

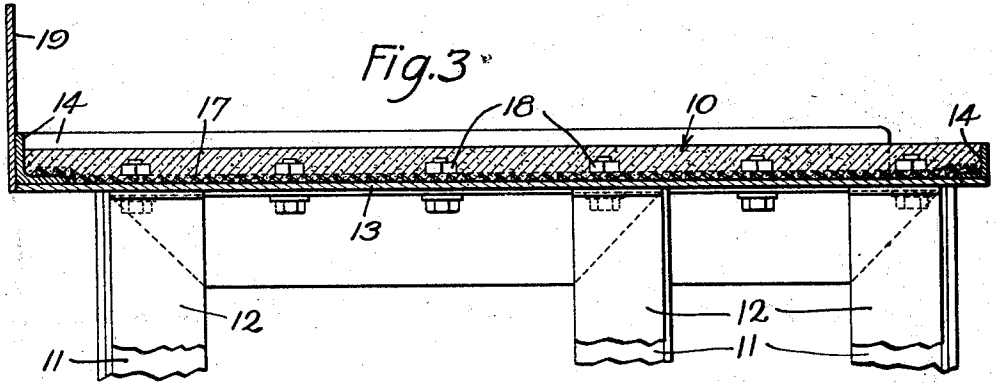
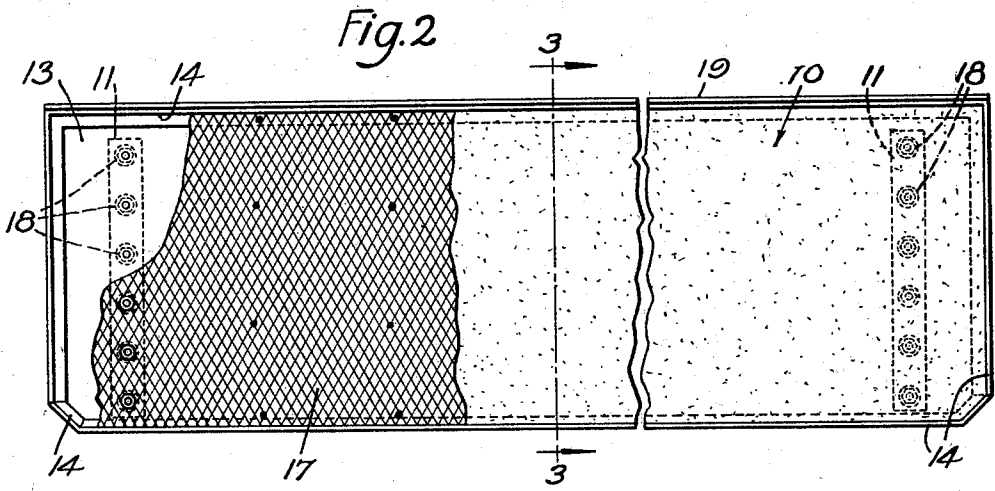
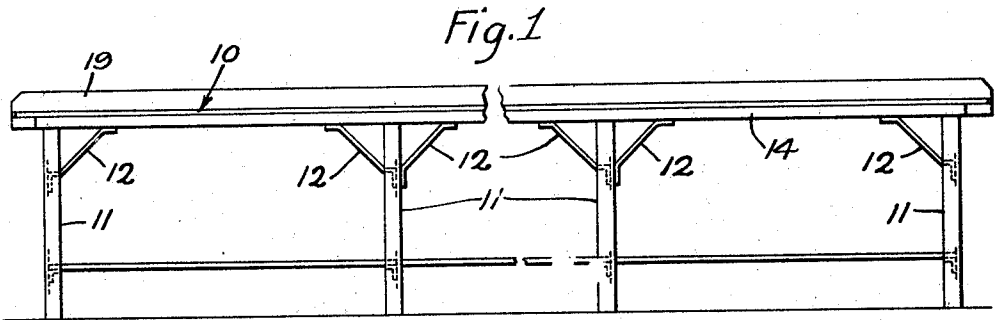
Nov. 25, 1930.

L. R. MCGUIRE

1,782,434

TABLE CONSTRUCTION

Filed Sept. 4, 1928



Inventor
Lee R. McGuire
by *H. S. Lutton* Atty.

UNITED STATES PATENT OFFICE

LEE ROY McGUIRE, OF NEWARK, NEW JERSEY, ASSIGNOR TO WESTERN ELECTRIC COMPANY, INCORPORATED, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK

TABLE CONSTRUCTION

Application filed September 4, 1928. Serial No. 303,772.

This invention relates to table constructions, and more particularly to work tables or benches for factory use.

The principal object of the invention is to provide a table top construction which is economical to build and maintain and at the same time possessing wear resisting properties.

In accordance with the general features of this invention as applied to a work table or bench for factory use there is provided an upright metal frame having a metal top foundation plate provided with upwardly projecting outer flanges to form a receptacle for a magnesite composition which is applied directly upon a surface of expanded metal welded at intervals directly to the top foundation plate, the expanded metal providing an effective anchorage for the composition. In the preferred form of the invention the magnesite composition is applied in two coats, the bottom coat which is of the greater thickness is more flexible than the upper coat which is somewhat harder and is colored as desired. An oil dressing is applied to the surface of the upper coat to prevent the constituents of the composition from collecting in the form of a dust.

Other objects and advantages of this invention will more fully appear from the following detailed description taken in connection with the accompanying drawing, in which

Fig. 1 is a fragmentary elevation of a work table embodying the features of this invention;

Fig. 2 is an enlarged fragmentary plan view thereof, partly in section, and

Fig. 3 is an enlarged vertical section on the line 3—3 of Fig. 2.

Referring now to the drawing in detail in which like reference numerals designate similar parts throughout the several views, and particularly to Fig. 1, there is illustrated an elevation of a work table or bench for factory use comprising a top 10 supported at either end and at suitable intermediate points thereof, depending on the length of the table or bench, upon a plurality of welded steel legs 11 braced by angular steel brackets 12. The brackets 12 are each preferably welded at

either end to the associated leg 11 and the under surface of a steel foundation plate 13 of the top 10. As clearly illustrated in Figs. 2 and 3 the foundation plate 13 is provided with an upwardly projecting flange 14 extending therearound at its outer edges. The flange 14 is made from a plurality of angle plates welded at all joints and at suitable intervals to the plate 13. Along the back and two ends of the table the flange 14 extends upwardly for slightly a greater height than along the front, the foundation plate 13 being bevelled at the two forward corners as clearly shown in Fig. 2. In addition all sharp edges throughout the table structure, particularly along the front thereof, are rounded in order to reduce the likelihood of injury to an operator passing or sitting at the table.

An expanded metal plate 17, the purpose of which will be made apparent shortly, is spot welded at suitable intervals to the top surface of the foundation plate 13 and extends across the entire surface thereof in close relation therewith as clearly illustrated in Fig. 2. The legs 11 are secured to the top 10, in addition to the securing and bracing afforded by the brackets 12, by a plurality of bolts 18 which pass through the plates 13 and 17 with the bolt nuts facing upwardly. A vertical plate 19 is secured to the top 10 and extends along the rear angle plate of the flange 14 to provide a back to the table, the height of the plate may vary with different tables or in some instances may be omitted.

It will be apparent that the foundation plate 13 with the upwardly projecting flange 14 extending therearound at its outer edges forms a receptacle, the upper surface of the plate 13 being covered with the expanded metal plate 17, which may be of the well known type, thus providing an irregular surface comprising a plurality of angularly disposed surfaces. The receptacle thus provided is filled with a composition possessing wear resisting properties up to the level of the upper edge of the front angle plate of the flange 14, as clearly indicated at the right side of Fig. 3, which in the particular structure illustrated provides a composition one inch in depth or thickness.

A composition of the oxide chloride type, such as magnesite, has been found suitable for this purpose and is preferably applied in a plastic state in two coats, the bottom coat of which is of greater thickness, for instance, five-eighths of an inch, and is rendered more flexible by a variation of the constituents than the upper coat which is three-eighths of an inch in thickness and is somewhat harder due to another variation in the constituents comprising the composition. A suitable coloring matter may be added to the composition comprising the upper coat to give the desired color effect and then trowled to provide a smooth outer working surface as described.

The constituents comprising the composition forming the bottom coat may be in the following proportions:

	Parts
Magnesite -----	80
Wood flour -----	13
Asbestos -----	13
Talc -----	20
Silex -----	20

The constituents comprising the composition forming the upper coat may be in the following proportions:

	Parts
Magnesite -----	80
Wood flour -----	5
Asbestos -----	13
Talc -----	13
Silex -----	13
Green oxide -----	13

The plastic magnesite composition becomes rigidly hardened within a few hours after being deposited in the receptacle provided in the framework of the table top 10 and thereafter the outer surface is given a dressing to prevent the constituents of the composition from collecting in the form of a dust. In practice a dressing which has been found satisfactory consists first of raw linseed oil with 10% to 15% of turpentine and thereafter a second coat of dressing consisting solely of raw linseed oil. Due to the attaching of the expanded metal plate 17 to the upper surface of the plate 13, the plastic composition lodges between the angular surfaces thereof and, upon hardening, the two coats of composition are firmly anchored as a whole in the receptacle of the table top 10.

In practice bench tops of the hereinbefore described type have proven very satisfactory from a life standpoint as well as the standpoint of economy in cost of first construction and ease of repair. They are capable of standing a considerable amount of hard usage and if they should crack or otherwise become damaged the damaged portion can be readily removed and substitute material added. Furthermore, to re-surface a mag-

nesite bench top there is only involved the removal of the composition and refilling the steel receptacle with new composition in plastic form without in any way changing, for instance, electrical conduits or other bench connections or machines which may be fixed to the bench top, the entire re-surfacing operation being performed without dismantling the work bench.

What is claimed is:

1. In a table construction, a receptacle, means having a plurality of angularly disposed surfaces attached to and abutting the inner horizontal surface thereof, and a composition surrounding the angularly disposed surfaces of said means and substantially filling the receptacle.

2. In a work table, a foundation plate having upwardly projecting elements providing a receptacle, a perforated metallic member attached to the upper surface of the plate, and a composition lodged within the perforations of the member and substantially filling the receptacle for providing a working surface.

3. In a work table, an upright frame, a horizontally disposed metallic plate mounted thereon having an upwardly projecting flange extending therearound providing a receptacle, an expanded metallic member attached to the upper surface of the plate, and a composition lodged within the openings of the member and substantially filling the receptacle for providing a working surface.

4. In a work table, an upright frame, a horizontally disposed metallic plate mounted thereon having an upwardly projecting flange extending therearound providing a receptacle, an expanded metallic member attached to and covering the upper surface of the plate, and a composition lodged within the openings of the member and substantially filling the receptacle applied in two layers varying in their constituents, the outer layer of which is of less thickness and comparatively harder than the inner layer.

5. In a work table, an upright frame, a horizontally disposed metallic plate attached thereto having an upwardly projecting flange extending therearound providing a receptacle, means attached to the upper surface of the plate having a plurality of angularly disposed surfaces, and a composition surrounding the angularly disposed surfaces and substantially filling the receptacle applied in a plurality of layers varying in their constituents, the outer layer of which is comparatively harder than the inner layer.

6. In a table construction, a receptacle, means having a plurality of angularly disposed spaced surfaces attached to and abutting a horizontal upper surface of the receptacle, and a composition surrounding the angularly disposed surfaces of said means and substantially filling the receptacle.

7. In a table construction, a receptacle,
means having a plurality of angularly dis-
posed surfaces integral with the inner sur-
face of the receptacle at a plurality of points,
5 and a composition surrounding the angular-
ly disposed surfaces of said means and sub-
stantially filling the receptacle.

8. In a table construction, a receptacle,
means having a plurality of angularly dis-
posed surfaces welded to the inner surface
10 of the receptacle at a plurality of spaced
points extending longitudinally and trans-
versely of the receptacle, and a composition
surrounding the angularly disposed surfaces
15 of said means and substantially filling the re-
ceptacle.

In witness whereof, I hereunto subscribe
my name this 23rd day of August A. D., 1928.

LEE ROY McGUIRE.

20

25

30

35

40

45

50

55

60

65