

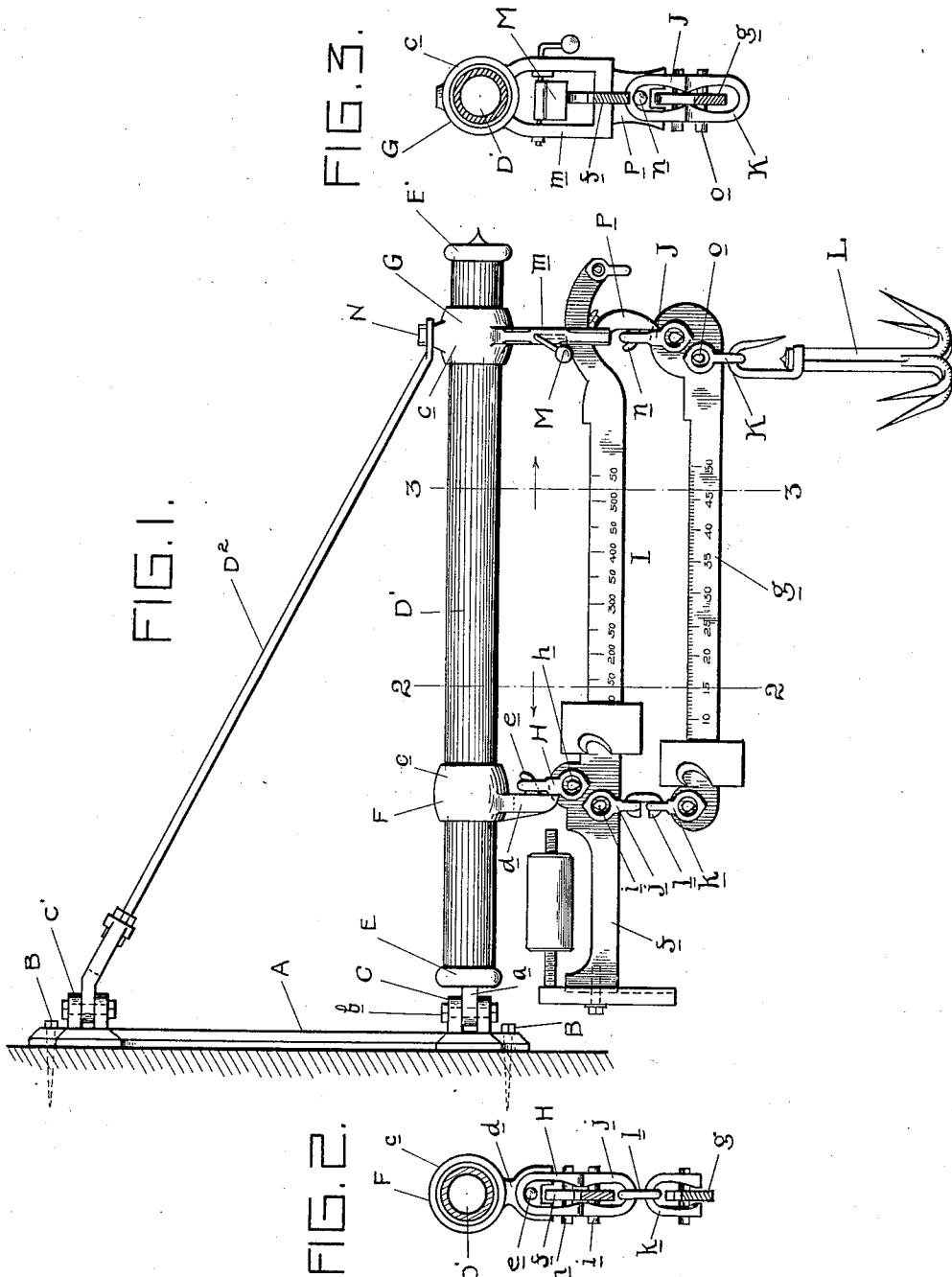
W. F. STIMPSON.

SCALE.

APPLICATION FILED DEC. 13, 1906.

1,006,414.

Patented Oct. 17, 1911.



WITNESSES

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SCALE.

1,006,414.

Specification of Letters Patent.

Patented Oct. 17, 1911.

Application filed December 13, 1905. Serial No. 291,505.

To all whom it may concern:

Be it known that I, WALTER F. STIMPSON, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Scales, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention consists in the novel construction as hereinafter set forth.

In the drawings, Figure 1 is a side elevation of the scale; Fig. 2 is a cross-section on line 2—2 Fig. 1, looking toward the left; and Fig. 3 is a section on line 3—3 Fig. 1, looking toward the right.

The scale belongs to that type in which there is a swinging frame from which the weighing beam is suspended, the arrangement being such that the frame and beam, when not in use, may be swung into a position parallel with the wall, but when in use are arranged perpendicular thereto.

In detail, A is a suitable wall bracket which is secured to the wall, as by the nails or screws B, and is provided with the outwardly projecting-lugs or ears C C' forming members of a hinge.

D is a frame comprising a horizontal beam member D' and an inclined tension member or truss rod D² which are respectively pivotally secured to the ears C C' on the wall plate A. The beam member D' is preferably formed of a tube which is provided at its opposite ends with the caps E E', the former having a projecting lug a which extends between the furcations of the projecting lug or ear C and is secured thereto by a pivot bolt b.

F G are two bracket members depending from the beam member D' and secured thereto by apertured hubs c which are sleeved upon the tube. The member F has a depending shank d and a hook e projecting laterally therefrom. This hook forms the support for the loop H in which the weighing beam I is fulcrumed.

The weighing beam I comprises a main beam f and an auxiliary beam g. The main beam is a lever of the first class having knife-edge fulcrum pivots h engaging with the bearings in the loop H, and also knife-edge pivots i arranged in a plane between the fulcrum pivots and the wall. From these pivots, the auxiliary beam is suspended through the medium of pivot bearing loops

j k and an intermediate connecting loop l. The auxiliary beam is a lever of the third class and is fulcrumed in a loop J which is suspended from the depending shank m of the bracket G, being engaged with a laterally projecting hook n thereon. The opposite end of the auxiliary beam g is connected to the loop k and between this connection and the fulcrum in close proximity to the latter are knife-edge pivots o from which the loop k is hung, the latter serving as a support for the hook member L, with which the articles to be weighed are engaged. The bracket member G has its shank member m centrally apertured for the passage of the main beam f and forms a guide for the latter. It also has pivoted therein the member M which forms a lock for the beam when not in use, preventing oscillation; furthermore, the member G forms the means of connecting the brace bar D² to the beam member D', this connection comprising the securing screw N, by which the member D² is clamped to the bracket.

The depending shanks of the members F G, in addition to forming supports for the loops H J, also form stops or check members for limiting the oscillation of said loops. Thus, the member d extends downward adjacent to the side of the loop H which faces the wall and the member m has the downwardly projecting portion p which is adjacent to the outer side of the loop J. These downward projections, while providing sufficient clearance to permit the loops to assume vertical positions, will nevertheless check the oscillations of the loops and beams supported thereby.

The swinging frame of the scale constructed as described forms a rigid support for the load and, at the same time, by reason of the fact that the beam D' is hollow, the structure is comparatively light; furthermore the depending brackets F G may be formed by casting and are easily secured to the beam member D', so that the entire structure is an inexpensive one to build.

What I claim as my invention is:—

1. A scale comprising a main and an auxiliary weighing beam, a frame from which said beams are suspended, said frame comprising a tubular beam member and cast hangers secured thereto one of said hangers forming a guide for the main weighing beam, and a fulcrum support for the auxiliary beam.

2. A scale comprising a main and an auxiliary weighing beam, a frame for supporting said beams comprising a tubular beam member and a cast hanger sleeved upon said tubular member, forming a guide for the main weighing beam and a fulcrum support for the auxiliary beam and a brace bar for said frame secured to said hanger.

3. A scale comprising a main and auxiliary weighing beam, a frame from which said beams are suspended comprising a horizontally-extending beam member and a pair of cast hangers sleeved thereon, each having a laterally-projecting hook for respectively supporting the main and auxiliary beams and a bracket supporting the auxiliary beam also constituting a guide for the main beam.

4. In a scale, the combination with main and auxiliary beams having separate ful-

crums arranged at opposite ends and supporting loops for said fulcrums, of a frame supporting said beams comprising a horizontally-extending beam member and a pair of brackets sleeved upon said beam member and depending therefrom, said brackets being respectively provided with oppositely-extending lateral hooks for supporting the fulcrum loops of the respective beams and having portions adjacent to opposite sides of said loops for limiting the oscillation thereof.

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

WALTER F. STIMPSON.

Witnesses:

JAMES P. BARRY,
EDWARD P. AULT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."