

LEAD INDUSTRIES ASSOCIATION, INC.

202 MADISON AVENUE

NEW YORK 17, N. Y.

September 18, 1962

SUBJECT: REPRINT FROM
"HOUSE BEAUTIFUL" ON LEAD

To Members of the Lead Industries Association, Inc.:

We are attaching a copy of the article entitled, "Discovering the Beauty of Lead," which appeared in the June, 1962 issue of HOUSE BEAUTIFUL. The author, Ernst Amerbach, discussed the article with LIA staff prior to publication. We did not, of course, supply him with the cost figure of 50 cents a pound for sheet lead which he mentions in the article.

Additional copies are available free of charge in quantities up to 25 and at our cost of 28 cents each for larger quantities.

Very truly yours,

David M. Bordin
David M. Bordin

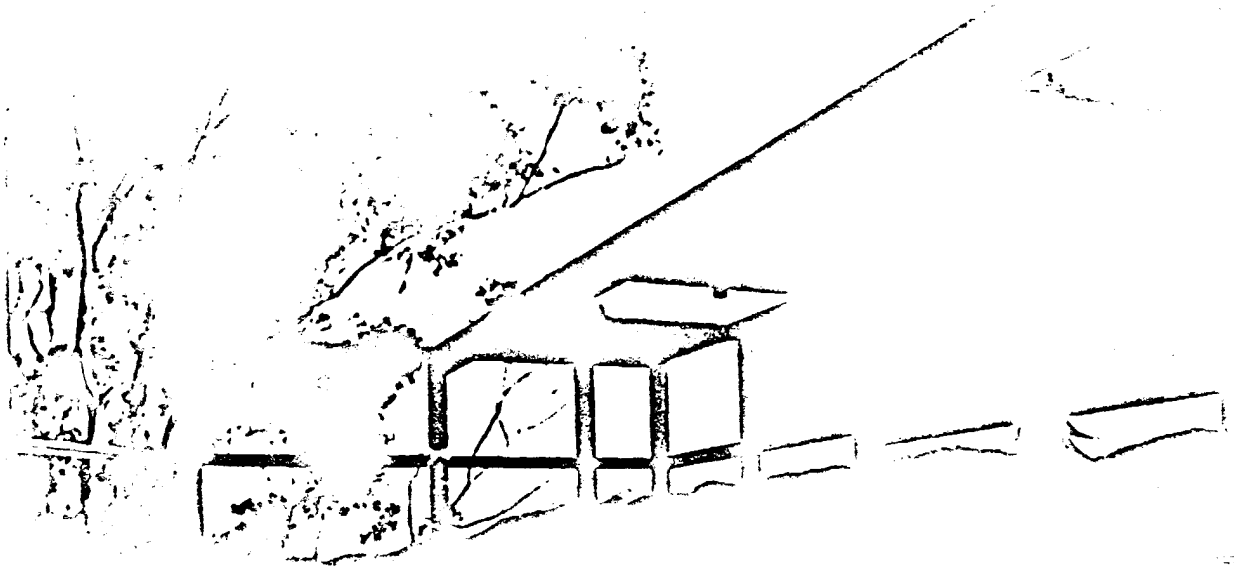


Look Ahead with Lead

House Beautiful

A 2,000 sq. ft. house
representative

What you get for \$10,000
in Washington, D.C.



No. 9 in the Series: How to Explore and Exploit the Nature of Materials

Discovering the Beauty of Lead

Lead in sheet form is the easiest of all common metals to cut, shape, and form. You can use it to create countless objects of uncommon beauty.

By ERNST ALLENBACH

For centuries lead has had inspired use in garden statuary, fountains, public signs, as well as in architectural ornamentation and structure. The reason is simple: lead is a material of quiet, understated beauty, and it is easy to use. You don't need a vast array of special equipment. You need only a few everyday tools and patience to shape it to your will and create countless objects, both useful and decorative.

Immune to corrosion and rusting, lead is ideal for use outdoors. It needs no special care or maintenance. Time and weather are kind to lead, softening its already soft gray color to one that is a perfect foil for flowers or foliage and a pleasing complement to cut stone, natural rock, brick, and painted or unpainted wood.

The method used in the fabrication of lead objects is casting. Casting makes possible a comparatively rapid and endless fabrication. But cast objects are heavy in proportion to their bulk, and this means added cost. Aesthetically, they usually lack definition and clarity. Of special importance to us, the casting of any metal is not a task to

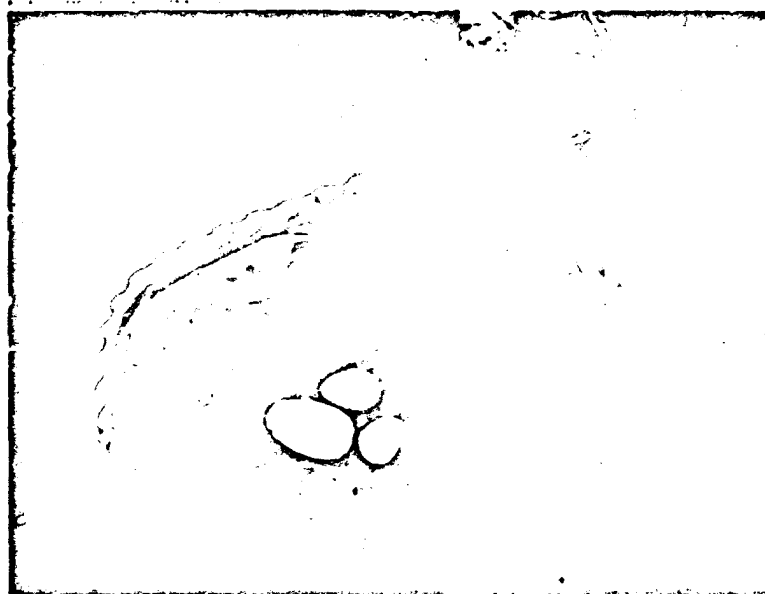
be undertaken lightly in a home workshop or without some special skill and experience.

These disadvantages are avoided if lead in sheet form is used. It is cut with tin snips and easily joined by soldering. If added rigidity is needed, the lead can be overlaid on a stiffening form of wood or applied as an overlay on a commercially available item which you wish to decorate and upgrade. Lead is an industrial material. The uniqueness and irregularities of its fabrication are a part of its charm. If worked with the casualness proper to its nature, it assumes a character that is unique and gratifying. The little errors you do make add interest to the result.

Detailed directions are given here for making the bird bath and reflecting pool illustrated on these two pages. Neither of these is beyond the abilities of a normally aware and interested person. Those either or both of these jobs projects are done, a personal technique will have been acquired ample enough to cope with any of the projects shown on the pages which follow. As your technique will be personal and your needs individual, it is highly improbable that you will want to make a spitting image of any of the projects shown, which is as it should be.

Smaller variations of the bird bath make excellent plant containers for either indoors or outdoors. An unglazed version is ideal for a house. Small leftovers can be folded or bent into ash trays. Prominently placed fence posts can be capped with lead, which can be unimpeachable as well as a help in checking weathering.

Lead is useful in masking or shielding exposed lights in outdoor illumination. For homes (Please turn the pages)



A Bird bath and bird bath, like that shown at left, is a simple project, but it can teach you much about the nature of lead, and enable you to go on to more elaborate projects like those shown on the pages which follow. All projects are made with 1 pound sheet lead, readily available from plumbing shops. Lead is an enduring metal, requires no maintenance.

This reflecting pool, measuring 12" square and 6" deep, can be made of lead placed over a cedar or redwood form. A single sheet of lead covers the bottom, sides, and extends downward on the outside. Thus the corners are fitted separately. Lead is so tractable, it can be fitted by hand, forced into place. You can have the wood form made at a millwork shop.

For complete step by step instructions on how to make the bird bath and the quadrant-shaped reflecting

DISCOVERING THE HEAVY OF LEAD

(Continued from PAGES 104)

bought in your locality, you are urged to experiment with them, particularly in the making of free-standing objects (use of silver and lead in the bird bath, for example, would permit a simpler construction of the sides and at the same time more complexity and greater freedom in the style and depth of the fluting.

The heavier weights are excellent in the fashioning of trays and naturalistic shapes, such as leaves. Objects that are to be raised or heated inside but would also best be made of the heavier weights, or you can get an alloy called automotive lead. It is more costly than common sheet lead. However, there is no need for it in your earlier projects.

Sheet lead can be bought at plumbing supply houses, well-stocked plumbers' shops, and sheet metal shops. Because of its weight, transportation is a considerable factor in the price of lead, but fifty cents a pound is a generous average. A square foot of four-pound lead will thus cost about two dollars.

Lead can be used in conjunction with all common metals, except aluminum. In contact with lead, the like of aluminum is sheet. Metals like copper, brass, and pewter can enhance a lead project by giving it the accent of another color or sheen. (Complete details on working with pewter appeared in the January, 1962 issue of *Home Mechanics*, page 90.)

Straight sides, and extend 4 inches downward on the outside. This is placed on a cedar or redwood form which has been assembled with brass screws. The quadrants of the form are hand-bored from solid blocks, between 1/2 inch wide, spaced 1 1/2 inches apart, are cut into the top of the straight sides. You can have the form made for you at a woodworking shop.

The form is placed on the lead and its outline traced. The form is then removed and another line is scribbled inside the profile of the quadrants at a distance equal to the thickness of the quadrant wall, which should be approximately 1/4 inch. Cut these corners out of the sheet.

You lay the sheet inside the form and ease it into place. At this

point, a willing but more assistant would be most helpful. If you can't complete the fitting by hand, use a hammer, but avoid all but the gentlest blows. Use a wood block. Don't strike the lead directly.

Next, fit pieces over the quadrants and solder them to the underlying lead with soft solder. As there is a considerable mass to be heated while soldering, it's a good idea to supplement the heat of the soldering iron with that of a small propane hand torch. After soldering is complete, check the pool for leaks by filling it with water.

To flute the top edges, clamp pieces of wood on each side 1/2 inch below the top. Drive the lead gently into the grooves, the lead flaring slightly over the pieces of wood clamped on the sides.

Tools For Working With Lead

Common tools:

Heavy pliers—type with slip joint is best.
Soldering iron—gun
Torch—propane
Tin snips—8 inch
Ball pen hammer
C-clamps—8 inch

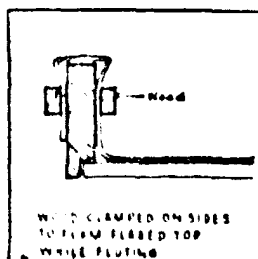
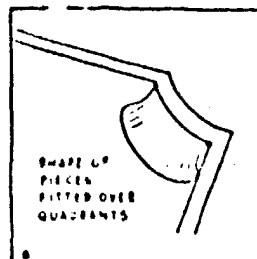
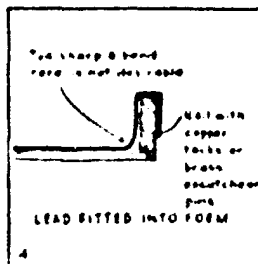
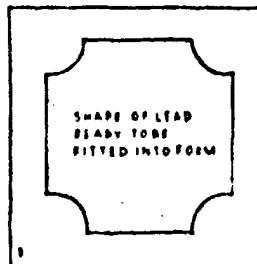
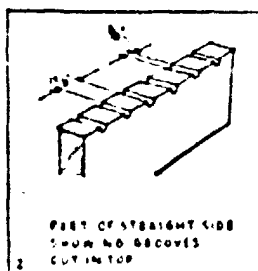
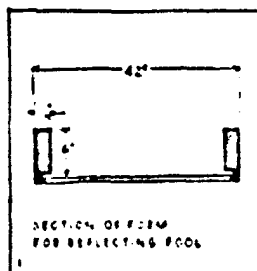
Materials:

Sheet lead (1-pound)
Soft solder (60/40)
Soldering flux

Special tools:

(These special tools are available from: All Craft Tool and Supply Co., 15 W. 14th St., New York 16, N.Y. Order numbers are from their Catalog No. 62.)
Hammer—No. 254
Mallet tool—No. 336 (there is a choice of six styles)

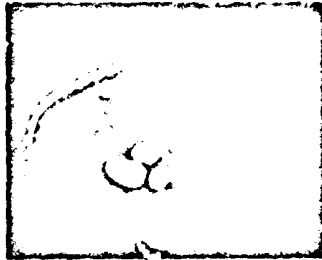
Follow these diagrams to make the pool



Here is how to make this reflecting pool



A pool measuring 12 inches square and 6 inches deep is a container as large as 7 feet square. Use a single sheet of 1-pound



Making this lead both will sharpen your skills

This pad is 16 x 24 inches when finished. After deciding on the size and shape, add 1/2 inch more on all sides of bottom to be turned up as a lip. Scribe a guide line 1/2 inch

in from the edge of the sheet, then proceed as shown in the series of steps below.

The average time for a beginner to complete project is 12 hours.

