

A. W. SCHRAMM.
 INSTRUMENT TABLE.
 APPLICATION FILED MAR. 30, 1911.

1,143,443.

Patented June 15, 1915.

2 SHEETS—SHEET 1.

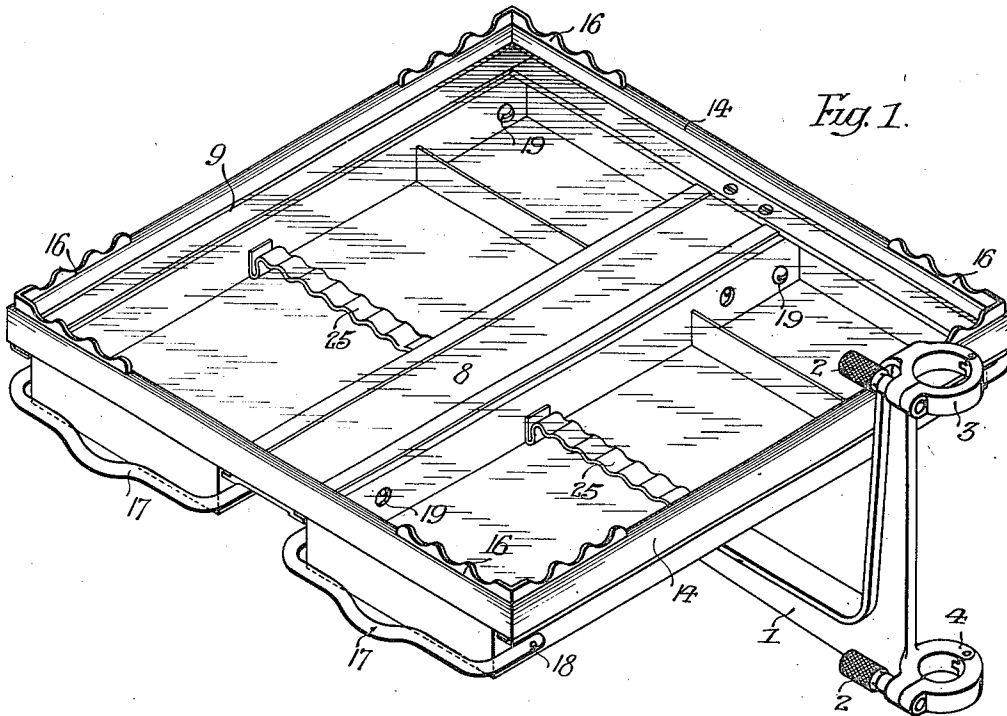


Fig. 1.

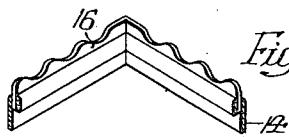


Fig. 3.

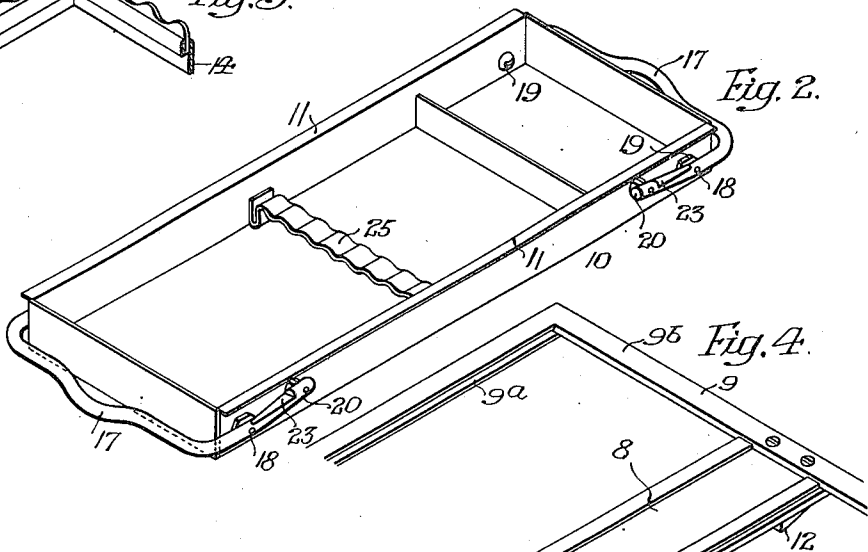


Fig. 2.

Fig. 4.

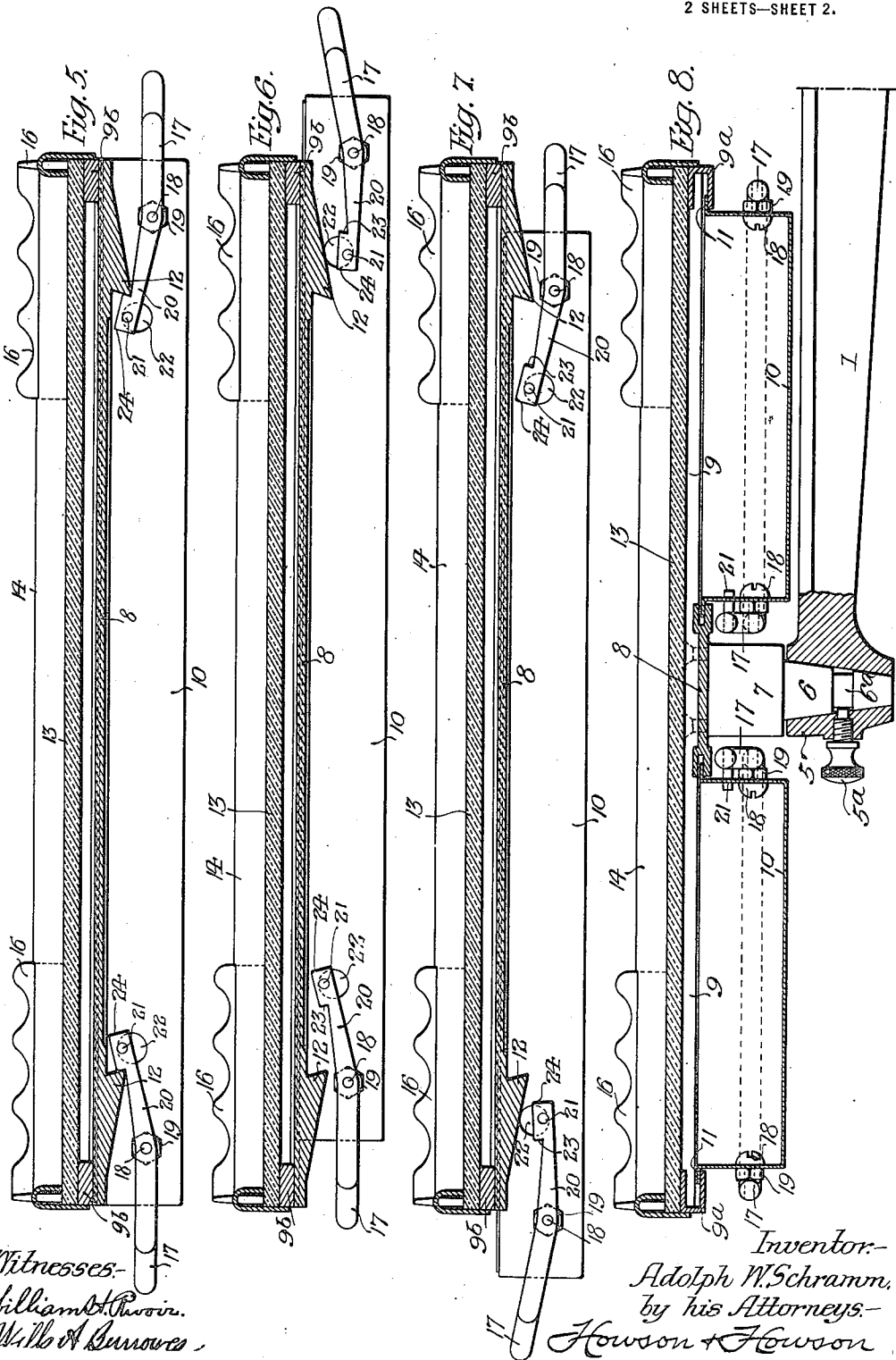
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

ADOLPH W. SCHRAMM, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO ELECTRO DENTAL MANUFACTURING COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

INSTRUMENT-TABLE.

1,143,443.

Specification of Letters Patent.

Patented June 15, 1915.

Application filed March 30, 1911. Serial No. 617,897.

To all whom it may concern:

Be it known that I, ADOLPH W. SCHRAMM, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Instrument-Tables, of which the following is a specification.

One object of this invention is to provide a table especially adapted for use of dentists and surgeons, which shall be of such a construction as will permit of its being conveniently made and kept aseptic; its parts being made to be easily separable, few in number, and of convenient proportions to permit of this operation.

It is also desired to provide a table of the character noted which shall be conveniently adjustable as to its position and which shall include drawers each capable of being moved or pulled out from under it from both of two opposite sides thereof.

It is further desired to provide novel means for limiting the movement of the drawers of the table and for moving said drawers; the invention also contemplating novel means for preventing accidental dislodgment of the drawers from their closed positions.

Another object of the invention is to provide an instrument table with novel means for reinforcement of the table structure which means shall also serve as a rack for holding the instruments in place.

These objects and other advantageous ends are secured as hereinafter set forth, reference being had to the accompanying drawings, in which;—

Figure 1, is a perspective view of the improved instrument table forming the subject of this invention; Fig. 2, is a perspective view of one of the drawers; Figs. 3, and 4 are fragmentary perspective views of a part of the main table frame and a part of the removable glass retaining frame respectively, and Figs. 5 to 8 inclusive are vertical sections of the table, illustrating the detail construction thereof.

In the above drawings 1 represents a bracket casting particularly designed for attachment to the vertical standard of a dental engine, although it is obvious that it may be connected to other supporting structures without in any way departing from the invention.

For the purpose of attaching this bracket to such a structure as that noted, it is provided with a pair of clamps 3 and 4 of annular form, each made in halves hinged together and clamped in operative position by a screw 2. The bracket 1 as shown is of right angled construction and its horizontal arm terminates in a boss 5 provided with a downwardly tapering recess for the reception of a pivot spindle 6 projecting downwardly from a boss 7 constituting part of a frame casting 8.

This frame casting is in the form of a narrow elongated plate, and in the present instance has rigidly fixed to it a rectangular frame 9; the arrangement being such that it extends across the middle of this frame, dividing it into two elongated rectangular parts.

As shown in Figs. 4 and 8, the long edges of the frame casting 8 and the opposite edges of the main frame 9 are channeled or slotted to receive the outwardly extending flanges 11 of the drawers 10, hereafter described; these slotted members 9^a of the main frame being made substantially U-shaped in section for this purpose, while the end members 9^b are preferably solid strips or bars.

As shown in Figs. 5 to 7 inclusive, the under side of the frame casting 8 is provided with four stops 12, two at the opposite ends of each long edge, and these are formed as wedge shaped structures increasing in thickness inwardly from the ends of the said casting, their thickest portions being preferably undercut at the end. The top of the table is formed by a rectangular glass plate 13 of substantially the same shape as the main frame upon which it rests and of a size large enough to extend at least to the edges of said frame; there being a removable holding frame 14 provided for the purpose of retaining the glass top in position and forming a ledge around the edge of the table to prevent articles rolling off the same. This holding frame is rectangular in form and is made of heavy sheet metal bent into a substantially U-shaped section, one side of which, however, is of considerably greater length than the other, so that while its short inner side rests upon and projects above the surface of the glass

top, the outer and longer side extends downwardly beyond the ends and sides of the glass top, fitting closely around the main frame.

5 It is to be noted that this retaining frame is made of such design that the dust falling on the glass, even though it works under said frame and over the edge of the glass, will fall clear of the drawers. This is a most important and valuable feature of the invention, as the instruments in the drawers, and more particularly the gold used for filling teeth, must be kept free from dust.

10 As a result, with the construction described, the edges of the glass are completely covered and the holding frame with this top is firmly held to the main frame. At the same time, merely by raising the holding frame 14, the glass top is released and may be removed for cleaning or any other purpose without permitting the dust upon it to fall into the drawers. In order to strengthen the holding frame, its side and end members are slotted adjacent their points of junction and have mounted in them reinforcing corner angles 16 which are made of relatively stiff metal, brazed or soldered to the metal of the holding frame.

15 These reinforcing angles are so designed that they project above the top of the holding frame at the corners thereof and have their upper edges notched or serrated as shown in Fig. 1, so as to provide rests or holders for instruments which might otherwise roll off the table or be difficult to pick up.

20 The drawers, in the present instance, are of elongated rectangular form and are made of stiff sheet metal having side flanges 11 whereby they are slidably mounted in the main frame of the table. At each end of each drawer is pivotally mounted a preferably U-shaped handle 17 preferably of heavy wire or light rod material, movably held in place by trunnion screws 18 mounted in openings in the sides of the drawer and rigidly held in place by nuts 19; the side arms of the handles being provided with openings for the reception of the cylindrical unthreaded ends of these screws.

25 One arm of each handle is extended beyond the screw pivot, as indicated at 20, and carries a pin 21 which extends into an opening 22 in the side of the drawer, the diameter of which is say three times that of the pin. The design of the handles is such that their front and main portions naturally overbalance the arm 20 so that this is maintained in such a position that its pin 21 rests upon the highest point of the opening 22. The walls of said opening thus form stops for the handle, keeping its front portion from falling below a certain desired position and likewise preventing said portion from being lifted or raised to an

abnormal extent. The upper surface of each of the extended arms 20 is notched at 23, usually adjacent its outer end, and the mounting of the handles is such that this notch is capable of engagement with the wedge shaped undercut end of one of the stops 12 on the main frame casting. Thus when one of the drawers is pushed inwardly on its supporting slideways formed by the frame casting 8 and the main frame structure 9, the end 24 of one of its arms, engages with the stop 12 at one side of the frame structure so that the front or projecting part of the handle 17 is raised. Thereafter this end passes beyond and rests behind the end of said stop 12 and finally when the drawer has been pushed inwardly for its full distance under the table, the second stop 12 is engaged by the notched end of the arm 20 at the opposite side.

30 When it is desired to open the drawer, the grasping of either of the handles, accompanied by a slight upward movement thereof, turns it on its trunnions or pivots and thereby lowers its notched arm 20 so that as the drawer is pulled out, said arm clears the stop 12. The outward movement of said drawer is limited by the flat end of the extended arm 20 of the second handle, striking the stop 12 which was first cleared by the other handle. If now the drawer be pushed inwardly, the notched portion of this same arm engages the stop 12 to which it is adjacent in the closed position and prevents the drawer from moving out from under the opposite side of the table. The grasping of the second handle and the moving to it upwardly, causes this notched arm to similarly release its stop, so that the drawer may be moved outwardly from the opposite side of the table and is limited as to its movement by the engagement of the end of its other handle with one of the stops 12.

35 From the above it will be seen that both drawers may be projected from either side of the table to a predetermined wide open position and either of them may be moved inwardly from either side to a predetermined closed position in which it is automatically locked from all movement in either direction. It is obvious that either drawer may be entirely removed from the table by raising its second handle at the time or before the end of its arm 20 engages the stop 12; there thus being nothing to prevent said drawer being completely moved from under the table.

40 By making the hole in the boss 5 and the spindle 6 in conical form, a greater or less retardation is provided to the revolution of the table on its bracket 1, and in order to provide against the accidental removal of said table from said bracket, I provide the spindle 6 with an annular recess 6^a and

mount in the side of the boss 5 a set screw 5^a in such position that its end enters said recess.

With the above described arrangement of parts it will be seen that any dust or foreign material collecting on the glass top is prevented from entering the drawers, since it extends completely over said drawers to the edges of the main frame upon which it rests. In order to separate the instruments in the drawers, I provide in these latter corrugated holding strips 25 of such length that they tightly fit between the side members of said drawers, serving also to properly support surgical and other instruments above the bottom of the drawer.

I claim;—

1. The combination of a table with a drawer therefor; supporting means for the drawer permitting it to be projected on opposite sides of the table; with means for limiting the amount of projection of said drawer on either side of the table, said means including a device for automatically locking the drawer in its closed position.

2. The combination of a table with a drawer therefor; supporting means for the drawer permitting it to be projected on opposite sides of the table, said supporting means having stops with independent devices for limiting the amount of projection of said drawer on either side of the table, each of said devices including a member placed to cooperate with one of the stops to lock the drawer in its closed position.

3. The combination of a table with a drawer therefor; supporting means for the drawer permitting it to be projected on opposite sides of the table; means for locking said drawer under the table including independent devices for limiting the amount of projection of said drawer on either side of the table.

4. The combination of a table having drawer supporting means; a drawer mounted on said means and capable of being projected on either of two sides of the table; means for limiting the amount of said projection in either direction, the same including two automatic devices for stopping and locking the drawer in its closed position when it has been moved thereto from either of its open positions.

5. The combination of a table; a drawer mounted thereon; and means for holding the drawer in its closed position, the same con-

sisting of fixed stops on the table and pivotally mounted handles on opposite ends of the drawer, each formed and mounted to engage one of said stops to automatically lock said drawer in its closed position and to engage the other stop to limit the outward movement of the drawer.

6. The combination of a table; a drawer therefor; a handle pivoted to the sides of the drawer and extending across the front thereof, one side of said handle having a notched portion and being retained in a stop engaging position under the action of gravity; and a stop on the table placed to be automatically engaged with the notched portion of said arm when the drawer is moved to its closed position to lock it therein.

7. The combination of a table; a drawer therefor; two independent locking devices on the drawer; and two stops on the table both placed to cooperate with either locking device to limit movement of said drawer between a closed position and two open positions.

8. The combination of a table; a drawer slidably mounted on the table so as to be capable of projection on opposite sides thereof; a handle at one end of said drawer; and two stops on the table; one of said stops being placed adjacent one side of the table in position to engage the handle to normally prevent projection of the drawer from its closed position in one direction, and the other stop being placed adjacent the opposite side of the table in position to also engage said handle to limit the possible projection of the drawer in the opposite direction.

9. The combination of a table; a drawer slidably mounted on the table so as to be capable of projection on opposite sides thereof; two handles at opposite ends of the drawer; and two stops at opposite sides of the table, respectively placed to be engaged by one handle to prevent projection of the drawer in one direction and also by the other handle to limit the movement of said drawer when moved in the same direction.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

ADOLPH W. SCHRAMM.

Witnesses:

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WM. A. BARR.