

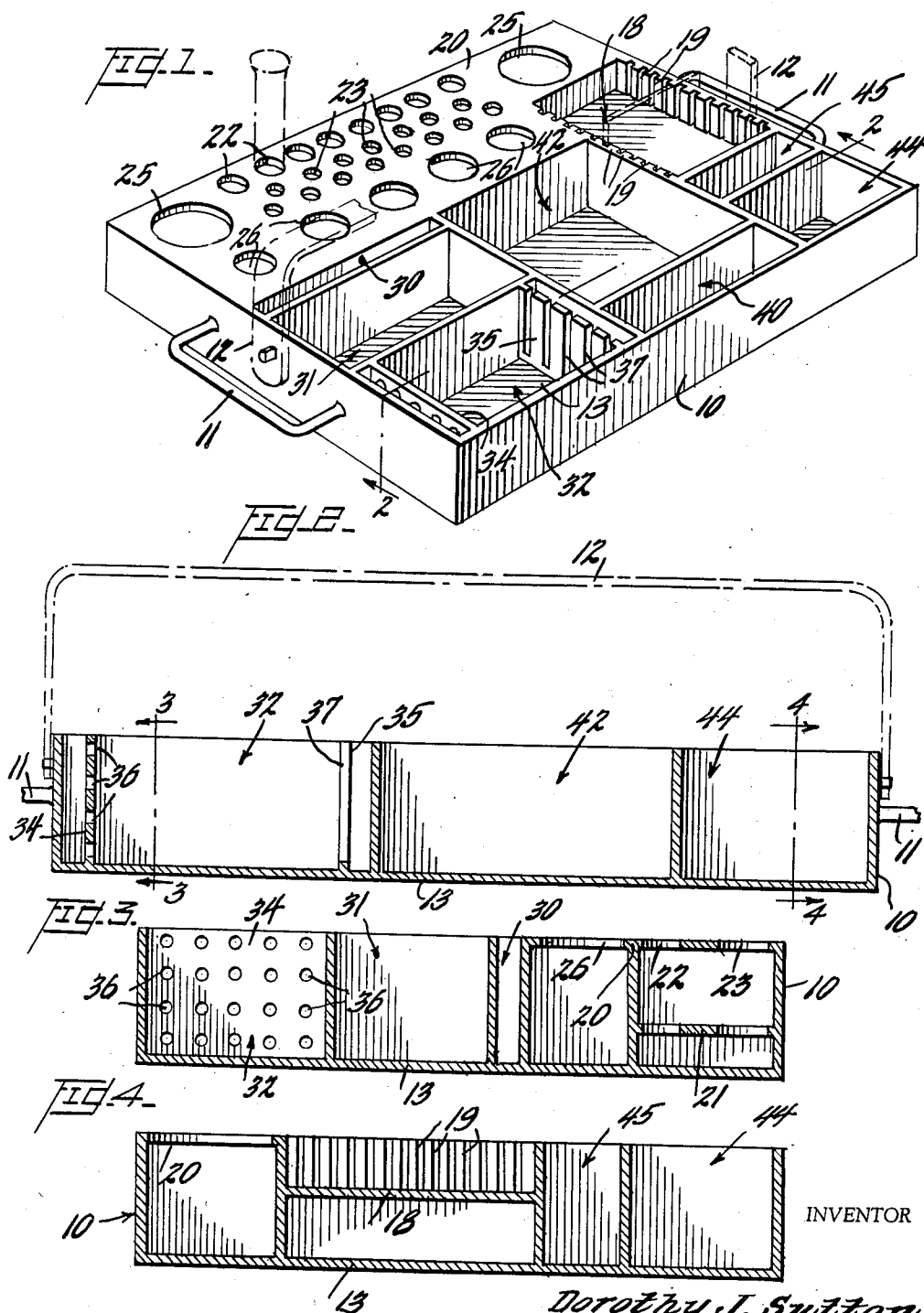
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LABORATORY TRAY FOR MEDICAL TECHNICIANS

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LABORATORY TRAY FOR MEDICAL TECHNICIANS

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2 Claims. (Cl. 206—72)

This invention relates to a novel and improved tray for use by laboratory technicians in medical diagnosis.

In the taking of specimens of blood of a patient for diagnostic purposes, certain conventional equipment is used by the laboratory technical or physician's assistant, such as hypodermic needles, pipettes, and slides for blood smears; various accessory materials, such as sponges, solutions of several kinds, and cards for records and notations must be readily available. This equipment and the accessory supplies are often carried by the technician in a receptacle or tray, but since there are no standard trays available for the purpose, the technician often supplies his or her own tray, which is ordinarily designed and arranged with less regard for convenience and efficiency than should be observed. In particular, adequate provision for the separation of used materials and equipment from fresh, sterile equipment is not provided; very frequently the receptacle or tray comprises nothing more than an open pan in which the equipment is more or less randomly arranged.

It is, therefore, the primary object of the instant invention to provide a tray in which fresh equipment and materials are readily accessible and in which the used equipment, for instance, pipettes, slides containing blood smears, and the various test tubes required may be replaced in orderly relationship, out of contact with one another, and secure from breakage upon even careless handling of the tray after taking samples.

More specifically, it is an object of the invention to provide a laboratory tray of the type indicated comprising a shallow receptacle or pan of rectangular outline, having a portion open at the upper side, which portion is divided into a plurality of compartments by partitions normal to the base of the receptacle, and having further portions of reduced depth. In one such portion there is a panel parallel to the base, the panel being provided with apertures dimensioned for the reception of certain necessary equipment, such as test tubes of different sizes, containers for cotton, solution, and the like. It is a feature of the invention that certain of the aforesaid compartments are especially formed to receive, in spaced relation and against unintentional displacement, certain equipment units which have been used, such as pipettes, containing blood samples and slides bearing blood smears.

Further objects and features of the invention will be apparent from the following description taken in connection with the accompanying drawings, in which:

Figure 1 is a perspective view of a technician's tray embodying the invention;

Figure 2 is a vertical sectional view on the line 2—2 of Figure 1; and

Figures 3 and 4 are sections taken substantially on the lines 3—3 and 4—4, respectively, of Figure 2.

Referring now to the preferred embodiment of the invention illustrated in the drawing, it will be perceived that my tray comprises a shallow rectangular pan or receptacle 10, which may be provided at opposite ends thereof with rigid handles 11, to assist in positioning the

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tray, and with a bail or arched handle 12, pivotally connected to opposite ends of the tray so that it can be raised for carrying the tray or lowered to an out-of-the-way position embracing one side of the tray. The handling or carrying elements form no part of the instant invention and may vary widely.

In general, the tray is seen to comprise three sections of different depth. That section of greatest depth, having the base 13 of the tray as its bottom wall, comprises an open portion which is divided into compartments by a plurality of suitably spaced partitions, normal to the base 13 of the tray. These partitions, and the compartments defined thereby, are hereinafter more fully described. A second section of intermediate depth is that provided by the panel 18, spaced from and parallel with the base 13, having a depth suitable for the reception of blood slides containing smears, opposite walls defining this section being grooved as indicated at 19 to receive the slides in parallel spaced relation with the upper edges thereof projecting sufficiently above the tray to permit ready withdrawal. The third section of least depth is that afforded by panel 20, also parallel with the base 13, and preferably flush with the upper edges of the tray 10. Panel 20 is provided with a plurality of apertures 22, dimensioned to receive a larger size test tube, apertures 23 accommodating a smaller size test tube, apertures 25 for the reception of jars holding respectively dry sponges or absorbent cotton, and alcohol saturated sponges, and apertures 26 to receive solution bottles. It will be observed that five bottle apertures are provided to accommodate the various solutions normally required, such as white counting solution, red counting solution, oxalate solution, alcohol, and haemoglobin. The purpose of providing the section 20 with considerable depth is to ensure that the test tubes, which extend through the apertures 22 and rest on the base 13 of the tray, will not be subject to accidental displacement, although it may be desirable, as assurance against damage to the test tubes, to provide a second panel 21, similarly apertured, below and parallel to the panel 20. The solution bottles will, of course, rest on the base 13, while the containers which fit in the apertures 25 may be provided with necks seating on the upper face of the panel 20, if desired.

Returning to the open portion of the tray, it will be noted that through the appropriate positioning of the various partitions, compartments suitably dimensioned for the reception of the various kinds of instruments are provided. Thus a narrow compartment 30 is adapted to receive requisitions, records, and other cards bearing various notations. Compartment 31 is suitable for the reception of clean pipettes which may simply be laid on the bottom of the compartment. Compartment 32 is provided adjacent opposite end walls with partitions 34 and 35, respectively, the partition 34 being apertured as at 36 to receive the ends of charged pipettes, the opposite ends of the charged pipettes being laid in vertical slots 37 formed in partition 35, suitable spacers, for instance of cotton, being inserted between superposed pipettes received in the slotted partition to ensure against breakage by contact.

A compartment 40 serves for the reception of miscellaneous equipment and supplies for which no specific provision is made. Compartment 42 is dimensioned to receive hypodermic syringes, syringe needles, in sterile containers, being placed in compartment 44. Clean slides are stacked in a convenient manner in compartment 45.

It will be appreciated that the tray described herein is entirely adequate for the carrying in an orderly manner of all of the equipment conventionally required by the laboratory technician for the taking of blood samples and that the arrangement of the several sections of the tray to provide receptacles of varying depth affords the utmost

convenience in removing and replacing the various items, while assuring against breakage by collision, especially of elements containing specimens obtained from the patient.

While the material of which the tray is formed may vary widely, it is preferably of a light weight inexpensive material, such as stainless steel, aluminum, or a durable plastic, resistant to heat and corrosion, and readily washed and sterilized. Alternatively, the tray may be formed of porcelain, shatterproof glass or other moisture and heat resistant substances. The invention is not primarily concerned either with the material employed or with the process of forming and uniting the several components comprising the tray, and is not limited in these respects.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent is:

1. A medical laboratory technician's tray comprising a relatively shallow rectangular receptacle having a base and side walls, said tray having three sections of different depth including a section of maximum depth, open at its upper side and having therein a plurality of partitions normal to the base and projecting upwardly therefrom to provide in such section a plurality of compartments for the reception of laboratory instruments and accessories therefor, upstanding partitions supported within one of said compartments in parallel relation with and adjacent opposite sides of such compartment, said last named partitions being recessed to receive within said compartment in spaced parallel relation a plurality of charged pipettes, another of said compartments being located adjacent to said last named compartment and adapted to receive a supply of fresh unused pipettes, a section of intermediate depth having an intermediate panel parallel to the base, opposed walls of said last named section having complementary grooves therein to receive in parallel relation and normal to the base a plurality of blood slides, another of said compartments being located adjacent said last named

section and adapted to receive a supply of fresh unused blood slides, and a section of minimum depth having an upper panel parallel to the base, said panel being provided with a plurality of apertures dimensioned to receive and support in spaced parallel relation normal to the base a plurality of test tubes resting at their lower ends on said base, said upper panel being provided with further apertures of larger dimension for the reception of solution jars.

2. A medical laboratory technician's tray comprising a relatively shallow rectangular receptacle having base and side walls, one section of said tray having therein a plurality of partitions normal to the base and projecting upwardly therefrom, to provide in such section a plurality of compartments for the reception of laboratory instruments and accessories therefor, a pair of upstanding partitions supported within one of said compartments in parallel relationship with and adjacent to opposite sides of said compartment, one of said pair of partitions having a plurality of vertical grooves therein to receive in stacked parallel relation the ends of a plurality of charged pipettes and the other of said pair of partitions having vertically spaced apertures to receive the opposite ends of the charged pipettes.

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