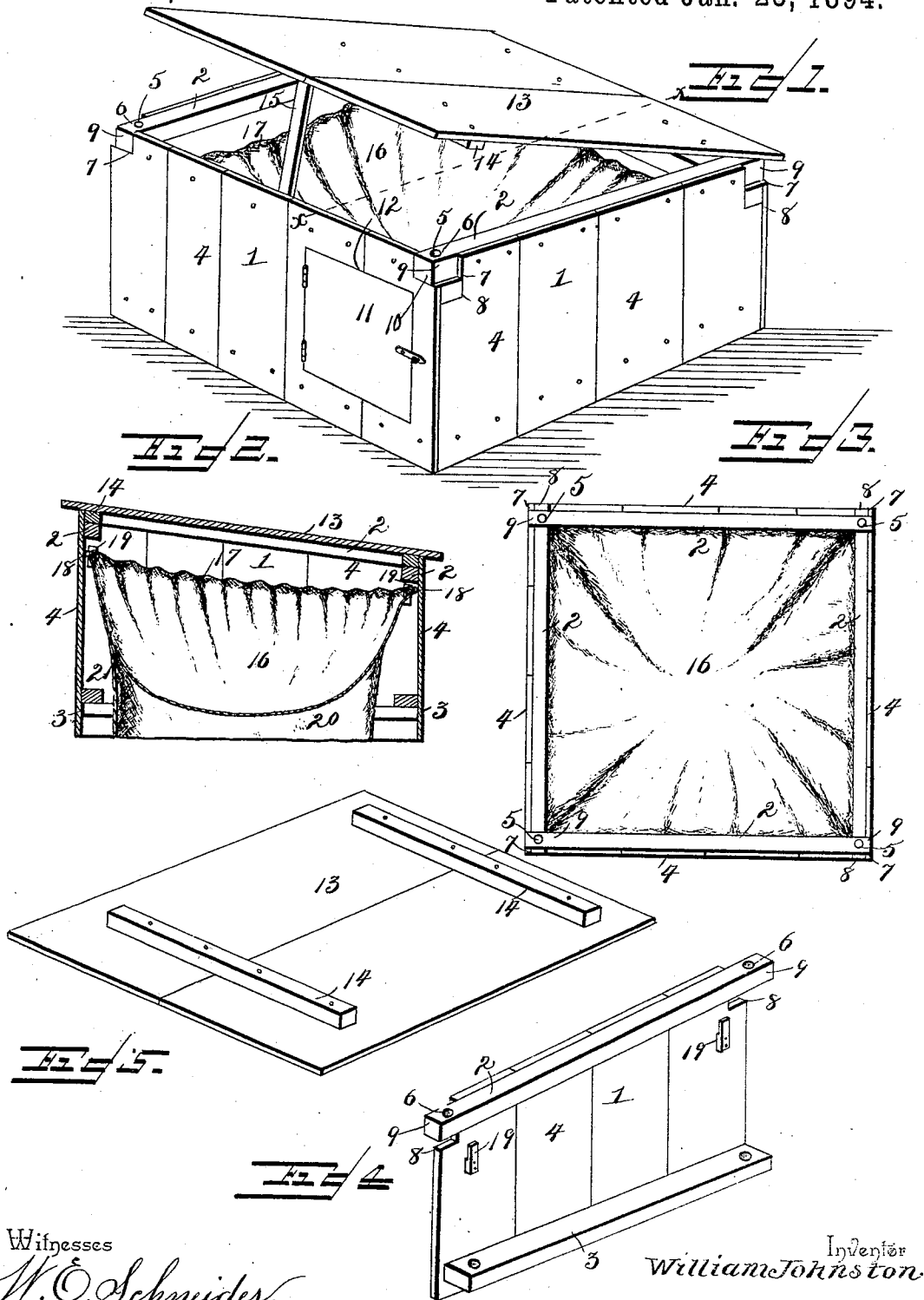


(No Model.)

W. JOHNSTON.
FARROWING BOOTH FOR BROOD SOWS.

No. 513,186.

Patented Jan. 23, 1894.



Witnesses

W. E. Schneider.

[Signature]

Inventor

William Johnston.

By *his* Attorneys,

Chas. H. & Co.

UNITED STATES PATENT OFFICE.

WILLIAM JOHNSTON, OF ESSEX, IOWA.

FARROWING-BOOTH FOR BROOD-SOWS.

SPECIFICATION forming part of Letters Patent No. 513,186, dated January 23, 1894.

Application filed March 7, 1893. Serial No. 464,932. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JOHNSTON, a citizen of the United States, residing at Essex, in the county of Page and State of Iowa, have
5 invented a new and useful Farrowing-Booth for Brood-Sows, of which the following is a specification.

My invention relates to a farrowing booth for brood sows, to protect the latter, and their
10 litters, from cold when due to farrow in cold weather, and the objects of my invention are to provide means for arranging a permanent textile covering so as to be constantly in contact with the sow and her litter; to provide a
15 depending curtain to protect the occupants of the inclosure from the sides of the latter and to fall over and close the entrance to the inclosure; to provide means for removably attaching the covering to the frame of the inclosure and suspending the same in the desired
20 position therein; to provide a removable imperforate lid or top, for the inclosure, which may be adjusted to furnish the desired ventilation; and to provide a knock-down construction of inclosure, whereby the latter may
25 be arranged in compact form for transportation or storage.

Further objects and advantages of my invention will appear in the following description, and the novel features thereof will be
30 particularly pointed out in the appended claims, such claims being construed in the light of the state of the art and of the existing law.

In the drawings: Figure 1 is a perspective view of a device embodying my invention. Fig. 2 is a central section of the same, upon
35 the line $x-x$ of Fig. 1. Fig. 3 is a plan view with the lid or roof removed. Fig. 4 is a detail view, in perspective, of one section or member of the structure. Fig. 5 is a similar view of the lid or roof.

Similar numerals of reference indicate corresponding parts in all the figures of the
45 drawings.

The frame-work, constituting the inclosure, comprises a series of vertical walls or
50 sides, 1, which are detachably connected to form separable sections or members of the frame-work. These separable sections or

members, 1, consist of horizontal upper timbers, 2, and lower timbers, 3, the latter being arranged at an interval from the ground or floor of the inclosure, for a purpose hereinafter explained. These parallel timbers, 2
51 and 3, carry the sheathing boards, 4, which form the walls of the inclosure. The horizontal timbers of the front and rear walls of the inclosure are spaced closer together than those of the side walls, as shown clearly in
60 the drawings, whereby the ends of the timbers of the front and rear walls fit between those of the side walls; the upper timbers of the side walls being arranged flush, at their upper
65 sides, with the upper ends of the sheathing-boards, and the upper timbers of the front and rear walls being set down from the upper edges of the sheathing boards, carried
70 thereby, a distance equal to the width of the upper timbers of the side walls. The overlapping ends of the timbers are detachably connected by means of devices, which in this case consist of vertical pins, 5, which fit in
75 registering perforations, 6, in said overlapping ends.

Any suitable means may be employed for the connection of the sections or members of the structure, which will fulfill the requirement of being detachable, and while bolts
80 may be employed in this connection they are not preferred for the reason that their detachment necessitates the previous disengagement of their nuts, which are liable to become rusted and resist the efforts of the
85 operator.

It is to avoid the necessity of using bolts that I have adopted the peculiar relative arrangement of timbers above described. By this arrangement the sections or members of the inclosure cannot become disconnected in
90 case the occupants of the same raise one of the sides.

The sheathing boards forming the front and rear walls of the structure are provided at their upper corners with angular notches,
95 7, and the upper timbers, 2, of the side walls are extended beyond the side edges of the sheathing boards carried thereby to engage in such notches: the extended ends of said side timbers are designated by the numeral 8. 100

Also, the upper timbers of the front and rear walls are extended as shown at 9 to engage angular notches in the side-walls, as shown at 10. By this peculiar interlocking joint the various sections or members constituting the frame-work of the structure are firmly united and rendered interdependent, when connected, and yet may be disconnected by the simple withdrawal of the pins, 5, at the angles.

10 The front wall of the structure is provided with an entrance door, 11, which is hinged in position to close into the door-opening, 12. It may be provided with any suitable locking devices.

15 This completes the description of the frame-work of the booth, or of so much thereof as is required when the device is to be arranged in a building or under a shed, but when it is designed to be arranged in the open air, without such supplemental protection, I employ a lid or roof, 13, provided with transverse cleats, 14, attached to its under surface, and set in slightly from its extremities, to fit between the upper edges of the front and rear walls of the frame-work. This arrangement of the cleat at the rear edge of the lid or roof with relation to the rear wall of the inclosure, forms a hinge connection, as indicated in Fig. 2, whereby the front edge of said lid may be elevated, and held at any desired inclination by means of a suitable prop, 15, to admit of a circulation of air and furnish light, &c.

By this relative arrangement of parts I attain the advantages of a hinged lid or roof, and at the same time permit of the removal of the latter, at will, when it is desired to pack or store the structure.

The textile covering, 16, which is draped within the inclosure to protect the occupants from cold, consists of a sheet of fabric, such as canvas, which is provided at its edges with a sheath, 17, in which is threaded a running cord or rope, 18. The edges of the covering are somewhat puckered or gathered upon this running cord or rope in order to cause the intermediate or central portion to sag or fall close to the floor of the inclosure and lie in contact with the occupants whether the latter are in a standing or a lying posture. The cord or rope, 18, is exposed at intervals and looped over fasteners or hooks, 19, upon the walls of the structure just beneath the upper timbers. This covering is also provided with a supplemental depending curtain, 20, which is attached at its upper edge to the covering at a prescribed interval from its edges and falls freely to the floor so as to surround the space occupied by the sow and her litter. When the door is left open to allow of the free entrance and exit of the occupants this curtain falls over the same and thus excludes the cold air without completely cutting off a healthy circulation of air and without interfering with the liberty of the occupants. The lower timbers forming parts of the sections or members of the

structure are arranged at an interval from the floor of the inclosure to enable them to fulfill the additional function of guards to prevent the sow from lying upon and crushing or smothering her pigs. The interval beneath these guards provided a surrounding airspace, 21, to furnish an imprisoned pig with air, and, if necessary, to enable it to escape and reach a safer position.

The functions of the various parts of my improved booth and the advantages gained by the improvements have been pointed out in the course of the above description and will be clearly understood by any one skilled in the art without recapitulation; and furthermore, it will be understood that changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of my invention.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination of a frame-work having side-walls provided with horizontal timbers, the extended ends of which overlap and are connected at the corners of the frame work, the upper timbers of one pair of opposite walls being arranged flush with the upper edges of the walls, and the upper timbers of the other pair of opposite walls being set down from the upper edges of the walls, and a lid or roof provided with depending cleats, which are set in from the opposite edges thereof to fit between the upper edges of the last-named walls to form a hinge-joint with a flexible covering connected to said sections or members and suspended in the inclosure, substantially as specified.

2. The combination with a framework or inclosure, of a peripherally supported, centrally depending flexible covering, and a curtain depending from said covering and surrounding a central space in the framework or inclosure, of which the intermediate portion of said covering forms the top, substantially as specified.

3. The combination with a knock-down frame-work or inclosure, comprising separable sections of a covering provided with a peripheral sheath, a running cord or rope threaded in said sheath and exposed at intervals, and cleats attached to the sections of the frame-work to engage the exposed portions of the cord or rope, substantially as specified.

4. The combination with a frame-work or inclosure, of a textile covering having a puckered or gathered edge and a sagging central portion, means to support the covering in said frame-work or inclosure, and a flexible curtain connected to said covering and surrounding a central area, substantially as specified.

5. The combination with a framework or inclosure, having side walls provided above their lower edges with horizontal cleats which

extend inward above the plane of the floor of the booth to form guards, of a textile covering secured peripherally to the side walls and provided with a depending curtain surrounding a central area and arranged adjacent to the inner edges of said guards, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM JOHNSTON.

Witnesses:

T. K. ELLIOTT,
J. P. NYE.