

22A



COPPER
in
CENTURIES
of
SERVICE

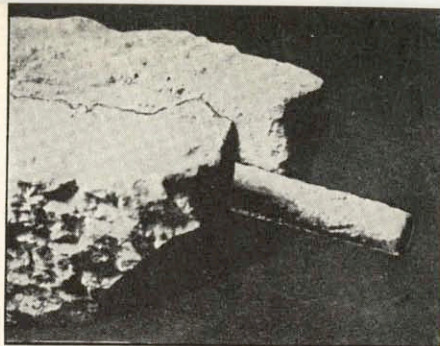
GREAT SERVICE TO MANKIND

♀ The history of mankind through the centuries is written in the enduring metals—Copper and the Copper Alloys.

From our slow emergence out of the stone age down to the rapid progress of the present era of civilization one step after another has been on the solid footing of Copper, Brass or Bronze.

Copper first was used about 8,000 B.C. By 3,000 B.C. knowledge of the metal had

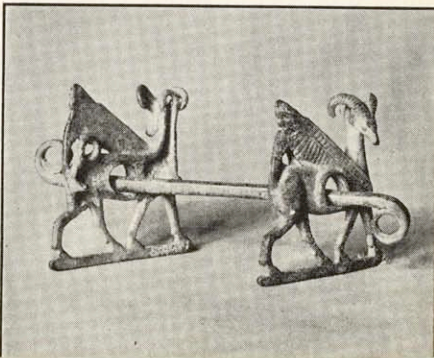
Section of
Copper Pipe
Unearthed at
Ghizeh, Near
Tomb of An
Egyptian King
and Believed
to be 5,400
Years Old.



spread through the great nations of the time. The Phoenicians were the first Copper traders, bringing it from the Island of Cyprus, from which the word Copper was derived.

Legend has it that Aphrodite—the Greek

Bronze Bit for
a Horse, a Relic
of Luristan, in
Persia. This Old
Ornament Prob-
ably Saw Ser-
vice About 3,-
000 Years Ago.





Lunkana Cross,
an Ancient
African Coin of
Peculiar Shape;
made from Cop-
per and Used
for the Pur-
chase of a Wife.

name for the Goddess the Romans called Venus—rose in her beauty from the sea off the island and used Copper for her mirror. The Ankh circle with cross attached was the Egyptian symbol for enduring life, and also the symbol for Copper.

COPPER AN AID TO HEALTH



Copper's role as an aid to health is attested by its presence in nearly all foods. The medical profession considers Copper essential to health and prescribes it where it is lacking—as in anemia.

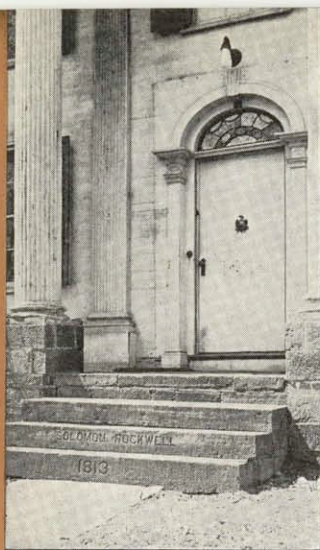
COPPER IN AMERICAN HISTORY



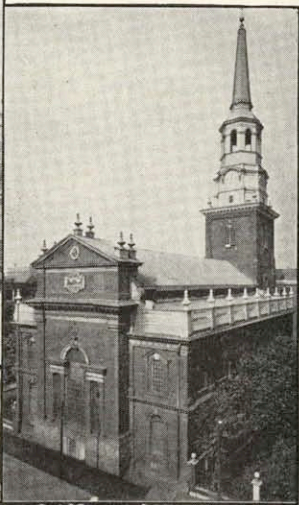
Copper was used by the Mound Builders and the Indians in America long before Columbus arrived. In fact Columbus scarcely had his first glimpse of the New World when Copper came upon the scene. Cruising off the coast of Honduras, he sighted a native canoe bearing a cargo of Copper hatchets.

The independence of the United States was rung out to the world on the metal, for the Liberty Bell was made of Copper Alloy.

Since 1749 the Copper Roof on Historic Christ Church, Philadelphia, has Stood Test of Permanency in Construction. Churches in all Sections of the Country have used Copper for Roofs and Spires, Adding Beauty to Endurance. ↓



Solid Bronze Hardware was Put on This House when it was Erected in 1813. Years of Hard Usage Have Left it as Good as New.



Bacon Home, Madison, Ga., Still Adorned by a Copper Roof Installed 100 Years Ago. Foresight then Saved Owners Costly Repairs For a Century.



COPPER'S USES IN THE HOME

♀ Copper, Brass and

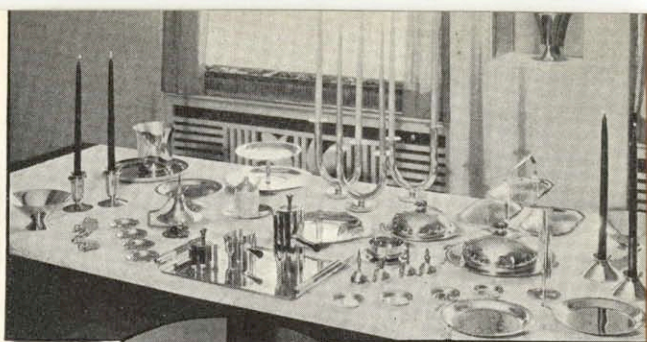
Bronze afford relief to the householder when he is weary of handing out money for repairs.

The use of these metals in the construction of the house provides long-run savings. Copper and brass pipe and tubing are permanent and insure an adequate flow of rust-free water. Copper flashings, gutters and downspouts (often lead-coated for certain architectural effects) need not be replaced every few years like rustable

metals. Solid Brass and Bronze hardware and lighting fixtures provide economy and satisfaction. Bronze screens stand up under weather attack. Copper radiators save space and are highly efficient.

Adequate electrical wiring and outlets add to the enjoyment of the home, provide safety and make for the convenient use of time-saving appliances. Copper cooking utensils have been used for years. They decorate the kitchen and aid in the preparation of the food. They take heat rapidly and evenly and are acclaimed by the great chefs in hotels and hospitals.

Copper, Brass and Bronze lend themselves admirably to decoration and practical service for lamps, book ends, vases, bowls, and countless other items.

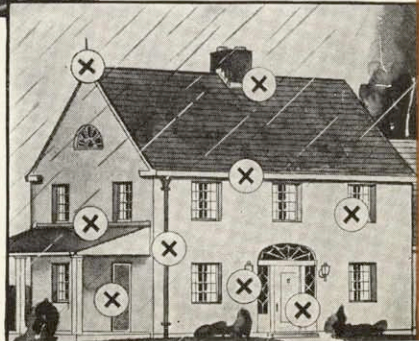


Distinction and Charm Radiates From the Table Decorated with Solid Copperware.



Left—Cookingware of Solid Copper Assists in Food Preparation by Speedy and Thorough Heating.

Right—X Marks the Spots Where Rust May Enter Your Home and Cost You Money Unless You Use Copper, Brass or Bronze...Downspouts, Gutters. Screens, Hardware, as Well as Water Pipes and Other Items.





NEW YORK



SAN FRANCISCO

COPPER IN MAJOR CONSTRUCTION ACROSS THE CONTINENT

Go where you will—New York, Chicago, San Francisco and the great cities between—the skylines are dotted with sturdy monuments to the lasting qualities of Copper, Brass and Bronze.

In major construction everywhere copper roofs—plain or lead-

coated—add beauty as well as stability to the architect's finest creations. Copper in one form or another is used effectively for vertical surfaces, band

courses, spandrels and storefronts. Bronzewindows adorn many fine structures.



CHICAGO

COPPER IN INDUSTRY



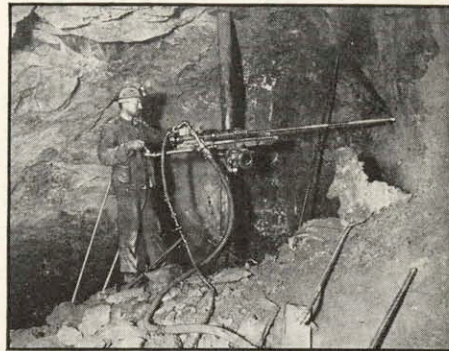
The easy working properties of Copper and its alloys, together with their freedom from rust, and proved durability, account for their wide use in the factories of the world.

Articles almost without number are made of these metals. In thousands upon thousands of machines they form essential parts. If it is not pure Copper itself that is used it is a Copper alloy—for technical research has seen to it that there is a

suitable composition for every manufacturing need.

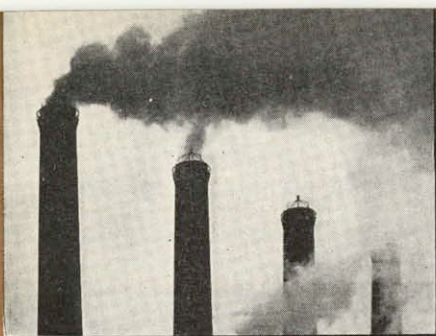
Technical research is continually widening the field. Among the recent develop-

Interior View of Copper Mine Showing How Ore is Drilled by Power Machines Before Being Hauled to the Surface in High-Speed Elevator Car.



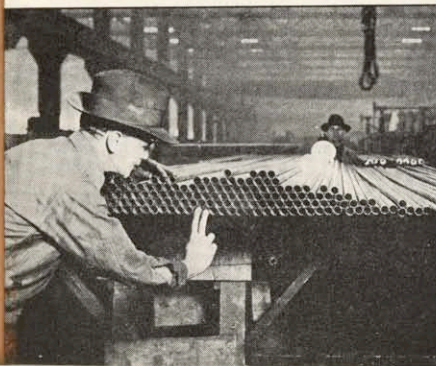
ments are alloys with the strength of steel, sheet Copper that is paper thin and springs of longer life.

In a great variety of industries Brass and Bronze castings and forgings are prolonging the life of machines.



Industries of United States Utilize Untold Tonnages of Copper and its Many Alloys in Manufacture of Countless Items of Everyday Use.

Copper alloys are available that have high tensile strength. Others may be welded, spun and stamped with definite production savings. Still others may be machined at such high speeds that the slightly higher cost of these better metals is more than offset by savings in machining time.



Skilled Men at Their Work in Brass Mill Inspecting Every Foot of Pipe to Make Sure High Standard of Workmanship is Maintained on all Orders

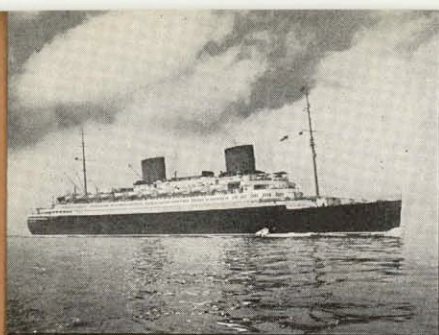
COPPER IN TRANSPORTATION



The record of modern transportation is a record of the use of Copper, Brass and Bronze.

A billion pounds of Copper serve the railroads. Another billion pounds is in the automotive industry, with 200,000,000 pounds consumed in a normal year. Subway and elevated lines and interurban and local trolleys also use a total tonnage equal to that of railroads.

Copper for centuries has been the metal



The Europa,
one of World's
Greatest Ships,
Relies on Cop-
per and Brass as
Proper Metals
to Safeguard
Against Losses
by Corrosion.

of the seas. The Bremen and the Europa, speed monarchs of the North Atlantic, each required 2,750,000 pounds in their construction, almost three times the total American consumption 100 years ago.



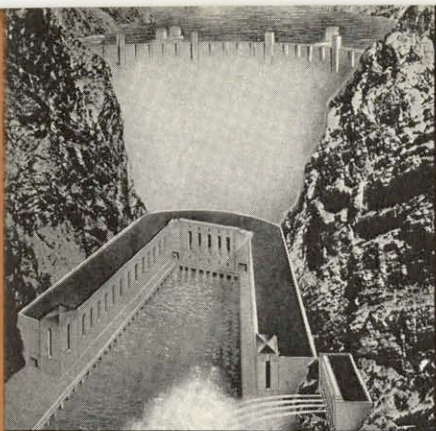
Tons of Copper
Pass Unnoticed
Day after Day
on Busy Streets;
They Ride on
Rubber Tires
as Vital Parts
of Automobiles
and Motor
Trucks.

LIGHT AND POWER



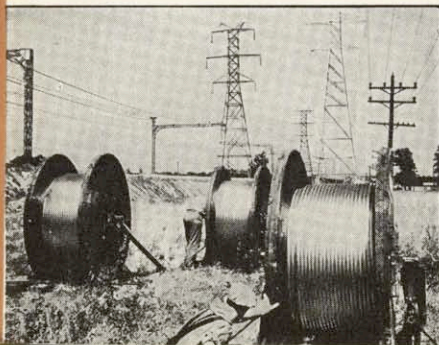
Copper, because of its high conductivity, is the foundation upon which the electrical industry and the numerous uses of electricity have been built. From primary generation to ultimate use for light or power, Copper's role is essential.

Copper is the metal in which the current is born in the generator. Through Copper bus bars and the Copper windings of transformers the electricity passes to high-



Hoover Dam, Great Power and Irrigation Project Now Being Built in Far West, to Use Copper in Distribution of Vast Energy.

tension lines. Copper transmission lines give long, trouble-free service. As the current is reduced in voltage until its ultimate use for light or power in some office or factory, it flows along Copper conductors.



Copper Cable Being Erected as an Addition to High Tension System Serving Electric Light and Power to One of Nation's Largest Cities.

CRYSTAL-COTE



Crystal-cote is

a new product developed by the Copper & Brass Research Association to permit the use of Copper in exposed situations without tarnishing. It is essentially a thin flexible silicate coating fused to the metal and preserves the original color and luster of the latter. New and striking color effects are also obtainable. It is expected to find many applications in industry. Information will be furnished on request.

MEMBERS OF THE ASSOCIATION

MINING COMPANIES

THE AMERICAN METAL COMPANY, LTD.
ANACONDA COPPER MINING CO.
BRADEN COPPER COMPANY
CALUMET & HECLA CONSOLIDATED COPPER CO.
CHILE EXPLORATION COMPANY
GRANBY CONSOLIDATED MINING, SMELTING
AND POWER CO. LTD.
GREENE CANANEA COPPER CO.
INSPIRATION CONSOLIDATED COPPER CO.
ISLE ROYALE COPPER CO.
KENNECOTT COPPER CORPORATION
MAGMA COPPER CO.
MIAMI COPPER COMPANY
MOTHER LODE COALITION MINES CO.
NEVADA CONSOLIDATED COPPER CO.
NICHOLS COPPER CO.
PHELPS DODGE CORPORATION
SHATTUCK DENN MINING CORP.
UNITED VERDE COPPER COMPANY
UTAH COPPER COMPANY

FABRICATORS AND DISTRIBUTOR

THE AMERICAN BRASS COMPANY
BRIDGEPORT BRASS COMPANY
CHASE BRASS & COPPER COMPANY, INC.
T. E. CONKLIN BRASS & COPPER COMPANY, INC.
NEW ENGLAND BRASS COMPANY
THE J. M. & L. A. OSBORN CO.
REVERE COPPER AND BRASS INCORPORATED
SCOVILL MANUFACTURING CO.

COPPER & BRASS RESEARCH ASSOCIATION

25 Broadway, New York City