

Jan. 15, 1946.

M. C. HANISCH, JR., ET AL

2,392,920

BROODER HOUSE

Filed Jan. 17, 1944

3 Sheets-Sheet 1

Fig. 1.

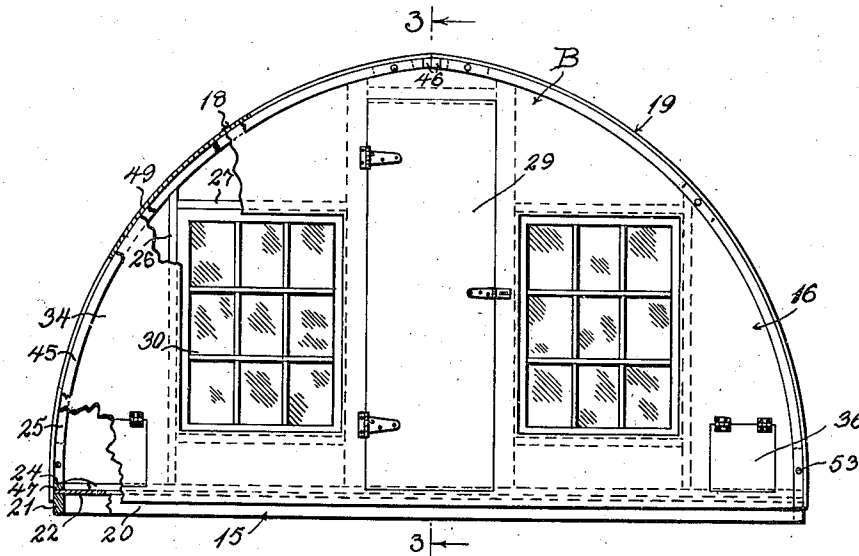
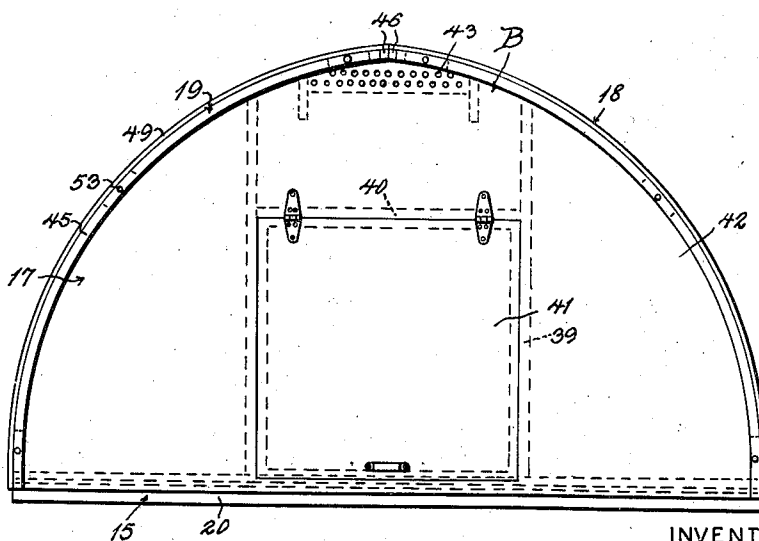


Fig. 2.



INVENTOR
MAX C. HANISCH JR.
ABRAHAM S. FRIEDMAN.

BY

Young & Wright.

ATTORNEYS

Jan. 15, 1946.

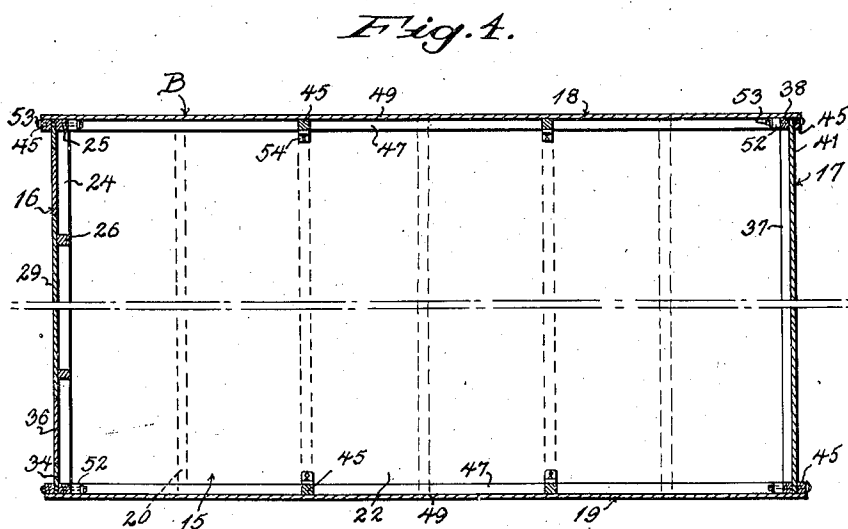
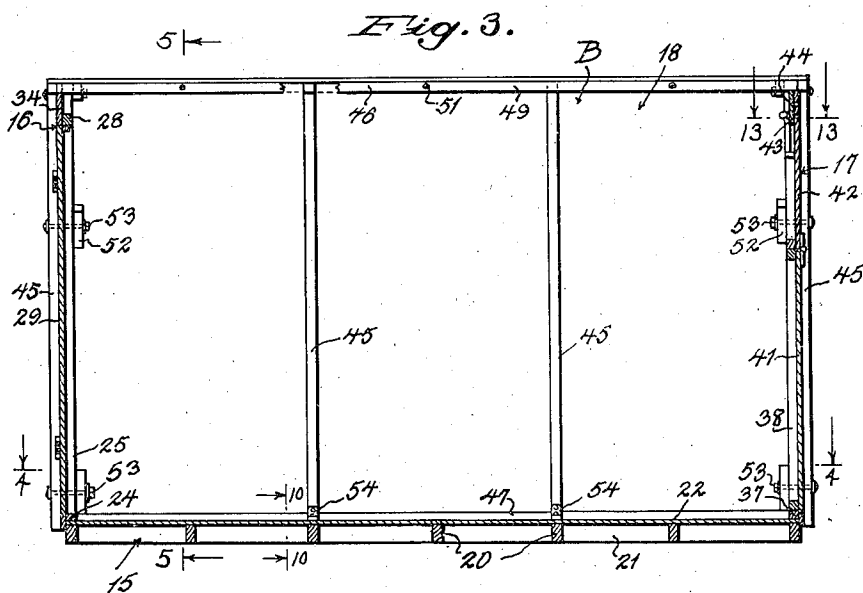
M. C. HANISCH, JR., ET AL

2,392,920

BROODER HOUSE

Filed Jan. 17, 1944

3 Sheets-Sheet 2



INVENTOR
MAX C. HANISCH JR.
ABRAHAM S. FRIEDMAN

BY

Young Wright

ATTORNEYS

Jan. 15, 1946.

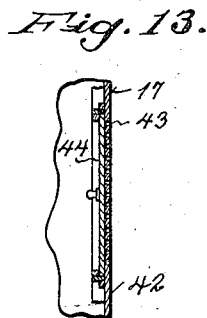
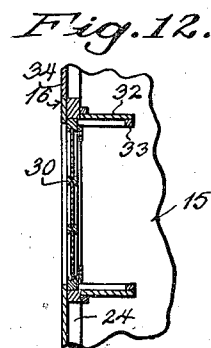
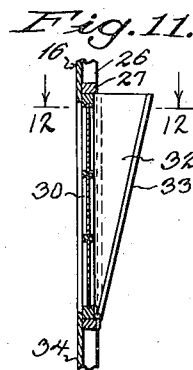
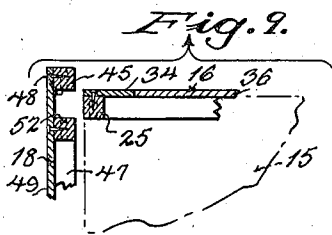
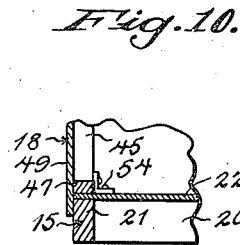
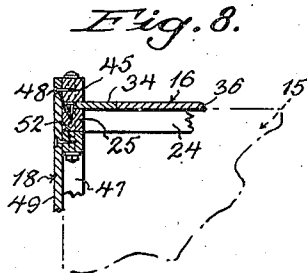
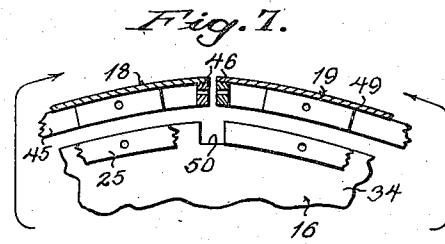
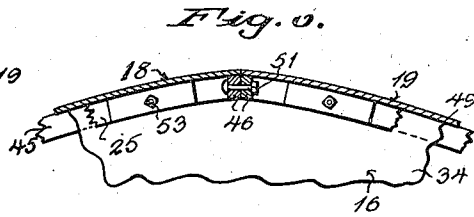
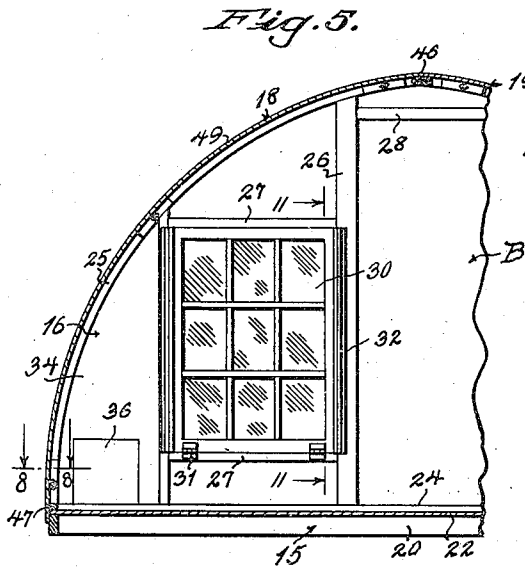
M. C. HANISCH, JR., ET AL

2,392,920

BROODER HOUSE

Filed Jan. 17, 1944

3 Sheets-Sheet 3



INVENTOR
MAX C. HANISCH JR.
ABRAHAM S. FRIEDMAN.

BY *Wm. Wright*
ATTORNEYS

UNITED STATES PATENT OFFICE

2,392,920

BROODER HOUSE

Max C. Hanisch, Jr., and Abraham S. Friedman,
Peshtigo, Wis.

Application January 17, 1944, Serial No. 518,536

4 Claims. (Cl. 20—2)

This invention appertains to buildings, and more particularly to a prefabricated, portable, knock down building:

One of the primary objects of our invention is to provide a prefabricated house for general utility purposes, which can be quickly set up for use at a desired spot without the use of skilled workmen or special tools.

Another salient object of our invention is to provide a portable, knock down house, which can be successfully used on farms as a brooder house, grain, feed, or seed storage bin, tool room or road side stand or as a play house and camp cottage or the like and which will be strong and durable and resistant to wind and weather.

A further object of our invention is to provide a knock down house which merely embodies five prefabricated sections so formed that the same can be quickly set up to form a rigid structure.

A further important object of our invention is to provide a prefabricated building embodying front and rear gable sections, a floor section and two roof shell sections; novel means being provided for permitting the quick interlocking of the roof shell sections with the front and rear gable sections to form the rugged rigid structure.

A still further object of our invention is to provide a prefabricated, portable, knock down house of the above character which will be durable and efficient in use, one that will be simple and easy to manufacture and one which can be shipped at a low cost in a compact, knock down condition.

With the above and other objects in view, the invention consists in the novel construction, arrangement and formation of parts, as will be hereinafter more specifically described, claimed and illustrated in the accompanying drawings, in which drawings:

Figure 1 is a front, elevational view illustrating one preferred type of the house, parts of the view being shown broken away and in section.

Figure 2 is a rear, elevational view of the novel house.

Figure 3 is a longitudinal, sectional view through the house taken on the line 3—3 of Figure 1 looking in the direction of the arrows.

Figure 4 is a horizontal, sectional view taken on the line 4—4 of Figure 3 looking in the direction of the arrows.

Figure 5 is a fragmentary, transverse, sectional view through the house taken on the line 5—5 of Figure 3 looking in the direction of the arrows.

Figure 6 is an enlarged, fragmentary, detail, transverse, sectional view taken through the roof

illustrating the novel means of connecting the roof shell sections together and to one of the end gable sections.

Figure 7 is a view similar to Figure 6 but showing the sections disconnected one from the other and in position to be assembled.

Figure 8 is an enlarged, fragmentary, horizontal, sectional view taken on the line 8—8 of Figure 5 looking in the direction of the arrows showing one lower corner of the building and illustrating the manner in which a roof section interlocks with an end gable section.

Figure 9 is a view similar to Figure 8 but showing the parts illustrated in Figure 8 disconnected and in position for connection.

Figure 10 is an enlarged, fragmentary, detail, vertical, sectional view taken on the line 10—10 of Figure 3 looking in the direction of the arrows illustrating one conventional means for connecting the roof sections with the floor section.

Figure 11 is a detail, vertical, sectional view taken on the line 11—11 of Figure 5 looking in the direction of the arrows illustrating one means which can be employed for ventilating the building where the same is to be used as a brooder or like house.

Figure 12 is a detail, horizontal, sectional view taken on the line 12—12 of Figure 11 looking in the direction of the arrows.

Figure 13 is a detail, horizontal, sectional view taken on the line 13—13 of Figure 3 looking in the direction of the arrows illustrating one form of ventilating means which can be carried by the rear gable section.

Referring to the drawings in detail, wherein similar reference characters designate corresponding parts throughout the several views, the letter B generally indicates one form of our prefabricated, knock down building. In the form of the building shown, the same is of a type which is particularly adapted for use as a brooder house. It is to be understood, however, that the form of the end gables, as will be described in detail, can be changed to permit the use of the building for other purposes.

The building B includes five main prefabricated sections, namely, a floor section 15, a front gable section 16, a rear gable section 17 and like companion roof shells 18 and 19. These five sections are prefabricated at the factory and the building is shipped in its knock down condition and these sections are so constructed that the same can be quickly united and assembled to form a rigid weather resistant building.

The floor section 15 includes a plurality of

transversely extending spaced parallel floor joists or sills 20 and these sills can be connected at their ends by longitudinally extending beams 21. The joists or sills 20 and the beams 21 are also firmly united by a desired type of flooring 22 which can, if so desired, be plywood. All of the pieces of the floor section can be glued together or secured by nails or the like.

The front gable section 16 includes a frame consisting of a marginal lower straight sill 24 and a substantially semi-circular frame beam 25. It is to be noted, however, that the frame beam at its center is slightly peaked so that a roof of somewhat of the Gothic type will be formed. The lower end of the semi-circular frame beam 25 is rigidly fastened to the bottom sill 24. These beams 24 and 25 are connected together at spaced points by vertical studding 26 and the studding is so spaced as to provide the sides for the window frames, door openings, or the like, which can be readily seen by referring to Figures 1 and 5 of the drawings. Where windows are formed, the studding 26 is connected by cross pieces 27 to form sills and headings. Where a door opening is formed, the studding can be connected by a transverse cross piece 28 to form a lintel.

The door opening can be closed by a swinging door 29. The window opening can be closed by suitable sash frames 30. Where the building is to be used as a brooder house, the sashes can be hung on hinges 31 at their lower ends and side guard plates 32 can be secured to the studding. These side plates 32 (see Figures 11 and 12) have formed on their inner inclined edges flanges 33 for limiting the downward swinging movement of the sashes. The outer face of the gable section 16 has secured thereto siding 34. If desired, plywood can also be used. The various elements of this section can also be secured together by glue or by the use of nails, or the like.

As illustrated in Figures 1 and 5, the siding 34 can be cut away to provide small openings at their lower ends and these openings can be closed by hinged closures 36. The openings can be used as entrances and exits for small poultry.

The rear gable section 17 is constructed along the same lines as the front gable section 16 and consequently the same includes a bottom straight sill beam 37 and a semi-circular marginal beam 38. This beam is also peaked at its center. The beams 37 and 38 can be connected together by vertical studding 39 and this studding is spaced to suit various conditions. The studding 39 is also arranged to form door framing and as shown in Figure 2, the studding can be connected by a lintel 40 to form such opening. The opening can be closed by a swinging door 41. Siding 42 can be utilized as a covering to form the end wall or plywood can be used in lieu of siding. Where the house is to be used as a brooder ventilating openings 43 can be made in the top of the siding and these ventilating openings 43 can be closed by a slide gate 44.

As heretofore stated, the two roof shell sections 18 and 19 each include a plurality of equidistantly spaced roof rafters 45. These roof rafters 45 can be in the nature of glued laminated beams, if so desired, and the upper ends of these beams are connected together by a longitudinally extending joist or beam 46. The lower ends of the roof rafters 45 are rigidly connected to longitudinally extending bottom sill beams 47. Attention is directed to the fact that at the ends of each roof shell section, the rafters 45 are arranged in close, but spaced parallel relation, to form a seat 48

which corresponds in width to the semi-circular marginal beams 25 and 37 and the siding of the end gable sections 16 and 17, for a purpose, which will be later set forth. These roof rafters are covered by roof sheathing 49 and if preferred, plywood can be used for this purpose. The elements forming the roof sections can be all glued together or secured in any preferred manner, such as by the use of fastening elements. It is to be noted, however, that the roof sheathing 49 extends below the bottom sill beams 47 for a purpose, which will also later appear.

Particular attention is called to the fact that the upper center of the gable sections 16 and 17 are notched, as at 50, and these notches form an important feature as will be later set forth (see Figure 7).

In assembling the building, the floor section 15 is placed on the ground and the front and rear end gable sections 16 and 17 are placed on the ends of the flooring and swung to an upright position in spaced parallel relation to one another and at right angles to the flooring with the bottom straight beams 24 and 37 thereof resting upon the upper face of the flooring. These end gable sections can be temporarily held in their upright position by the workmen or brace strips can be temporarily nailed thereto and to the flooring. The roof shell sections 18 and 19 are now ready to be placed in position. First one section is placed on the gable ends and its longitudinally extending joist beam 46 is placed in the notches 50 of the end gable sections and this roof section 18 is now swung down into engagement with the floor with the bottom sill 47 resting thereon. The other roof section 19 is now placed on the gables with its longitudinally extending roof joist 46 seated or hooked in the notches 50 and this roof section is swung on the floor with its bottom sill 47 resting thereon. The longitudinal joists 46 can now be firmly united together by means of bolts 51 (see Figure 6). By referring to Figures 8 and 9, it can be seen that the seats 48 formed by the end roof rafters 45 engage the inner and outer faces of the end gable sections 16 and 17 and consequently effectively hold these end gables in place in their upright position. If preferred, in lieu of providing the closely spaced end roof rafters 45, the innermost of these end rafters can have cleats 52 substituted therefor at spaced points, as is clearly shown in Figures 3 and 5. Bolts 53 can be passed through the roof rafters and the end panels to effectively hold these sections in proper position and against displacement.

To unite the roof sections to the flooring, angle brackets 54 can be utilized and these angle brackets can be fastened to the roof rafters 45 and to the floor. By referring to Figure 5, it can be seen that the roof sheathing extends below the floor section and the siding and the front and rear gable sections 16 and 17 can also extend below the floor section.

Any preferred type of roofing material can be placed over the roof sheathing after the building has been assembled to make the roof weather tight.

If desired, the building can be mounted on heavy skid timbers (not shown) so that the building can be shifted from one point to another.

While we have stated that the house is constructed from five prefabricated sections, it is to be understood that the same can be made from five or more prefabricated sections. For instance, the floor section 15 can be made in two pieces to facilitate shipping.

Attention is also directed to the fact that the rear door 41 in the gable section 17 is of a greater size than the front door 29 in the gable section 16. This is important as it permits the largest portion of the rear gable section 17 to be opened up and thus the house can be used as a range house so that the chickens can freely run in and out.

From the foregoing description, it can be seen that we have provided an exceptionally simple and durable form of prefabricated, knock down building which can be built of various pieces to suit different purposes and two or more of the buildings can be inter-connected where it is desired to form an extra large building, such as where a camp cottage is to be made.

Changes in details may be made without departing from the spirit or the scope of our invention, but what we claim as new is:

1. A portable knock down building comprising a prefabricated floor section, front and rear prefabricated gable end sections, each of said end sections including bottom beams adapted to rest on the floor section and substantially semi-circular marginal beams having their lower ends secured to the ends of the bottom beams, said semi-circular marginal beams being notched at their centers to form seats, and prefabricated arcuate companion roof sections each including a plurality of arcuate roof rafters, a top longitudinally extending roof joist and a bottom longitudinally extending roof sill, the sills being adapted to rest on the floor section and said roof joist being adapted to abut and detachably fit in said seats to interlock the roof sections with the end gable sections.

2. A portable knock down building comprising a prefabricated floor section, front and rear prefabricated gable end sections, each of said end sections including bottom beams adapted to rest on the floor section and substantially semi-circular marginal beams having their lower ends secured to the ends of the bottom beams, said semi-circular marginal beams being notched at their centers to form seats, and prefabricated arcuate companion roof sections each including a plurality of arcuate roof rafters, a top longitudinally extending roof joist and a bottom longitudinally extending roof sill, the sills being adapted to rest on the floor section and said roof joist being adapted to abut and detachably fit in said seats to interlock the roof sections

with the end gable sections, means detachable securing the roof joists of the roof sections together.

3. A portable knock down building comprising a prefabricated floor section, front and rear prefabricated gable end sections, each of said end sections including bottom beams adapted to rest on the floor section and substantially semi-circular marginal beams having their lower ends secured to the ends of the bottom beams, said semi-circular marginal beams being notched at their centers to form seats, and prefabricated arcuate companion roof sections each including a plurality of arcuate roof rafters, a top longitudinally extending roof joist and a bottom longitudinally extending roof sill, the sills being adapted to rest on the floor section and said roof joist being adapted to abut and detachably fit in said seats to interlock the roof sections with the end gable sections, the end rafters of the roof sections being adapted to engage the outer faces of the gable sections, and means carried by the roof sections for engaging the inner faces of the semi-circular marginal beams of the end gable sections.

4. A portable knock down building comprising a prefabricated floor section, front and rear prefabricated gable end sections, each of said end sections including bottom beams adapted to rest on the floor sections and substantially semi-circular marginal beams having their lower ends secured to the ends of the bottom beams, said semi-circular marginal beams being notched at their centers to form seats, and prefabricated arcuate companion roof sections each including a plurality of arcuate roof rafters, a top longitudinally extending roof sill, the sills being adapted to rest on the floor section and said roof joist being adapted to abut and detachably fit in said seats to interlock the roof sections with the end gable sections, the end rafters of the roof sections being adapted to engage the outer faces of the gable sections, and means carried by the roof sections for engaging the inner faces of the semi-circular marginal beams of the end gable sections, removable means connecting the roof sections with the end gable sections and means connecting the roof sections with the floor sections.

MAX C. HANISCH, JR.
ABRAHAM S. FRIEDMAN.