

G. KRETZSCHMAR.

TOBACCO BARN.

APPLICATION FILED JUNE 27, 1910.

990,749.

Patented Apr. 25, 1911.

2 SHEETS—SHEET 1.

FIG. 1.

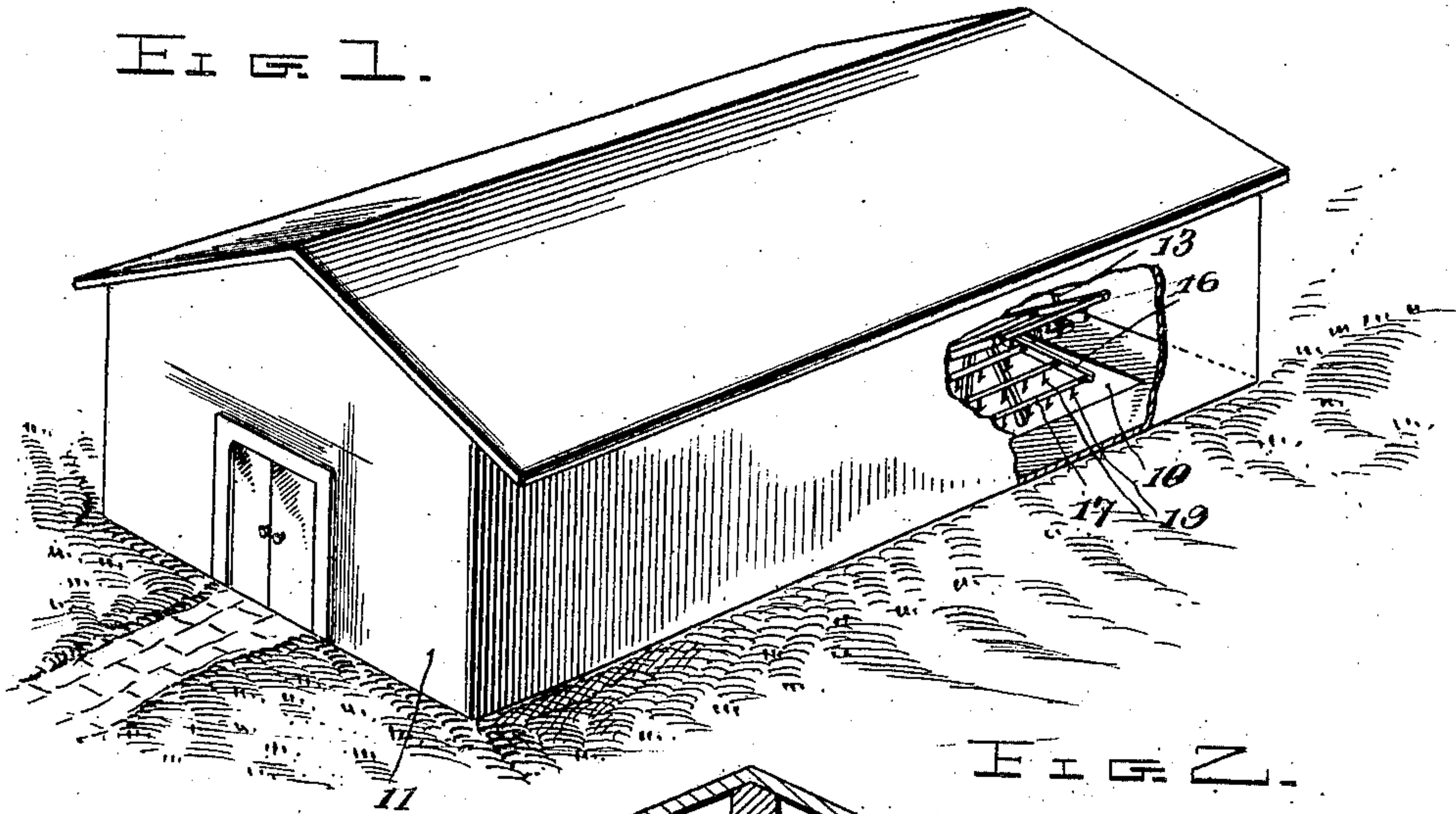
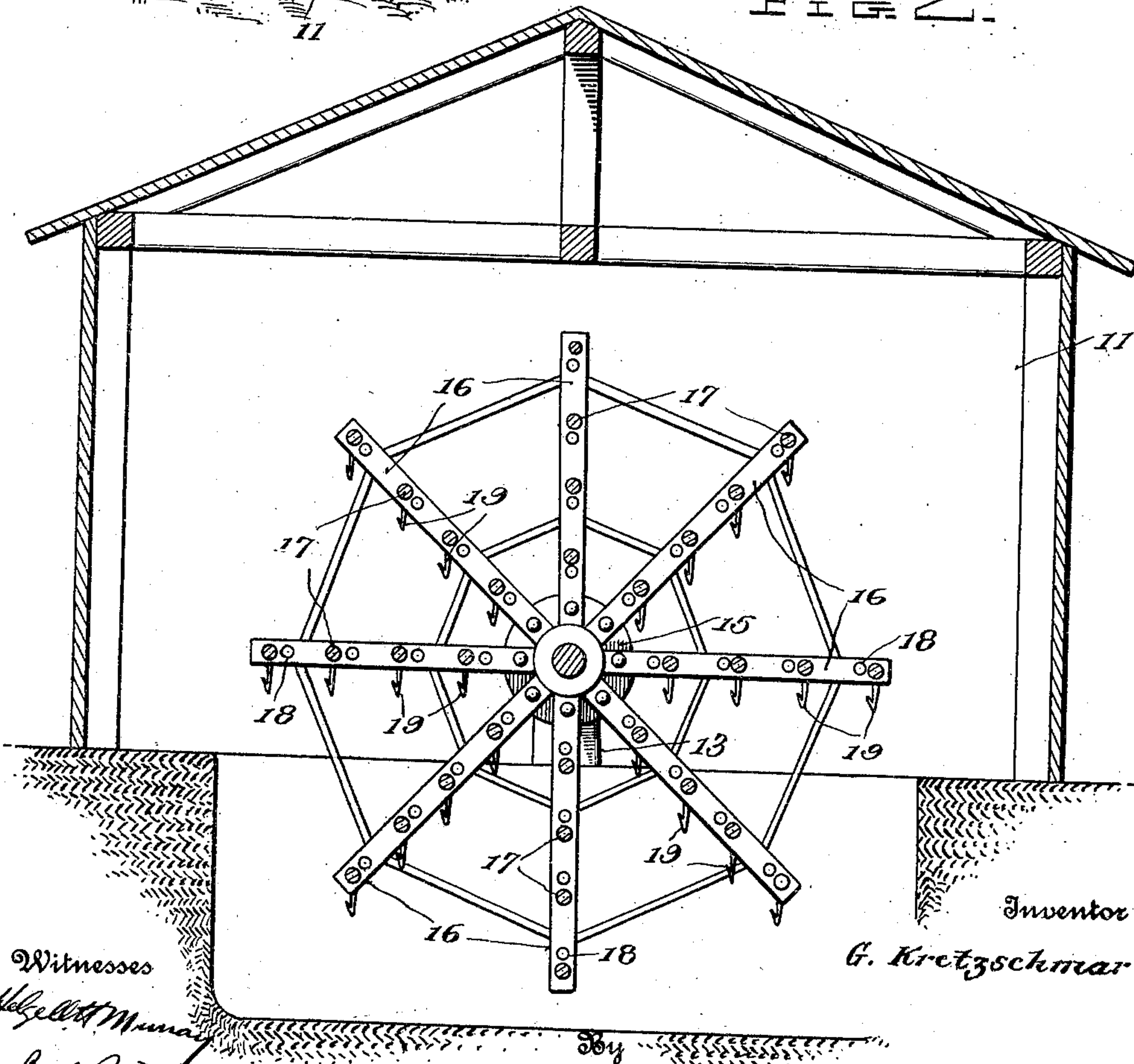


FIG. 2.



Witnesses
Edgell H. Mumay
L. N. Gillis

Inventor
G. Kretzschmar

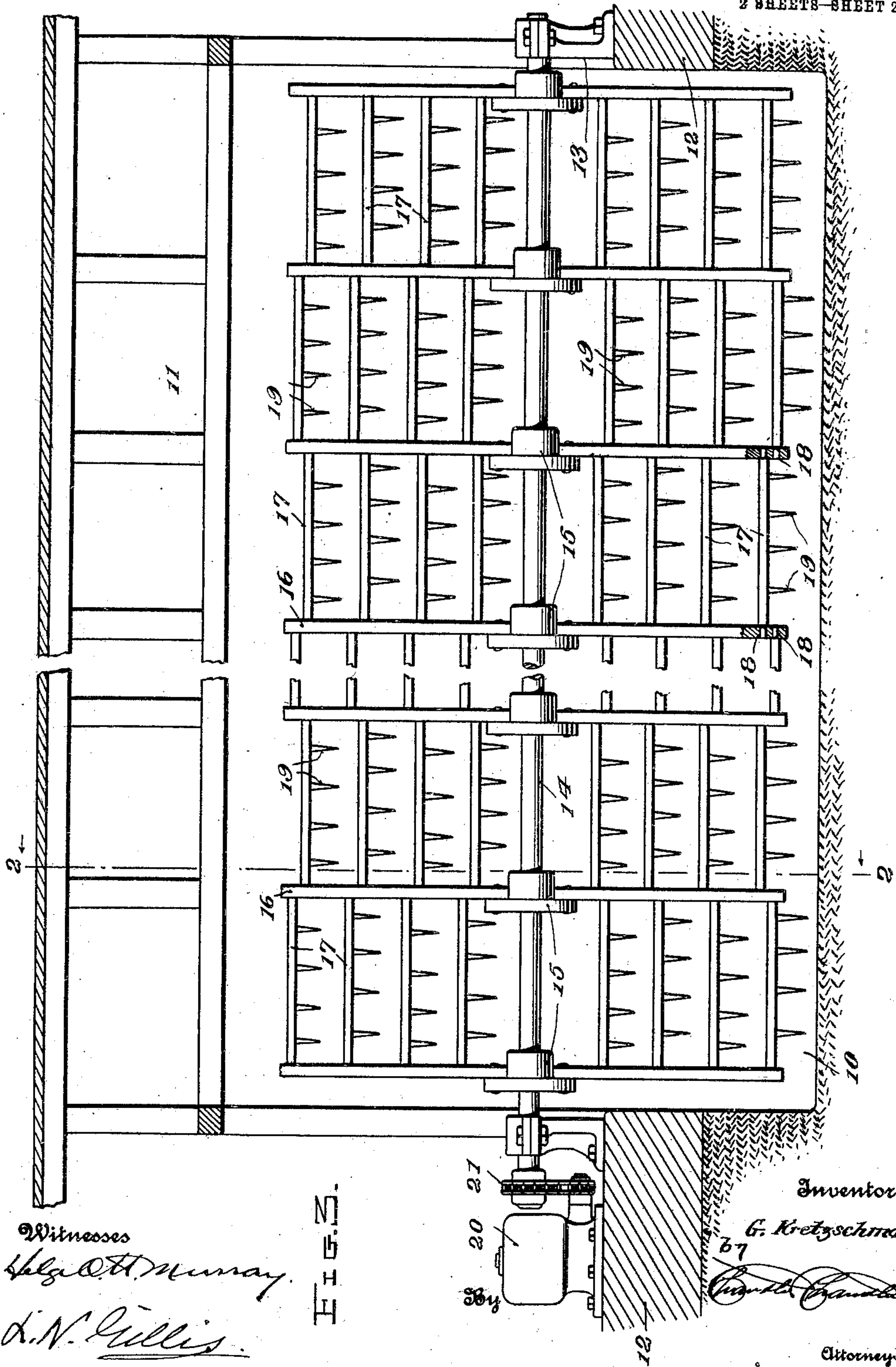
By *Charles H. Chandler* Attorneys

TOBACCO BARN.

Patented Apr. 25, 1911.

2 SHEETS—SHEET 2.

990,749.



Witnesses

Wm. A. Murray

D. N. Gillis

М
Г
Ч
Ч

Inventor

G. Kretzschmar

Attorneys

UNITED STATES PATENT OFFICE.

GUSTAV KRETZSCHMAR, OF PAAUILO, TERRITORY OF HAWAII.

TOBACCO-BARN.

990,749.

Specification of Letters Patent.

Patented Apr. 25, 1911.

Application filed June 27, 1910. Serial No. 569,061.

To all whom it may concern:

Be it known that I, GUSTAV KRETZSCHMAR, a citizen of the United States, residing at Paauilo, in the county of Hawaii, Territory of Hawaii, have invented certain new and useful Improvements in Tobacco-Barns; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to tobacco curing and has special reference to a curing barn and fittings therefor.

It is a well understood fact that in many parts of the world where tobacco is raised there is a great scarcity of lumber suitable for the construction of the large barns ordinarily used for the storage of tobacco while curing.

One object of this invention is to provide a form of barn wherein the height of the barn may be reduced to a minimum with a view of increased economy in its construction.

It is also well known that the ordinary means of hanging tobacco in curing barns is attended with a great waste of room and expenditure of labor owing to the fact that the tobacco must be carried up to the racks.

A second object of this invention is the economical utilization of the space in the barn and the provision of means whereby the climbing of ladders with tobacco will be eliminated.

Another disadvantage of the ordinary method of constructing barns of this description is that the tobacco, when once suspended, has either to be left in that position or changed by hand with great loss of time and injury to the tobacco. If left in position the tobacco in the upper part of the barn is not cured at the same rate as the tobacco in the lower part of the barn owing to the heated air ascending to the upper part and this also works injury to the tobacco.

A third object of the present invention is the provision of means of novel character whereby all of the tobacco in the barn will be cured evenly.

With the above and other objects in view, the invention consists in general of a low barn structure having a rotary drying rack therein, the whole being of novel and improved construction.

The invention further consists in certain

novel details of construction and combinations of parts hereinafter fully described, illustrated in the accompanying drawings, and specifically set forth in the claim.

In the accompanying drawings, like characters of reference indicate like parts in the several views, and:—Figure 1 is a perspective view of a barn constructed in accordance with this invention, a portion of one side being broken away to show part of the interior. Fig. 2 is a transverse section through a barn constructed in accordance with this invention. Fig. 3 is a longitudinal section through such a barn, certain parts being broken away in order to permit the showing of the mechanism and structure on a large scale.

In the construction of this barn there is first excavated a large pit 10. This pit is preferably of oblong form and is nearly but not quite as long as the barn structure which it is intended to place over said pit. On top of this pit and entirely covering the same is erected a low barn structure 11. At each end of the pit 10 are constructed suitable foundations 12 and on these foundations are positioned bearings 13, the bearings being alined and disposed centrally of the ends of said pit. In the bearings 13 is journaled a horizontal shaft 14 whereon are spaced hubs to each of which is bolted or otherwise secured a series of radial arms 16. Between the arms of adjacent series are rack bars 17 having reduced ends 18 which are journaled in the arms and depending from these rack bars are hooks 19 whereon are hung the "hands" of tobacco. These arms are of such length that as the shaft is rotated the arms pass down into the pit and up to a point adjacent the trusses of the barn. In order to rotate this shaft there is provided a motor, here indicated as an electric motor 20, which is connected to the shaft by suitable gearing 21.

In the operation of curing tobacco the "hands" are brought into the barn and hung upon the hooks by operators stationed along the sides of the pit. When one set of hooks is filled the motor may be started and rotate the rack to bring another set of hooks to loading position, thus obviating the necessity of climbing ladders or the like. This operation is kept up until all of the tobacco has been placed upon the hooks. As the curing proceeds the motor may be operated either continuously or periodically so that

the tobacco is changed in its position and is thus equally exposed to the influence of the different temperatures and hygroscopic qualities of the air at different points. In addition to this the rotation of the tobacco on the racks will have the effect of stirring up the air so that both temperature and hygroscopic qualities will be equalized. In this manner all of the tobacco is evenly cured while by reason of the employment of a pit the barn structure is kept low and thus can be constructed with the minimum of lumber.

There has thus been provided a simple and efficient device of the kind described and for the purpose specified.

It is obvious that the bars and barn structure may be made of such material and dimensions as are best adapted for the purpose.

Having thus described the invention, what is claimed as new, is:—

The combination with a floor provided with a pit; of a barn structure covering said pit, a shaft journaled for horizontal rotation and extending longitudinally over said pit in close relation thereto, spaced series of radial arms projecting from the shaft to rotate therewith, rack bars carried by adjacent series of arms and provided with "hand" supporting means, and means to rotate said shaft.

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

GUSTAV KRETZSCHMAR.

Witnesses:

ALLAN M. BOYLE,
F. J. JOHNSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
