

Sept. 5, 1933.

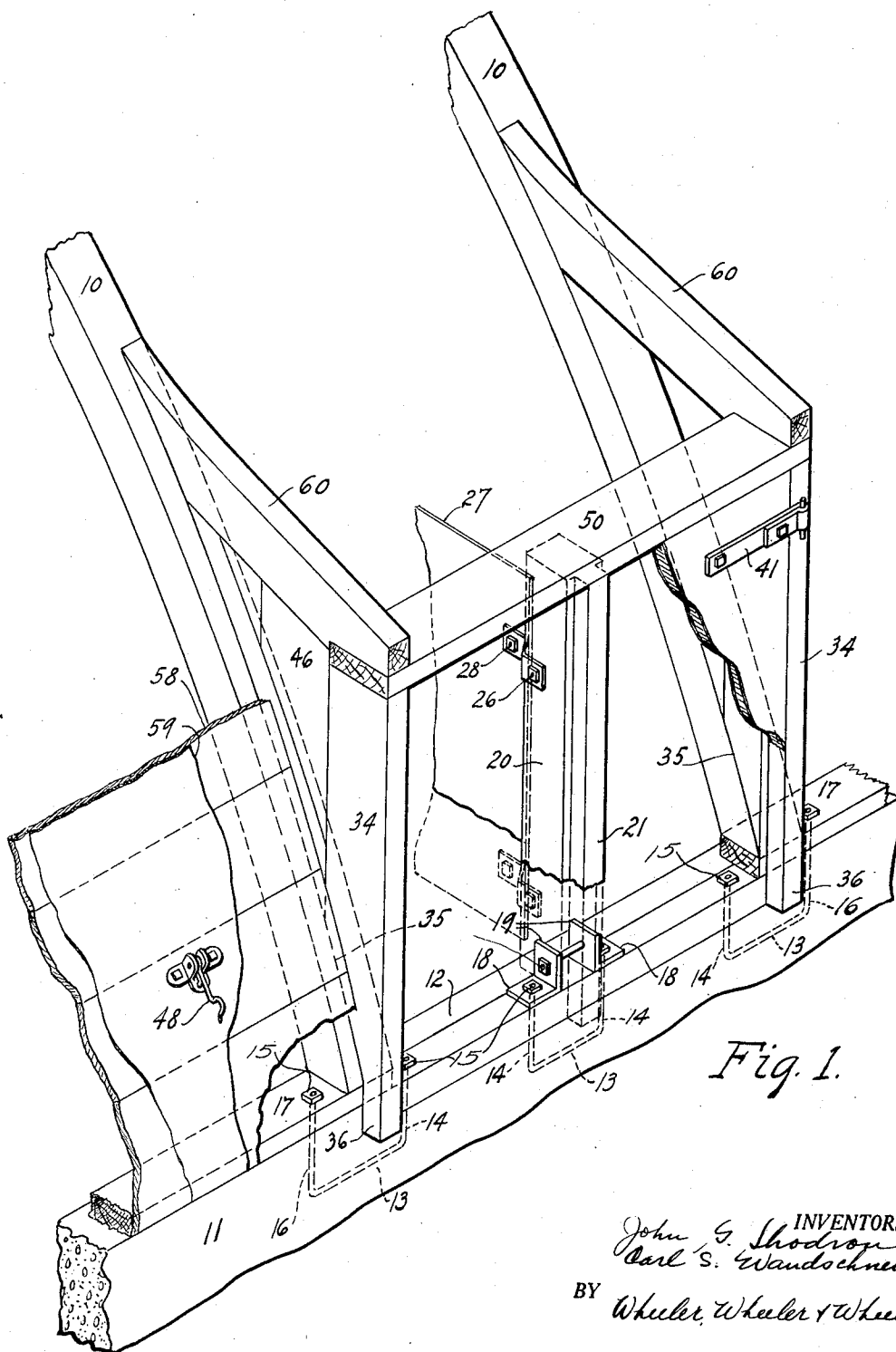
J. G. SHODRON ET AL

1,925,284

EXIT DORMER FOR ARCHED BUILDINGS

Filed May 5, 1930

2 Sheets-Sheet 1



INVENTORS
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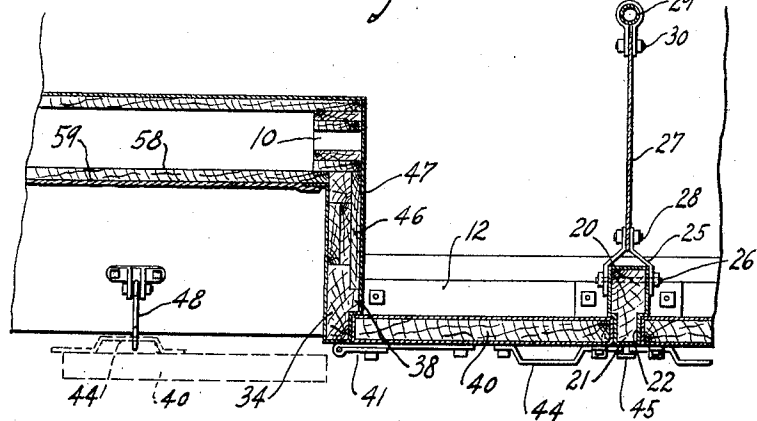
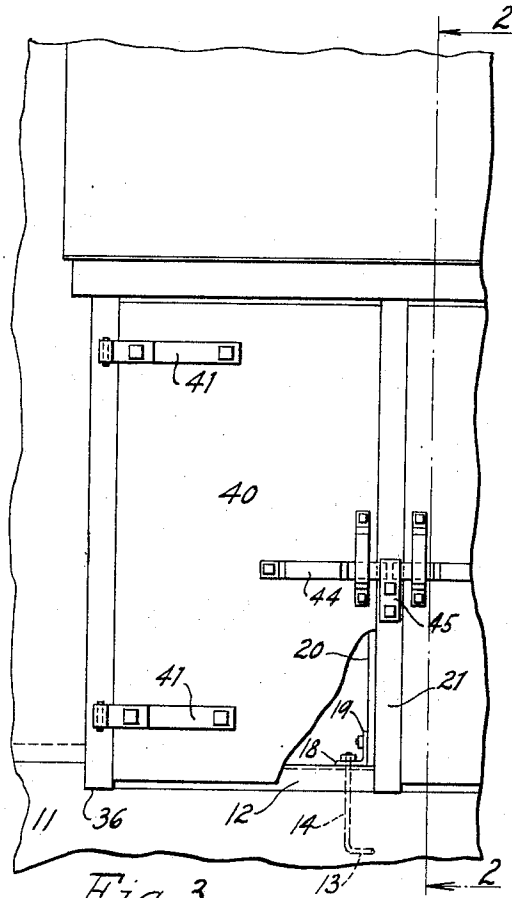
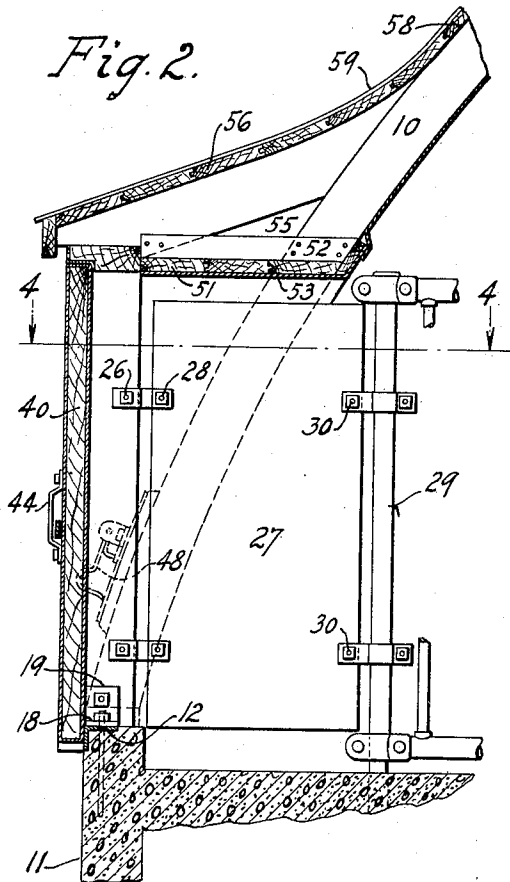
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EXIT DORMER FOR ARCHED BUILDINGS

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UNITED STATES PATENT OFFICE

1,925,284

EXIT DORMER FOR ARCHED BUILDINGS

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Fort Atkinson, Wis., assignors to James Manu-
facturing Company, Fort Atkinson, Wis.

Application May 5, 1930. Serial No. 449,868

1 Claim. (Cl. 20—11)

Our invention relates to improvements in exit dormers for arched buildings such as hog houses and other enclosures for animals.

Objects of this invention are to provide means whereby such buildings may be provided with exits in their arched walls without weakening the structure, without mutilating the supporting arches or subjecting any of them to strains not imposed upon the others; to provide means whereby a single dormer may be equipped with exit doors allowing egress from a plurality of pens; to provide means whereby such exits may be formed in the arched side of a building and covered by roof extensions which do not promote leakage; and in general to provide inexpensive serviceable and satisfactory dormers for buildings of the described type.

In the drawings:

Figure 1 is a perspective view of a fragment of an arched building wall provided with my improved dormer, a portion of the wall covering being removed to expose the framing.

Figure 2 is a sectional view of substantially the same portion of the building shown in Fig. 1, the section being drawn generally to line 2—2 of Fig. 3.

Figure 3 is a front elevation of a portion of one of the dormers showing a fragment of the building wall at one side thereof and with one lower corner of the illustrated door broken away to show the anchorage of the sill.

Figure 4 is a sectional view drawn to line 4—4 of Fig. 2.

Like parts are identified by the same reference characters throughout the several views.

The arches 10 and the foundation 11 may be assumed to be of the general type illustrated in Letters Patent of the United States No. 1,687,850 dated October 16, 1928 and granted on application filed by John G. Shodron, one of the applicants herein named. The foundation wall 11 is recessed between two of the arches and provided with a door sill 12 which is secured to the foundation wall by staple-shaped anchors 13 partially embedded in the wall and with side arms 14 projecting upwardly through the sill 12 and threaded to receive clamping nuts 15. At the ends of the sill these anchors 13 preferably have one arm 14 engaging the sill and another longer arm 16 engaging a foundation plate or sill 17 as clearly illustrated in Fig. 1.

The central anchor 13 also serves to secure angle brackets to the sill, these angle brackets having base plates 18 through which the arms 14 pass, and perpendicular flanges 19 extending up-

wardly from the opposing margins of the base plates 18 to receive between them a door post or mullion 20.

This mullion 20 has a forwardly projecting door jamb member 21 of reduced diameter and, if formed of wood, the mullion will be preferably encased in a metal sheath 22 whereby it is kept from splitting and protected from the elements.

Coupling plates 25 are clamped to the sides of the mullion by bolts 26 and at the inner side of the mullion they have convergent portions provided with parallel extremities clamped to the panel 27 by bolts 28, said panel having its opposite margin similarly clamped to a supporting post 29 by bolts 30.

The mullion 20 constitutes the center post of the dormer front. The end posts 34 of this front wall have their rear margins cut away at 35 in conformity to the curvature of the base portion of the arches 10 and are fitted to the front surface of these portions of the arches. Their lower extremities 36 extend downwardly below the sills and the central portions 38 of their inner surfaces are thickened or inwardly off-set in the form of a vertically extending rib which constitutes the door jamb. The doors 40 are connected to the posts 34 by hinges 41, each door closing to the mullion flange or jamb member 21, to which it may be connected by a latch 44 adapted to engage a two-way catch 45 carried by the mullion. The roof rafters 60 form portions of the end walls of the dormer and are nailed or bolted to the arches and posts 34 respectively.

Between the posts 34 and the divergent portions of the arches 10 above the cut-away portions 35 of the posts, the dormer frame is provided with end walls 46, preferably laminated, and a metal sheet 47 preferably encases these end walls and the posts 34. Therefore there are two doors for the dormer, each hinged to the respective end posts 34 and closing upon the mullion jamb 21 to which the doors are latched. When opened they may be secured in the open position by a hook 48 attached to the side wall of the building, as clearly shown in Fig. 4, in a position to engage the off-set central portion of the latch 44.

The lintel 50 spans the space between the door posts in an ordinary manner and from this lintel a plate 51 extends inwardly and has its ends secured to the arches 10 by brackets 52, these brackets being preferably flanges on a metallic liner 53 which extends underneath the plate 51. The end walls of the dormer extend upwardly above the plate 51 as indicated at 55 in Figure 2 and support the dormer roof 56. The ends of

the roof boards are supported upon the concave upper margin of the end wall portion 55. These roof boards 56 are matched into the boarding 58 of the building wall and constitute reversely curving or concave extensions thereon, the roof covering 59 extending continuously from the building wall outwardly over the dormer.

It will be understood that the panel 27 and post 29 may constitute portions of a pen partition whereby the doors 40 may control admission and egress to different pens, the entire dormer structure being so located and associated with adjacent arches as to permit the erection of a dormer having two doors of adequate width and capable of being set into the space between two arches without cutting or weakening the arches. In the ordinary building a minimum distance between arches will be approximately four feet or more, and, inasmuch as the end posts of the dormers are applied to the outer face of the arches, each door-way may be made at least two feet wide less one half the thickness of the mullion.

By having the arches footed upon one sill between the legs of the inverted anchor staples,

and the mullion post footed upon the door sill in a similar manner and secured thereto by the angle brackets, an exceedingly inexpensive dormer may be provided without weakening the building in any degree whatever. It will be obvious that the invention is applicable to either dormer window structures or dormer doors, although especially designed as a means for providing arched stables with exit doors.

We claim:

A dormer doorway frame having side posts and a central post adapted to serve as a jamb for doors connected with the side posts, a cementitious sill capped by wooden sill members in supporting relation to said side posts, a set of angle clips having vertical flanges attached to the center posts and horizontal flanges resting upon the cementitious sill, and U-shaped anchor members embedded in the cementitious sill underneath the respective posts and having vertically extending arms secured to the angle clips and the wooden sill members supporting the side posts substantially as described.

JOHN G. SHODRON.

CARL S. WANDSCHNEIDER.

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45	120
50	125
55	130
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65	140
70	145
75	150