Nov. 3, 1925. 1,560,406

L. H. CARUFEL

SAND DUSTING SCREEN

Filed March 25. 1924

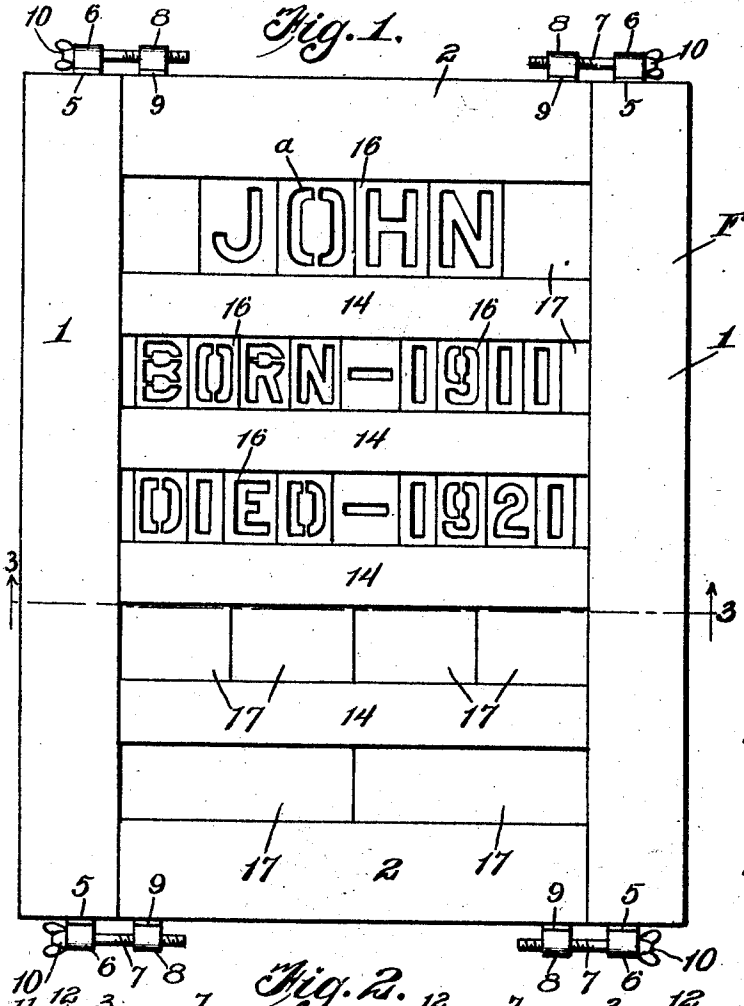


Fig. 1.

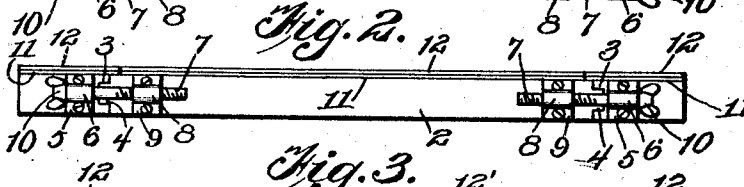


Fig. 2.

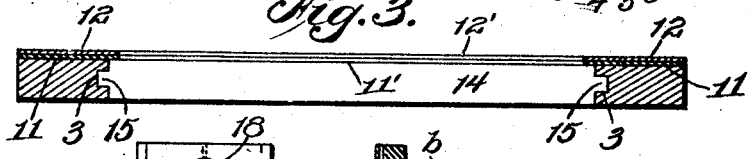


Fig. 3.

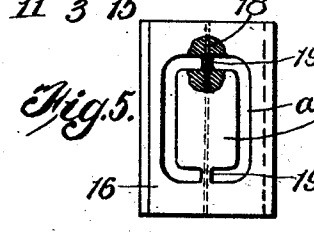


Fig. 5.

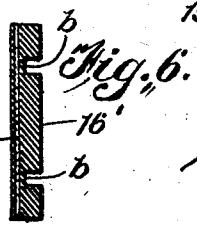


Fig. 6.

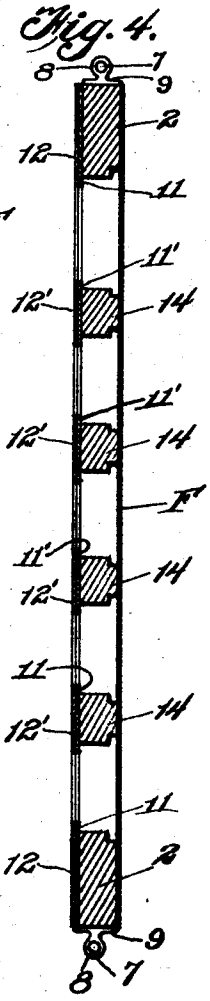


Fig. 4.

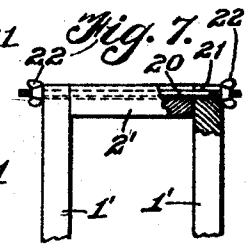


Fig. 7.

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UNITED STATES PATENT OFFICE.

LOUIS H. CARUFEL, OF MINNEAPOLIS, MINNESOTA.

SAND-DUSTING SCREEN.

Application filed March 25, 1924. Serial No. 701,782.

To all whom it may concern:

Be it known that I, LOUIS H. CARUFEL, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Sand-Dusting Screens, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in sand dusting screens and it is an object of the invention to provide a device of this general character embodying novel and improved means whereby a number of stencils may be held thereby in desired arrangement and wherein the screen is so constructed to permit an adjustable spacing of the stencils.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved sand dusting screen whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein:—

Figure 1 is an elevational view illustrating a screen constructed in accordance with an embodiment of my invention and in assembled relation;

Figure 2 is a view in end elevation of the structure as illustrated in Figure 1;

Figure 3 is a sectional view taken substantially on the line 3—3 of Figure 1;

Figure 4 is a longitudinal sectional view taken through the device as herein disclosed;

Figure 5 is a view partly in plan and partly in elevation of one of the stencils as herein employed;

Figure 6 is a sectional view taken through the stencil as illustrated in Figure 5;

Figure 7 is a fragmentary view partly in section and partly in elevation illustrating a frame constructed in accordance with another embodiment of my invention.

As disclosed in the accompanying drawings, my improved screen comprises a frame F consisting of the side members 1 and the end members 2, the inner edges of the side members 1 are provided entirely therealong with grooves 3 which receive the tongues 4 carried by the extremities of the end members 2 whereby said side members 1 and end members 2 are in interlocking engagement.

Secured to each end of a member 1 is a bracket 5 provided with a sleeve 6 through which is disposed the headed shank or bolt 7, said shank or bolt 7 being in threaded engagement with a sleeve 8 carried by the bracket 9 fixed to the adjacent extremity of a member 2. The head 10 of the shank or bolt 7 is arranged outwardly of the sleeve 6 and as herein disclosed has contact with said sleeve whereby upon rotation of the shank or bolt 7 in one direction the adjacent extremities of a side member 1 and an end member 2 are moved one toward the other. Upon rotation in the opposite direction, said members 1 and 2 are permitted to have separating movement.

The outer faces of the members 1 and 2 have disposed thereover metallic laminations or sheets 11 suitably affixed thereto and cemented or otherwise attached to the outer face of each of the laminations 11 is a lamination 12 of rubber. The assembled laminations 11 and 12 extend a predetermined distance inwardly of the inner margins thereof and for which reason such laminations of the end members 2 terminate a distance inwardly of the extremities thereof to permit the extended portions of the laminations carried by the side members to overlap the adjacent ends of the members 2.

Adapted to be arranged between the side members 1 and adjustably positioned therealong as the occasions of practice may require, are the bars 14, the ends of which being provided with the tongues 15 to be received within the grooves 3 of the members 1. Adjacent bars 14 are adapted to be spaced apart in accordance with the size of the stencils 16 to be interposed and arranged therebetween and such adjustment of the bars 14 may be readily effected. The bars 14 also have superimposed thereupon the laminations 11′ of metal and 12′ of rubber, said laminations of each bar 14 terminating inwardly of the opposite ends thereof to permit the desired lapping of the laminations 11 and 12 of the side members 1.

The stencils 16 when applied serve to hold the bars 14 in place as these bars are loose at all times. After the stencils have been properly mounted, the resultant spaces in a row

and the spaces between adjacent bars 14 are adapted to be closed by the filler blocks 17.

The stencils 16 are preferably made of rubber and have suitable openings *a* cut therein to produce the desired letter, character or symbol. In Figure 5 the stencil is of a type wherein the desired letter is formed by the use of a center piece 16′ positioned within the opening *a*, said center piece 16′ being held in applied position by the tie or bridge pin 18, the portions of said pin disposed across the resultant opening being provided with a covering 19 of rubber so that effective resistance will be offered to the sand blast to prevent cutting of said tie or bridge pin. While Figure 5 shows a stencil to reproduce the letter "O", it is to be understood that a stencil will be similarly constructed in connection with the letters "A", "P" and the like.

It is also to be understood that the tie or bridge portions *b* are raised sufficiently high from the under surface of the stencil to permit the sand blast to flow therebeneath.

The construction of a stencil as just described can be accomplished very economically.

In the embodiment of my invention as illustrated in Figure 7, the side members 1′ and each of the end members 2′ are held together by the bolt 20 engaged within the grooves 21 in the outer face of the end member 1′ and the adjacent end of each of the members 2′. Coacting with the opposite end portions of the bolt 20 are the holding nuts 22 herein disclosed as of a wing type.

While I have hereinbefore referred to my invention as particularly adapted for use as a sand dusting screen it is also to be understood that the same can be used by painters in connection with the well-known air brush process.

Certain of the features disclosed in this application are described and claimed in my pending application Serial No. 17,286 filed March 21, 1925.

From the foregoing description it is thought to be obvious that a sand dusting screen constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which is may be assembled and operated, and it will also be obvious that my invention is susceptible of some change and modification without departing from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as hereinafter claimed.

1 claim:—

1. A sand blasting screen comprising a frame, said frame consisting of separable side and end members, means carried by the adjacent extremities of the side and end members for connecting said members and to move the same one with respect to the other, bars interposed between and held by opposed members of the frame, stencils arranged between adjacent bars, said bars and the associated members of the frame interfitting when in assembled relation.

2. A sand blasting screen comprising a frame, said frame consisting of separable side and end members, means carried by the adjacent extremities of the side and end members for connecting said members and to move the same one with respect to the other, bars interposed between and held by opposed members of the frame, stencils arranged between adjacent bars, and rubber laminations disposed over the outer faces of the members of the frame and the bars.

3. A sand blasting screen comprising a frame, said frame consisting of separable side and end members, means carried by the adjacent extremities of the side and end members for connecting said members and to move the same one with respect to the other, bars interposed between and held by opposed members of the frame, stencils arranged between adjacent bars, and rubber laminations disposed over the outer faces of the members of the frame and the bars, the laminations carried by the members with which the bars engage extending beyond the inner margins of the members to overlap the adjacent end portions of the bars.

4. A sand blasting screen comprising a frame, said frame consisting of separable side and end members, sleeves carried by the adjacent end portions of said members, and a holding member disposed through each pair of adjacent sleeves.

5. A sand blasting screen comprising a frame, said frame consisting of separable side and end members, sleeves carried by the adjacent end portions of said members, and a holding member disposed through each pair of adjacent sleeves, said member being in threaded engagement with one of the sleeves.

In testimony whereof I hereunto affix my signature.

LOUIS H. CARUFEL.