

D. B. MILLER.
ADJUSTABLE TABLE.
APPLICATION FILED MAR. 17, 1916.

1,243,750.

Patented Oct. 23, 1917.

Fig. 1

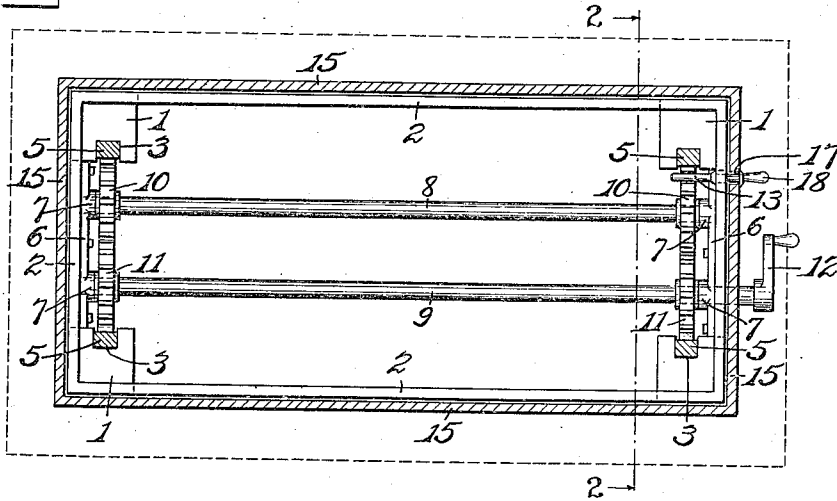


Fig. 2

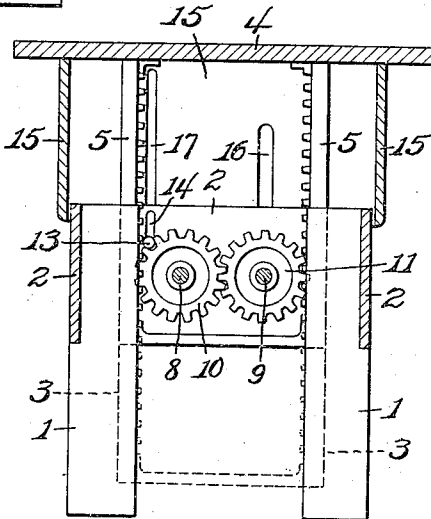
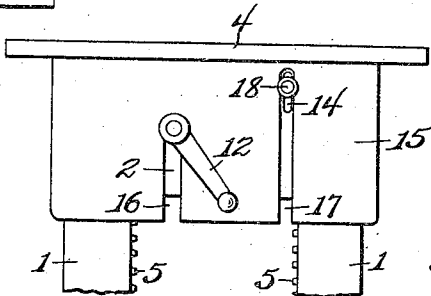


Fig. 3



INVENTOR
Daniel B. Miller.
BY *H. E. Dunlap.*
ATTORNEY

UNITED STATES PATENT OFFICE.

DANIEL B. MILLER, OF WHEELING, WEST VIRGINIA.

ADJUSTABLE TABLE.

1,243,750.

Specification of Letters Patent.

Patented Oct. 23, 1917.

Application filed March 17, 1916. Serial No. 84,925.

To all whom it may concern:

Be it known that I, DANIEL B. MILLER, a citizen of the United States of America, and resident of Wheeling, county of Ohio, and State of West Virginia, have invented certain new and useful Improvements in Adjustable Tables, of which the following is a specification.

This invention relates broadly to tables, and it has for its object to provide a table having means whereby its top may be readily adjusted to any desired elevation.

A further object is to provide conveniently operated means adapted for embodiment in tables, work-benches, and the like, whereby the top, or working surface, thereof may be raised or lowered to any desired extent within appropriate limits to accommodate the convenience of the user.

With these and other objects in view, the invention resides in the features of construction, arrangement of parts and combinations of elements which will hereinafter be exemplified, reference being had to the accompanying drawings, in which—

Figure 1 is a horizontal section of a table embodying my invention, said section being taken at a point a short distance below the table top;

Fig. 2 is a vertical section taken on line 2—2, Fig. 1; and—

Fig. 3 is an end elevation.

Referring to said drawings, in which like designating characters distinguish like parts throughout the several views—

A and B indicate generally the upper and lower sections, respectively, of a two-section table constructed in accordance with my invention. The lower section is of rectangular form and comprises a plurality of upright legs 1 joined in any suitable manner, as by the plate-like connecting panels 2. Each of said legs is provided with a vertical guide groove 3, the legs at opposite sides of said section B having said grooves formed in their opposing faces.

The upper table section A comprises a table top 4 mounted upon the upper ends of vertical rack-bars 5 which are slidably received within said guide grooves 3.

Interposed between the legs 1 at each of the opposite ends of the table-section B is a suitable transverse support or casting 6 having a pair of bearings 7, and journaled in said bearings at opposite ends of said sec-

tion are two horizontal parallel longitudinally disposed shafts 8 and 9. Fixed on each of the opposite ends of the shaft 8 so as to mesh with the teeth of the adjacent rack-bar is a gear wheel 10, and mounted on each of the opposite ends of the shaft 9 so as to mesh with the teeth of the adjacent rack-bar and also mesh with the adjacent gear 10 is a gear wheel 11. One of said shafts, as the shaft 9, has one end projected outward through the adjacent panel 2 and has a hand-crank 12 fixed thereon whereby said shaft may be rotated for effecting adjustment of the elevation of the table section A. As is apparent, rotation of said shaft 9 acts through the gear wheels 11 to move the adjacent rack bars in their respective guide grooves 3, and also through gear wheels 10 to correspondingly move the oppositely disposed rack-bars in their grooves, effecting the lowering or raising of said table section A, according to the direction of rotation of said shaft 9.

A pin or stud 13 is vertically adjustable in a suitable slot 14 provided in one of the end panels 2 at a point closely adjacent to one of the rack-bars, said pin being designed to be lowered to a point where it is received between the teeth of said rack-bar and the contacting gear, as shown in Fig. 2, for locking the latter against rearward rotation. As is obvious, the locking pin is adjusted to locking position when the table-section A has been elevated to a desired point, thus preventing the lowering movement which would otherwise result due to the weight of said section being sustained by the gear wheels.

For concealing the various parts of the adjusting mechanism from view, a depending apron or shield consisting of vertically disposed side and end plates 15 is provided, each of said plates being carried by the table top 4 in a position wherein its inner face is substantially coincident with the outer faces of the adjacent panel 2 of table-section B. Further, each plate 15 is of such vertical width that its lower edge will slightly overlap the adjacent panel 2 when the section A has been raised to the limit of its elevating movement.

Vertical slots 16 and 17 are provided in one end-plate 15 in which the shaft 9 and outwardly projecting knob or handle-portion 18 of pin 13 are respectively received,

such slots permitting adjustment of the table without interference.

What is claimed is—

1. In a table, a lower section having pairs
5 of legs grooved on their confronting sides
with the grooves extending through said
sides, panels connecting the tops of the legs,
one of the panels having a vertical slot, an
upper section having pairs of racks depend-
10 ing therefrom and sliding in said respec-
tive grooves, a pair of transverse supports
connected at their ends to the respective
pairs of legs at one side of the grooves of
said legs, a pair of shafts journaled in said
15 supports and having intermeshing gears
which latter also mesh with the respective
racks, means to rotate one of the shafts, an
end apron secured to the upper section and
having vertical slots one of which latter re-
20 ceives the end of the shaft having said rotat-
ing means, the other slot being in register
with the panel slot, and means operating in
the other slot and in the slot of the panel to

lock the gear on the adjacent end of the
other shaft. 25

2. In a table, a lower section having
pairs of legs formed with U-shaped grooves
on their inner sides, an upper section hav-
ing rack bars of rectangular cross-section se-
cured thereto and sliding in said grooves, a
30 single pair of shafts journaled in the lower
section, a single pair of gears borne by each
shaft at the respective ends thereof, the ad-
jacent gears at the adjacent shaft ends being
intermeshed and meshing with the respec-
35 tive rack bars, means carried by one shaft
to rotate same and thereby the other shaft,
and means to lock one of the gears against
rotation.

In testimony whereof, I affix my signature 40
in presence of two subscribing witnesses.

DANIEL B. MILLER.

Witnesses:

H. E. DUNLAP,
W. F. KEEFER.

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