

(No Model.)

2 Sheets—Sheet 1.

R. MAINARDI.
EXTENSION TABLE.

No. 540,920.

Patented June 11, 1895.

Fig. 1.

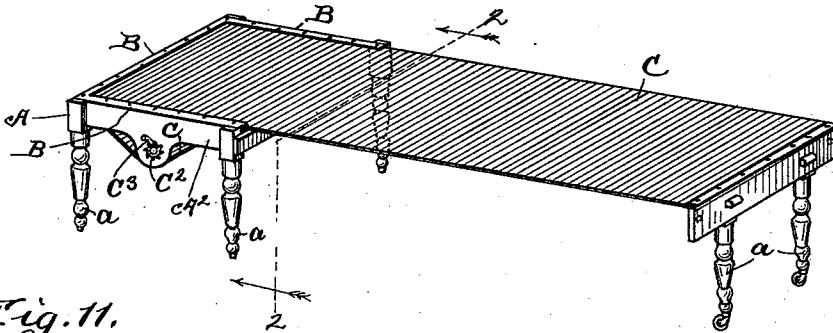


Fig. 11.

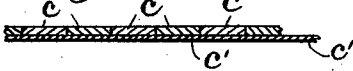


Fig. 12.

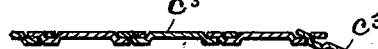


Fig. 2.

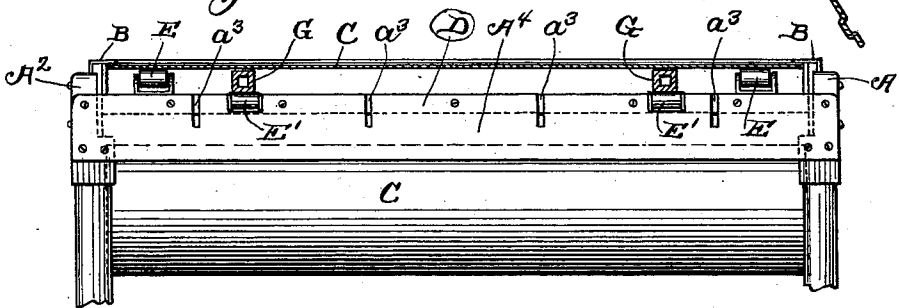


Fig. 3.

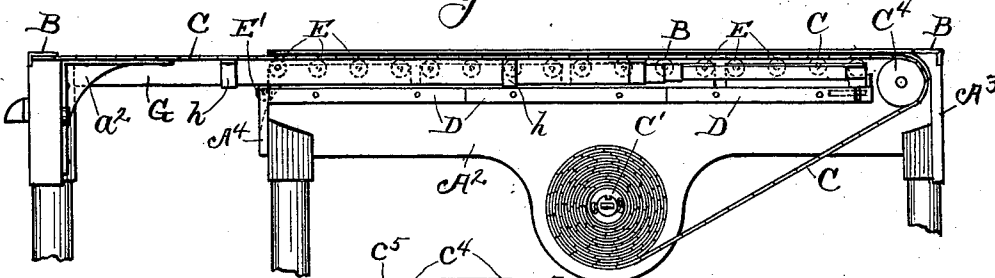
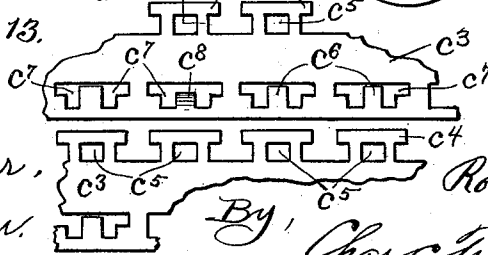


Fig. 13.



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(No Model.)

2 Sheets—Sheet 2.

R. MAINARDI.
EXTENSION TABLE.

No. 540,920.

Patented June 11, 1895.

Fig. 4.

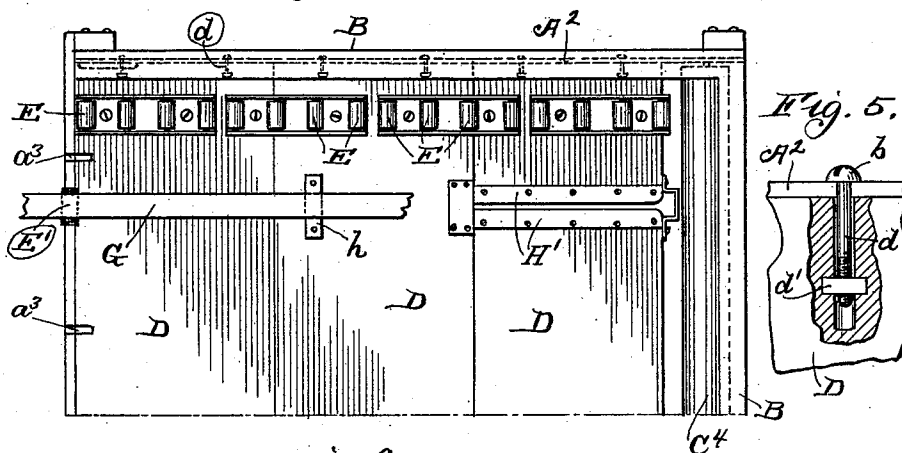


Fig. 6.

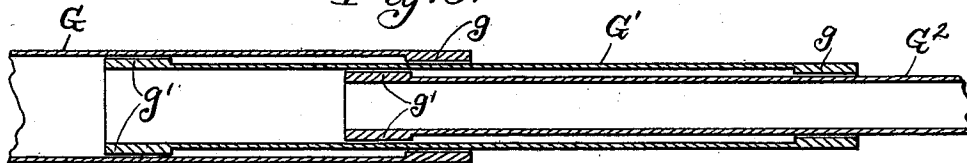


Fig. 9.



Fig. 10.

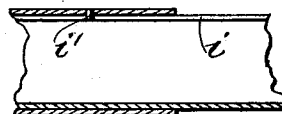


Fig. 7.

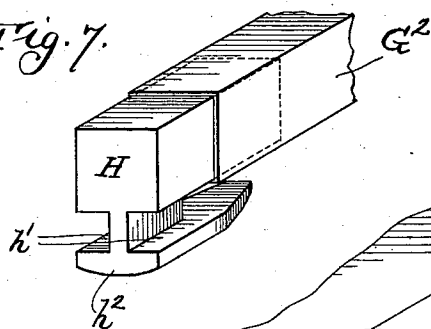
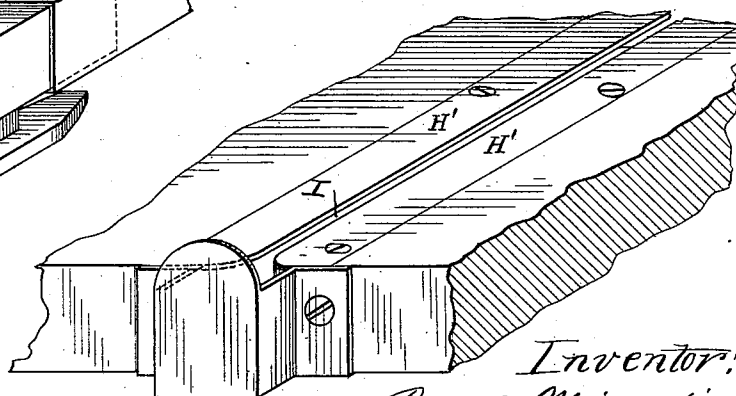


Fig. 8.



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UNITED STATES PATENT OFFICE.

ROMOLO MAINARDI, OF CHICAGO, ILLINOIS.

EXTENSION-TABLE.

SPECIFICATION forming part of Letters Patent No. 510,920, dated June 11, 1895.

Application filed August 4, 1894. Serial No. 519,446. (No model.)

To all whom it may concern:

Be it known that I, ROMOLO MAINARDI, a subject of the King of Italy, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Extension-Tables, of which the following is a specification.

This invention relates to improvements in extension tables, and consists in certain peculiarities of the construction, novel arrangement, and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

The objects of my invention are, first, to provide a table, which shall be attractive in appearance, strong and durable, when in either its compact form or extended; second, a table, which may be readily extended to any convenient or desired length, and may be automatically contracted, and, third, a table, which is so constructed that but few legs are required to support it, thus allowing the guests to place their legs under the table, without hinderance or obstruction, by reason of the table-legs.

In order to enable others skilled in the art, to which my invention pertains to make and use the same, I will now proceed to describe it, referring to the accompanying drawings, in which—

Figure 1 is a perspective view of my table, showing it partly extended. Fig. 2 is an enlarged cross-sectional view of the upper part of the table, taken on line 2 2 of Fig. 1. Fig. 3 is a view in side elevation with one of the sides of the stationary frame of the table removed, showing the curtain or top partly extended. Fig. 4 is a plan view of a portion of the stationary frame of the table with the curtain removed therefrom. Fig. 5 is a detail view illustrating the manner of securing the floor of the stationary part of the table to the frame thereof. Fig. 6 is a longitudinal sectional view in detail of the telescopic supporting-tubes detached from the curtain. Fig. 7 is a perspective view of a portion of one end of one of the telescopic tubes, showing it provided with a guide-piece to engage a guideway in the stationary frame. Fig. 8 is a perspective view of a portion of the stationary flooring, showing the guideway therein. Fig. 9 is a plan view illustrating a modification in the construction and operation of the telescopic tubes. Fig. 10 is a longitudinal sec-

tional view thereof. Fig. 11 is an edge view of a portion of the curtain-top. Fig. 12 is a similar view of a modification thereof; and Fig. 13 is a plan view of a part of said modification, showing the strips separated.

Similar letters refer to like parts throughout the different views of the drawings.

A, represents the main frame of my table, which is made of any suitable size, form, and material, but preferably rectangular in shape, and of wood. This frame is supported by means of legs *a*, located at each corner thereof, as shown in Fig. 1 of the drawings. Each of the sides *A'*, and *A''*, and one of the ends *A'''*, of the frame, are provided on their upper surfaces with inwardly extending flanges or strips *B*, which slightly overlap the edges of the curtain or top *C*, and together with the stationary floor *D*, form a guide-way for said curtain or top.

The floor *D*, is located within the frame *A*, just below the flanges or pieces *B*, and is provided near its edges with a series of rollers *E*, upon which the curtain or top *C*, rests, and is facilitated in its movements. The flooring *D*, is also provided at suitable points with another series of rollers *E'*, which are partly counter-sunk therein, and serve to support and facilitate the movement of the telescopic supporting tubes, as will be presently explained.

The edges of the flooring *D*, adjacent to the sides *A'*, and *A''*, of the stationary frame *A*, are provided with openings *d*, for the reception of retaining screws *b*. Within each of the openings *d*, is placed a nut *d'*, which is provided with a screw-threaded opening to engage the screw-threaded shank of the screws *b*. This enables me to secure the flooring *D*, within the frame *A*, in a very firm and secure manner, avoiding the possibility of the screws becoming loose, as would be the case if the screws were to engage the wood.

Between the side pieces *A'*, and *A''*, and about midway thereof, and having its bearings therein, is a self-acting-spring-roller *C'*, upon which is wound the curtain or top *C*. This roller is of substantially the same construction as the ordinary self-acting-spring-roller used for window-shades, and is so well known, that it is not deemed necessary to herein fully illustrate or describe the same. However, on one end of this roller is located a ratchet wheel *C''*, which engages a pawl *C'''*,

secured to one of the sides of the stationary frame, and is adapted to retain the curtain or top in its extended position. When it is desired to retract the top or curtain, it is obvious
 5 that the pawl may be disengaged from the ratchet, when the spring will cause the roller C' , to rotate, and wind the curtain thereon. Between the sides A' , and A^2 , and near the upper part of the end-piece A^3 , of the stationary
 10 frame is located another roller or pulley C^4 , over which the top C , passes.

The free end of the top or curtain C , is provided with a flange or inwardly turned piece B , corresponding with similar pieces or flanges
 15 on the edges of the stationary frame of the table, in order that, when the table is in its compact form, its edges will present a uniform appearance. The free end of the top or curtain C , is also provided with legs a , to support it, when it is extended. These legs are
 20 firmly secured to the top or curtain C , by means of braces a^2 , which when the top is retracted fit in the slots a^3 , of the end piece A^4 , of the stationary frame, which slots are provided for said purpose.
 25

The curtain or top C , is formed of a series of slabs or pieces c , which are secured together by means of flexible material c' , which is glued or otherwise secured to the lower surfaces of the slabs c , composing the curtain or
 30 top. Near each edge of the curtain or top C , and to the lower surface thereof, is secured a hollow tube G , which is preferably rectangular in form, in cross section, and is provided at its inner end with a contracted portion or
 35 neck g . Within the tube G , is placed a tube G' , of a form similar to the tube G , but having on its end within the latter named tube an enlargement or head g' , to engage the neck
 40 g , to prevent its being entirely withdrawn. Within the tube G' , is placed another tube G^2 , of a like form and construction. As before stated, these series of tubes, which may consist of any number of pieces, are, preferably placed near the edges of the top or curtain,
 45 but I may locate them, and as many series of them as may be necessary, at any desired points on the curtain.

The tubes G , are rigidly secured to the curtain or top, by means of brackets h , or otherwise, and the other tubes are adapted to telescope one within the other, as will be clearly understood by reference to Fig. 6 of the drawings. The inner ends of the inner tubes or
 50 those when the curtain top is fully extended, adjacent to the roller C^4 , are provided each with guide-pieces H , which are formed at the lower portion with groove h' , on each side thereof, to engage the guide-pieces H' , attached to the upper surface of a part of the stationary flooring D , which part of said flooring is provided with a groove I , of a shape to correspond with the head h^2 , of the guide-piece h .
 55

By reference to Fig. 7 of the drawings, it will be seen that the head h^2 , of the guide piece H , extends somewhat below the lower

surface of the inner tube, thus allowing said tube to lie horizontally on the flooring, but at the same time to be controlled by means of
 70 the groove I , therein.

In Figs. 9 and 10 of the drawings, I have shown a modification in the construction of the telescopic tubes, which consists in forming the tubes with longitudinal slots i , within
 75 which operate small pins or projections i' , on the outer tube. These slots, as shown by dotted lines in Fig. 9, do not extend quite the entire length of the tubes, and thus prevent them being drawn entirely out, or disconnected.
 80

In Figs. 12 and 13 of the drawings, I have shown a modification in the construction of the curtain or top, which consists in employing a series of metal slabs or pieces c^3 , which are provided on their adjacent edges with projections c^4 , having openings c^5 , therein to receive the tongues c^6 , in the edge of its adjacent piece. When it is desired to join the pieces c^3 , together, the projections c^4 , are inserted into the openings c^5 , when the tongues
 85 c^6 , will pass through the openings c^5 , in the other strip, and will thus link or hinge the pieces together in a flexible sheet, as shown in Fig. 12 of the drawings. Before the strips c^3 , are united, the tongues c^6 , are curved, as
 90 shown at c^8 , in Fig. 13, when by straightening said tongues, the pieces will be securely attached together.
 95

From the foregoing and by reference to the drawings, it will be seen and readily understood, that by drawing out the curtain or top
 100 C , its lower surface near its edges will rest on the rollers E , and the tubes G , will be drawn over the rollers E' , therefor, until the necks or contracted portions g , engage the heads or
 105 enlargements g' , of the inner tubes, or they will be extended until a similar engagement takes place with the tubes within them, and so on throughout the series, thus forming a strong and substantial support for the curtain or top and avoiding the use of many supporting legs.
 110

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—
 115

In an extension table, the combination of a main frame having a horizontal flooring provided with a series of anti-friction rollers, and the grooves I , with the self acting spring rollers journaled in the sides of the frame, a roller
 120 or pulley located in said frame, a flexible top or curtain secured at one of its ends to the spring roller and adapted to pass over said pulley, and a series of tubes telescoped one within the other and provided with contracted
 125 and enlarged ends, and secured to the lower surface of the curtain, one of each series of tubes being provided with the guide piece H , having the head h^2 , adapted to operate in the grooves I , substantially as described.

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