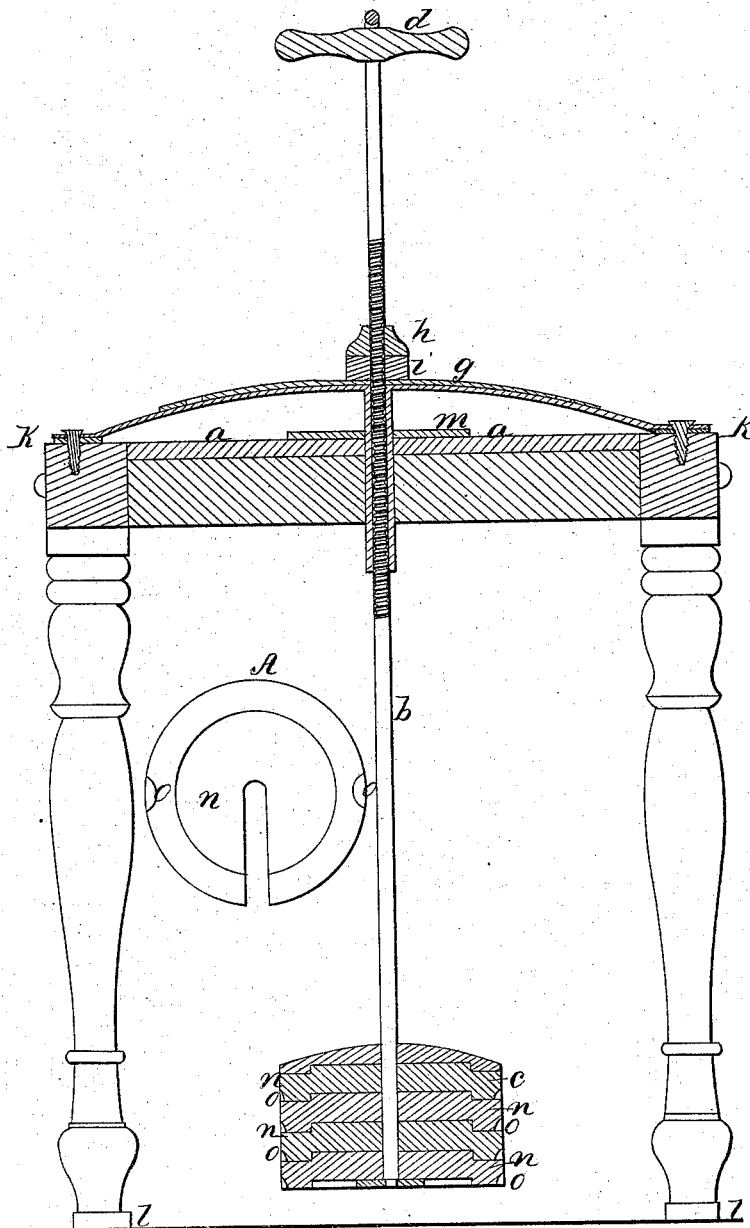


*D. P. Butler,*

*Exercising Machine.*

*N<sup>o</sup> 48050.*

*Patented June 6, 1865.*



*Witnesses;*  
*W. Gould*  
*W. B. Gleason*

*Inventor;*  
*D. P. Butler*  
*W. Crosby*

# UNITED STATES PATENT OFFICE.

D. P. BUTLER, OF BOSTON, MASSACHUSETTS.

## WEIGHT-LIFTING APPARATUS.

Specification forming part of Letters Patent No. 48,050, dated June 6, 1865.

*To all whom it may concern:*

Be it known that I, D. P. BUTLER, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Weight-Lifting Apparatus; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

This invention relates to the construction of a weight-lifting apparatus to be used for hygienic purposes, and has particular reference to the construction and arrangement of a table with a weight or weights suspended under the center thereof upon a rod passing up through the table, and having a handle upon its upper end by which the weight is lifted.

Apparatus having this general arrangement is well known; and my invention consists in the details of construction by which such a mechanism or device is compacted and simplified, and made adjustable and efficient for use for individuals possessing different degrees of strength and varying in form and size, and having capabilities of graduation to comport with an individual development of strength and improvement in physical form from exercise with the apparatus.

The drawing represents a vertical cross-section of the apparatus.

*a* denotes the table-top; *b*, a weight-holding rod extending vertically through the table; *c*, the weights supported on the rod; *d*, the handle at the top of the rod.

Instead of lifting the weights directly from the floor, I support the rod upon a spring, *g*, (the rod passing through a tube depending from the spring,) by means of a nut or collar, *h*, the effect of which is that the jar or concussion produced by the descent of the weights to the floor is obviated, and the strain produced by sudden lifting of the whole of the weight is prevented, because the upward pressure of the spring overcomes part of the weight, and the strain upon the muscles is thereby rendered gradual.

The nut *h* may be cushioned upon the spring by an elastic washer, *i*, and the spring upon the surface of the table by elastic pieces *k*. I also provide elastic bed-pieces *l* for the table to rest upon, and elastic surfaces *m* for

the person to stand upon to prevent slipping, these all tending to render an exercise comparatively noiseless, and free from jarring effects upon the user of the apparatus.

To adapt the apparatus to the use of persons of different heights or to the use of the same person in different attitudes, I so apply the weight-rod that it can be adjusted to elevate or lower the handle *d* with respect to the surface of the table, this being effected by means of a screw-thread upon the rod and the nut *h*, as will be readily understood. Thus, before using, the height of the handle is fixed to match the height or form of the particular person about to lift the weights.

In the employment of common weights upon the rod, much difficulty is experienced from their jarring off or becoming detached in raising and lowering them. I therefore construct the weights for special adaptation to the purpose of the apparatus, making the weight, as a whole, sectional, and giving to each section *n* a depression in its lower surface and a projection upon its upper surface, so that they fit one upon or into the other or others, and cannot be separated by any jar which the apparatus may receive. These sections being generally quite heavy, I provide each one with depressions *o*, (as seen in the sectional drawing, and also at *A*, which denotes an under side view of one of the weights,) by means of which they can easily be raised and removed by hand, one or more together, from the others.

For the purpose of giving portability to the apparatus, and in order that it may be easily taken apart and put together and packed for transportation, thus enabling it to be made and sold as an article of manufacture, and to be readily set up in offices and dwelling-houses, the parts may be put together by screws and pins, requiring no mechanical skill to set up or take down the table and lifting mechanism.

I claim—

A weight-lifting apparatus having a construction and capability of adjustment substantially as described.

In witness whereof I have hereunto set my hand this 24th day of March, A. D. 1865.

D. P. BUTLER.

Witnesses:

J. B. CROSBY,  
F. GOULD.