H. MANOOGIAN.

EXTENSION TABLE.

APPLICATION FILED MAY 18, 1914.

1,128,808.

Patented Feb. 16, 1915.

2 SHEETS—SHEET 1.

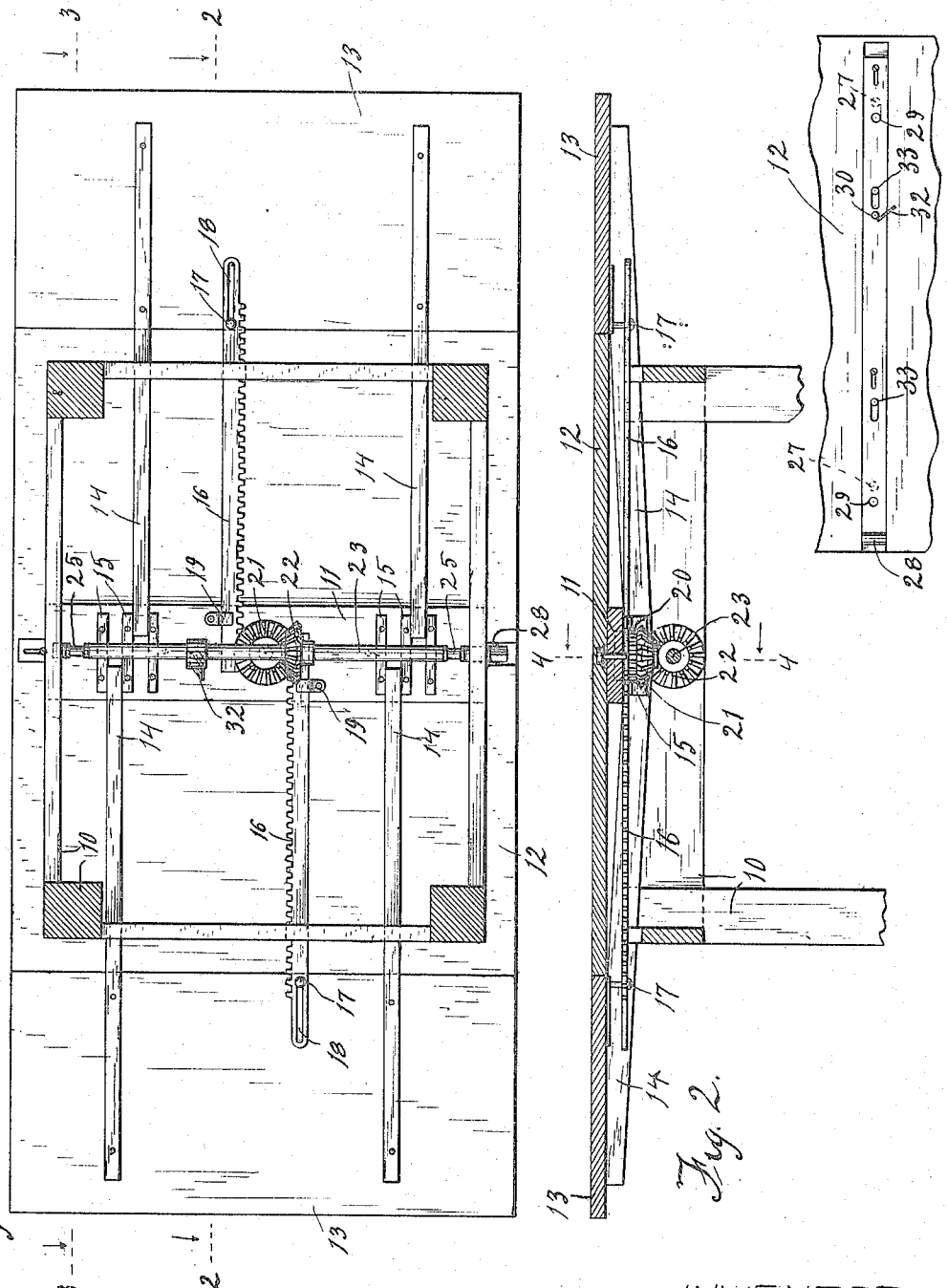


Fig. 1.

Fig. 2.

WITNESSES

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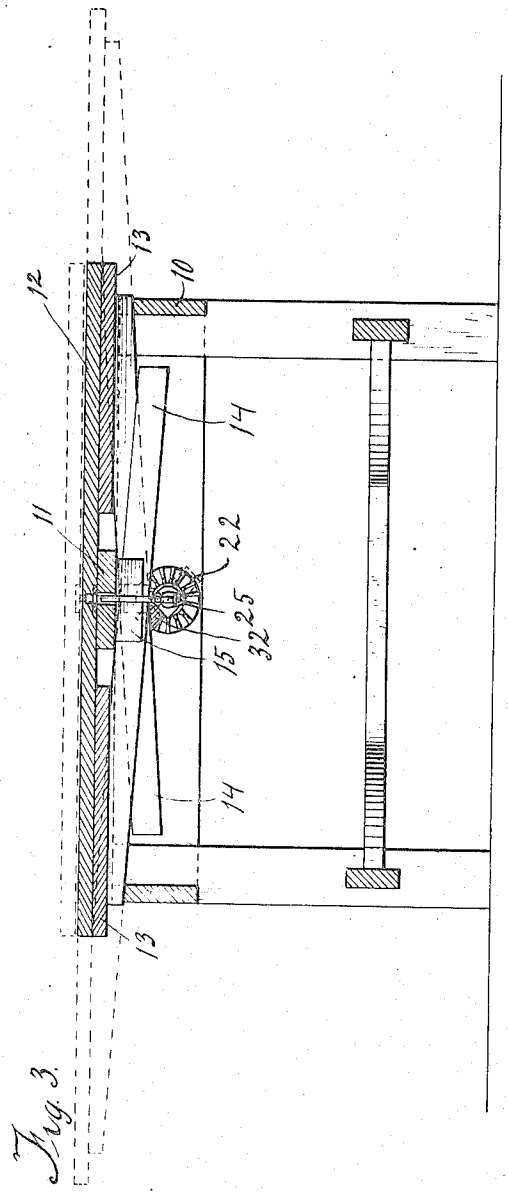


Fig. 3.

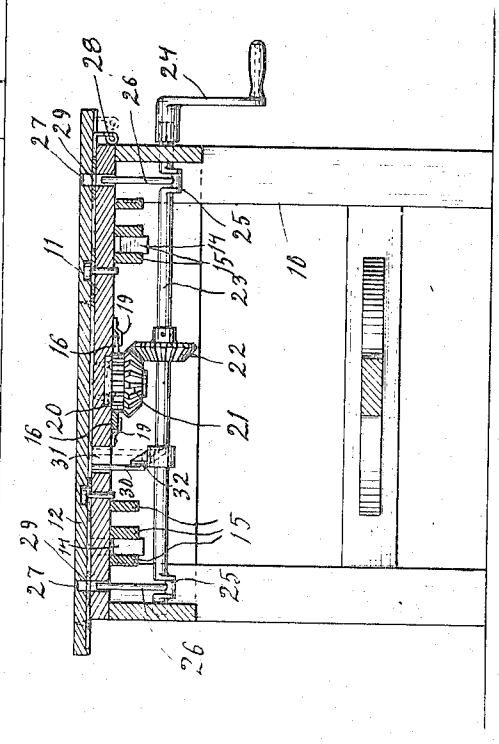


Fig. 4.

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HARRY MANOOGIAN, OF TROY, NEW YORK, ASSIGNOR TO HARRY ENOCHIAN, OF KENOSHA, WISCONSIN.

EXTENSION-TABLE.

1,128,808. Specification of Letters Patent. Patented Feb. 16, 1915.

Application filed May 18, 1914. Serial No. 839,251.

To all whom it may concern:

Be it known that I, HARRY MANOOGIAN, a subject of the Sultan of Turkey, and resident of Troy, in the county of Rensselaer and State of New York, have invented new and useful Improvements in Extension-Tables, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

This invention has for its object to provide a table which may be readily extended from its normal size to a considerably greater size without the necessity for use of removable parts.

With the above and other objects in view the invention consists in the extension table as herein claimed and all equivalents.

Referring to the accompanying drawings in which like characters of reference indicate the same parts in different views: Figure 1 is a bottom view of an extension table constructed in accordance with this invention and shown in its extended condition; Fig. 2 is a vertical longitudinal sectional view thereof on the sectional plane of line 2—2 of Fig. 1; Fig. 3 is a similar view of the table in its contracted condition on the sectional plane of line 3—3 of Fig. 1; and Fig. 4 is a transverse sectional view thereof on the plane of line 4—4 of Fig. 2.

In these drawings 10 indicates the table base or frame or ordinary rigid rectangular construction and 11 is a crosspiece which is rigidly secured across the top of the base. A table top 12 rests upon the crosspiece 11 but is capable of being elevated therefrom in a manner which will be later described. The crosspiece 11 holds the table top 12 spaced from the upper edge of the base 10 and within this space at each end of the table is contained an extension leaf 13 having a pair of inclined parallel supporting arms 14 slidably fitting in notches provided therefor in the base and guided between guide cleats 15 which are secured to the bottom of the crosspiece 11. The supporting arms 14 bear against the bottom of the crosspiece 11 and their inclination is such that when the extension leaves are drawn out from beneath the table top 12 they are raised to the plane of the table top 12 when it rests on the crosspiece 11 and at its edges on the supporting arms 14, as is shown in Fig. 2. Each extension leaf 13 has a rack 16 connected with it by means of a headed pin 17 on the bottom of the extension leaf passing through a longitudinal slot 18 in the rack and these racks 16 are slidably held by clips 19 on the crosspiece 11 so that they engage the teeth on the opposite sides of a gear wheel 20 which is rotatably mounted on the crosspiece 11. The gear wheel 20 has rigidly connected therewith a beveled pinion 21 which meshes with a correspondingly beveled pinion 22 on a crank shaft 23 which is journaled across the base of the table and may be turned by means of a crank handle 24 removably fitting on a square projecting end of said shaft. By turning the crank shaft 23 the extension leaves 13 may be extended or withdrawn so as to extend or contract the table.

In order that the inward movements of the extension leaves may not be interfered with by the table top 12 resting upon them, provision is made for lifting the table top automatically before beginning such movements. Cranks 25 are formed in the crank shaft 23 and have lifting pins 26 mounted on them and passing through openings in the crosspiece 11 so that the turning of the crank shaft 23 causes the lifting pins to project above the top of the crosspiece 11 and lift the table top 12 therefrom. It is not desired, however, that the table top 12 should be elevated with each rotation of the crank shaft 23 and it is therefore provided with openings 27 to receive the lifting pins 26 and permit of their full upward movement without lifting the table top unless a slide 28, which is fitted in the bottom of the table top, is moved so that openings 29 therein are carried out of register with the openings 27 in the table top. In such position of the slide 28 with the openings out of register the upward movement of the lifting pins 26 causes the table top to be lifted to permit of the sliding movement of the extension leaves, but immediately after the first lifting movement of the table top the slide 28 is restored to its normal position with its openings 29 in register with the openings 27 by means of a pin 30 projecting downwardly from the slide 28 through a slot 31 provided for it in the crosspiece 11 and in the path of an oblique blade 32 carried by the crank shaft. When the slide 28

is drawn outwardly to the position shown by dotted lines in Fig. 4 so that the openings 29 do not register with the openings 27 the crank shaft is capable of nearly a complete rotation during which the table top is lifted before the pin 30 is engaged by the blade 32 and is forced thereby to its normal position where the slide will have its openings 29 in register with the openings 27 and thereafter the turning movements of the crank shaft will not effect the lifting of the table top. The preliminary turning of the crank shaft in order to lift the table top is permitted without disturbing the extension leaves 13 by reason of the travel of the slotted ends of the rack 16 on the headed pins 17, but as soon as the table top is elevated above the level of the extended leaves 13 the leaves begin their inward movement so that they support the table top in its elevated position at the time when the slide 28 is restored to its normal position and permit it to gradually lower during their inward travel.

In order that the table top may be held against displacement without interfering with its vertical movement it is provided with dowel pins 33 passing through slots provided for them in the slide 28 and entering openings in the crosspiece 11.

In operation with the table in its contracted position, as shown in Fig. 3, it is only necessary to turn the crank handle 24 to cause the extension leaves 13 to be forced outwardly and because of the inclination of their supporting arms they are gradually raised, meanwhile lifting the table top 12 which continues to rest thereon until their inner edges reach the edge of the table top when the table top drops between them and lies in the same plane therewith as shown in Fig. 2. When it is desired to contract the table it is first necessary to draw the slide 28 to the position in which its openings 29 are out of register with the openings 27 and then by turning the crank handle 24 to the opposite direction to that in which it was turned before the table top is first elevated from between the extension leaves 13 by the lifting pins 26 and then the extension leaves 13 begin their inward travel and before the lifting pins 26 are pushed upwardly again the slide 28 is restored to its normal position by the plate 32 acting on the pin 30 so that the further turning of the crank shaft continues to retract the extension leaves with the table top resting thereon.

What I claim as new and desire to secure by Letters Patent is:

1. An extension table, comprising a base having a crosspiece, extension leaves mounted on the base by having inclined supporting arms bearing on the base and against the crosspiece, a table top resting on the extension leaves and adapted to fall between them in their extended position, a shaft having suitable connection with the extension leaves for causing them to move inwardly or outwardly, and means on the shaft for causing the table top to be lifted before beginning the inward movement of the extension leaves.

2. An extension table, comprising a base provided with a crosspiece, extension leaves mounted on the base by having inclined supporting arms bearing on the base and against the crosspiece, a table top resting on the extension leaves and adapted to drop between them when they are in their extended position, a crank shaft journaled in the base, suitable means connecting the crank shaft with the extension leaves for moving them inwardly or outwardly, lifting pins mounted on the cranks of the crank shaft and passing through the crosspiece and adapted to engage the table top to lift it before beginning the inward movement of the extension leaves.

3. An extension table, comprising a base provided with a crosspiece, extension leaves mounted on the base by having inclined supporting arms bearing on the base and against the crosspiece, a table top resting on the extension leaves and adapted to drop between them when they are in their extended position, rack bars connected with the extension leaves, a gear wheel on the crosspiece engaging the rack bars, a beveled pinion on the gear wheel, a shaft journaled in the base having a beveled pinion meshing with the first mentioned beveled pinion, cranks on the shaft, lifting pins connected with the cranks and passing through the crosspiece, there being openings in the table top to receive the lifting pins, and a slide mounted on the table top to cover such openings but having openings to register therewith.

4. An extension table, comprising a base provided with a crosspiece, extension leaves mounted on the base by having inclined supporting arms bearing on the base and against the crosspiece, table top resting on the extension leaves and adapted to drop between them when they are in their extended position, rack bars connected with the extension leaves by a pin and slot connection, a gear wheel on the crosspiece engaging the rack bars, a beveled pinion on the gear wheel, a shaft journaled in the base having a beveled pinion meshing with the first mentioned beveled pinion, cranks on the shaft, lifting pins connected with the cranks and passing through the crosspiece, there being openings in the table top to receive the lifting pins, a slide mounted on the table top to cover such openings but having openings to register therewith, a pin projecting from the slide, and an oblique blade on the shaft

adapted to engage the pin and restore the slide to the position in which its openings register with the openings of the table top after the table top has been lifted by the engagement of the lifting pins with the slide and before the beginning of the inward movement of the extension leaves.

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

HARRY MANOOGIAN.

Witnesses:
M. L. HALAIDJIAN,
THOMAS H. GUY.