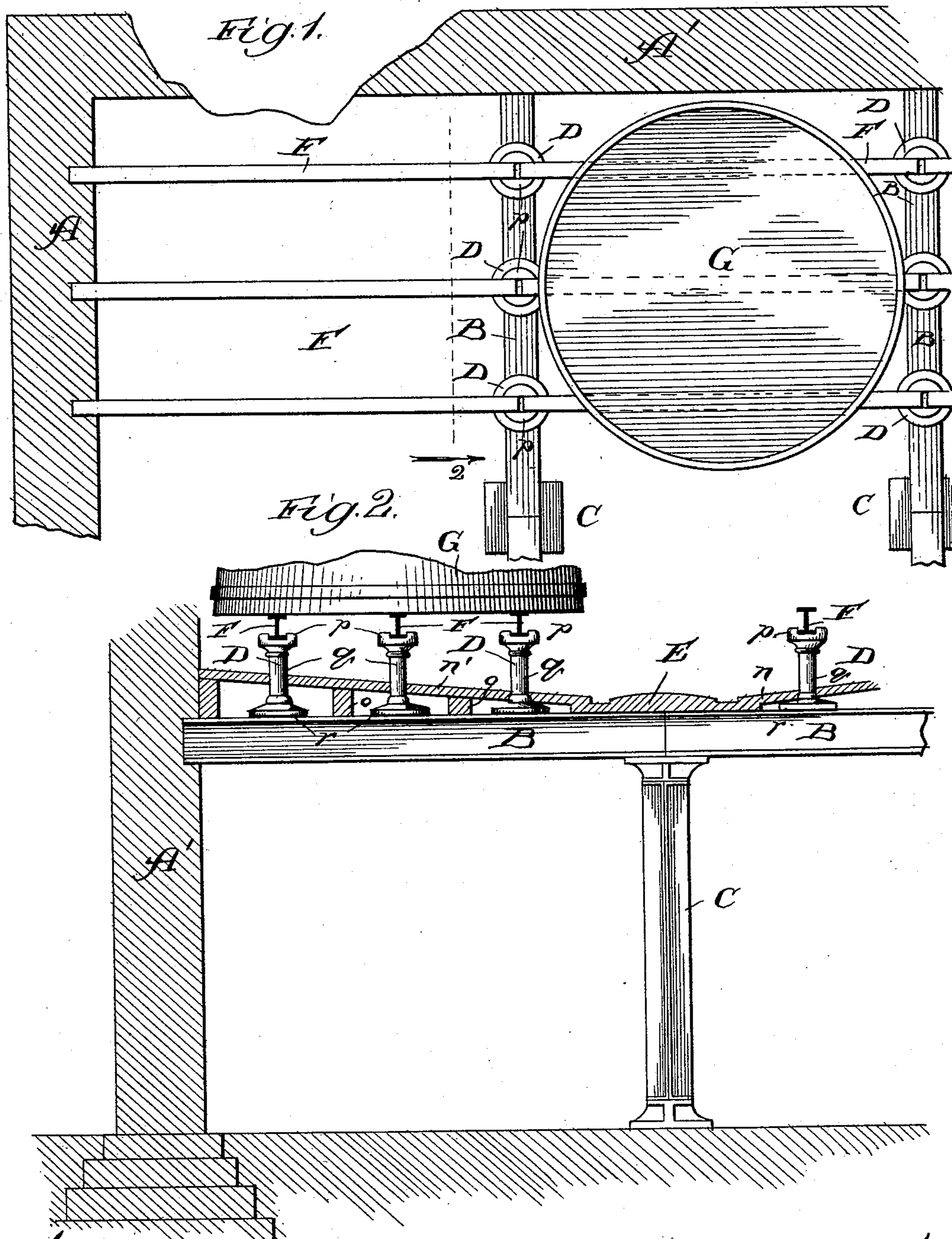


(No Model.)

W. GRIESSER.  
CONSTRUCTION OF STORAGE ROOMS.

No. 482,889.

Patented Sept. 20, 1892.



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# UNITED STATES PATENT OFFICE.

WILLIAM GRIESSER, OF CHICAGO, ILLINOIS.

## CONSTRUCTION OF STORAGE-ROOMS.

SPECIFICATION forming part of Letters Patent No. 482,889, dated September 20, 1892.

Application filed February 20, 1892. Serial No. 422,181. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM GRIESSER, a subject of the Emperor of Germany, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in the Construction of Storage-Rooms, of which the following is a specification.

My invention relates to an improvement in the construction of the floors of such storage-rooms as are employed for the storage of very heavy objects, such as the immense vats for storing beer in the process of its manufacture.

A common construction employed in the floors of storage-rooms of the class referred to involves floor-girders supported on pillars and crossed by floor-beams, between which the flooring—such as, and commonly, arched tiling with a level surface of concrete—is supported. On adjacent floor-beams are imposed “shoes” in rows of two or more for each side of the base of a vat, the rows extending lengthwise of the floor-beams, and each such row of the shoes has its members connected at their top ends with corresponding members of a row on an adjacent girder by supporting-beams on which the vats are directly imposed. Each vat is thus supported on at least two supporting-beams extending across opposite sides of the center of its base and imposed on parallel rows of the shoes, which in turn rest on the floor-beams crossing the pillar-supported floor-girders, whereby the weight is intended to be always sustained by the pillars or other fundamental support.

The foregoing construction is not only unnecessarily elaborate and expensive to attain the desired end, but it not unfrequently fails in its purpose by reason of the liability of the supporting-shoes becoming displaced through carelessness or inadvertence, so as to rest on the comparatively frail portion of the floor between the floor-beams, which being insufficiently strong to resist the weight thus imposed upon it gives way with obviously disastrous consequences. My objects are to simplify the construction thus outlined, thereby also cheapening it, and to render impossible the accidental displacement of the vat-supporting shoes. These objects I accomplish in a manner enabling me to omit entirely from the structure floor-beams by imposing the vat-

supporting shoes, connected as hereinbefore described, by the vat-supporting beams directly on the pillar-supported floor-girders and building the floor-surface, whether of wood, metal, or other material, directly on the girders around the standard portions of the shoes.

My improvement is illustrated in the accompanying drawings, in which—

Figure 1 is a plan view representing a broken portion of a storage-room floor constructed in accordance with my improvement and a vat supported thereon; and Fig. 2 is a sectional view thereof, showing only a broken portion of the vat in elevation, the section being taken on the line 2 of Fig. 1 and viewed in the direction of the arrow.

A A' represent walls of a storage-room.

B B are cross-beams or floor-girders, supported at their ends in the walls A', and between the latter on pillars C. Shoes D, regularly arranged in any desired manner and each comprising in its preferred form (illustrated) a base *r*, shaft *q*, and recessed head *p*, are seated at their bases at suitable intervals in rows lengthwise along the girders B. A floor E, which need be only strong enough to support ordinary weight in the use of the floor for standing purposes and moving over it, and which may, therefore, be formed with timbers *o* and flooring *n* of wood, as represented, or of light metal, is built around the shafts *q* of the shoes D, which thus are permanently located in their respective places. Vat-supporting beams F (shown as I-beams) are seated at their ends on and thus extend between pairs of the shoes D, the members of which are on adjacent girders B. Two such pairs of shoes and two beams F may suffice for supporting each vat G, though ordinarily three of each are employed, as shown.

From the foregoing description of my improved structure it will be seen that floor-beams are entirely dispensed with, thereby producing simplicity and cheapness of construction, the cheapness being the greater by reason of the lightness of the floor-surface rendered possible, and by the impossibility of such displacement of the supporting-shoes as would cause the weight of the object they support being distributed between the girders.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a storage-room, in combination with the walls and supporting-pillars or the like supporting-girders, shoes supported at intervals directly on the girders, and supporting-  
5 beams F for vats G or the like extending crosswise of the girders and seated on shoes thereon, substantially as described.

2. In a storage-room, the combination, with the walls and supporting-pillars or the like,  
10 of floor-girders supported thereon, shoes D, supported at intervals directly on the girders, supporting-beams F for vats G or the like extending crosswise of the girders and seated on shoes thereon, and a floor E, built on the  
15 girders around the shoes, substantially as described.

3. In a storage-room, the combination, with the walls and supporting-pillars or the like, of floor-girders B, supported thereon, shoes D, each having a base  $r$ , shaft  $q$ , and recessed  
20 head  $p$ , forming a seat supported at intervals in pairs directly on adjacent girders, supporting I-beams F for vats G or the like extending crosswise of the girders and seated in the recessed heads of said shoes, and a floor E,  
25 built on the girders around the shaft portions of the shoes, substantially as described.

WILLIAM GRIESSER.

In presence of—  
J. N. HANSON,  
M. J. FROST.