J. G. SHODRON.

STABLE.

APPLICATION FILED AUG. 30, 1916.

1,379,725.

Patented May 31, 1921.

2 SHEETS—SHEET 1.

Fig. 1.

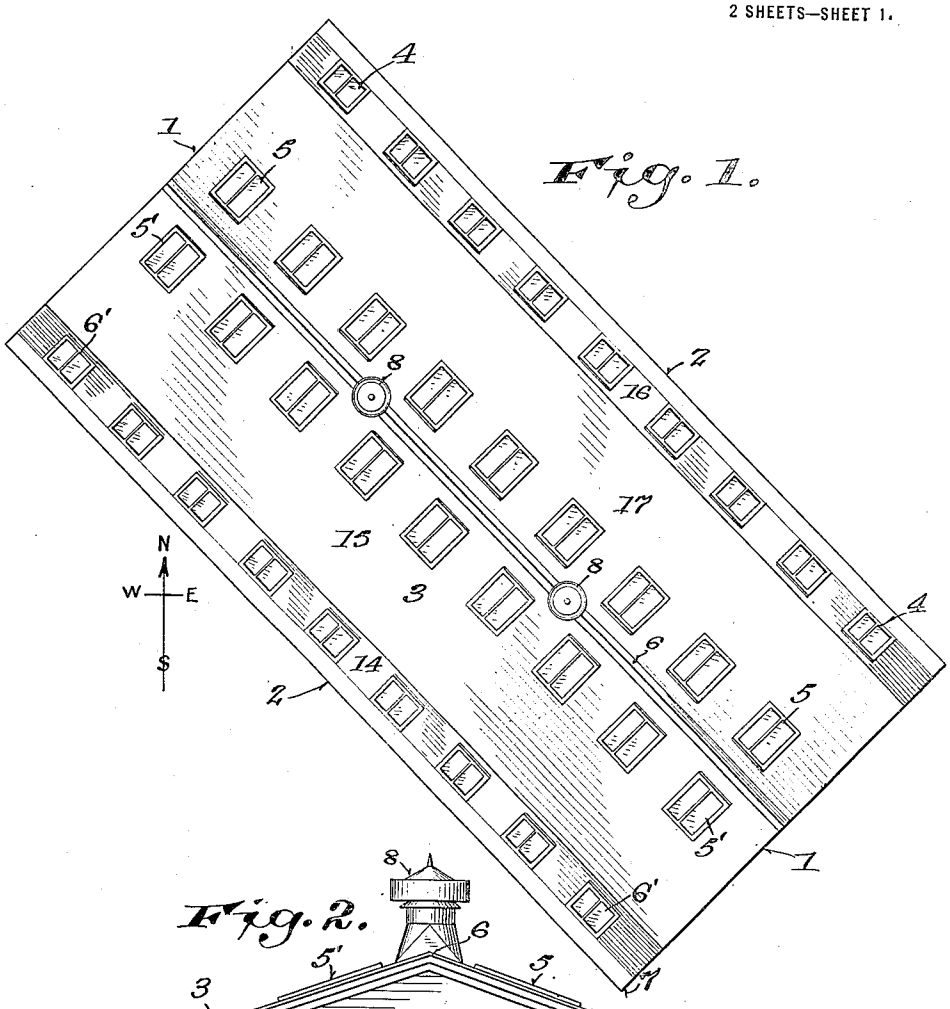
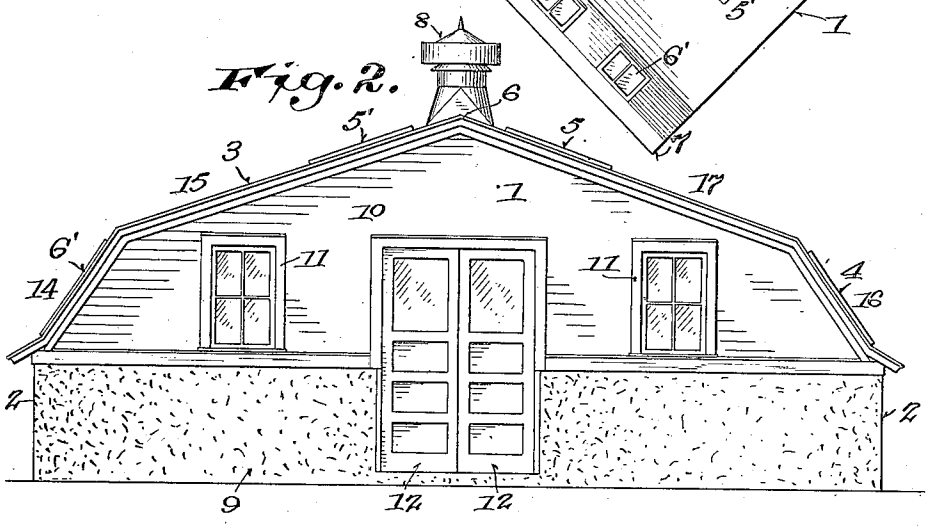


Fig. 2.



Inventor
John G. Shodron
By Emrich & Wheeler
Attorneys.

J. G. SHODRON.

STABLE.

APPLICATION FILED AUG. 30, 1916.

1,379,725.

Patented May 31, 1921.

2 SHEETS—SHEET 2.

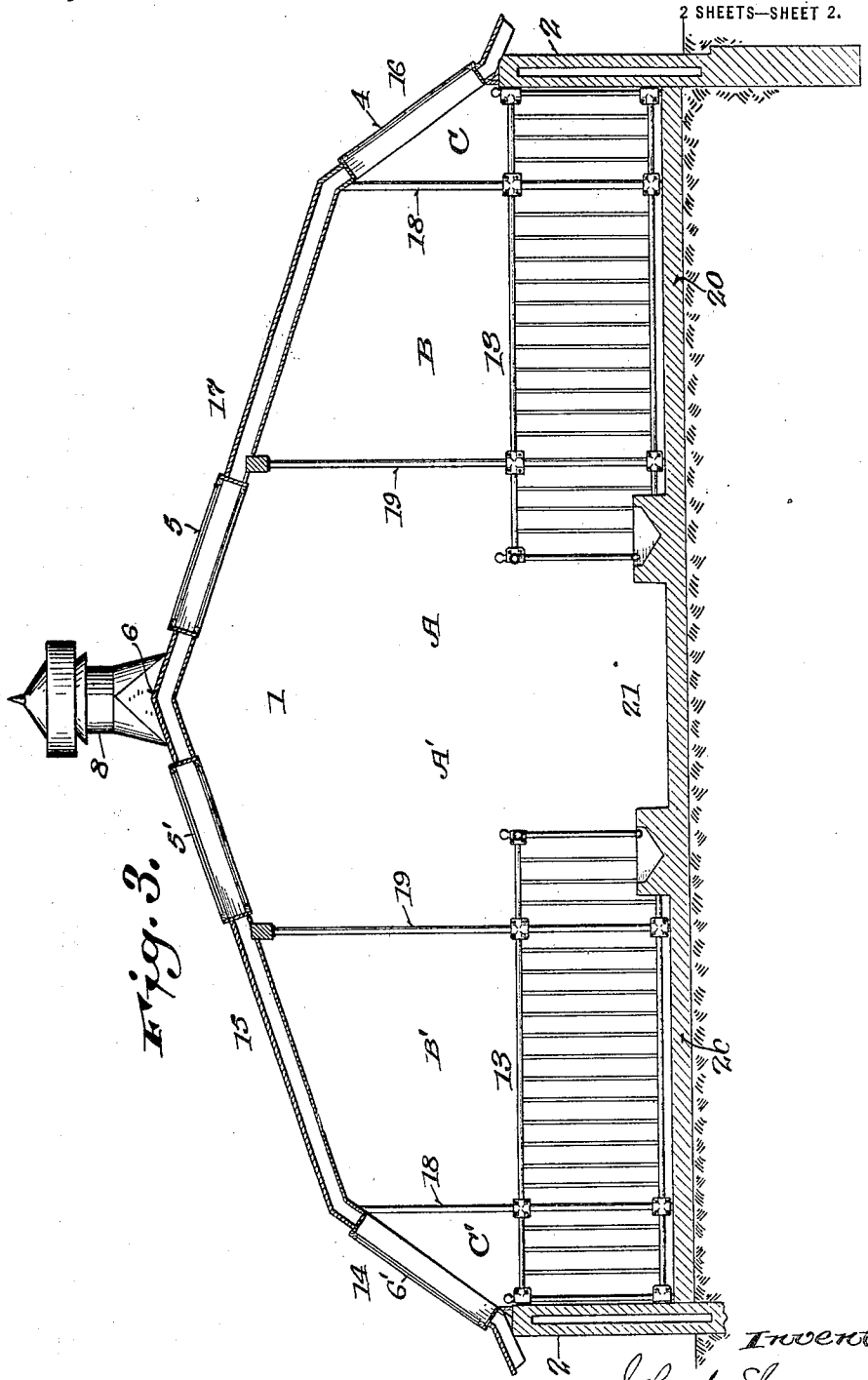


Fig. 3.

Inventor
John G Shodron
By Evarts & Wheeler
Attorneys.

UNITED STATES PATENT OFFICE.

JOHN G. SHODRON, OF FORT ATKINSON, WISCONSIN, ASSIGNOR TO JAMES MANUFACTURING COMPANY, OF FORT ATKINSON, WISCONSIN, A CORPORATION OF WISCONSIN.

STABLE.

1,379,725. Specification of Letters Patent. Patented May 31, 1921.

Application filed August 30, 1916. Serial No. 117,612.

To all whom it may concern:

Be it known that I, JOHN G. SHODRON, a citizen of the United States, residing at the city of Fort Atkinson, county of Jefferson, and State of Wisconsin, have invented new and useful Improvements in Stables, of which the following is a specification.

The object of my invention is to so locate a pig pen or other stables in relation to the cardinal points of compass that sun light, when the sun is shining, will pass more directly through such openings or sky lights formed in the roof at all times during the day, whereby pigs or other animals within such building will receive all the benefit derived from such light, by improved sanitation and otherwise.

My invention is further explained by reference to the accompanying drawings, in which—

Figure 1 represents a plan view of a building as the same is preferably located with reference to the cardinal points of the compass, indicated on the left hand side of said figure.

Fig. 2 is an end view of the same building, and

Fig. 3 is a vertical section thereof.

Like parts are referred to by the same reference numerals throughout the several views.

1, 1 represent the end walls of a building, and 2, 2 the side walls. 3 represents the roof. The roof 3 is provided with four series of sky lights or windows 4 and 5 and 5′ and 6′, two series being located on each side of the ridge 6.

It will be obvious that when a hipped roof building is located, as shown in Fig. 1, with one end toward the northwest and the other end toward the southeast the sun in the morning will enter the roof more directly through the series of windows 4 and 5 upon the northeast side of the building. When, however, the sun has, in its daily course, passed southward and toward the zenith the more direct rays thereof will pass through the series 5 and 5′, and will thereafter pass more directly through said series 4 and 5 during the greater part of the day. When, however, the sun has moved northward past the corner 7 of said building it will again pass more directly through the series of windows 6′ than it would otherwise do if such building were located in line with the cardinal points of the compass north and south or east and west.

The building is preferably provided with a plurality of ventilators 8, 8 and the base of the building between the ground and the lower end of the roof is preferably formed of concrete 9, as shown in Fig. 2, while that part of the building 10 located above the lower edge of the roof is preferably formed of wood or other similar material. 11 are windows formed in the ends of the building, and 12, 12 represent a pair of doors which are preferably formed at the respective ends of the building.

Referring to Fig. 3, 13 represents partitions, a plurality of which are preferably interposed between the respective ends of the building. The roof preferably comprises a plurality of angular members 14, 15, 16 and 17, and said roof is preferably supported from the standards 18 and 19, which standards 18 and 19 extend downwardly from the roof and are connected with the floor 20 of the building. The building is preferably provided with a passageway 21, which extends longitudinally thereof from one end of the building to the other.

The partitions 13 are open partitions which do not exclude the sunlight from the portions of the building inclosed thereby. The space between the floor and the roof is open and unobstructed by any light excluding walls or partitions.

Referring to Fig. 3 and assuming the building to be divided longitudinally by imaginary planes extending vertically through the ridge and through the sets of posts 18 and 19 thereby subdividing the interior space into sections A, A′, B, B′ and C, C′, it will be observed that the morning sun entering through the windows 4 in the more vertically disposed roof section will illuminate to a large extent the inner sides of northwesterly and southwesterly walls and the lower portion of section C′, B′, A′, A and B, the inclined windows 4 continuing to admit sunlight over a large floor area until the sun has reached a considerable height, the sun light admitted through these windows being concentrated increasingly in B and eventually in section C as the sun approaches and reaches the zenith.

Similarly, as the sun approaches the zenith its light passing through the windows 5 will reach the westerly portions or sections of

the building A′ and B′ gradually swinging toward and into the section A and also into section B. As the sun passes the zenith the conditions will then be reversed and the sun light admitted principally through the windows 5′ and 6′.

It will, of course, be understood that when the building is placed with the ridge extending northwesterly and southeasterly then the northerly end of the building will be illuminated by the morning sun and the southerly end will be illuminated by the afternoon sun. The windows on the west slope of the roof will of course be better exposed to the sun light than those on the easterly slope and for a longer period. The contrary would be true if the building extended in a northeasterly and southwesterly direction, but in either case the distribution of sun light will, in the course of the day, be universal to all floor areas and nearly equal.

It will further be observed that the roof of the building differs from ordinary hipped roofs in that the upper or more horizontal portion covers the larger area, the steeper portions being comparatively short. This enables me to provide a low and comparatively inexpensive building for the arrangements of the windows and the position of the building permits much more adequate illumination than has heretofore been secured with buildings designed for similar purposes. This illumination is particularly important for hog pens which are thus kept dry and sanitary by simply allowing the sun to sterilize all the floor portions and lower wall surfaces.

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

1. A stable, open spaced from floor to roof, and having the roof hipped adjacent to the side walls; that portion of the roof adjacent to the side walls being more steeply inclined than the central portions, and both portions being provided with longitudinally extending series of windows, of which those in the central portion are adjacent to the ridge of the building; said building being disposed at a sufficient angle to the cardinal points of the compass to allow the direct rays of the sun to reach substantially all portions of the building in the course of the day, whereby the stable may be kept in a sanitary condition and the health of the animals therein promoted.

2. A stable provided with ventilating means, and open spaced from floor to roof, and free from light excluding solid walled partitions, and having the roof hipped adjacent to the side walls; that portion of the roof adjacent to the side walls being more steeply inclined than the central portions and both portions being provided with longitudinally extending series of windows, of which those in the central portion are adjacent to the ridge of the building; said building being disposed at a sufficient angle to the cardinal points of the compass to allow the direct rays of the sun to reach substantially all portions of the building in the course of the day, whereby the stable may be kept in a sanitary condition and the health of the animals therein promoted.

3. A stable provided with a roof inclined in two directions and having a ridge extending substantially along a northwest and southeast line, said stable being open spaced from floor to roof and the roof being inclined on opposite sides of the ridge in planes more nearly horizontal than vertical, and provided with series of skylight windows extending from one end of the stable to the other adjacent to the ridge; said stable being provided with other series of windows extending from end to end thereof along the side walls and disposed in planes more nearly vertical than horizontal; the portions of the roof between said last mentioned series of windows and those of the first mentioned series being formed of opaque material supported from the floor by posts, and said windows being of sufficient size to allow the direct rays of the sun to enter substantially all parts of said stable during the day.

4. A stable provided with a roof inclined in two directions, and having a ridge extending at an angle to the points of the compass, said stable being open spaced from floor to roof and the roof being inclined on opposite sides of the ridge in planes more nearly horizontal than vertical, and provided with series of skylight windows extending from one end of the stable to the other adjacent to the ridge; said stable being provided with other series of windows extending from end to end thereof along the side walls and disposed in planes more nearly vertical than horizontal; the portions of the roof between said last mentioned series of windows and those of the first mentioned series being formed of opaque material supported from the floor by posts; said windows being of sufficient size, and said building being disposed at a sufficient angle to the points of the compass, to allow the direct rays of the sun to reach substantially all the interior portions of the building through said windows in the course of the day.

In testimony whereof I affix my signature in the presence of two witnesses.

JOHN G. SHODRON.

Witnesses:
JOHN B. OLSON,
ROBT. J. PARKS.