

(No Model.)

G. ANDERSON.  
AUTOMATIC WEIGHING APPARATUS.

No. 603,371.

Patented May 3, 1898.

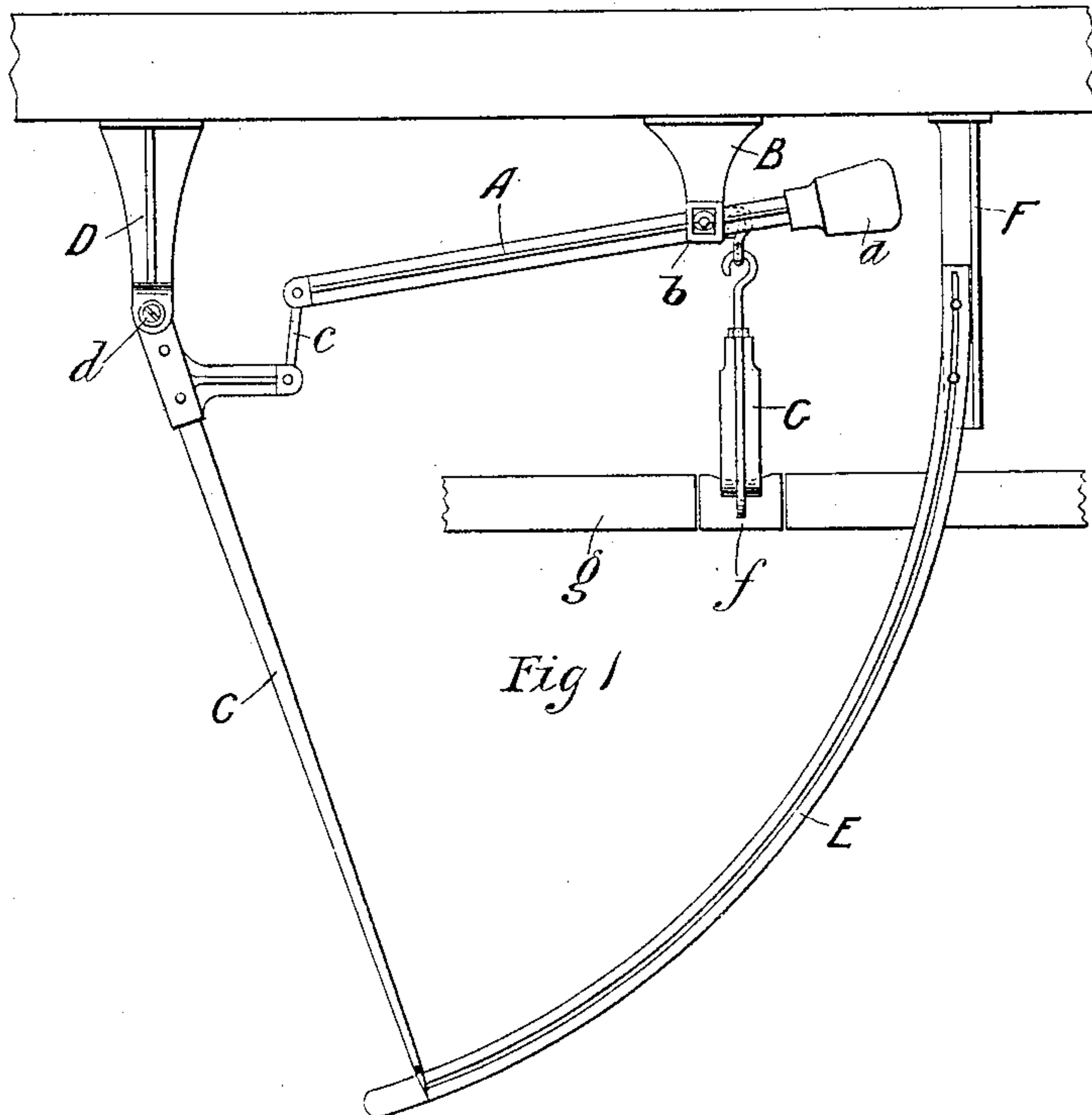


Fig. 2.

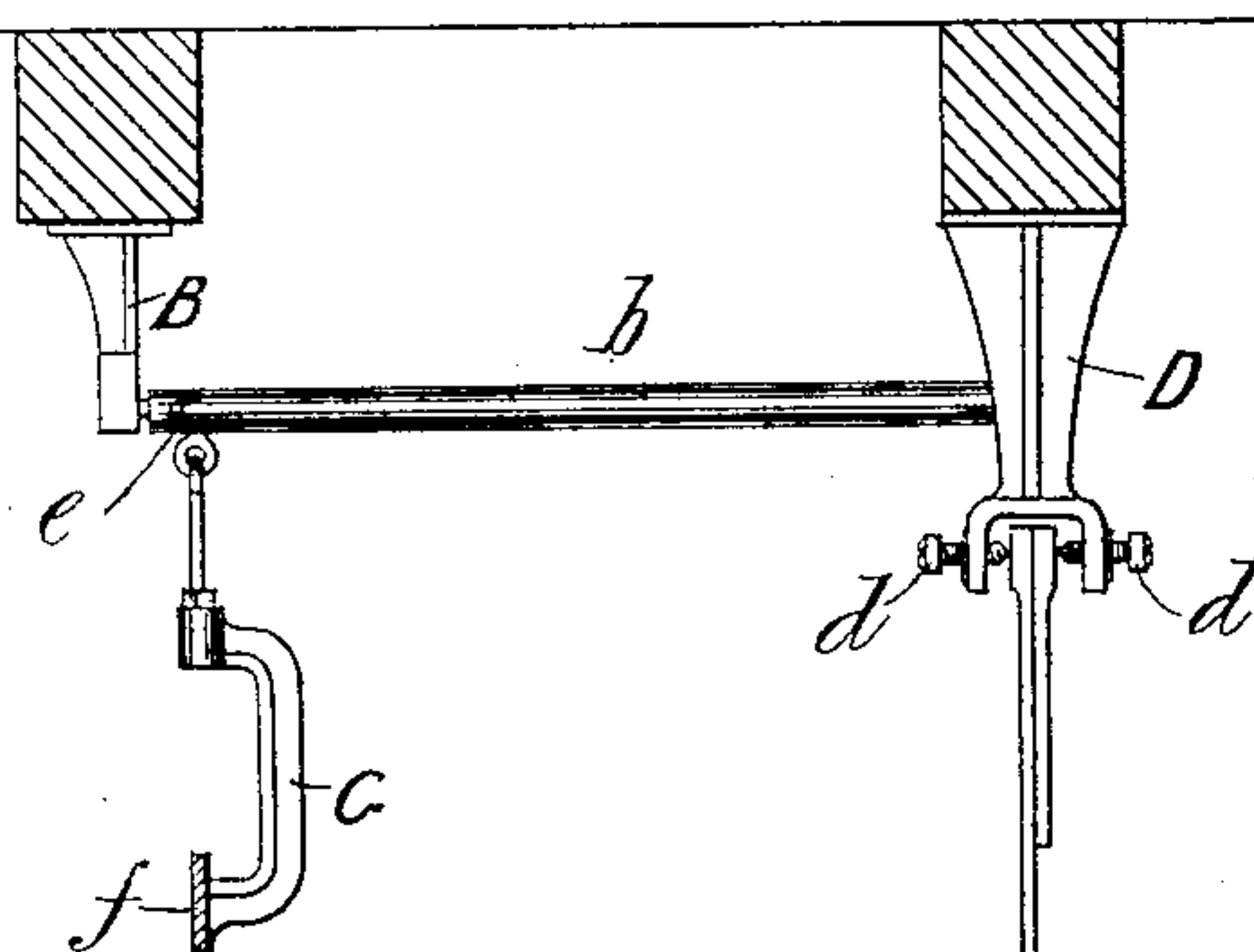
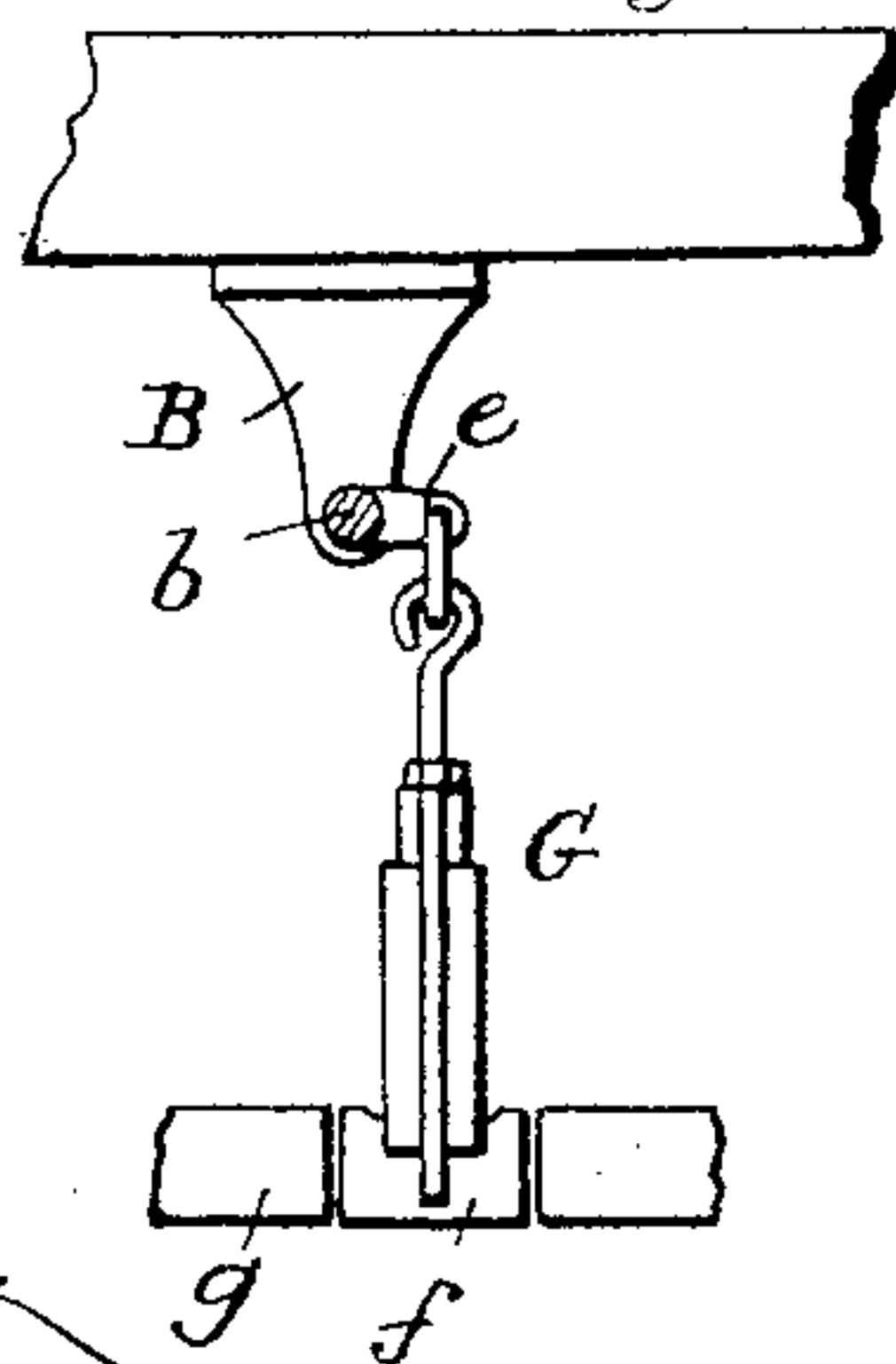


Fig. 3.



Witnesses  
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# UNITED STATES PATENT OFFICE.

GILBERT ANDERSON, OF CHRISTCHURCH, NEW ZEALAND.

## AUTOMATIC WEIGHING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 603,371, dated May 3, 1898.

Application filed September 3, 1896. Serial No. 604,773. (No model.) Patented in New Zealand February 7, 1895, No. 7,414; in England May 4, 1895, No. 6,609; in Victoria May 28, 1895, No. 12,231, and in New South Wales May 31, 1895, No. 5,824.

*To all whom it may concern:*

Be it known that I, GILBERT ANDERSON, a subject of the Queen of Great Britain and Ireland, residing at Christchurch, Canterbury, in the Colony of New Zealand, have invented certain new and useful Improvements in Automatic Weighing Apparatus, (for which I have obtained Letters Patent in the following country and colonies, viz: Great Britain, No. 6,609, dated May 4, 1895; New Zealand, No. 7,414, dated February 7, 1895; Victoria, No. 12,231, dated May 28, 1895, and New South Wales, No. 5,824, dated May 31, 1895,) of which the following is a specification.

This invention relates to improvements upon the apparatus for which I have already obtained a patent in the United States, No. 561,470, dated June 2, 1896, such apparatus being more particularly adapted for use in freezing-works.

The object of these improvements is to simplify the construction and mode of connecting and hanging the levers, so that instead of one lever being hung and connected to the back of the other the one lever is hung immediately over the other in the same plane, thus occupying considerably less space, while the lever to which the recessed hanging-bar or "platform" is suspended is weighted and fitted to a fulcrum-rod or rock-shaft working on knife or V-shaped bearings in brackets or hangers, thus enabling the levers to act more sensitively. The lower end of this weighted lever is connected, by means of a coupling-rod, to the other lever, forming a pointer and working in centers in a hanger or bracket, the lower end of pointer being bifurcated in order to move over a curved dial-plate suspended from another hanger or bracket. The rock-shaft is provided with a projecting arm carrying a pin to which a hanger is suspended, this hanger having a plate of the same thickness as the rail-track, which fits into a gap formed in such rail-track. The lever-pointer is so adjusted that when each traveling hook carrying a carcass passes over the plate attached to the hanger the said hanger is depressed, thereby turning the rock-shaft and causing the weighted lever to raise the lower

lever-pointer, and thus indicate upon the dial-plate the weight of said carcass.

Referring to the drawings which form a part of this specification, Figure 1 is a front view of the improved apparatus. Fig. 2 is an end view of same. Fig. 3 is a vertical sectional view.

A is a lever having a weight *a* on upper end and attached near said end to a rock-shaft *b*, the ends of which are fitted with (preferably) V-shaped or knife-edge pins, which work on bearings fitted in hangers or brackets B. The lower end of this lever is connected by means of a coupling-rod *c* to an arm *c*<sup>2</sup> of another lever C, forming a pointer hung at its end on center-pins *d* to another bracket D. The lower end of pointer is bifurcated and moves over a curved dial-plate E, suspended from another hanger or bracket F. This dial-plate is provided with two rows of figures, (not shown,) one row representing the weight of the carcass when hot, while the other row represents the weight of the carcass when frozen. The rock-shaft *b* is provided with an arm *e*, projecting from the opposite side of said shaft to the lever A and carrying a pin to which a recessed hanger G is pivotally suspended, this hanger being connected to a plate *f* of the same thickness as the rail-track *g* and fitting into a gap formed in said rail-track.

As each traveling hook carrying a carcass passes over the plate *f* the recessed hanger G is depressed, thereby turning the fulcrum-rod *b* and causing the lever A to raise the lever-pointer C, which indicates upon the dial-plate E the "hot" and "frozen" weight of the carcass at one and the same time. Thus the said carcasses are automatically and expeditiously weighed without removing them from the rail-track upon which they hang.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In weighing apparatus, the combination of a track having a movable section, a rock-shaft at right angles to the track provided at one end with an arm projecting from one side thereof and at its opposite end with a lever projecting from the opposite side thereof, a



connection between the arm and the movable track-section, a pivoted pointer, connections intermediate the projecting lever and the pointer, and a curved dial-plate adapted to  
5 be traversed by the pointer, substantially as described.

2. In weighing apparatus, the combination of a track having a movable section, a rock-shaft at right angles to the track provided at  
10 one end with an arm projecting from one side thereof and at its opposite end with a lever projecting from the opposite side thereof, a connection between the arm and movable track-section, a pointer pivoted at its end and  
15 having an arm, centering devices for the pointer, a link connecting the projecting lever and the arm of the pointer, and a dial-plate adapted to be traversed by the pointer, substantially as described.

20 3. In weighing apparatus, the combination

of a track having a movable section, a rock-shaft at right angles to the track provided with V-shaped ends and having an arm near one end and a projecting lever near its opposite end, said arm and lever projecting from  
25 opposite sides of the rock-shaft, a connection between the arm and the movable track-section, a pointer pivoted at its end between centering devices and having an arm, a link connecting the arm and the projecting lever and  
30 a dial-plate adapted to be traversed by the pointer, substantially as described.

In witness whereof I have set my hand to this specification in the presence of two subscribing witnesses.

GILBERT ANDERSON.

Witnesses:

A. H. HART,  
GEORGE HART.