

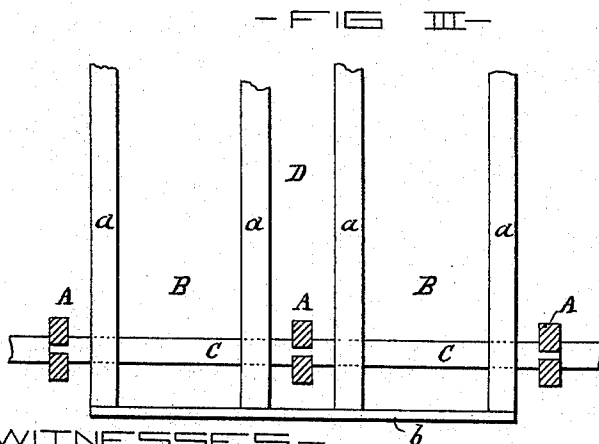
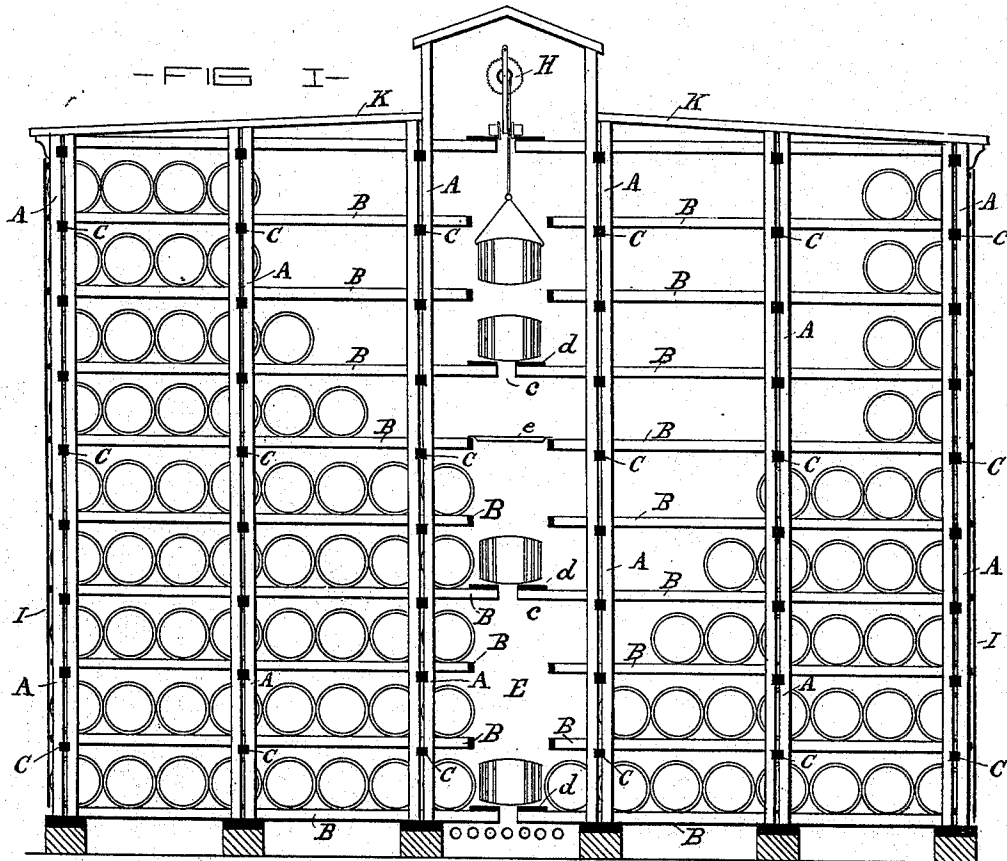
(No Model.)

3 Sheets—Sheet 1.

R. STEWART.
BARREL STORING WAREHOUSE.

No. 268,748.

Patented Dec. 5, 1882.



- WITNESSES -

Paul Fisher
H. A. Daniels

- INVENTOR -

Robert Stewart,
by G. H. Howard,
attor.

(No Model.)

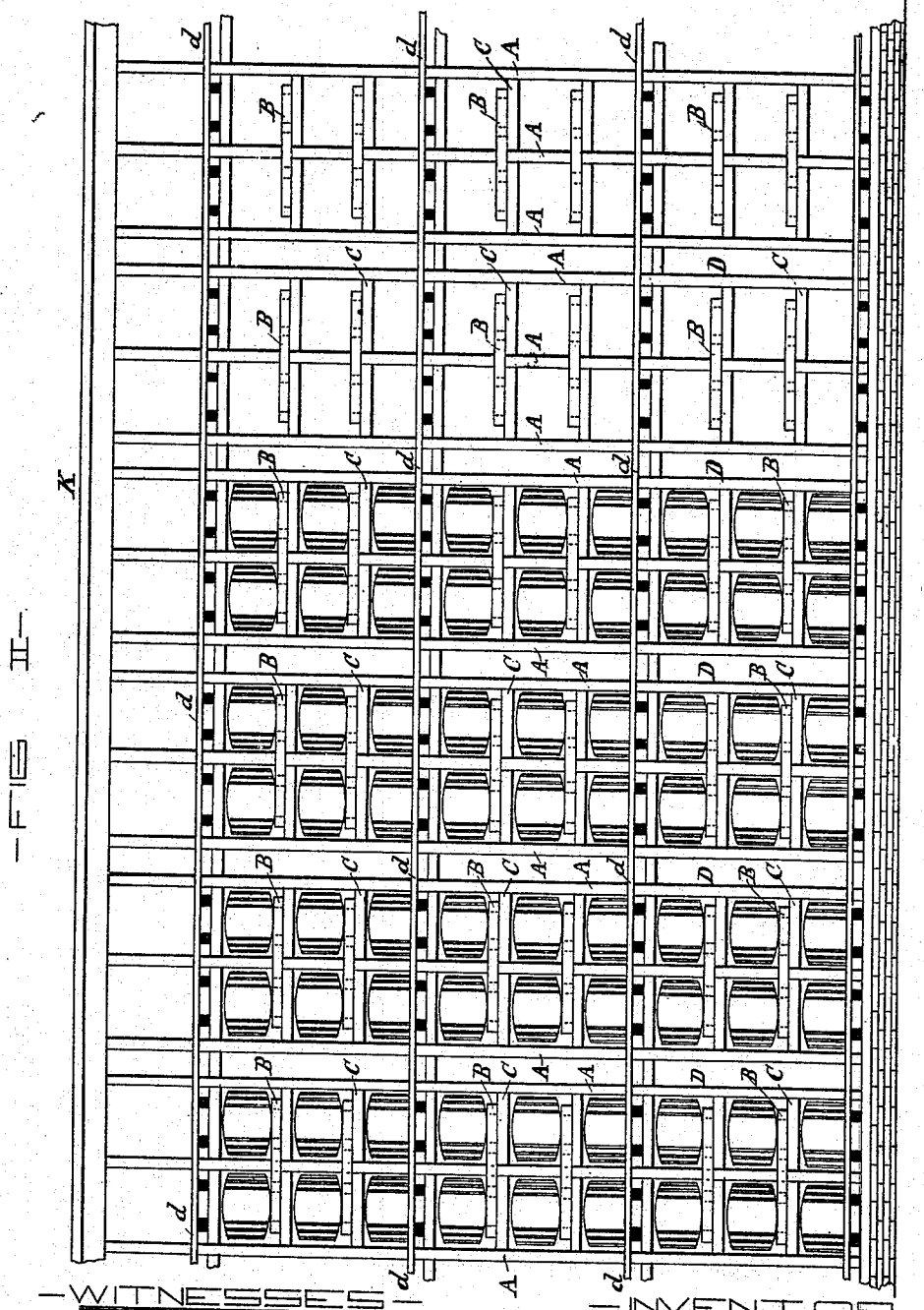
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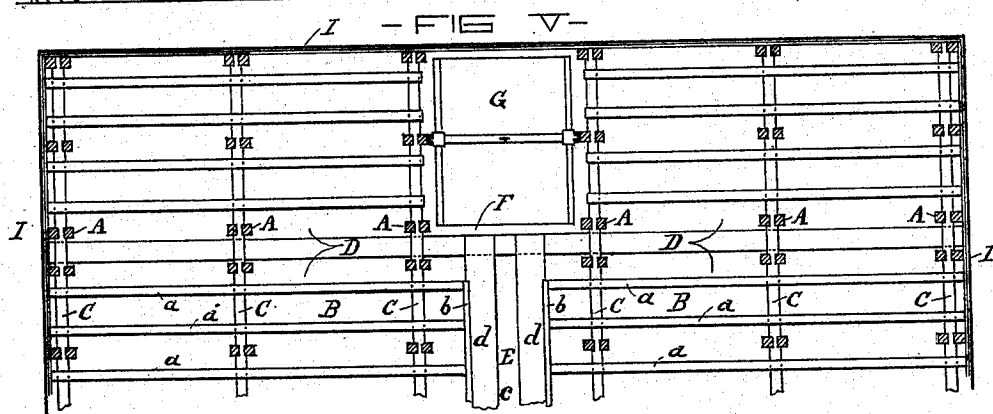
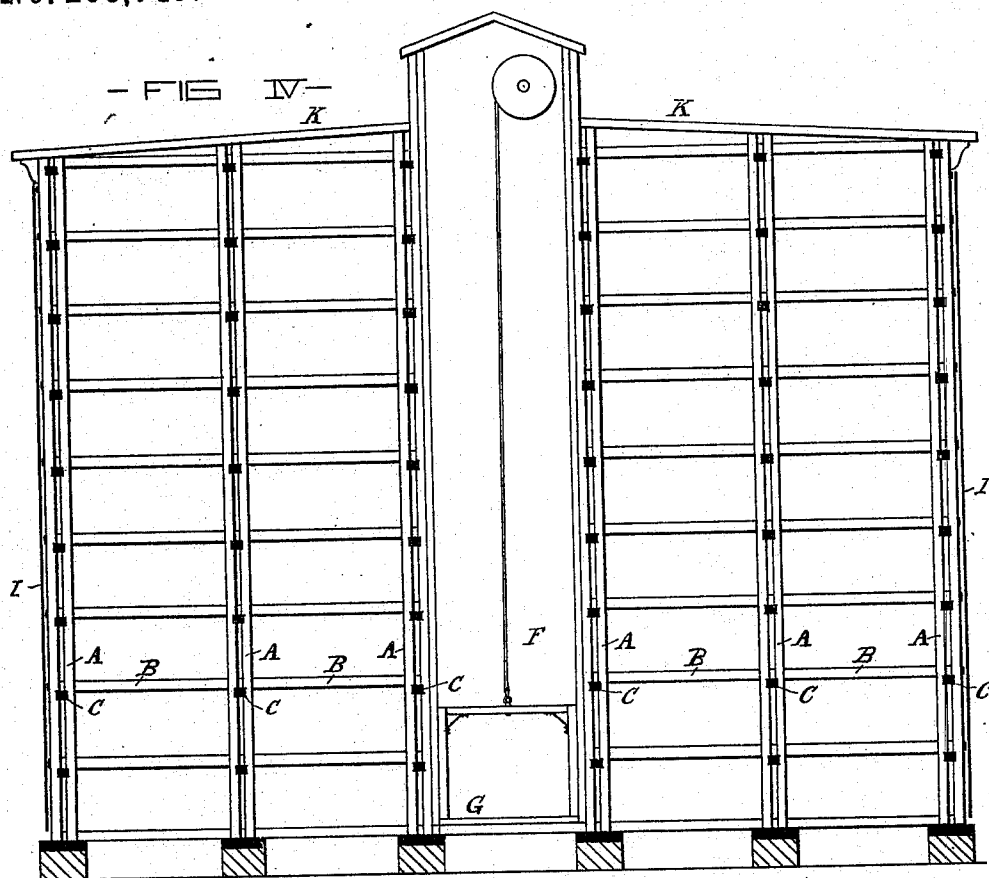
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Paul Fisher
Ed. J. Riggs

INVENTOR

Robert Stewart.
by Esther Howard.
Attyy.

UNITED STATES PATENT OFFICE.

ROBERT STEWART, OF BALTIMORE, MARYLAND.

BARREL-STORING WAREHOUSE.

SPECIFICATION forming part of Letters Patent No. 268,748, dated December 5, 1882.

Application filed May 8, 1882. (No model.)

To all whom it may concern:

Be it known that I, ROBERT STEWART, of the city of Baltimore, and State of Maryland, have invented certain Improvements in Barrel-Storing Warehouses, of which the following is a specification.

The object of this invention is to provide a system of racks, inclosed or covered by a practically weather-proof casing, in which filled barrels of whisky may be easily stored in bond during the time required for the aging of the liquor; and it consists in a frame structure, which is to all intents and purposes a number of racks tied together so as to be self-supporting, upon which barrels may be placed and isolated in tiers, one above the other, with passage-ways to facilitate the placing and examination of every barrel, and a well provided with an elevator for raising the barrels to the different tiers of racks, and with other devices to admit of the manipulation of the barrels in the racking operation, the whole being inclosed by a casing and a roof sustained by the supports of the rack.

In the further description of the invention which follows reference is made to the accompanying drawings, forming a part hereof, and in which—

Figure I is a transverse section of the improved structure. Fig. II is a longitudinal section of the same. Fig. III is an enlarged top view of a part of the invention. Fig. IV is a section of the invention corresponding with Fig. I, except that it is taken through the elevator-well. Fig. V is a horizontal section of a part of the structure, showing the position of the elevator-well with reference to the racks.

Similar letters of reference indicate similar parts in all the views.

A A are posts, which for rigidity and convenience in attaching them to other parts of the structure are preferably made double—that is to say, of two scantlings with a space between them.

B B are the barrel-racks, supported from the upright posts A by means of longitudinally-extending joists C. The racks are each composed of two pieces of timber, *a*, separated sufficiently to allow the barrels to be rolled thereon, and an end piece, *b*, which prevents the barrels rolling off. (See Fig. III.) The racks are

preferably placed in pairs, as shown in Figs. II and III, with a passage-way, D, between them, and the barrels are arranged with their stamped ends next to the said passage-way, in order that the inspector or person in charge may examine them at pleasure. A central alley-way, E, extends throughout the whole length of the building, and the racks in each third section in height project to near the center of the said alley-way, a space, *c*, being left between them for a hosting chain or rope; but the space is not wide enough to allow a barrel to fall through. By this means the building is divided into a series of stories, and each story has a capacity of three tiers of barrels in height. At one or both ends of the building is an elevator-well, which leads from the ground to the roof, through which barrels are hoisted to the upper stories and placed on the lower tier of racks, which come nearly together centrally of the alley-way, as before described.

The elevator-well and hoisting-platform, which are respectively represented by F and G, are shown in Figs. IV and V, and it will be seen that the central alley-way, E, connects directly with the said well.

A small hoisting-machine, H, on a wheeled truck may be moved along a platform in the upper story for hoisting the barrels to the racks.

It will be seen that each story is provided with boards *d* to be used as a footway and a landing-place for barrels.

When a barrel is to be placed on the rack it is elevated slightly above the rack and a skid, *e*, placed between the ends of the rack, as shown in Fig. I. The barrel is then lowered to the skid, and after being turned is rolled to its place.

The structure, as described, is merely a framework of barrel-racks tied together, so as to be self-supporting, and to protect its contents from the weather it is cased exteriorly and roofed. The casing and roof are respectively designated by I and K.

It will be understood that my invention consists not in a building having racks secured therein, but a frame-work of racks properly tied together and self-sustaining, roofed and weather-boarded to protect its contents, the casing and the roof not being depended on to sustain in any manner the interior frame-work,

but used merely to protect the contained barrels from the action of the weather, as before stated.

In the aging of whisky it is necessary in the winter months to retain the liquor at a much higher temperature than that of the outer air. I therefore have a system of steam-pipes in the lower part of the building, and make the outer casing or weather-boarding a poor conductor of heat by inserting paper or other non-heat-conducting substance between the said casing and the frame-work of the racks.

I do not claim broadly a warehouse in which the floors are constructed as barrel-racks; nor a system of barrel-racks combined with and forming a part of a warehouse, the two structures being dependent upon each other for support; but

What I do claim is—

A structure for supporting and storing barrels, which consists in a system of barrel-racks connected and tied together to be self-sustaining, the said racks having passage-ways to facilitate inspection of the stored barrels, an alley-way to admit of the transfer of barrels in front of the racks, and an elevator-well through which barrels may be hoisted to any height within the structure, the whole being inclosed by a casing and roof sustained by the supports of the racks, substantially as specified.

ROBERT STEWART.

Witnesses:

WM. T. HOWARD,

ED. J. DIGGS.