the same. The inner ends of the arms 4 are connected by angular or L-shaped bracket pieces 6 similar in form to the bracket pieces 2, and connected with the arms by pivot pins or rivets 7, the arrangement being such that the arms may be extended horizontally, as shown in Fig. 1, or folded to lie between and parallel with the bars, as shown in Fig. 2.

The central bar or staff 8 extends vertically between the bars 1 and is provided at its lower end with a metallic bracket piece 9 fixed thereto and pivotally connected with one of the pins or bolts 7, as indicated in Fig. 4. The upper end of the staff projects above the body of the rack formed by the bars 1 through the space between the upper ends of said bars and the bracket pieces 2, and is formed with a notch or recess 10. A latch 11 is carried by the staff to lock it to the upper portion of the rack body when the latter is extended. This latch comprises a plate spring fixed at its lower end to the staff some distance below the recess 10, and formed at its upper end to provide a latch hook 12 and underlying locking shoulder 13, below which the latch strip is curved outwardly or away from the staff, as indicated at 14.

In operation of setting up the device for use, the legs or bars 1 are extended and the arms 4 swung outward to the horizontal position shown in Fig. 1, in which operation the center staff 8 is drawn down until its recessed portion comes opposite the bracket pieces 2. Normally the notched end of the staff is above the brackets 2, as indicated in Fig. 2, and when the staff is drawn downward the curved portion 14 of the latch comes in contact with one of the brackets 2 and is forced inwardly thereby, the latch hook 12 being by this operation retracted into the recess 10, so as to permit the latch to move to locking position between the brackets. As soon as the recessed portion 10 comes between the brackets, the curved portion 14 of the latch extends below the brackets, leaving the hook 12 free to spring out into engagement with one of the brackets. The shoulder 13 thus underlies the engaged brackets, thus preventing the bar

from having upward movement and allowing the rack to collapse. The hay or other material may then be piled upon the rack and supported in such manner as to be held
5 above the ground and upon the rack so that air may pass directly up through and around the same, thus facilitating the process of curing and preventing damage to the material by contact with the ground. After
10 the process of curing the material is completed, the latch 11 is retracted, the upper end of the center staff grasped and drawn upward, thus pulling upon the arms 4 which will fold inwardly and upwardly, whereby,
15 upon the removal of the cured material, the rack may be conveniently folded as shown in Fig. 2, in compact form for storage or transportation.

It will thus be seen that the invention
20 provides a simple form of rack which may be economically manufactured and is effective for its intended purpose.

Having thus described the invention, what I claim as new and desire to secure by Letters-Patent, is:—

1. A rack comprising a plurality of bars pivotally connected at their upper ends, supporting arms pivotally connected to the
30 lower ends of the bars and to each other between the bars, a center staff pivotally connected at its lower end to the arms and slidably movable at its upper end between the pivoted ends of the bars, and means for locking the upper end of the staff to the
35 bars.

2. A rack comprising a plurality of bars pivotally connected at their upper ends, supporting arms pivoted to the lower ends of

the bars and to each other between the bars, a center staff pivoted at its lower end to the
40 arms and slidably mounted at its upper end between the pivoted ends of the bars, and a spring latch upon the upper end of the staff to interlock it to the arms.

3. A rack comprising a plurality of bars, 45 brackets pivotally connecting the upper ends of the bars, arms pivotally connected to the bars at their lower ends and to each other between the bars, a center staff pivoted at its lower end to the arms and slidably
50 mounted at its upper end between the brackets, and a latch upon the upper end of the staff to interlock with one of said brackets when the rack is extended.

4. A rack comprising a plurality of supporting bars pivotally connected by angle
55 brackets at their upper ends, supporting arms intermediately pivoted to the bars and pivotally connected at their inner ends to each other, a center staff pivotally connected
60 at its lower end to the arms and slidably mounted at its upper end between the angle brackets, said staff being formed at its upper end with a recess, and a latch upon the
65 staff comprising a curved spring strip secured at its lower end to the staff and having a hooked upper end to move into said recess and interlock with one of the said angle brackets.

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

WILLIAM A. RAUDABAUGH.

Witnesses:

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