July 22, 1930. G. M. HURFF 1,771,085

SEED CORN RACK

Filed Nov. 19, 1927

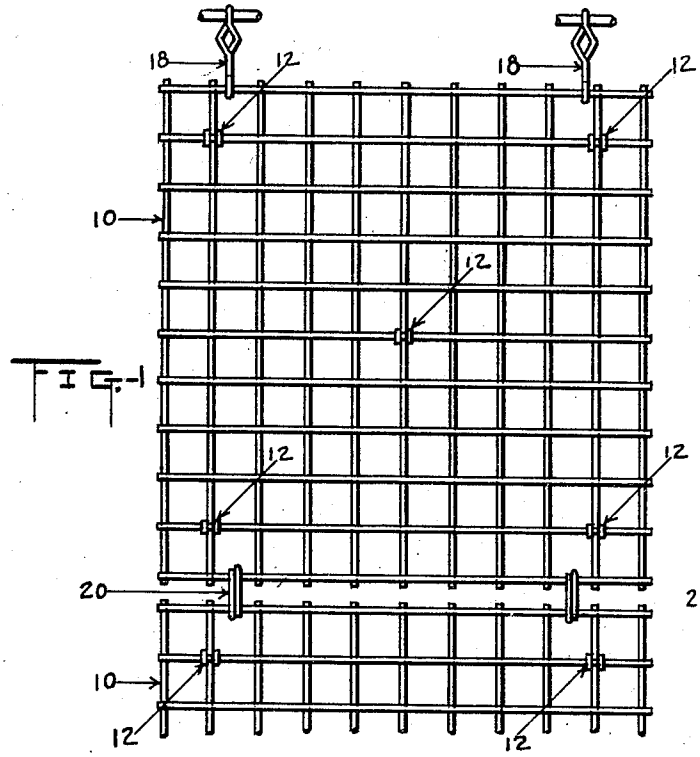


FIG.-1

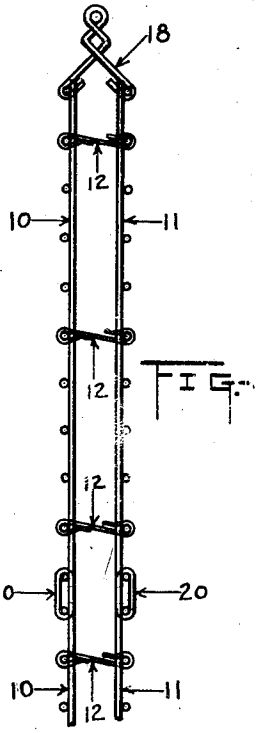


FIG.-2

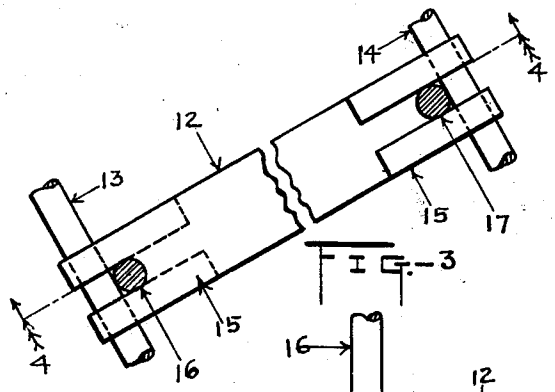


FIG.-3

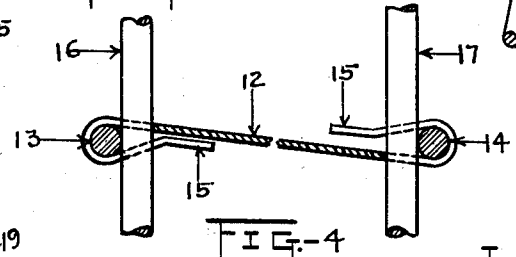


FIG.-4

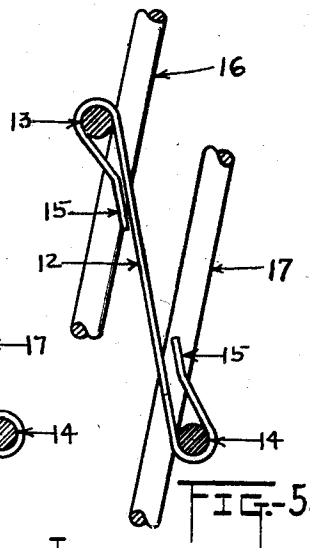


FIG.-5

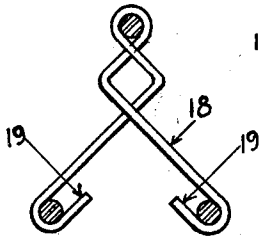


FIG.-6

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UNITED STATES PATENT OFFICE

GEORGE M. HURFF, OF KEWANEE, ILLINOIS

SEED-CORN RACK

Application filed November 19, 1927. Serial No. 234,354.

This invention relates to seed corn racks.

It is the purpose of the present invention to produce a rack in form the simplest, cheapest and most practical for the purpose designed.

The rack itself is preferably formed from wire strands non-interwoven, viz., electrically welded, to the end that the respective cross strands shall be straight, as such construction facilitates close packed relation for shipping.

The most pertinent feature of the invention consists in the provision of an interlocking member adapted to support and relatively space rack sections, to the end of supporting ear corn units, said interlocking member being fashioned for hook engagement with relatively opposed wires of hanger sections, in such relation that said sections may be relatively collapsed, one upon the other, but there being included in such fashioning a relative stop as between the connector members and longitudinal strands, with which they connect in a pivotal relationship so that a definite limit of movement of the sections is had when collapsed sections are elevated for the purpose of relative spacing, whereby when so spaced all of the opposed cross strands will be relatively in parallel relation.

Also, the invention preferably comprehends the permanent uniting of one end of each spacer member with one rack section, and an open hook connection of said spacer with the opposed rack section, whereby said latter section may readily be demounted to facilitate close packing for shipment, as well as a similar convenience to the user. However, if preferred, both ends of the interlocking members may be permanently interlocked with opposed sections, whereby in such form the sections may readily be collapsed, but are not then as readily demountable as in my preferred manner of relating the connector members with opposed sections.

The invention also includes other details of construction hereinafter specified.

In the drawings—

Fig. 1 is a side elevation of the invention, showing the rack and suspension means therefor, and a portion of the second section suspended therefrom;

Fig. 2 is an end view of the invention;

Fig. 3 is a perspective view, partly in section, showing details of the connector and the manner of relating same to cross strands of an opposing section;

Fig. 4 is a detail view in elevation, showing the connector member related to cross and vertical strands of opposed hanger sections;

Fig. 5 is a side elevation, partly in section, showing the hanger sections in collapsed relation; and

Fig. 6 is a detail view of the hanger.

Referring to the drawings, 10 and 11 are hanger sections comprising vertical and transverse wire strand members lying relatively in exact parallelism, the same being sections of electrically welded wire fabric. 12 are connector members for uniting and relatively spacing hanger sections 10 and 11, there being preferably provided five of such connector members disposed as shown in Fig. 1, spaced one from each corner of the section, and one connector at the middle portion of the sections.

Connectors 12 are each formed from a metal plate of such constituency as to permit end portions thereof to be bent into hook form and to reasonably maintain such form under circumstances ordinarily applied to same in connection with their relationship to the hanger sections, to the end of maintaining a proper union thereof with strand members of said hanger sections.

Connector members 12 are formed from metal strip blanks with their end portions longitudinally slotted, as shown. The end portions are bent preferably, the one at the left hand side (see Figs. 3 and 4) in a manner to embrace cross strand 13 and to be compressed thereabout and to contact the lower face of the hanger to form a pivoted or swinging connection with said section strand 13. Also, the opposed end of connector 12 is bent into hook form to embrace a strand member as 14, preferably in a fashion to permit tensioned entry of said wire

strand into the said hook portion, but leaving the inturned end member 15 of the hook relatively spaced from the main body of the connector member, thereby permitting ready separation of the hook from strand 14 to facilitate demounting of the hanger section of which strand 14 is a part. However, if desired, inturned portion 15 of the connector may be similarly compressed with relation to wire strand 14, as in the instance of its opposed end with relation to strand 13, that a permanent union of the connector with the hanger section may be established.

Particular attention is called to the relation of connectors 12 with vertical strands as 16, as shown particularly in Figures 3 and 4, wherein it will be noted that the depth of the slots, after being "hook fashioned" at both ends of the connector member with relation to cross strand 13 and vertical strand 16 at one end, and cross strand 14 and vertical strand 17 respectively of opposed hanger sections, is such that when collapsed hanger sections are being disposed in relative spaced relation, a stop is effected against adjustment to accomplish such spacing, to cause opposed cross strands in each section to be in substantially exact parallelism (see Fig. 4), whereby through the close fit relation of the end slots with the vertical strands and the impinging stress developed between the connector and its relation with strands 13—16 and 14—17, when proper relative spacing of the sections has been accomplished to promote parallelism of strands in opposed sections, a rigid sectional unit is produced and one that may not readily be deflected laterally or upwardly but can only be collapsed downwardly.

Hanger means may be provided for suspending the unit racks. The hanger that I preferably select comprises hanger unit 18, double crossed at its upper end and fashioned with an eyelet and with each of its free ends fashioned with hooks 19 so inclined with respect to its main reach members that by slight compression of the latter, ready entry of the hooks over top strands of the hanger unit sections will be accomplished, and they will be tensionally held by the hangers. 20 are links adapted to connect hanger units in series, as shown in Fig. 1, there being a double set of such links provided as shown in Fig. 2 that each unit section may be independently held.

I have previously invented and patented devices in this art, as the Patent Office records will disclose. Also, I have been actively engaged and interested in the manufacture and sale of corn curing and drying devices for many years. I think I have come in contact with all seed corn hangers and seed corn racks that have appeared on the market, and the present invention represents development resulting from the experience mentioned, and results, I think, in the presentation of a structure possessing the maximum of utility; one that affords a sectional structure that is cheap, that is enduring and whose unit parts may be packed in exact parallelism and in the smallest possible space; one that is readily collapsible for convenience in use upon the farm; and one that is readily demountable. All of such features are essentials to the practical use of seed corn racks.

There is shown herein the preferred form of embodiment of the invention, but it is within my conception that the connector units may be modified in form and details to accomplish the result sought, and therefore I seek to claim all forms of embodiment that lie strictly within the spirit and purpose of the invention here presented.

What I claim is:

1. In a collapsible seed rack of the character described comprising spaced sections formed of a plurality of spaced vertical and horizontal strands, and connector members connecting the spaced sections, each of said connector members being formed of a metal strip slotted at its ends to form spaced projections, the spaced projections at one end of the connector surrounding a vertical strand of one section at a point immediately above a horizontal strand of the same section and extending downwardly around said horizontal strand, the spaced projections at the other end of the connector surrounding a vertical strand of another section at a point immediately below a horizontal strand of the same section and extending upwardly around said horizontal strand.

2. In a collapsible seed rack of the character described, a connection between adjacent sections formed of a plurality of spaced vertical and horizontal strands, consisting of a connector made of a flat metal strip slotted at its ends to form spaced projections and attached at each end to strands of adjacent sections, the projections at one end of the connector surrounding a vertical strand of one of the sections at the closed end of the slot at a point immediately above a horizontal strand of the same section and extending downwardly around the horizontal strand, the projections at the other end of the connector surrounding a vertical strand of another section at a point immediately below a horizontal strand of the same section and extending upwardly around said horizontal strand, the connector being adapted to turn only substantially ninety degrees with respect to the vertical strands of the first said section.

In testimony whereof I have hereunto affixed my signature.

GEORGE M. HURFF.