(No Model.) 2 Sheets—Sheet 1.

J. LINES.

METHOD OF MAKING SHEET METAL MOUNTS FOR BRUSHES, &c.

No. 492,216. Patented Feb. 21, 1893.

Fig. 1

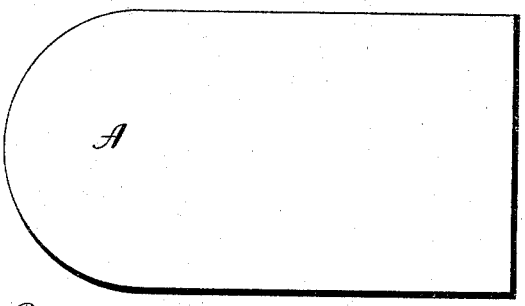


Fig. 2

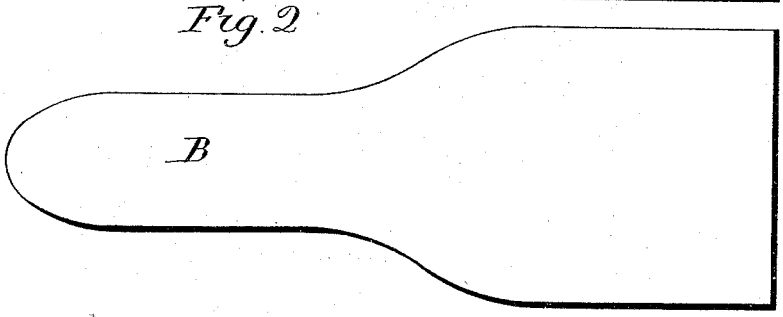


Fig. 3

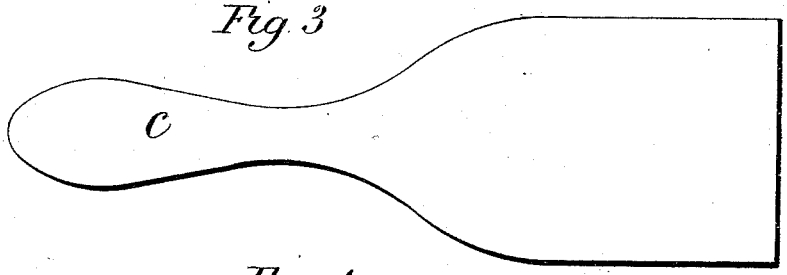
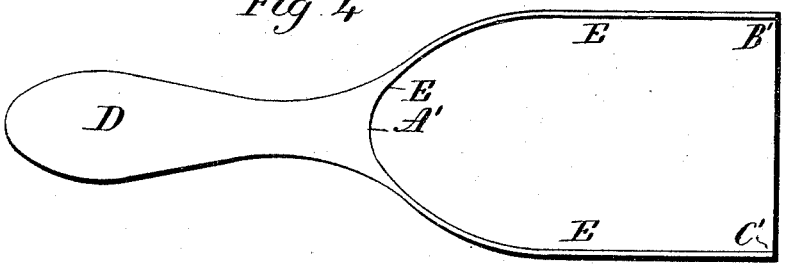


Fig. 4



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(No Model.) 2 Sheets—Sheet 2.

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METHOD OF MAKING SHEET METAL MOUNTS FOR BRUSHES, &c.

No. 492,216. Patented Feb. 21, 1893.

Fig. 5

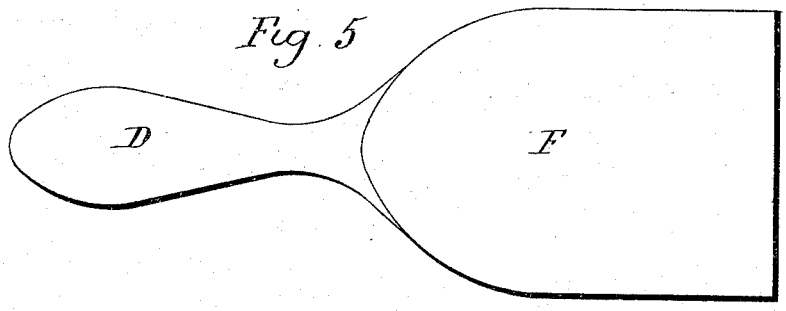


Fig. 6

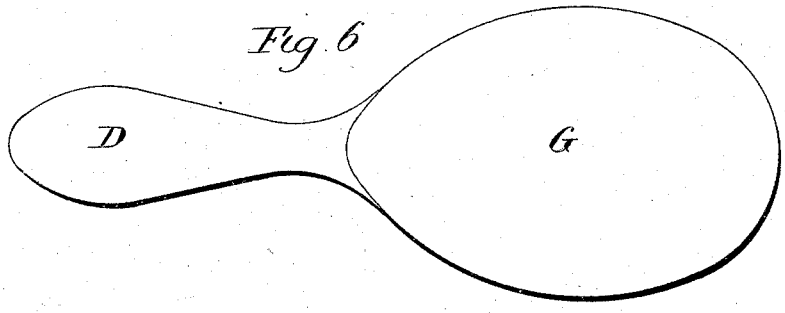


Fig. 7

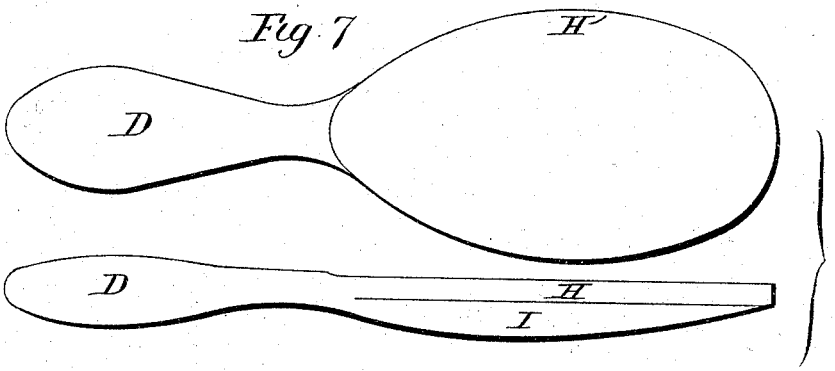
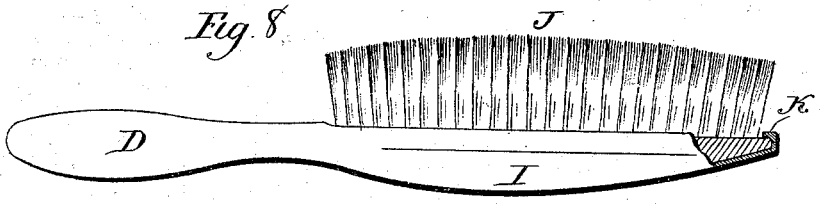


Fig. 8



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UNITED STATES PATENT OFFICE.

JOHN LINES, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE SCOVILL MANUFACTURING COMPANY, OF SAME PLACE.

METHOD OF MAKING SHEET-METAL MOUNTS FOR BRUSHES, &c.

SPECIFICATION forming part of Letters Patent No. 492,216, dated February 21, 1893.

Application filed November 21, 1892. Serial No. 452,676. (No model.)

To all whom it may concern:

Be it known that I, JOHN LINES, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new Improvement in Methods of Making Sheet-Metal Mounts for Brushes, Hand-Mirrors, &c.; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view showing such a blank or shell as I employ, in the first stage of its development. Fig. 2, a view showing the blank in its second stage, its closed end having been operated on to partly develop the handle. Fig. 3, a view showing the blank or shell after the handle has been developed. Fig. 4, a view showing the blank having a portion of its open end cut away preparatory to the development of that end of the blank. Fig. 5, a view showing the open end of the blank opened out and flattened. Fig. 6, a view showing the said flattened end of the blank after it has been trimmed into oval form. Fig. 7, comprises plan and edge views of the blank after the edge of its trimmed open end has been drawn up to form a rim or flange. Fig. 8, an edge view of a brush made in accordance with my invention and broken away to show how the edge of the rim of the open end of the shell is drawn inwardly over the backing of the brush, which is thus held in place.

My invention relates to an improved method of making sheet-metal mounts for brushes, hand-mirrors, and kindred articles, the object being to produce, at a comparatively low cost for manufacture, a seamless, sheet-metal article of high finish, and pleasing and convenient form.

With these ends in view, my invention consists in first forming a tubular blank or shell, closed at one end, then reducing the closed end of the shell, and developing it to form a handle, and then developing the other end of the shell or blank to adapt it to receive a brush or other object.

My invention further consists in a method having certain other steps and details as will be hereinafter described, and pointed out in the claims.

In carrying out my improved method, I first draw a short, tubular shell A, closed at one end, in diameter about equal to the width to the outer end of the mount which it is designed to produce, either round or oval in cross-section, and drawn to the size demanded by the size and character of the mount to be produced. This shell or blank represents the first stage in the development of the mount. Having secured it, I reduce its closed end by stripping, drawing, spinning or otherwise, to form the partially developed handle B, shown by Fig. 2 of the drawings, which represents the second stage in the development of the mount. The partly developed handle is then spun to form the handle C, which, as shown by Fig. 3 of the drawings, is smaller in its largest diameter than the diameter of the partially-developed handle B. After the handle has been formed, as described, it may, if preferred, be flattened, according as it is desired to have the handle of the completed mount round, or, slightly flattened, as is common in brushes and hand-mirrors.

In the remaining figures of the drawings, the handle D, is shown as slightly flattened. To do this, the handle is filled with tallow, resin, sand, or some other suitable material to prevent it from caving in, and then subjected to pressure between suitable dies. This may be done either before or after the development of the other portion of the shell has begun. The development of the other or open end of the shell or blank will depend for its character upon the use to which the mount is to be put, *i. e.*, whether it is to receive a brush, mirror, whisk-broom, or other article. As shown herein, the open end or main-portion of the blank or shell, is developed to receive a hair-brush. With that end in view, a large segment is cut longitudinally from the open end of the shell, as shown at E E E in Fig. 4 of the drawings, the cut beginning at the inner end of the handle, and extending outward through to the outer open end of the shell. The said end of the shell so cut, is now opened and flattened out, as shown by F, in Fig. 5 of the drawings, and then trimmed into the oval form G, shown by Fig. 6 of the drawings.

The next step in the method is to draw up the edge of the oval thus formed, to form a rim or flange H, as shown by Fig. 7 of the drawings, and to strike or otherwise shape the metal within the said rim into concavo-convex form, as shown by I in the said figure, whereby the said end of the mount is increased in capacity, and room made for the backing of the brush J, and the exterior contour of the outer end of the mount fashioned in harmony with the lines of its handle. The brush J, is then set within the said flange or rim, the edge of which is then drawn down to hold the same in place, as shown by K, in Fig. 8 of the drawings. The mount thus produced by my improved method, is seamless and strong, and capable of holding, without deterioration, a very high finish, whereas mounts having seams require special finishing to conceal them, which cannot well be done so that they will not reappear when the article has had some use. My improved mount may also be made in pleasing and convenient shapes, and at a comparatively low cost, considering the quality of the product secured.

I do not limit myself to developing the open end of the blank or shell in the particular manner specified herein, as in developing it for other objects than brushes or mirrors, it might be treated differently from the manner shown and described.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A method of making sheet-metal mounts for brushes and kindred articles, consisting in first forming a tubular shell or blank, closed at one end, then reducing the closed end of the shell and developing it to form a handle, then cutting, opening out, and flattening and developing the other end of the blank to adapt it to receive a brush or other object, substantially as described.

2. A method of making sheet-metal mounts for brushes and so forth, consisting in first forming a tubular shell, closed at one end, then reducing the closed end of the shell and developing it to form a handle, and flattening the same after filling it with some substance to prevent it from caving in, and cutting, opening out and flattening and developing the other end of the blank to adapt it to receive a brush or other object, substantially as described.

3. A method of making sheet-metal mounts for brushes and so forth, consisting in first forming a tubular shell, closed at one end, then reducing the closed end of the shell and developing it to form a handle, then cutting away the other end of the shell longitudinally to remove a large segment of it, then opening out, flattening and trimming the said end, and then drawing up the edge of the said trimmed portion of the shell to form a rim or flange, the edge of which is afterward turned inward to hold a brush or other object placed within it, in place, substantially as described.

4. A method of making sheet-metal mounts for brushes and kindred articles, consisting in first forming a tubular shell or blank, closed at one end, then reducing the closed end of the shell to partially form the handle, then spinning the said partially formed handle to further develop it, then cutting away the other end of the said shell longitudinally to remove a large segment of it, then opening out, flattening and trimming the said end, then drawing up the edges of the said trimmed portion of the shell to form a rim or flange, the edge of which is afterward turned inward to hold the brush or other object placed within it in place, and imparting a concavo-convex form to the metal inclosed by the said rim or flange to increase the capacity of the said end of the mount, and give it an ornamental form, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN LINES.

Witnesses:
M. L. SPERRY,
C. W. DEMOTT.