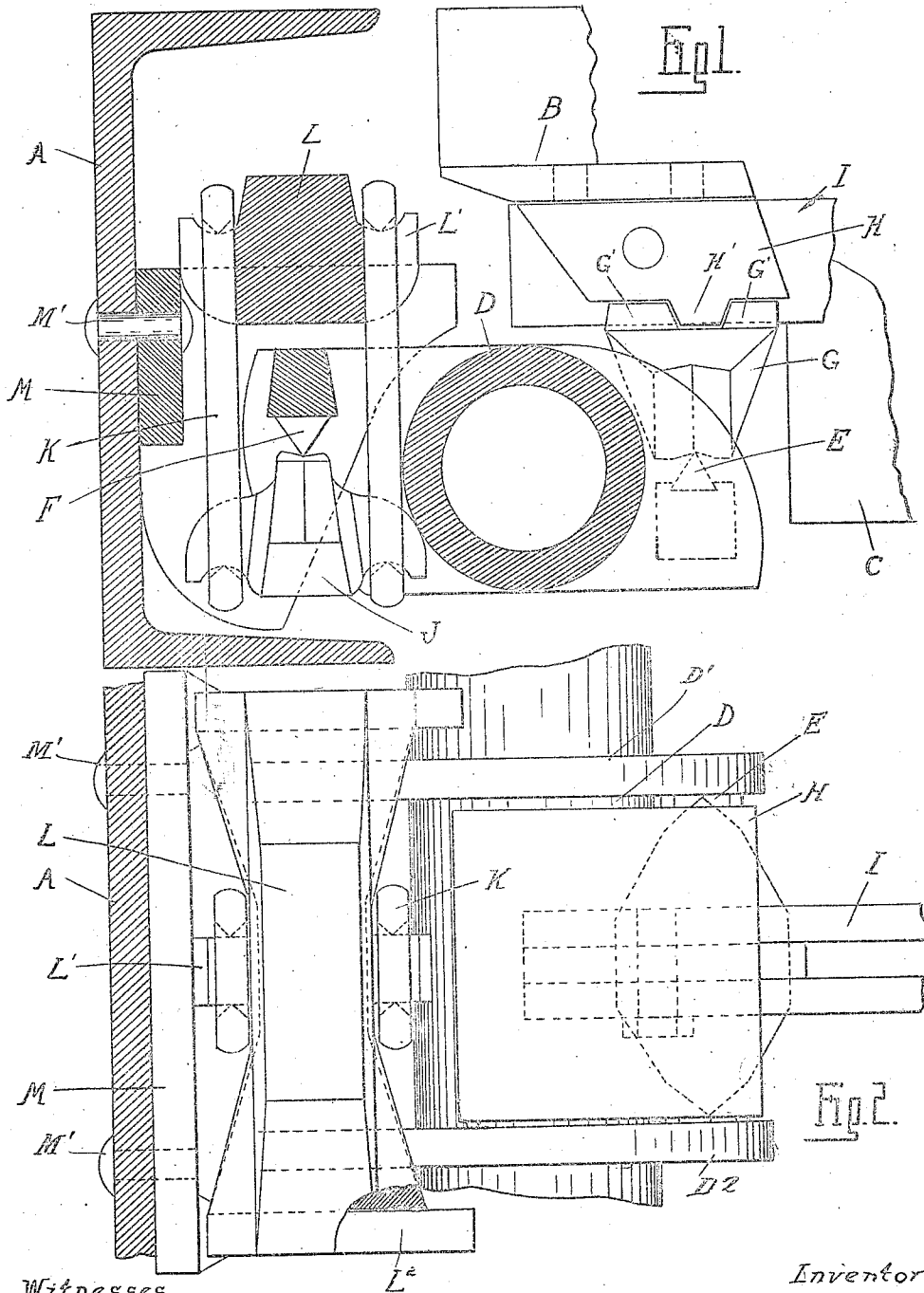


992,747.



Witnesses

W. C. Ford
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Inventor

Stephen J. Austin

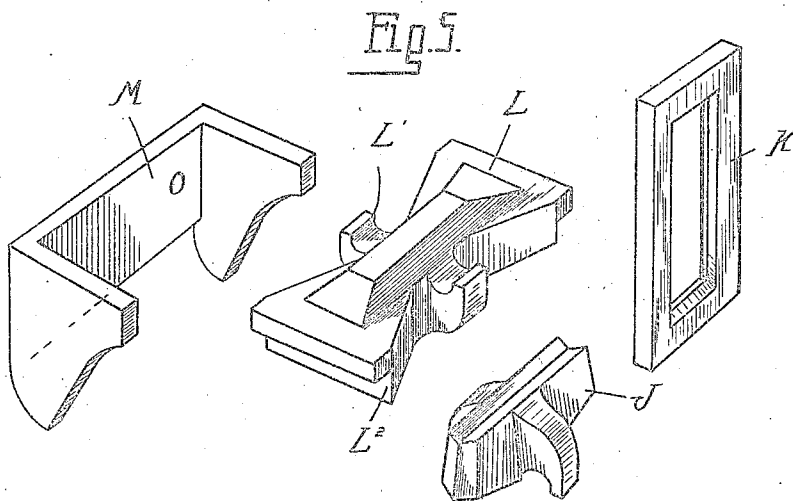
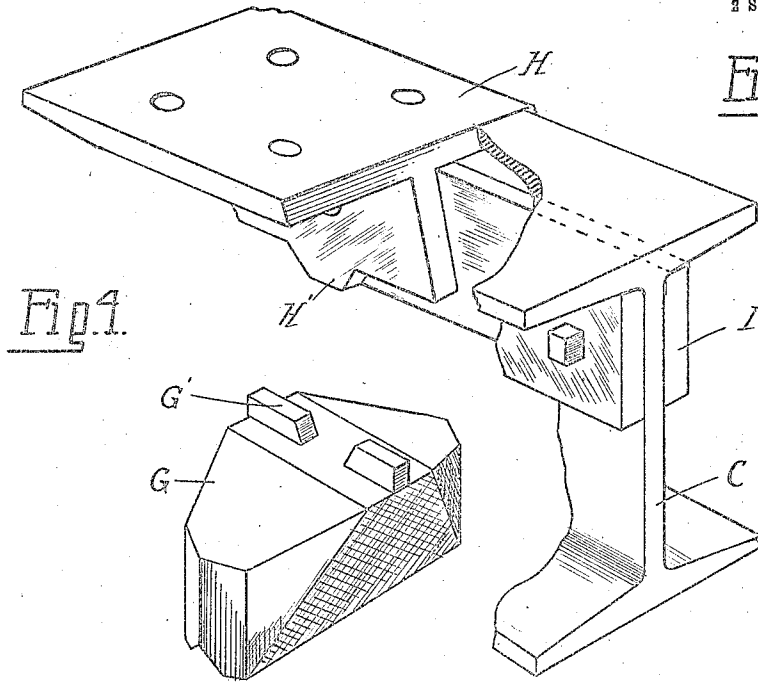
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S. J. AUSTIN.
PITLESS SCALE.
APPLICATION FILED MAY 22, 1908.

992,747.

Patented May 23, 1911.

2 SHEETS—SHEET 2.



Witnesses
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UNITED STATES PATENT OFFICE.

STEPHEN J. AUSTIN, OF TERRE HAUTE, INDIANA, ASSIGNOR TO E. AND T. FAIRBANKS AND COMPANY, OF ST. JOHNSBURY, VERMONT, A CORPORATION OF VERMONT.

PITLESS SCALE.

992,747.

Specification of Letters Patent.

Patented May 23, 1911.

Application filed May 22, 1908. Serial No. 434,350.

To all whom it may concern:

Be it known that I, STEPHEN J. AUSTIN, a citizen of the United States of America, residing at Terre Haute, in the county of Vigo and State of Indiana, have invented certain new and useful Improvements in Pitless Scales, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to platform scales of that type commonly known as "pitless" and the invention consists in certain novel features of construction, with particular reference to the means for adjustably supporting the bearing members, as more fully hereinafter set forth.

In the drawings—Figure 1 is a section through a portion of the scale frame and platform illustrating the construction of adjustable bearings; Fig. 2 is a plan view thereof; Fig. 3 is a fragmentary view of the platform beam and its support. Fig. 4 is a perspective view of the bearing block G. Fig. 5 shows the bracket and the cooperating bearing members detached from each other.

A is the supporting frame for the scale which is of rectangular form and preferably composed of channel beams.

B is the platform supported upon the platform beams C, and D is one of the carriers which constitutes a portion of the lever system. The carrier D is provided with spaced arms D' and D² which carry knife-edge bearings E and F for respectively supporting the platform and for engaging the supporting hanger. These bearings are preferably arranged with their knife edges in the same horizontal plane in the normal or balancing position of the scale.

G is the bearing block for engaging the knife edge bearing E which is preferably formed of cast metal having a V-shaped groove in its under side.

H is a member also preferably formed of cast metal which rests upon the block G and forms a means for supporting the platform beam C. As shown, this member H is of a T-shaped cross section having a depending lug H' on its under side which bears upon the upper face of the block G and is arranged between upwardly extending lugs G' thereon. The member H is secured to the beam C by straps I upon opposite sides thereof, and these straps also embrace the

lugs G' retaining the member G in engagement with the member H, while permitting a limited adjustment of the one in relation to the other.

The knife edge bearing F rests upon a bearing block J which is suspended by links K from a block L. The latter is formed with lugs L' on opposite sides thereof with which the links K engage and extends upon opposite sides of said lugs to form separated seats for resting upon the frame support. This frame support preferably consists of a bracket M secured by means of bolts M' to the web of the channel beam A and having the outwardly extending flanges which engage with grooves L² at opposite ends of the block L. This engagement permits of the lateral adjustment of the block L upon the bracket M.

With the construction as described, freedom of adjustment is provided by which binding of the scale levers is prevented. Thus the block L being laterally adjustable on the bracket M may assume a position where the links K are normally in vertical planes. The block G is also permitted a limited adjustment in relation to the member H and the latter, which is secured by the straps I, may be adjusted in relation to the platform supporting beams. A further advantage of the construction is that the hanger blocks and the bearings are arranged underneath the top flange of the channel girder A where they are protected from dust and dirt, and still further the construction is one in which any change due to contraction or expansion of the parts will be compensated for by the automatic adjustment of the parts.

What I claim as my invention is:

1. The combination with a platform supporting pivot bearing, of a platform supporting beam, a T-shaped member in alignment with said platform supporting beam and resting upon said platform supporting bearing, said T-shaped member and beam having web portions and a strap lying adjacent to the web portions of said T-shaped member and beam and secured thereto.

2. The combination with a platform supporting pivot bearing, of a platform supporting beam, a T-shaped member in alignment with said beam, a strap for coupling the web portion of said T-shaped member and said

beam, and intermeshing lugs on said T-shaped member and bearing retained in engagement by said strap.

3. The combination with a platform supporting pivot bearing, of a platform supporting beam, a flanged member in alignment with said beam resting on said bearing, straps for coupling said flanged member to said beam, and a lug on said bearing projecting upward into the recess between the sides of said straps whereby the latter is retained in engagement with said bearing.

4. The combination with a stationary frame and a platform-supporting lever, of a bearing block for supporting said lever having recessed ends, and a bifurcated bracket rigidly secured to said frame, with which said recessed portions of the bearing block have a free slidable engagement.

5. The combination with a stationary frame and a platform-supporting lever, of a knife-edge bearing on said lever, a bearing block engaging said knife-edge bearing, a bracket fixedly secured to said frame, a block mounted on said bracket for free slidable movement, and straps connecting said block with the first-mentioned bearing block.

6. The combination with a lever and an

upturned knife-edge bearing thereon, of a bearing block engaging said knife-edge and provided with spaced lugs, a member resting upon said block having a projection positioned between said spaced lugs, and means for preventing lateral disengagement of said projection and said lugs.

7. The combination with a lever and a knife-edge bearing thereon, of a bearing block engaging said knife-edge and provided with spaced lugs, and a member having a bearing on said lugs provided with a projection positioned therebetween.

8. The combination with a stationary frame and a platform-supporting lever, a knife-edge bearing on said lever, a bearing block engaging said knife-edge bearing, a bracket fixedly secured to said frame, a block mounted on said bracket for free slidable movement, and means for supporting said bearing block from said slidable block.

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

STEPHEN J. AUSTIN.

Witnesses:

E. E. STARR,

G. H. TESSMAN.