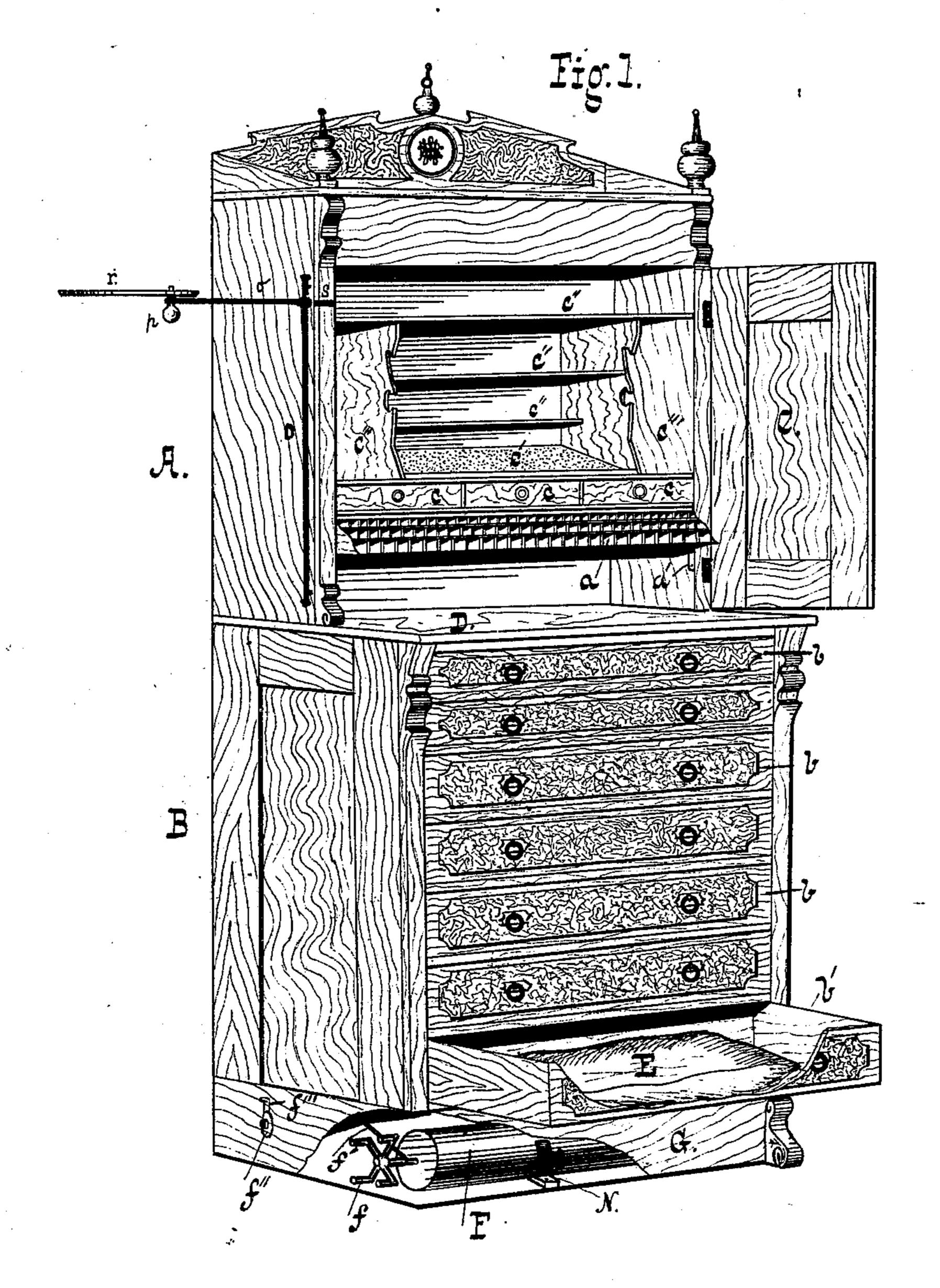
B. M. WILKERSON. Dentist's Cabinet.

No. 205,938.

Patented July 9, 1878.



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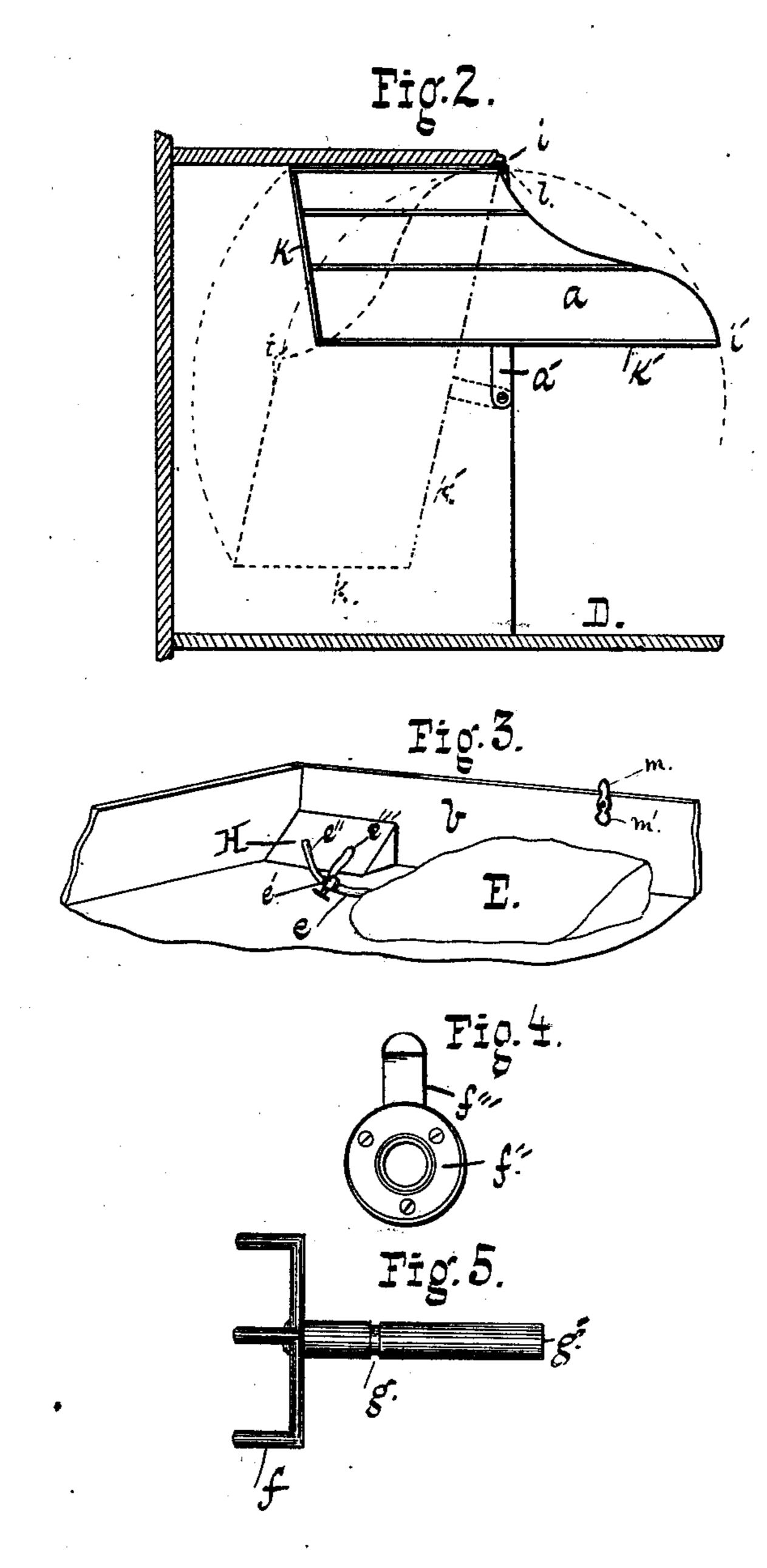
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UNITED STATES PATENT OFFICE.

BASIL M. WILKERSON, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN DENTISTS' CABINETS.

Specification forming part of Letters Patent No. 205,938, dated July 9, 1878; application filed March 19, 1878.

To all whom it may concern:

Be it known that I, Basil M. Wilkerson, of the city of Baltimore, State of Maryland, have invented certain new and useful Improvements in Dentists' Cabinets; and I hereby declare the same to be fully, clearly, and exactly described as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of the device, portions being broken away in order to illustrate internal arrangements. Fig. 2 is a side elevation, partly in section, of the instrument-case. Fig. 3 is a perspective view of the drawer for containing the nitrous-oxide-gas bag, and Figs. 4 and 5 illustrate certain details of construction hereinafter fully described.

The design of my invention is to furnish a dentist's cabinet affording greatly increased facility for finding any instrument which it is desired to use, and for administering the usual anæsthetic nitrous-oxide gas, the construction of the device being such as to enable the operator to dispense with the services of an assistant.

In the accompanying drawings, Figure 1 is a perspective view of the device complete. The upper portion A consists of a cabinet provided with a door, C, and containing a tilting instrument-tray, a, drawers c c, shelves c' c'', and pigeon-holes c''' c'''.

The instrument-tray (see Fig. 2) consists of a tray proper having two or more tiers of shelves and subdivided by partitions, as shown, into a suitable number of compartments. The tray a is mounted upon arms a', which are pivoted to the sides of the cabinet, admitting of the tilting of the tray, as shown in dotted lines, Fig. 2. The pivot referred to being equidistant from the edge i of the shelf above and the front i' of the tray, the latter, when tilted back, fits snugly under the shelf, the back of the tray k assuming a horizontal and the bottom k' a nearly vertical position. A spring-catch, l, serves to secure the tray in its | horizontal position. Drawers c c c occupy the space just above the tray, and above them is located the inclined shelf c', preferably covered with velvet or plush, and the pigeonholes c''' c'''. The shelf c' is designed for holding the instruments about to be used, and the

pigeon-holes for containing various bottles for ammonia, creosote, &c.

The lower portion B consists of a cabinet containing a number of drawers b b b for the larger instruments, such as forceps, &c.

The base of the cabinet G is arranged to contain a pair of nitrous-oxide-gas cylinders, F, of the ordinary commercial size and construction, the same being secured upon the bottom plank by means of clamps N, having thumbscrews, as shown. Opposite the ends of the cylinders the side of the cabinet is perforated for the insertion of the foot-cock. (See Fig. 5.) This latter consists of a cylinder terminating in a square socket, g', for engagement with the square shoulder of the valve in the gas-cylinder, and provided at the opposite end with a series of arms, f, adapted to be turned by the foot of the operator.

A suitable escutcheon, f'', (see Fig. 4,) is attached over the perforation in the side of the cabinet, and is provided with a sliding detent, f''', for engagement with an annular slot, g, in the foot-cock, whereby the latter is secured in place. The drawer b', above the cabinet base G, is adapted to contain the gas-bag E, which is of the ordinary construction, and is provided with the usual hose and mouth-piece for the patient.

At the rear of the drawer b' the bottom and rear side are cut away, as shown, and an inclined piece, H, provided with holes e'' e''' for the hose, is secured over the opening, the object of which construction is to prevent the compression of the hose e as the drawer is closed or opened.

A section of hose communicates with each of the two liquefied gas-cylinders in the base of the cabinet, being attached to their outlet-pipes f', and meeting inside the drawer b' in a three-way cock, e', from which the hose e leads to the gas-bag E. This construction affords a means for setting up communication at will between either of the cylinders and the bag.

The various drawers are provided with catches m, for preventing their accidental withdrawal from the cabinet. The catch consists of a suitable piece of wood or metal attached to the rear of the drawer by means of

a screw, around which it freely swivels, and I they are recognized, are brought prominently is provided with a counterpoise, m', which holds it in a vertical position. The projecting end of the catch normally prevents the entire withdrawal of the drawer from the cabinet; but should it be desired to remove the drawer, it can be readily effected by swinging the catch to one side until its projecting end falls below the plane of the upper edges of the drawer.

A rod, O, is secured vertically at the side of the upper portion A of the cabinet, and carries a swinging arm, o, made vertically adjustable by means of a thumb-screw or other similar device, adapted to secure the arm o at any desired height upon the rod O. The arm o carries at its extremity a small alcohol-lamp, p, for annealing dental gold foil, the neck of the lamp constituting a pivot, upon which the instrument-tray r is arranged to swivel horizontally. A slot, s, is provided in the side of the cabinet, into which the arm o falls when the tray is turned completely around into the cabinet, admitting of the closing of the door C.

The advantages of the arrangements described for effecting and regulating the flow of gas from the cylinders to the bag will be readily appreciated. It has heretofore been necessary to employ an assistant in administering the anæsthetic, whose duty it was to regulate the flow of gas, as both hands of the operator are necessarily otherwise engaged.

By the means described the flow of gas is regulated by the operator himself by means of the foot-cock f, the flow being cut off the instant the patient is observed to be fully under the effects of the anæsthetic. Two cylinders for the gas are preferably used, the three-way $\operatorname{cock} e'$ being so turned as to deliver the gas from one of them until nearly empty, when it it is turned, so as to deliver the gas from the other, the empty cylinder being replaced by a fresh one, thus constantly keeping a reserve of gas on hand. When not in use the deliveryhose from the bag E is coiled around it, and the drawer b' is closed.

The tilting instrument-tray a will be found especially convenient, greatly facilitating the selection of any desired instrument, as the operating-points of the instruments, by which |

into view.

The shelf r may be turned toward the operating-chair, affording a convenient receptacle for such instruments as during a dental operation are but momentarily laid aside, and when not in use may be turned back within the cabinet, as hereinbefore described.

The rod O may obviously be secured within the cabinet instead of externally, as described, the latter arrangement being, however, preferable.

While I have described the valve of the gascylinder as being actuated by a foot-cock, the valve may be held in any convenient manner and the cylinder caused to rotate, thereby accomplishing the same end.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A dental cabinet adapted to secure and contain a cylinder for liquefied nitrous-oxide gas, which cylinder is provided with a suitable cock adapted to be actuated by the foot of the operator, substantially as described.

2. In combination with the cabinet B, having clamp N, the cylinder F, having foet-cock f, as set forth.

3. A dental cabinet adapted to contain a pair of gas-cylinders and a gas-bag, communicating by means of hose, provided with a three-way cock, substantially as described.

4. In combination with the cabinet B, the cylinder F, foot-cock f, having slot g, and the detent f''', as set forth.

5. In a dental cabinet, the drawer b, having perforated ledge H, as and for the purpose set forth.

6. In a dental cabinet, an instrument-tray vertically adjustable upon a rod, O, and arranged to fold within the cabinet when not in use, substantially as described.

7. In combination with the cabinet A, the tray r, vertically and horizontally adjustable, and adapted to turn within the cabinet, as set forth.

BASIL M. WILKERSON.

Witnesses:

R. D. WILLIAMS, J. C. WILKERSON.