

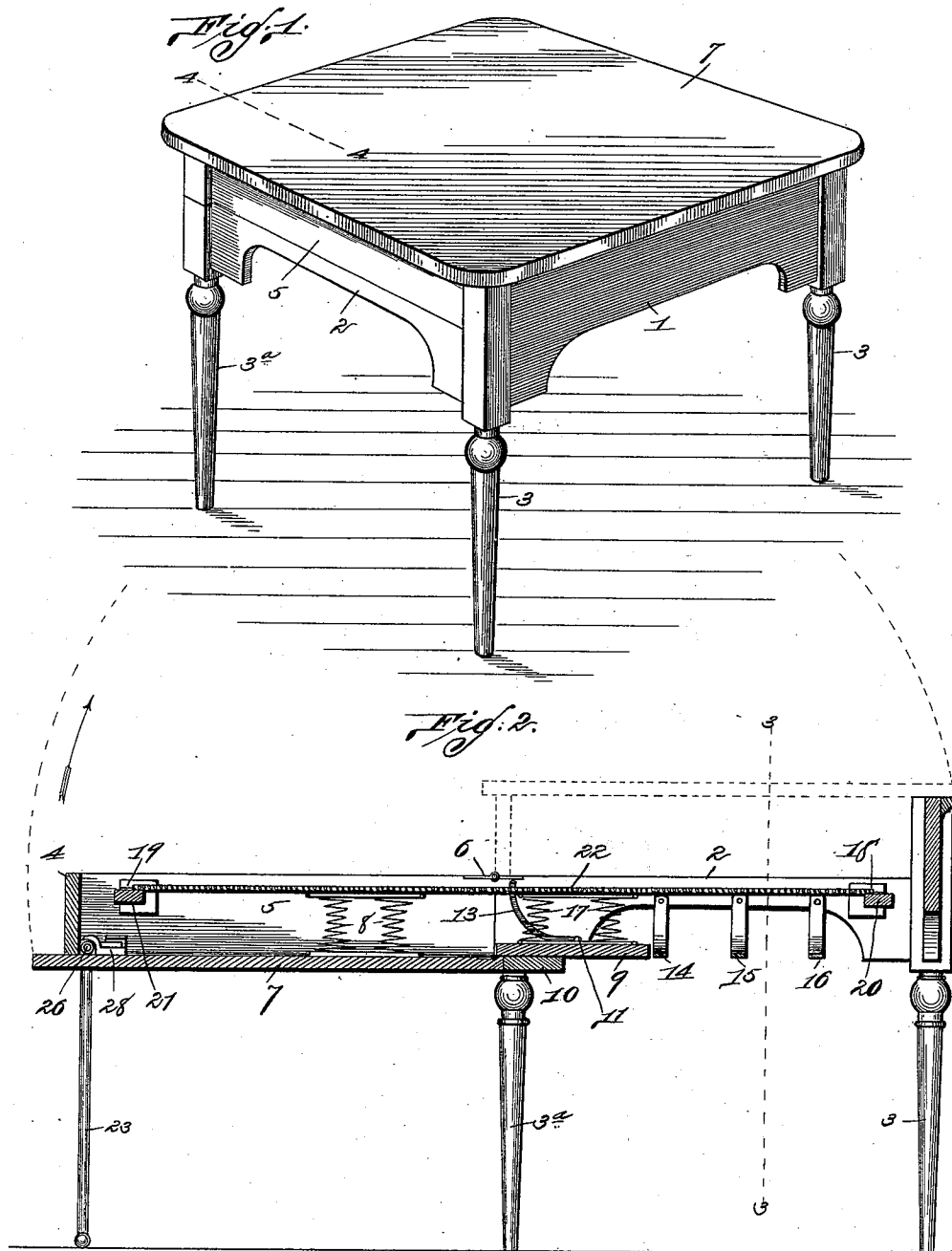
(No Model.)

2 Sheets—Sheet 1.

R. VOCKE & E. LUNGSTRAS.
TABLE FOLDING BED.

No. 563,520.

Patented July 7, 1896.



Attest
J. S. Wells.

Inventors:
Rudolph Vocke and
Ewald Lungstras.
By Higdon Higdon Higdon Attys.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

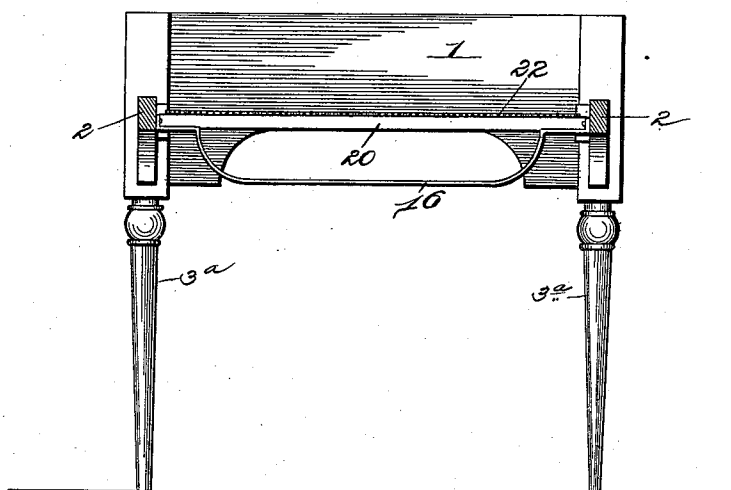


Fig. 4.

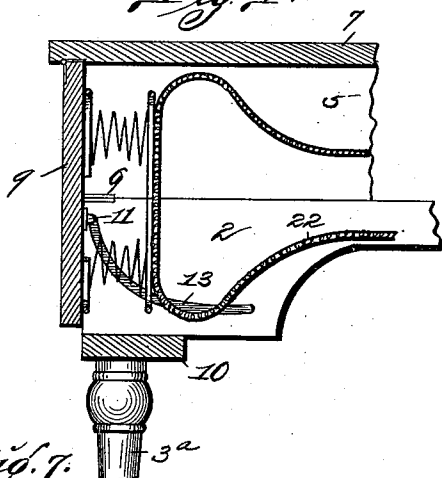


Fig. 5.

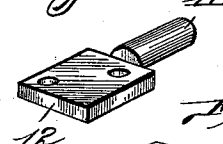


Fig. 6.

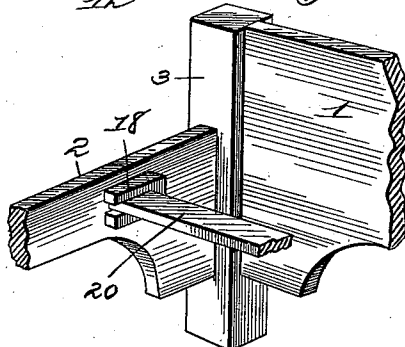


Fig. 7.

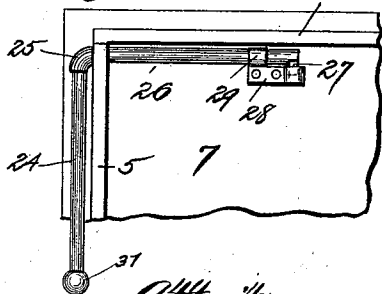
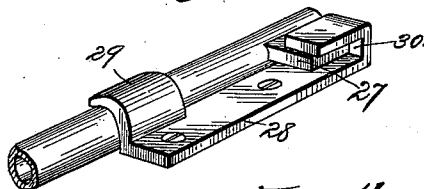


Fig. 8.



Attest
M. P. Smith
S. S. Wells

Inventors
Rudolph Vocke and
Ewald Lungstras
By Higdon Higdon & Horgan
attys.

UNITED STATES PATENT OFFICE.

RUDOLPH VOCKE AND EWALD LUNGSTRAS, OF ST. LOUIS, MISSOURI.

TABLE FOLDING BED.

SPECIFICATION forming part of Letters Patent No. 563,520, dated July 7, 1896.

Application filed April 8, 1896. Serial No. 586,659. (No model.)

To all whom it may concern:

Be it known that we, RUDOLPH VOCKE and EWALD LUNGSTRAS, of the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in Table Folding Beds, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

Our invention relates to an improved table folding bed; and it consists in the novel construction, combination, and arrangement of parts hereinafter described and claimed.

Our present invention is an improvement on, and should be read in connection with, our former invention disclosed in Letters Patent No. 538,470, dated April 30, 1895.

In the drawings, Figure 1 is a view in perspective of our improved table folding bed folded and in the form of a table. Fig. 2 is a longitudinal sectional view of our device open in the form of a bed, the dotted lines showing the position the folded portion of the device assumes when said device is in the form of a table. Fig. 3 is a longitudinal sectional view taken on the line 3 3 of Fig. 2. Fig. 4 is a transverse sectional view taken on the line 4 4 of Fig. 1. Fig. 5 is a perspective of a guide-pin of which we make use. Fig. 6 is a perspective of one of the corner-posts and its connections, the connections being broken away. Fig. 7 is a bottom plan view of the folded portion, showing the folding leg and the method of connecting the same to the table. Fig. 8 is a perspective of the means of clamping the folding leg to the table and locking the same when its use is not desired.

Referring by numerals to the accompanying drawings, 1 indicates the head-board of the stationary portion of our table folding bed. The side rails 2 are framed to the head-board in the usual manner, and this framework is mounted upon suitable supporting-legs 3 and 3^a. The movable or folding portion of the bed comprises the foot-board and the side rails 5, fixed to said board and lying in alinement with the side rails 2, said side rails 5 and 2 being hinged together at their meeting upper corners by the hinge 6. The board 7, which performs the function of a table-top, is fixed to the under side of the foot-board 4 and the side rails 5, as shown in Fig.

2. A series of bed-springs 8 are attached to the under side of the table-top 7, and a cross-bar 9 is hinged to the under face and inner end of said table-top in such a way that when the bed is folded into a table said cross-bar 9 assumes a vertical position parallel with the head-board 1, and when said table is opened out to form a bed, as shown in Fig. 2, said cross-bar 9 assumes a horizontal position and rests upon the bar 10, which is interposed transversely of the bed between the pair of legs 3^a.

The guide-pins 11, having the heads 12, are inserted in the recesses 13, formed in the inner faces of the side rails 2, and the heads 12 of said pins are rigidly fixed to the cross-bar 9. The head-board 1 and the side boards 2 have their lower edges cut away, as shown in Fig. 1, to such a height that the knees of the diners will readily pass under the table.

Straps 14, 15, and 16 extend transversely of the bed and connect the side rails 2. For this purpose we prefer to use light strap-iron and run the straps inwardly in a horizontal plane some distance from the side rails 2, and then bend them down to a level with the lower corners of said side rails, thus forming ample and convenient room for the bedding when the device is to be used as a table; but leather straps, canvas, or netting may be substituted for the iron straps shown without departing from the spirit of our invention. By using the iron straps as shown, or any other similar construction, the bedding is held out of sight when the table is closed and at the same time ample room for a liberal amount of bedding is provided.

Bed-springs 17 are attached to the inner surface of the cross-bar 9, and an ordinary wire mattress 22 is positioned upon top of the springs 8 and 17.

Recessed blocks 18 are attached to the inner faces of the side rails 2 and at the ends thereof nearest the head-board 1 and in transverse alinement with each other. Similar blocks 19 are attached to the inner faces of the free ends of the side rails 5 and in transverse alinement with each other.

A slat 20 is positioned with its ends resting in the recesses of the blocks 18 and a similar slat 21 is positioned with its ends resting in the recesses of the blocks 19.

The head end of the wire mattress 22 is attached to the slat 20 and the foot end of said mattress is attached to the slat 21, as shown in Fig. 2. Iron legs 23 support the folding part of the bed and consist of a section of pipe 24, attached to the elbow 25, and a section of pipe 26, inserted in the opposite end of said elbow. Upon the end of the section 26 opposite the elbow 25 is a lug projecting at right angles from said section, and a clamp 28, having a semicircular lug 29, is attached to the under face of the board 7 for the purpose of holding the section 26 of the leg in position. The end of the clamp 28 opposite the lug 29 is bent upwardly and backwardly, forming the rectangular recess 30, designed to receive the lug 27 upon the end of the section 26. The end of the section 26 opposite the lug 27 is journaled in the side rails 5, as shown in Fig. 7. The ball 31 is attached to the free end of the section 24.

When the swinging portion of the bed is raised up and closed, as shown in dotted lines in Fig. 2, the legs 23 fold down against the under surface of the board 7 just outside of the side rails 5, and by pushing the section 26 through the bearing formed by the lug 29 the lug 27 is inserted in the rectangular aperture 30, and said legs are held in position out of sight and out of the way.

When the bed is closed to form a table, the cross-bar 9, by means of the guide-pins 11 working in the recesses 13, is operated to assume a vertical position, and the wire mattress assumes a position substantially as shown in Fig. 4. It will be noticed that in making this fold the wire mattress makes a large round bend and is not cramped and kinked as were the mattresses in the old devices.

The operation is as follows: Assuming that the device has been in use as a table and it is desired to open or transform the same to be used as a bed, the operator manually lifts the end of the table-top 7 adjacent the head-board 1 and unfolds or swings the entire movable portion of the device over until said movable portion lies in a horizontal plane with the immovable portion. In so unfolding or opening the device, the lower edge of the transverse bar 9 retreats inwardly under the immovable portion of the table, guided by the guide-pins 11 upon the ends of said bar, until said bar is in a horizontal plane. The coil-springs 17, fastened to the inner face of said cross-bar 9, now assume a vertical position on top of said cross-bar and sustain the center of the spring-mattress 22 and do not allow the same to sag. The legs 23, which have heretofore been folded upon the under edge of the table-top 7 and supported by the lug 27, engaging in the rectangular aperture 30 of the clamp 28, are now pulled outwardly until the lug 27 is released, allowing the balls 31 upon the free ends of said legs to swing downwardly and engage the floor, thus sustaining said swinging portion of the bed in a horizontal plane. The slat 20 is

then removed from the recesses in the blocks 18 and the mattress may then be turned backwardly toward the center of the bed, and the bedding may then be removed from the bottom of the table where it has been supported by the straps 14, 15, and 16. After the bedding has thus been removed the slat is repositioned in the recesses in the blocks and the bed is in readiness for use.

To transform the device from a bed to a table, the slat 20 is again removed from the recesses in the blocks 18 and the bedding replaced in the bottom of the table upon the straps 14, 15, and 16. Then the operator manually lifts the free end of the movable portion of the device, and in so doing the transverse bar 9 again assumes a vertical position, as shown in Fig. 4, and the top board 7 assumes its normal position, as shown in dotted lines in Fig. 2. The legs 23 swing into a position parallel with the top board 7 and are pushed inwardly until the lug 27 engages in the rectangular aperture 30, as before described. The transverse bar 9, sliding into a vertical position, as before described, closes that side of the table and hides the bedding from sight.

If at any time it is desired to remove the spring-mattress 22 in order to clean the same or the interior of the device, either the slat 20 or the slat 21 may be first removed from the recesses in which it reposes, and then the mattress and springs 8 and 17 may be removed from their support and the device cleaned, as desired.

A table folding bed of our improved construction can be very easily and quickly manipulated or transformed from a bed to a table and vice versa, is very simple and strong in construction, cannot get out of order, can be readily taken apart to clean, contains no hiding-places for insects, and possesses superior advantages in point of simplicity, durability, and general efficiency.

When in use as a bed, it cannot by any possibility become prematurely closed and thus imprison or injure the occupant.

We claim—

1. In a table folding bed, a stationary frame consisting of a head-board having its lower edge cut away intermediate of its corners, mating side rails framed to said head-board, said side rails having their lower edges cut away intermediate of their corners, a horizontally-positioned transverse bar framed to and connecting the ends of said side rails opposite said head-board, and legs supporting said frame, in combination with a frame designed to fold upon said stationary frame, a table-top on said folding frame, a transverse bar hinged to said table-top, pins projecting from the ends of said bar and engaging guide-recesses in said side rails of said stationary frame, legs journaled in the side rails of said folding frame, lugs attached to the upper ends of said legs, clamps attached to the table-top, semicircular lugs upon said

clamps and engaging said legs, said clamps also having rectangular open-ended recesses to receive the lugs on said legs, substantially as specified.

5 2. In a table folding bed, a stationary frame, a movable frame designed to fold upon said stationary frame, a table-top on said folding frame, a transverse bar hinged to said table-top, pins projecting from the ends of said bar and engaging guide-recesses in the side rails of the stationary frame, bed-springs attached to the inner face of said transverse bar, a wire mattress attached to said bed-springs, legs journaled in the side rails of said folding frame, lugs attached to the upper ends of said legs, clamps attached to the table-top, semicircular lugs upon said clamps and engaging said legs, said clamps also having rectangular open-ended recesses to receive the lugs on said legs, substantially as specified.

3. In a table folding bed, a stationary frame, consisting of a head-board having its lower edge cut away intermediate of its corners, mating side rails framed to said head-board, said side rails having their lower edges cut away intermediate of their corners, a horizontally-positioned transverse bar framed to and connecting the ends of said side rails opposite said head-board, connections between the lower edges of said side rails, thus forming a basket between said side rails, in combination with a folding frame, a table-top on said folding frame, legs journaled in the side rails of said folding frame, lugs attached to the upper ends of said legs, clamps attached to the table-top, semicircular lugs upon said clamps and engaging said legs, said

clamps also having rectangular open-ended recesses to receive the lugs on said legs, substantially as specified.

4. In a table folding bed, the legs 23 journaled in the side rails 5, the lugs 27 attached to the upper ends of said legs, the clamps 28 attached to the table-top, the semicircular lugs 29 engaging the sections 26 of the legs 23, said clamps also having the rectangular open-ended recesses 30 to receive said lugs 27.

5. In a table folding bed, a stationary framework, stationary legs for said framework, a folding framework hinged to the stationary framework, a transverse bar hinged to the table-top and pivotally connected by guide-recesses to the side rails of the stationary framework to form one side of the device when the same is in use as a table, recessed blocks located upon the inner faces of the side rails of both frameworks, transverse bars located in said recesses, a spring-mattress secured to said transverse bars, legs journaled in the side rails of said folding frame, lugs attached to the upper ends of said legs, clamps attached to the table-top, semicircular lugs upon said clamps and engaging said legs, said clamps also having rectangular open-ended recesses to receive the lugs on said legs, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

RUDOLPH VOCKE.
EWALD LUNGSTRAS.

Witnesses:

THEODORE HEROLD,
C. W. BLOCK.