No. 724,908. PATENTED APR. 7, 1903.

R. R. MAXSON.

BEAN PRESERVING DEVICE.

APPLICATION FILED DEC. 10, 1902.

NO MODEL.

Fig. 1.

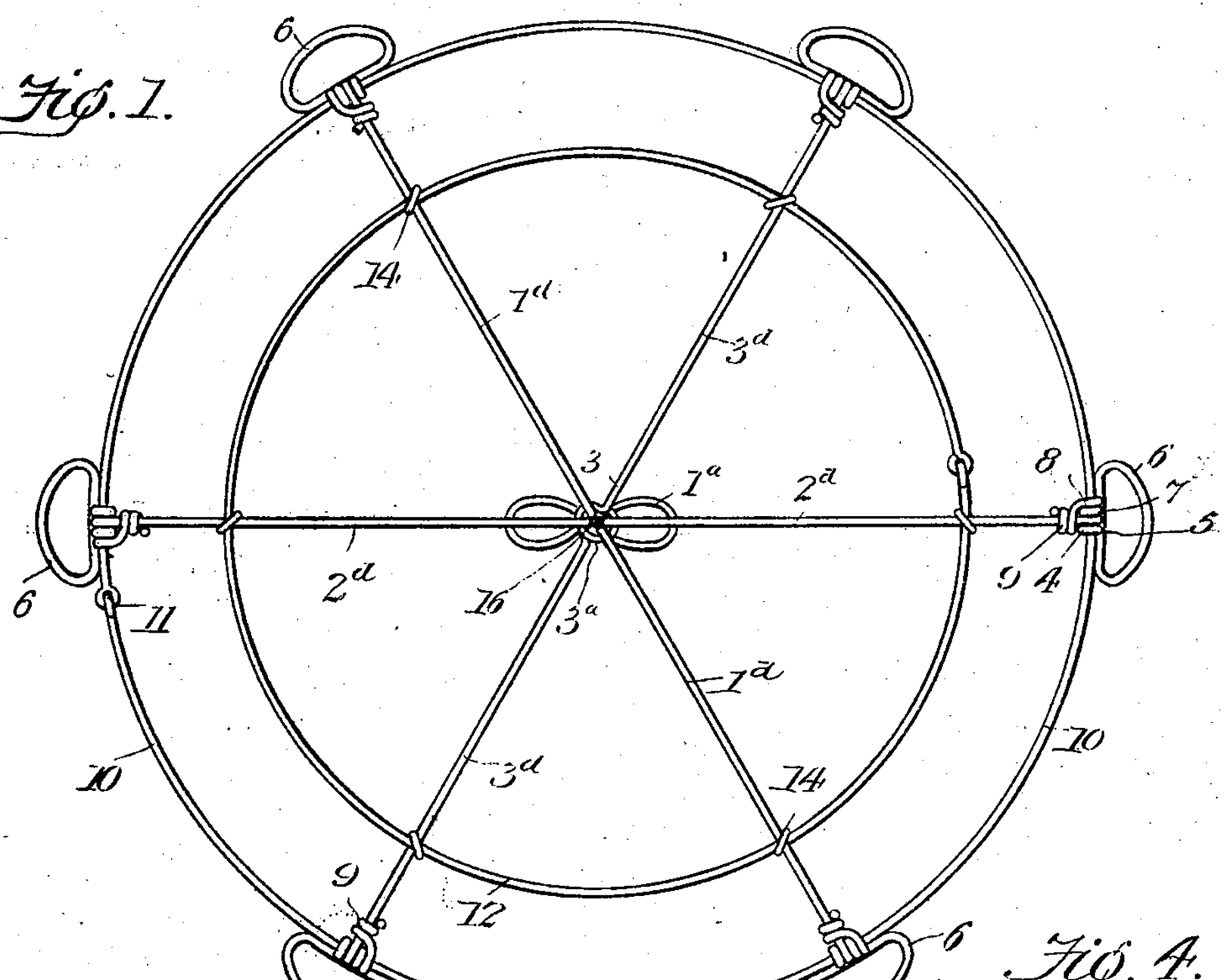


Fig. 3.

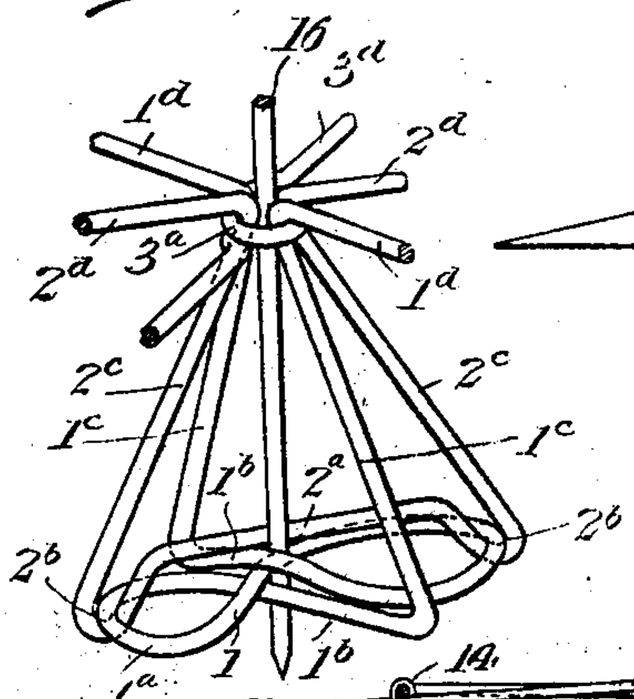


Fig. 2.

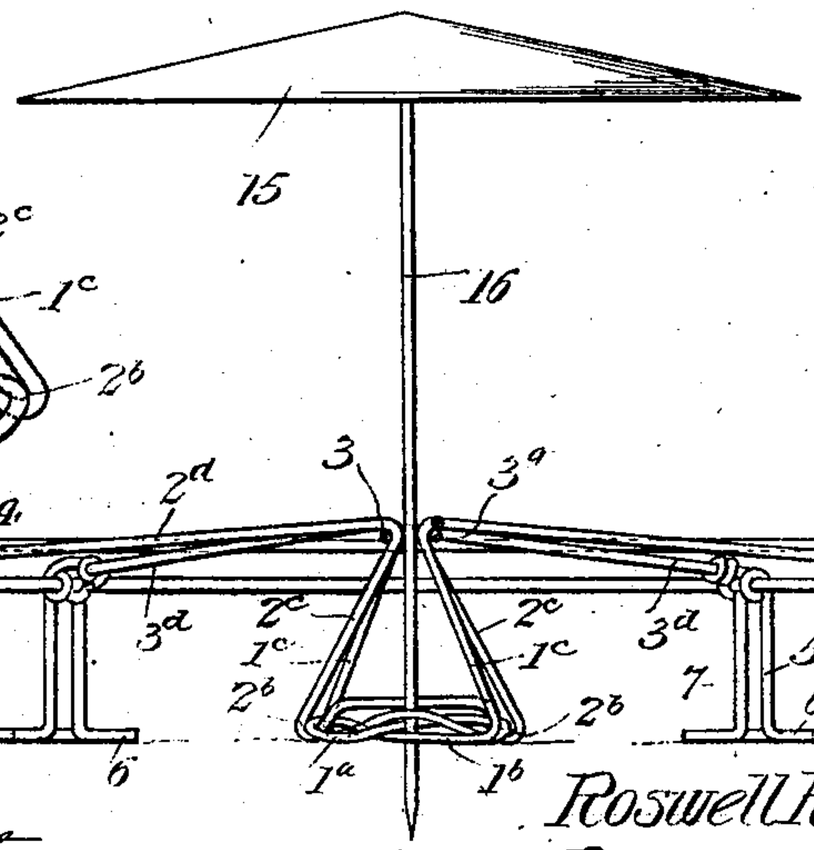
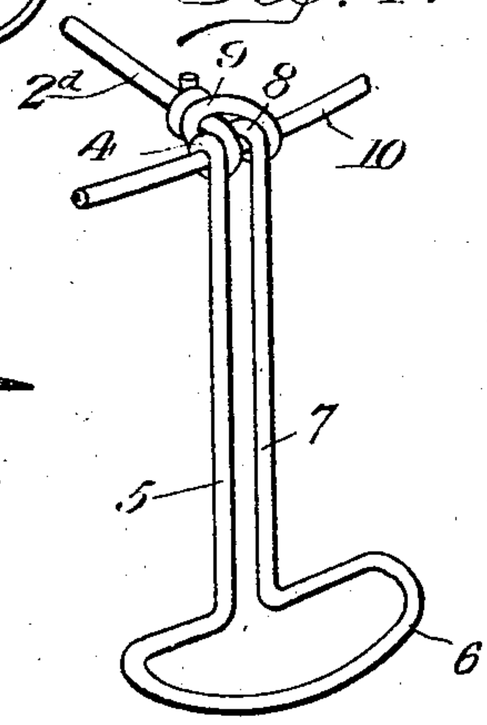


Fig. 4.



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UNITED STATES PATENT OFFICE.

ROSWELL R. MAXSON, OF CHARLOTTE, MICHIGAN.

BEAN-PRESERVING DEVICE.

SPECIFICATION forming part of Letters Patent No. 724,908, dated April 7, 1903.

Application filed December 10, 1902. Serial No. 134,672. (No model.)

To all whom it may concern:

Be it known that I, ROSWELL R. MAXSON, a citizen of the United States, residing at Charlotte, in the county of Eaton and State of Michigan, have invented a new and useful Device for Curing Beans, of which the following is a specification.

This invention relates to a device for curing beans; and it has for its object to provide a frame or supporting device which shall be simple in construction, inexpensive, and easily manipulated, which said frame may be employed to form a support upon which beans may be stacked while curing for the purpose of keeping the vines and pods from contact with the ground, thereby avoiding unnecessary and detrimental wetting or dampening of the same, which usually results in the beans being blackened and rendered unfit for use.

My invention consists in the improved construction of such supporting-frame and in the combination therewith of a protecting device which shall serve to shed rain from the stack protected thereby, thus enabling the curing of the beans to be attained more speedily and satisfactorily than has hitherto been the case.

In the accompanying drawings, Figure 1 is a plan view of a supporting-frame constructed in accordance with the principles of my invention. Fig. 2 is a vertical sectional view showing also the rain-shedding protecting device in position for operation. Fig. 3 is a perspective detail view, on an enlarged scale, illustrating the detailed construction of the central portion of the frame. Fig. 4 is a perspective detail view, on an enlarged scale, illustrating the construction of one of the legs or supports of the frame.

Corresponding parts in the several figures are indicated by similar numerals of reference.

My improved supporting-frame is composed of wire of suitable dimensions, ordinary galvanized wire of gage No. 7 or No. 9 being deemed suitable for the purpose. In the construction of the frame a wire (designated 1 in the drawings) is bent or twisted at its central part to form an 8-shaped loop, (indicated in the drawings by 1^a.) The meeting ends of the wire at the center or crossed portion of the loop 1^a are extended laterally, as shown at 1^b, and the ends of the wire are next bent upwardly in the direction of each other, forming uprights 1^c, the upper ends of which approximate each other, as will be clearly seen in Fig. 3 of the drawings. From the upper extremities of the legs 1^c the wires are bent outward and slightly downwardly, forming the braces 1^d. A second wire is placed above the crossed portion of the 8-shaped loop 1^a, forming a cross-bar 2^a, the ends of which are extended under the opposite extremities of said 8-shaped loop, forming recesses 2^b to support the ends of said loop. The ends of the wire are then bent upwardly in the direction of each other to form the legs 2^c, the upper ends of which approximate each other at the meeting-point of the leg members 1^c, being from thence extended outwardly to form the brace 2^d. A third wire 3 has its central portion coiled or twisted around the legs 1^c and 2^c, at the upper ends of said legs, which are thus tied together by the loop 3^a, formed upon the wire 3, the ends of which are from thence extended outwardly to form braces 3^d. The meeting-point of the legs 1^c and 2^c may be additionally connected by means of solder; but this is not considered necessary or essential. Upon the braces 1^d, 2^d, and 3^d, equidistantly from the center or connecting-point of said braces, are formed eyes 4, from which the ends of said wires are bent downwardly to form leg members 5, which are preferably made shorter than the central legs, to which reference has already been made. The lower ends of the leg members are twisted or bent to form approximately horizontal supporting-feet 6, from which the ends of the wires are bent upwardly, as shown at 7, forming leg members, the upper ends of which are twisted to form loops or eyes 8, from whence the extreme ends of the wires are bent or twisted upon themselves, as indicated at 9. It will be seen that in this manner each one of the braces is provided with a leg comprising the parts 5, 6, and 7 and having at its upper end the loops or eyes 4 and 8. These legs are disposed equidistantly from each other, or approximately so, and through the eyes 4 and 8 of each of said leg members is passed a binding-wire 10, the ends of which are suitably connected, as may be seen at 11, the means of connection being, however, not necessarily as illustrated; but it may be varied to any

extent within the scope of my invention. Thus, for instance, the ends of the wire may be connected by soldering, by welding, or in any other suitable way. A tie-wire bent to form a circular ring 12 is disposed adjacent to the braces 1^d, 2^d, and 3^d either upon the upper or under sides of the latter and is connected to said braces by means of wiring 14. The ends of the wire constituting the ring 11 may be connected in any suitable manner. This ring is disposed intermediately between the binding-ring 10 and the center of the device, preferably at no great distance from the binding-ring.

It will be observed that my improved supporting-frame has several characteristics. One of these is that it is slightly elevated at its central portion, thus enabling it to naturally support a circular stack of a size which will be gaged by the size of the frame. The latter will support the stack at a distance above the ground equal to the height of the legs thereof, the feet at the lower ends of which will prevent said frame from sinking into the ground. Again, the frame is made of very inexpensive material, and the mode of its construction is extremely simple, thus enabling it to be manufactured at a moderate expense.

In connection with my improved supporting-frame I employ a conical protector, as 15, made, preferably, of sheet metal and which may be of any suitable size. This protector is provided with a supporting-rod 16, which may engage the frame or supporting device centrally, or approximately so, and be driven into the ground until the protecting device 15 rests on top of the stack, where it is thus firmly secured in position. This protector thus serves not only to shed rain, but also to bind the stack in position upon the supporting-frame, so that the stack will not be liable to be injured or carried off by violent windstorms.

The operation and advantages of my invention will be readily understood from the foregoing description taken in connection with the accompanying drawings. In the treatment of beans after the vines have been pulled it has been customary to fork them together into small stacks, which have been left upon the ground for the purpose of curing. These stacks it has been necessary to frequently manipulate by turning them, in spite of which even under favorable conditions of the weather the beans have been more or less liable to be injured by direct contact with the ground, while in a wet season the crop is frequently almost a total loss, owing to the impossibility of keeping the beans even moderately dry. By my present invention this may be perfectly accomplished. The vines are supported at a distance from the ground which renders contact impossible and which admits of the passage under the stack of currents of air, which are effective in rapidly drying and curing the beans. If rain should fall, it will be diverted by the protector 15, while the stack at the same time is protected against the wind. The curing of the beans may thus be accomplished without manipulation after they have been once piled upon the supporting device.

Having thus described my invention, I claim—

1. In a device of the class described, a supporting-frame comprising central supporting means, peripheral supporting means lower than the central supporting means, braces extending outwardly from the latter, and rings connecting and supported by said braces.

2. In a device of the class described, a supporting-frame comprising central supporting means, peripheral supporting means lower than the central supporting means, braces radiating from the latter and connecting said central and peripheral supporting means, eyes formed at the intersection of said braces and peripheral supporting means, and a binding-wire engaging said eyes and having its ends connected.

3. In a device of the class described, a supporting-frame comprising a plurality of wires bent to form a central supporting means having upwardly-extending converging legs provided with outwardly-extending braces and tie-wires connecting the said legs and having outwardly-extending braces, supporting devices formed at the outer ends of the said several braces and provided with eyes, and a binding-wire extending through the said several eyes and having connected ends.

4. In a device of the class described, a supporting-frame formed of wire and having central supporting means and peripheral supporting means lower than the central supporting means and provided at their lower ends with outturned feet.

5. In a device of the class described, a frame having a central supporting device comprising horizontally-disposed looped and crossed wires, upwardly-extending converging legs having outwardly-extending braces, and a tie-wire connecting said legs and having outwardly-extending braces.

6. In a device of the class described, a supporting-frame composed of wire and having a central support, peripheral supports lower than the central support and binding-wires, in combination with a conical rain-protector having a supporting-rod adapted to engage the ground through the central portion of the supporting-frame.

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