Sept. 6, 1932. J. R. FOLEY 1,875,582

METHOD AND MEANS FOR IDENTIFYING RUBBER GOODS

Filed Dec. 11, 1929

Fig. 1.

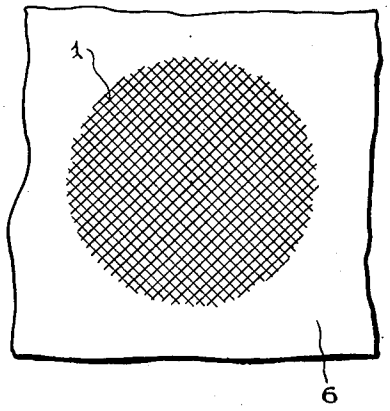


Fig. 2.

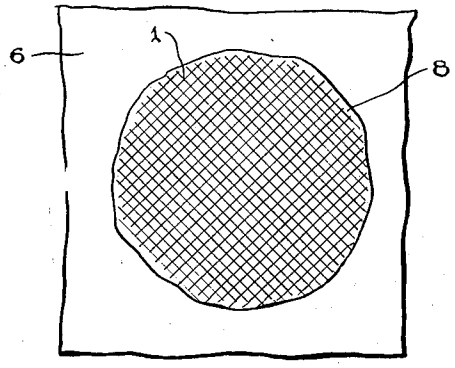


Fig. 3.

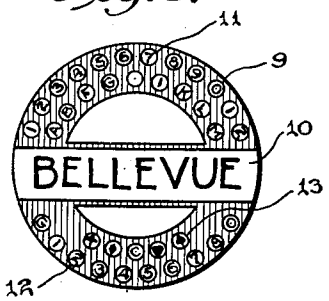


Fig. 4.

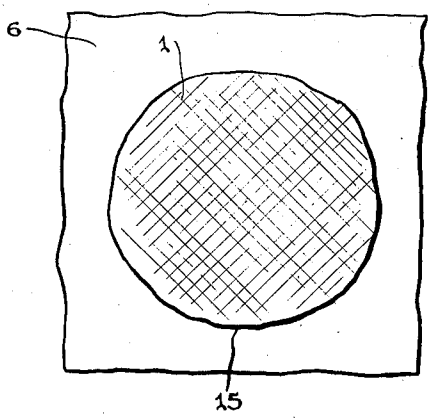
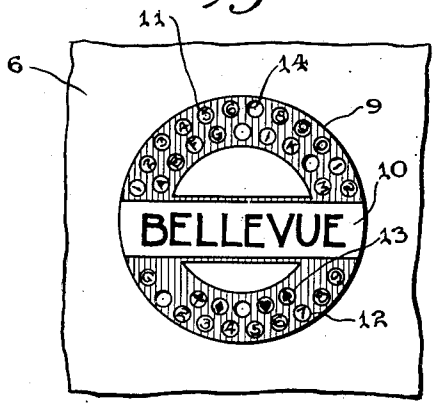


Fig. 5.



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Patented Sept. 6, 1932 1,875,582

UNITED STATES PATENT OFFICE

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METHOD AND MEANS FOR IDENTIFYING RUBBER GOODS

Application filed December 11, 1929. Serial No. 413,333.

This invention relates to the identification of rubber goods, and to a method of applying identification means to such goods.

In hospitals or the like, and particularly in hospitals having a number of wards, rubber goods, such as hot water bottles, ice packs, pneumatic cushions, maternity pads, or rubber sheeting, are frequently lost or find their way from one ward to another, due to the fact that no means has heretofore been devised for successfully marking such goods for identification. Some effort has been made in the past to mark the goods by means of printed rubber patches or labels which are vulcanized to the goods by hot vulcanization. This procedure is open to a number of objections, among which may be mentioned the ease with which the printed identification may be eliminated without mutilating the article to which the label is attached; and second, the fact that the hot vulcanization changes the color of the patch, so that different colors cannot be employed to signify different wards of the hospital. Furthermore, such labels do not identify the date of the application thereof to the article, and consequently, it is impossible to tell from such a label whether the article has been in use four months or four years.

The primary object of this invention is to provide an improved label, and a method of securing the same to rubber goods in such manner that the label may be applied by cold vulcanization, and when once secured, in place, cannot be changed without mutilating the rubber article to which it is attached.

Another object of the invention is to furnish an identification label provided with indications for dates, wards and the like, which indications may be punched before the label is applied to the goods, whereby portions of the goods will be displayed thorugh the punched holes, and the identification cannot be removed without destroying the article to which the label is applied.

With the foregoing objects outlined and with other objects in view which will appear as the description proceeds, the invention consists in the novel features hereinafter described in detail, illustrated in the accompanying drawing, and more particularly pointed out in the appended claims.

Referring to the drawing,

Fig. 1 is a plan view of a portion of any rubber or rubberized article after a surface of such part has been scraped to receive a first vulcanization compound.

Fig. 2 is a similar view after the first compound has been applied.

Fig. 3 is a plan view of one form of label of the type used in the invention.

Fig. 4 is a view similar to Fig. 2, after a second vulcanization compound has been applied to the rubber article.

Fig. 5 is a plan view of a portion of the rubber article after my improved rubber identification label has been attached to the same.

In accordance with the invention, a part 6 of a hot water bottle, ice pack, cushion ring, rubber sheet or any other rubber or rubberized article, is first scraped with sand paper or the like, to provide the outer surface of the same with a roughened spot 7 of approximately the size of the label, (Fig. 3), which is to be attached thereto.

Then the first vulcanization compound is applied to this roughened spot as shown at 8 in Fig. 2, to cover a space slightly larger in diameter than the label itself. This compound will evaporate, becoming dry to the touch in about five or ten minutes after application. When dry to the touch, a second coat of the same compound is applied and allowed to also become dry. Only a small amount of this first compound is necessary to each coat, but the first coat should be allowed to become dry before the application of the second coat.

While the second coat is drying, the rubber identification label 9 is prepared to be applied to the goods. This label is usually mounted on a paper shield or backing which adheres to the back of the label by means of any suitable adhesive, and the face of the label bears, for example, the name 10 of a particular hospital, a series of month indications 11, a series of year indications 12, and a series of private code markings 13. Furthermore, the face of the labels may be colored

in any single or contrasting colors to signify any particular ward of the hospital, and as my vulcanization is of the "cold" type, such coloring will not be affected during the vulcanization process.

In accordance with the invention, before the label is removed from its paper backing, suitable indications are punched from the series 11, 12 and 13 to indicate a particular month, year and private code, and this will leave the label in the condition shown in Fig. 5, in which 14 indicates holes in the label through which portions of the article 6 are exhibited.

After the label has been punched, its backing sheet is removed, and the label is now ready for application to the article. At this time, a swab is used to apply a coating of a second vulcanization compound over the two coats of the first compound, as indicated at 15 in Fig. 4, care being taken to prevent the second compound from running over and spreading beyond the spot formed by the first compound.

Immediately after generously painting the spot 8 with the second compound, the rear of the punched label is applied to the spot 15, and the label is held against the article until it is thoroughly attached, which requires about one or two minutes. Hand pressure is all that is necessary to make adhesion positively permanent, and within a few hours, the label cannot be removed intentionally or otherwise. The compounds take about thirty minutes to set. When the compounds have set, the article with its attached label, will have the appearance shown in Fig. 5.

With regard to the vulcanizing compounds employed, it may be stated that the first is an attaching compound and/or cement with a basis of crude rubber, co-mingled with other substances, all held in solution and suspension with a highly volatile ingredient, and this compound is packed in an air-tight container, and so held until the need for its immediate use. When applied to any finished, cured, or semi-cured rubber, or rubberized article, in this liquid and suspended state, the volatile ingredient evaporates and leaves as a residue the crude rubber substance in the state desired.

Upon this residue will, in turn, be applied a curing medium other than heat, either directly or indirectly. This medium or second compound is also to be an ingredient suspended in highly volatile matter, packed in an air-tight container, and so held until the time it is needed for use.

The combination of these two compounds in the relation of each to the other, is such, that if another finished, cured, or semi-cured rubber or rubberized article is placed immediately in contact with the above mentioned residue, in combination with its curing medium, it will cause the two articles to become permanently attached to one another.

This simple procedure differentiates from the highly technical method of curing or treating rubber, and brings to the consumer, a method of obtaining a desired result in the attaching or adhering of any finished, cured, or semi-cured rubber or rubberized articles, without the present compliment of extensive machinery or the use of intense heat, either directly or indirectly.

Furthermore, when one of the improved labels is prepared and attached in this way, its color will not be affected, and its identification marking cannot be removed without mutilating the article to which the label is attached.

While I have disclosed a preferred embodiment of the invention in such manner that the same may be readily understood by those skilled in the art, I am aware that changes may be made in the details set forth, without departing from the spirit of the invention, as expressed in the claims.

What I claim and desire to secure by Letters Patent is:

1. A method of identifying rubber goods, comprising puncturing a rubber label to provide indications therein, and then applying the label to a rubber article by cold vulcanization.

2. A method of identifying rubber articles, comprising punching a rubber label in such manner as to indicate a certain month and year, and applying such label to the article by cold vulcanization.

3. A method of identifying highly flexible rubber articles of the kind employed in hospitals, comprising mutilating a rubber label in such manner as to indicate a certain month and year, and then securing such label to the article by cold vulcanization.

4. A method of identifying rubber hospital articles or the like, comprising roughening a surface of such an article, coating said surface with a compound having a basis of crude rubber, held in solution and suspense with a highly volatile ingredient, permitting said compound to dry, then applying to the coated surface a second compound including an ingredient suspended in highly volatile matter, then placing a rubber label on the coated surface and pressing said label against the article for a short time, and afterwards allowing the article with the applied label, to rest until the compound sets.

5. A method of applying identification labels to rubber hospital articles or the like, consisting in roughening a surface of such article, applying first and second coats of vulcanizing compounds to the roughened surface, punching identification marks in a rubber label, then applying such rubber label to the coated surface and permitting the

label to become attached to the article by cold vulcanization.

6. A hospital identification label, comprising a rubber patch provided on its face with a delineated space to bear the name of a hospital, and also provided with consecutively arranged month and year indications adapted to be punched from the label.

7. The combination with a flexible rubber article, of a rubber identification patch united with the latter by cold vulcanization, said patch being provided on its face with a delineated space bearing the name of a hospital or an institution and also provided with consecutively arranged month and year indications, the patch being perforated where some of said indications occur to form identification characters through which the surface of the article is displayed.

8. The combination with a flexible rubber article, of a flexible rubber identification patch united with the latter by vulcanization, said patch being provided on its face with a delineated space bearing the name of an institution and also provided with consecutively arranged month and year indications, the patch being multilated where some of said indications occur to form identification characters.

In testimony whereof, I have signed this specification.

JOHN RUSSELL FOLEY.