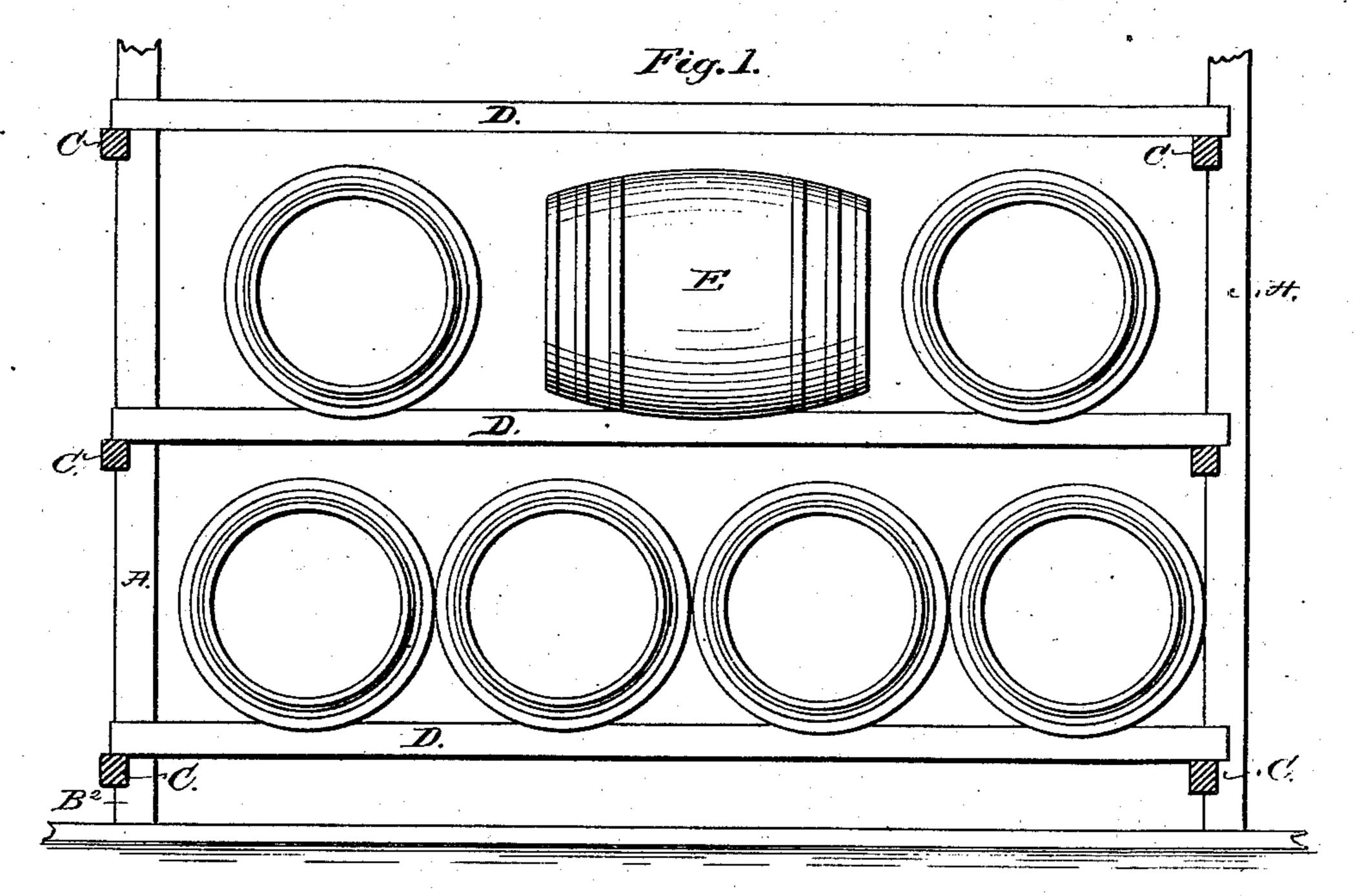
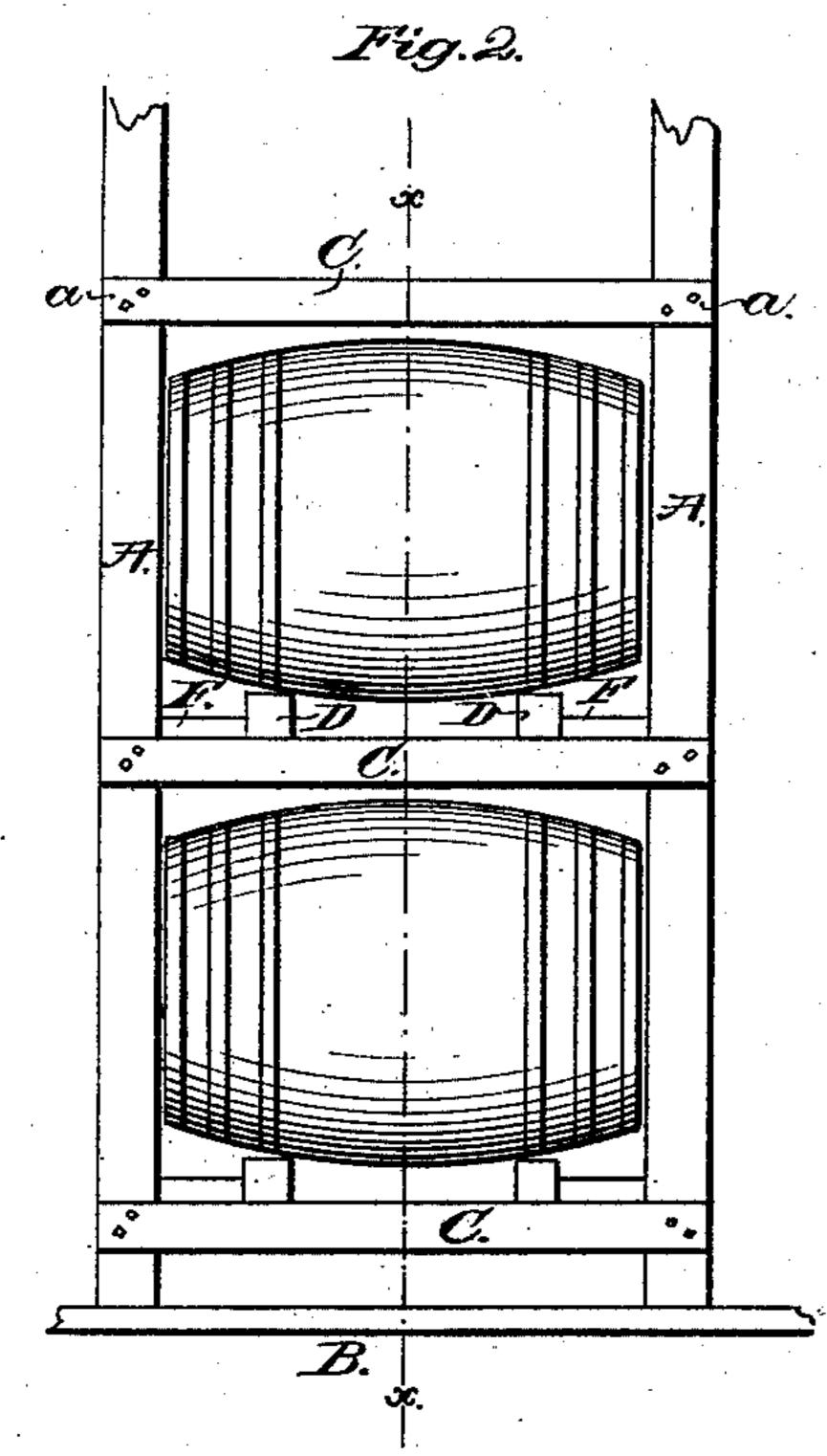
W. H. THOMAS.

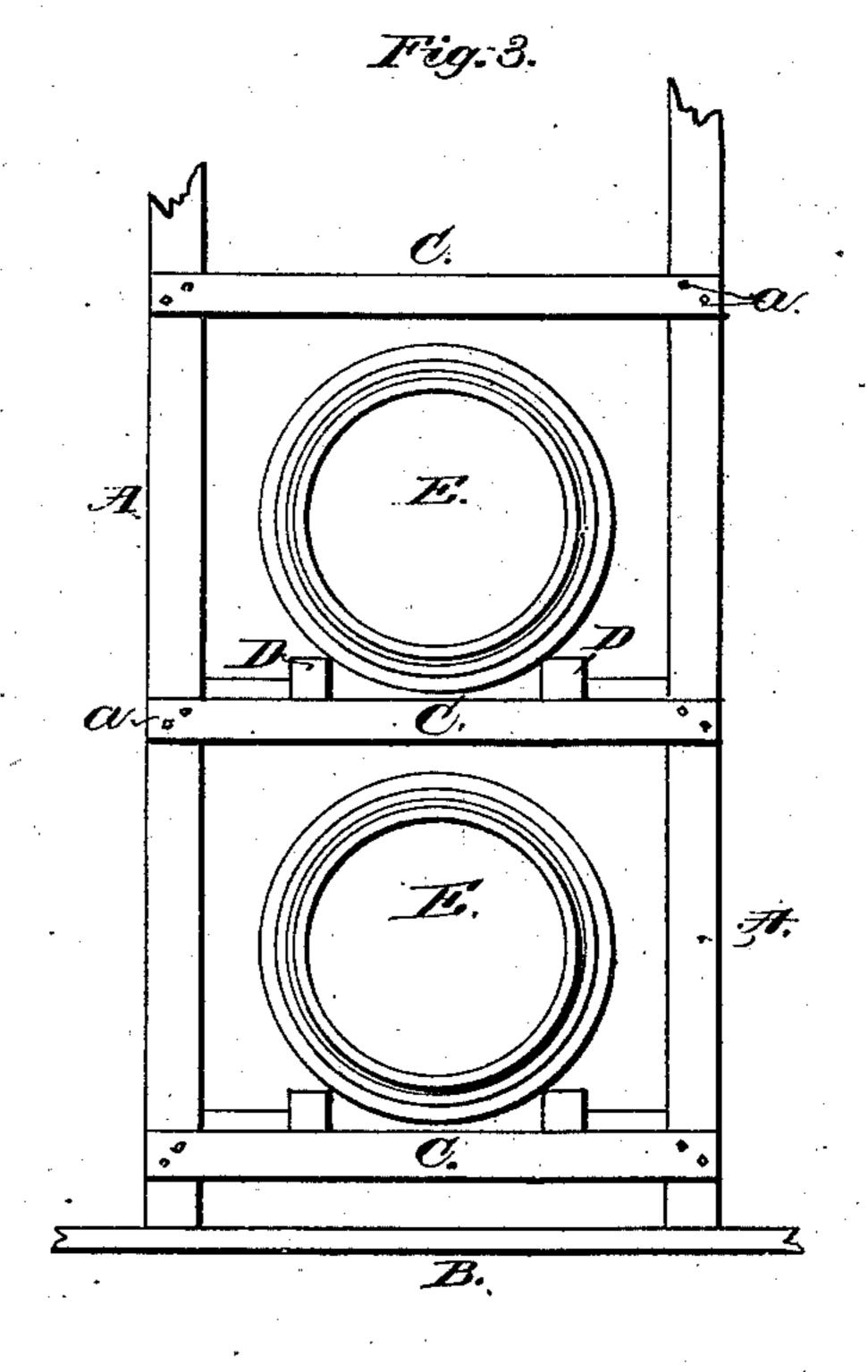
Rack for Tiering Barrels.

No. 232,569.

Patented Sept. 21, 1880.







Witnesses. Jun F.C. Premilet

Inventor.
William H. Thomas.

By Mineral States.

Attorney.

## UNITED STATES PATENT OFFICE.

WILLIAM H. THOMAS, OF LOUISVILLE, KENTUCKY.

## RACK FOR TIERING BARRELS.

SPECIFICATION forming part of Letters Patent No. 232,569, dated September 21, 1880.

Application filed August 16, 1880. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HILTON THOMAS, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented new and useful Improvements in Racks for Tiering Barrels, of which the following is a specification.

My invention relates to certain improve-

ments in racks for tiering barrels.

Previous to my invention it was common in tiering barrels in warehouses to first arrange one row of barrels upon the floor, and then on top of said row to arrange longitudinally two rails, one near to each end of said barrels, 15 and upon these rails to arrange another row of barrels, and so on as high as desirable or practicable. In this method of storing barrels containing liquids of any kind the lowest row necessarily sustained the weight of those 20 above, which tended to cause leakage, and at the same time render it difficult and troublesome to remove a given barrel in any of the lower rows. To overcome these disadvantages barrel-racks have been devised consisting of 25 upright posts and inwardly-projecting rails a sufficient distance apart vertically to permit the passage of a barrel and sufficiently far apart laterally to receive and support the extreme ends or chines of the barrel.

Jess length than those for which such racks may have been designed, and that when, by accident, a barrel becomes turned at right ausless to its normal position, it will drop between said rails.

The object of my invention is to overcome the disadvantages incident to this last-named method; and my invention consists of a rack for tiering barrels composed of vertical posts suitably arranged to receive cross-pieces, which serve as ties to maintain the posts in proper vertical relation to each other, and which also serve to support the rails, and two or more rails laid upon such cross-pieces in such manner that they may be independently adjusted laterally and then held by check-blocks, as will be hereinafter set forth.

In the accompanying drawings, Figure 1 represents a longitudinal section taken at the 50 line x x, Fig. 2, of a barrel-rack embodying my invention; Fig. 2, a front or end view of the same, and Fig. 3 a similar view with the barrels arranged at right angles to the position shown in Fig. 2.

Similar letters indicate like parts in the

several views.

A A represent the vertical posts, which may be of any desired length, arranged upon a base or sill, B, and tied together by ties C, 60 which are mortised or notched into the posts and secured by one or more bolts or ordinary spikes, a. These ties serve also as supports for two longitudinal rails, D D, preferably of four-by-four scantling. They are in no wise 65 fastened to the posts, but are capable of lateral adjustment, so that they will support, in the usual way, barrels of any given length, or even kegs, and they may be so arranged as to support the ordinary-sized barrel at points 70 nearer to the center or bilge than is usual, and at the same time prevent them from slipping through, should they, by accident, be turned into the position represented by the barrels marked E, Figs. 1 and 3.

When the rails D D have been adjusted properly they are held against outward or lateral movements by checks or blocks F, a number of which may be provided of varying lengths to hold the rails at different distances 80 apart. These checks or blocks are not absolutely necessary, but should be used as a presention against assistant.

caution against accident.

The gist of my invention rests in the idea of tying the vertical posts together with cross-85 ties and arranging thereon independent and laterally-adjustable supporting-rails.

The posts may be composed of continuous pieces reaching from the sill to the top of the warehouse, or they may be made in sections. 90 In the latter case the bottom ends of each succeeding section rests upon the head or top of the preceding sections, or upon lintels or cap-pieces secured thereto.

The spaces between each row of racks should 95 be sufficiently wide to permit the passage of

the inspector, and walk-boards may be provided in the usual manner at any given altitudes to inspect the higher tiers of barrels.

What I claim, and desire to secure by Let-

5 ters Patent, is—

1. In combination with a series of posts, arranged as described, the cross-ties C, and independent and adjustable rails D, substantially as and for the purpose set forth.

2. In combination with the vertical posts A, cross-ties C, secured thereto, and the independ-

ent and laterally adjustable rails D, and the checks or blocks F, for securing the rails in their adjusted positions, substantially as hereinbefore set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing

witnesses.

WILLIAM HILTON THOMAS.

Witnesses:

GAVIN H. COCHRAN, EDMUND Z. DAVISON. It is hereby certified that in Letters Patent No. 232,569, dated Sept. 21, 1880, to William H. Thomas, for improvement in "Racks for Tiering Barrels," on page 2, in line 3, of the second claim, the word "and" was erroneously inserted after the reference letter "D," that the proper corrections have been made in the records of this Office, and that the said correction is hereby made in the Letters Patent.

Signed, countersigned and sealed this 4th day of December, A. D. 1880.

[SEAL.]

A. BELL,
Acting Secretary of the Interior.

 ${\bf Counter signed:}$ 

E. M. MARBLE,

Commissioner of Patents.