E. E. SHORE & W. T. WILSON.

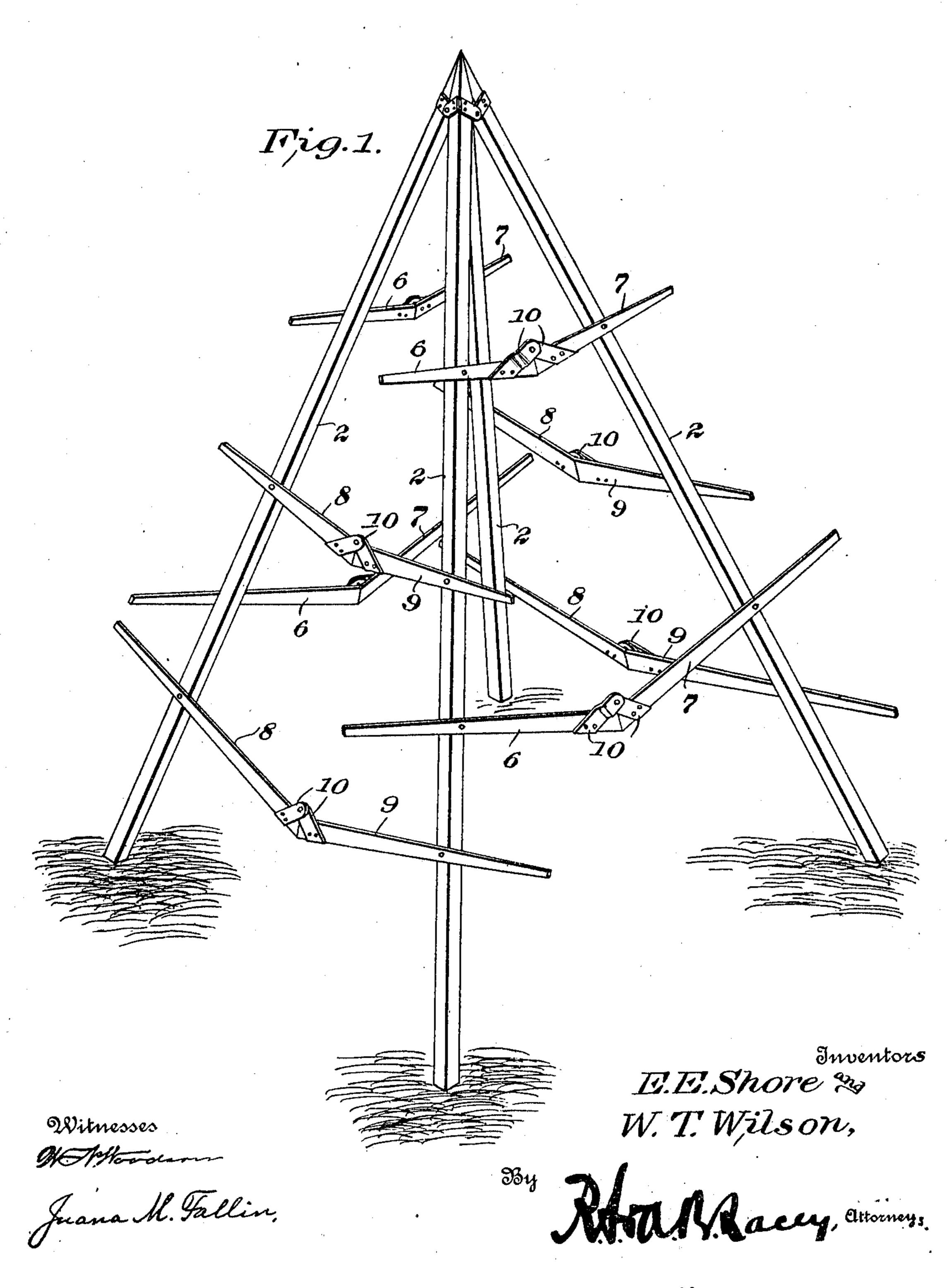
DRYING RACK FOR HAY.

APPLICATION FILED OUT. 18, 1909.

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Patented Mar. 29, 1910.

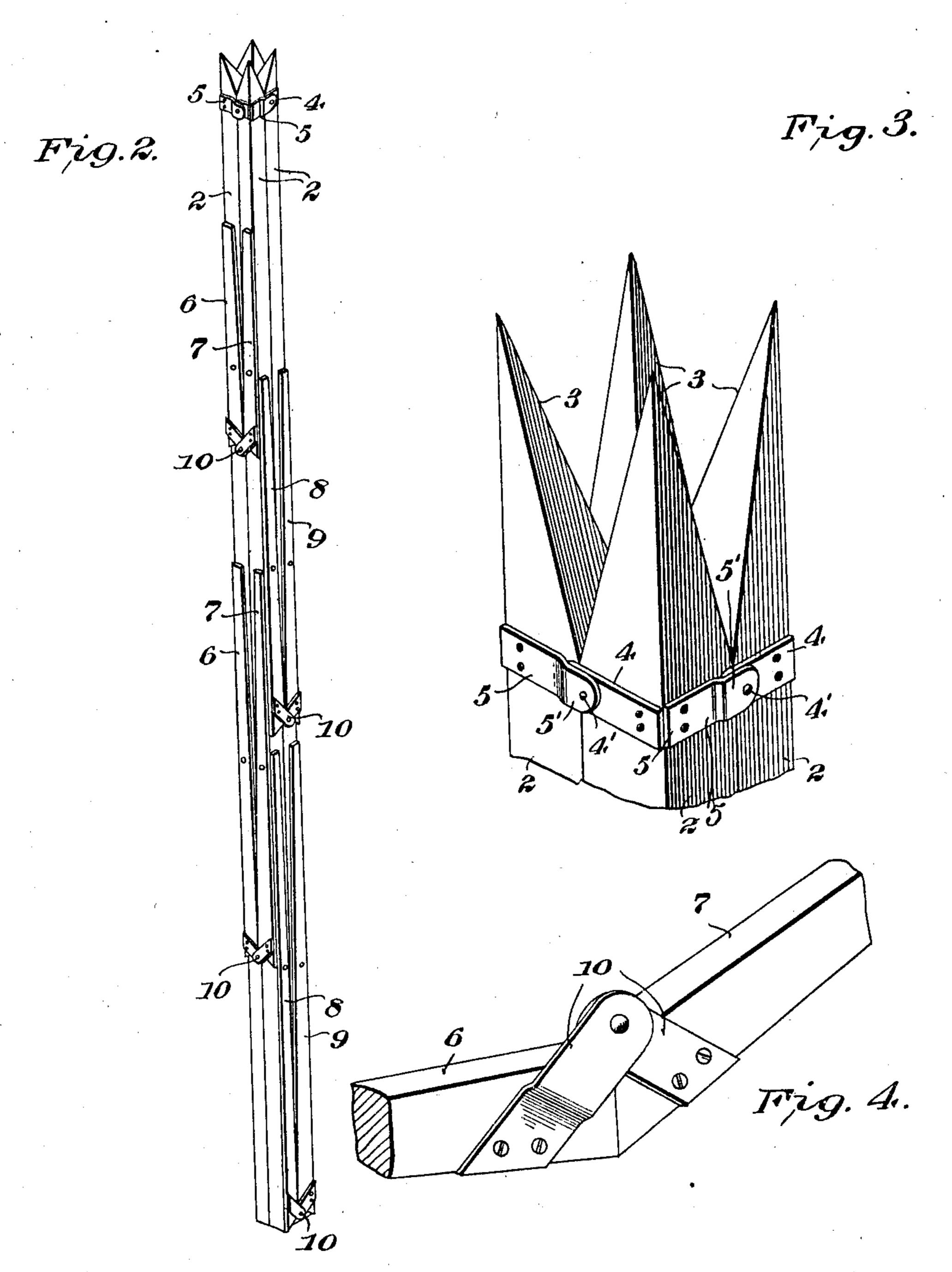
2 SHEETS—SHEET 1.



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Inventors

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## UNITED STATES PATENT OFFICE.

ELLIS E. SHORE AND WILLIAM T. WILSON, OF RURAL HALL, NORTH CAROLINA.

DRYING-RACK FOR HAY.

953,239.

Specification of Letters Patent. Patented Mar. 29, 1910.

Application filed October 18, 1909. Serial No. 523,195.

To all whom it may concern:

Be it known that we, Ellis E. Shore and Whliam T. Whlson, citizens of the United States, residing at Rural Hall, in the county of Forsyth and State of North Carolina, have invented certain new and useful Improvements in Drying-Racks for Hay, of which the following is a specification.

Our invention relates to a frame or rack used to dry pea hay or any other hay that

is hard to cure.

The racks are designed to be used in the field, the hay being placed on the racks soon after being cut, the racks being so constructed as to allow the air to circulate through the stack when the weather is fair and thus dry the hay and cause it to a great extent to retain its original color and nutritive

properties.

The invention consists, generally speaking, in four supporting bars which are hingedly connected to each other at their upper ends, so that they may be spread out laterally as if they defined the four cor-25 ners of a pyramid, these supports being joined by sectional pivoted cross bars which, when the supporting bars are spread out, take a position transverse to the supporting bars, so that their ends project out be-30 yound the supporting bars and form projecting fingers upon which the hay may be supported, these sectional cross bars being pivoted to the supporting bars so that when the supporting bars are closed, the sections 35 of the cross bars will take a position parallel to the supporting bars.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of our improved rack in position; Fig. 2 is a perspective view of the rack folded up; Fig. 3 is an enlarged perspective view of the upper end of the rack supports; and, Fig. 4 is a detailed perspective view enlarged of the joined ends of two of the cross bar sections and the hinge therefor.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same

reference characters.

Referring to these drawings, it will be seen that our device consists of four sup-

ports 2 square in section and diagonally beveled at their upper ends, as at 3. Each support is hinged at its upper end to the next adjacent support and thus the supports may be moved outward diagonally 60 with relation to each other or inwardly diagonally, so that when moved outward the supports define the four corners of a relatively sharp pyramid, while when moved inward they will be moved into contact with 65 each other and into a position of practical parallelism.

The hinges may be of any suitable character, but we have shown them as consisting of two members, one of the members 70 consisting of a plate 4 having a stud 4' projecting from its outer face, the other member consisting of a plate 5 having an offset end portion 5' with a hole through which the stud 4' passes. These plates are 75 screwed or otherwise attached to the two adjacent sides of each of the supports.

It will be seen that the supports are arranged in two opposed pairs, one pair being movable toward the other pair, and the sup- 80 ports of each pair being movable toward and away from each other. The supports of each pair of supports are connected to each other by sectional cross bars 6 and 7. The inner ends of these cross bars are connected 85 by hinge plates 10. The cross bar sections 6 and 7 are pivoted at their middles to the supporting bars, so that when the supports are moved toward each other, the cross bars will be turned upon their pivots until when 90 the supports are parallel with each other, the cross bar sections will be turned into alinement with the supports, as shown in Fig. 2. The supports of each pair of supports we have shown as being connected to 95 each other by two of these sectional cross bars 6 and 7, one pair being located at the upper end of the pair of supports 2, while the other is located about the middle thereof.

Each pair of supports is connected to the 10c opposite pair by sectional cross bars 8 and 9 which are constructed precisely similar to 6 and 7, the sections 8 and 9 being pivoted each at its middle to the support, just as previously described, the inner ends of the 105 sections 8 and 9 being hingedly connected to each other by the hinged plates 10, as previously described. It will thus be seen that when the supports are open that the cross bar sections 8 and 9 and the cross bar 11c

sections 6 and 7 will be opened or spread outward, and the extremities of the sections will project beyond the supporting bars, while when the supports are moved toward 5 each other or folded, the sections 6 and 7 and 8 and 9 will be likewise folded upward and into alinement with the supports 2, so that as shown in Fig. 2, the four supports and their cross bar sections will form a com-10 pact bundle which may be easily stored and easily transported to various positions upon the field where they are needed. In practical service the uprights or supports would be about six and one-half feet long. The 15 cross pieces should properly extend beyond the uprights or supports about twelve or fifteen inches.

In operation the racks are to be carried to the field and unfolded and set up. The 20 hay can then be placed upon the same beginning with the bottom cross piece sections and continuing upward until the racks are entirely filled, the uppermost hay overlapping the lowermost, so as to shed water. 25 After the racks are filled the hay cock is capped, thus preventing the entrance of water to the interior of the stack and at the same time allowing the air to circulate through the stack, the air entering the stack 30 and into the interior of the rack through the lower portion thereof.

Our invention is simple, cheap and very reliable, and extremely convenient in use.

Having thus described the invention what

35 is claimed as new is:

1. A drying rack of the character described including a plurality of supports connected to each other at their upper ends but adapted to be spread apart at their 40 lower ends, and transverse cross bars attached to each of said supports, one set of cross bars extending in one direction and projecting beyond the support and the other set extending at right angles to the first 45 named set and also projecting beyond the support, said cross bars being pivoted to the support and being thereby adapted to be turned into line therewith.

2. A rack of the character described com-50 prising a plurality of supports hingedly connected to each other at their upper ends and adapted to be spread apart at their lower ends, and a plurality of members each pivoted at its middle to one of said supports 55 and movable into a position in alinement with the support or inclines thereto, each of said members being engaged with the opposed member on the next adjacent support.

3. A rack of the character described comprising a plurality of supports hingedly connected to each other at their upper ends, the upper ends of the supports being cutaway on their inside faces above their

pivotal points to permit the lower ends of 65 the supports to be spread outward, a plurality of members each pivoted at its middle to a support and adapted to be turned into a position in alinement with the support or at an angle thereto, and hinge plates at 70 tached to the inner ends of said members and extending toward each other at an angle to said members, said plates having pivotal engagement with each other.

4. A rack of the character described com- 75 prising a plurality of supports hingedly connected to each other at their upper ends, and a plurality of members each pivoted at its middle to a support and adapted to be turned into position in alinement with the 80 support or at an angle thereto, the inner ends of said members being hinged to each

other.

5. A rack of the character described comprising four supports hingedly connected 85 to each other at their upper ends, the lower ends of the supports being adapted to be spread, and cross bar sections pivotally mounted on the like faces of opposed supports, the inner end of each section being 90 hingedly connected to the inner end of the opposed cross bar section on the opposed support.

6. A rack of the character described comprising a plurality of supports, the upper 95 end of each support being hinged to the upper end of the next adjacent support on both sides, the lower ends of the supports being therefore adapted to be spread, a plurality of cross bar sections pivoted at their 100 middles to one side of each support at separated points, a plurality of cross bar sections pivoted at their middles to the next adjacent side of said support but at different levels from the first named cross bar sec- 105 tions, and hinges connecting the inner end of each cross bar section to the inner end of the like section on the next adjacent support.

7. A rack of the character described including a plurality of upwardly and in-110 wardly inclined supports connected to each other at their upper ends, and cross bars connecting each support to the next adjacent support on both sides, said cross bars being pivoted to and projecting out beyond 115 the supports and being formed in two sec-

tions hinged to each other.

8. A rack of the character described comprising a plurality of supports, said supports being square in section at their upper 120 ends, the inside faces of the upper ends being beveled, each of said supports below the beveled portion being provided on its outside faces with hinge plates, the hinge plates of one support being pivoted to the hinge 125 plates of the next adjacent support, a plurality of cross bar sections pivoted at their middles to one side of each support at sep-

arated points, a plurality of cross bar sections pivoted at their middles to the next adjacent side of said support but at different levels from the first named cross bar sec-5 tions, and means for engaging one end of each cross bar section to the inner end of a like section on the next adjacent support.

In testimony whereof we affix our signatures in presence of two witnesses.

ELLIS E. SHORE.

WILLIAM T. WILSON. [L.s.]

Witnesses:

W. A. SMITH, S. S. FLYNT.