H. A. ST. JOHN AND G. H. SAUER.

FOLDING DINING ROOM SET.

APPLICATION FILED SEPT. 15, 1919.

1,339,232.

Patented May 4, 1920.

2 SHEETS—SHEET 1.

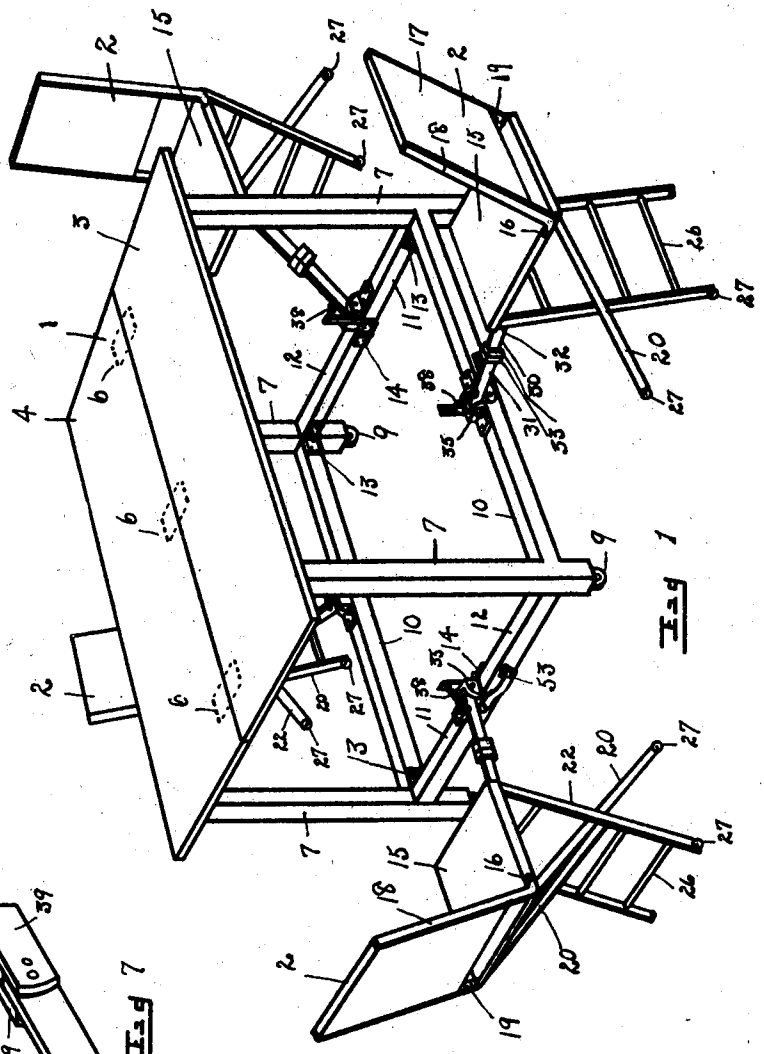


Fig 1

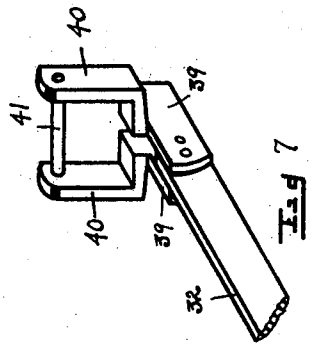


Fig 7

INVENTORS

HENRY A. ST. JOHN

GEORGE H. SAUER

BY Thomas L. Wilder

ATTORNEY.

H. A. ST. JOHN AND G. H. SAUER.

FOLDING DINING ROOM SET.

APPLICATION FILED SEPT. 15, 1919.

1,339,232. **Patented May 4, 1920.**

2 SHEETS—SHEET 2.

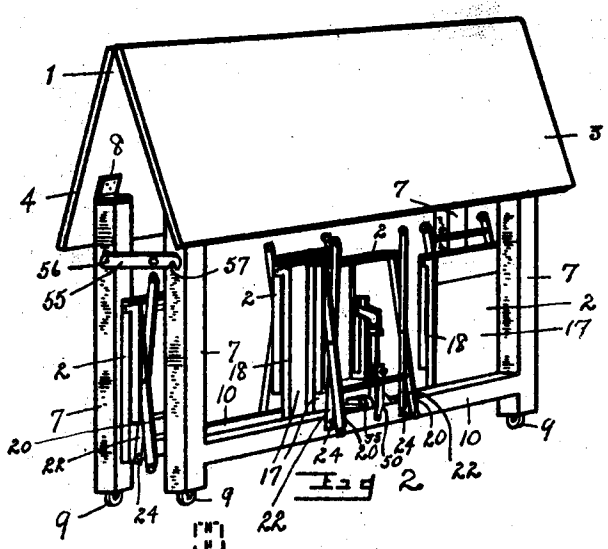


Fig 2

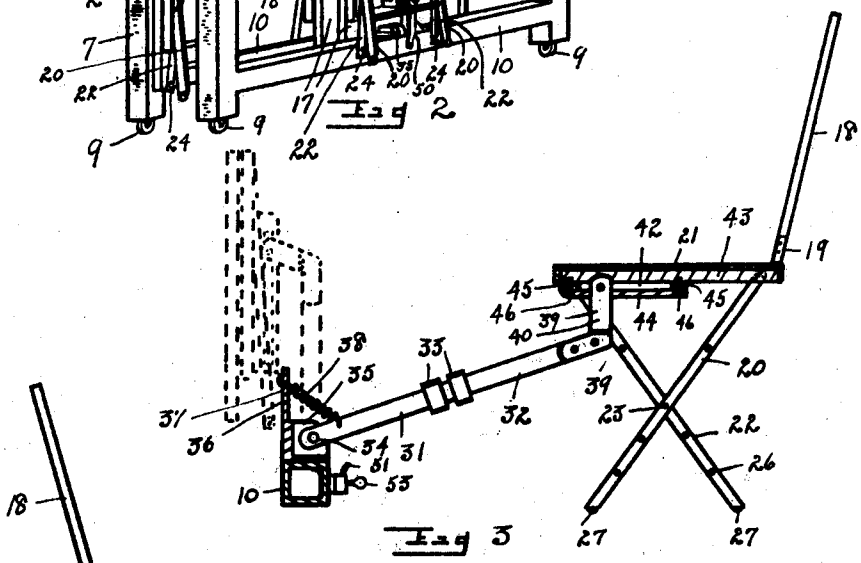


Fig 3

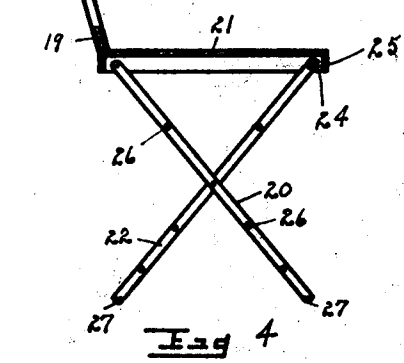


Fig 4

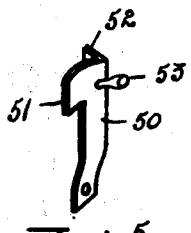


Fig 5

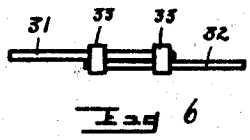


Fig 6

INVENTOR

HENRY A. ST. JOHN

GEORGE H. SAUER

BY

Thomas L. Wilder

ATTORNEY.

UNITED STATES PATENT OFFICE.

HENRY A. ST. JOHN AND GEORGE H. SAUER, OF UTICA, NEW YORK.

FOLDING DINING-ROOM SET.

1,339,232. Specification of Letters Patent. **Patented May 4, 1920.**

Application filed September 15, 1919. Serial No 323,852.

To all whom it may concern:

Be it known that we, HENRY A. ST. JOHN and GEORGE H. SAUER, citizens of the United States, residing at Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Folding Dining-Room Sets, of which the following is a specification, reference being had therein to the accompanying drawing.

Our invention relates to a folding dining room set and we declare the following to be a full, clear, concise, and exact description thereof, sufficient to enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, in which like reference characters refer to like parts throughout the specification.

The object of the invention is to provide a combination folding table and folding chairs for use more particularly in large public halls where it is desirable during part of the time, at least, to stack the furniture for dancing or entertainments. The set will be found useful, moreover, in restaurants also in apartment houses where the rooms are small and for home use especially at afternoon tea parties and like occasions.

The object will appear by reference to the drawings in which:

Figure 1 is a perspective view of the table and chairs shown in open or extended position;

Fig. 2 is a perspective view of the table and chairs in folded position;

Fig. 3 is an enlarged detail view, showing the manner of connecting a chair to the table, parts being illustrated in section;

Fig. 4 is a vertical section taken beyond the center of a chair employed, the chair being shown somewhat enlarged;

Fig. 5 is an enlarged perspective view of a pawl used for holding the folded chair in vertical position adjacent the table;

Fig. 6 is a detail plan view of the bars used to connect a chair with the table.

Fig. 7 is an enlarged detail view of certain brackets used and of a bar in fragment.

Referring more particularly to the drawings, the device embodies a folding table —1— to which is attached the folding chairs 2 in such manner that the table 1 and chairs 2 can be folded together to occupy a very small space. The table —1— has a top composed of parts 3 and 4 that are hinged by one way hinges along the under surface, as at 6—6—6 indicated by dotted lines in Fig. 1. The table top or parts 3 and 4 are supported by the four legs 7—7—7—7 made of square metal tubing to which said parts 3 and 4 are hinged at 8—8—8—8.

The lower ends of the legs 7 are equipped with casters 9—9—9—9 and are strengthened laterally by the side bars 10—10 and the end bars also made of square metal tubing. The end bars are formed in two parts 11 and 12, which parts are hinged by one way hinges to the side bars 10 at 13—13—13—13 respectively. Furthermore, the bars 11 and 12 are hinged by one way hinges 14—14 where they meet in the middle, whereby each set of end bars 11 and 12 may swing inward when the table —1— is folded.

Each of the chairs 2 is made to fold and embodies a seat 15 to which is pivoted at 16—16 a back 17, that is disposed at an angle to the seat 15 when in open position. It will be observed that the lower ends of the bars 18 that form the back 17 are turned at an angle, whereby to permit the back 17 to lay parallel with the seat 15 when in folded position. Cleats 19 are fastened by rivets to the inner sides of the bars 18. The lower edges of said cleats abut against the adjacent surface of the seat 15, whereby to limit the backward throw of the back 17.

The set of legs 20—20 are pivoted to the frame 21 of the seat 15 and are pivoted also to the set of legs 22—22 at 23—23. The upper ends of the legs 22 are each equipped with an open recess 24 that is adapted to engage a lug 25 extending laterally from either side of the frame 21 of the seat 15, whereby to hold said legs 22 in extended position. Each set of legs 20 and 22 is strengthened by cross bars 26. The legs 20 and 22 are provided with rollers 27 to allow them to move freely over the floor.

The chairs 2 are connected to the table —1— by extension members 30, which permit a certain amount of adjustment of the chairs 2 relative to the table —1—. The extension members comprise in each instance two bars 31 and 32 each of which carries on its free end a sleeve 33 that is adapted for holding in a loose manner the opposite bar, whereby said bars 31 and 32 can slide freely

with respect to each other and, yet, not be drawn apart.

The bar 31 of the extension member 30 is pivoted in each instance to a shaft 34 carried by the bracket members 35 which are fastened by rivets or otherwise to the side bars 10—10 and to the parts 11—11 of the broken end bars of the table. The bracket 35 has an upward extension 36 with a hole 37 for securing one end of a coiled spring 38. The opposite end of the spring 38 is secured to the bar 31, whereby to aid in automatically drawing said bar 31 and connected parts into upright or vertical position relative to folding the chairs and table.

The bar 32 of the extension member 30 is fastened to oppositely disposed brackets 39, each of which has an upward extending offset member 40. A shaft 41 is carried by said members 40 and projects through an elongated slot 42 formed between the depending bar 43 and the bar 44, which bars are held apart by spacing blocks 45—45. Screw bolts 46—46 are used to secure the bar 44 and blocks 45 to the depending bar 43. A bracket 39 is attached, as just above described, to each side of the bar 32, whereby to prevent any lateral wabbling of the chair 2 relative to its adjustment along the slot 42, when moving said chair nearer to or farther away from the table —1—.

It will be noted by referring to Figs. 1 and 2 that each of the chairs 2 is attached to the table —1— in the same manner as just above described. However, in regard to the chairs 2 attached to the ends of the table —1— in the same manner, they are arranged to swing inward between the adjacent legs 7—7 when the table —1— is folded. The bracket 35 is fastened here, in each instance, to the bar 11 adjacent the end thereof that is contiguous to the end of the bar 12, whereby the chairs 2 on said ends will swing in opposite directions when closing the table —1—.

Lock pawls 50 fulcrumed to the side bars 10 and end bars 11 respectively are employed to hold the chairs 2 in vertical folded position against the folded table —1—. The pawls 50 embody an upper part having a wing 51 that turns outward, whereby to pass the bars 31 and 32 when in the position, as shown in Figs. 2 and 3, and a shoulder 52 that limits the swing of the pawl 50 past the bars 31 and 32 relative to locking them in vertical position. The pawls 50 are equipped also with handles 53, whereby to turn said pawls 50 on their fulcrums.

The table —1— and chairs 2 can be folded into closed position by first swinging the backs 17 of the chairs 2 down upon their respective seats 15 and then releasing the several sets of legs 22 from engaging the lugs 25, whereby said sets of legs 20 and 22 will fold against the under surface of the seats 15 of the chairs 2 and the backs 17 against the upper surfaces. The chairs thus folded can be moved toward the table —1— because of the adjustment along the slots 42 and because of the relative movement of the bars 31 and 32. The chairs 2 thus folded will be locked in vertical position adjacent the table —1— by the lock pawls 50.

When moving the chairs 2 into closed position, it will be impossible to dispose them beyond vertical position because of the abutment of the bars 31 with the back portions of the brackets 35. The end bars 11 and 12 will be broken inward and the end chairs 2, which are attached by the bars 30 and 31 in each instance to the bars 11, after being folded will move inward with said bars 11 between the adjacent legs 7—7 at an angle of ninety degrees to their former open extended position, whereby to be disposed in longitudinal arrangement with respect to the table —1—, as illustrated in Fig. 2. Simultaneously with the breaking inward of the bars 11 and 12 on each end, the parts 3 and 4 of the table top will fold together as seen in Fig. 2. The table and chairs thus folded are locked by the pawl 55 fulcrumed at 56 to a leg 7 and provided with an open recess 57 adapted to engage a lug or hook fastened to the adjacent leg 7.

Although only four chairs are shown here, it will be obvious that any number of chairs 2 could be similarly attached to a table of proportionate size. It is thought, however, that a table to which twelve such chairs are attached would be sufficiently large for any ordinary purpose.

Having thus described our invention what we claim as new and desire to secure by Letters Patent is:

1. In a folding dining room set, a folding table, folding chairs, means for folding said table and chairs together, and bars having sleeves for adjusting the nearness of the chairs to said table.

2. In a folding dining room set, a folding table, folding chairs, means for folding said chairs against the table bars having sleeves for adjusting the nearness of the chairs to said table, and a pawl for holding said chairs and table in such folded position.

3. In a folding dining room set, a table having a top made in two parts adapted to fold together, folding chairs attached to said table, bars having sleeves for adjusting the nearness of said chairs to said table, and hinges adapted to permit said table top and chairs to fold into substantially a vertical plane.

4. In a folding dining room set, a table having a top made in two parts adapted to fold together, folding chairs, bars having sleeves adapted to permit said bars to slide relative to each other, whereby to attach said chairs to said table in an adjustable manner,

and pawls for locking said chairs in folding position against said table.

5. In a folding dining room set, a table adapted to fold together, chairs, bars having sleeves for attaching said chairs to said table, means for permitting said chairs to fold against said table, and springs, whereby to aid in automatically drawing said chairs into folded position.

6. In a folding dining room set, a table adapted to fold together, chairs attached to said table, bars having sleeves for adjusting the position of said chairs with reference to said table, said bars being pivoted to the side bars of said table, whereby said chairs may be folded against said table, means for locking said chairs in folded position against said table and means for locking said folded table and folded chairs together in vertical position.

7. In a folding dining room set, a table having a top made in two parts adapted to fold together, folding chairs, bars having sleeves for holding said chairs to said table in an adjustable manner, springs adapted to automatically draw said bars into vertical position, means for locking said folded chairs in vertical position against the folded table, and means for locking said table and chairs in folded position.

8. In a folding dining room set, a table having a top made in two parts, hinges for permitting said parts to fold together, a collapsible frame for supporting said table top, folding chairs, extension bars pivotally secured to said frame, whereby to permit the folded chairs to fold against said frame, springs for normally holding said chairs in such folded position, pawls for locking said chairs in folded position against the table and a pawl for locking the table and chairs in folded position.

In testimony whereof we have affixed our signatures.

HENRY A. ST. JOHN.
GEORGE H. SAUER.