

SculptureHouse

38 EAST 30th STREET
NEW YORK 16, N. Y.
ORegon 9-7474



working in **sculp-metal**

THE NEW PERMANENT MODELING METAL

No. 2 Sculp-Metal Kit\$ 4.00

Bulk Prices:

3 lb. can Sculp-Metal	5.00
12 lb. can Sculp-Metal	17.00
60 lb. drum Sculp-Metal	75.00
1 pt. Sculp-Metal solvent	1.00
1 gal. Sculp-Metal solvent	4.95

**IT MODELS LIKE CLAY—
HARDENS INTO METAL!**

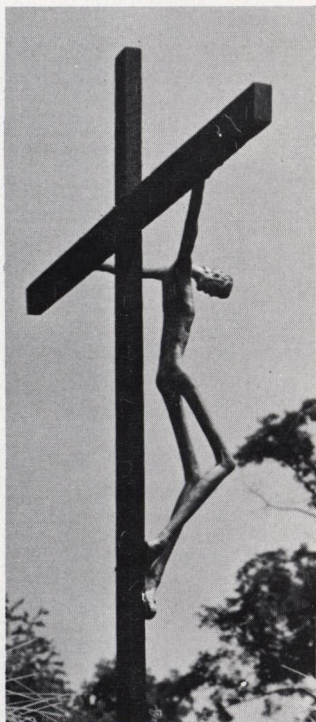
introduction—

This booklet is presented as a guide to those who wish to work in a fascinating new medium — Sculp-Metal*. Working sculptors, artists and craftsmen will find Sculp-Metal a medium of expression with a practical, as well as aesthetic quality. Full, round sculptures, base-reliefs, semi-reliefs, models, miniatures and other projects can be made by professionals, students and hobbyists alike.

Designers, modelmakers, teachers will find Sculp-Metal a useful material for all types of projects. Mosaic makers and enamelists will find it an easy to use, durable material for mounting tiles and enamels.

the sculp-metal company

Pittsburgh 22, Pennsylvania



**They Hung Him
Up To Die.**

by J. A. Petrencs

58" Sculp-Metal
figure built around
screen armature.

sculp-metal

**WHAT IT IS . . .
AND HOW TO USE IT**

Sculp-Metal, the Permanent Medium
That Models Like Clay—
Hardens Into Metal
Has Many Interesting
Creative Possibilities

what sculp-metal is—

Sculp-Metal is a newly developed aluminum compound which lends itself amazingly well to modeling. Permanent sculptures can be created quickly, easily and economically. No intermediate steps are needed to complete a work since Sculp-Metal itself represents the final medium. Sculp-Metal is not a plastic but a true metal which air hardens without chemicals, heat or baking.

As it comes from the can, Sculp-Metal is like putty. It is applied with a palette-knife or the fingers. It is spread in a smooth or rough texture. It begins to surface dry immediately so that large areas may be built-up with little effort. It completely hardens and cures upon exposure to air.

Among the exceptional characteristics of Sculp-Metal are its versatility, convenience and economy. Since it is a "direct" medium it lends itself to fresh and vital expression. It can be used in studio, work-shop and classroom alike since no heat, flame, flux, complicated tools or equipment are needed. Permanent pieces can be created at a fraction of the cost of hot-metal or plaster casting. Being aluminum, it is light weight. One pound of Sculp-Metal has the approximate volume of three pounds of bronze or five pounds of lead.

sculp-metal properties

Sculp-Metal doesn't chip, crack, expand or shrink. It is harder than lead; will not rust or corrode; has a high impact resistance; and withstands temperatures up to 350° F. It resists water, greases, oil and most acids; and stands up well outdoors. Sculp-Metal adheres to metals, wood, plaster, leather, fabrics, ceramics and some plastics. It is an excellent base for lacquers, synthetic enamels and oil base paints.

direct modeling—

Sculp-Metal is applied directly to pre-shaped wire forms or armatures. Layers are built-up until the required contours are obtained. In making large figures and reliefs, Sculp-Metal is applied over hollow-core armatures as a matter of economy and for maximum structural strength.

A piece may be made in one work session, or over several. Thick masses are built-up in successive $\frac{1}{8}$ " layers, permitting each layer to surface dry before applying the next. Multi-layers fuse together. For complete hardening, typical drying times are: $\frac{1}{32}$ "-- $\frac{1}{2}$ hour; $\frac{1}{16}$ "--2 to 3 hours; $\frac{1}{4}$ "--6 hours or more. Infra-red lamps speed hardening. After a piece is built-up, it is set aside to completely harden for 2 to 3 days before finishing.

finishing and coloring—

After hardening, Sculp-Metal is smoothed with files, then sanded, steel-wooled or buffed to a high aluminum luster. Sections may be cut, sawed, carved, ball-peened and otherwise worked. Designs may be incised into finished objects. For an extremely high luster, burnish pieces with burnishing tool or back of teaspoon.

Polished Sculp-Metal is natural aluminum. Finished pieces may be patinaed to resemble bronze, brass, lead, etc., by using shoe dyes of the desired colors, available from variety stores. Dyes are applied after polishing. Finally, projects should be coated with protective clear lacquer.

TOOLS AND MATERIALS ARE FEW

Tin shears, pliers, palette knife, shoe rasp, files, steel-wool and sandpaper put you in business. Use heavy steel clothesline wire for small figures, hardware cloth for hollow-core armatures. Bind parts together with thin wire.



Ronald Schwerin filing his Sculp-Metal figures "My Brother's Keeper," made over heavy clothesline wire armature.

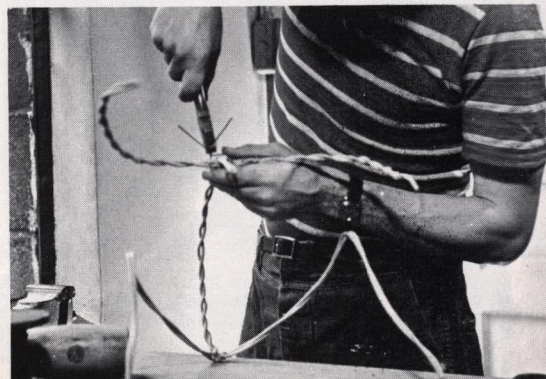
let's make a figure—

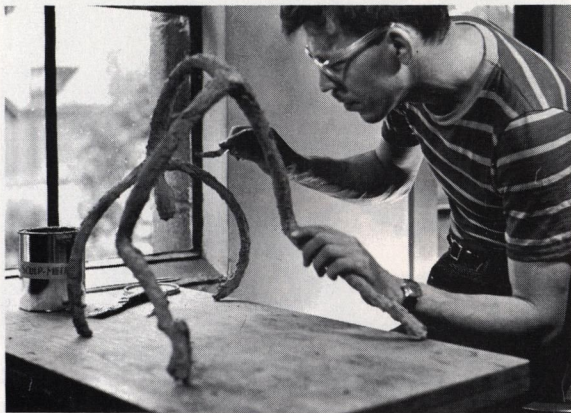
All types of projects can be made in Sculp-Metal. But to get the feel of this fascinating "wonder" metal, start with a simple sculpture. Then you'll see for yourself how easy it really is.

The photos which follow show a seated figure as it progresses from a roll of wire and 3 pounds of Sculp-Metal to a finished sculpture. While the figure is simple, in making it you go through all the steps followed in making the most complicated project or model.

So—let's go! The photographs will guide you . . . the captions will tell you how.

Make basic figure from heavy steel clothesline wire, twisting and interlocking wires to desired shape. Bind separate parts together with thin wire. Push Sculp-Metal well into all points of assembly and let harden.





2

Over armature, apply $\frac{1}{8}$ " layer of Sculp-Metal and let dry. Continue building-up figure in thin layers, rough modeling as you progress. Let harden a few days after modeling is complete.

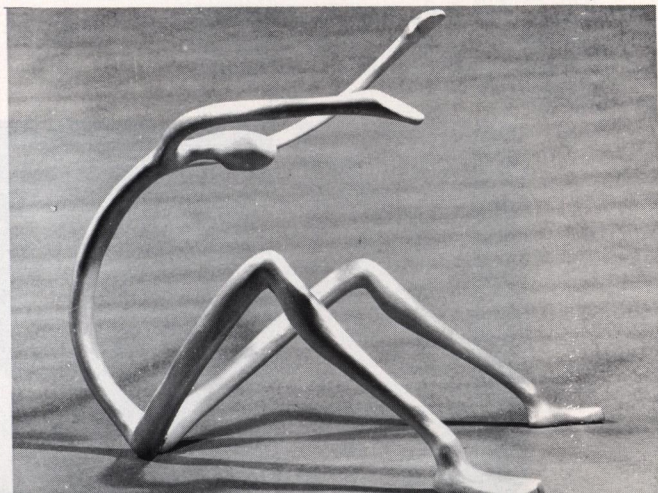


3

After hardening, rough file with rasp. Fill in pits which appear during filing with Sculp-Metal. Finish with finer files, sandpaper, steel wool. Burnish for high aluminum gloss. For other colors, use dyes.

SEATED MAN

3-lbs. Sculp-Metal



making a sculpture

over a hollow-core armature

Large and complex sculptures and models can be made easily by applying Sculp-Metal over hollow-core armatures. The procedure is simple. The basic shapes (cone, cylinder, square, oval, etc.) are first constructed of $\frac{1}{8}$ " or $\frac{1}{4}$ " hardware screen. The shapes are then fastened together with binding wire and the secondary forms are added. After the armature is completed, Sculp-Metal is worked well into all points of assembly. Next the entire armature is covered with a $\frac{1}{8}$ " layer of Sculp-Metal—then put aside to harden for a few days. This coating when hardened forms a solid base upon which to model subsequent shapes. Finer details such as the collar, hands, hair, ears, etc., of "The Shaker Man"—are built as solid forms.

Interesting textures are achieved easily with Sculp-Metal. They include: Cross-Hatching with coarse rasps, Surface-Smoothing with palette-knife, Flowing thinned Sculp-Metal over pieces, Ball-Peening and Chasing. Unusual surfaces result from making impressions of fly screen, rough bricks, etc., into soft Sculp-Metal. Experiments will reveal others.

The photographs that follow show the step-by-step procedure. Try it for yourself.

1



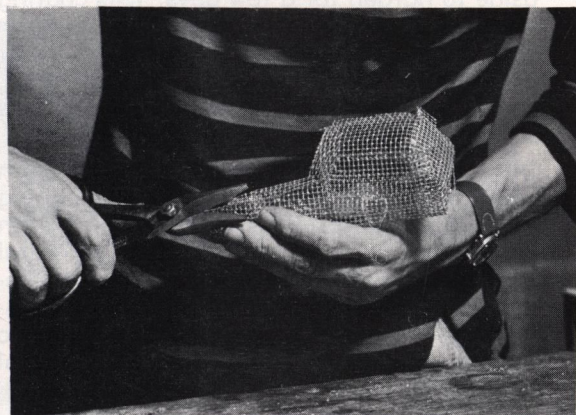
From $\frac{1}{4}$ " hardware screen cut large piece for body. Form into tubes; fasten together with thin binding wire. Flatten finished body into elongated oval shape.

2



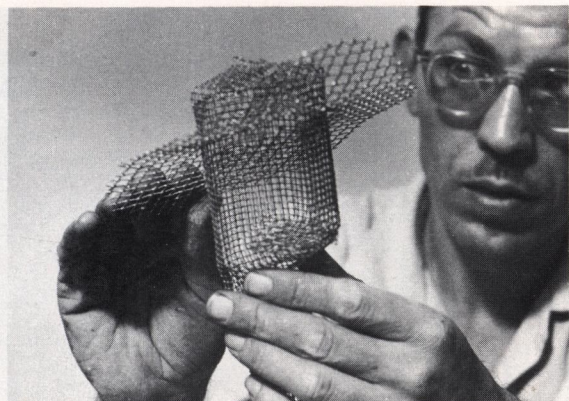
Make four tubes from $\frac{1}{8}$ " hardware screen. Two for arms, two for legs. Bind sides together with thin wire. Note completed tube at right.

3



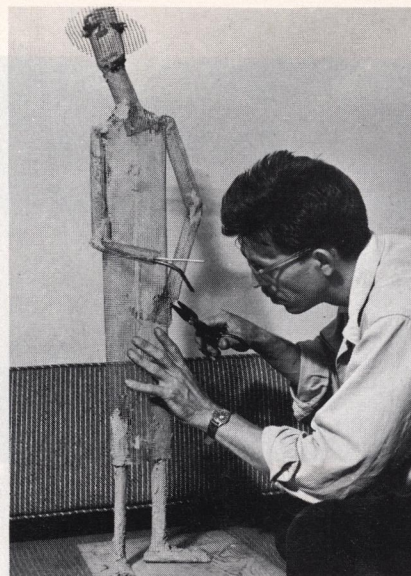
Fashion head and neck from tube made of $\frac{1}{8}$ " screen. Cut pie-shaped wedges from top of head and curve remaining tabs together to make crown. Form neck as tube.

4



Form shoulders. Fasten head and neck to body. For hat, cut hardware screen into doughnut shaped brim, wire into position. Give the brim a graceful curve.

5



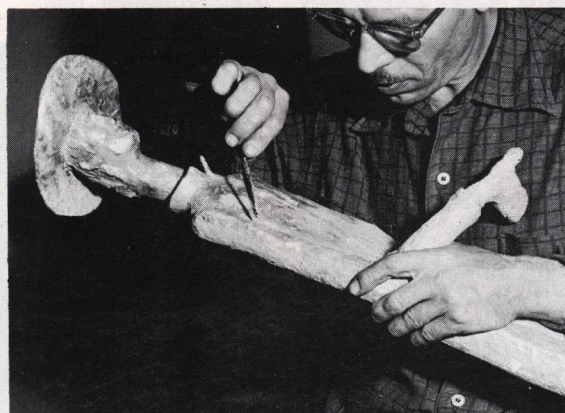
Wire arm and leg tubes to body. Fashion shoes and hands from scraps of screen. Daub all points of assembly with Sculp-Metal. Allow to harden.

6



Cover figure with $\frac{1}{8}$ " layer of Sculp-Metal. Build up features, hair, hands, etc., as solid forms while work progresses.

7



Continue building up forms. Details need not be refined; they may be filed or carved to shape after hardening. Compact Sculp-Metal well.



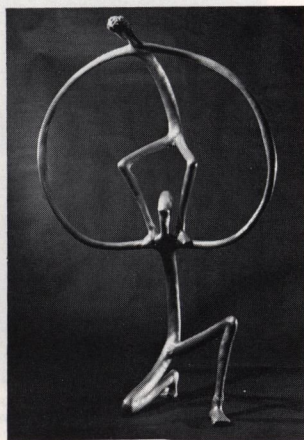
File face, hands and other areas to final form. Fine files or chisels will reach the "tight" spots. Leave coat, shoes, hair, hat unfilled. Steel-wool to final patina.

While a sculpture was made to illustrate working in Sculp-Metal, the same method is used for making plaques, planters, trays, and similar projects. Instead of a piece of sculpture, the project could be a model boat, car or plane made from hardware cloth, cardboard, wood, etc. and Sculp-Metal.



THE SHAKER MAN
39" High
7-lbs. Sculp-Metal

ACROBATS
35" High
6-lbs. Sculp-Metal



Metalize baby shoes by brushing several coats of thinned Sculp-Metal over them. Let each coat dry before applying next. When hardened, finish with fine steel-wool. For a high, mirror-like finish, burnish shoes with back of teaspoon.

metalizing with sculp-metal

Almost any object can be given an aluminum coating by using thinned-out Sculp-Metal. A mixture of 1-part Sculp-Metal and 1-part Thinner is brushed or sprayed over the project. About 4 or 5 coats are a good thickness, but allow each coat to dry for at least 1/2 hour before applying the next. After the last coat, let project dry for 2 or 3 days. When hard and firm, polish with fine steel wool for rich aluminum patina. For a mirror-like finish, burnish with the back of a teaspoon.

Gold or bronze finishes are created by applying shoe dyes or transparent colored lacquers. Sculp-Metal will coat cardboard, wood, plaster, leather, canvas and other materials. Baby shoes, baseballs, trays, plaster novelties and other objects can be metalized quickly and easily.

Thinned out Sculp-Metal or Sculp-Metal as it comes from the can may be used on paintings, too, to gain unusual metallic effects. After painting is dried, Sculp-Metal portions should be polished.

sculp-metal offers
unlimited possibilities
in arts and crafts

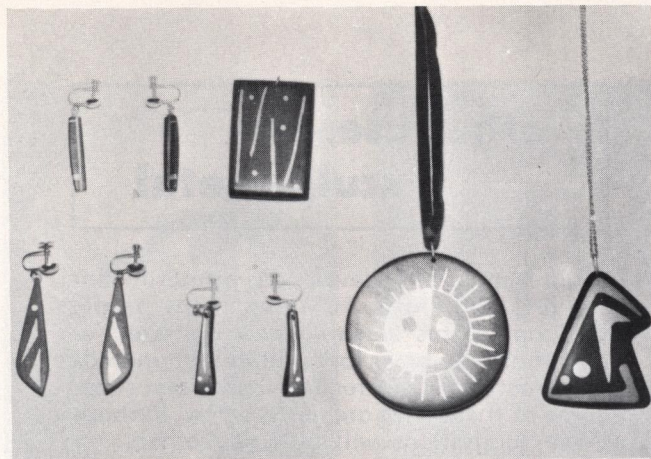
Sculp-Metal is such a new medium, its full versatility is still unknown. It allows the creative artist, craftsman, teacher and hobbyist many opportunities to experiment and develop individual techniques. A few applications are suggested here. Many more are within the range of this remarkable metal that resists weather and aging.

DESIGN — Wood and plaster models may be metal coated with Sculp-Metal. Or cores can be made from hardware cloth and modeled in Sculp-Metal. Design changes are easily accomplished by cutting away or building-up.

MOSAICS — Sculp-Metal is used to anchor mosaic stones and tiles to bases. Outstanding effects can be obtained by using Sculp-Metal between the individual pieces to make them look like they are inlaid in metal. Too, enamels can be bonded to backings with Sculp-Metal.

CRAFTS — Lightweight marionette parts can be made with wire screen and Sculp-Metal. Scraps of screen can be converted

Brother Cornelius, working on the Keith Memorial Plaque, St. Mary's College, California. The Sculp-Metal plaque has been placed at Edwards Field, University of California, Berkeley, California.



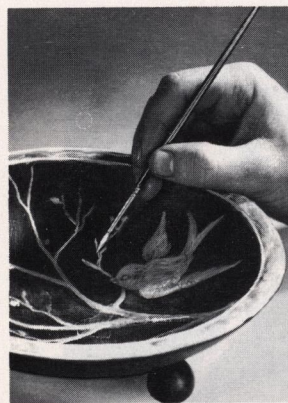
Jewelry making with Sculp-Metal is easy. Earrings, brooches and pins may be created from scraps of hardware cloth and Sculp-Metal. Carved wood and ceramic jewelry may be inlaid with Sculp-Metal. Inlaid ebony jewelry illustrated made by Gordon G. Pond.

into unusual jewelry. Stones, gems, shells and other ornamental odds and ends may be mounted in Sculp-Metal to form attractive brooches, pins, etc.

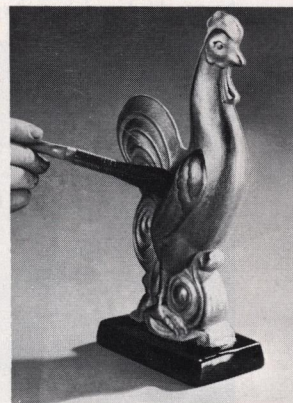
HOBBIES — Cigar boxes, candlesticks, flower pots, old wooden legs from tables and chairs—in fact, almost anything—can be turned into attractive objects with a beautiful metal patina with Sculp-Metal. Decoys, weathervanes, planters are just a few of the many projects which suggest themselves.

INLAYING — Interesting inlays can be easily made in wood surfaces by gouging out the designs with a sharp knife or gouge, then filling the grooves with Sculp-Metal. After hardening, the Sculp-Metal is sanded down and polished even with the surface.

Designs are easily painted on wooden bowls to create a raised metal effect. Photo.—courtesy of Popular Mechanics.



A plaster rooster becomes a conversation piece by coating it with Sculp-Metal. Photo.—courtesy of Popular Mechanics.



other uses for sculp-metal

Sculp-Metal was developed primarily for the arts and crafts. However, many people working in this versatile new material report that they have found literally hundreds of "practical" uses for it in home and shop. Some of these uses are listed below. Perhaps these suggestions will give you others.

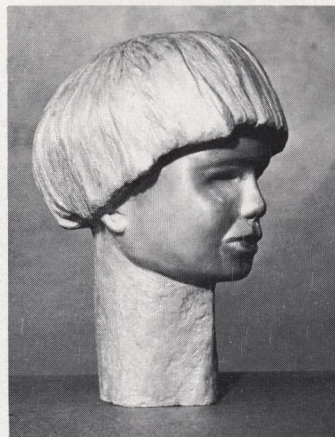
MODEL MAKING — Metalizing solid models. Making fillets and streamlining joining parts. Repairing and replacing broken parts. Mounting engines, wheels and similar components to models.

MARINE USES — Thinned-out Sculp-Metal is widely used over canvas decks, planking, etc., because of its amazingly water-proof qualities and because it holds up under all weather conditions. It can also be used anywhere in a boat to fill in or rebuild broken parts such as transoms, stems, keels, etc.

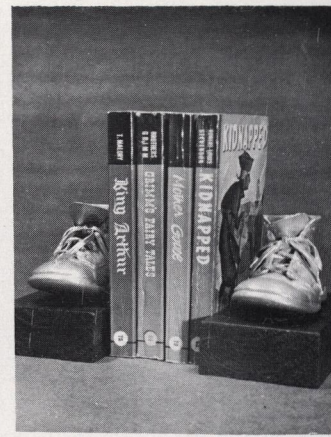
HOUSEHOLD USES — Filling cracks and holes in walls and woodwork. Tightening loose screws. Sealing pipe holes, leaky window frames and cracked sinks and tubs.

SHOP USES — Many industries use Sculp-Metal in their operations, particularly in the aircraft and plastics fields. Because Sculp-Metal is weather and chemical resistant and is not affected by heat or cold, acids or alkalies, it is widely used for sealing cracks, lining vats, pattern making, and in all types of maintenance.

YOUNG BULL 24" long, 6-lbs. of Sculp-Metal. Armature of solid wire and hardware screen. Sculp-Metal thinned and flowed onto body and polished after hardening. Horns and hooves filed and burnished.



YOUTH 14" high, 3-lbs. Sculp-Metal over hollow armature; features built-up. Note variations of textures in head.



BABY SHOE BOOK ENDS Metalized and screwed to wooden blocks, baby's shoes become book ends or paper weights.

points to remember:

- Build figures over rigid wire or hardware screen armatures. Hollow-core armatures save Sculp-Metal.
- Build up large masses in $\frac{1}{8}$ " layers of Sculp-Metal, allowing each layer to dry before applying the next.
- Let pieces dry thoroughly before filing or otherwise finishing. A few days curing strengthens Sculp-Metal.
- To smooth pieces to a perfectly even surface, file, then burnish with back of teaspoon.
- When using Sculp-Metal for spraying and painting, reduce with approximately equal parts of Thinner.
- Recondition Sculp-Metal which has hardened in can with Sculp-Metal Thinner. Some types of lacquer thinner may also be used, but test them first.
- Sculp-Metal is not recommended for casting in molds or applying over oil-base, non-hardening clay.
- Do not use Sculp-Metal or Thinner near open flame as it is inflammable. Work in well ventilated area.
- Follow instructions carefully when making your first few projects. Keep this handbook for reference.
- Sculp-Metal is a new medium of arts and crafts. You will find that as you work in it, you'll develop your own style and techniques and the flexibility of the material will amaze you!

sculp-metal has been featured in:

- Newsweek
- Popular Hobbies
- Popular Mechanics
- Ceramic Monthly
- American Artist
- Design
- Crafts and Hobbies
- Popular Science

sculp-metal

THE PERMANENT
PLASTIC METAL
SCULPTURAL MEDIUM



**It Models Like Clay—
Hardens Into Metal**



Sculp-Metal—3 & 12-lb. Cans
Thinner—1-pt. & 1-gal. Cans

the sculp-metal company
701 Investment Bldg., Pittsburgh 22, Pa.