

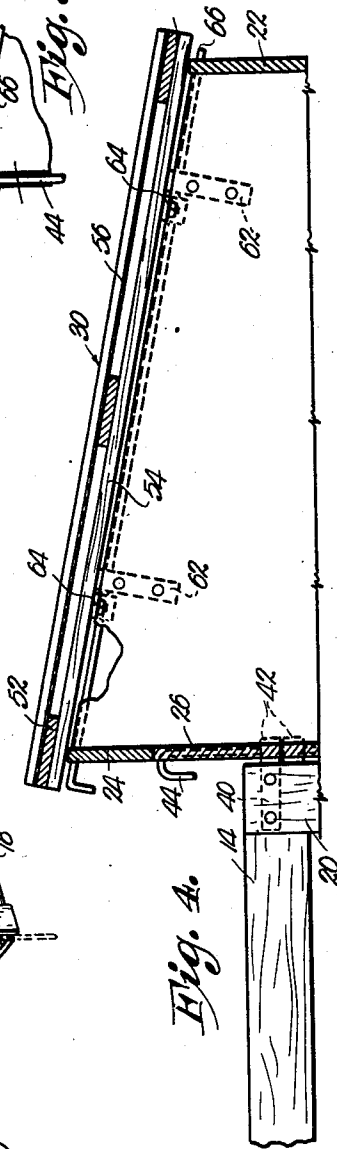
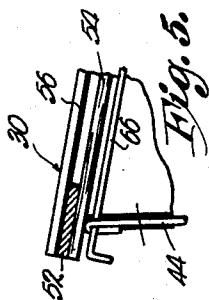
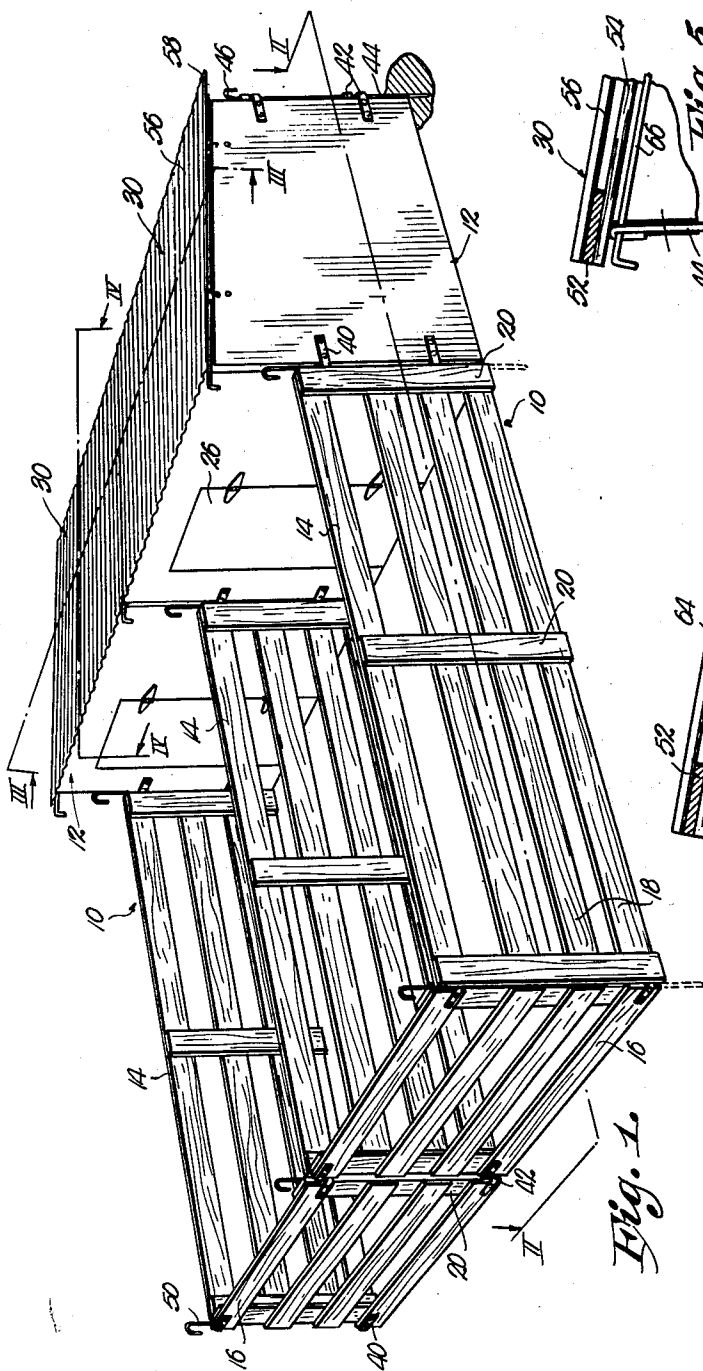
May 18, 1954

M. A. MEYER
COMBINATION COLLAPSIBLE PORTABLE
BUILDING AND PEN STRUCTURE

2,678,629

Filed April 10, 1950

2 Sheets-Sheet 1



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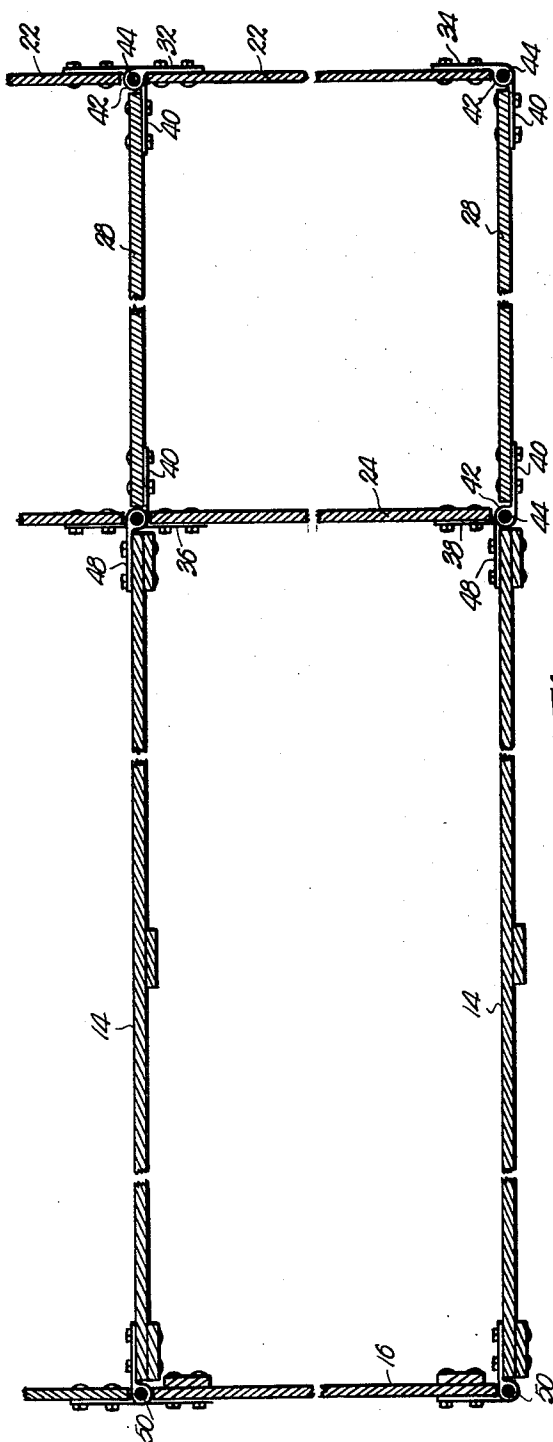


Fig. 2.

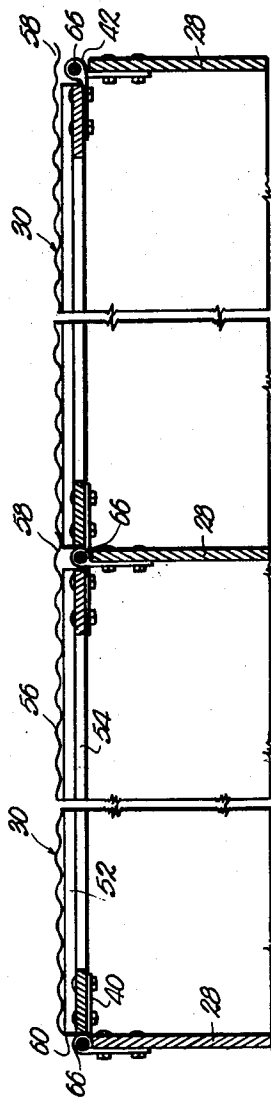


Fig. 3.

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UNITED STATES PATENT OFFICE

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COMBINATION COLLAPSIBLE PORTABLE
BUILDING AND PEN STRUCTURE

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1 Claim. (Cl. 119—20)

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This invention relates to shelters and pens for domestic animals, particularly hogs and has to do especially with a combination shed and pen, both of a fully collapsible nature whereby to render the entire assembly of parts portable, easily handled and capable of assembling in side-by-side relationship as desired.

It is the most important object of the present invention to provide a combination building and pen, each of which is provided with a number of separable parts that are interconnected by quickly releasable structure, certain of which serve to releasably join the pen with the building.

Other objects of the present invention include the way in which the buildings and the pens are set up in series relationship whereby certain of the side walls of the building and certain of the panels of the pens, are common to two buildings and two pens respectively; the way in which one side wall of each building, two additional side walls and two of the panels of the pen are all joined together by common releasable structure; the way in which the roofs of the buildings are releasably joined with the side walls thereof; the manner of jointing the roofs for rendering the same weather-proof; the manner of coupling the roof with the pens and the side walls of the building; and many other minor details of construction, all of which will be made clear or become apparent as the following specification progresses.

In the drawing:

Figure 1 is a perspective view of a combination collapsible, portable building and pen structure made in accordance with my present invention.

Fig. 2 is a substantially horizontal, enlarged, fragmentary, cross-sectional view taken on line II—II of Fig. 1.

Fig. 3 is a fragmentary, vertical, enlarged, cross-sectional view taken on line III—III of Fig. 1, looking in the direction of the arrows.

Fig. 4 is a fragmentary, vertical, enlarged, cross-sectional view taken on line IV—IV of Fig. 1; and

Fig. 5 is a fragmentary, detailed, enlarged, cross-sectional view illustrating a slightly modified form of the invention.

It is an important factor in the hog raising business to provide shelter and pen construction that is easily moved from time to time to new ground and to also provide structures that may be assembled in series relationship so as to reduce the cost of construction and to conveniently dispose all of the sheds and pens in a relatively close assembled condition.

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These aims and others are accomplished through the structure shown in the drawings and in Fig. 1 thereof, a pair of pens 10 and a pair of buildings 12 are shown operably interconnected in the manner contemplated by this invention.

Pens 10 comprise a plurality of substantially identical panels 14 and 16, each having a series of spaced-apart horizontal rails 18 and a number of upright bars 20. It is noted that the centermost panel 14 constitutes one side of each of the pens 10, and that the buildings 12 serve to close one end of the corresponding pen 10. Buildings 12 each comprise a back wall 22, a front wall 24 having a door 26 therein and a pair of side walls 28. Additionally, each shed 12 has a roof broadly designated by the numeral 30. Here again, it is noted that one side wall 28 is common to both sheds 12.

Back wall 22 is provided with a number of straps 32 and 34 and front wall 24 is likewise provided with a number of straps 36 and 38. Side walls 28 have a number of opposed pairs of straps 40. Straps 32, 34, 36, 38 and 40 are all of substantially identical character and are bolted or otherwise affixed directly to the respective wall of each shed 12 respectively. Additionally, each of these straps is provided at the outermost free end thereof with an eyelet 42 for receiving vertical stakes 44 each provided with a loop 46 at the uppermost end thereof to facilitate removal.

It is clear that the four walls 22, 24, and 28—28 are interlocked through the medium of the aforesaid straps and stakes 44. It may be desirable to drive the stakes 44 into the ground as indicated in Fig. 1 of the drawings. The stake 44 that interconnects wall 22 with the partition wall 28, also serves as a means of connecting the rear wall 22 of one building 12 with the rear wall 22 of the other building as shown in Fig. 2 of the drawings. Additionally, it is noted that all of the panels 14 and 16 are provided with straps 48 of identical nature with the straps of buildings 30 above explained and that each side wall 28 receives a corresponding panel 14 and is coupled therewith through the medium of a stake 44. Obviously, straps 40 of side walls 28 adjacent panels 14 are offset with respect to the straps 48 of panels 14 as illustrated in Fig. 4 of the drawings. Panels 16 are releasably locked with panels 14 through the medium of stakes 50 in the same manner as above described with respect to stakes 44.

Each of the roofs 30 includes a plurality of elongated strips 52 superimposed upon a number of rafters 54 and suitably joined thereto. A

weather-proof sheet of material 56 made of corrugated metal or the like, rests upon the strips 52 and is secured rigidly thereto. As illustrated in Fig. 3 of the drawings, each strip 56 extends outwardly beyond the proximal ends of the strips 52 as at 58, while the opposite end thereof is bent downwardly in the form of a flange 60 and if desired, is secured to the proximal rafter 54. The side walls 28 are also provided at the uppermost edges thereof with straps 62 and the roofs 30 are likewise provided with corresponding straps 64 for receiving elongated rods 66 to releasably tie the roofs 30 to the side walls 28.

Fig. 3 illustrates the manner in which the overhanging portions 58 of the sheets of materials 56 present a lap joint, thereby rendering the two buildings 12 substantially weather-proof directly above the partition wall 28.

In some cases it may be desirable to eliminate the aforesaid partition wall 28 and to combine the two buildings 12 as a single unit. In such event, the two roofs 30 will not be adequately joined with the underlying portions of the building. Accordingly, as shown in Fig. 5 of the drawings, the proximal stake 44 may be disposed with its loop 46 in hooked relationship to the projected end of a corresponding rod 66. It is seen that the buildings 12, as well as the pens 10, may be quickly and easily set up in the manner illustrated in Fig. 1 of the drawings and may also be disassembled by merely removing all of the stakes 44 and 50, as well as the rods 66. Any number of buildings 12 may be so assembled in series relationship with their corresponding pens 10 and in each case the required number of side walls 28, as well as panels 14, will be reduced because of the construction herein set forth. It is conceivable also that the size of the pens 10 may be varied by utilizing an additional panel at the outermost end of each panel 14 respectively to which the panels 18 can be releasably attached. The number of panels required is also reduced because of the fact that the front wall 24 of each building 12 respectively, closes one side of the pens 10. By coupling the pens 10 directly with buildings 12, the likelihood of displacement of the pens by the animals therewithin, is reduced because of the fact that the buildings present an effective anchor for the pens.

Referring again to Fig. 5 of the drawings, the stake 44 that is looped over and adjacent rod 66,

can easily be slipped into place beneath roofs 30 by bending the same outwardly and slipping loop 46 in place. It is notable also that for the most part, all of the elements of the construction are of identical nature, thereby reducing the cost of manufacture.

All of the straps above enumerated may be of identical character, all of the side walls 28 are alike, the roofs 30 are of the same nature, all of the panels 14 are identical and the panels 16 are of the same length and width.

Manifestly, the entire assembly of parts includes many additional advantages not above enumerated and those that fairly come within the scope of the appended claim, are contemplated hereby.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

In a readily collapsible, portable shelter and enclosure assembly, a building having a pair of spaced side walls, a front wall spanning the distance between the side walls, a rear wall, and a roof; a pen having a pair of spaced side panels and an end panel joining the side panels at one end thereof; and a releasable interlocking structure at the opposite ends of each side panel respectively, each of said structures including a pair of space hinge units and a vertical hinge pin common to the pair of hinge units, each unit including a hinge strap secured to a side panel, a hinge strap secured to a side wall and a hinge strap secured at the front wall, each strap having a vertical, pin-receiving hinge barrel, the hinge barrels of each of said structures being vertically aligned and the pin of each structure extending through the corresponding barrels and into the ground below the building and the pen, whereby each pin joins one of the side panels to an adjacent side wall and to the front wall and whereby the two pins join the front wall to the side walls.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
349,200	Balmer	Sept. 14, 1886
670,378	Stinger	Mar. 19, 1901
849,433	Sprague	Apr. 9, 1907
1,330,404	Sommer	Feb. 10, 1920
1,837,044	Heim	Dec. 15, 1931