Sept. 6, 1960 C. H. ENGH 2,951,312

COLLAPSIBLE MINIATURE HOUSE

Filed Oct. 17, 1957

FIG. 1

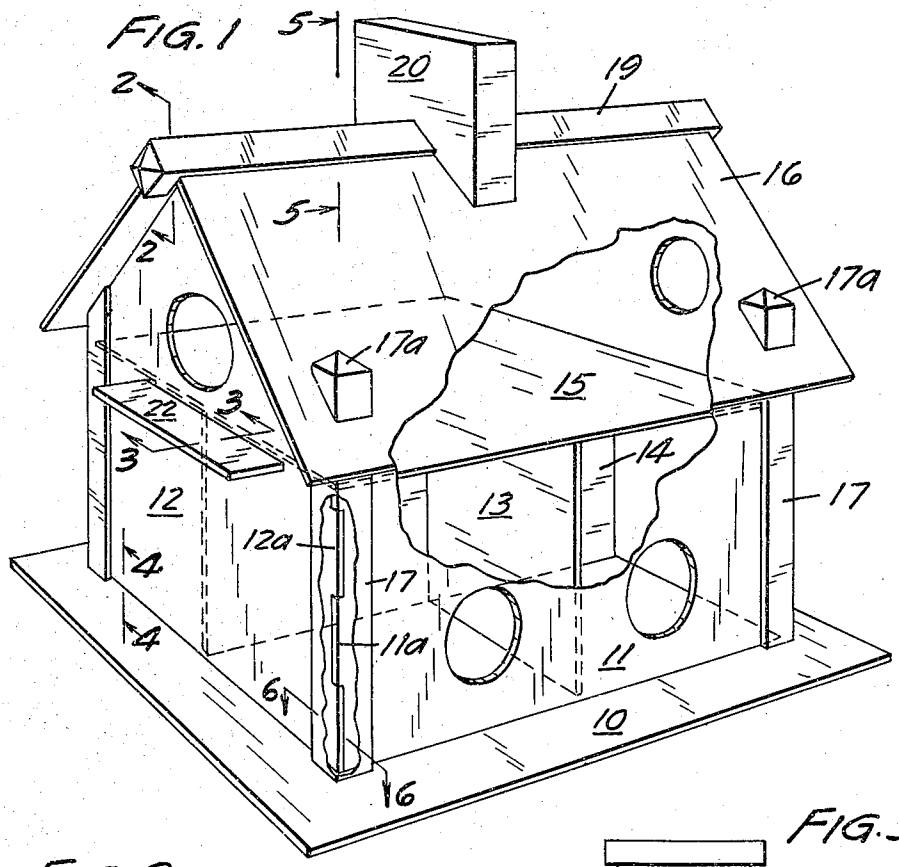


FIG. 2

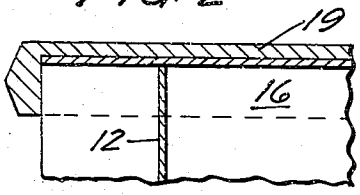


FIG. 3

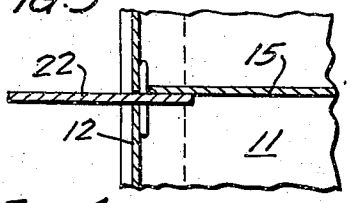


FIG. 4

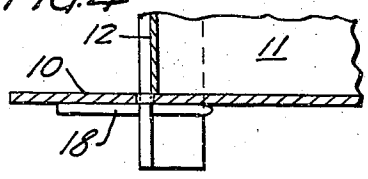


FIG. 5

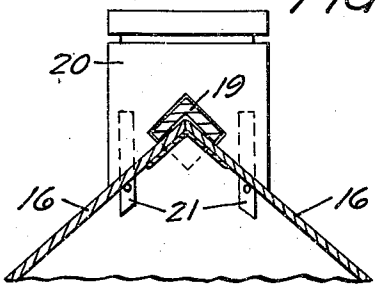
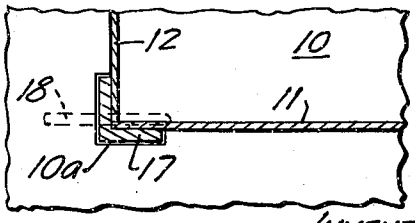


FIG. 6



INVENTOR
CASPER H. ENGH

BY
Williamson, Schroeder, Adams & Meyers
ATTORNEYS

United States Patent Office 2,951,312 Patented Sept. 6, 1960

2,951,312

COLLAPSIBLE MINIATURE HOUSE

Casper H. Engh, 803 8th St., Fargo, N. Dak.

Filed Oct. 17, 1957, Ser. No. 690,647

2 Claims. (Cl. 46—19)

This invention relates generally to miniature houses and particularly to one which can be compactly shipped in a knocked-down condition, and which may be readily assembled.

It is an object of my present invention to provide a miniature house for use as a bird house or toy house, which consists of a number of prefabricated sections, particularly constructed to facilitate compact shipment and easy assembly into erected position.

It is another object to provide a small miniature house made in a plurality of prefabricated sections with means for securely holding said sections in assembled relation.

More specifically, it is an object to provide a collapsible miniature house provided with corner anchoring posts, specifically constructed to positively hold all of the sections in interfitted assembled relation.

These and other objects and advantages of my invention will more fully appear from the following description made in connection with the accompanying drawings wherein like reference characters refer to the same or similar parts throughout the several views, and in which:

Fig. 1 is a perspective view of a house embodying my invention, with portions thereof broken away.

Fig. 2 is a fragmentary longitudinal vertical sectional view taken substantially along the line 2—2 of Fig. 1.

Fig. 3 is a fragmentary horizontal sectional view taken substantially along the line 3—3 of Fig. 1.

Fig. 4 is a fragmentary vertical sectional view taken substantially along the line 4—4 of Fig. 1.

Fig. 5 is a fragmentary transverse vertical sectional view taken substantially along the line 5—5 of Fig. 1.

Fig. 6 is a fragmentary transverse horizontal section view taken substantially along the line 6—6 of Fig. 1.

As illustrated in the accompanying drawings, I provide a base section 10, consisting of a stiff panel member, and having a plurality of angle-shaped slots 10*a* formed therein. The slots 10*a* define the corners of a rectangle and side panels 11, and end panels 12 extend respectively therebetween. Suitable means are provided at the ends of side wall sections 11 and end panel sections 12 to permit the same to be interfitted, such as the tongue and notch arrangement illustrated, which incorporates the spaced-apart tongue elements 11*a* and 12*a* of the respective panels 11 and 12. Notches are provided between each of the tongue elements, so that the tongues 11*a* of the side panels are received in close-fitting relation with the notches of the end panels 12 and the tongues 12*a* of the end panels are received in close-fitting relation within the notches of the side panels 11. This close-interfitting relationship at the corners greatly facilitates assembly of the panels, since it provides means for temporarily holding the corners together by the frictional engagement of the respective tongues in the notches, to permit subsequent completion of the assembled unit.

The interior of the house may be subdivided, as by a plurality of partitions, such as the dividing partitions 13 and 14. Also, a platform 15 may be provided above

said partitions to provide housing accommodation space in the gable area below the roof.

A pair of roof panels 16 are supported on the upper gable edges of the end panels 12, and said roof panels have angle-shaped slots formed therethrough directly above the corners of the wall sections to permit an angle-shaped corner anchoring column 17 to be inserted slidably therethrough. An abutment 17*a* is provided at the top of said angle post 17 to engage the area of the roof sections 16 adjacent the angular slots therethrough. I have found it to be convenient to provide a slight taper on the cross-sectional area of the angular post members 17 to facilitate insertion thereof through the roof slots, downwardly adjacent the marginal end portions of the wall panels 11 and 12, and into the angular slots 10*a* provided in the base 10 to form corner anchoring posts which not only hold the roof downwardly against the upper ends of the wall sections, but also positively anchor the corners of the wall sections, as best shown in Figs. 1 and 6. Suitable means for locking each corner post 17 downwardly in tightly-clamped relation, are provided, such as the tapered locking pins 18, shown in Fig. 4, which underlie the base panel 10, as illustrated. The roof-engaging surface of the abutment or enlarged top portion 17*a* of the anchor post 17, is beveled at a similar angle to the pitch of the roof 16, so as to fit downwardly thereagainst, as described. A ridge member 19 is provided for overlying the upper marginal edge portions of the roof sections 16, as best shown in Figs. 1, 2 and 5, and is securely held in position by the chimney member 20, which has a pair of downwardly-extending anchoring rods 21, best shown in Fig. 5, which are held against the roof sections 16 by underlying, tapered pins similar to the pins 18.

It will be apparent that the miniature house illustrated is adapted for use as a bird house, and when so used, a pair of perch platforms 22, as shown in Figs. 1 and 3, are provided and extend inwardly through suitable slots formed in the end walls 12, and extend under the marginal end portion of the horizontal platform panel section 15.

It will be seen that I have provided a relatively simple miniature house construction, which is particularly adapted for easy and rigid assembly, and may be used as a bird house in the form illustrated, or obviously could be adapted for use as a child's doll house, or even in a larger form, such as a dog house.

It will, of course, be understood that various changes may be made in the form, details, arrangement and proportions of the parts, without departing from the scope of my invention, which consists of the matter shown and described herein and set forth in the appended claims.

What is claimed is:

1. A miniature house constructed of a plurality of prefabricated individual sections, comprising a base section, side and end wall panels supported on said base section, the side and endwall panels engaging each other at the corners and having interfitting tongue and notch portions preventing inward movement of the panels, roof sections supported on the upper edges of said wall panels, corner anchoring posts having a cross sectional shape in the form of an angle and overlapping the tongue and notch portions of said wall panels at the exterior side of the respective corners thereof, said roof sections and said base section having angle-shaped slots at the respective corners of the wall sections and receiving said angle-shaped corner posts therethrough, roof hold-down means at the top of said posts and integral therewith, and releasable means at the bottom of the posts and underlying the base section and locking the base section to positively clamp the wall panels between the roof sections and the base section.

2. A miniature house constructed of a plurality of prefabricated individual sections, comprising a base section, side and endwall panels supported on said base section, the side and endwall panels having interfitting means at the corners preventing inward movement of the panels, roof sections supported on the upper edges of said wall panels, corner anchoring posts having a cross sectional shape in the form of an angle and projecting through correspondingly shaped slots in the roof and base sections and overlapping the marginal corner portions of said wall panels at the respective corners thereof to hold the wall panels from moving outwardly, said corner posts having roof hold-down means engaging the top surfaces of the roof sections and also having means below the base section for locking the same and positively clamping the wall panels between said roof sections and said base section, a ridge member having a generally L-shaped cross section overlying the intersection between said roof sections at the upper edges thereof, a chimney-like structure overlying the ridge member and engaging the roof sections on opposite sides of

the ridge member and including a pair of depending rods projecting through apertures in the roof sections to prevent movement of the roof sections downwardly away from the ridge member, and means on the rods beneath the roof sections and clamping the roof sections against the chimney structure.

References Cited in the file of this patent

UNITED STATES PATENTS

739,669	Grimm	Sept. 22, 1903
1,279,866	Henschel	Sept. 24, 1918
1,608,273	Glasgow	Nov. 23, 1926
1,610,121	Dickinson	Dec. 7, 1926
1,671,505	Bemis	May 29, 1928
2,204,319	Parsons et al.	June 11, 1940
2,422,217	Barnes	June 17, 1947
2,680,327	Harper	June 8, 1954
2,714,782	Dinn	Aug. 9, 1955

FOREIGN PATENTS

593,970	Great Britain	Oct. 30, 1947