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COMPOSITE DETACHABLE DESK OR TABLE TOP
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Fig. 1

Fig. 2

Fig. 3

Fig. 4
This invention relates to the tops or working surfaces of desks, tables, benches or the like that are preferably formed of wood.

The tops of desks and tables, when subjected to various changes in temperature and humidity incident to general weather conditions, are apt, in a more or less degree, to warp or buckle and thus a surface on such desk or table top that is not perfectly flat is 10 resultant. The cause for this defect is in most cases due to the fact that temperature and humidity changes cause the outer or exposed part of the table or desk top to expand or shrink, thereby setting up great stresses in the top member which results in its being warped or bent out of shape.

It has been the practice to cover table, desk and other working surfaces with a heavy grade linoleum or other pliable material which has good wearing qualities, by securing the same to the top in various manners, such as by example by gluing the linoleum or other material to the top member. In practically all instances, heretofore, this resulted in an unbalanced top whereby the natural pull or stress of the top member would cause it to warp or bend out of shape.

An object of my invention is to provide a composite top or working surface for desks, tables, benches and the like, which will be evenly balanced and thus reduce to a minimum likelihood of such top warping or bending out of shape regardless of whether linoleum is used in connection therewith or not.

I accomplish this by providing a working surface or top that is mounted on a framework of wood of sufficient strength to overcome the natural pull or stress that tends to warp or bend the top out of shape, that is, the developed stresses in the working surface due to the causes already enumerated are not of sufficient strength to bend or warp the framework or foundation upon which the top surface or working surface is mounted. As a consequence the working surface or top in my invention remains perfectly true and smooth when subjected to the effects of glue, humidity and temperature changes.

An object is to provide a top member for desks, tables, and the like to which a linoleum surface may be easily, quickly and cheaply secured without destroying the balance of such top member. That is the top member is so constructed that after applying a linoleum surface thereto the stress or natural pull of the wood top tending to warping will be so distributed as to be overcome by the stress of the base or foundation to which the top surface member is attached or secured.

Another object of my invention is to provide a smooth and true working surface or table, or bench top which will be much lighter in weight than present tops for similar purposes.

An object is to so construct a top member for tables, desks and the like that warping thereof is reduced to a minimum, and practically eliminated, especially when linoleum is used in combination therewith to provide a working surface.

Simplicity, cheapness in manufacture, with a maximum of rigidity and strength are other objects.

A still further object is to provide a detachable table or desk top that will be less costly than ordinary and ply wood tops heretofore used.

My invention is broadly new, basic and pioneer in that I provide an open framework or foundation member made of material having a relatively large thickness, and attach or secure thereto a three or more ply top panel member having a thickness relatively smaller than the foundation member.

Other objects, advantages and features of invention may appear from the accompanying drawings, the subjoined detail description and the appended claims.

Although the principles of my invention may be applied to, or embodied in, many devices on which a working or top surface is desired, for the purpose of simplicity I have illustrated my invention in the form I at present deem preferable in the accompanying drawings as applied to an ordinary office desk.

Figure 1 is a perspective view of an ordinary office desk now in general use, and having my novel top member secured thereto. Fig. 2 is a plan view of my novel table or
desk top detached from the desk or table body. Parts are broken away to more clearly illustrate the underneath structure of a top embodying my invention.

Fig. 3 is a transverse sectional view on enlarged scale, on line 2—3, Fig. 2. Parts are broken away to contract the view.

Fig. 4 is a fragmental longitudinal sectional view on the same scale as Fig. 3, and taken on line 4—4, Fig. 2.

The desk body A is of any standard construction including uprights 11, held in place by horizontal spacing members 12 at the top and bottom of said uprights. The usual drawers 13 and partitions 14 may be provided between the uprights 11 or they may be omitted if desired to form a table of ordinary construction.

The top member 15 is detachably secured to and held in place on body A by any suitable means as by clips 16 (see Fig. 3) through which screws 17 extend into the uprights 11 of the framework of the desk body A and screws 18 extend into framework of the top member A. By removing the screws 18 from the top member A and clips 16 the top member may be lifted from the body A.

The composite top member 15 comprises an open framework foundation member a that includes side members or rails 19, 20 spaced apart by suitable spacing or cross members 21 that are preferably mortised to and extend between the rails 19, 20 as shown in Fig. 2 and positioned at intervals along said rails. The cross members as shown do not extend above or below the rails 19, 20, but preferably terminate flush with the upper and lower surfaces thereof, so as to obtain a maximum strength and rigidity for the foundation member. A panel or surface member b made out of three or more ply is secured to the foundation member a by any suitable means, such as by gluing and covers the entire surface of the foundation member a to form therewith the top member 15. The panel or surface member b is relatively thinner than the base member being approximately one half or one third as thick as the railroad and cross members forming the foundation member. In the event the panel b is made of more than three ply of material 22, 23, 24 as shown, the relative total thickness thereof with the base member a should be about the same as shown.

By constructing the top member 15 as above described the frame or foundation member a will provide a sufficiently strong base for the table or desk top to adapt the table or desk to the use that such devices are usually subjected to. The open framework a eliminates considerable material that has heretofore been required in making table or desk tops which have heretofore been made of solid material. When the panel b is secured to the base a the combined thickness will be such as is now generally used for tops of desks and tables.

The foundation or base member a being of a thickness two or three times as great as the panel b will have a natural stress that will offset the stress or pull of the panel b from exerting sufficient pull or stress to warp or buckle the top.

A suitable banding c of wood or metal of any desired or suitable colors, such as oak, walnut or mahogany, and which terminates flush with the top surface of said working surface is fastened around the edge of the top member 15 to give a finished appearance thereto. The banding c may be fastened to the top by any suitable means, such as by glue, nails, or screws.

A covering for said panel, of composition cloth d, such as linoleum of any suitable or desirable color, may be glued to the panel or surface member b to entirely cover the same and provide a working surface instead of the wood veneering 22, 23 and 24.

By constructing the top member 15 as above described I provide a novel top for desks, tables and the like which will not warp because the relatively thin panel including the composition cloth secured thereto will not have of itself, under temperature or humidity changes or the action of the glue securing the composition cloth to the panel, sufficient stress or natural pull to offset the stress or natural pull of the base or foundation member a and thereby warp or bend the working surface of the top member out of true.

I claim:

1. A composite top member for desks, tables and the like comprising an open framework foundation member; and a relatively thin panel member having a thickness approxi- mately one-third to one-half of the thickness of the foundation member, and said panel having a natural pull and stress that will not offset the natural pull and stress of the foundation member to cause warping of said members.

2. A composite top member for desks, tables and the like comprising a foundation member; a panel member secured thereto, said panel member having a thickness rela- tive to the foundation member approximating one-third to one-half the thickness of the foundation member so that the natural stress and pull of the panel member will not offset the natural stress and pull of the foundation member to cause warping of said members and a composition cloth covering superimposed upon and securely fastened to and entirely covering said panel member.

In testimony whereof, I have hereunto set my hand at Los Angeles, California, this 5th day of July, 1927.

ELMER E. ASH.