June 26, 1923.

1,460,098

W. C. HOUSER

PORTABLE KNOCKDOWN SHELTER

Filed May 23, 1922

2 Sheets-Sheet 1

FIG. 1.

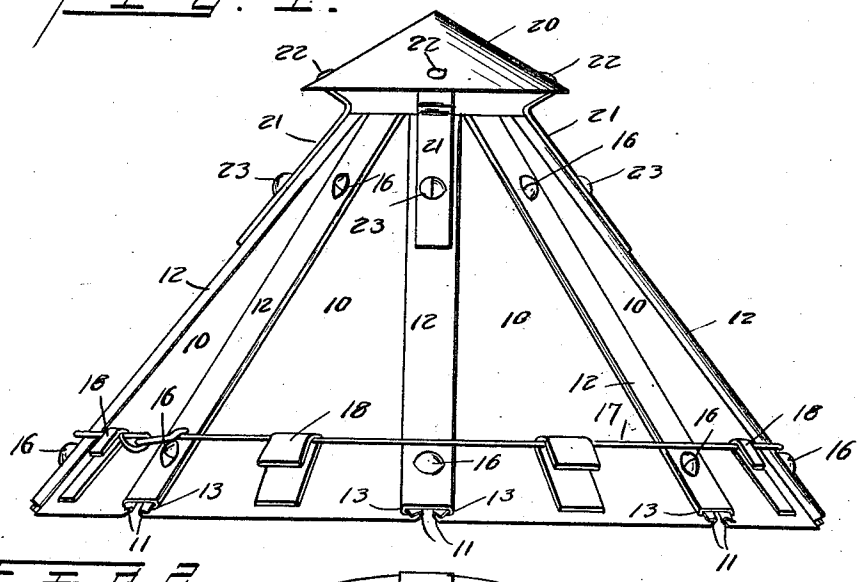
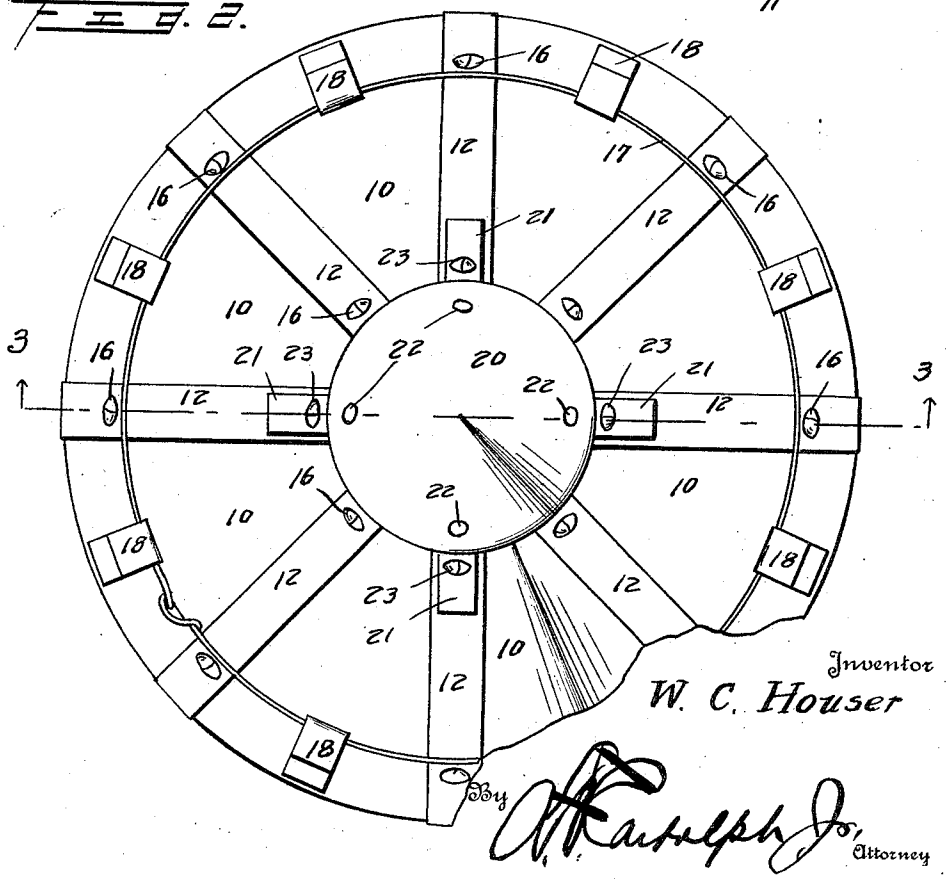


FIG. 2.



Inventor

W. C. Houser

By Randolph Jr.

Attorney

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Filed May 23, 1922. 2 Sheets-Sheet 2

FIG. 3.

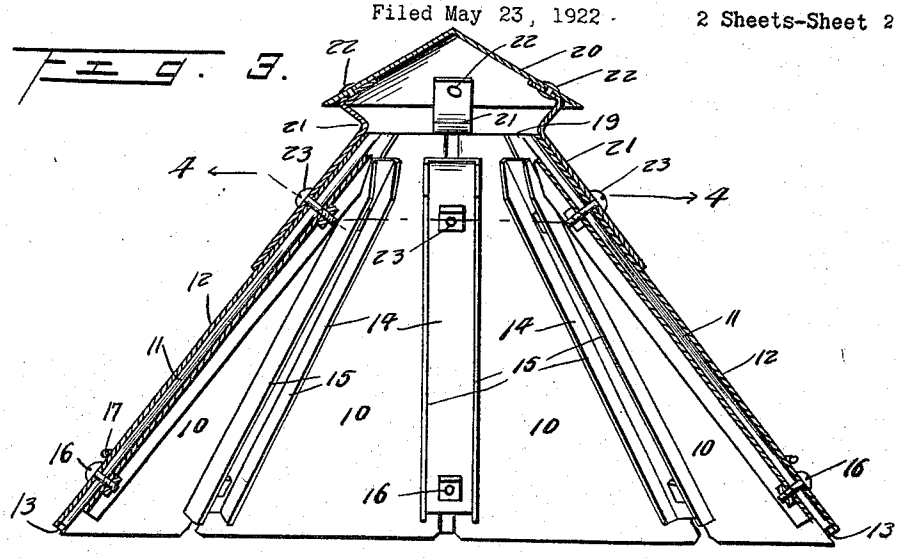


FIG. 4.

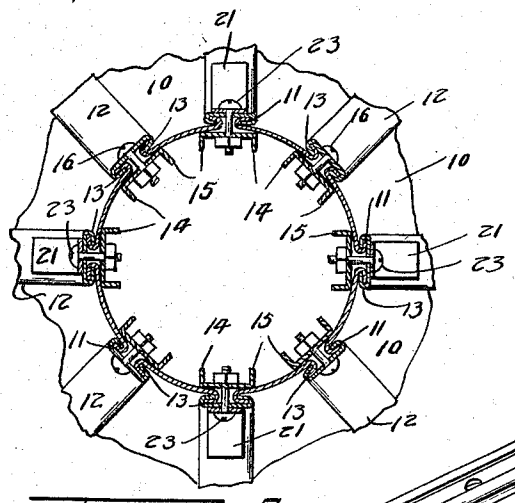


FIG. 5.

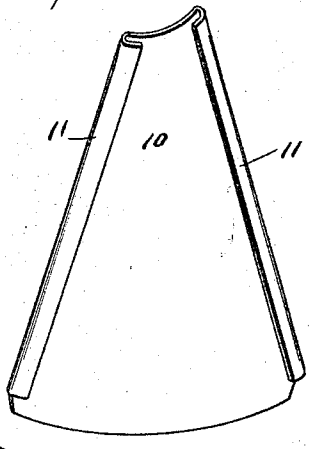


FIG. 6.

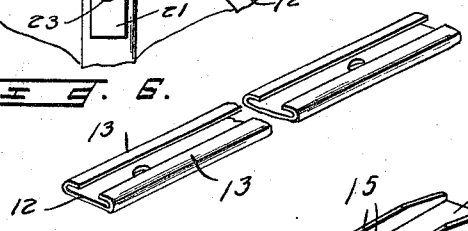
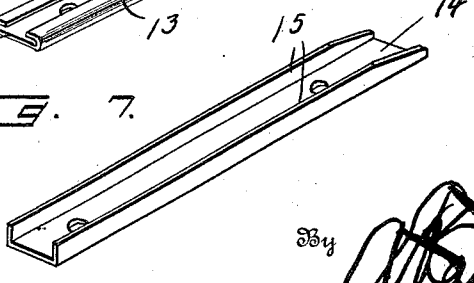


FIG. 7.



Inventor
W. C. Houser

By [signature] Attorney

Patented June 26, 1923. 1,460,098

UNITED STATES PATENT OFFICE.

WILLIAM C. HOUSER, OF CASEY, ILLINOIS.

PORTABLE KNOCKDOWN SHELTER.

Application filed May 23, 1922. Serial No. 563,096.

To all whom it may concern:

Be it known that I, WILLIAM C. HOUSER, a citizen of the United States, residing at Casey, in the county of Clark and State of Illinois, have invented certain new and useful Improvements in a Portable Knockdown Shelter; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a portable, knockdown shelter or roof.

It is aimed to provide a novel and efficient means to protect hay stacks, grain stacks and the like or piles of material from the rain and the elements so as to avoid loss in value through undue exposure.

An object is to provide a construction in which the parts are simple and may be readily assembled or disassembled and in connection with a suitable ventilator means.

Another object is to provide a construction in which the sections of the shelter or hood are segmental whereby they may be secured in operative relation by strips disposed internally and externally at their joints and connected.

Another object is to provide a construction having hooks or the like to coact with a ring of less diameter than the greatest diameter of the shelter in order to prevent detachment of the parts should they become loose through constant use.

Additional objects and advantages will become apparent from a consideration of the description following taken in connection with accompanying drawings illustrating one practical embodiment.

In said drawings:—

Figure 1 is a side elevation of the improved shelter showing it in use on a stack;

Figure 2 is a plan view thereof;

Figure 3 is a vertical sectional view on the line 3—3 of Figure 2;

Figure 4 is a transverse sectional view taken on the line 4—4 of Figure 3 and across the joints between two of the sections;

Figure 5 is a detail perspective view of one of the sections;

Figure 6 is a detail perspective view of one of the connecting strips and

Figure 7 is a detail perspective view of one of the rafters.

Like reference characters designate like or similar parts in the different views.

In reducing the invention to practice, it is preferably generally formed of conical or hood shape as shown. It may employ a plurality of segmental sections or plates 10 whose longitudinal edges are formed into flanges 11. Securing strips are provided at 12 which have inturned flanges 13 adapted to slidably receive the flanges 11 in hook fashion to thus connect the sections 10 together.

At the joints between the sections 10 and on the interior of the shelter, rafter strips 14 may be provided, which are reinforced by longitudinal side flanges 15. Suitable securing elements like bolts or rivets 16 for instance may pass through the strips 12 and 14 and intermediate the flanges 11 of the sections. The flanges 15 by engagement with the stacks serve to space the sections 10 therefrom in order that effective ventilation of the stacks will not be hampered.

A securing ring or band 17, of less diameter than the greatest diameter of the shelter, surrounds the same relatively close to the base thereof. On the sections 10, hooks or studs 18 may be provided adapted to engage the band 17. Also the heads of elements 16 are in the path of downward movement of the band 17. As a result, the parts cannot detach or accidentally separate should they loosen through constant use.

At the top of the shelter or hood, a ventilating opening is provided at 19 and over the same a cap 20 preferably conical as shown, is disposed in spaced relation thereto. This cap may be secured in place in any suitable manner and for instance by means of arms 21 secured at 22 to the cap and removably bolted or otherwise secured as at 23 to the strips 12 and 14.

It will be realized that the various parts of the shelter are knocked down and portable so that the device will occupy minimum space when not in use and so that it may be readily transported from place to place. At its destination, the parts are readily attachable to each other and about a stack as suggested in Figure 1 or if desired the parts may all be connected and then bodily moved into place over the stack or the equivalent, depending on the size of the shelter and the facility of handling it.

As merely one practical embodiment has been illustrated and described, it is to be understood that changes in the details may be resorted to provided they fall within the spirit and scope of the invention.

I claim as my invention:—

1. A sheltering device of the class described having a hood-shaped body, and spacing means extending therefrom to engage sheltered material to provide a ventilating space.

2. In a sheltering device of the class described, body sections, rafter sections within the device having spacing flanges engageable with sheltered material to provide a ventilating space therefor, and means cooperating with said last sections to secure the body sections together.

3. In a sheltering device of the class described, a plurality of detachable body sections substantially of segmental form, a securing band about said device of less diameter than the greatest diameter of the device, and means on said sections to coact with said band to prevent sliding movement of the sections relatively thereto.

4. In a sheltering device of the class described, a plurality of segmental body sections, rafter members within the device having flanges to engage the sheltered material to space the sections therefrom for ventilation, said sections having longitudinal edge flanges, securing strips applicable to said latter flanges to connect the sections, fastening elements passing through said rafter members and strips, hooks on said sections, and a securing band about the device of less diameter than the greatest diameter of the device and engaged by said hooks.

In testimony whereof I affix my signature.

WILLIAM C. HOUSER.