

No. 877,104.

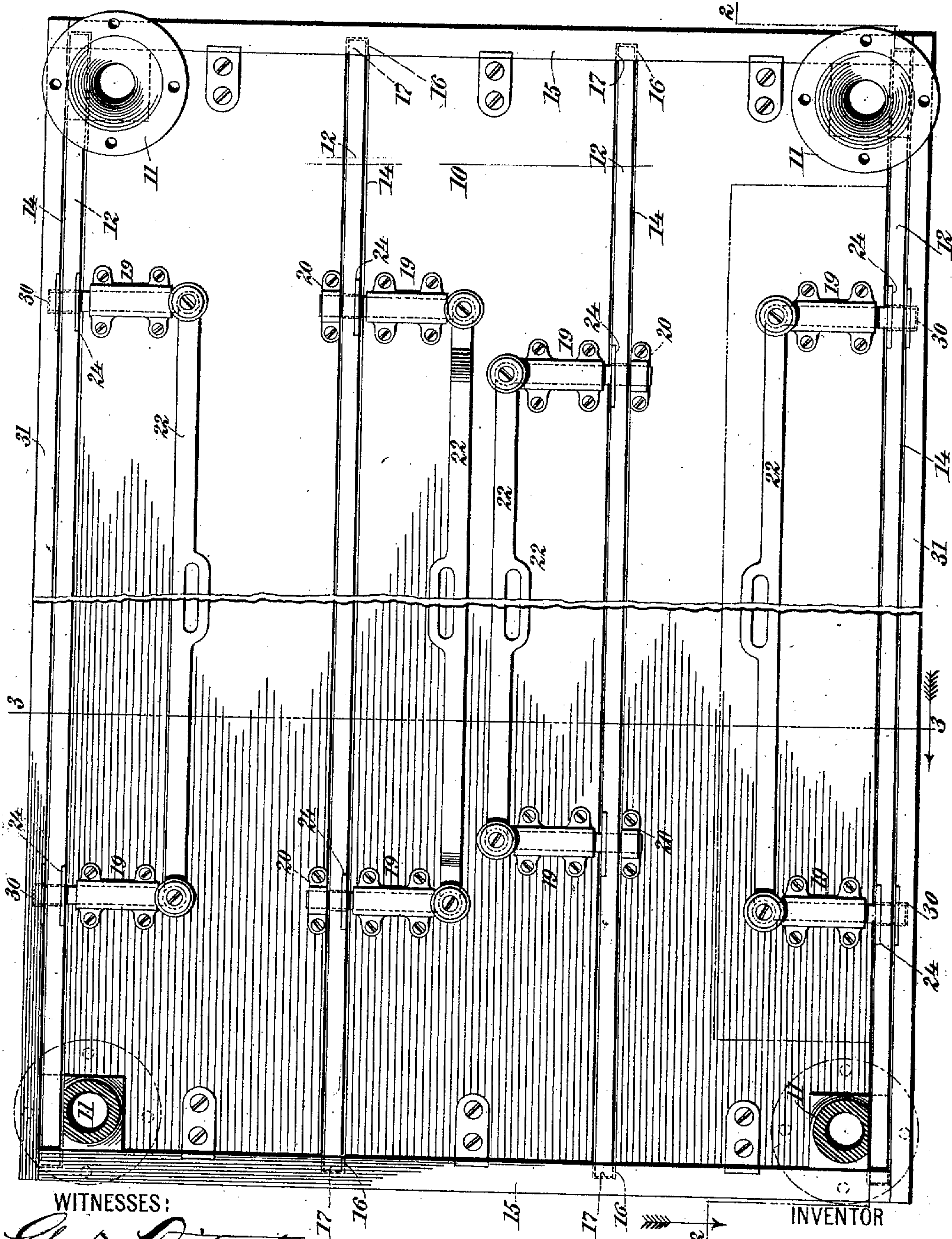
F. H. H. MEIER.

PATENTED JAN. 21, 1908.

TABLE.

APPLICATION FILED OCT. 31, 1907.

3 SHEETS—SHEET 1.



WITNESSES:

*Gustav Rietrich*  
*Edwin H. Bittich*

Fig. 1.

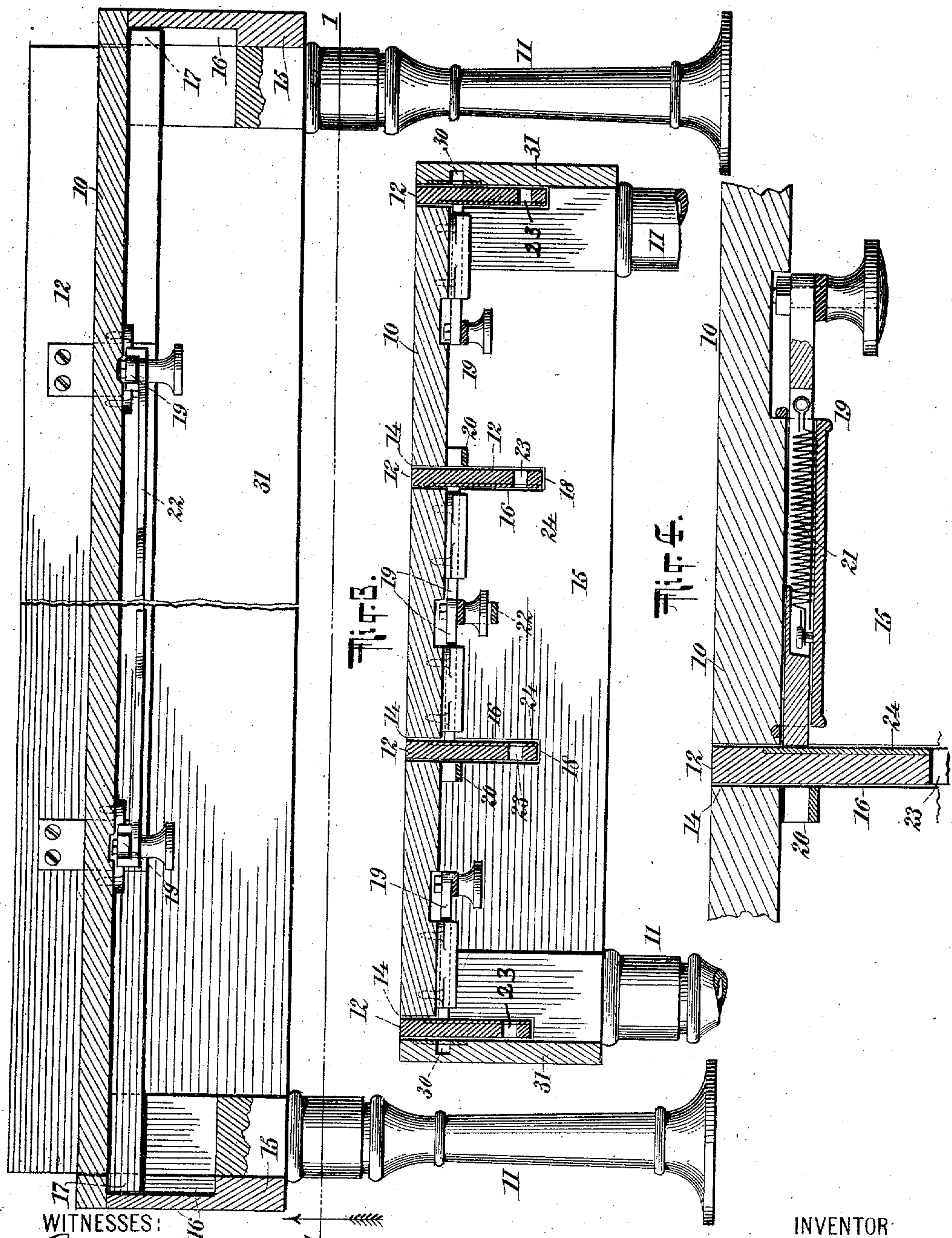
INVENTOR

*Frederick H. H. Meier*

BY

*Chas. C. Gill*

ATTORNEY



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Fig. 2.

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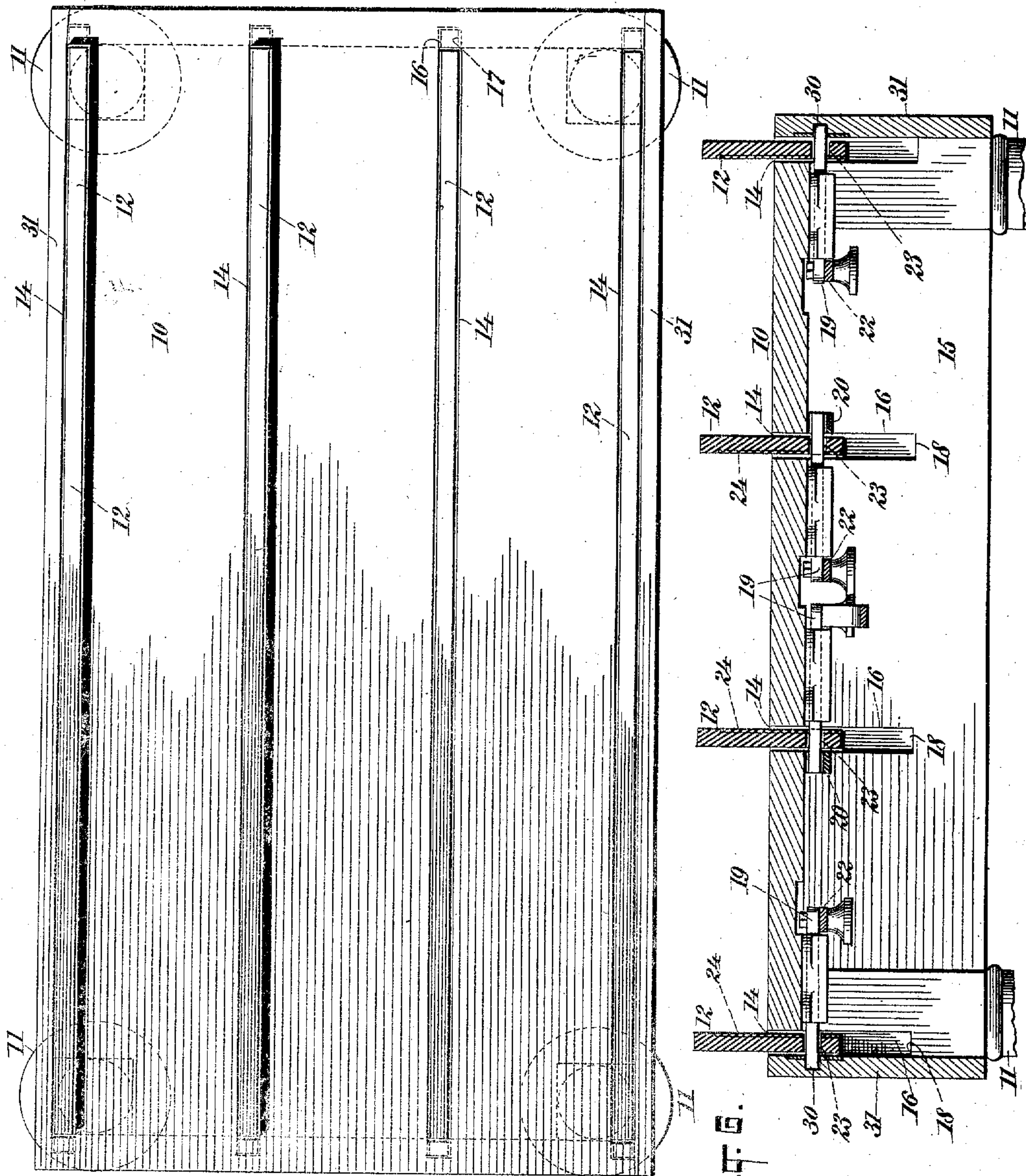
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3 SHEETS—SHEET 3.



WITNESSES:

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Fig. 5.

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# UNITED STATES PATENT OFFICE.

FREDERICK H. H. MEIER, OF NEW YORK, N. Y.

## TABLE.

No. 877,104.

Specification of Letters Patent.

Patented Jan. 21, 1908.

Application filed October 31, 1907. Serial No. 400,101.

*To all whom it may concern:*

Be it known that I, FREDERICK H. H. MEIER, subject of Germany, and resident of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Tables, of which the following is a specification.

The invention relates to improvements in tables for use at sea, and consists in the novel features and combinations of parts hereinafter described, and particularly pointed out in the claims.

The object of my invention is to provide a table for use in dining-rooms and elsewhere on steamships and other vessels which with greater convenience than has heretofore been attainable may have guards or vertical boards elevated thereon above the table-top to retain the dishes and the like thereon.

In carrying out my invention I provide the table-top with a series of slots to receive and permit the vertical movement therein of a corresponding number of straight independent guards or boards set on edge, and equip the table with automatic means for independently locking said guards or boards when they are moved to their upper or operative position. The end rails or bars of the table have in their inner sides vertical grooves which afford guides and seats for extensions or ears formed on the ends of the guards or boards, and the upper ends of these vertical grooves are closed over by portions of the table-top, thereby locking said extensions or ears within said grooves and enabling said ears to act as stops to prevent the guards or boards from being pushed upwardly to an undue extent or removed from the table.

I deem it important that the guards or boards be capable of independent elevation so that only those required for use may be elevated, that the guards or boards be so connected with the table that they cannot be detached therefrom and that independent automatic locking means be provided for each guard or board, so that upon the pressing or pushing upwardly of a guard or board from below the table it will become firmly locked and supported.

In the employment of the table the top thereof will present a smooth or flush surface except when the ship is riding on one side or other condition shall exist requiring the elevation of some of the guards or boards,

and under such condition only these guards or boards actually required to be put into operation will be elevated, thereby causing the minimum inconvenience to the persons using the table. The table-cloth will extend upon and cover the guards when the latter are in use.

The invention will be fully understood from the detailed description hereinafter presented, reference being had to the accompanying drawings; in which:

Figure 1 is a bottom view, partly broken away and partly in section on line 1—1 of Fig. 2, of a table constructed in accordance with and embodying the invention; Fig. 2 is a longitudinal section, partly broken away, of the same, on the dotted line 2—2 of Fig. 1, one of the vertically movable guards or boards being shown in its upper operative position; Fig. 3 is a transverse section of the same on the dotted line 3—3 of Fig. 1, and illustrates all of the guards or boards in their lower inoperative position; Fig. 4 is a corresponding transverse sectional view of a portion of the table and is presented to illustrate the mechanism on an enlarged scale; Fig. 5 is a top view of a table constructed in accordance with and embodying the invention, two of the guards or boards being indicated in their elevated operative position; and Fig. 6 is a transverse section, on an enlarged scale and partly broken away, of the same, and illustrating all of the guards or boards in their elevated or operative position.

In the drawings, 10 designates the top of the table, 11 the legs or supports therefor, and 12 the independent guards or boards adapted to rest in their lower position shown in Fig. 3 or be secured in their upper operative position illustrated in Fig. 6. The top of the table is formed with a series of vertical longitudinal slots 14 adapted to snugly receive the boards or guards 12, there preferably being four of these slots, one adjacent to each edge of the table and two near the middle portion thereof. Obviously, however, the table may be provided with any desired number of the slots 14 and guards or boards 12 in accordance with its size.

The top of the table is secured upon end rails or bars 15 which are formed with grooves 16 adapted to receive ears 17 projecting from and integral with the lower portions of the ends of the guards or boards 12, as illustrated more clearly in Fig. 2. The grooves 16 are



of sufficient vertical length to permit of the vertical movement of the guards or boards 12 from their lower position shown in Fig. 3 to their upper position shown in Fig. 6. When the guards 12 are in their lower position the ears 17 thereof seat upon the bars 15 at the lower ends of the grooves 16, whereat seats 18 are formed to act as supports for said bars when the latter are in their lower position. The upper ends of the grooves 16 extend through the upper edges of the bars or rails 15 but are closed over by portions of the top of the table, and hence, as shown in Fig. 2, the upper edges of the ears 17 may operate as stops, when the guards 12 are elevated, to arrest said guards and prevent their complete detachment from the table.

When the guards or boards 12 are in their lower position their upper edges are flush with the top of the table, the upper portions of said guards being within and filling the slots 14 formed in the top of the table, while their lower edges, at their ends, are held in the grooves 16 and rest upon the seats 18. During the vertical movement of the guards 12 the sides of the grooves 16 and the facing sides of the slots 14 guide and maintain said guards in vertical position.

It is my purpose that the guard-boards 12 shall be elevated by being pressed upwardly from the lower side of the table-top and be automatically locked and supported when arriving at their upper or operative position, and to this end I secure upon the lower side of the table-top and at one side of each of the slots 14 spring latch-bolts 19 and at the other side of said slots keepers 20 to receive the projected ends of said bolts when the latter are freed to enter said keepers. One of the latch-bolts 19 is shown in detail in Fig. 4, said bolts being of ordinary construction except that they are equipped with springs 21 which act to thrust the bolts from their casings and into the keepers 20. I will preferably connect the latch-bolts for each guard-board 12 by means of a handle-bar 22, so that all of the bolts for one guard-board may be retracted at one time. The guard-boards 12 adjacent to their lower edges and in vertical line with the latch-bolts are formed with apertures 23 (Figs. 3 and 6) which, when said boards are in their elevated position, pass into line with the bolts 19 and keepers 20 and permit the springs 21 to drive the said bolts across the vertical path of said boards and into said keepers, said bolts passing through the apertures 23 and into the keepers 20, as shown in Fig. 6, where they operate to support the boards 12 in their elevated position and are themselves supported from the bottom of the table-top through the medium of the casings for the bolts and the keepers 20. The bolts for the two outer boards 12 after passing through the apertures 23 therein enter sockets 30

formed in the sides 31 of the table, as shown in Figs. 3 and 6, said sockets serving as keepers for the outer ends of the bolts.

Each guard-board 12 becomes automatically locked in its upper position when pushed upwardly to the full extent permitted by the ears 17, which as hereinbefore explained, limit the upward movement of said boards and prevent their complete detachment from the table. When it is desired that the guard-boards 12 shall be restored to their lower position, the attendant will withdraw the latch-bolts from the keepers 20 and apertures 23 and permit said boards either to automatically descend or to be pushed downwardly until their upper edges are flush with the top of the table and their lower edges reach the seats 18. The spring-bolts 19 maintain, at their outer ends, a constant pressure against the faces of the boards 12 preparatory to passing through the apertures 23 thereof when the boards are elevated, and for the purpose of preventing the ends of the bolts from unduly wearing against the surfaces of the wooden boards 12, I provide the latter with wear-plates 24 in vertical line with the apertures 23 and extending from the lower edges of said boards upwardly to near the upper edges thereof. The plates 24 will prevent the ends of the bolts from wearing into the boards during the vertical movement of the latter and also reinforce the entering edges of the apertures 23.

The table of my invention comprises therefore a table-top having a series of vertical slots extending lengthwise of it, a series of vertically movable independent guard-boards adapted to said slots, means concealed below said top for supporting said boards when they are in their lower position and guiding them during their movements, means for limiting the upward movement of the boards, and independent locking means for securing the respective guard-boards when they are elevated.

In the employment of the table any one or more of the guard-boards may be elevated in accordance with such conditions as may exist. If a ship should be riding on its side or in a tilted position, it would not be necessary to elevate the guard-boards at the high edge or side of the table, and this is a feature of considerable convenience to persons sitting at that side of the table. The table-cloth will extend upon and cover the guard-boards both when the latter are elevated as well as when they are depressed, the cloth being pressed against the vertical sides of said boards when the latter are elevated so that said boards may be entirely concealed.

What I claim as my invention and desire to secure by Letters-Patent, is:

1. A table having in its top a series of slots and in its frame below said top a corresponding series of grooves, whose upper ends are



closed, combined with a series of vertically movable independent guard-boards in said slots and having portions of their ends in said grooves, and independent automatic locking means for securing the respective guard-boards when they are elevated; substantially as set forth.

2. A table having in its top a series of slots and in its frame below said top a corresponding series of grooves, whose upper ends are closed, combined with a series of vertically movable independent guard-boards in said slots and having portions of their ends in said grooves, spring-bolts secured to the bottom of the table-top at one side of said slots and keepers for said bolts at the other side of said slots, said guard-boards having apertures in them through which, when said boards are elevated, said bolts pass to enter said keepers and support said boards; substantially as set forth.

3. A table having in its top a series of slots and in its frame below said top a corresponding series of grooves, whose upper ends are closed, combined with a series of vertically movable independent guard-boards in said slots and having portions of their ends in said grooves, and means for independently securing the respective guard-boards in their elevated position; substantially as set forth.

4. A table having in its top a series of slots, combined with a series of vertically movable

independent guard-boards adapted to said slots, means concealed below said top for supporting said boards when they are in their lower position and guiding them during their movements, means for limiting the upward movement of said boards, and independent automatic locking means for securing the respective guard-boards when they are elevated; substantially as set forth.

5. A table having in its top a series of slots, combined with a series of vertically movable independent guard-boards adapted to said slots, means concealed below said top for supporting said boards when they are in their lower position and guiding them during their movements, means for limiting the upward movement of said boards, bolts secured to the bottom of the table-top at one side of said slots and keepers for said bolts at the other side of said slots, said guard-boards having apertures in them through which, when said boards are elevated, said bolts may extend into said keepers for supporting said boards; substantially as set forth.

Signed at New York city, in the county of New York, and State of New York, this 30th day of October A. D. 1907.

FREDERICK H. H. MEIER.

Witnesses:

ARTHUR MARION,  
CHAS. C. GILL.