

E. DIXON.  
WEIGHT LEVER FOR SPINNING MACHINES.  
APPLICATION FILED MAY 18, 1908.

990,806.

Patented Apr. 25, 1911.

Fig. 1.

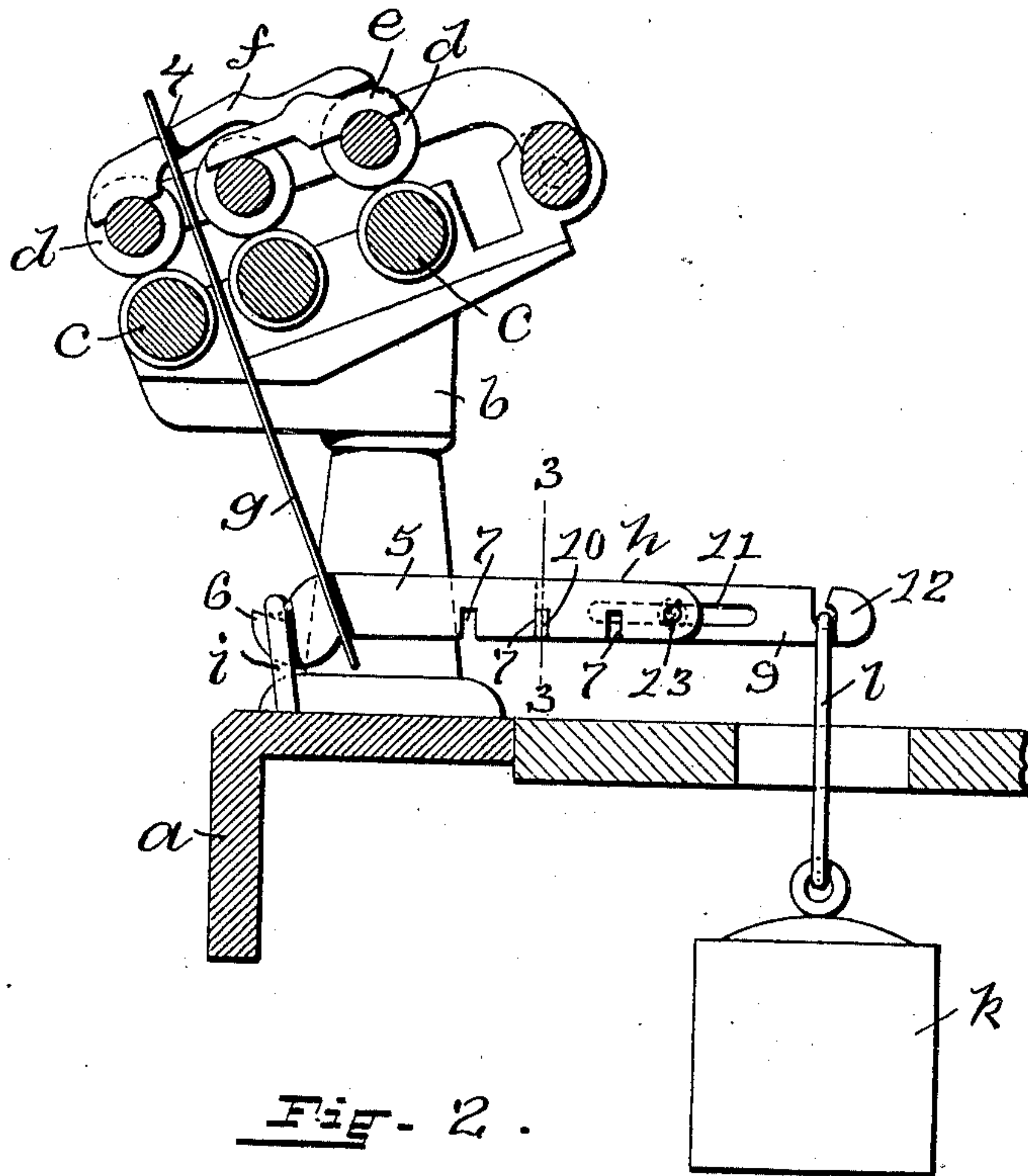


Fig. 2.

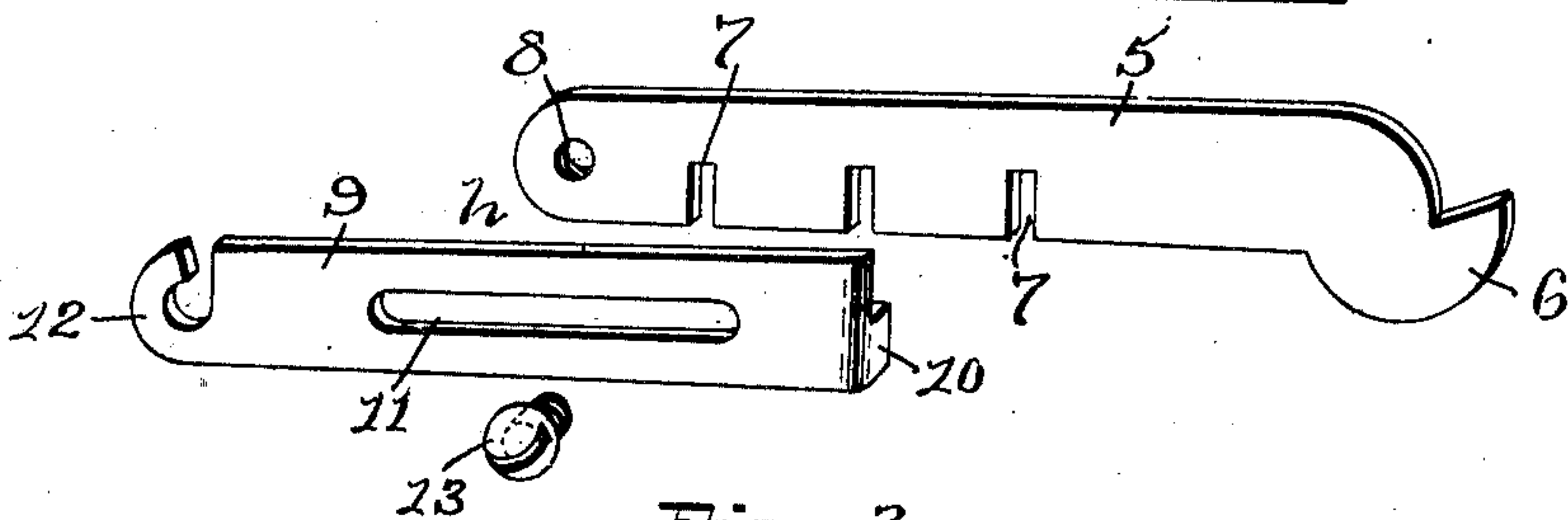
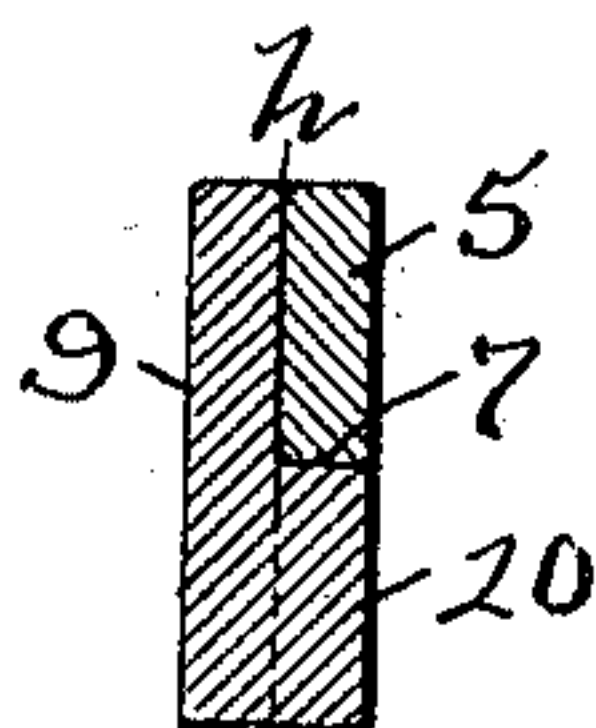


Fig. 3.



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# UNITED STATES PATENT OFFICE.

EZRA DIXON, OF BRISTOL, RHODE ISLAND.

WEIGHT-LEVER FOR SPINNING-MACHINES.

990,806.

Specification of Letters Patent.

Patented Apr. 25, 1911.

Application filed May 13, 1908. Serial No. 432,603.

*To all whom it may concern:*

Be it known that I, EZRA DIXON, a citizen of the United States, and residing at Bristol, in the county of Bristol and State of Rhode Island, have invented a new and useful Improvement in Weight-Levers for Spinning-Machines, of which the following is a specification.

This invention has reference to an improvement in spinning machines and more particularly to an improvement in weight levers used in connection with the top roll saddles of spinning machines.

In spinning machines the pressure on the top rolls is usually adjusted either by adjusting the upper end of the stirrup strap on the front top roll saddle, or by adjusting the lower end of the stirrup strap on the weight lever, or by adjusting the weight on the weight lever. The construction generally used to accomplish these adjustments is such that the several parts may be easily gotten out of adjustment through the vibration of the machine by accident or other causes, also in removing or replacing the parts, when it is required to remove laps from the rolls.

The object of my invention is to improve the construction of a weight lever for spinning machines, whereby the pressure on the top rolls is adjusted without adjusting the stirrup strap on the saddle or weight lever and without adjusting the weight on the weight lever, and the several parts may be removed and replaced without destroying the adjustment of the pressure on the top rolls.

My invention consists in the peculiar and novel construction of a two part weight lever for spinning machines, said weight lever having means for longitudinal adjustment of the parts, for securing the parts together after adjustment and details of construction, as will be more fully set forth hereinafter and claimed.

Figure 1 is a transverse sectional view of part of a spinning machine provided with my improved adjustable weight lever. Fig. 2 is an enlarged perspective view of the weight lever removed from the machine and showing the parts of the lever separated to more clearly show the construction of the same, and Fig. 3 is an enlarged transverse sectional view through the lever taken on line 3 3 of Fig. 1.

In the drawings, *a* indicates the front rail

of a spinning machine, *b* the roller stand, *c c* the drawing rolls, *d d* the top rolls, *e* the back top roll saddle, *f* the front top roll saddle, *g* the stirrup strap, *h* my improved two-part weight lever, *i* the eye forming the fulcrum for the weight lever, and *k* the weight secured to the free end of the weight lever *h* by the link *l*. The front top roll saddle *f* has the usual transverse notch 4, as shown in Fig. 1, for the upper end of the stirrup strap *g* which has the usual openings (not shown) in each end for the weight lever *h* and the front top roll saddle *f*.

My improved two-part weight lever *h* consists of a flat arm member 5 having a hook-shaped fulcrum end 6 adapted to hook into the fulcrum eye *i*, a plurality of deep notches 7 7 in its under edge, and a screw-threaded transverse hole 8 in the opposite end, and a flat overlapping arm member 9 having a side projection 10 at one end adapted to enter the notches 7 7 in the arm member 5, a central longitudinal slot 11 through the side of the arm member and a hook-shaped end 12 for the weight link *l*, and adjustably secured together by a screw 13 which extends through the slot 11 in the arm member 9 into the screw-threaded hole 8 in the arm member 5.

When in use the weight lever *h* may be easily lengthened or shortened by loosening the screw 13 and changing the position of the side projection 10 in the notches 7 7 and securing the arms in the adjusted position by tightening the screw 13, thereby changing the position of the weight *k* relative to the fulcrum end of the lever and increasing or decreasing the pressure of the top roll saddles *e* and *f* on the top rolls *d d*, as required. The weight lever *h* when adjusted and set to the pressure required on the top rolls cannot get out of adjustment by accident or other causes, and the lever may be removed and replaced without disturbing its adjustment or the required adjustment of the pressure of the saddles on the top rolls.

By the peculiar and novel construction of the weight lever all of the adjustment required of the pressure of the saddles on the top rolls is obtained by adjusting the weight lever to lengthen or shorten the same without changing the position of the stirrup strap on the saddle or weight lever and without changing the position of the weight on the weight lever.

It is evident that any means could be used



for adjustably securing the members of the weight lever together so that the same can be adjusted longitudinally on each other, without materially affecting the spirit of my invention.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:—

1. A two part weight lever for spinning machines comprising a flat arm member having a series of deep notches in its lower edge, a fulcrum for said member carried by the top rail of the machine, a flat overlapping arm member having a side projection adapted to enter the notches in the fulcrum arm member, and a hook-shaped end adapted to support a weight, and means for adjustably securing the arm members together, whereby the arm members may be adjusted longitudinally on each other to increase or decrease the length of the weight lever.

2. A two part weight lever for spinning machines comprising a flat arm member hav-

ing a hook-shaped fulcrum end and a transverse screw-threaded hole in the opposite end, a fulcrum for said member carried by the top rail of the machine, a flat overlapping arm member having a longitudinal slot through the side and a hook-shaped end, means for adjustably securing the arm members together consisting of a screw or its equivalent through the longitudinal slot in the overlapping arm member screwing into the screw-threaded hole in the fulcrum arm member, and means for locking the arm members in the adjusted position, whereby the arm members may be adjusted longitudinally on each other to increase or decrease the length of the weight lever.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EZRA DIXON.

Witnesses:

ADA E. HAGERTY,  
J. A. MILLER.

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