

(No Model.)

G. W. WILLIAMS.  
PLATFORM SCALE.

No. 505,503.

Patented Sept. 26, 1893.

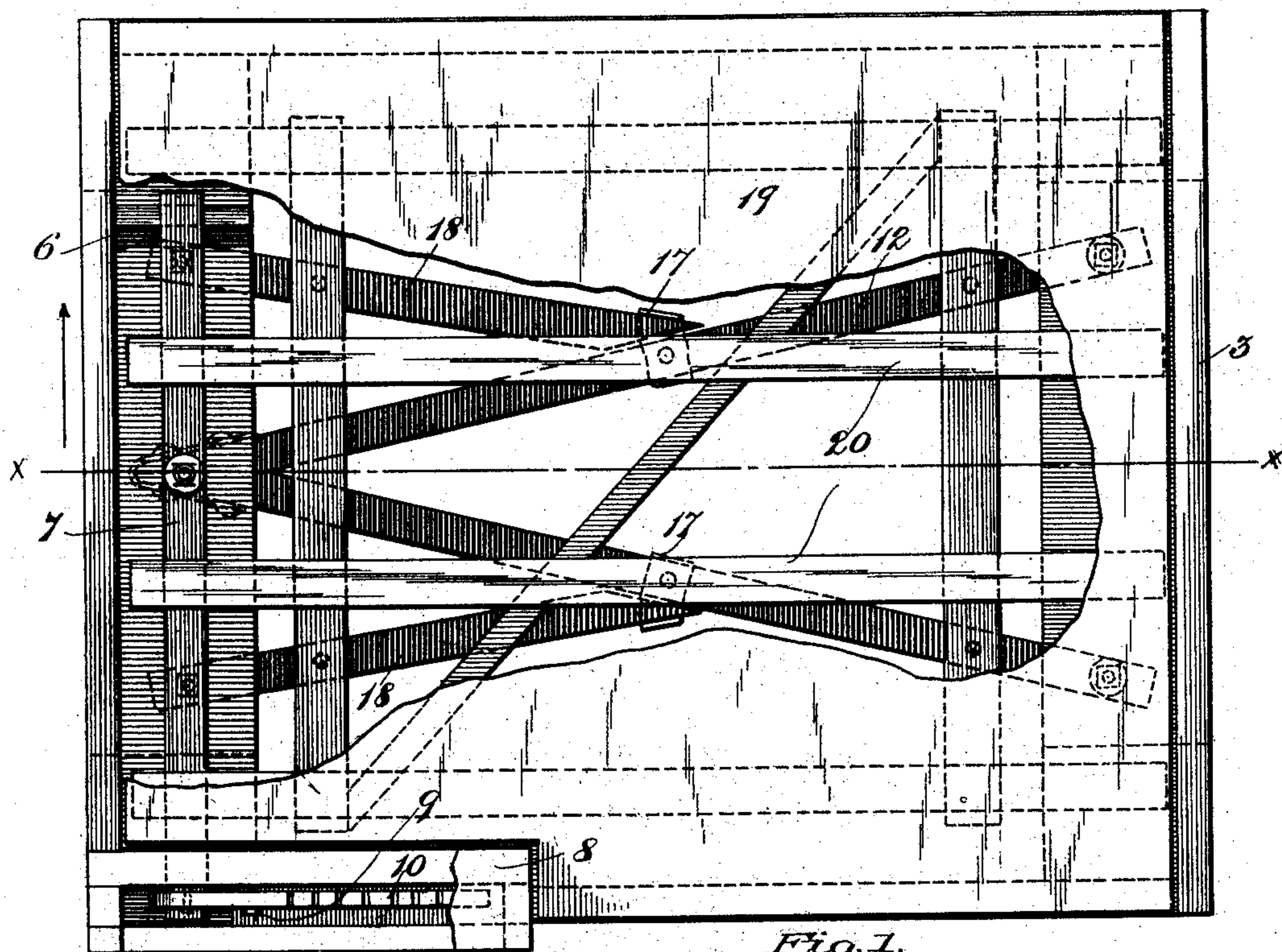


Fig. 1.

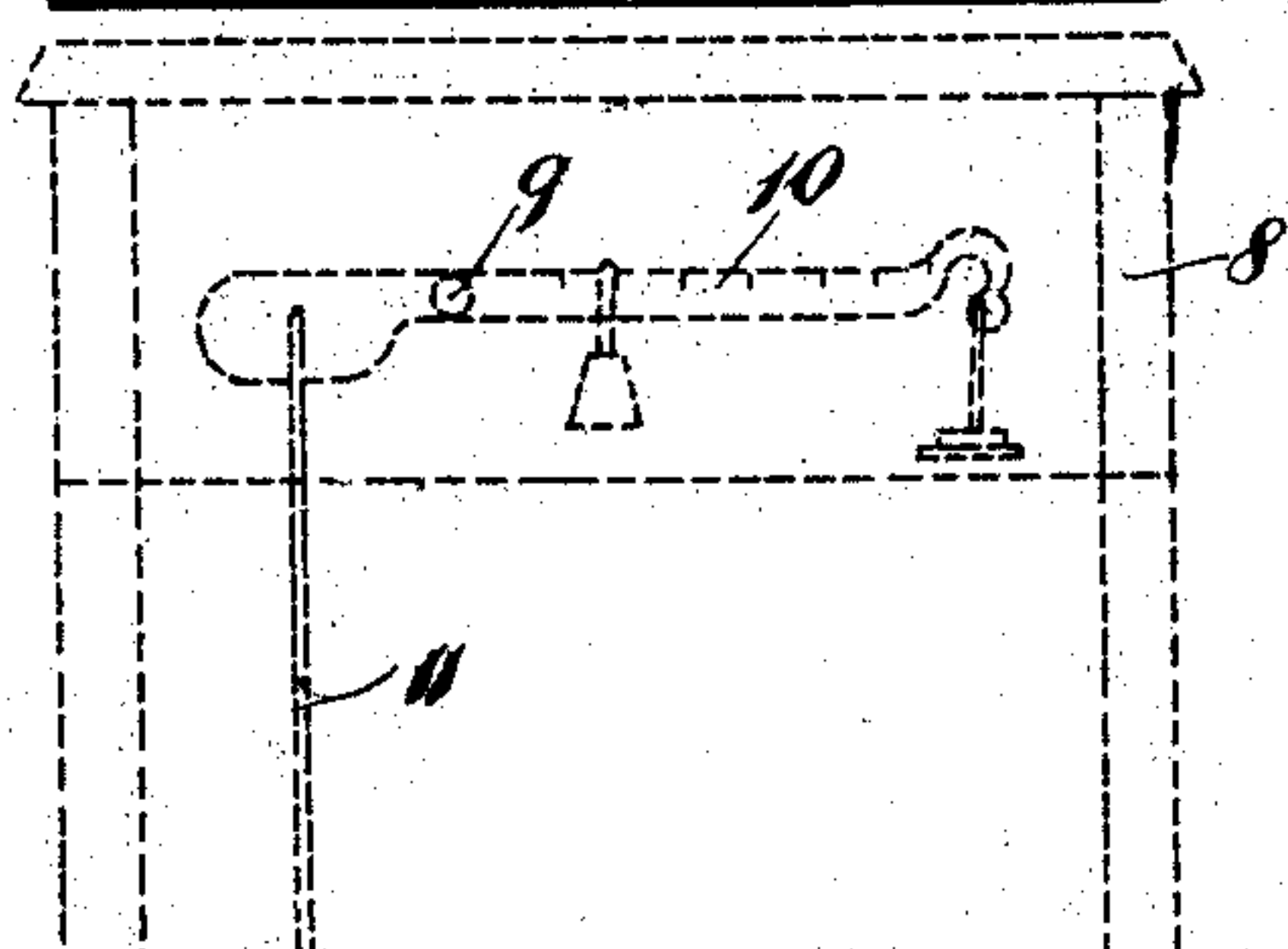
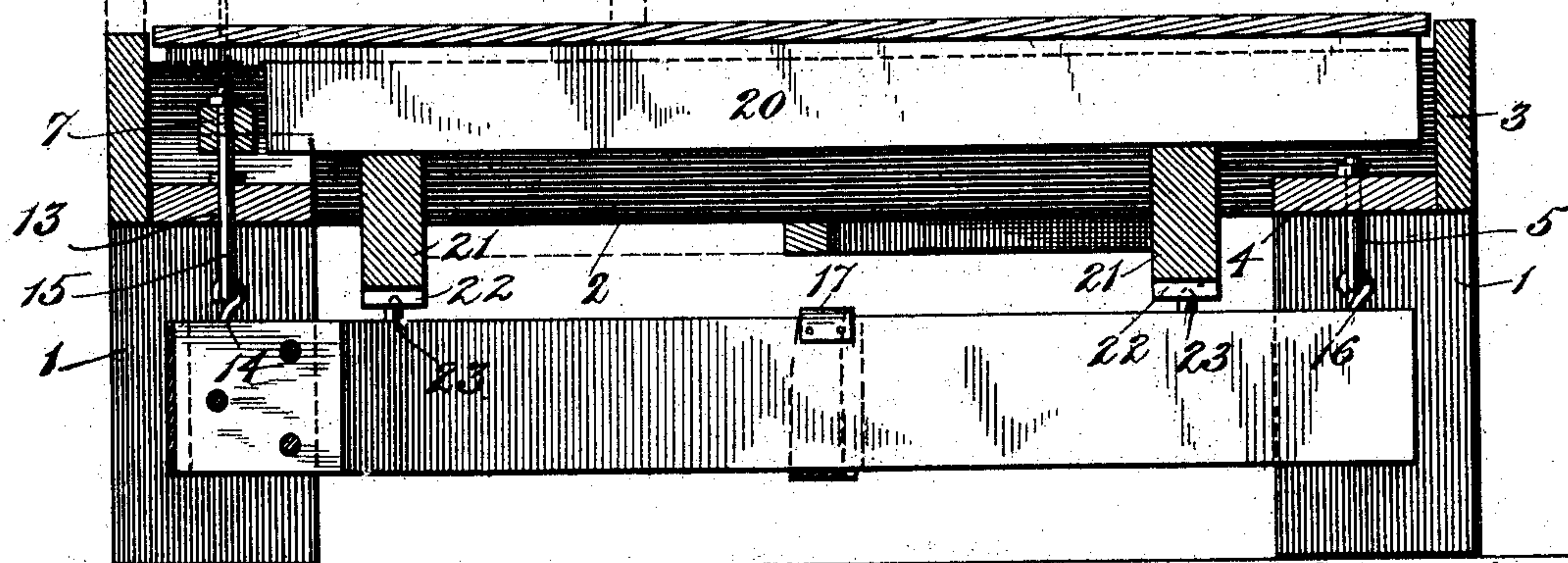


Fig. 2.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

GEORGE W. WILLIAMS, OF EDDYVILLE, KENTUCKY.

## PLATFORM-SCALE.

SPECIFICATION forming part of Letters Patent No. 505,503, dated September 26, 1893.

Application filed January 26, 1893. Serial No. 459,926. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. WILLIAMS, a citizen of the United States, residing at Eddyville, in the county of Lyon and State of Kentucky, have invented a new and useful Scale, of which the following is a specification.

My invention relates to improvements in platform scales, the objects in view being to provide a scale of this class that shall be of cheap and simple construction, in that it is capable of being constructed principally of wood, and which shall be extremely durable and capable of long use without liability of becoming impaired thereby, or through lapse of time.

With these and other objects in view the invention consists in certain features of construction hereinafter specified and particularly pointed out in the claims.

Referring to the drawings:—Figure 1 is a plan view of a platform-scale embodying my invention, the platform being partially broken away to expose the mechanism therebelow. Fig. 2 is a longitudinal sectional view on the line  $x-x$  of Fig. 1, looking in the direction of the arrow.

Like numerals of reference indicate like parts in all the figures of the drawings.

In carrying out my invention I employ four stout corner posts 1, and connect the same by the side and end bars 2 and 3 respectively, so as to form a rectangular frame. The posts are also connected by transverse suspension or rest bars 4. Depending from each of the suspension bars 4 is a pair of suspension eyes 5, the same being located at equidistant sides of the longitudinal centers of said bars.

Upon one of the rest or suspension bars 4 there is located a transversely disposed knife-edge bearing rib 6, and resting thereupon is the inner end of a transversely disposed lever 7 which extends through an opening in one of the side bars 2 and into the housing 8, shown in plan in Fig. 1 and by dotted lines in Fig. 2. In this housing there is fulcrumed as at 9 the usual scale-beam 10 having the ordinary appurtenances, and a rod 11 connects the rear end of said beam with the outer end of the lever 7. A pair of main levers 12 meet at a point below an opening 13 formed in that rest bar 4 that supports the

lever 7, and is provided with a hook 14 at their meeting point, which through the medium of a long hook-shaped rod 15 which passes up through the hole 13 just mentioned, is connected with the said lever 7 between the ends of the latter, or in other words, between its point of fulcrum and its point of connection with the rod 11 that leads to the scale beam. The remaining or diverging ends of the main levers 12 are provided with hooks 16, and they engage the suspension hooks 5 arranged in the rest-bar 4 immediately thereover. Suspension clips 17 engage the upper edges of each of the main levers 12 and are at the outer sides thereof, and in these suspension clips rest the inner ends of supplemental or auxiliary levers 18, which are of about half the length of the levers 12, and are chamfered at their inner meeting ends as shown in Fig. 1 and diverge from the levers 12, so as to be the same distance from the center of the rest bar 4, under which they terminate, as the terminals of the levers 12 are from the center of that rest-bar 4 under which they terminate. The platform 19 surmounts the frame thus constructed, and is provided upon its under side with the usual cleats 20 and cross-beams 21, the latter being located adjacent to the ends of the platform and being provided with metal plates 22, having countersunk recesses in their under sides which take over a series of four rest studs 23 which extend upward from the terminals of each of the main levers 12 and auxiliary levers 18. This completes the construction of the platform-scale, and it will be seen that the levers 12, 18, and 7, as well as the remainder of the structure, with the exception of the clips 17, beam 10, and the eyes, may all be constructed of wood; furthermore, that an efficient scale will be produced of great durability and one not liable to become impaired by excessive use or lapse of time.

Having described my invention, what I claim is—

1. In a platform-scale, the combination with a rectangular frame, a scale-beam support, a scale beam arranged therein, and a platform for the frame, of main levers converging to a point under one of the cross-bars of the frame and diverging toward a point under the re-



maining cross-bar and loosely suspended from the latter, supplemental levers secured to the sides of the levers and diverged therefrom to a point under that cross bar where the meeting ends of the main levers occur and suspended loosely from said cross-bar, a lever fulcrumed upon the last mentioned cross-bar, connecting devices between the ends of the same and the scale-beam, and connecting devices between the meeting ends of the main levers and the said lever that is arranged upon the end bar, substantially as specified.

2. In a platform scale, the combination with four supporting posts, the rectangular frame arranged thereon, and the rest bars at the ends of the frame surmounting the posts, a scale beam and a cover for the same, and a rod depending from said beam, of a pair of main levers converged to a point under one of the rest bars, eyes in the terminals of said

levers, suspension eyes depending from the rest-bar thereabove and loosely connecting with said eyes, supplemental levers arranged at the outer sides of the main levers, loose clips connecting the same therewith, eyes arranged in the outer ends of said supplemental levers, eyes depending from the adjacent rest bar and engaging the same, a knife-edge bearing arranged upon the last mentioned rest bar, a lever having one end resting upon said bearing and its outer end connected to the rod that leads to the scale-beam, an eye at the meeting ends of the main levers, and a rod between the eye and the superimposed lever, substantially as specified.

GEORGE W. WILLIAMS.

Witnesses:

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