May 23, 1939. D. H. HARDY 2,159,697

MARKING STAMP

Filed Nov. 29, 1937

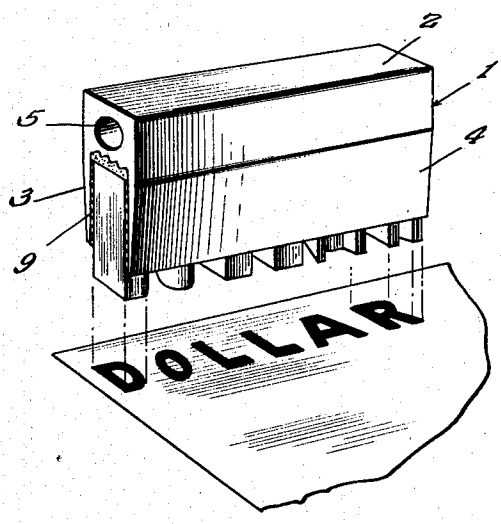
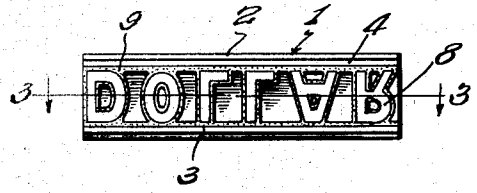


Fig. 1.

Fig. 4.

Fig. 2.



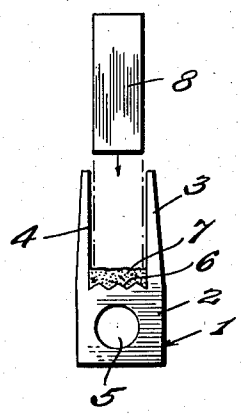
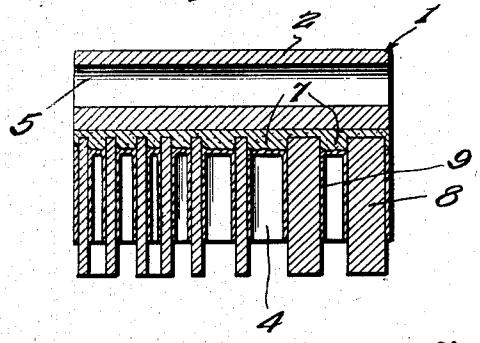


Fig. 3.



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MARKING STAMP

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6 Claims. (Cl. 101—368)

This invention relates to an improved marking stamp and more particularly to a device of this character intended for use in marking clothing, linens, or other articles.

One object of the invention is to provide a marking stamp which may be made ready for use by merely moistening the free extremity thereof with water so that the use of a troublesome stamp pad will be avoided.

Another object of the invention is to provide a marking stamp having a handle formed of composition material, the handle having relatively thin side walls which may be chipped away as the letters of the stamp are worn down so that further use of the letters may be had.

A further object of the invention is to provide a marking stamp of this character the marking elements of which may be formed from a plastic mass and forced through a die to form the desired characters.

Another object of the invention is to provide a device of this character wherein means are employed for effectively retaining the marking elements in proper position within the handle.

And the invention seeks, as a still further object, to provide a marking stamp which is of the utmost simplicity in construction, which is durable in use, and which may be carried from place to place with the greatest facility.

It is believed that other objects of the invention will render themselves apparent during the course of the following description.

In the drawing forming a part of my application:

Figure 1 is a perspective view of my complete marking stamp as it would appear ready for use, an imprint of the stamp being shown therebeneath.

Figure 2 is a bottom plan view of my improved marking stamp.

Figure 3 is a vertical sectional view on the line 3—3 of Figure 2, looking in the direction indicated by the arrows.

Figure 4 is an exploded end view showing the handle of my improved marking stamp in position to receive a marking element.

Referring now more particularly to the drawing, wherein it will be seen that like numerals of reference designate similar parts throughout the various views, the numeral 1 indicates, in general, the handle of my improved marking stamp. The handle is of substantially inverted U-shape in vertical cross section and is provided with a relatively thick bight portion and legs or walls 3 and 4 which are tapered in thickness toward their free ends. An opening 5 extends throughout the length of the bight portion medially of its thickness. The handle is preferably composed of a composition of plaster of Paris and dextrin, or a similar mixture, and said handle is preferably cast, along with a number of other handles, in the form of yard length rods or sticks. These rods or sticks are allowed to set and then removed from the mold. Excess moisture is driven off with heat but the moisture is immediately brought back into contact with the handle as said handle is heated and dipped in a bath of hot wax. The immersion of the rods or sticks in the wax renders the handles formed from the sticks resistant to moisture. Moreover, the handles will become capable of being polished.

As best seen in Figures 1 and 4 of the drawing, the inner surface of the bight portion 2 of the handle is roughened, throughout the length of the handle, so as to provide anchoring means for element securing cement 7 which is disposed within the handle. The cement 7 is composed preferably of one part shellac, two parts rosin, pigment and hair. Asbestos may be employed in lieu of hair, if desired.

The marking elements 8 are formed by the following process: Ordinary glue is first melted in hot water and oil glucose soap and salts are added. The resultant compound is removed from heat and is worked up with carbon black until a stiff dough is produced. The dough is forcibly mixed until a stiff homogeneous mass is produced, after which the dough is passed between warm rollers to expel excess moisture and eliminate air pockets. Finally, the dough is placed in a cylinder and is forced through dies of a shape to form the desired marking element. It has been found that oil of wintergreen facilitates working of the mass and the same is, therefore, preferably used. The proportions of the ingredients above mentioned may be varied widely and, in the manufacture of the marking elements, I have employed various compositions of ingredients with varying results as to strength and stretch. Moreover, shrinkage upon drying of the elements must be considered when choosing the proportions of ingredients. It has been found that the addition of alum to the compound composing the elements will render the elements insoluble so that they may be used in connection with many coloring materials.

It is desired to state that, after the ink elements have been dried, they are subjected to a fifteen pound steam pressure for an hour or any other suitable length of time. It has been found in practice that a steam cooker of ordinary construction will be satisfactory for completing this step. It has also been found that the steam treatment relieves stress and strain in the elements themselves and it also effectively mixes the ingredients to form a more solid ink. Moreover, the tendency toward expansion, when the elements are brought into contact with water, is greatly reduced.

When the marking elements have been formed in the manner described, they are placed in the

handle while both the handle and marking elements are warm. The inner corresponding ends of the elements are seated in the cement 7 which has become plastic after heating. The element securing cement 7 will effectually secure the inner ends of the elements in place. As will be seen by referring particularly to Figures 2 and 4 of the drawing, a slight space is present between the end walls of the elements and the inner surfaces of the side walls 3 and 4 of the handle. A hot mixture of wax is poured in the handle and around the letters and will serve to reinforce the letters throughout their lengths. After a few seconds, or before the wax is entirely cool, the stamp is inverted so that all wax except that which adheres to the side walls of the elements and handle, may drain off. After the wax has been allowed to cool, the handle is separated from the stick or stock and the marking elements are ground down so that they will present an even uniform surface. The device is then ready for use.

It should be understood that the handles 2 are preferably retained on the stick until the marking elements are ready to be levelled off, for the reason that the handles may be manipulated with much greater facility.

In use, the surface to be stamped is preferably moistened and the marking elements are placed with their ends in a small amount of water until a thick ink is formed on their ends. Excess ink, if there be any, is removed, and then the stamp is applied to the article to be marked with a firm even pressure. The marking elements are made in such size that although a considerable quantity of liquid may adhere to the faces of the elements, an even distribution of ink will be formed about said faces. A uniform print, which will penetrate the entire surface of the garment or piece of material to be marked, will thus appear. Moreover, a large amount of thick ink may be forced into the fabric so that it is possible to use a cheap ink with good results. It is pointed out, however, that there is no economy in using the device sparingly since a thin mixture of ink and water will not make a lasting print.

It is desired to state that any indelible ink producing substances may be employed in making the marking elements. It has been found that aniline chlorate and copper sulphate may be used combined in the same letters or separately in different letters so that, in use, the two chemicals are brought together.

It has been found that after the stamp has been used for a time, dried coloring matter will accumulate around and near the ends of the marking elements. This is particularly true if paint has been used. It has been found that it is not always convenient or possible to remove the obstructing material without injury to the marking elements. Therefore, in order to overcome the difficulty, the working ends of the elements are sanded or cut down until a new stamping face appears. It is desired to point out that the device should not be permitted to stand in water nor should it be permitted to be placed in a hot dry place. Also, after a marking operation, the articles having the marks thereon should not be washed until the ink is thoroughly dry. Attention is directed to the fact that after the marking elements have become worn down and the walls 3 and 4 of the handle interfere with their proper use, these walls may be chipped away from the elements for eliminating the obstruction to said elements.

Attention is further directed to the fact that inasmuch as I have provided the opening 5, the handle will be lightened in weight without sacrifice of strength. Further description of my invention is believed to be unnecessary.

Having thus described the invention, what I claim is:

1. A device of the class described including a handle having side walls, and marking elements embedded in the handle and each formed of a solidified inking substance adapted to be moistened on its working surface for making an impression upon an article to be marked, said side walls being capable of being broken away for exposing additional portions of the elements as said elements are worn by use.

2. A device of the class described including a handle having a bight portion and having tapered side walls, marking elements embedded in the handle and extending past the side walls, and means for securing the elements within the handle and to said side walls and bight portion.

3. A marking stamp including a handle formed of composition and having tapered side walls and a relatively thick bight portion provided with a roughened inner surface, composition marking elements carried by the handle and formed of a solidified ink substance adapted to be moistened on their working surfaces for making an impression upon an article to be marked, and means carried by the handle on said roughened surface and retaining the marking elements in the handle.

4. A marking stamp including a U-shaped handle having a relatively thick bight portion and side walls, said relatively thick bight portion having a roughened inner surface, marking elements carried by the handle and formed of a solidified ink substance adapted to be moistened on their working surfaces for making an impression upon an article to be marked, cement carried by the handle on said roughened surface and adhering to the inner ends of the elements for retaining the elements in position, said elements being slightly spaced at each end from the side walls, and wax disposed between the side walls and the elements and retaining and reinforcing the marking elements throughout their portions in the handle.

5. The process of manufacturing marking stamps consisting of the step of mixing plaster of Paris and dextrin in a mold to form a handle stock, placing a cement within the handle stock, placing marking elements in the handle stock on the cement, and pouring wax in the handle stock about the elements for cooperating with the cement for retaining the elements in position, separating the handle from the stock, and grinding the elements to define a uniform working surface therefor.

6. A marking stamp including a handle, a marking element carried by the handle and being formed of a chemical composition, and another marking element carried by the handle and formed of a different chemical composition, said marking elements being adapted to be moistened in use for bringing the chemicals together and forming an indelible ink.

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