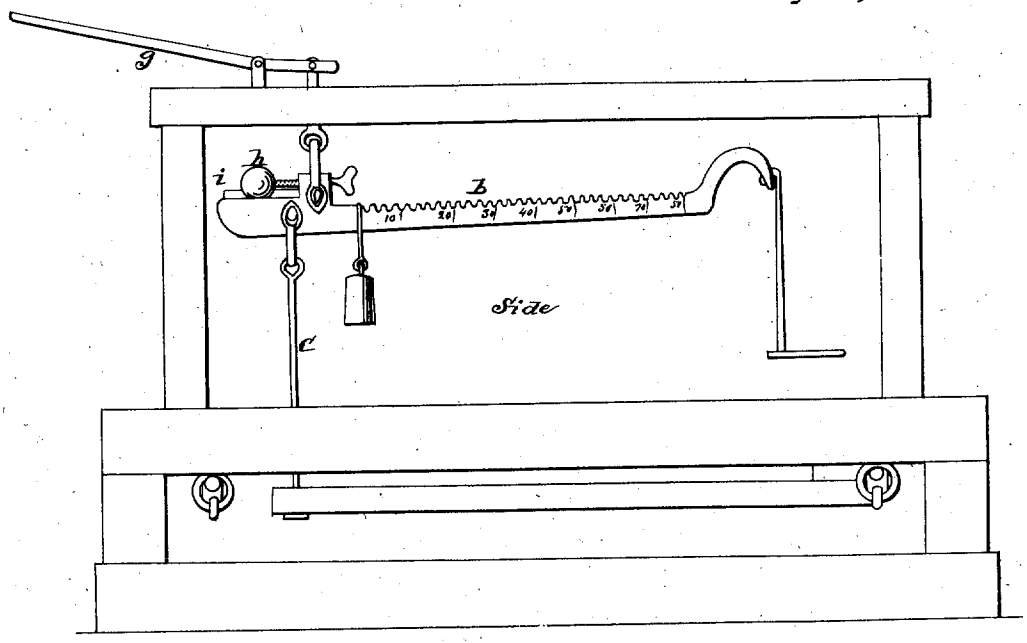
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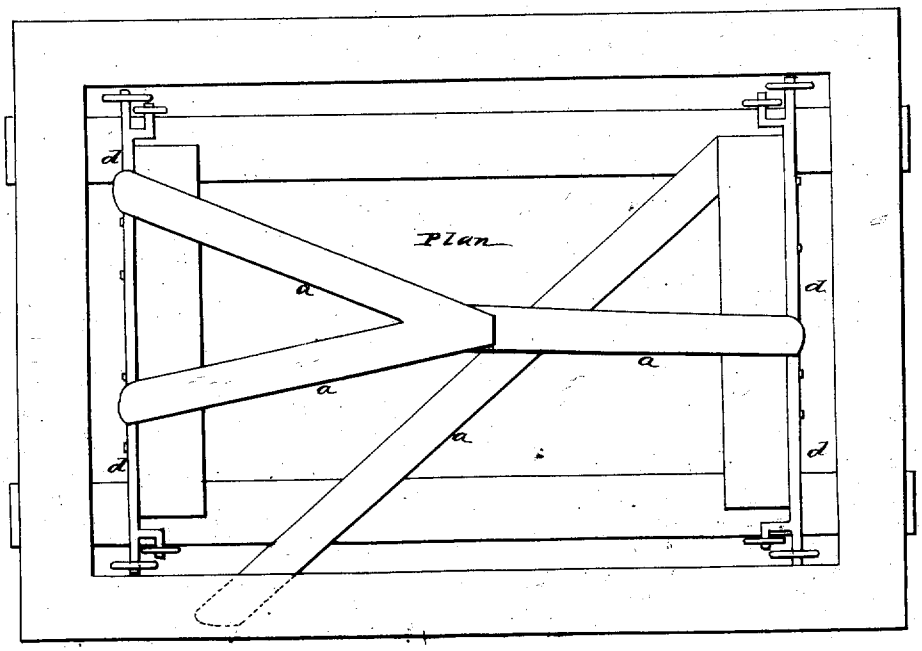
J. Marden.

9077X

Balance Scales.

Patented Sept. 9, 1835.





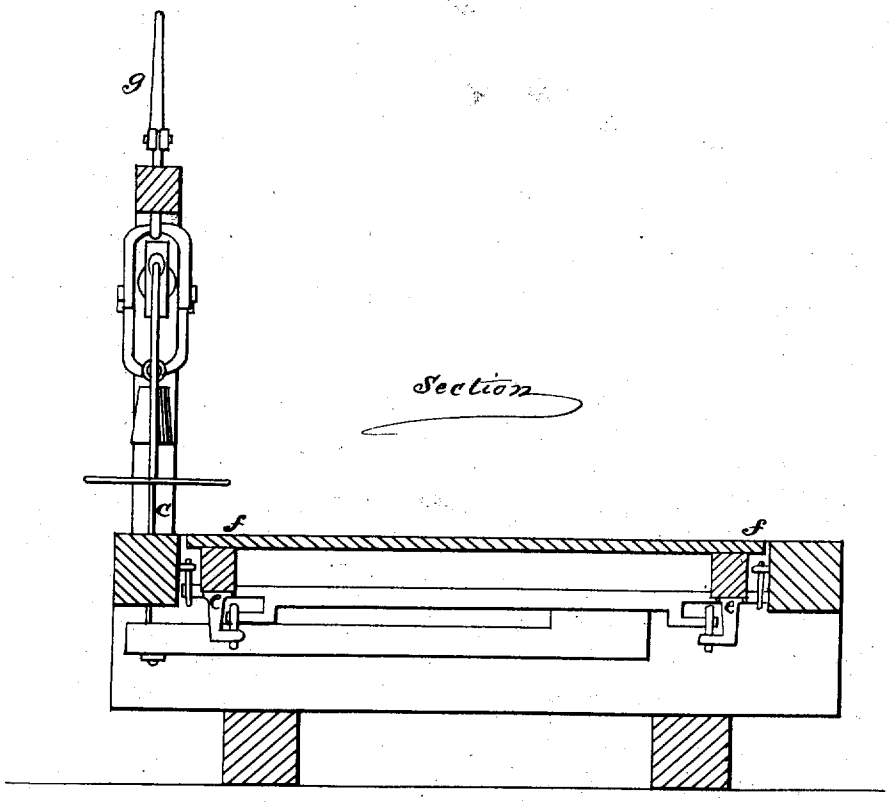
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J. Marden.

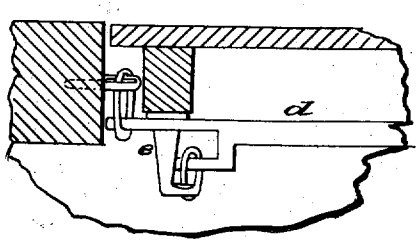
Balance Scales.

Patented Sept. 9, 1835.



Section

Detail



Sept. 9, 1833

Jesse Marden of Baltimore State of Maryland

(533)

Letters Patent

The schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Jesse Marden himself of his improvement in scales for weighing articles.

To all, to whom these Presents shall come. Be it known that I. Jesse Marden of the city of Baltimore and state of Maryland have invented a new and useful improvement in a scale beam or balance and that the following is a full and exact description of the construction and operation of the said improvement as invented by me. My invention consists of an improvement on a machine for weighing articles commonly called the platform Balance now used at the Railroad depot on Pratt street and at other establishments in Baltimore and elsewhere. The general principle of these scales consists of a combination of levers or beams. Two horizontal ones below and an index are above. The end of one of the lower levers is connected with the upper one, at a proper place near the fulcrum by a vertical rod or chain. The main beam below has an axle for its fulcrum running across the frame each end of this axle is forked or branched, each outer branch is suspended from the frame by means of a staple & ring to work in as its fulcrum bearing. On the other end of the frame is a short beam forked and hung so as to correspond with the first. The end of this short beam, rests on the middle of the main beam, These two beams, by means of the inner prongs or branches above named form a seat on which lies the platform. Now, my improvement consists in forming a downward projection from the side pieces of the platform so as to get room to suspend the platform by means of rings or links & staples, from the inner prongs of the fulcrums, by which the platform hangs perfectly free, and will play in any direction as if hung on chains

9011X

or ropes always finding its centre of gravity & not be liable to get out of plaw or order— Whereas in the other plan where the platform rests immediately on the prongs or beam, if the platform gets moved either way, as it is sure to do, it shifts the points of bearings, throws the platform out of its proper plaw and position subjects the machine to untruth, and wears the bearings and soon puts the whole apparatus out of order— By suspending the platform I preserve an ample sufficiency of room without sacrificing convenience and by this mode of suspension I secure the perfection and accuracy of the bearings and consequently long preserve the truth and use of the instrument— I use a lever above the upper beam to raise the scales from their bearings, whilst the platform is loading and unloading— Some persons have regulated the upperbeam by means of a horizontal screw on which a weight is turned the weight being turned with the hand, whilst the screw remains stationary— I turn the screw by means of one end projecting with a thumb joint, the weight slides backward and forward as the screw is turned— This plan is perfectly handy, whereas the other is incommoded by the interference of the stand and other fixtures being in the way— I claim the manner of constructing the platform so as to project downwards for the purposes & advantages above specified—

Witnesses
Geo. S. Eichelberger
John W. Post

Jesse Marden

(669 words)