Nov. 7, 1933. J. D. STEBBINS 1,933,878

AERONAUTICAL ROOF SIGN

Filed May 4, 1931

Fig. 1.

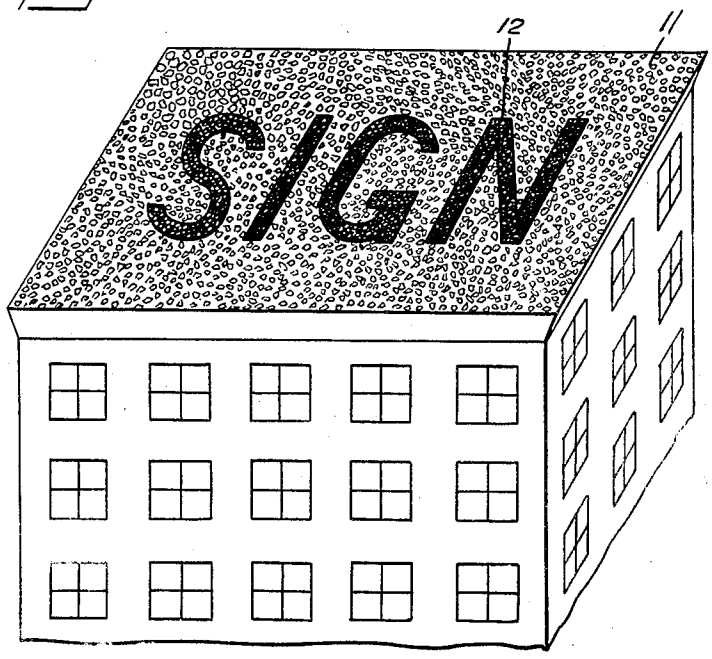


Fig. 2.

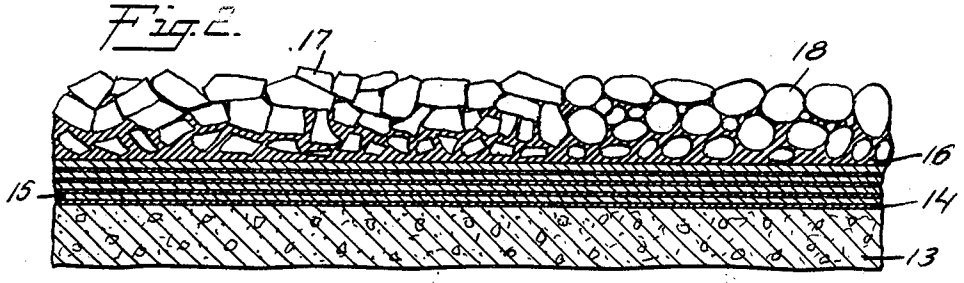
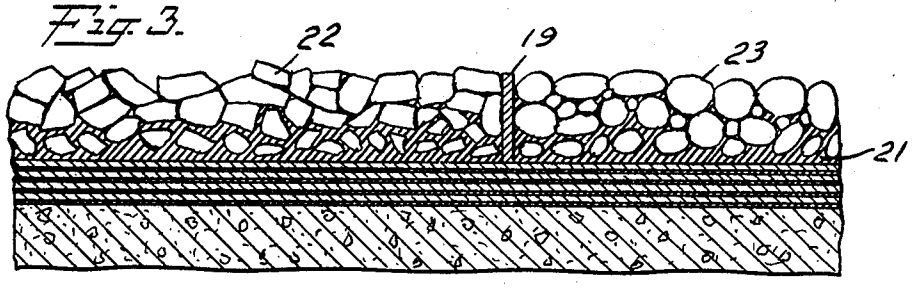


Fig. 3.



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AERONAUTICAL ROOF SIGN

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1 Claim. (Cl. 40—125)

This invention relates to aeronautical signs and more particularly to a sign structure designed to serve as identification or advertising means to be viewed from the air.

It is an object of this invention to provide an aeronautical sign atop a building which combines highly weather-resistant properties with striking optical effects.

It is another object of this invention to provide an aeronautical sign atop a roof by utilizing alternate layers of felt and bituminous material in building up the roof structure and then surfacing the upper felt layer with granular material of two different types, granular material of one type forming the background of the sign and granular material of a different type which contrasts with and is readily discernible from the granules of the type used to form the background being used to form the sign proper, that is, the letters or figures constituting the sign. In this manner a sign is formed which is visible from great heights and distances, which is as permanent as the roof proper since the granules are water- and wear-resistant and which involves little or no additional cost beyond that necessary for building the roof.

Heretofore it has been the practice in producing signs or symbols atop a building to paint or coat the roof in predetermined areas to provide the desired design. Such painting and coating, by reason of the action of the sun and rain, is not of a permanent nature and must necessarily be renewed from time to time, thus entailing the expenditure of time, labor and materials in addition to the first cost of painting the roof. This disadvantage is avoided by my invention, since in the initial formation of the sign, the inherent surface structure of the roof provides the contrasting design forming the sign proper.

My invention comprises an aeronautical sign built up of alternate layers of fabric such as bituminous saturated felt and a suitable cementitious binder, as for example asphalt or coal tar pitch, a relatively thick layer of the binder material and a surfacing of granular materials of two types, one forming the background of the sign proper which may consist of relatively uniform spherical particles of gravel of one color blend or single color and the other may consist of irregular slag particles of larger size and different color blend constituting the letter or figure portion of the sign.

For a more complete understanding of my invention, reference is made to the following description and the accompanying drawing in which

Fig. 1 is a diagrammatic perspective view of a building embodying the sign of my invention;

Fig. 2 is a fragmentary cross-section of my novel sign structure taken on a line at right angles to the line of juncture between zones of different characteristics, i. e., the background portion and the sign proper portion; and

Fig. 3 is a fragmentary cross-section of a modified form of a sign embodying my invention.

Roof 11 of a building, selected for the purpose of illustration, is provided with a sign or symbol 12 built up in the manner shown in Fig. 2 and hereinafter described. The basic portion of the roof of the building, which may be of the nature of a concrete deck 13 or other suitable foundation may have applied thereto a layer 14 of pitch, asphalt or other cementitious bituminous material. A strip 15 of suitable roofing fabric such as felt saturated with bitumen is applied to the pitch layer 14. Alternate layers of pitch and saturated felt may then be applied to the roof, thus building up a waterproof roof structure in the manner well known to skilled roofers.

A relatively thick layer 16 of pitch or other suitable cementitious binder is then applied to the foundation built up in the manner described and the design of the sign or symbol may be laid out on this layer or on the roof structure before the application of the layer by means of lines, tapes or other suitable means. Granular material such as gravel, crushed rock, slate or the like hereinafter referred to as grit and of contrasting characteristics as to color, size or shape is applied to the predetermined portions which go to form the letter or symbol of the sign and the portions which form the background of the sign, one type of grit being applied to the background portion and the other type to the letter or symbol portion. For example in Fig. 2, I have shown a surfacing layer 17 of crushed slag of irregular shaped particles forming the background portion of the sign and located in abutting relation to a layer 18 of substantially regular spherical particles of gravel of a distinct contrasting color from the slag. The particles of slag and gravel are partially embedded in the cementitious layer 16 by pressure applied thereto, the upper surfaces of the particles being exposed to view. The symbols and signs may thus be made of a size coextensive with that of the roof and may be readily seen and distinguished from high altitudes. In view of the large sizes of the symbols, it is not necessary

that there be a perfect line of demarcation between the joining zones of material of contrasting characteristics, since the large size of the letters will render any minor deviation from the line imperceptible at a distance from which the sign is ordinarily viewed, i. e., from an aeroplane flying in the air over the building and the deviations will not interfere with the legibility of the sign.

In Fig. 3 I have shown a modified form of construction that may be employed in the manufacture of my sign to insure correct lines of juncture. Wooden scantlings 19 or metal strips are applied to the top layer of roofing felt and are laid out to form the desired symbol. A relatively thick layer 21 of pitch or other bituminous material is then applied and the surfacing materials 22 and 23 of contrasting characteristics are applied to the zones as defined by the scantling members. After the roof has been formed, the scantlings may be either left in place or withdrawn.

From the above description, it is obvious that my invention is possessed of many advantages. A sign or symbol is formed in the normal operation of building up a roof which will last as long as the roof, which does not require any repainting or recoating by reason of the deleterious effects of the elements and which in the manufacture requires little or no additional expense beyond that necessary to construct the roof proper. The contrasting characteristics, being inherent in the materials per se, are not affected by the sun or rain and will maintain their contrast as long as the material itself exists. The sign or symbol is integrally formed within a roof with no additional time or trouble other than that involved in forming the ordinary roof, thus eliminating an extra operation of coating or painting.

It is to be understood that my sign and the novel method of making same may be employed on roofs already formed as well as on original roofs, the layers of pitch and contrasting surfacing material being capable of ready application to any type of roof.

It is also to be understood that different materials of contrasting characteristics may be employed in the manufacture of my sign, aside from gravel and slag. Silica-coated particles of different colors, materials of relatively different fineness, and the like may be employed. Instead of grit for either the background or symbol portion of the sign, felt or bituminous substances might be used in contrast to the grit surfacing of the other portion.

Having thus described certain embodiments of my invention, it is evident to those skilled in the art that the various changes and modifications may be made therein without departing from its spirit and scope, as defined by the appended claim.

I claim:

An aeronautical roof sign comprising alternate layers of saturated felt and bituminous material, scantlings applied to the top layer of the saturated felt to form the outline of a symbol, a layer of bituminous material applied over the top layer of saturated felt, grit partially embedded in the areas of said top layer of bituminous material enclosed by the scantlings and particles of surfacing material of contrasting color as compared with the color of said grit partially embedded in the remaining areas of said top layer of bituminous material to provide a symbol and a background of contrasting optical effect.

JOHN D. STEBBINS.