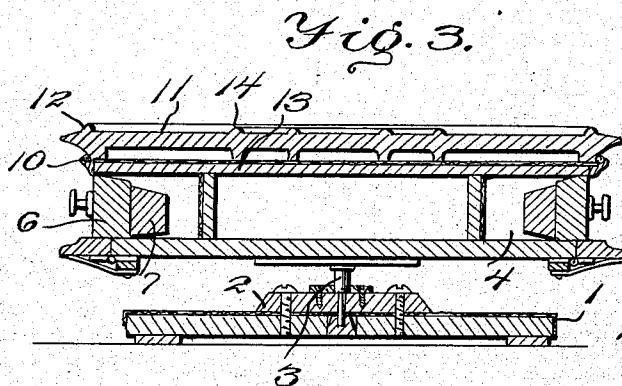
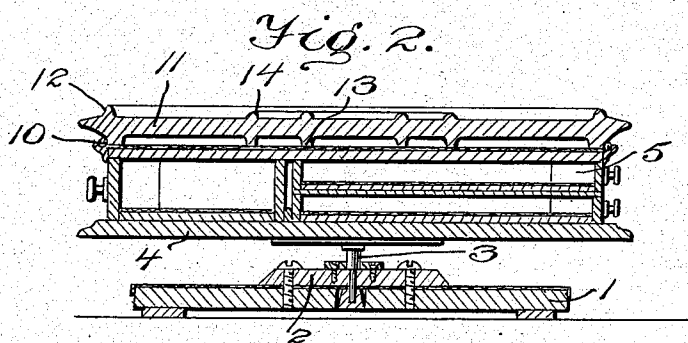


1,015,664.

Fig. 1. A perspective view of a cylindrical device, possibly a camera or a container, with various numbered components (1-14) indicating parts like the lens, body, and base.



Witnesses
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By

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UNITED STATES PATENT OFFICE.

WILLIAM BOOTH, OF EAST LIVERPOOL, OHIO.

COMBINED CABINET AND TRAY.

1,015,664.

Specification of Letters Patent.

Patented Jan. 23, 1912.

Application filed May 26, 1911. Serial No. 629,673.

To all whom it may concern:

Be it known that I, WILLIAM BOOTH, citizen of the United States, residing at East Liverpool, in the county of Columbiana and State of Ohio, have invented certain new and useful Improvements in Combined Cabinets and Trays, of which the following is a specification.

This invention has relation to combined cabinets and trays especially adapted for the use of dentists.

The object of the invention is to provide a cabinet which is of special shape that it may be positioned upon a pedestal or other support close to an operating chair, and which does not present obstruction or projecting parts which might interfere with the movements of the operator.

This cabinet is designed to hold the instruments and bits as are generally used in connection with a dental engine, and upon it is mounted a tray of china or porcelain which may be readily detached from the cabinet for cleaning and other purposes. This tray is also circular in plan, and the cabinet is provided at its upper edge with a peripheral bead of suitable material, within which the edge portion of the tray fits snugly. The tray is of especial design and is provided at its outer portion with an annular flange and within the said flange are located sets of ridges and depressions concentrically arranged one set within the other. The under side of the tray is provided with suitable bracing ribs which are annular and concentrically arranged with their lower edges in the same plane so that they may rest squarely upon the top of the cabinet within the bead.

For a full understanding of the invention reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of the combined cabinet and tray; Fig. 2 is a transverse sectional view of the same cut on the line 2—2 of Fig. 1; and Fig. 3 is a similar view cut on the line 3—3.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawings by the same reference characters.

The cabinet includes a base 1 which is adapted to be positioned upon a pedestal, bracket or other support (not shown). A block 2 is mounted at the center of the

upper surface of the base 1. A shaft 3 is journaled at its lower end in the block 2, and means is provided for preventing the said shaft from moving longitudinally with relation to the block. A cabinet 4 is mounted upon the upper end of the shaft 3 and is circular in plan. The said cabinet 4 is provided in its sides with sliding drawers 5 which may be arranged in any desired manner and which are designed to contain tools and instruments and parts thereof. The said cabinet is also provided in its sides with hinged sections 6, upon the inner sides of which are mounted blocks 7. These blocks are provided with bores 8 which are inclined at acute angles to the inner faces of the blocks, and these bores are adapted to receive snugly the shank portions of bits or similar instruments, indicated at 9. By reason of the fact that the bores 8 are disposed at acute angles to the surfaces of the blocks 7, the said sections 6 together with their blocks may be readily swung to open or closed positions without danger of the said bits falling out of the said bores, and when the sections and blocks are swung to open positions the outer end portions of the bits are inclined toward the operator, so that the said bits may be readily withdrawn from the bores as they are to be used.

If desired the hinges of the sections 6 may be provided with springs so that when the sections are swung to full open positions they will be held so by gravity against the tension of these springs, but while the sections are being closed and as they move about half way to closed position, the tension of the springs comes into play and will completely close the sections, should the operator neglect to do so. This is due to the fact that during the act of closing the center of gravity of the sections and blocks carried thereby is shifted with relation to the hinges so that some of the weight is at the opposite sides of vertical planes passing through the hinge pins, and therefore the shifting of the weight and the tension of the springs will effect the complete closing of the sections.

The top of the cabinet 4 is flat with the exception of an annular bead 10 provided at its periphery which stands up above the plane of the top proper of the cabinet. This bead may be of heavy cord, rubber or any other suitable material.

Resting upon the top of the cabinet 4 is a detachable tray 11. This tray is formed

from clay or metal or any other material that has considerable weight and which at the same time may be so treated that its surfaces may be glazed in order that the tray may be removed and thoroughly cleaned.

As illustrated in the drawing the tray 11 is circular in plan and is provided upon its upper side and in the vicinity of its periphery with an upstanding annular flange 12. Upon its under side the tray 11 is provided with a series of annular ribs 13. These ribs are concentrically arranged and one of them is in the vicinity of the periphery of the tray and is adapted to fit snugly within the bead 10 provided at the top of the cabinet 4. The lower edges of the ribs 13 are in the same plane, and consequently when the tray is in position upon the cabinet the said ribs bear directly against the top of the cabinet and support the peripheral and central portions of the tray. These ribs are also desirable as a means for strengthening the tray structure for preserving its integrity while it is being handled or moved and when it is not in position upon the cabinet.

Upon its upper side the tray 11 is provided with several series of concentrically arranged ridges and furrows 14, one series being within the other and both series being within the annular flange 12 of the tray. The ridges and furrows of one series are approximately in radial alinement with the ridges and furrows of the other series with relation to the center of the tray 11.

Therefore it will be seen that a combined cabinet and tray as described, when positioned in the vicinity of an operating chair, presents no projecting parts or exsertions liable to interfere with the free movement of an operator, at the same time the cabinet and tray may be readily revolved upon the base 1 so that the drawers or hinged sections may be conveniently positioned by the operator. After the instruments and tools have been used, either in the hand of the operator or in conjunction with a dental engine, and prior to cleaning the same, they may be laid upon the tray 11 radially with relation thereto, whereby they will be received within the furrows and between the ridges of the two sets thereof and will be prevented from rolling upon the tray as the said tray is turned. By providing means for so positioning the tools and instruments upon the tray the working ends of the said tools and instruments will be toward the center of the tray, and consequently any drippings or material carried by the said tools or instruments will come in contact with the central portion of the tray and not the edge portion thereof. Therefore the

edge portion of the tray will not become soiled and consequently may be used by the operator for turning the cabinet and tray. The weight of the tray is sufficient to hold the same securely in position notwithstanding the fact that the tray may be used as a means for turning the entire upper portion of the structure. Also during such turning the bead 10 will prevent edgewise slipping of the tray with relation to the cabinet.

If from accident or other cause a tool or instrument is not properly positioned upon the tray as above described, or from any other cause should roll upon the top of the tray, it cannot roll off of the same for the reason that the flange 12 will check its rolling movement as it approaches the periphery of the tray.

As shown in the drawing the outer rib 13 is not exactly at the periphery of the tray 11. Therefore there is an edge portion of the said tray that projects beyond the said rib, and this portion may be conveniently used for grasping the tray when it is desired to lift the same off of the cabinet.

As hereinbefore stated, this tray is composed of a weighty material and is integral and its surface should be glazed or so treated that no harbor will be afforded for filth nor will it be possible for the material to absorb germs or the like. Thus when the tray is removed it may be thoroughly cleansed and replaced, and the danger of transmission or disease by contagion is eliminated.

Having thus described the invention, what is claimed as new is:

A tray especially adapted to be used as a top for a cabinet comprising a circular body having upon its under side and within its rim an annular rib, said body also having upon its under side and within the first mentioned rib a series of annular ribs concentrically positioned with relation to the body and the first mentioned rib, all of the said ribs having their lower edges in the same plane, said body having upon its upper side and within its edge an annular flange, said body also having upon its upper side and within the first mentioned flange a series of annular flanges concentrically positioned with relation to the body and the first mentioned flange and corresponding in number with the number of ribs, the intermediate flanges being provided with ridges and furrows.

In testimony whereof, I affix my signature in presence of two witnesses.

WILLIAM BOOTH. [L. s.]

Witnesses:

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S. T. HERBERT.