C. B. HURST.

CORN OR GRAIN CRIB.

APPLICATION FILED OCT. 21, 1907.

906,027.

Patented Dec. 8, 1908.

2 SHEETS—SHEET 1.

Fig. 1.

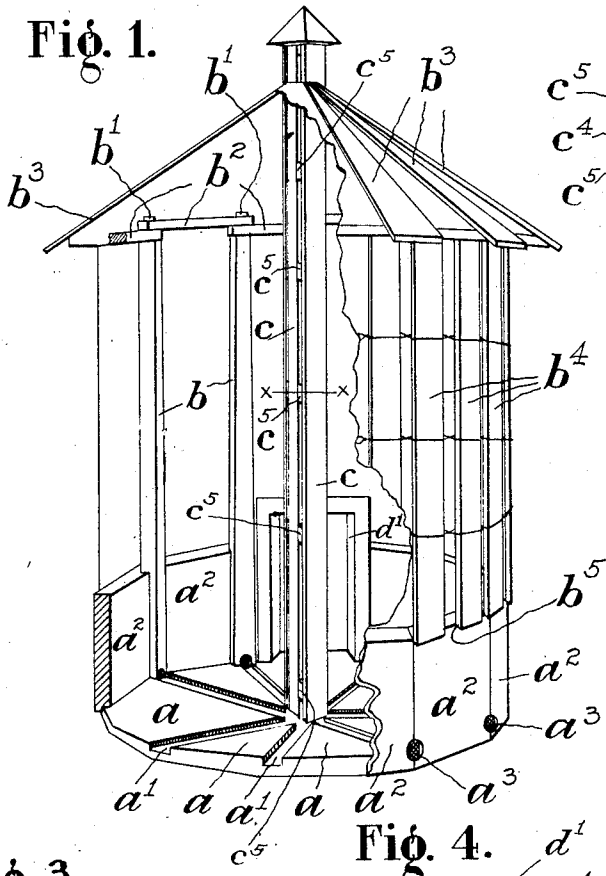


Fig. 2.

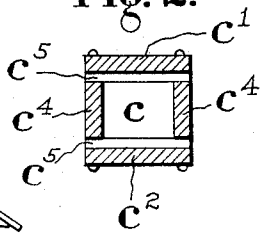


Fig. 3.

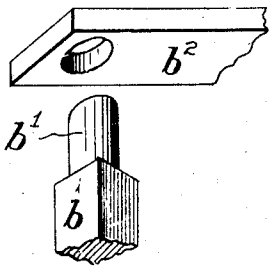
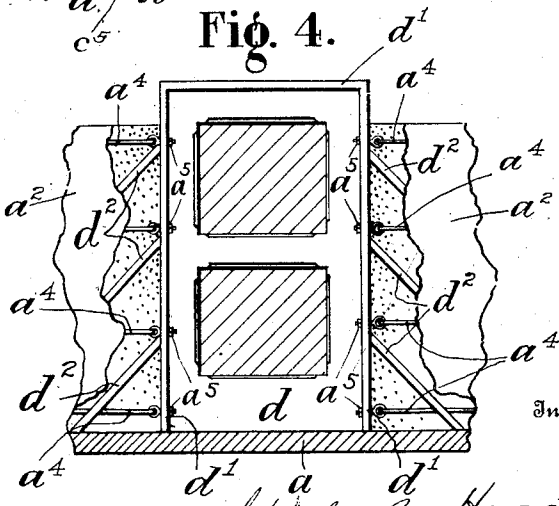


Fig. 4.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 6.

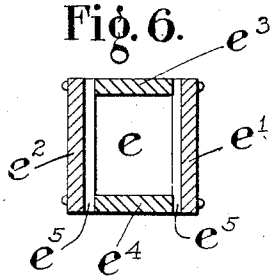


Fig. 5.

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UNITED STATES PATENT OFFICE.

CHARLES B. HURST, OF CHILLICOTHE, OHIO.

CORN OR GRAIN CRIB.

No. 906,027. Specification of Letters Patent. Patented Dec. 8, 1908.

Application filed October 21, 1907. Serial No. 398,333.

To all whom it may concern:

Be it known that I, CHARLES B. HURST, a citizen of the United States, residing at Chillicothe, in the county of Ross and State of Ohio have invented certain new and useful Improvements in Corn or Grain Cribs, of which the following is a specification.

My invention relates to improvements in cribs for corn and grain.

The object of my invention is to provide a device of this character which shall be simple and durable in construction and cheaply built, and also one which will be proof against the invasion of rats, etc.

A further object of my invention is to provide improved means for ventilating a structure of this kind.

My invention consists in the construction and combination of parts hereinafter described and set forth in the claims.

In the accompanying drawings Figure 1 is a side elevation of a structure embodying my invention, the wall of which is partly broken away to show the interior. Fig. 2 is a cross-section of the central support. Fig. 3 is a detail of a portion of the supports of the roof. Fig. 4 is a detail of the door. Fig. 5 is a side elevation of the structure on a larger scale than in Fig. 1 the side walls being partly broken and shown in section to better illustrate the interior, this view showing some features not shown in Fig. 1. Fig. 6 is a detail of one of the ventilators shown in Fig. 5.

Like parts are represented by similar characters of reference.

In said drawings *a* represents the floor or base of the structure, formed with a series of radial grooves, a^1, open at the top and terminating at a common point in the center, this floor being constructed preferably of cement.

a^2 a^2 represent sections of cement extending around the floor portion to form the side walls of the structure, these sections, a^2, extending up for any suitable distance and being joined together by a series of interengaging tie-rods, a^4, in the manner described in my prior patent No. 767,690 issued Aug. 16, 1904. Partly embedded in these cement side wall sections are a series of vertical supporting-posts *b*. The upper end of these posts are reduced as shown in b^1, Fig. 3, and fitting over these reduced portions, b^1, are a series of connecting beams, b^2, these connecting beams forming supports for one end of the rafters, b^3, the inner ends of the rafters being supported by the central post, *c*, to which they may be nailed or secured in any suitable manner. The roofing (not shown) may be of any desired construction.

The central post, *c*, is constructed of four walls, c^1, c^2, c^3, c^4, so as to form a passage way throughout its entire length, the lower end of this hollow support communicating with the grooves, a^1, and the upper end extending through the roof and being open to the atmosphere. The side walls are further spaced apart by spacing blocks, c^5, as shown, so that the hollow central support is practically open to the atmosphere throughout its entire length.

The radial grooves, a^1, communicate with the outside atmosphere through the medium of openings, a^3, in the cement side wall sections; these openings being adapted to extend through the vertical supporting posts, *b*, there preferably being one of these posts for each radial groove and said posts being embedded in the cement side wall at point where the outer ends of said grooves terminate, which is preferably at the joints of the cement sections. Screens are preferably placed in the openings, a^3, to prevent the entrance of mice and rats.

In Fig. 5 are shown a series of auxiliary hollow ventilators, *e*, which communicate with air passage of said central post, *c*, radiate therefrom and join the radial grooves, a^1, in the floor of the structure; these auxiliary ventilators being constructed in the same manner as the central post, the side walls, e^1, e^2, e^3 and e^4 being spaced apart by blocks, c^5, as shown in Fig. 6. These auxiliary ventilators will also act as supports for the central post, *c*.

Secured to the vertical supporting posts, *b*, above the cement side walls, a^2, are a series of slats, b^4, these slats being preferably wired to the supporting posts as shown and being adapted to slightly over-hang the cement side walls as shown at b^5, to guard against rats jumping up from the ground and securing a footing on the side walls.

In Fig. 4 I have illustrated a door *d*, located in the cement side walls. d^1 represents the door frame, to the sides of which are secured eyes, a^5, to which are secured the series of tie-rods a^4, the tension on these tie-rods serving to hold the frame securely in position. To prevent the frame from spread-

ing when the tension is put on the tie-rods and before the cement work is put in, I provide a series of braces, d^2, on each side of the frame.

By the construction described it will be seen that I have provided a structure which will be substantial and of a permanent character; one that will be thoroughly ventilated; one that will be proof against the invasion of rats and other rodents; and one that can be built in sections and readily transported from the factory and easily and quickly placed together.

Having thus described my invention, I claim:—

1. In a grain crib, a floor, said floor having a series of air passages, an air flue open at its sides, and connections between said floor air passages and said flue, substantially as specified.

2. In a grain crib, a central vertical hollow post, said hollow post having openings on its sides, and a floor having a laterally-extending air passage therein which communicates with said hollow post at its inner end and with the atmosphere at its outer end, substantially as specified.

3. In a grain crib, a floor, side walls, and an air flue, open at its sides, said floor having air passages connecting with the bottom of said air flue and extending through said side walls, substantially as specified.

4. In a grain crib, a main air flue having openings on its sides, a floor having air passages connecting with said main air flue and auxiliary air flues or ventilators extending from said air passages to said main air flue, substantially as specified.

5. In a grain crib, a floor, a series of open radial grooves in said floor, a central hollow post connecting with said grooves at the bottom, said hollow post being open at intervals along its sides, and said grooves being open to the atmosphere at their outer ends, substantially as specified.

6. In a grain crib, a central hollow post open at the sides, a floor having a series of radial air passages connecting with said hollow post, side walls having air inlets connecting with said air passages, vertical supports supported by said side walls having a series of open slats above said side walls, and a roof supported by said vertical supports, substantially as specified.

In testimony whereof, I have hereunto set my hand this 3d day of October 1907.

CHARLES B. HURST.

Witnesses:
FRANK. P. HINTON,
MATTHIAS T. GUENTHER.