

ADVERTISEMENTS 1925

H-882

A D V E R T I S E M E N T S

	<u>Page</u>
National Lead Company.....	1 to 128
United States Cartridge Company.....	129 to 158
The Dick X-Ray Company.....	159 to 162

NATIONAL LEAD COMPANY

American Agriculturist.....	36,37
American Architect.....	13 to 23,25,26
American Federationist.....	1
American Machinist.....	2,3,4,5,6,7,24,62
American Magazine.....	8,9,10,11,12,83,126,128
American Paint & Oil Dealer.....	63 to 69
American Paint & Decorator.....	101,103,104,106,107,110,112
Architectural Forum.....	13 to 23,25,26
Automotive Industries.....	2,3,4,5,6,7,24,62
Breeders Gazette.....	36,37
Buildings & Building Management.....	27 to 33
Collier's Weekly.....	9,11,12,34,35,83,126,127
Country Gentlemen.....	36 to 41,41A,42
Drugs, Oils & Paints.....	93
Engineering News Record.....	43 to 55
Gas Age Record.....	56 to 61
General Electric Review.....	2,3,4,5,6,7,24,62
Good Hardware.....	65
Hardware Age.....	63 to 69
Hardware Retailer.....	63,64,66 to 69
Hoard's Dairyman.....	36,37
Indiana Farmer's Guide.....	36,37
Kansas Farmer Mail & Breeze.....	36,37
Machinery.....	2,3,4,5,6,7,24,62
Marine Engineering & Shipping Age.....	70 to 76
Master Painter & Decorator.....	101,103,104,106,107,110,112
Michigan Farmer.....	36,37
Modern Hospital.....	77 to 81
National Geographic.....	11,12,82 to 85,126 to 128
Nations Business	8 to 12,83,126 to 128
Nebraska Farmer.....	36,37
Ohio Farmer.....	36,37
Oil and Gas Journal.....	86 to 91
Oil, Paint and Drug Reporter.....	92 to 95
Oklahoma Farmer & Stockman.....	36,37

--2--

NATIONAL LEAD COMPANY

Pacific Rural Press	36,37
Painter and Decorator.....	96 to 100
Painters Magazine.....	101 to 112
Pocket List of Railroad Officials.....	112A
Prairie Farmer.....	36,37
Progressive Farmer.....	36,37
Purchasing Agents.....	2 to 7,24,62
Railway Age.....	113 to 118,121
Railway Purchases & Stores.....	113,116 to 121
Review of Reviews.....	11,12,83,85,126 to 128
Saturday Evening Post.....	12,122 to 128
The Farmer.....	36,37
Wallace's Farmer.....	36,37
Wisconsin Agriculturist.....	36,37

UNITED STATES CARTRIDGE COMPANY

Page

American Rifleman.....	129 to 149
Farm Journal.....	152,153,156
Field & Stream.....	152,153,154,156
Forest & Stream.....	152,153,154,156
Hardware Age.....	150,151,157,158
Hardware & Metal.....	158
Oregon Farmer.....	153,154,156
Outdoor America.....	152,153,154,156
Outdoor Life.....	152,153,154,156
Outdoor Recreation.....	152,153,154,156
Pacific Rural Press.....	153,154,156
Progressive Farmer.....	153,154,156
Saturday Evening Post.....	152,153,154,156
Sea Girt Small-Bore Program.....	155
Southern Agriculturist.....	153,154,156
Sporting Goods Journal.....	150,151,157,158
Washington Farmer.....	153,154,156

THE DICK X-RAY COMPANY

	<u>Page</u>
American Journal of Roentgenology & Radium Therapy....	159 to 161
Hospital Progress.....	162

Dutch Boy solders for all purposes



THE Dutch Boy series of solders covers every possible requirement of the solder user. There is a composition for every purpose.

For instance, for all-around work there is nothing better than Dutch Boy 111 solder. It is the acme of solder quality, being 50% tin and 50% lead, which is not true of many so-called "half and half" solders.

In the other grades from 222 to 888 the proportions of lead and tin vary according to the number. Whatever the number, you are sure to get uniform composition and quality if the solder bears the Dutch Boy trademark.

National Lead Company also makes plumbing materials such as lead pipe, black tin pipe, lined pipe, traps, bends, sheet lead and lead wool.

NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 909 West 18th Street; Cincinnati, 609 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of Penna., 310 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

This advertisement appears in the following publication:

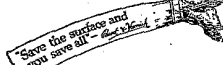
¼ Page American Federationist—Jan., 1925

Use the paint that painters use



FOR generations Dutch Boy white-lead has been the standard with painters. They not only use it in painting the houses of others. Because of its beauty, long life, and low cost of applying, Dutch Boy white-lead is the paint that painters use on their own homes. Mixed with linseed oil, it forms a tough coating that protects exteriors against rot and destruction.

For interiors Dutch Boy white-lead mixed with Dutch Boy flattening oil produces a flat paint that adds new beauty to old rooms and greater charm to new. It flows smoothly and easily and has unusual covering power.



NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 909 West 18th Street; Cincinnati, 609 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of Penna., 310 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

This advertisement appears in the following publication:

¼ Page—American Federationist—March

Save the surface and
you save all—*Red & Lead*



New wall beauty for your home

Your walls painted with Dutch Boy white-lead and flattening oil will have the soft and silky appearance of a rubbed-down job. Moreover, with this flat paint you can obtain exactly the tints you prefer, for it can be tinted to any desirable color. And it holds its flat finish and color indefinitely no matter how often you wash it.

NATIONAL LEAD COMPANY

to St.
A. St.
West
Flam-
lead &
ohn T.

Rolling stock and immovable structures—

Both need the protection of
pure red-lead paint

ALL-STEEL cars such as gondolas and hopper bottom cars, and the steel underframes on all cars, are constantly subject to the attacks of air and moisture. If they are without protection it isn't long before rust gets a foothold. Then the rolling stock goes rolling to the repair shop.

Rust attacks all metal railroad property, whether on cars or permanent structures. Cars can be kept going and structures kept standing only if they receive adequate protection against rust.

The best known method of protecting metal from rust is to give it a standard three-coat covering of pure red-lead paint. Dutch Boy red-lead is pure red-lead. When applied to the clean metal it sticks tight and forms a tough coating which air and moisture cannot penetrate.

With careful inspection and repainting when necessary, a metal surface painted with Dutch Boy red-lead will last indefinitely.

Write our nearest branch for more specific information on how to protect your metal property from rust.

NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 909 West 18th Street; Cincinnati, 609 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of Penna., 310 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

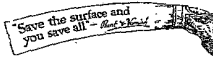


This advertisement appears in the following publication:

Page—Pocket List of R. R. Officials—January

brushes out easily and evenly and has unusual covering power.

Dutch Boy red-lead is the natural red-lead color and comes in paste form. It can be tinted to browns, greens, black and other dark colors.



NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 909 West 18th Street; Cincinnati, 609 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of Penna., 310 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

This advertisement appears in the following publication:

¼ Page—American Federationist—April

0000-NLI-000017237

Dutch Boy solders for all purposes



THE Dutch Boy series of solders covers every possible requirement of the solder user. There is a composition for every purpose.

For instance, for all-around work there is nothing better than Dutch Boy 111 solder. It is the same of solder quality, being 50% tin and 50% lead, which is not true of many so-called "half and half" solders.

In the other grades from 222 to 888 the proportions of lead and tin vary according to the number. Whatever the number, you are sure to get uniform composition and quality if the solder bears the Dutch Boy trademark.

National Lead Company also makes plumbing materials such as lead pipe, black tin pipe, tin-lined pipe, traps, bends, sheet lead and lead wool.

NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 137 State Street; Buffalo, 110 Oak Street; Chicago, 500 West 18th St.; Cincinnati, 659 Freeman Avenue; Cleveland, 100 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co., of Penn., 210 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

This advertisement appears in the following publication:

1/4 Page American Federationist—Jan., 1925

Use the paint that painters use



FOR generations Dutch Boy white-lead has been the standard with painters. They not only use it in painting the houses of others. Because of its beauty, long life, and low cost of applying, Dutch Boy white-lead is the paint that painters use on their own homes. Mixed with linseed oil, it forms a tough coating that protects exteriors against rot and destruction.

For interiors Dutch Boy white-lead mixed with Dutch Boy flattening oil produces a flat paint that adds new beauty to old rooms and greater charm to new. It flows smoothly and easily and has unusual covering power.



NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 137 State Street; Buffalo, 110 Oak Street; Chicago, 500 West 18th St.; Cincinnati, 659 Freeman Avenue; Cleveland, 100 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co., of Penn., 210 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

This advertisement appears in the following publication:

1/4 Page American Federationist—March

Save the surface and
you save all—*that's lead*



New wall beauty for your home

Your walls painted with Dutch Boy white-lead and flattening oil will have the soft and silky appearance of a rubbed-down job. Moreover, with this flat paint you can obtain exactly the tints you prefer, for it can be tinted to any desirable color. And it holds its flat finish and color indefinitely no matter how often you wash it.

NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 137 State Street; Buffalo, 110 Oak Street; Chicago, 500 West 18th St.; Cincinnati, 659 Freeman Avenue; Cleveland, 100 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co., of Penn., 210 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

This advertisement appears in the following publication:

1/4 Page—American Federationist—February 1925

On guard against rust

DUTCH BOY red-lead provides a protective coating that keeps iron and steel free from rust.

This pure red-lead forms a tough film which the elements cannot penetrate. It sticks fast to metal and does not chip or scale. It brushes out easily and evenly and has unusual covering power.

Dutch Boy red-lead is the natural red-lead color and comes in paste form. It can be tinted to browns, greens, black and other dark colors.

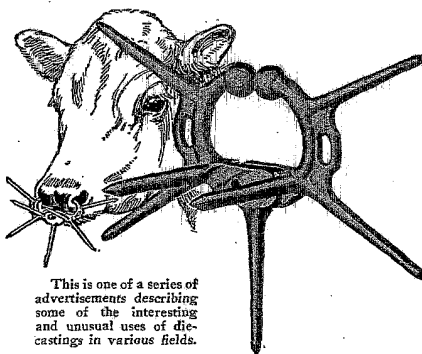


NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 137 State Street; Buffalo, 110 Oak Street; Chicago, 500 West 18th Street; Cincinnati, 659 Freeman Avenue; Cleveland, 100 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co., of Penn., 210 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

This advertisement appears in the following publication:

1/4 Page—American Federationist—April



This is one of a series of advertisements describing some of the interesting and unusual uses of die-castings in various fields.

An odd-shaped die-casting with an equally odd use

THIS strange-looking device is known to dairymen as a "weaner."

Clamped on the nose of a calf, the weaner accomplishes what its name indicates by convincing the mother cow that it is less irritating to keep her hungry offspring always at a distance. One prod of the prongs is usually sufficient to carry conviction.

The weaner is typical of some of the unusual jobs which we, as manufacturers of aluminum, zinc, lead and tin die-castings, are called upon to turn out. If a device or a machine part can be die-cast, we can make it. Unusual, intricate die-casting problems are our forte. Moreover, our large manufacturing facilities enable us to produce die-castings of any type, in any quantity, economically and expeditiously.

Your inquiries, accompanied if possible by a blueprint or a model, are solicited.



When you buy die-castings from us, you are assured of the same high quality that has established our Dutch Boy trademark as a mark of excellence on babbitts, solder and paint materials.

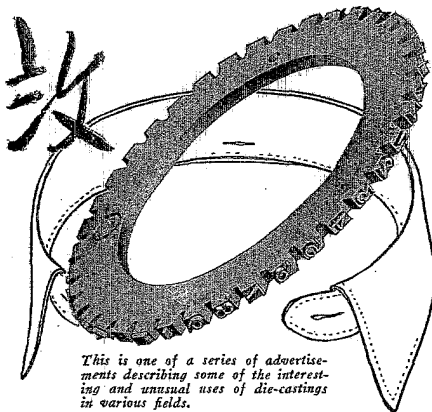
NATIONAL LEAD COMPANY

111 Broadway Die-Casting Division New York, N.Y.
Western Representatives: E. R. McCormick, 1299 Cadillac Ave.,
Detroit, Mich. A. H. Bergedick, 667 Bowen Street, Dayton, Ohio. A.
A. Gillemester, 444 4th Street, Toledo, Ohio.

ALUMINUM, ZINC, LEAD and TIN DIE-CASTINGS

This advertisement appears in the following publications:

American Machinist, April 30, 1925
Automotive Industries, April 23, 1925
Purchasing Agent, May, 1925
Machinery, June, 1925
General Electric Review, June, 1925



This is one of a series of advertisements describing some of the interesting and unusual uses of die-castings in various fields.

Going Charlie Chinaman one better

EVERY laundry has a numbering system by which track is kept of each customer's wash. Even Charlie Chinaman uses such a system. In strange hieroglyphics, by hand, he marks an identifying number in indelible ink on the inner side of every collar and the neckband of every shirt. Sometimes, instead of numbering the pieces individually, he ties several together with a numbered linen strip.

The modern steam laundry goes Charlie Chinaman one better. There the numbering, like the washing and ironing, is done mechanically. A machine, equipped with die-cast numbering wheels of the type illustrated, prints the serial numbers neatly, legibly and quickly.

The numbering wheel for the laundry marker is only one of many similar parts that are being die-cast by us of aluminum, zinc, lead and tin-base alloys. Included in the list are gears, disks, washers, etc., of all sizes and descriptions. Some of the wheels and gears are less than half an inch in diameter, yet every detail is sharp and clean-cut.

No matter how small or how large or how intricate the part you need, we are equipped to turn it out accurately, expeditiously and economically. Moreover, our technical staff is at the call of any manufacturer who wishes to determine if he can save money by having certain parts die-cast.



When you buy die-castings from us, you are assured of the same high quality that has established our Dutch Boy trademark as a mark of excellence on babbitts, solder and paint materials.

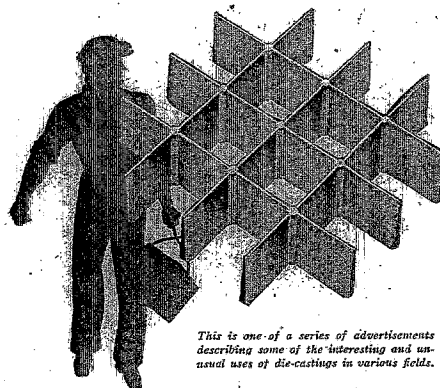
NATIONAL LEAD COMPANY

111 Broadway Die-Casting Division New York, N. Y.
Western Representatives: E. R. McCormick, 2599 Cadillac Ave., Detroit, Mich. A. H. Bergedick, 667 Bowen Street, Dayton, Ohio. A. A. Gildemeister, 444 4th Street, Toledo, Ohio.

ALUMINUM, ZINC, LEAD and TIN DIE-CASTINGS

This advertisement appears in the following magazines:

American Machinist - - - May 21, 1925
Machinery - - - - - July, 1925
Automotive Industries - - - May 21, 1925
Purchasing Agent - - - - - June, 1925
General Electric Review - - - July, 1925



This is one of a series of advertisements describing some of the interesting and unusual uses of die-castings in various fields.

Die-casting a form for the modern ice-man

GONE forever from the back door of many homes is the lusty voice that calls "Any ice today, lady?" The man with the tongs is losing customers to the modern ice-man—the electrical refrigerator.

In addition to keeping things always cool, the modern ice-man delivers little blocks of ice which are frozen in a form or mold like the one illustrated. This form is die-cast and is another outstanding example of how die-castings are being utilized in modern inventions.

New inventions are by no means, however, the only places where die-castings are being used to advantage. Of aluminum, zinc, tin and lead alloys, we are die-casting parts also for many machines and appliances which have been on the market for years.

Whether you have a new product or an old one, we should like to have you consider with us the possibility of die-casting some of its parts. Our experienced technical staff is at your service.



When you buy die-castings from us, you are assured of the same high quality that has established our Dutch Boy trademark as a mark of excellence on babbitts, solder and paint materials.

NATIONAL LEAD COMPANY

Die-Casting Division

111 Broadway

New York, N. Y.

Western Representatives: E. R. McCormick, 2599 Cadillac Ave., Detroit, Mich. A. H. Bergedick, 667 Bowen Street, Dayton, Ohio. A. A. Gildemeister, 444 4th St., Toledo, Ohio.

ALUMINUM, ZINC, LEAD and TIN DIE-CASTINGS

This advertisement appears in the following publications:

*American Machinist August 13
Machinery September
Automotive Industries August 13
Purchasing Agent August
General Electric Review September*

0000-NLI-000017241

A die-casting talk with teeth in it

WHEN a man's teeth start to go to pieces, it doesn't necessarily mean the end of the teeth—and certainly not the end of the man. Therein a man differs from a gear. When a gear's teeth "go," good-bye teeth and good-bye gear. Even if it is only a baby gear, its first teeth are its last teeth. That's why, in buying gears, it pays to make sure that the teeth are strong, sound teeth.

Take the gears shown here. There's nothing false about their teeth. These gears were die-cast by us and in actual use have proved to be everything good gears should be.

If you have need of die-cast gears with stout teeth, or of other die-cast parts, you will find it to your advantage to learn of our complete die-casting service. Let our expert staff of technical men help you solve your die-casting problems.

When you buy die-castings from us, you are assured of the same high quality that has established our Dutch Boy trademark as a mark of excellence on babbitts, solder and paint materials.



This is one of a series of advertisements describing some of the interesting and unusual uses of die-castings in various fields.

NATIONAL LEAD COMPANY

Die-Casting Division

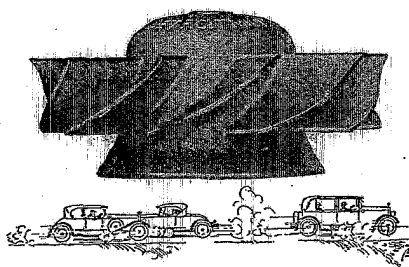
111 Broadway New York, N. Y.

Western Representatives: E. E. McCormick, 2599 Cadillac Ave., Detroit, Mich. A. H. Bergesick, 667 Bowen Street, Dayton, Ohio. A. A. Gildenister, 444 4th St., Toledo, Ohio.

ALUMINUM, ZINC, LEAD and TIN DIE-CASTINGS

This advertisement appears in the following publications:

American Machinist	September, 1925
Automotive Industries	September 10, 1925
Purchasing Agent	September, 1925
Machinery	October, 1925
General Electric Review	October, 1925



Cleaning the air your motor breathes

"FULL of grit" is a fine thing in football, but let an automobile motor get full of grit and the garageman rubs his hands expectantly.

Much of the grit that otherwise would find its way into a motor can be kept out by cleaning the air of dirt before it passes into the carburetor to be mixed with gasoline.

Among the air-cleaning devices on the market is one of which the die-casting shown above is the principal part. As the dust-laden air is drawn through the vanes of this die-casting, it is caused to whirl in such a way that the dirt is separated out by centrifugal force just as cream and milk are divorced in a cream-separator. Then the dirt-free air is sucked into the carburetor through a connecting pipe.

This die-casting is but one of hundreds similarly unique that we are called upon to manufacture. We can take care of your die-casting needs and would welcome an opportunity to consult with you on your requirements.

When you buy die-castings from us, you are assured of the same high quality that has established our Dutch Boy trade-mark as a mark of excellence on babbitts, solder and paint materials.

This is one of a series of advertisements describing some of the interesting and unusual uses of die-castings in various fields.



NATIONAL LEAD COMPANY

111 Broadway Die-Casting Division New York, N. Y.

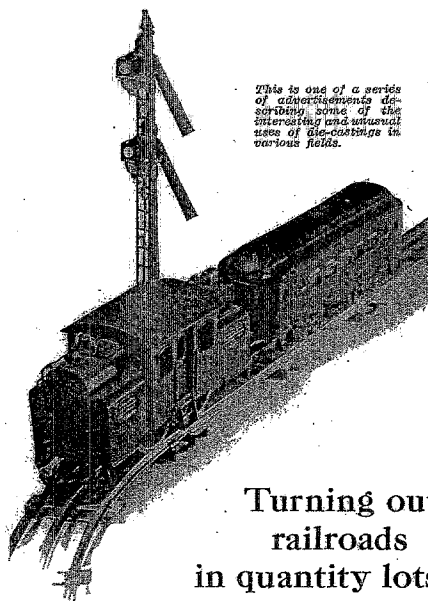
Western Representatives: E. R. McCormick, 2539 Cadillac Ave., Detroit, Mich. A. H. Bergedick, 667 Bowen Street, Dayton, Ohio. A. A. Gildenester, 444 4th Street, Toledo, Ohio.

ALUMINUM, ZINC, LEAD and TIN DIE-CASTINGS

This advertisement appears in the following magazines:

American Machinist, November 5th, 1925
Automotive Industries, November 5th, 1925
Purchasing Agent, November, 1925
Machinery, December, 1925
General Electric Review, December, 1925

0000-NLI-000017243



This is one of a series of advertisements describing some of the interesting and unusual uses of die-castings in various fields.

Turning out railroads in quantity lots

A MINIAURE semaphore drops, a bell clangs at an imaginary crossing, and the "Living-Room Limited" roars down the track, jumps a switch and piles up against the new mahogany bridge-lamp!

There's a real thrill in it for the youngsters, thousands of whom are clamoring for model railroads, with the result that manufacturers are turning out these toys in quantity lots. And die-castings are helping to satisfy the demand. The manufacturers have found that production can be speeded up economically by the employment of such die-cast parts as wheels, semaphores, lamp standards, etc.

Just as toy manufacturers are using die-cast parts successfully and profitably, so are manufacturers in many other lines. Perhaps the die-casting of some parts of your product can show you a saving. Have you investigated the possibilities of die-castings for your purposes?

When you buy die-castings from us, you are assured of the same high quality that has established our Dutch Boy trade-mark as a mark of excellence on babbitts, solder and paint materials.



NATIONAL LEAD COMPANY

111 Broadway Die-Casting Division New York, N. Y.

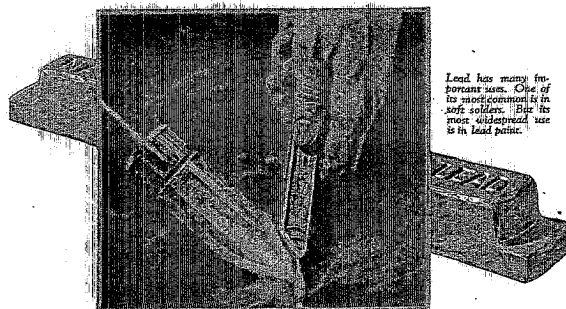
Western Representatives: E. R. McCormick, 2509 Cadillac Ave., Detroit, Mich. A. R. Borgedich, 667 Bowen Street, Dayton, Ohio. A. A. Gilchrist, 444 4th Street, Toledo, Ohio.

ALUMINUM, ZINC, LEAD and TIN DIE-CASTINGS

This advertisement appears in the following issues:

*American Machinist, December 10, 1925
Automotive Industries, December 10, 1925
Purchasing Agent, December, 1925
Machinery, January, 1926
General Electric Review, January, 1926*

0000-NLL-000017244



"SODDER" The Glue of the Metals

WE pronounce it *sodder* and spell it *solder*, though there have been as many different ways of spelling it as there are letters in the word. *Soder, sawder, sowder*—have all been used. The origin of the word *solder* means "to make solid." Lead mixed with tin makes this solder, whose use is to join metal to metal, to seal metal containers, and to patch holes in metal. Lead-tin solder is to the metal worker what glue is to the cabinetmaker and the bookbinder.

Why is lead used in soft solders? One reason is that pure lead combined with pure tin produces an alloy whose melting point is below that of either of these metals alone, and therefore is below that of the metals to be joined, even though these metals be lead and tin themselves. This alloy also adheres to zinc, copper, brass, and even iron and steel, joining them in a perfect union.

Dutch Boy solders

Thousands of workers use the soft solders made under the Dutch Boy trademark. The Dutch Boy series of solders has been scientifically selected to cover every possible requirement of the solder user. Dutch Boy solder 111 is 50% lead and 50% tin, which is not true of many so-called "half-and-half" solders. In the grades from 222 to 888 the proportions of lead and tin vary according to the number, but each number is always uniform.

National Lead Company also will furnish solder according to any formula required, in a variety of shapes, sizes, lengths and weights.

Lead in paint

Of all the important uses of lead in the arts and industries of civilized peoples, the most general of all is the use of lead paint. From lead is made white-lead, famous for generations for the protection it gives to the surface it covers. Manufacturers use white-lead as the principal ingredient of their best paints. Professional painters use "lead-and-oil," a mixture of pure white-lead and pure linseed oil. House-owners more today than ever before save the surface of their properties by covering them with white-lead paint.

National Lead Company makes white-lead of the highest quality and sells it, mixed with pure linseed oil, as Dutch Boy white-lead.

Other Dutch Boy products

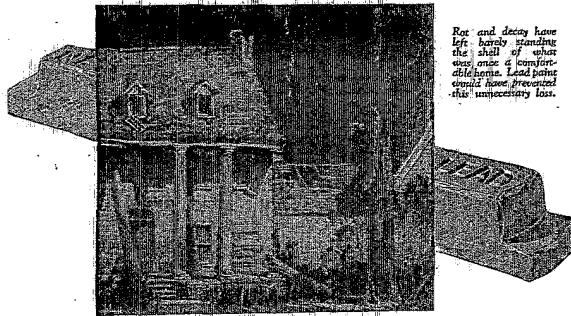
In the famous Dutch Boy series of products, besides white-lead and solder, there are red-lead, linseed oil, flatting oil and babbitt metals. National Lead Company also makes lead products for practically every purpose to which lead can be put. If you desire specific information about solder, white-lead or any other use of lead, write to the nearest branch of National Lead Company.



Save the surface and you save all.

NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 151 State Street; Buffalo, 116 Oak Street; Chicago, 320 West 88th Street; Cincinnati, 659 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 48 California Street; Pittsburgh, National Lead and Oil Co. of Penna., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.



Rot and decay have left barely standing the shell of what was once a comfortable home. Lead paint would have prevented this unnecessary loss.

For the fire that makes no smoke lead paint is the extinguisher

NEARLY fourteen million houses in this country are burning without sign of flame or smoke. Wherever unpainted surfaces are exposed to the atmosphere, they burn just as surely as when a match is applied. This burning, or combustion, is simply oxidation, during which oxygen is taken from the surrounding air. There are three kinds of combustion—almost instantaneous, or explosion; rapid, or fire; and slow, or rot. Slow combustion is destroying the millions of houses mentioned above.

All combustion can be stopped by cutting off the supply of oxygen. You can keep the wooden surfaces of your house safe from *slow* combustion, or *rot*, by keeping them covered with a constantly maintained film of a paint that is impervious to air and moisture and does not crack or scale.

Why people use Dutch Boy white-lead

Lead paint is a real investment because it gives this complete protection to wood. Thousands of master painters and house owners use Dutch Boy white-lead. Dutch Boy white-lead is *pure* white-lead. It contains no adulterants to cheapen it and rob it of its merits. It is *ground fine*. This insures a smooth, dense film with the maximum of spread. It makes a *tough, elastic and waterproof* film that sticks to the surface. Dutch Boy white-lead makes a paint film that *does not crack or scale* and has great *hiding* power. Users have learned to rely on the *unvarying uniformity* of Dutch Boy white-lead.

For exterior work use a combination of Dutch Boy white-lead and

linseed oil. For flat finishes (usually desired for interior painting) mix Dutch Boy white-lead with Dutch Boy flattening oil. In either case the paint can be tinted to any color desired.

Send for this free paint booklet

We will be pleased to send you a new booklet, "Painting—Protective and Decorative." This booklet tells what paint is, what paint does, and why paint protects the surface. It contains color plates of house exteriors and interiors and also of interesting and unusual artistic wall finishes that can be obtained with paint. This booklet sent free on request.

Other Dutch Boy products

In the famous Dutch Boy series of products besides white-lead, there are flattening oil, solder, red-lead, linseed oil and babbitt metals.

National Lead Company makes, in addition, lead products for practically every purpose to which lead can be put in art, industry and daily life. Among these products are die castings, Cinch expansion bolts, Hoyt Hardlead products for buildings, and printers' metals.

If you desire specific information about any of these or other uses of lead, write to the nearest branch of National Lead Company.



Save the surface and you own it—lead!

NATIONAL LEAD COMPANY
New York, 111 Broadway; Boston, 151 State Street;
Buffalo, 116 Oak Street; Chicago, 902 West 10th Street;
Cincinnati, 559 Freeman Avenue; Cleveland, 820 West
Superior Avenue; St. Louis, 722 Chestnut Street; San
Francisco, 485 California Street; Pittsburgh, National
Lead and Oil Co. of Penna., 316 Fourth Avenue; Phila-
delphia, John T. Lewis & Bros. Co., 437 Chestnut Street



A two-toned figured finish, one of many obtainable with white-lead and flattening oil. A ground coat of one color and a finishing coat of another color are applied. By rolling a crumpled newspaper over the second coat while still wet, you get a design that you can be sure is distinctive.

*Interior finishes once found
only in the houses of the rich—*
**Now made available for every home
by white-lead and flattening oil**

WHEN great-grandfather was a boy, the interior charm of American homes was due largely to beautiful and artistic woodwork finishes. These woodwork finishes, built up with as many as five or six paint coats, were used generally throughout Colonial mansions. But they were expensive and took a long time to put on.

Up to a short time ago such interior paint finishes were a luxury that only the wealthy could afford. But there is available today for homes everywhere a flat paint finish that is similar to the old rubbed-down finish.

This flat finish is easier to apply than the rubbed-down finish, much more economical (because fewer coats and less labor are required), and very durable. Not only for woodwork but for painting of walls this finish is ideal. With it many very beautiful and distinctive effects can easily be obtained, among them two-toned figured finishes, like the one shown above, two-toned mottled effects, two-tone glaze and Tiffany finishes.

What paint to use

Dutch Boy white-lead and Dutch Boy flattening oil make this new flat paint. The pigment ingredient is Dutch Boy white-lead, made from the metal, lead. Mixed in the right proportions with Dutch Boy flattening oil, it makes a paint

that can be quickly applied without brush marks, laps or streaks. This paint makes a tenacious, durable, moisture-proof film that becomes part of the covered surface, a film easily cleaned with soap and water without any harm to the paint.

National Lead Company maintains a Department of Decoration made up of experts who will gladly give advice on the proper selection of colors for interiors of new houses or old. These men can also tell you exactly how to get distinctive finishes. Address the Department of Decoration in care of the nearest branch office listed below.

Send for free booklet

We will gladly send you actual painted samples of the two-toned figured finish accompanied by a new booklet, "Painting—Protective and Decorative." This booklet contains color plates of interiors and exteriors and also of interesting and unusual artistic wall finishes. No charge. National Lead Company makes lead products for practically every purpose to which lead can be put in art, industry and daily life. If you desire specific information about any uses of lead, write to our nearest branch.



The figure of the Dutch Boy Painter shown here is reproduced on every keg of Dutch Boy white-lead and is a guarantee of exceptional purity.

NATIONAL LEAD COMPANY
New York, 111 Broadway; Boston, 131 State St.; Buffalo, 126 Oak St.; Chicago, 900 West 18th St.; Cincinnati, 659 Freeman Ave.; Cleveland, 320 West Superior Ave.; St. Louis, 722 Chestnut St.; San Francisco, 485 California St.; Pittsburgh, National Lead and Oil Co. of Pa., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut St.



Generations before lead was used in anti-friction alloys, lead in the form of white-lead paint was rendering its service to man. Down through the ages, it has fought the elements in its most important work of saving the surface.

Friction How lead helps man control it

THERE'S a fight going on in this picture. The man is winning, but at a terrific expenditure of physical energy. Every time he tugs and pulls, friction does its best to hold back the runners of his improvised carrier. Friction was one of primitive man's worst enemies.

Today man has taught friction its place, has made it his friend. Not only does friction, by transmitting power, help to transport you from place to place; but by means of pulleys, belts, gears and friction clutches it enables you to turn your dynamos, print your newspapers, make your shoes, and do a thousand and one other things.

Yet even today, friction in the wrong place is man's enemy. The points at which friction is not desired are those where parts are supposed to slide or rotate. These are known as bearings. They are made just as smooth as possible, and a lubricant is added to induce slippage still further.

How man fights friction

A little tallow in the hubs of the old carriage wheels stopped the creaking and lightened Dobbin's task. Later petroleum oils made lubrication simpler, more effective. But with the increasing complexity of machine parts, other bearing problems arose. A shaft slightly out of true plays havoc in a high-speed machine. Bearing surfaces must be a little tolerant. In 1839, Isaac B. Babbitt of Boston, Mass., invented a metal alloy which, when cast into bearings, would not only resist high pressures and the wear of rapidly rotating shafts, but would also conform to the play of a shaft without breaking.

From his first formula, many dif-

ferent types of bearing metals or babbitts have been developed to serve different purposes in industry.

Lead is an important metal in the anti-frictional alloy business and thousands of tons of it are used every year. Among other advantages it is the cheapest of any metals that could be used for this purpose.

A complete line of babbitt metals is made under the well known Dutch Boy trade-mark. Among those most generally used are Dutch Boy Phoenix Metal, Dutch Boy Heavy Pressure Metal, Dutch Boy Genuine Babbitt Metal, and Dutch Boy Perfection Anti-Friction Metal. These metals are expertly designed to perform every type of service to which a bearing metal can be put.

Our new booklet interestingly tells of the many uses of these superior babbitt metals. Write for it. If you have need for special alloys for special purposes, we shall be glad to talk it over with you.

Other Dutch Boy Products

The most famous of Dutch Boy products is white-lead for paint. Whether used with linseed oil, for exterior work, or with flaxing oil, for interior work, it has no superior for saving and beautifying the surface.

In addition, National Lead Company produces under the Dutch Boy brand, red-lead, linseed oil, flaxing oil and solder. This company also makes practically every form of lead product used by man today.

For specific information about any of these or other uses of lead, write to our nearest branch.

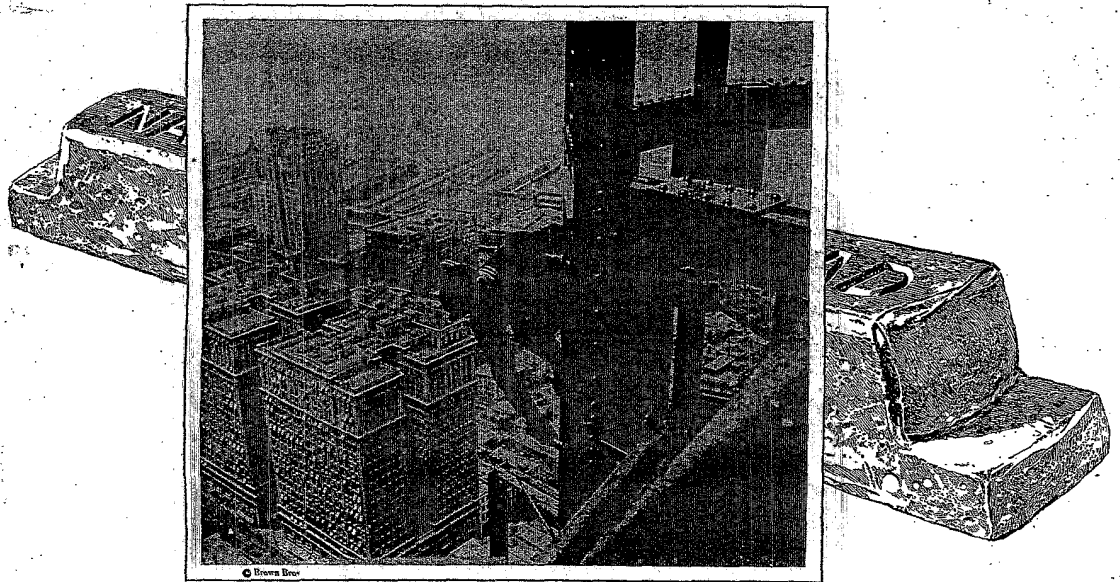


NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 900 West 18th Street; Cincinnati, 659 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead and Oil Co., 44 Penna., 116 Fourth Avenue; Philadelphia, John T. Lewis & Bro., 437 Chestnut Street.

2578 3/4 Page American Magazine—June *
Nation's Business—Sept.
Review of Reviews June.

Colliers weekly June 20.
National Geographic June



AT DIZZY HEIGHTS

he spreads a coat of red-lead

WHY?

DAILY he dangles in mid-air. The steel skeleton of a building that is to be, or a network of bridge cables, is his only foothold. Where he works, breezes become whistling gales striving to tear him from his precarious perch. Below him move many tiny dots, skeltering about like so many ants, all unaware of one of their kind who works at dizzy heights just to spread a thin red film of lead paint.

"Why," you ask, "must he do it?" Because upon the thoroughness with which he spreads this red film—upon its ability to protect the surface it covers—rests, in no small measure, the safety of the structure and the lives of thousands.

Protecting the weak links

You have heard no doubt the old engineering axiom, "A structure is only as strong as its details." It is not enough, however, to design a structure's details with care and precision. Be it bridge, building, ocean greyhound or simple railroad switch, every detail must be kept adequately protected from air and moisture, the two corroding elements that sap the strength of the strongest

pores of the metal and forms a hard yet elastic protecting film that resists moisture and keeps out air.

This metal-protecting film of red-lead paint is so important that the hardest-to-get-at places of our tallest skyscrapers receive a thorough red-leading regardless of the fact that they will later be shielded from the weather by walls of brick and mortar. And railroad cars, ships, signal towers, farm machinery, water tanks, filling station pumps, life-boats, tin roofs, gas tanks, coal piers, even the "Iron Policeman" on the corner—these are but a few of thousands of places where red-lead paint is on guard against rust.

Why Dutch Boy red-lead?

The United States Navy, eminent engineers, contractors and builders prefer Dutch Boy red-lead because of its great durability and economy of application. It brushes out so evenly that it makes a superior film which sticks tight to the metal surface. When such a film is

linseed oil, makes a paint that can be tinted to any desired dark color.

Paint booklet sent free

THE "Handy Book on Painting," a storehouse of general paint facts and formulas, will be sent to anyone free. A section of this handbook is devoted to the protection of metal surfaces. It tells how to prepare the surface for painting, how to mix and how to apply the paint. We shall also be glad to give you any specific information on any particular painting problem you may have.

Other Dutch Boy Products

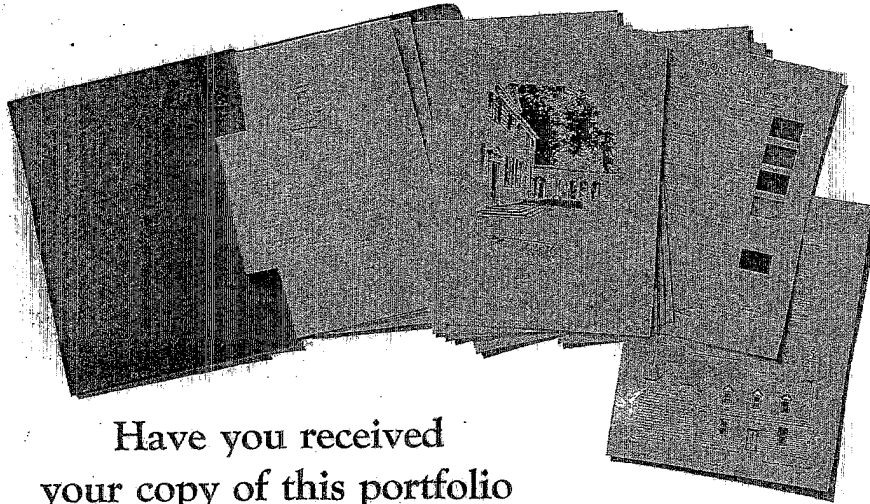
The Dutch Boy series of products includes, besides red-lead, flating oil, linseed oil, solder, babbitt metals and white-lead.

In addition to these, National Lead Company makes lead products for practically every purpose to which lead can be put in art, industry and daily life, such as litharge, sheet lead, lead bars, lead comes, lead pipe, and die-castings.

If you would like to know more about any of these or other uses of lead, write to our nearest branch.



The figure of the Dutch Boy Painter is shown on every bag of Dutch



Have you received your copy of this portfolio of old design?

THIS portfolio of Early American Architecture is one of the service features of National Lead Company's Department of Decoration. Its thirty-four full-page, loose-leaf plates of measured drawings and sketches, carefully compiled from authentic sources, breathe the spirit of true American design.

These drawings cover a period from 1632 to 1830. Each subject is presented by one or more key sketches or photographs, and accurate measured drawings of the important details. The sketches of Otto R. Eggers and the original prize drawings of John McComb, Jr., architect of New York City Hall, are particularly noteworthy.

An unusual feature of Early American Architecture is the suggestions for color treatment. These suggestions which appear in every section, are also shown graphically in a special color chart of mixing formulas.

One architect writes, "The scheme of presenting color treatments in immediate contact with the architectural details is excellent. You have collected in effective, compact and usable form much valuable information not previously available."

You will want this portfolio for your reference library. If you have not already received a copy, write for it on your business letterhead.



NATIONAL LEAD COMPANY

*Makers of Dutch Boy white-lead, the logical choice
for preserving and beautifying distinctive design*

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street;
Chicago, 900 West 18th Street; Cincinnati, 539 Freeman Avenue; Cleveland, 820
West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 Cal-
ifornia Street; Pittsburgh, National Lead & Oil Co. of Penna., 316 Fourth Avenue;
Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

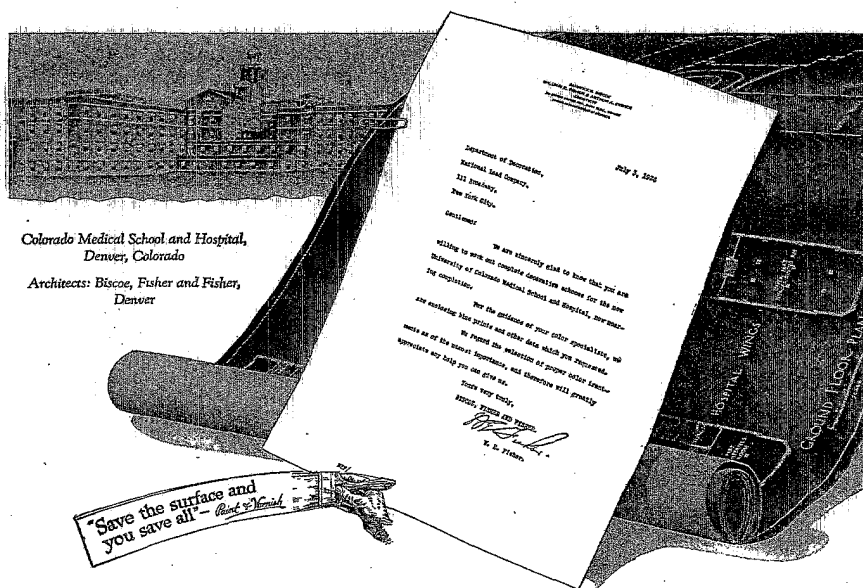
"Save the surface and
you save all" — *Red Lead*

CONTENTS

- | | |
|------|---|
| Sec. | |
| I | Old Royall House, Medford, Mass. (Built in 1632-1738) |
| II | Trinity Church, Newport, R. I. (Built in 1726) |
| III | Mount Vernon, Fairfax Co., Va. (Built in 1743-84) |
| IV | Mt. Pleasant Mansion, Philadelphia, Pa. (Built in 1761) |
| V | Bull-Pringle House, Charleston, S. C. (Built in 1765) |
| VI | Thomas Cowles House, Farmington, Conn. (Built in 1790) |
| VII | City Hall, New York, N. Y. (Built in 1803-12) |
| VIII | Edgewood, near Edgefield, S. C. (Built in 1830) |

This advertisement appears in the following publications:

Page—*Architectural Forum*—January
American Architecture—January 14



How colors were picked for Colorado's new medical school

THE task called for complete decorative schemes for the new University of Colorado Medical School and Hospital. Mr. Fisher of Biscoe, Fisher and Fisher, Denver architects, regarded the selection of these colors as "of the utmost importance." So he enlisted the help of National Lead Company's Department of Decoration.

Immediately a staff of color experts went into action. First they determined from blueprints and other data the size of each room, its floor covering, its natural illumination, its particular use—all the important factors which enter into the scientific selection of color.

Then complete specifications were prepared. These included: 1. appropriate color treatments; 2. panels of the colors recommended; 3. formulas for producing the colors; 4. reasons for their use; 5. their light reflection factor; 6. practical painting directions.

Not only were the architects well satisfied with the recommendations, but they also write us:

"The Dean of the School of Medicine is particularly delighted with your assistance. Your color suggestions appeal to all as logical and most attractive—a happy solution to the difficult problem of correctly decorating these new buildings."



When you specify Dutch Boy white-lead, you are certain of obtaining a pure white-lead.

Willing to pay—yet the service is free

The architects, like many others who have referred their decorative problems to our Department of Decoration, were willing to pay well for the valuable help. Yet it cost them no more than the time necessary to write us.

In this same thorough manner our Department of Decoration will gladly work with any architect or others who realize the tremendous importance of scientifically selecting colors. This valuable service is rendered without any obligation on your part. You are free to use it whether your decorative problem concerns but a single room or an entire building.

We cannot tell you in this limited space of the many ways you can utilize our Department of Decoration. This one example will at least indicate our willingness to work with you and the thoroughness with which any job you give us will be handled. A letter will bring you more specific information about our service.

NATIONAL LEAD COMPANY

Makers of Dutch Boy white-lead, the logical choice for preserving and beautifying distinctive design

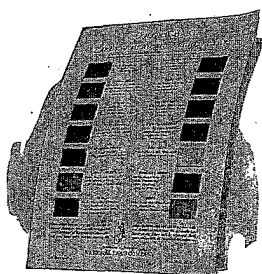
New York, 111 Broadway; Boston, 131 State St.; Buffalo, 116 Oak St.; Chicago, 900 West 18th St.; Cincinnati, 659 Freeman Ave.; Cleveland, 620 West Superior Ave.; St. Louis, 722 Chestnut St.; San Francisco, 433 California St.; Pittsburgh, National Lead & Oil Co. of Pa., 316 4th Ave.; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut St.

This advertisement appears in the following publication:

Page—*Architectural Forum*—February
American Architect—February 11

0000-NLI-000017251

A simple way to select colors for your old Colonial design



This special color chart is included with Early American Architecture. It shows the colors referred to in the portfolio and gives exact mixing formulas.



© U. P. C. Book Co.

THE stately Old Royall House at Medford, Mass., holds for present-day architects delightful details worthy of reproduction. But these details need a careful color treatment if they are to retain their simple, dignified Colonial charm.

Just how such a color treatment should be worked out is graphically shown in *Early American Architecture*, now being sent upon request to architects by the Department of Decoration of National Lead Company. In this portfolio the architectural reasons for the colors suggested are made clear by means of key sketches and full-page measured drawings. The architect has before him a complete working picture that faithfully reproduces the original structure.

In this same complete manner, *Early American Architecture* brings to the architect's drawing board other noteworthy Colonial structures such as New York City Hall, Mount Vernon, the Bull-Pringle House at Charleston, etc.

Would you like to have a copy of this portfolio? Just address your letter to our nearest branch, listed below. Ask for *Early American Architecture*. There is no charge—and of course no obligation.

Our Department of Decoration, conducted by paint and color specialists, is also willing to work with you on decorative problems for any type of buildings. At no cost to you, men experienced in every phase of decorative work will help you select the decorative plan, submit for your approval color charts and color renderings, and assist in the writing of your specifications. If you want this specific help, mark your letter for the attention of the Department of Decoration. Feel free to write at any time for this specific paint and color service.



You can be sure that pure white lead is used if you specify the brand that bears this well-known Dutch Boy trademark.

"Save the surface and you save all" — Paint & Varnish

NATIONAL LEAD COMPANY

Makers of Dutch Boy white-lead, the logical choice for preserving and beautifying distinctive design

New York, 111 Broadway; Boston, 131 State St.; Buffalo, 116 Oak St.; Chicago, 900 West 16th St.; Cincinnati, 655 Freeman Ave.; Cleveland, 820 West Superior Ave.; St. Louis, 722 Chestnut St.; San Francisco, 495 California St.; Pittsburgh, National Lead & Oil Co., of Pa., 316 4th Ave.; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut St.

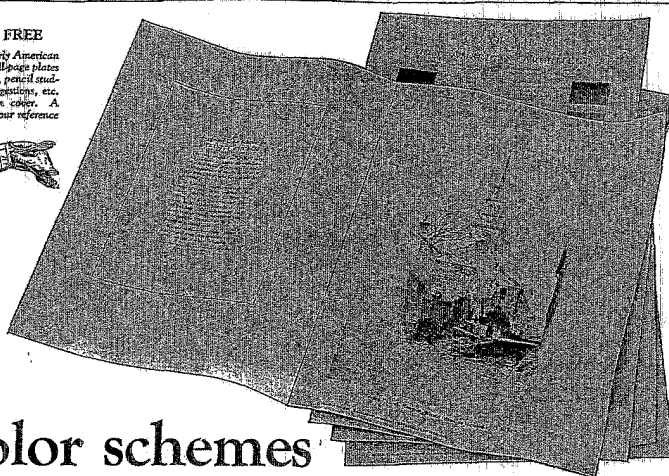
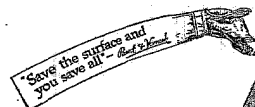
This advertisement appears in the following publications:

Page—*Architectural Forum*—March
American Architect—March 11

0000-NLI-000017252

SENT YOU FREE

PORTFOLIO of Early American Architecture. 34 full-page plates of measured drawings, pencil studies, sketches, color suggestions, etc. Loose-leaf, Cavalier color. A valuable addition to your reference library.



New color schemes for old Colonial design

"COMPLETE working pictures of America's most noteworthy Colonial structures" is the way one architect describes Early American Architecture. This portfolio of sketches, photographs and detailed measured drawings is now being distributed to architects without charge by our Department of Decoration.

This portfolio brings to your drawing board eight early American structures carefully selected for their historical associations and architectural perfection. It presents these old buildings in a new and vivid manner. And, in addition to the best sketches and measured drawings available on the special subjects selected, there is a series of suggested color schemes so worked out as to give the proper emphasis to important architectural features.

Includes color chart

With these suggested color schemes before him, any architect can quickly visualize the important details shown in the measured drawings. They help him to catch more readily the true spirit of the old design so that he can faithfully incorporate it in his own work. They suggest the proper method for working out color schemes for any type of building. Nor need there be any difficulty in obtaining the right colors on the job, for a

special color chart shows the colors themselves together with exact mixing formulas.

For your library

In referring to these color schemes and the portfolio in general, Mr. George Nichols, New York architect, says, "The scheme of presenting color treatments in immediate contact with the architectural details is excellent. You have collected in effective, compact and usable form much valuable information not previously available." We shall be pleased to present you with a copy of Early American Architecture. Just send your request on your letterhead to our nearest branch.

Our Department of Decoration will work with you in developing distinctive decorative plans.

Specialists will make color sketches from your blue prints at no cost. Any question about paint will be cheerfully answered. For such specific help address your letter to our nearest branch marked for the attention of our Department of Decoration.

NATIONAL LEAD COMPANY

Makers of Dutch Boy white-lead, the logical choice for preserving and beautifying distinctive design

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 910 West 18th Street; Cincinnati, 639 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of Pa., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

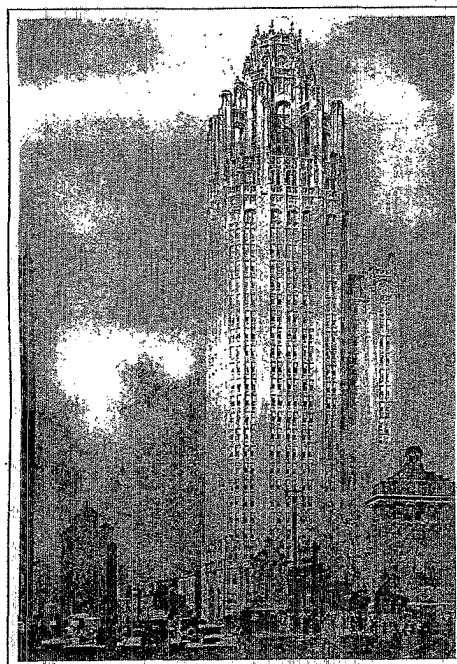


This Dutch Boy trade-mark appears on every keg of Dutch Boy white-lead as a guarantee of excellence.

This advertisement appears in the following publications:

Page—Architectural Forum—April
American Architect—April 8

0000-NLI-000017253



TRIBUNE TOWER BUILDING,
Chicago
Architects: Howells & Hood,
New York
Engineer: Henry J. Bart, Chicago
Contractor: Hegeman & Harris
Co., New York

All steel of Tribune Tower protected with Dutch Boy Red-Lead

HAVING as their object the erection of the finest office building in the world, the Chicago Tribune first held a prize competition, the winning design being submitted by Howells & Hood. Then, in the construction of the building, no limitation was placed upon these architects in the choice of materials. That Dutch Boy red-lead was specified and used to protect all the steel from corrosion is therefore significant.

Our Department of Technical Service will be glad to send you the data that influenced the selection of Dutch Boy red-lead for the Tribune Tower.



NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 900 West 18th Street; Cincinnati, 639 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of Penna., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

This advertisement appears in the following publications:

Page—*Architectural Forum*—April
American Architect—April 8

0000-NLI-000017254

W. HUGH COCHRANE,

ADVERTISING DEPT.,

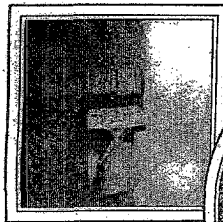
BUILDING.

Distinctive WALL EFFECTS

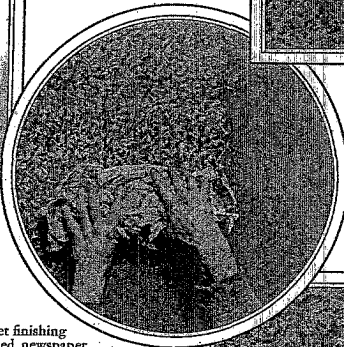
... the two-tone
figured finish

The first of a series of articles showing how modern wall finishes are obtained with Dutch Boy white-lead and Dutch Boy flattening oil.

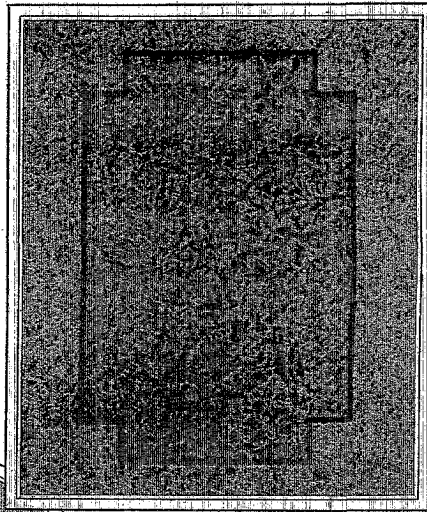
BY M. REA PAUL, CONSULTING COLORIST



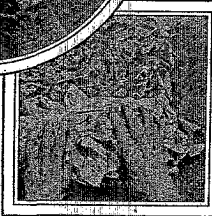
Over a light ground, which has been allowed to dry, a darker finishing coat is applied in a slightly different color.



Against the wet finishing coat, a crumpled newspaper is firmly placed. With the fingers it is rolled downward. This lifts off some of the paint so that the ground coat in places shows through.

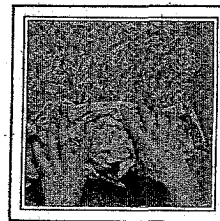


The soft, feathery design of the two-tone figured finish is distinctive, individual. Its decorative possibilities are almost unlimited. It permits a wide choice of effects, with sharp or subdued patterns, depending upon the colors selected. And all at a surprisingly reasonable cost. Actual painted panels showing the beauty of this finish will be sent you if you write our nearest branch.



TO PRODUCE
FIGURE VARIATIONS

Widely spaced figures may be had by rolling with loosely crumpled newspaper, or wrapping paper.



Smaller figures are made with tightly crumpled newspaper, or crumpled tissue paper.

A special service to architects

The Department of Decoration of National Lead Company, conducted by paint and color specialists, offers its help to architects in solving decorative problems for any type of building. At no cost to you, men experienced in every phase of decorative work will help you to carry out the decorative treatments you have in mind. They will help select the schemes of treatment, submit for your approval color suggestions and color renderings when necessary, and assist in the writing of your specifications.

We shall be glad to send you, without charge, actual samples typical of the almost unlimited possibilities of the two-tone figured finish. Just write our nearest branch, marking your letter for the attention of the Department of Decoration.



NEXT MONTH, the mottled effect. The mottled effect and how it is secured will be described in the next article of this series on Distinctive Wall Effects. The mottled effect and the two-toned figured finish are but two of many charming treatments that can be secured with Dutch Boy white-lead and Dutch Boy flattening oil.

NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 900 W. 18th Street; Cincinnati, 639 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of Pa., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

This advertisement appears in the following publications:

Page Architectural Forum—May
American Architect—April 22

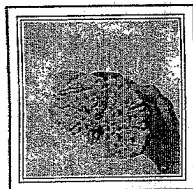
0000-NLI-000017255

DISTINCTIVE WALL EFFECTS

The Sponge-Mottled finish

The second article of a series showing how modern wall finishes are obtained with Dutch Boy white-lead and Dutch Boy flattening oil.

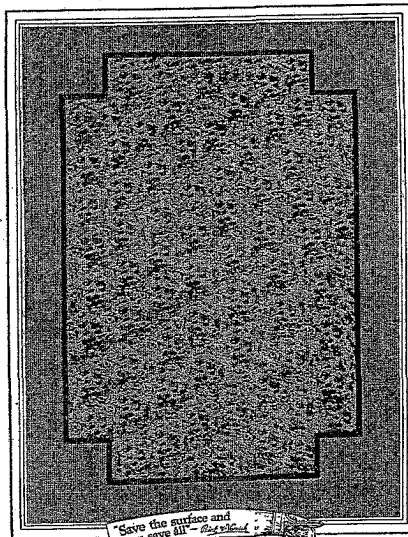
BY M. REA PAUL, CONSULTING COLORIST



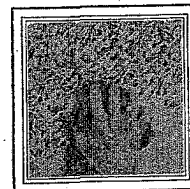
1. An ordinary sponge, cut with a flat surface, produces the design of the mottled finish. One of the interesting effects possible is shown in the large panel to the right.



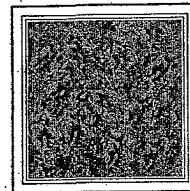
2. After a light undercoat is applied and allowed to dry, a little of the darker finish is poured on a board or other flat surface, into which the flat side of the sponge is pressed.



Save the surface and you save it—*Reynolds*



3. Then the flat side of the sponge is stamped against the wall, leaving an individual design where the high parts of the sponge come in contact with the surface.



4. This striking effect can be secured by applying a light color as a finishing coat, over a ground of a darker color. Write us if you would like samples of the mottled effect.

THE Department of Decoration of National Lead Company offers its help to architects in solving decorative problems. At no cost to you, color specialists will help you carry out the decorative treatments you have in mind. They will help select the schemes of treatment, submit for your approval color suggestions and color renderings when necessary, and assist in the writing of your specifications.

We shall be glad to send you samples typical of the wide range of effects that can be secured with the sponge-mottled finish. Just write our nearest branch, address-

ing your letter for the attention of the Department of Decoration.

Next month, the silk effect. The next article of this series will describe the silk effect—another of the many interesting treatments that can be secured with Dutch Boy white-lead and Dutch Boy flattening oil.

NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 900 West 18th Street; Cincinnati, 639 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of Penna., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.



This advertisement appears in the following publications:

Page—Architectural Forum—June
American Architect—May 20

0000-NLI-000017256

DISTINCTIVE WALL EFFECTS

The Satin Finish

The third of a series showing how modern wall finishes are obtained with Dutch Boy white-lead and Dutch Boy flattening oil.

By M. REA PAUL, Consulting Colorist.

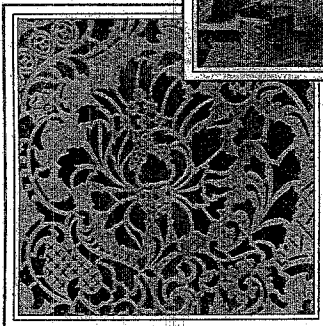
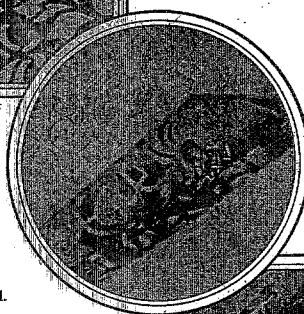
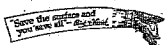


The panel above illustrates the use of a stencil in producing the Satin Finish with gloss paint contrasted with flat paint. In this panel the light part is stenciled flat over the dark, gloss ground.

After the gloss ground coat has been applied and allowed to dry, a stencil is fastened firmly to the wall.

Then a little of the flat finishing coat is placed on a smooth surface, into which the brush is dipped. This light color is then applied to the wall through the openings in the stencil, by tamping with the stenciling brush.

The panel to the right shows the same stencil as that used in the panel above, but in this one the light ground is glossy and the dark color is stenciled on flat.



THE Satin Finish is one of many interesting decorative treatments that can be obtained with Dutch Boy paint materials. To visualize it, think of the familiar figured, satin-covered wall. The gloss element is obtained with paint made of Dutch Boy white-lead and Dutch Boy flattening oil, to which has been added a little pale varnish. The contrasting flat portion of the design is secured with paint made of Dutch Boy white-lead and Dutch Boy flattening oil.

The Department of Decoration of National Lead Company offers its help to architects in solving decorative problems. At no cost to you, color specialists will help carry out treatments you have in mind. They will help select schemes of treatment, submit color suggestions and color renderings when necessary, and assist in the writing of your specifications.

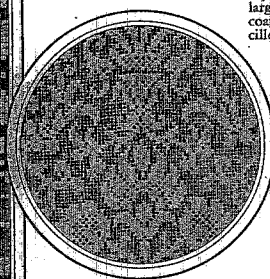
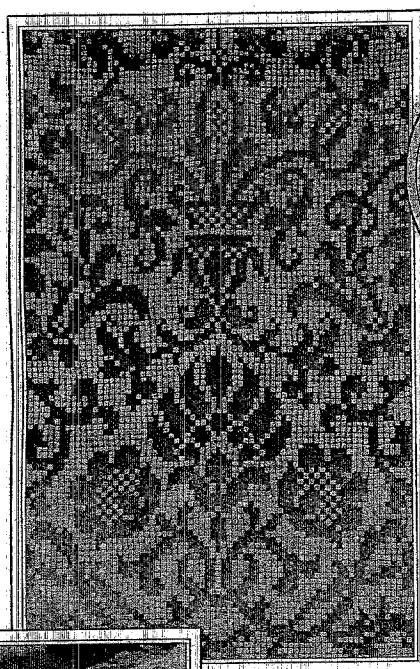
Actual painted samples of the Satin Finish and detailed instructions, convenient for filing, will be sent

you if you will write the Department of Decoration in care of our nearest branch.

The next article of this series will describe the Lace Stencil Effect—another interesting treatment obtainable with Dutch Boy paint materials.

NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 900 West 18th Street; Cincinnati, 659 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of Pennsylvania, 516 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.



The treatment in the circle is just the opposite of the large panel. The ground coat is light and the stencilled finish is dark.

DISTINCTIVE WALL EFFECTS

The Lace Stencil Finish

The fourth of a series showing how wall finishes are obtained with Dutch Boy white-lead and Dutch Boy flatting oil.

BY M. REA PAUL, *Consulting Colorist*

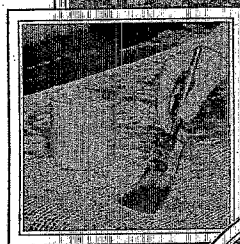
THE Lace Stencil Finish is most frequently used in panels to lend a distinctive atmosphere to the decorative treatment of interiors such as those in the more elaborate residence, the theatre, or the ball room. It gives a clean-cut pattern which with the intricate design results in a decidedly interesting effect.

Write for actual samples

You can secure actual painted samples of the Lace Stencil Finish and any or all of the finishes previously described in this series, including two-tone figured finishes of various types, if you will write the Department of Decoration in care of our nearest branch. Samples are accompanied by detailed instructions, convenient for filing.

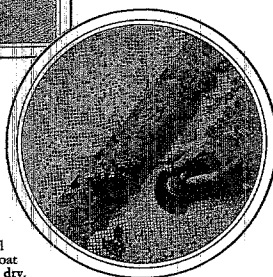
The Department of Decoration of National Lead Company, conducted by paint and color specialists, will help you carry out decorative treatments you have in mind. They will help select the schemes of treatment, submit color suggestions and, if you wish, assist in the writing of your specifications.

Next month the Tiffany Finish—one of the most desirable of the painted wall finishes—will be described.



An ordinary lace curtain of fairly large mesh is made stiff and non-absorbent by a thin coat of shellac on both sides.

The lace is then used as a stencil through which a finishing coat is tamped with the stencil brush, over a ground coat that has been allowed to dry.



NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 500 West 18th Street; Cincinnati, 650 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 483 California Street; Pittsburgh, National Lead & Oil Co. of Penna., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.



This advertisement appears in the following publications:

Page—*Architectural Forum*—Aug.
Amer. Architect—Aug. 12

0000-NLI-000017258

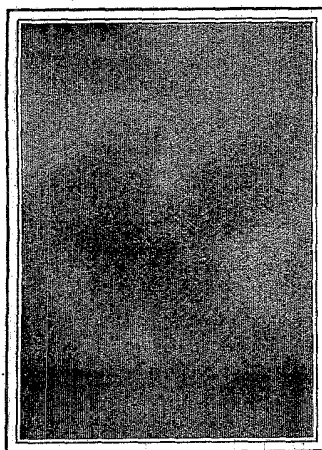
BUILDING.

DISTINCTIVE WALL EFFECTS

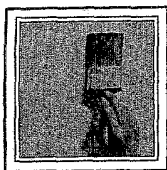
The TIFFANY FINISH

The fifth of a series showing how various wall finishes are obtained with Dutch Boy white-lead and Dutch Boy flattening oil.

BY M. REA PAUL,
Consulting Colorist

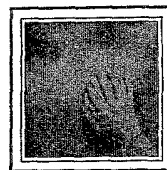
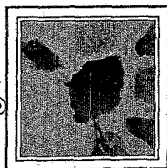


The Tiffany Finish (illustrated in large panel) lends itself to a variety of rich effects. One of the most interesting is that resembling leather, secured by blending burnt sienna, burnt umber and raw umber on a cream ground as shown below.



When the cream ground is dry, a coat of Dutch Boy flattening oil is applied.

Immediately the glazing colors are applied in spots.



Finally the colors are wiped out entirely in a few places to permit portions of the ground to show through.

With a circular motion, the spots are blended together by means of a ball of cheesecloth.

ONE of the richest painted wall finishes is the Tiffany. With it, a beautiful blended effect is produced, making the walls appear as though light were shining on them through a stained glass window. The natural beauty of the Tiffany finish is accentuated when it is enclosed in panels, surrounded by a plain one-tone wall.

Would you like to secure actual painted samples of the Tiffany finish and other interesting treatments that can be secured with white-lead paint? These samples will be sent you without charge or obligation if you will write the nearest branch of National Lead Company, marking your letter for the attention of the Department of Decoration. Samples are accompanied by



detailed instructions, convenient for filing.

National Lead Company through its Department of Decoration also offers a special advisory service to architects. Color specialists, without charge, will help you to carry out the decorative treatments you have in mind. They will help select the schemes of treatment, submit for your approval color suggestions and color renderings and, if you wish, assist in the writing of your specifications.

On this page next month, the Wiped Stencil Finish will be shown and described.

NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 909 West 18th Street; Cincinnati, 699 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of Penna., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

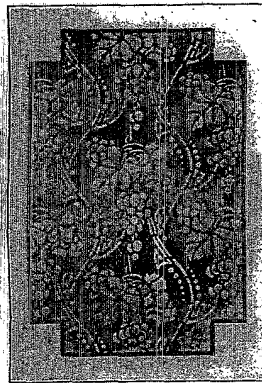
This advertisement appears in the following publications:—

Page—Architectural Forum—September
American Architect—September 9

0000-NLI-000017259

DISTINCTIVE WALL EFFECTS

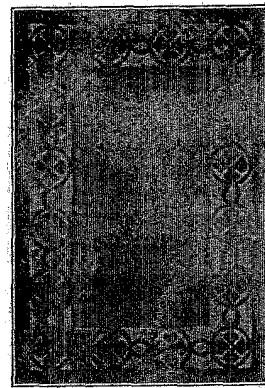
The WIPED-STENCIL FINISH



The Wiped-Stencil Finish employed in a panel

The sixth of a series showing how various wall finishes are obtained with Dutch Boy white-lead and Dutch Boy flatting oil.

by M. REA PAUL
Consulting Colorist



A border effect obtainable with the Wiped-Stencil Finish

THE Wiped-Stencil Finish is obtained by employing a stencil design over a Tiffany Finish. The stenciling, however, is not secured by painting, but by wiping out the wet glazing colors of the Tiffany through the stencil openings, permitting the ground coat to show through. The Wiped-Stencil Finish is most frequently used in panels. But it is equally well suited for border effects. It is done faster than direct stenciling because there is no need to wait for the wall to dry. Then, too, errors are easier to correct, for the stencil is wiped out instead of being painted in. An interesting added effect may be obtained by applying colors-in-oil to certain parts of the wiped-out sections. These colors, in full strength, provide

an appropriate blend in harmony with the rest of the finish. Actual painted samples of the Wiped-Stencil Finish, and the finishes previously described in this series, will be sent you, if you will write our nearest branch.

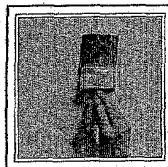
The Department of Decoration of National Lead Company will help you carry out the decorative treatments you have in mind. They will help you select schemes of treatment, submit for your approval color suggestions and color renderings and, if you wish, assist in the writing of your specifications. Address them in care of our nearest branch.

On this page next month, the effects obtainable by means of Paneling will be shown and described.



NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 115 Oak Street; Chicago, 900 West 18th Street; Cincinnati, 639 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 483 California Street; Pittsburgh, National Lead & Oil Co. of Penna., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.



When the proper ground coat is dry, a coat of Dutch Boy flatting oil is applied

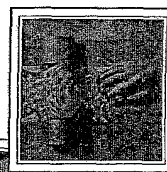


Immediately the glazing colors decided upon are applied in spots

With a circular motion, the spots are blended together by means of a ball of cheesecloth



The colors are wiped out entirely in a few places to permit portions of the ground coat to show through

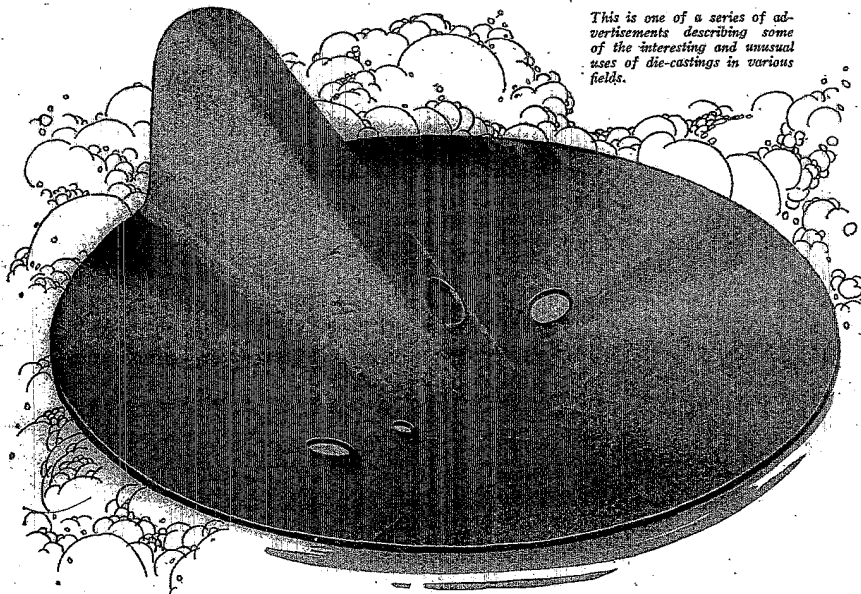


Then with a piece of dry cheesecloth, the glazing coat is wiped out through the stencil openings, permitting the ground coat to show through

This advertisement will appear in the following publications:

Architectural Forum—October
American Architect—Oct. 5

0000-NLI-000017260



This is one of a series of advertisements describing some of the interesting and unusual uses of die-castings in various fields.

We don't die-cast the suds

WHILE looking over part after part that we die-cast for electric washing machines, a prospective customer was led to remark: "Why, you seem to die-cast everything except the soap and water."

Such is virtually the case. Manufacturers of electric washers make extensive use of die-castings. We die-cast at least two dozen different parts for washing machines, including such large pieces as complete wringer frames, stomper arms, and gear boxes.

The metal disk illustrated is a washing-machine part. It is what makes a cer-

tain electric washer wash. Measuring almost a foot and a half across its face and weighing close to four pounds, this disk is one of the largest aluminum die-castings ever manufactured.

Many parts heretofore considered too big to be die-cast are now being turned out successfully. Try us if you have a large part that you want die-cast.



When you buy die-castings from us, you are assured of the same high quality that has established our Dutch Boy trademark as a mark of excellence on babbitts, solder and paint materials.

NATIONAL LEAD COMPANY

111 Broadway

Die-Casting Division

New York, N. Y.

Western Representatives: E. R. McCormick, 2599 Cadillac Ave., Detroit, Mich.

A. H. Bergedick, 667 Bowen Street, Dayton, Ohio.

A. A. Gildemeister, 444—4th Street, Toledo, Ohio

ALUMINUM, ZINC, LEAD and TIN DIE-CASTINGS

The advertisement appears in the following magazines:

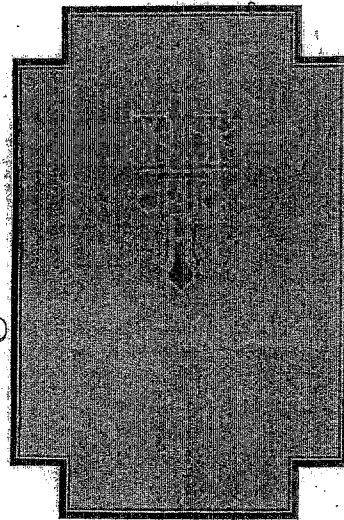
Automotive Industries..... June 18, 1925
American Machinist..... June 18, 1925
Purchasing Agent..... July, 1925
Machinery..... August, 1925
General Electric Review..... August, 1925

BUILDING.

Seventh of a series on various wall effects obtained with Dutch Boy white-lead and Dutch Boy flatting oil

by M. REA PAUL
Consulting Colorist

One of the many interesting effects obtainable by means of paneling. Inside the panel is a plain, stippled finish, relieved by a central motif stencilled in.

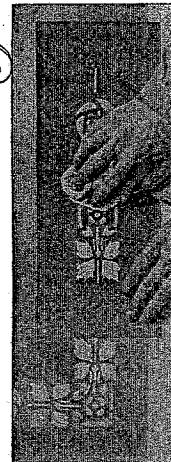


DISTINCTIVE WALL EFFECTS

PANELING WITH PAINT



Panel in which the crumpled roll finish has been used. The severity of the straight line border is relieved by a decoration stencilled over the panel finish.



The Tiffany finish used in a panel. Here the border effect is obtained by wiping out the panel finish through the stencil.



Striking off the border stripe with lining brush.

PANELING is employed chiefly as a means of lending interest to an unbroken expanse of wall surface. Inside the panels a variety of decorative effects may be used, such as the crumpled roll finish, the silk effect, the lace stencil finish, the Tiffany finish and others which have been described in this series on Distinctive Wall Effects. Moreover, variety can be obtained by the use of different borders, such as the painted straight line, the painted stencil, wiped stencil and molding.

When a molding or a border is used to enclose the panel, it is painted a harmonizing color, sufficiently different to set off the panel. Painted panel borders

have several advantages. They are economical in cost, simple to obtain. When re-decoration is desired, the painted border can be painted out. There are no nail-holes, no disfigurement of the wall surface.

In producing the desired paneling the ground color is applied to the entire wall and allowed to dry. Then the areas in which panels are to be made are outlined by snapping a taut, chalked string against the wall. The finishing coat to be used inside the panel is applied. Then the border stripe is struck off with a lining brush or is stencilled or wiped through the openings of a lining stencil.

If you would like to receive actual painted samples of the various wall finishes described in this series, including two-tone figured finishes of various types, write our Department of Decoration in care of our nearest branch.

Our experts will be glad to assist you in selecting schemes of treatment, submit color suggestions, and, if you wish, assist in the writing of your specifications.



NATIONAL LEAD COMPANY
New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 900 West 18th Street; Cincinnati, 659 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of Penna., 346 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

This advertisement will appear in the following publications:

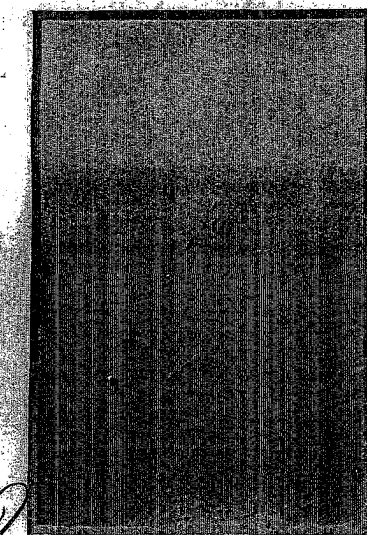
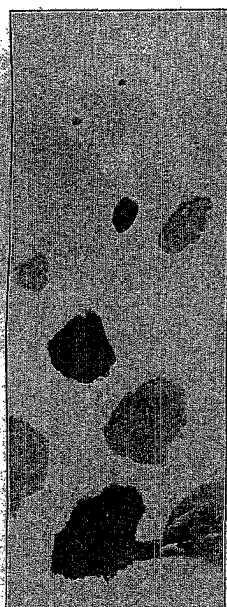
Architectural Forum—Nov.
American Architect—Nov. 5

0000-NLI-000017262

DISTINCTIVE WALL EFFECTS

The Shaded Tiffany Finish

BUILDING.



After the selected ground coat is dry, a coat of Dutch Boy flattening oil is applied. While the flattening oil is still wet, the glazing colors are put on in spots. The spots should vary from small, widely spaced ones at the top to larger, more closely spaced ones at the bottom as shown.

With a circular motion the spots of glazing colors are blended together by means of a ball of cheesecloth. The colors are wiped out entirely in a few places to permit portions of the ground coat to show through. Then the work is finished by tamping with a ball of cheesecloth.

Eighth of a series showing how various wall effects are obtained with Dutch Boy white-lead and Dutch Boy flattening oil.

by M. REA PAUL, Consulting Colorist

AN exquisite harmonizing and gradation of coloring are found in the shaded Tiffany finish. It differs from the plain Tiffany finish in that it is gradually shaded from dark coloring at the base to the lighter first coat at the top.

The shaded Tiffany is especially well suited for use in low-ceiling interiors as a means of giving the appearance of increased height. It may be used to advantage in the hotel grill, lobby or corridor; in the assembly room of the school or for the larger low-ceiling rooms in the home. The glazing colors selected for use may be so blended as

to produce a soft, unobtrusive, but decidedly interesting effect.

Write for Free Samples

If you will write our nearest branch, we shall be glad to send you actual painted samples of the shaded Tiffany finish and any or all of the other seven finishes described in this series on Distinctive Wall Effects.

We also offer you without charge the help of our Department of Decoration. Color specialists will assist you in seeing that you secure the decorative treatments you have in mind.

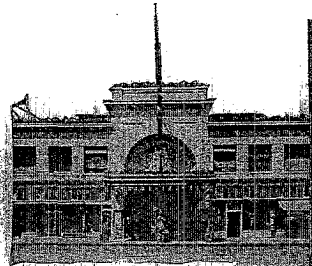
They will help select the schemes of treatment, submit for your approval color suggestions and color renderings and, if you wish, assist in the writing of your specifications. For this service, simply address the Department of Decoration in care of our nearest branch.



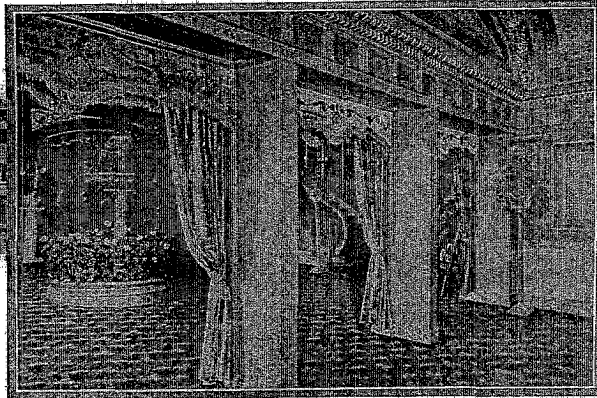
NATIONAL LEAD COMPANY
New York, 111 Broadway, Boston, 131 State Street;
Buffalo, 116 Oak Street; Chicago, 900 West 18th
Street; Cincinnati, 659 Freeman Avenue; Cleveland,
820 West Superior Avenue; St. Louis, 722 Chestnut
Street; San Francisco, 485 California Street; Pitts-
burgh, National Lead & Oil Co. of Penna., 316 Fourth
Avenue; Philadelphia, John T. Lewis & Bros. Co.,
437 Chestnut Street.

This advertisement appears in the following publications:—

Architectural Forum—December
American Architect—Dec. 5



Exterior view and foyer of the Liberty Theatre, Portland, Oregon, Paul Noble, Manager. The photograph does not begin to show the blending of cool tan with old gold on the ceiling, or the muted walls with tones of autumn tints. These effects were achieved with Dutch Boy white-lead mixed with Dutch Boy flatting oil.



Entire theatre redecorated— not a performance missed

HOW could the entire theatre be redecorated without missing a single performance? This was the problem that recently faced Paul Noble, manager of the Liberty Theatre in Portland, Oregon. Mr. Noble got in touch with W. F. Blaesing, a prominent local painter and decorator.

Carefully they made their plans. As a result the Liberty Theatre today has charming and artistic interiors such as the one you see above. Yet not a single performance was missed!

After the show each evening Mr. Blaesing and his fifteen men worked while Portland slept. Of course they had to have a quick-drying paint and one that spread easily.

Mr. Blaesing and his men used such a paint, made with Dutch Boy white-lead and Dutch Boy flatting oil. With it they were able to produce effects so beautiful that many columns of favorable comment appeared in the Portland newspapers.

The same qualities which made Dutch Boy the choice in this instance are causing building owners and managers to specify it for the redecorating of office buildings, hotels, and apartment houses.

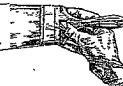
Paint made of Dutch Boy white-lead and flatting oil is so remarkably easy to apply and has such unusual covering power per gallon, that a real saving results. Moreover, it reduces repainting costs because it will

stand repeated washings over a period of years without losing its rich, silky finish.

If you want to plan a decorative scheme that will not only please your tenants, but will also be sensibly economical, write to our Department of Decoration. This department has made a practical study of building problems and places a wealth of experience at your command. Its service includes the preparation of color charts, mixing formulas, paint specifications and color sketches which show the colors as they will look on the job. There is no charge for this service, and of course no obligation.



"Save the surface and
you save all" — Paint & Varnish



NATIONAL LEAD COMPANY
New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 900 West 18th Street; Cincinnati, 659 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of Pa., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Company, 437 Chestnut Street.

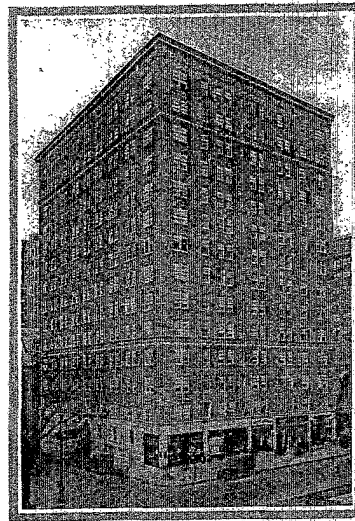
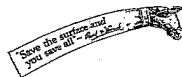
This advertisement appears in the following publication:

Page—Buildings & Building Management—Jan. 5, 1925

0000-NLI-000017264



Joseph Golding's new apartment at 255 West 88th Street, New York City. This new building has been decorated throughout with Dutch Boy white-lead and flatting oil by Cherkasky and Rubin.



Every apartment filled before building is finished

New 14-story apartment house offers such attractive interiors that owner has no trouble in leasing every room

AMONG New York City's many new apartment houses, none can boast of more attractive interiors than the fourteen-story building recently completed for Mr. Joseph Golding at 255 West 88th Street.

When this building was first planned, Mr. Golding stipulated that its interiors should be so attractively designed that select, discriminating people would want to make it their home. Mr. J. B. Cotier, the construction engineer, and Mr. S. Cherkasky, the decorator, worked out a decorative treatment that not only satisfied Mr. Golding but so delighted apartment-seekers that the building was filled long before the painters had completed their work.

Perhaps the most noteworthy feature of this decorative treatment—one that will specially interest building-owners and managers—is its two-fold economy.

First, the wall finishes, in soft two-

tone stippled effects, will harmonize with almost any type of interior furnishing. Thus costly redecorating to please fussy tenants, the problem of every building-owner, was practically eliminated at the start.

Secondly, by using paint made of Dutch Boy white-lead and flatting oil a beautiful flat finish was secured that is not only extremely durable but perfectly washable. It is not necessary to repaint so often if the interior finish can be cleaned with soap and water.

Both Mr. Cotier and Mr. Cherkasky are enthusiastic about the results they obtained with this Dutch Boy combination. The latter tells us "Dutch Boy white-lead and flatting oil makes an ideal paint for work of this kind, for it enables the painter to mix his paint to suit the job on hand. Nor is there any limit to color selection. It is the only paint I know of that will stand re-

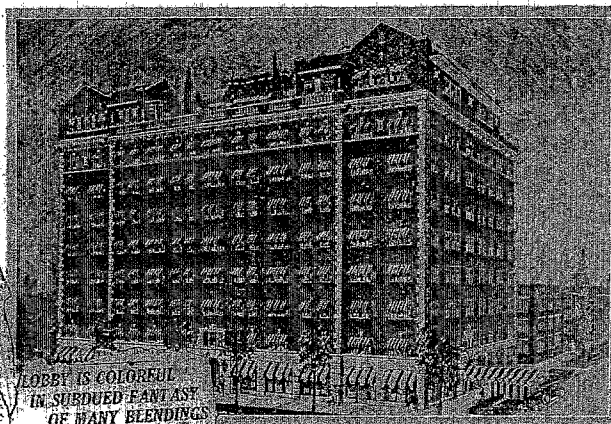
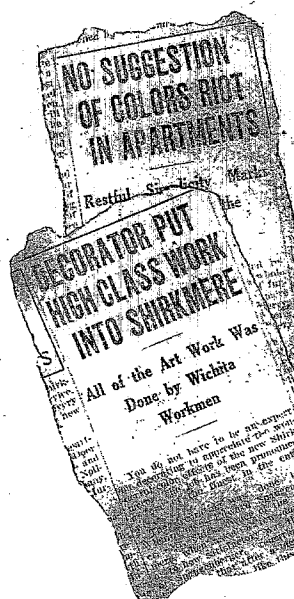
peated washings over a period of years without cracking or losing its rich, silky finish."

If you want to plan similar decorative schemes that not only prove effective in securing the right tenants but are also sensibly economical, write to our Department of Decoration.

This Department has made a practical study of building problems, and places a wealth of experience at your command. The service includes the preparation of color charts, mixing formulas, paint specifications and color sketches which show the colors as they will look on the job. All this service costs you is the time it takes to write a letter.

NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 151 State Street; Buffalo, 116 Oak Street; Chicago, 900 West 18th Street; Cincinnati, 639 Freeman Avenue; Cleveland, 320 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 486 California Street; Pittsburgh, National Lead & Oil Co. of Pa., 814 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Company, 437 Chestnut Street.



The Shirkmere, Wichita, Kansas, and some of the newspaper comment regarding its interiors, which were decorated with Dutch Boy white-lead and Dutch Boy flatting oil.

Sixteen families on the waiting list

WHEN Oscar S. Shirk first planned his modern apartment house for Wichita, Kansas, he had one idea that he was determined to carry out. He was determined to give Wichita an apartment with every modern convenience, regardless of cost.

He was taking a chance, for as he himself said, "A good many persons told me they were afraid I could not keep the apartment filled. I was not so sure myself. But I went ahead and built. Today the Shirkmere Apartments are all filled and there are 16 families on the waiting list."

Mr. Shirk spent over a million dollars on the Shirkmere and its decorations. He did not stop with the usual appointments of an apartment house, but included a spacious lounge, a solarium, ballrooms, and spacious roof gardens.

An outstanding feature of the Shirkmere—and one that doubtless had a great deal to do with its success—is its charming interior effects. These effects are so striking that they received columns of favorable comment in the local newspapers. Mr. Shirk himself, who owns other apartment houses in Wichita, pronounced the decorating of the Shirkmere as having "more than

equalled the terms of our contract and my expectations. It is a 100% job."

These effects are the work of Edward Spangenberg, a prominent decorator of Wichita, who used five tons of Dutch Boy white-lead mixed with Dutch Boy flatting oil in decorating the Shirkmere.

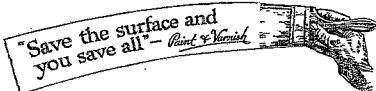
Dutch Boy white-lead and flatting oil make an ideal paint for work of this kind, whether it be in an apartment house such as the Shirkmere, or a commercial building or an office building. This paint gives a beautiful flat finish which is not only extremely durable, but is perfectly washable. With such a finish repainting is not required so often because the interiors can be cleaned again and again with soap and water without destroying their beauty.

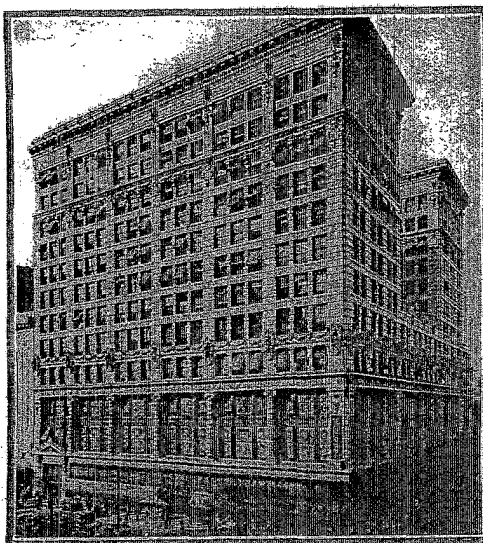
If you want to plan a decorative treatment that will not only please your tenants, but will also be sensibly economical, write to our Department of Decoration. This department has made a practical study of building problems and places a wealth of experience at your command.

There is no charge for this service. Just write our nearest branch.

NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 909 West 18th Street; Cincinnati, 659 Freeman Avenue; Cleveland, 320 West Superior Avenue; St. Louis, 721 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of Pa., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.





Maison Blanche Building, located in the busiest section of New Orleans. Walls and ceilings of this building are decorated with Dutch Boy white-lead and Dutch Boy flatting oil.

The secret of the Maison Blanche

Owners of well-known southern building discover a paint that keeps walls and ceilings attractive at no additional cost

IN the busiest section of New Orleans is the Maison Blanche Building, operated by the Maison Blanche Realty Company. In addition to offices, here is located the famous Maison Blanche, one of the largest department stores in the south.

Until a year ago the paint used on the interiors of the Maison Blanche Building peeled and did not give satisfactory results, according to M. Aragon, master painter of the company. He began using Dutch Boy white-lead and flatting oil. Here is what Mr. Aragon reports:

"I note that peeling on ceilings and walls is eliminated. Dutch Boy white-lead and flatting oil dries to a beautiful sheen. This paint covers better, works smoother, and dries without laps. The cost is about the same as ordinary flat paint, since covering capacity is about one and one-half times greater."

Dutch Boy white-lead and flatting oil makes an ideal paint for interiors of office buildings, apartment houses and commercial buildings. This paint can be mixed

right on the job. It lends itself perfectly to such decorative treatments as stippled effects and Tiffany finish.

Walls and ceilings painted with Dutch Boy white-lead and flatting oil can be washed repeatedly without losing their rich, silky finish. This means a real saving in repainting costs.

Our Department of Decoration has made a practical study of building problems and places a wealth of experience at your command. Write our nearest branch if you would like help in planning a decorative treatment that will not only please your tenants, but will also be sensibly economical. This service is rendered without obligation and includes the preparation of color charts, mixing formulas, paint specifications and color sketches which show the colors as they will look on the job.



NATIONAL LEAD COMPANY

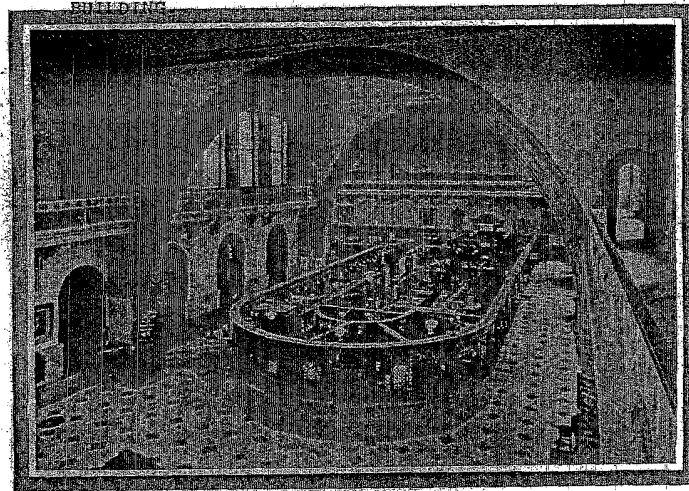
New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 300 West 18th Street; Cincinnati, 659 Front Ave.; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 482 California Street; Pittsburgh, National Lead & Oil Co. of Pa., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

This advertisement appears in the following publication:

Page—Buildings and Building Management—March 30

0000-NLI-000017267

WITH annual deposits of \$200,000,000, the Philadelphia Savings Fund Bank is one of the largest banks in the United States. Its walls and ceilings were painted with Dutch Boy white-lead over the original coating of the same paint which kept in good condition for eighteen years.



Eighteen years with a single painting

EIGHTEEN years ago the walls and ceilings of the Philadelphia Savings Fund Building were decorated with paint made of Dutch Boy white-lead. This paint kept in good condition until recently, with only an occasional dusting and washing. No wonder a short time ago, when redecoration was planned, paint made of Dutch Boy white-lead was again selected.

Of course this is an unusual instance. No building manager or superintendent expects paint—even Dutch Boy white-lead—to last so many years without repainting. More frequent redecoration is desirable in order to change the color treatment or to please new tenants. Nevertheless, interior walls should be covered with something which can be kept clean and sanitary, and Dutch Boy white-lead stands repeated washings over a long period of time.

For distinctive interiors

Long wear is but one of the qualities that make Dutch Boy white-lead popular for decorating banks, office buildings and apartments. Mixed with Dutch Boy flattening oil, it produces a flat paint for interiors that is rich and silky, yet inexpensive. This paint can be tinted any desired

color. With it unusual wall effects—such as stippling, mottling, two-tone finishes, Tiffany finishes—are easily produced.

Repeated washing does not injure paint made of Dutch Boy white-lead and Dutch Boy flattening oil. Cleansing with soap and water does not mar its original beauty.

Our Department of Decoration has made a practical study of building problems. They will be glad to help you select color treatments for one room or an entire building, and will furnish you with color charts, mixing formulas, paint specifications and color sketches, when necessary, showing the colors as they will look on the job.

This color service is rendered without obligation. Just write our nearest branch.

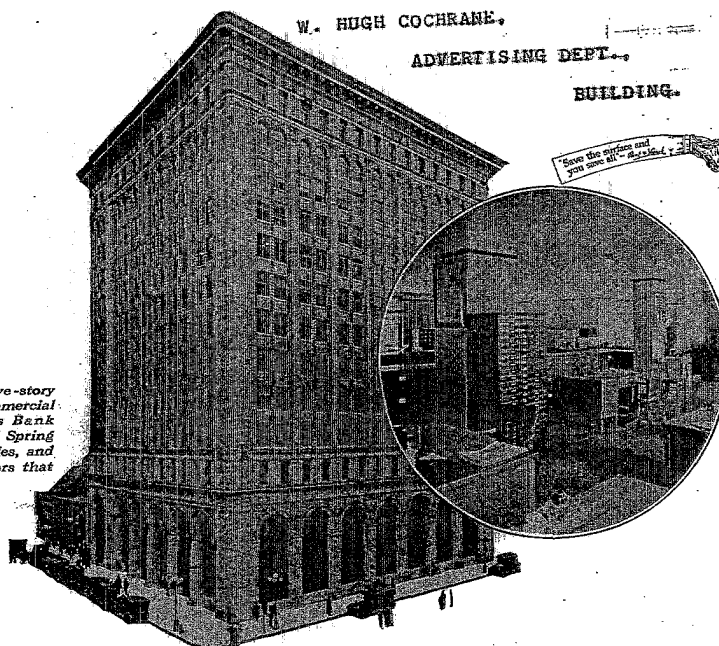


NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 900 West 18th Street; Cincinnati, 639 Freeman Avenue; Cleveland, 320 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of Pa., 315 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

This advertisement appears in the following publication:

Page—Buildings and Building Management—June



THE new twelve-story Hellman Commercial Trust & Savings Bank Building, 7th and Spring Streets, Los Angeles, and one of the interiors that were decorated with flat paint made of Dutch Boy white-lead and Dutch Boy flatting oil.

Covering power that surprised the painter himself

R. A. WARREN is president of one of the largest painting firms in California. Though he has been in the business for many years, he was recently surprised at the spreading power of Dutch Boy white-lead and Dutch Boy flatting oil when he used this flat paint on interiors of the new Hellman Commercial Trust and Savings Bank in Los Angeles. He found that "one gallon of this paint covered better than 700 square feet per coat."

Not only is paint made of Dutch Boy white-lead and flatting oil economical to use, because of its unusual covering power, but it goes on quickly and easily and produces a smooth, silky finish rivaling a many-coat, rubbed-down job. Referring to the interiors above, Mr. Warren says, "The results obtained were most pleasing from the standpoint of appearance, and the working qualities were all that could be desired."

Dutch Boy white-lead and flatting oil may be

tinted to any desirable color, and it also lends itself to any popular decorative finish such as mottled, stippled, and Tiffany effects.

Walls painted with Dutch Boy white-lead and flatting oil can be washed repeatedly without losing their smooth, silky finish.

Our Department of Decoration has made a special study of building decoration problems. Our specialists will be glad to help you to select color treatments for one room, or for an entire building. They will furnish you with color charts, mixing formulas, paint specifications and color sketches. There is no obligation for this service. Just write our nearest branch.



NATIONAL LEAD COMPANY
New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 900 W. 18th Street; Cincinnati, 659 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of Pa., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

This advertisement appears in the following publication:
Page—Buildings & Building Management—July 20

Walls and ceilings by Lacourciere and Dutch Boy

THE Southern New England Telephone Company recently opened their new building at Meriden, Connecticut. The painting was done by The J. Lacourciere Company. To best combine the three essential qualities—attractiveness, durability and sanitation—the painters did the entire job with Dutch Boy white-lead and Dutch Boy flatting oil.

As a result the interiors of the Meriden Telephone Building are both good-looking and



A corner of the rest room in the Meriden Telephone Building. The interiors of this new building are decorated with flat paint made of Dutch Boy white-lead and flatting oil.

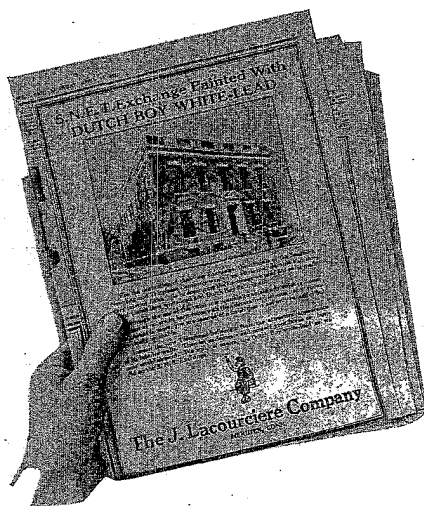
thoroughly practical. Flat paint made of Dutch Boy white-lead and flatting oil produces a smooth, silky finish—beautiful and easy on the eyes. It provides a *lasting* beauty—a surface that can be washed as frequently as desired without marring its appearance.

Paint made of Dutch Boy white-lead and

flatting oil cuts the cost of interior decoration. It is easy to apply. A small quantity covers a large area. It also reduces maintenance costs, because of its unusual lasting power and ease of cleaning.

Moreover, this paint has unlimited decorative possibilities. It can be readily tinted to any desirable color. Any good painter can achieve many beautiful variations in design and effect. And it is easy to get full, practical instruction on methods for producing de luxe interior effects. Just write our Department of Decoration, whose

job it is to study building decoration problems and place the full data on your desk. Its service includes preparation of color charts, mixing formulas, paint specifications and color sketches showing colors as they will look on the job. All this is free of cost or obligation.

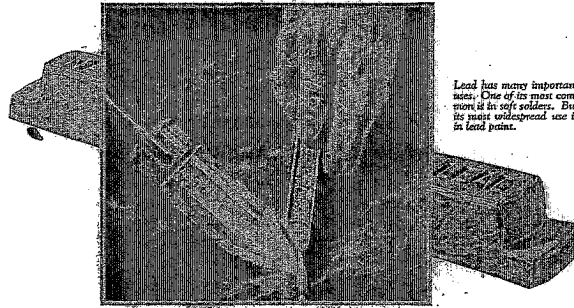


The J. Lacourciere Co., who painted the Meriden Telephone Building, express their pride in a good job and give credit to Dutch Boy, through a quarter-page advertisement in the Meriden Journal.



NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 900 West 18th Street; Cincinnati, 659 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead and Oil Co. of Penna., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.



Lead has many important uses. One of its most common is in soft solders. But its most widespread use is in lead paint.

"SODDER" *The Glue of the Metals*

WE pronounce it *sodder* and spell it *solder*, though there have been as many different ways of spelling it as there are letters in the word. *Soder, sawder, sowder*—have all been used. The origin of the word solder means "to make solid." Lead mixed with tin makes this solder, whose use is to join metal to metal, to seal metal containers, and to patch holes in metal. Lead-tin solder is to the metal worker what glue is to the cabinetmaker and the bookbinder.

Why is lead used in soft solders? One reason is that pure lead combined with pure tin produces an alloy whose melting point is below that of either of these metals alone, and therefore is below that of the metals to be joined, even though these metals be lead and tin themselves. This alloy also adheres to zinc, copper, brass and even iron and steel, joining them in a perfect union.

Dutch Boy solders

Thousands of workers use the soft solders made under the Dutch Boy trademark. The Dutch Boy series of solders has been carefully and scientifically selected to cover every possible requirement of the solder user. Dutch Boy Solder 111 is the acme of solder quality. There is nothing better. It is 50% lead and 50% tin, which is not true of many so-called "half-and-half" solders. In the grades from 222 to 888 the proportions of lead and tin vary according to the number, but each number is always uniform in composition and quality. The Dutch Boy trademark guarantees absolute uniformity at all times.

National Lead Company also will furnish solder according to any formula required, in a variety of shapes, sizes, lengths and weights. It makes bar, wire, ingot, triangular, drop, segment, round, half-round, strip and ribbon solders.

If you are interested in the many uses to which solders can be put, or are concerned with the use of solder for any particular purpose, we will be pleased to send you complete informa-

tion. We will also send you free on request an illustrated leaflet, which tells in non-technical language how solders are made, what they are used for, and the importance of lead in these alloys that contribute to your comfort and safety.

Lead in paint

Of all the important uses of lead in the arts and industries of civilized peoples, the most general of all is the use of lead paint. From lead is made white-lead, famous for generations for the protection it gives to the surface it covers. Manufacturers use white-lead as the principal ingredient of their best paints. Professional painters use "lead-and-oil," a mixture of pure white-lead and pure linseed oil. House-owners more today than ever before save the surface of their properties by covering them with constantly maintained coatings of white-lead paint.

National Lead Company makes white-lead of the highest quality and sells it, mixed with pure linseed oil, as Dutch Boy white-lead.

Other Dutch Boy products

In the famous Dutch Boy series of products, besides white-lead and solder, there are red-lead, linseed oil, flating oil and babbitt metals.

National Lead Company makes, in addition, lead products for practically every purpose to which lead can be put. Among these products are sheet metal, lead tubes and tubing, calking lead and US cartridges and shot shells.

If you desire specific information about any of these or other uses of lead, write to the nearest branch of National Lead Company.



Send the address you are all at.

NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 925 West 18th Street; Cincinnati, 559 Freeman Avenue; Cleveland, 822 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 425 California Street; Pittsburgh, National Lead and Oil Co. of Penna., 516 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.



A two-tone figured finish, one of many obtainable with white-lead and flattening oil. A ground coat of one color and a finishing coat of another color are applied. By rolling a crumpled newspaper over the second coat while still wet, you get a design that you can be sure is distinctive.

*Interior finishes once found
only in the houses of the rich—*
**Now made available for every home
by white-lead and flattening oil**

WHEN great-grandfather was a boy, the interior beauty and charm of American homes were due in large measure to the beautiful and artistic woodwork finishes. These handsome woodwork finishes, built up with as many as five or six paint coats, were used generally throughout Colonial mansions. You may have seen and admired these rich, velvety finishes in reproductions of Colonial houses and in the finest modern homes. But these finishes were expensive and took a long time to put on.

Up to a short time ago such interior paint finishes were a luxury that only the wealthy could afford. But there is available today for interiors of homes everywhere a flat paint finish that is similar in beauty and durability to the old rubbed-down finish.

This flat finish is easier to apply than the rubbed-down finish, much more economical (because fewer coats and less labor are required) and very durable. Not only for woodwork but for the painting of walls this finish is ideal. With it many very beautiful and distinctive effects can easily be obtained, among them two-tone figured finishes, like the one shown above, two-tone mottled effects, two-tone glaze and Tiffany finishes.

What paint to use

Dutch Boy white-lead and Dutch Boy flattening oil make this new flat paint. White-lead, the pigment ingredient, is made from the metal, lead.

Dutch Boy white-lead is the highest grade white-lead obtainable. Mixed in the right proportions with Dutch Boy flattening oil, it makes a paint that can be quickly applied, and that produces a finish absolutely free from brush marks, laps or streaks. This paint makes a tena-

cious, durable, moisture-proof film that really becomes part of the covered surface. This film can be cleaned easily with soap and water without any harm to the paint.

Experts help to select colors

Dutch Boy flattening oil and Dutch Boy white-lead can be tinted to the shade or tint that will harmonize perfectly with your furnishings and draperies. National Lead Company maintains a Department of Decoration made up of experts who will gladly give advice on the proper selection of the colors for interiors of new houses or old. These men can also tell you about distinctive finishes and give you formulas for obtaining these finishes. Address your inquiries to Department of Decoration in care of the nearest of the branch offices listed below.

Send for free booklet

We will gladly send you actual painted samples of the two-tone figured finish, and a new booklet, "Painting—Protective and Decorative." This booklet tells what paint is, what paint does and why paint protects the surface. It contains color plates of interiors and exteriors and also of interesting and unusual artistic wall finishes that can be obtained with paint. Both the booklet and the samples are free.

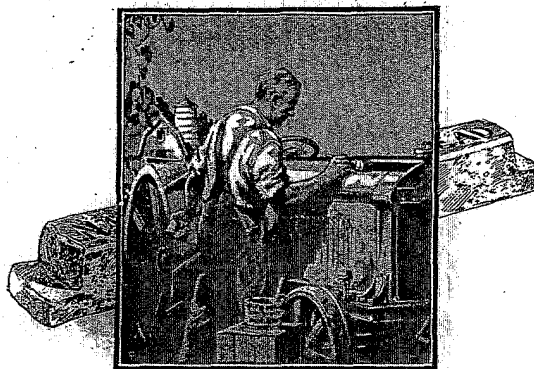
In addition to Dutch Boy white-lead and flattening oil, National Lead Company makes lead products for practically every purpose to which lead can be put in art, industry and daily life. If you desire specific information about any use of lead, write to our nearest branch.

NATIONAL LEAD COMPANY
New York, 111 Broadway; Boston, 151 State St.; Buffalo, 116 Oak St.; Chicago, 902 West 18th St.; Cincinnati, 659 Freeman Ave.; Cleveland, 840 West Superior Ave.; St. Louis, 722 Chestnut St.; San Francisco, 485 California St.; Pittsburgh, National Lead and Oil Co. of Pa., 216 Fourth Ave.; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut St.



The figure of the Dutch Boy Painter shown here is reproduced on every keg of Dutch Boy white-lead and is a guarantee of exceptional purity.





Red-lead helps man win the greatest war of all time

THIS war is between man and Nature. What man builds, the forces of Nature try to destroy. Nature is everlastingly striving to return all materials to their original and most stable form.

Man uses in his structures, among other materials, the strongest metal he has—steel. Opposed to it is one of Nature's strongest elements—moisture-laden air. The air attacks this metal which man has won from Nature and tries, by what is known as rusting, to draw it back to its original state. If the metal is left to face the attack alone, it soon weakens. It crumbles—is destroyed.

This battle with rust goes on about your own farm every minute of the day. You have steel in metal equipment, machinery, plows, metal gutters, various farm implements.

With red-lead, made from the metal, lead, you can make a covering for your steel through which air and moisture cannot penetrate. With red-lead your steel and thus your farm equipment give much longer service. When you give your metal this complete protection, you do only what engineers, building contractors, railroads, steamship companies and the U. S. Navy do for all the steel they use.

Follow their example further and use Dutch Boy red-lead.

Dutch Boy red-lead is pure and is highly oxidized. It has stood all tests for durability. It makes a hard, tenacious film that is still elastic

enough to expand and contract under heat and cold without cracking. Because it is exceedingly fine, it brushes out evenly and has unusual covering power. It gives full and economical protection to the metal surface it covers.

Dutch Boy red-lead, ready for mixing with pure linseed oil, comes in the natural red-lead color. It can be shaded to browns, greens, black, and other dark colors as desired.

Free paint booklet

We shall be pleased to send you a booklet, "The Handy Book on Painting," a storehouse of general paint facts and formulas. A section is devoted to the protection of metal surfaces. It tells how to prepare the surface for painting, how to mix and apply the paint. We shall also be glad to give you any specific information on any particular painting problem you may have.

Other Dutch Boy Products

In the famous Dutch Boy series of products, besides red-lead, there are white-lead, flattening oil, solder, linseed oil and babbitt metals.

National Lead Company, in addition, makes lead products for practically every purpose to which

lead can be put in art, industry and daily life. If you desire specific information about any uses of lead or have any special paint problem, write to our nearest branch.



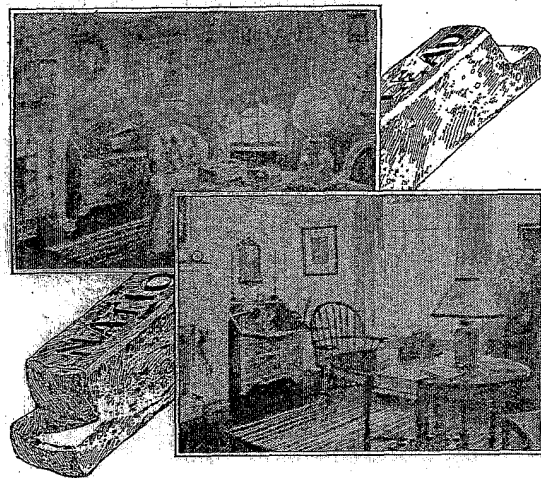
Save the surface and
you save all the steel

NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 900 West 18th Street; Cincinnati, 659 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of Penna., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

This advertisement appears in the following publications:

<i>Country Gentleman</i> —March 14	Standard Farm Paper Unit composed of
<i>Ohio Farmer</i> —March 14	<i>American Agriculturist</i> —week of March 9
<i>Indiana Farmer's Guide</i> —March 21	<i>Breeder's Gazette</i> —"
<i>Oklahoma Farmer and Stockman</i> —March 15	<i>The Farmer</i> —"
<i>Kansas Farmer, & Mail & Breeze</i> —March 28	<i>Hoard's Dairyman</i> —"
<i>Michigan Farmer</i> —March 28	<i>Nebraska Farmer</i> —"
	<i>Wisconsin Agriculturist</i> —"
	<i>Pacific Rural Press</i> —"
	<i>Prairie Farmer</i> —"
	<i>Progressive Farmer</i> —"
	<i>Wallace's Farmer</i> —"



Chase gloom from every room—with lead paint

YOU may remember how cheerless and unattractive the interiors of so many farm houses were a generation ago. Rooms looked like the one in the top picture—dark, gloomy, depressing. Many pieces of furniture, some of them of poor design, uncomfortable-looking and forbidding, stood about. Ornate wall decorations added to the confusion.

Such rooms are disappearing. Today women everywhere want cheerful surroundings—bright happy homes, attractive rooms to live in and work in—like the one in the lower picture.

Many farm women have found it easy to make this change in their homes. They stored the worst-looking and most useless furniture and knickknacks in the attic and thus gave the remaining fine old furniture space to display its beauty. They made other changes.

But the most important thing they did was to paint walls and ceilings simply and in tints that lightened and brightened the entire room. And in this work these women were helped by a remarkable interior flat paint. They used it with unusually beautiful results.

This new paint is made of white-lead—itsself very old—mixed with a new flattening medium—Dutch Boy flattening oil. Dutch Boy white-lead, a pure product made from the metal lead, makes with the flattening oil a flat paint that gives new beauty to new walls and greater charm to old walls and ceilings.

Dutch Boy white-lead and Dutch Boy flattening oil gives full protection to the covered surface, whether it be plaster or wood. It makes interior finishes of rare beauty—finishes like those found in the finest homes in

America. Take this paint, add the proper coloring matter to it, and you can get any tint or shade you desire. Either plain walls or two-tone mottled effects may be had.

Besides the beautiful finishes and the protection it gives, this flat paint has other great advantages. It is an economical paint because it has unusual spreading power and saves the surface for a long, long time. It can be easily cleaned with soap and water without harming its original beauty. It is easy to apply. It can be quickly put on in a smooth, even film that is free from brush marks and laps.

We will be pleased to send you a free booklet, "Painting—Protective and Decorative." This booklet tells what paint is, what paint does, and why paint protects the surface. It contains color plates of house exteriors and interiors and also of beautiful and unusual finishes obtainable with paint. The booklet sent free on request.

The picture of the Dutch Boy trademark on every package of Dutch Boy white-lead and Dutch Boy flattening oil is your guarantee of excellence.

National Lead Company also makes lead for practically every purpose to which lead can be put in art, industry and daily life. If you want specific information about any use of lead or of lead paint, write to the nearest National Lead Company branch.



NATIONAL LEAD COMPANY

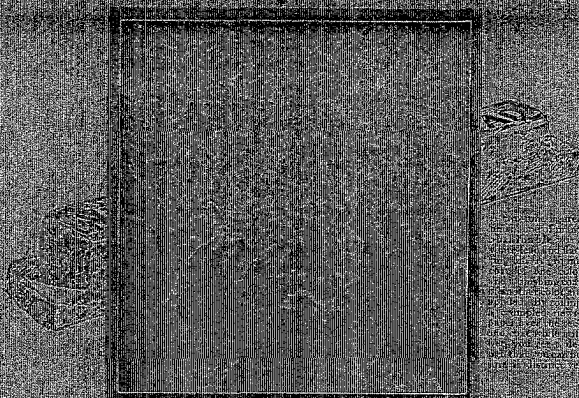
New York, 111 Broadway; Boston, 111 State Street; Buffalo, 115 Oak Street; Chicago, 900 West 115th Street; Cincinnati, 600 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 484 California Street; Pittsburgh, National Lead and Oil Co. of Penna., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bro. Co., 437 Chestnut Street.

This advertisement appears in the following publications:

Country Gentleman—April 11
Ohio Farmer—April 11
Indiana Farmer's Guide—April 18
Oklahoma Farmer & Stockman—April 15
Kansas Farmer, Mail & Breeds—April 25
Michigan Farmer—April 25

Standard Farm Paper Unit
American Agriculturist—Week of April 6
Breeder's Gazette—Week of April 6
Farmer—Week of April 6
Hoard's Dairyman—Week of April 6
Nebraska Farmer—Week of April 6
Pacific Rural Press—Week of April 6
Prairie Farmer—Week of April 6
Progressive Farmer—Week of April 6
Wallace's Farmer—Week of April 6
Wisconsin Agriculturist—Week of April 6

0000-NLI-000017274



INTERIOR FINISHES

once found only in the
houses of the rich, now
made available for every
farm house by white-lead
and flatting oil

What a great difference was a box of interior finish and charm of American homes were the interior finish. The beautiful and durable woodwork finishes you may have seen and admired these hand-painted finishes built up with as many as five or six coats of paint in the production of Colonial houses and in the finest modern homes.

Up to a short time ago such interior paint finishes were a luxury that only the wealthy could afford. But there is available today for the masses of homes everywhere the same finishes that is similar in beauty and durability to the hand-painted finishes of the olden times. They are better than the ordinary paint finishes that are common. They are more durable and less likely to be scratched, and more durable. Not only for woodwork but for the painting of walls and finishes. With it, a very beautiful and durable finish can easily be obtained. Among them, two-toned finishes like the one shown above.

What paint to use

Dutch Boy white-lead and Dutch Boy flatting oil are the best paint and the best oil for the interior of the house. The Dutch Boy white-lead paint is the best for the interior of the house. The Dutch Boy flatting oil is the best for the interior of the house.

Dutch Boy white-lead is preferred by professional painters and home owners everywhere. Mixed in the right proportions with Dutch Boy flatting oil, it makes a paint that can be quickly applied, that produces a finish free from brush marks, lumps and streaks and that can be rubbed to any desired color.

Send for Samples and Booklet

We will be pleased to send you a set of color samples of the two-toned finish and a booklet of the Dutch Boy flatting oil. The booklet tells what kind of paint to use and how to apply it. It also tells how to mix the paint and oil in the right proportions and how to apply it. It also tells how to mix the paint and oil in the right proportions and how to apply it.

Advisory Service

We are anxious to help you in every way we can. We will be pleased to send you a set of color samples of the two-toned finish and a booklet of the Dutch Boy flatting oil. The booklet tells what kind of paint to use and how to apply it. It also tells how to mix the paint and oil in the right proportions and how to apply it.

NATIONAL PAINT COMPANY

1000 Broadway, New York, N. Y.
Branches in all large cities.
Dutch Boy White-lead Paint
Dutch Boy Flattening Oil
Dutch Boy Interior Finishes

Farms Lose \$830,000,000 Yearly by Depreciation

And Man Depreciation penalizes the American farmer for the vast amount of \$830,000,000 annually. Because he does not paint at certain intervals, about the \$830,000,000 buildings that are scattered over the farms of the United States according to the Farm Journal of Philadelphia.

Farms use 1,000,000 gallons of paint yearly, and they need to use 400,000 gallons more. About 90 percent of all farms are made of wood. Of this 2,000,000 square feet of outside work, about 250,000 is never painted. The remainder is repainted on the average every eight and a half years. The average should be three or four years.

How much does neglect to paint cost you?

LEAD paint would save the millions of dollars lost through depreciation of farm buildings. The size of this loss is so tremendous that it is enough to pay \$7.50 to every person in the United States.

Lead paint will save you from paying your share of that \$830,000,000. It will help you keep down expenses that can so quickly eat into your profits. Use white-lead, the paint made from the metal, lead, to preserve your property from weather attacks—to save the money you have invested in it—to increase the value of your farm. It is less expensive to keep your buildings properly protected with white-lead than it is to make repairs and replacements.

The paint that painters use

White-lead has been the standard surface protection for generations among master painters and house owners. There is nothing better than pure white-lead to give complete protection to wood and other non-metallic surfaces. You will find it the basic ingredient in all the best paints.

Because it is pure white-lead thousands of house owners specify Dutch Boy white-lead. They know they can rely on it to give the complete protection the surface needs.

For exterior-painting, and also for interior work where a gloss finish is desired, mix Dutch Boy white-lead with pure linseed oil. This gives a moisture-proof and weather-

proof film—a smooth, uniformly even coat that sticks so tight it seems to be a part of the covered surface. It does not crack and scale.

For interior walls, ceilings, and woodwork, where a flat finish is usually preferred, mix Dutch Boy white-lead with Dutch Boy flattening oil. You'll get a flat paint that gives to your home unusual beauty. You can tint this combination, as you can Dutch Boy white-lead and linseed oil, to any color you desire.

As Dutch Boy white-lead protects non-metallic surfaces from deterioration, so Dutch Boy red-lead keeps metal farm equipment, machinery and tools from rusting.

For your own paint campaign

We have a "Handy Book on Painting" that contains all kinds of information on paint, including directions for the painting of wood, masonry and metal. This book will help you in your own private "Save the surface" campaign. Write for your copy. It is free.

Besides paint materials, National Lead Company make lead products for practically every purpose to which lead can be put in art, industry and daily life.

If you are particularly interested in any use of lead or have any special paint problem, write to any branch listed below.



This Dutch Boy trademark is on every package of Dutch Boy white-lead, flattening oil and red-lead and is a guarantee of exceptional purity.

NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 900 West 18th Street; Cincinnati, 659 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 415 California Street; Pittsburgh, National Lead & Oil Co. of Penna., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.



For the fire that makes no smoke lead paint is the extinguisher

NEARLY a half-million farm buildings in the country are burning without signs of fire or smoke. This burning is so slow that it is not noticed. Perhaps your own farm buildings are burning and you don't know it. They are if the surface is not painted.

This burning, also known as combustion, involves oxidation, during which oxygen is taken from the air. There are two kinds of combustion: a violent one which is rapid and bright, and a slow combustion.

It is slow combustion, on a large scale, that is destroying the millions of farm buildings. This combustion, or burning, goes on ceaselessly wherever unpainted surfaces are exposed to the atmosphere. It causes porch columns, window sash, exterior walls to decay and crumble.

Lead paint will prevent your farm buildings from burning. You can keep your buildings safe from deterioration, from fire, smokeless fire, by keeping them always covered with a film of lead paint.

Why use Dutch Boy white lead

Thousands of farmers use Dutch Boy white lead paint to protect their property. Dutch Boy white lead is pure white lead. It contains no threatening adulterants. It is a pure line of paint that must pass through a silk screen containing 27,000 holes to clear the paint of any lumps or smooth down film with the minimum of spread. It makes a white, clean and safe protective film on the surface that does not crack

and does not burn, fire making possible.

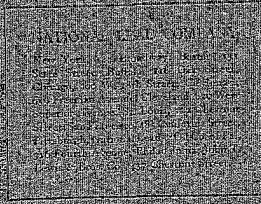
For keeping the outside of your buildings safe, a combination of Dutch Boy white lead and Dutch Boy based oil is the most effective. It makes this Dutch Boy white lead with Dutch Boy, burning oil. The paint is white, but can be tinted in any color desired. Dutch Boy white lead and burning oil is the white of paint that is the most beautiful and most durable.

Dutch Boy white lead is the most perfect metal as far as Dutch Boy white lead for the most perfect surfaces.

Free paint booklet

We will be pleased to send you a new booklet, "Painting, Protection and Decoration." This booklet tells what painters, what paint jobs, and what paint jobs the surface. It contains color plates of houses, walls, and ironwork, and describes the best and most durable paint for each. It can be obtained free of charge. This booklet is sent free with this ad.

In the famous Dutch Boy series of products, the National Lead Company has developed a new line of lead and lead-based paints. These are the most perfect lead products for painting in any way, and can be used in any color, and in any quantity. For more information about the use of lead paint, write to the National Lead Company.





"What do you bid?"

Every paint-starved farm
brings a low price

YOU have the choice of two different types of insurance. The first is a term policy, which provides protection for a certain period of time. The second is a permanent policy, which provides protection for the rest of your life. Both types of insurance are designed to protect your family in the event of your untimely death. The difference between the two is that a term policy only provides protection for a certain period of time, while a permanent policy provides protection for the rest of your life.

Not a head down. Look at the house—dilapidated—shabby—weather-beaten and dilapidated. All the buildings are in the same condition—damn starved.

Perhaps you feel sorry for the owner. But it is his fault that he did not give his building adequate protection with lead paint. Now it is too late.

You will find bankers everywhere who say that well painted farm buildings are worth much more than poorly painted buildings; that paint adds \$7,000,000,000 to the total value of American farms; that bankers make loans much more readily to the farmer whose property is thoroughly covered in paint.

[illegible]

Why farmers prefer Dutch Boy
Paint your outdoor surfaces with
Dutch Boy white lead and you
give them the protection of our
white lead flake. Dutch Boy white lead
mixed with zinc instead of iron
paint that makes painters and

It is a fact that in home owners always go for and not to save. The surface finish of paint is important to maintain. Stick tight to the surface, does not track or scale. It is a fact that in home owners always go for and not to save. The surface finish of paint is important to maintain. Stick tight to the surface, does not track or scale. It is a fact that in home owners always go for and not to save. The surface finish of paint is important to maintain. Stick tight to the surface, does not track or scale.

It includes walls, ceilings and floors. Dutch boy white paint mixed with Dutch boy darning color gives both protective and beautiful finishes. Such must be economical because they last long and can be washed again and again with soap and water without decreasing their original beauty.

For all metal surfaces use Dural Boverd lead. This is pure red lead and has been the standard for painting iron and steel against weather attack.

Free pain booklet

If you would like to know more about it, and how to apply it, how to use it for different finishes, how to use it on concrete, masonry, or metal, write for our Handy Book on painting. It is free on request.

In addition to being an international Lead Company makes its products of every type and description. If you desire specific information regarding any product such as price, size or materials or want any special custom problem solved, write to our nearest branch.

A black and white illustration of a man in traditional attire, possibly a turban and dhoti, walking towards the right while carrying a large sack over his left shoulder. The drawing is done in a simple, sketchy style.[illegible]

41A



Each drop of rain— each ray of sunshine

*works slow but ceaseless destruction
on farm buildings unprotected with
lead paint*

At least one rain drop each day is at work in destroying unprotected paint. The rain drops the surface, washes and shows it all. Sun and wind dry it again, and the rain the next day is at work on the wooden fibres again.

There is no way to prevent this damage to farm houses and outbuildings with lead paint, except with white lead, obtained from the metal lead. Damp air, rain, sun and moisture cannot harm any wooden surface that is painted with white lead, the standard moisture covering used for generations.

Properly painted farms are estimated by bankers to be worth sixteen per cent more than unpainted farms. This means that if you wanted to sell your farm today, and the buildings were well painted and protected with white lead, you could get a higher price than if your farm were unpainted. It is the difference in value of your farm's timber, its machinery, its stock, and your property, the difference in price to protect the face of your farm as a home and even as an investment.

How Dutch Boy protects

Farmers who are thoroughly aware of the need for protection and preserving their buildings use Dutch Boy white lead. This is the purest kind of white lead obtainable. The nearest Dutch Boy white lead surface is the surface of a new roof, covered with it and then in time long run by the sun, rain, wind, and moisture. It is the property of white lead that it properly covers all over the country, and is the only Dutch Boy white lead and is used on all the

country. Such a paint gives a smooth, very firm and durable surface, elastic and waterproof—a fact that does not change in time.

This is the Dutch Boy white lead paint, Dutch Boy white lead covers such Dutch Boy buildings, and gives protection, makes them clean and beautiful, and lasts.

Red lead protects the metal surfaces of farm implements and machinery, just as white lead saves wooden surfaces. Dutch Boy and lead will keep your metal equipment from rusting.

Send for free booklet

If you want to know what paint does, how it saves the surface of farm buildings, write us for the "Dutch Boy on Painting." In it you will find a guide to the best paint for your farm, how to mix paint, how to apply it, and how to keep it.

You can have a copy of our booklet, "Dutch Boy on Painting," and a list of our dealers, by filling out the coupon on the back of this page, and sending it to the National Lead Company.

National Lead Company, in addition to white lead and red lead, makes lead products for practically all uses. You can get any information regarding any use of lead or have our expert painters call on you. Write to the National Lead Company, 100 Broadway, New York, N. Y.



NATIONAL LEAD COMPANY

100 Broadway, New York, N. Y.
Branches in all large cities.
Dutch Boy White Lead Paint is sold by all leading paint dealers.
Write for free booklet and list of dealers.

Which house would you rather live in



These are features of the same house.
Lead paint makes the difference.

Of course, you can't tell the difference between the two houses just by looking at them. But you can tell the difference between the two houses just by looking at the paint. The paint on the top house is lead paint. The paint on the bottom house is white lead.

There's a way to preserve this house for years to come for you and your children—to save thousands to make it look as it does in the picture on the right. It's the way of white lead paint.

The weather cannot harm white lead paint. It is completely covered with lead paint, and the lead paint is so good that it has been used for generations. It is a white lead, made from the finest lead, it gives complete protection to non-metallic surfaces and makes them impervious to the weather.

What paint to use

If you follow these simple rules, you can be sure that your paint will last for years. First, you must use the best paint. Second, you must use it properly. Third, you must keep it properly.

White lead paint is the best paint for exterior work. It is completely covered with lead paint, and the lead paint is so good that it has been used for generations. It is a white lead, made from the finest lead, it gives complete protection to non-metallic surfaces and makes them impervious to the weather.

For more information, write to the National Lead Company, 100 Broadway, New York, N. Y. They will give you a free booklet on painting.

White lead paint is the best paint for exterior work. It is completely covered with lead paint, and the lead paint is so good that it has been used for generations. It is a white lead, made from the finest lead, it gives complete protection to non-metallic surfaces and makes them impervious to the weather.

White lead paint is the best paint for exterior work. It is completely covered with lead paint, and the lead paint is so good that it has been used for generations. It is a white lead, made from the finest lead, it gives complete protection to non-metallic surfaces and makes them impervious to the weather.

Free book on painting

The Handy Book on Painting is a little book full of painting information and formulas. It tells you of simple ways in which paint should be used, how paint should be mixed, and even gives the names of the best paint companies and the best paint products.

White lead paint is the best paint for exterior work. It is completely covered with lead paint, and the lead paint is so good that it has been used for generations. It is a white lead, made from the finest lead, it gives complete protection to non-metallic surfaces and makes them impervious to the weather.

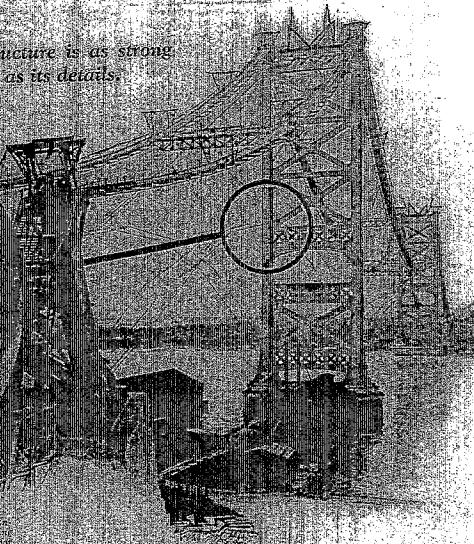
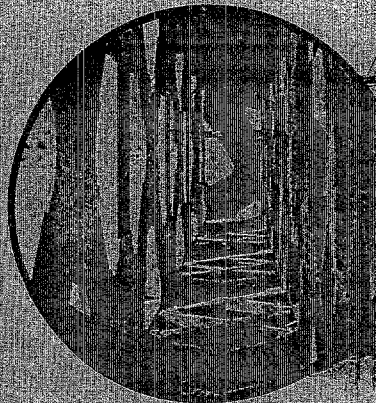
White lead paint is the best paint for exterior work. It is completely covered with lead paint, and the lead paint is so good that it has been used for generations. It is a white lead, made from the finest lead, it gives complete protection to non-metallic surfaces and makes them impervious to the weather.

NATIONAL LEAD COMPANY

100 Broadway, New York, N. Y.

This completed bridge of Dutch Boy white-lead and linseed oil paint is a masterpiece of engineering. But the fine details of the structure are the real test of the paint. The paint must be able to stand up to the most severe conditions of weather and wear.

A structure is as strong as its details.



The Delaware River Bridge, designed by the Delaware River Bridge Commission and built by the Delaware River Bridge Commission. The bridge is a masterpiece of engineering and is the longest suspension bridge in the world.

The longest suspension bridge in the world

How engineers are planning to keep it one of the safest

In designing a bridge such as the Delaware River Bridge, the main members are a fairly straightaway job. But the details—such as the tower strut shown above, with its intersections of many members and many stresses—are the points that call for careful analysis and the highest skill of the designer.

The engineers in charge of the Delaware River Bridge knew that it would be only as strong as its details. They knew too that these hard-to-get-at details are the places where air and moisture concentrate their attack. They therefore saw to it that the details received not only the utmost care in designing, but that they had the best protection.

Before erection the details were thoroughly painted with red-lead paint. The paint which the engineers chose to safeguard the Delaware River Bridge and its details was Dutch Boy. There were three coats. Both first and second coats were mixed of Dutch Boy red-lead and pure linseed oil. The second coat was tinted to a light brown with lampblack in oil, to distinguish it from the shop coat of pure red-lead. The third coat was of Dutch Boy white-lead and linseed oil, tinted to a dark battleship gray.

In 1926, when the bridge is finished, it will be painted with a fourth coat of gray. This

coat will be similar to the third coat of Dutch Boy white-lead and linseed oil, but will be lighter in color.

This four-coat covering will protect the Delaware River Bridge for the present. But no paint—not even Dutch Boy—will last forever. Only by properly maintaining the paint film—by careful inspection of the details and repainting them when necessary—can any structure be thoroughly protected. And always the paint used should be pure red-lead.

Dutch Boy is pure red-lead. It spreads uniformly and forms a hard, yet elastic coating that expands and contracts without cracking.

Dutch Boy red-lead is sold in both paste and liquid form. The liquid comes in the natural red-lead color and also in light and dark green, light and dark brown, and black for finishing coats. The paste comes in the natural color and can be shaded to browns, greens and blacks.

Specific information will be sent you regarding protective paint coverings if you will write the branch that is nearest to you.

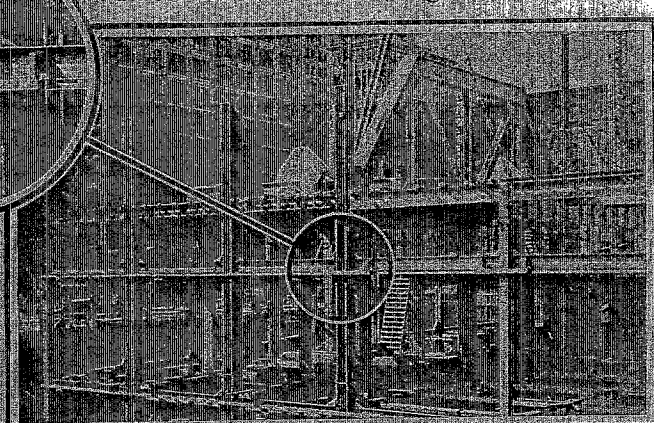


NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 300 West 18th Street; Cincinnati, 305 Erie Avenue; Cleveland, 124 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of P. O. Box 115, Fourth Avenue; Philadelphia, 101 N. 11th & Broad Co., 47 Chestnut Street.

This advertisement appears in the following publications:
Engineering News-Record—Jan. 31

0000-NLI-000017231



What the public overlooked was the engineers' biggest job

RIGHT in the heart of Chicago's Loop, the New Palmer House will open its doors. Its twenty-three stories will be divided into 2268 rooms, making it the largest hotel in the world.

A curious public watched in wonder as the network of steel was erected. But all they saw was a complicated mass of metal. They overlooked the innumerable details, the designing of which was the engineers' biggest job. For upon the strength of these details depends the safety of the whole structure.

Care in design and close hearing are of vital importance in making sure that the details are sound. But there is something more. All of the steel should be thoroughly protected against corrosion, and special care should be exercised in painting the details. In the recesses of details, where there are overlapping joints, at bolt heads, the edges of plates and girders, etc., rusting usually starts.

Once steel is surrounded by masonry it becomes inaccessible for repainting. The one painting it receives, therefore, should be with the best paint possible to buy. This is why pure red lead is the standard for protecting the steel framework of buildings. It is why in the New Painter House every bit of steel from the heavy girders and trusses to the gusset plates and bolt heads, is covered by a thorough painting with Dutch Boy red lead.

Dutch Boy red-lead will keep the inaccessible steel in good condition indefinitely. Being pure red-lead, it gives the best known protection to iron and steel surfaces—those that are exposed as well as those that are inaccessible after erection. It spreads evenly under the brush, insuring uniform protection. It dries with a

tough, moisture-proof film that does not crack and scale.

Dutch Boy red lead comes in both paste and liquid form. The paste is obtainable in the natural orange-red color and can be shaded to browns, greens, and black. The liquid comes in the natural orange-red color and also comes shaded to light and dark brown, light and dark green, and black for finishing coats.



Write our nearest branch if you are interested in protective paint coatings.

NATIONAL LEAD COMPANY

*Makers of Dutch Boy red-lead and other
Dutch Boy paint products*

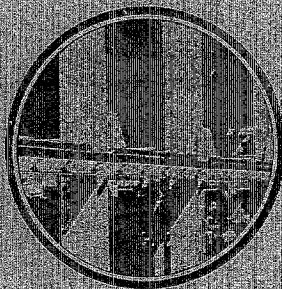
New York, 111 Broadway; Boston, 181 State Street;
Buffalo, 116 Oak Street; Chicago, 900 West 38th Street;
Cincinnati, 553 Freeman Avenue; Cleveland, 829 West
Superior Avenue; St. Louis, 722 Chestnut Street; San
Francisco, 454 California Street; Pittsburgh, National
Lead & Oil Co. of Pa., 316 Fourth Avenue; Philadelphia,
John T. Lewis & Bros. Company, 457 Chestnut Street.

This advertisement appears in the following publication:

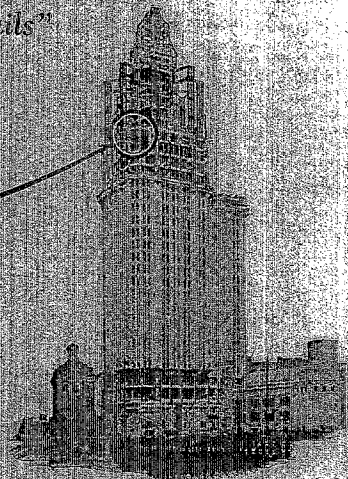
Page—Engineering News-Record—Jan. 22

0000-NLI-000017282

"A structure is as strong as its details"



The new Tribune Tower Building, North Michigan Avenue, Chicago, Illinois. John Mead Howell and Raymond M. Hood, New York architects, were chosen for the design and supervision of the building. Henry J. Barr was the structural engineer and Messrs. W. A. Jones Company, Chicago, were the contractors. The American Lead Company fabricated the lead, which received the best protection with Dutch Boy red-lead.



Why the new Tribune Tower is a tower of strength

CHICAGO'S new Tribune Tower Building was built from plans judged the most beautiful of hundreds submitted in a world-wide contest among architects. But those in charge have done more than make the Tribune Tower a beautiful building. By carefully designing and protecting every detail, they have made it a tower of strength.

Details well protected

Care in design and close fitting are of vital importance in making sure that the details are sound. But here is something more. Not only should all the steel be painted, but special care should be exercised in protecting the details. For upon the strength of these details depends the safety of the whole structure.

The steel work of the Tribune Tower Building received the best protection known. The trusses, the

brackets for the stone veneer, the steel skeleton of the tower—all were thoroughly covered with Dutch Boy red-lead paint before they were encased in concrete. The protection of Dutch Boy red-lead will keep this inaccessible steel work in good condition indefinitely.

Dutch Boy red-lead is pure red-lead. It gives complete protection to iron and steel surfaces. It spreads evenly under the brush and it has unusual covering power. It dries with a hard, moisture-proof film that is also elastic enough to expand and contract with the metal without cracking or scaling.

You can get Dutch Boy red-lead in both paste and liquid form. The

paste comes in the natural orange-red color and can be shaded to light and dark brown, light and dark green, and black. The liquid comes in the natural orange-red color and also shaded to light and dark brown, light and dark green, and black for finishing coats.

Our Department of Technical Service has made a special study of protective paint coverings. These experts will be glad to consult with you regarding your particular problem. All you need to do is write to our nearest branch.

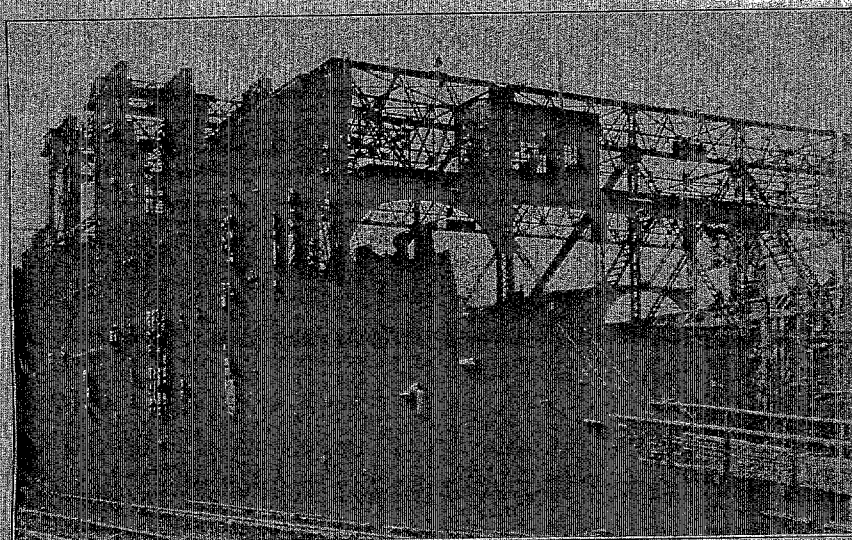


NATIONAL LEAD COMPANY

New York, 101 Broadway, Boston, 152 State Street, Buffalo, 410 Oak Street, Chicago, 600 West 181st Street, Cincinnati, 339 Erie Avenue, Cleveland, 360 West Superior Avenue, Detroit, 222 Chestnut, Evansville, Ind., 463 California Street, Pittsburgh, 400 North 6th & Co. Bldg., 310 North Avenue, Philadelphia, 100 N. 10th & Race, Cincinnati, 100 Chestnut Street.



This advertisement appears in the following publication:
Chicago Evening News-Herald, Feb. 1, 1924



The photograph shows a coal pier being dumped at the coal pier of the Chesapeake & Ohio Railway Company, Newport, N.Y. All the many details of the pier are subject to the attack of moisture-laden air and gases that are harmful to unprotected metal. But the details are kept strong with the adequate protection of pure red-lead paint.

How strong is this giant coal pier?

LIKE any other structure, the giant coal pier you see in the picture is only as strong as its details. The strength of these details in turn depends upon their careful design and the close figuring done by the engineers. How long these details will remain strong, however, depends to a large degree upon the paint protection received.

This pier has the best paint protection it is possible to give metal surfaces—red-lead paint. Such protection is absolutely necessary. For as cars are dumped, coal dust fills the air, settling all around and particularly in the many recesses of the details. This dust, which contains sulphur, combines with moisture and forms sulphuric acid, which quickly corrodes metal unless it is protected with red-lead paint.

To insure absolute protection on all iron and steel, you must be sure that the red-lead is pure red-lead. Dutch Boy red-lead is pure red-lead. Its film is impervious to moisture. It sticks right to the metal; it becomes virtually a part of the metal itself. A standard three-coat covering of

Dutch Boy red-lead, renewed when necessary, will protect a metal surface indefinitely. It dries with a hard, moisture-proof film that expands and contracts with the metal, yet does not crack and scale.

You can get Dutch Boy red-lead in both paste and liquid form. The paste comes in the natural orange-red color and can be shaded to light and dark brown, light and dark green, and black. The liquid comes in the natural orange-red color and also shaded to light and dark brown, light and dark green, and black for finishing coats.

Have you a particular paint problem on which you would like assistance? Our Department of Technical Service, consisting of a group of paint specialists, will be glad to help you. All you need do is write our nearest branch.



NATIONAL LEAD COMPANY

New York, 117 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 900 West 18th Street; Cincinnati, 450 Franklin Avenue; Cleveland, 300 West Superior Avenue; St. Louis, 222 Chestnut Street; San Francisco, 480 California Street; Pittsburgh, National Lead & Oil Co. of Pa., 315 Fourth Avenue; Philadelphia, John T. Lewis & Son, 1000 Chestnut Street.



Dutch Boy Red-Lead

A structure is as strong as its details



New plant of the Sullivan Machinery Company, at Michigan City, Ind. A. S. Coffey, Chicago architect, drew the plans and supervised construction. The steel was furnished at the Chicago office of the National Lead Company and received a thorough coating of Dutch Boy red-lead.

Why the new Sullivan plant is up to stay

This modern factory has modern protection from corrosion. All structural metal is painted with Dutch Boy red-lead.

THE Sullivan Machinery Company at Michigan City, Ind., had to have a new plant. One of the pictures above shows the factory in course of construction. This plant represents the most modern practices in engineering. The main building is of one-story saw-tooth construction. Not much brick was used in the wall construction; the walls are nearly all glass set in metal sash.

Eighteen hundred tons of steel were used on the Sullivan plant. All this steel received the thorough protection of Dutch Boy red-lead.

Because it is pure, Dutch Boy red-lead gives complete protection to iron and steel surfaces.

It safeguards against corrosion the hard-to-reach details the strength of which

determines the strength of the entire structure.

You can get Dutch Boy red-lead in both paste and liquid form. The paste comes in the natural orange-red color and can be shaded to light and dark brown, light and dark green, and black. The liquid comes in the natural orange-red color and also shaded to light and dark brown, light and dark green, and black for finishing coats.

Our Department of Technical Service has made a special study of protective paint coverings. Experts will be glad to consult with you regarding your particular problem. All you need do is write to our nearest branch.

NATIONAL LEAD COMPANY

New York, 111 Broadway, Boston, 131 State Street, Buffalo, 116 Oak Street, Chicago, 900 West 48th Street, Cincinnati, 659 Exchange Avenue, Cleveland, 323 West Superior Avenue, St. Louis, 719 Cleveland Street, San Francisco, 183 California Street, Pittsburgh, National Lead & Oil Co. of Pa., 316 Fourth Avenue, Philadelphia, John T. Leverage Bros. Co., 439 Chestnut Street.



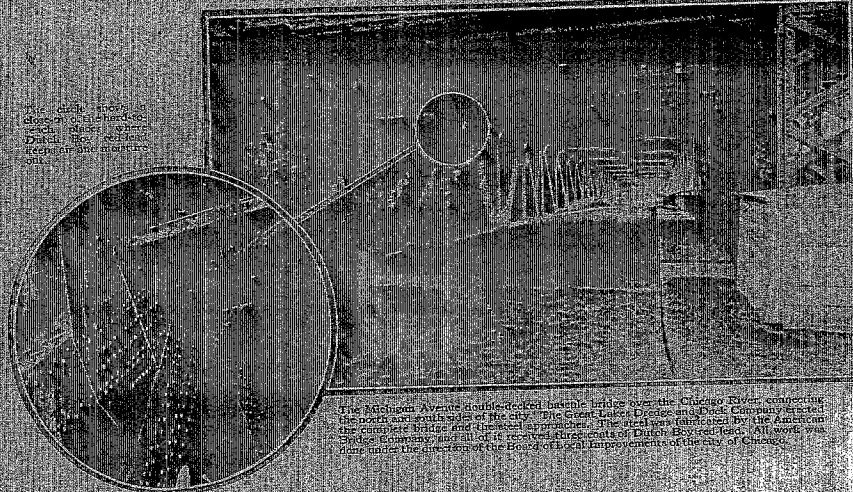
Dutch Boy Red-Lead



This advertisement appears in the following publication:
Page-Engineering News-Record-March 5

0000-NLI-000017285

The circle shows a close-up of the bridge deck, which shows where Dutch Boy red-lead paint is applied.



The Michigan Avenue double-decked bascule bridge over the Chicago River, spanning the north and south sides of the city. The Great Lakes Dredge and Dock Company built the complete bridge and the steel approaches. The structure is maintained by the American Bridge Company for all of its red-lead three coats of Dutch Boy red-lead. All work was done under the direction of the Board of Local Improvements of the city of Chicago.

What will keep the details of this double-decked bridge secure? *Something more than care in design!*

TEN THOUSAND tons of steel went into the construction of the Michigan Avenue double-decked bascule bridge in Chicago. This special type of bridge demanded unusual care in design and construction.

It presented a problem involving close figuring of many details. On these details depends the strength of the whole structure.

Engineers, by careful design, have made the details of the Michigan Avenue Bridge structurally secure. But more than that, the ten thousand tons of steel—and particularly the hard-to-reach details—have received the best protection known against corrosion. The bridge itself and the steel in the approaches received a shop coat and two field coats of Dutch Boy red-lead. In the two field coats alone, over fifteen tons of Dutch Boy red-lead were used.

This standard three-coat covering of Dutch Boy red-lead gives the bridge—and

its details the protection they need against rusting. The film of red-lead is impervious to air and moisture—the causes of rusting.

Dutch Boy red-lead is obtainable in both paste and liquid form. You can get the paste in the natural orange-red color, which can be shaded if desired to light and dark brown, light and dark green, and black. The liquid comes in the natural orange-red color, light and dark brown, light and dark green, and black for finishing coats.

If you have a particular paint problem, write to our Department of Technical Service, addressing your letter to our nearest branch. Experts will gladly give individual attention to your problem and may be able to give you some valuable help.



NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 121 State Street; Buffalo, 710 Oak Street; Cincinnati, 300 West 18th Street; Cincinnati, 659 E. Lee; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; Chicago, 437 Chestnut Street; Pittsburgh, 1000 North 10th Street; Philadelphia, 1000 North 10th Street; San Francisco, 437 Chestnut Street.

Dutch Boy Red-Lead



This advertisement appears in the following publication:

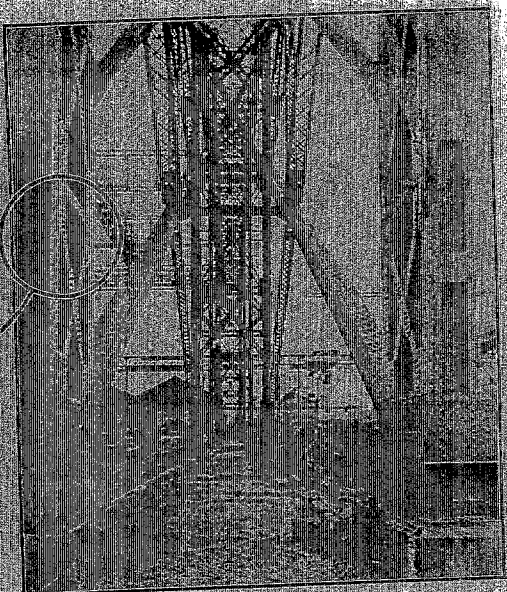
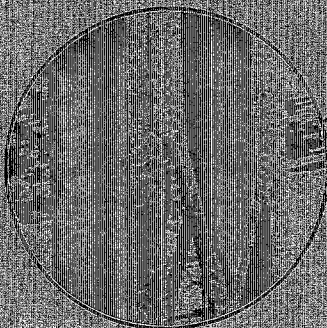
Engineering News-Record, March 10

0000-NLI-000017286

BUILDING

"A structure is as strong as its details"

This upright is part of a trestle for an overhead crane. The upright and all other metal details of the structure were treated with undercoats of red lead in the natural orange-red color followed by a finishing coat of red lead tinted to brown.



The upright safeguards the trestle — but what protects the upright?

THE building of this mammoth trestle was possible only because of the careful designing and fitting of details by the engineers. That is an important, but alone it is not enough to insure the safety of the structure. The overhead framework, the uprights, as well as every little steel detail, need the best protection they can get from corrosion.

All the metal on this structure has received such protection. It has been thoroughly covered with pure red lead paint.

Because it is pure red lead, Dutch Boy red lead provides the protection that metal surfaces need.

It forms a tough film that the elements cannot penetrate. It sticks tight to the metal and becomes in effect a part of the metal itself. It spreads evenly under the brush and has unusual covering power. It is elastic enough to expand and contract with the metal without cracking and scaling.

Dutch Boy red lead is obtainable in both paste and liquid form. You can get the paste in the natural orange-red color. It can be shaded to light and dark brown, light and dark green, and black. The liquid comes in the natural orange-red color and also shaded to light and dark brown, light and dark green, and black for finishing coats.

If you have a particular paint problem, write to our Department of Technical Service addressing your letter to our nearest branch. Experts will gladly give individual attention to your problem and may be able to give you some valuable help. There is no obligation.



NATIONAL LEAD COMPANY
New York, 415 Broadway; Boston, 141 State Street; Buffalo, 116 Oak Street; Chicago, 609 West 18th Street; Cincinnati, 659 Freeport Avenue; Cleveland, 326 West Carnegie Avenue; St. Louis, 722 Chestnut Street; San Francisco, 382 California Street; Philadelphia, National Lead & Oil Co. of Pa., 316 Pine Street; Pittsburgh, John T. Lewis & Sons Co., 54 Liberty Street.

Dutch Boy Red-Lead

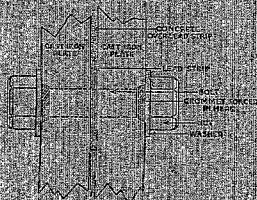
This advertisement appears in the following publication:
Engineering News-Record—April 2

0000-NLE-000017287

Making bolt-holes water-tight in the Holland Vehicular Tunnel



A structure is as strong as its details



THIS diagram shows how red-lead and hemp grommets are used on bolts in the Holland Tunnel to make the bolt-holes water-tight. It also shows how the plate connections are kept water-tight by the use of strips of lead—the metal from which red-lead is derived. The lead strips, after being caulked into the groove of the cast-iron plates, are covered with concrete.

Dutch Boy Red-Lead

HOW could they make the bolt-holes water-tight? That was one of the problems which faced the engineers in charge of building the Holland Vehicular Tunnel.

After the heavy sectional rings were placed and bolted up, workmen began to retighten and caulk. The caulking was done by means of hemp grommets, two for each bolt, one under the head and one under the nut. These grommets were forced into the sunken bolt-holes, as workmen retightened the bolts, making the bolt-holes water-tight.

Alone, the grommets could not have insured water-tight connections. Each grommet, before being used, was soaked for 48 hours in a thick mixture of Dutch Boy red-lead and linseed oil.

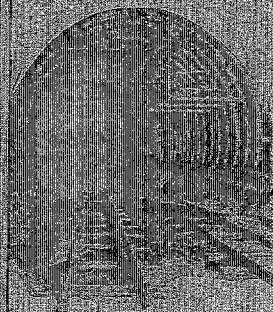
This unusual and interesting use of red-lead was probably suggested by the common practice of red-leading pipe joints to make them watertight. Just as red-lead insures a water-tight joint in these cases, so it insures a moisture-proof paint film. Moisture cannot get through to start corrosion on steel that is protected with pure red-lead.

Dutch Boy red-lead is pure red-lead. It is obtainable in both paste and liquid form. The paste comes in the natural orange-red color and can be shaded to light and dark brown, light and dark green, and black. The liquid comes in the natural orange-red color and also shaded to light and dark brown, light and dark green, and black for finishing coats.

Our Department of Technical Service has made a special study of protective paint coverings. Experts will be glad to consult with you if you have a particular problem. Just write our nearest branch.

NATIONAL LEAD COMPANY

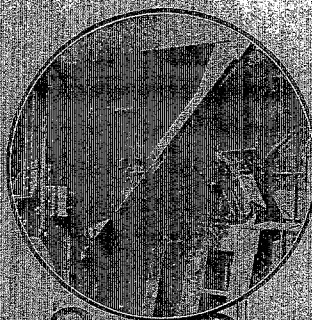
New York: 115 Broadway; Boston: 151 State Street; Buffalo: 110 Court Street; Chicago: 200 West Madison Street; Cincinnati: 169 Fremont Avenue; Cleveland: 320 West Superior Avenue; St. Louis: 122 Chestnut Street; San Francisco: 345 California Street; Pittsburgh: National Lead Co., Oil City; Portland, Ore.: Fourth Avenue; Philadelphia: John W. Lewis & Son, Co.; 437 Chestnut Street.



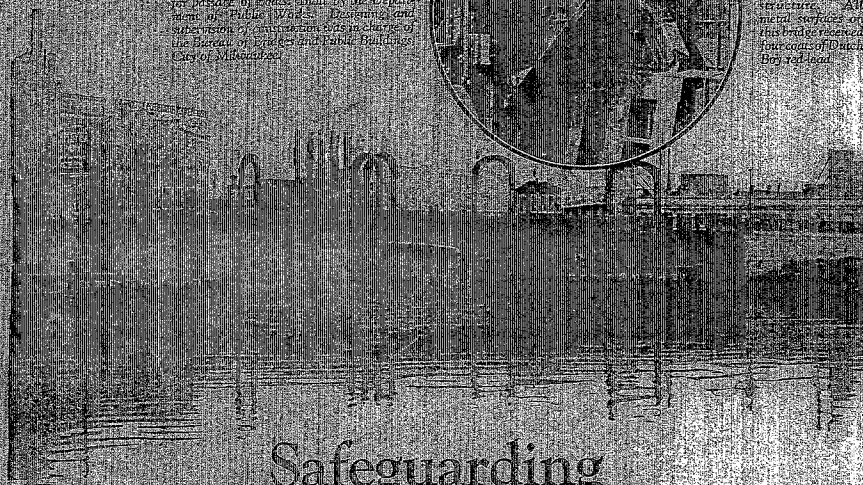
Cuts the surface on your wall or ceiling

A section of the south tube, one of the two comprising the Holland Vehicular Tunnel under the Hudson River. The length of each tube is to be 18,600 feet. Booth & Flinn, Ltd., contractors and builders.

The new State Street double leaf bascule bridge in Milwaukee, crossing the Milwaukee River, is not only a landmark but also a masterpiece of engineering. It is the first of its kind in the world. When the leaves are raised to permit ships to pass, the bridge is a marvel of engineering. It is the Department of Public Works, Engineering and Construction, Milwaukee, Wis., in charge of the bridge, and the Milwaukee City of Milwaukee.



Note how thoroughly the details have been painted, insuring her safety and strength. All metal surfaces of this bridge received four coats of Dutch Boy red lead.



Safeguarding Milwaukee's new bascule bridge

The new bascule bridge at State Street, Milwaukee, was recently opened to traffic. Unusual care in design, special precautions in erection, made certain the structural safety of the bridge. But one thing more was needed—the complete protection from corrosion of all metal surfaces, and especially the important details.

The State Street bridge has such protection. It received four coats of Dutch Boy pure red lead. All the steel received a shop coat before it was put in place. Then, after erection, three field coats of Dutch Boy red lead were applied. Special care was taken in the thorough painting of details, the strength of which determine the strength of the entire structure.

This four-coat covering of Dutch Boy red lead gives the State Street bridge and its details the protection they need against corrosion. The red lead film sticks tight to the metal and becomes in effect a part of the metal itself. It spreads evenly under the brush—has unusual covering power—is elastic enough to expand

and contract with the metal without cracking and scaling.

Dutch Boy red lead is obtainable in both paste and liquid form. You can get the paste in the natural orange-red color. It can be shaded to light and dark brown, light and dark green, and black. The liquid comes in the natural orange-red color and also shaded to light and dark brown, light and dark green, and black for finishing coats.

If you have a particular paint problem, write to our Department of Technical Service, addressing your letter to our nearest branch. Experts will gladly give individual attention to your problem and may be able to give you some valuable help. There is no obligation.



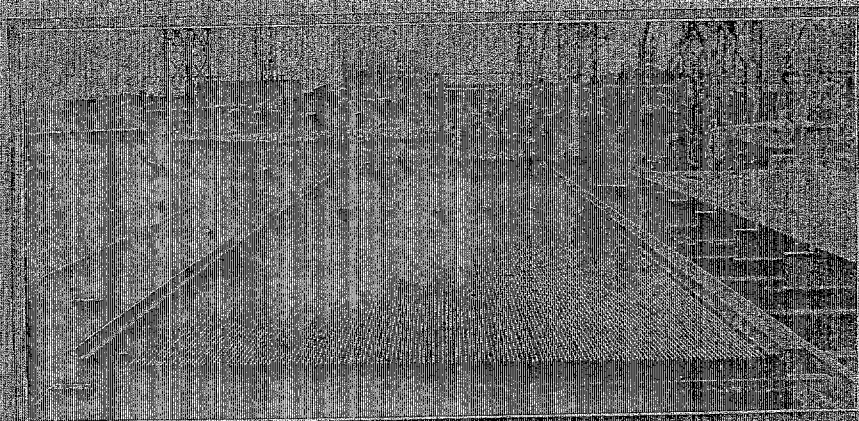
NATIONAL LEAD COMPANY

New York: 114 Broadway; Boston: 151 State Street; Buffalo: 116 Oak Street; Chicago: 309 West 13th Street; Cincinnati: 659 Rosemont Avenue; Cleveland: 310 West Superior Avenue; St. Louis: 717 Chestnut Street; San Francisco: 185 California Street; St. Paul: 100 North Second Street; St. Peter: 100 North Second Street; Philadelphia: 100 North Second Street; Portland: 100 North Second Street; Seattle: 100 North Second Street; Spokane: 100 North Second Street; Tacoma: 100 North Second Street; Vancouver: 100 North Second Street; Victoria: 100 North Second Street; Winnipeg: 100 North Second Street; York: 100 North Second Street.

This advertisement appears in the following publications:

Eng. News-Record, Jan. 30

0000-NLI-000017289



These rakes for one of the Muscle Shoals dams have been painted with pure red lead.

Protecting the rakes that will be on guard at Muscle Shoals

These rakes will soon be put in place at one of the Muscle Shoals dams. They will serve the giant turbines from floating debris.

These protective rakes have themselves received protection. They have just been thoroughly painted with pure red lead to protect them against rust.

A film of pure red lead sticks tight to metal surfaces. It provides adequate protection for the metal, whether it is under water or exposed to the weather. There is no better protection known for metal surfaces than pure red lead.

Because it is pure red lead, Dutch Boy red lead forms a tough coating that the elements cannot penetrate. It spreads easily under the brush.

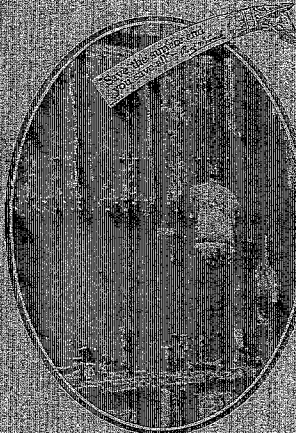
Has unusual covering power—expands and contracts with the metal without cracking and scaling.

Dutch Boy red lead is obtainable in both paste and liquid form. The paste comes in the natural orange-red color. It can be shaded to light and dark brown, light and dark green, and black. The liquid comes in the natural orange-red color and also shaded to light and dark brown, light and dark green, and black for finishing coats.

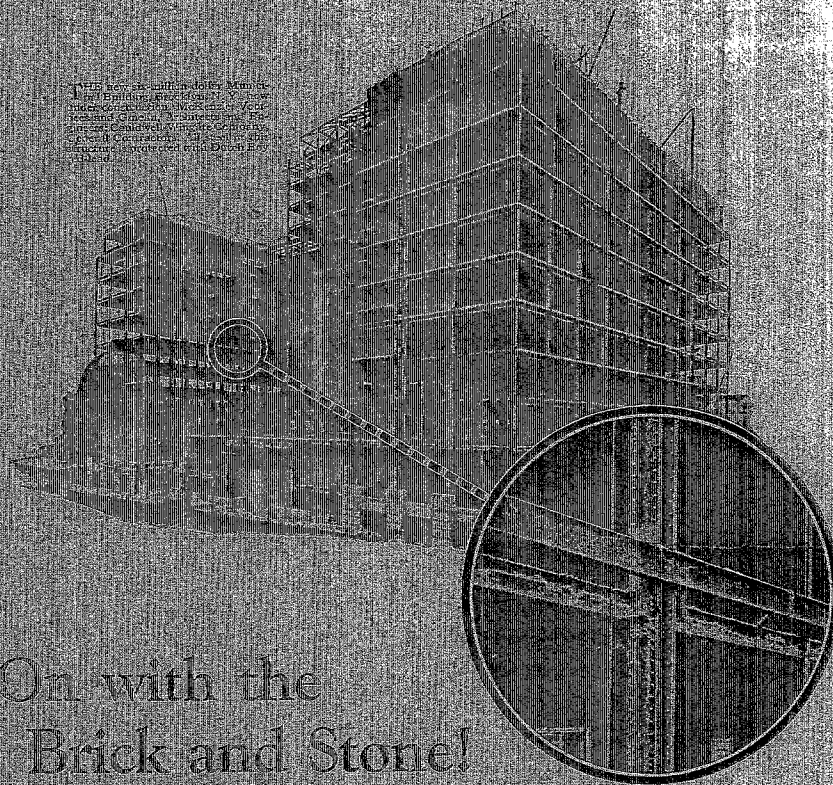
If you have a particular paint problem, write our Department of Technical Service, addressing your letter to our nearest branch. Experts will be glad to give individual attention to your problem and may be able to give you some valuable help. This service is rendered without obligation.

NATIONAL LEAD COMPANY
New York: 111 Broadway, Boston: 22 State Street, Buffalo: 116 Oak Street, Chicago: 901 West 18th Street, Cincinnati: 650 Freeman Avenue, Cleveland: 240 West Superior Avenue, St. Louis: 1075 Oak Court, St. Paul: 100 Hennepin Ave., St. Paul, Minn., St. Petersburg: National Lead & Oil Co. of Fla. 216 North Avenue, Philadelphia: John F. Lewis & Bros., Inc., 150 Chestnut Street.

This shows part of a gate under construction for one of the Muscle Shoals dams. All contact or joining surfaces were painted with pure red lead and checked together while the paint was still wet. Then all outside surfaces received a covering of pure red lead.



This new \$1,000,000 Municipal Building in Brooklyn, N. Y., is being constructed by the City of Brooklyn. The building is being constructed by the City of Brooklyn. The building is being constructed by the City of Brooklyn.



On with the Brick and Stone!

FOR months during construction this network of steel has been viciously attacked by the weather. Before long, every inch of steel will be covered with masonry, hidden from view—inaccessible to inspection. What if these deadly attacks have given corrosion a start?

On with the brick and stone! The steel can be forgotten. It has the protection of Dutch Boy red lead.

Paint it (before and after erection), enclose it, forget it—if you paint the framework with Dutch Boy red lead. It spreads evenly under the brush, insuring uniform protection. It dries with a tough, moisture-proof film that does not crack and scale.

You can get Dutch Boy red lead in both paste and liquid form. The paste comes in the natural orange-

Structural steel on Brooklyn's new Municipal Building can be covered and forgotten, for it is thoroughly painted with Dutch Boy red lead.

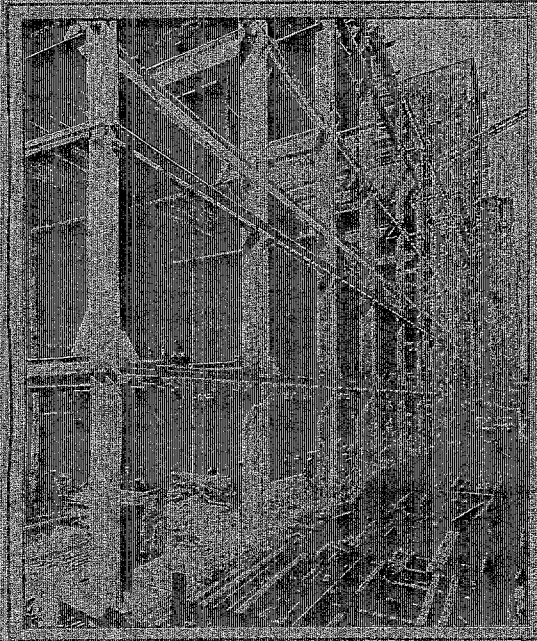
red color and can be shaded to light and dark brown, light and dark green, and black. The liquid comes in the natural orange-red color and also shaded to light and dark brown, light and dark green, and black for finishing coats.

Our Department of Technical Service has made a special study of protective paint coverings. Experts will be glad to consult with you regarding your particular problem. All you need do is write to our nearest branch.



NATIONAL LEAD COMPANY

New York, 111 Broadway, Boston, 131 State Street, Buffalo, 115 Oak Street, Chicago, 900 West 180th Street, Cincinnati, 659 Franklin Avenue, Cleveland, 810 West Superior Street, St. Louis, 727 Chestnut Street, San Francisco, 485 California Street, Pittsburgh, National Lead & Oil Co. of Pa., 316 Fourth Avenue, Philadelphia, John T. Lewis & Sons, Inc., 437 Chestnut Street.



One of the tower stanchions of the Delaware River Bridge connects Philadelphia and Camden, N. J. When completed in 1926, this bridge will be the first air suspension bridge in the world. It is said to have been thoroughly treated with Dutch Boy red-lead.

Shown on the left is the New Palmer House in Chicago, one of the world's largest hotels. It has 298 rooms, each with bath. It will be the largest hotel in the world. All the structural steel is treated with Dutch Boy red-lead.

The world's largest hotel . . . the longest suspension bridge

Both are protected with Dutch Boy red-lead

THE engineering problems in building the Delaware River Bridge—the longest suspension bridge in the world—and the New Palmer House in Chicago—the world's largest hotel—were totally different. But both structures had one problem in common—the protection of the structural steel from corrosion. So both structures received the best protection known against corrosion. Both were painted with Dutch Boy red-lead.

Because it is pure red-lead, Dutch Boy provides complete protection to iron and steel surfaces, those that are exposed as well as those that are inaccessible after erection. It safeguards against corrosion the hard-to-reach details the strength of which determines the strength of the entire structure. It spreads evenly under the brush—has unusual

covering power—does not crack and scale.

Dutch Boy red-lead comes in both paste and liquid form. The paste is obtainable in the natural orange-red color and can be shaded to browns, greens, and black. The liquid comes in the natural orange-red color and also comes shaded to light and dark browns, light and dark green, and black for finishing coats.

If you have a particular problem on paint protection, write our nearest branch. Experts in our Department of Technical Service will be glad to help you.

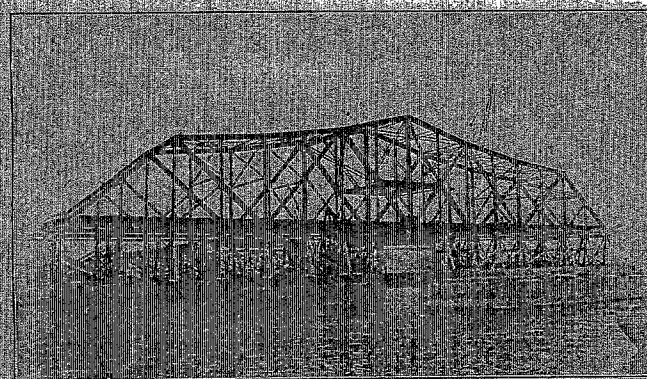


NATIONAL LEAD COMPANY
New York, 171 Broadway; Boston, 121 State Street; Buffalo, 316 Oak Street; Chicago, 800 West 34th Street; Cincinnati, 159 Freeman Avenue; Cleveland, 401 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 495 California Street; Pittsburgh, National Lead & Oil Co. of Penn.; 316 Second Avenue; Philadelphia, John T. Lewis & Sons, Co., 417 Chestnut Street.

This advertisement appears in the following publication:

Engineering News-Record, August

0000-NLF-000017292



340 feet span for the new Passaic River Bridge at South Amboy, N. J. Designed and built by the New Jersey State Highway Commission—W. G. Sloan, State Highway Engineer, Clarence W. Hudson, Supervising Engineer, Stillman, Delahanty, Ferris Company, contractors.

Protecting New Jersey's new bridge to the shore

At South Amboy, New Jersey, this new bridge is being built to take care of increased automobile traffic to the New Jersey seashore resorts. It is a center-bearing swing-span drawbridge. Its length, including the concrete approaches, is more than a mile and a half. It is wide enough to accommodate four lanes of traffic.

All steel of this bridge, including important details such as bolt-heads and hard-to-reach places, is thoroughly protected with pure red-lead.

A protective covering of pure red-lead, such as Dutch Boy red-lead, sticks tight to steel. It keeps salty, moisture-laden air from getting at the metal. Dutch Boy red-lead spreads evenly under the brush. It has unusual covering power. It dries with a hard, moisture-proof film that is also elastic enough to expand and contract with the metal without cracking and scaling.

You can get Dutch Boy red-lead in both paste and liquid form. The paste comes in the natural orange-red color and can be shaded to light and dark brown, light and dark green and black. The liquid comes in the natural orange-red color and also shaded to light and dark brown, light and dark green and black for finishing coats.

Experts in our Department of Technical Service will be glad to consult with you regarding any painting problem. Simply write to our nearest branch for this help. There is no obligation.

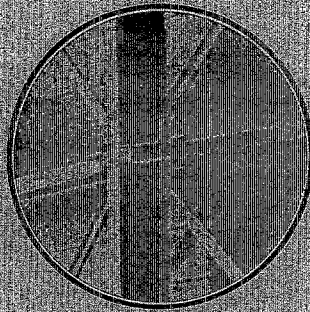


NATIONAL LEAD COMPANY

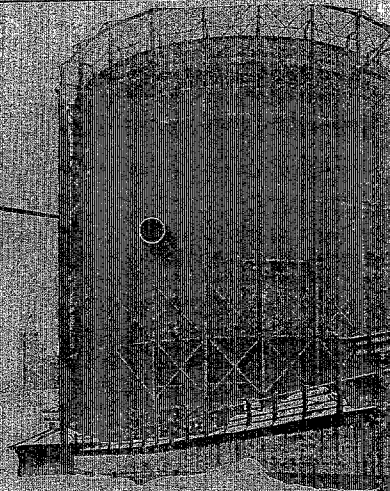
New York, 171 Broadway; Boston, 131 Essex Street; Buffalo, 116 Oak Street; Chicago, 500 West 18th Street; Cincinnati, 659 Freeman Avenue; Cleveland, 428 West Superior Avenue; St. Louis, 772 Chestnut Street; San Francisco, 455 California Street; Pittsburgh, National Lead & Oil Co. of Pa., 316 Fourth Avenue; Philadelphia, John T. Lewis & Son, Co., 437 Chestnut Street.

This advertisement will appear in the following publication:
Engineering News-Record—Oct. 1

0000-NLI-000017293



Places such as this, where steel guides and braces meet, with rivets and corner plates are the places that need special paint protection.



How to make your holders last longer

A GAS holder, like any other structure, is only as strong as its details. Steel guides and braces, plate connections, bolt heads—these vital details are ever subject to the attacks of air and moisture. Only adequate paint protection will keep them strong so the holder can give its full life of service.

The best way to be sure your holders and their details are adequately protected is to give them a standard three-coat covering of pure red-lead paint.

Even that is not sufficient protection for all time. The entire holder—and especially the details such as you see in the circle—should be carefully inspected at regular intervals, and an unbroken paint film constantly maintained.

Gas companies and all other owners of metal equipment know from experience that there is one paint that gives complete protection to metal surfaces. That paint is pure red-lead.

Because it is pure red-lead, Dutch Boy red-lead is used extensively by gas companies everywhere. It gives holders and other metal surfaces the pro-

tection they need. It sticks tight to the metal and keeps air and moisture out.

Dutch Boy for all three coats

Dutch Boy red-lead comes in both paste and liquid form. You can get the liquid in the natural red-lead color, light and dark green, light and dark brown, and black. The paste comes in the natural red-lead color and can be shaded to browns, greens, black, etc. You can be sure that you have adequate protection if you see that Dutch Boy red-lead is used for all three coats.

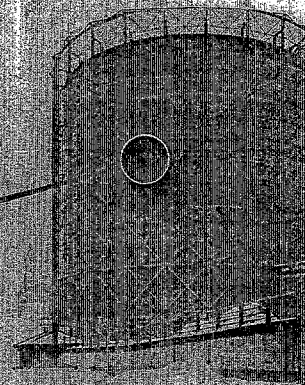
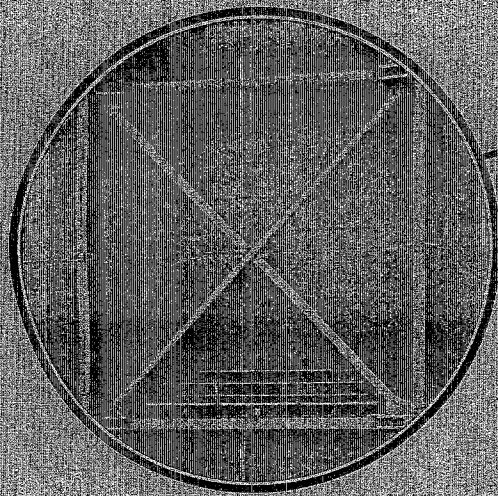
If you want to know how to protect any metal surface, tell us what your problem is, writing to our Technical Service Department at our nearest branch. Paint specialists will give you specific advice on how to protect your equipment.

NATIONAL LEAD COMPANY
New York: 411 Broadway, Boston: 121 State Street,
Pittsburgh: 116 Old Street, Chicago: 900 West 10th St.,
Cincinnati: 429 Freeman, Cleveland: 524 West
Superior, Denver: 1001, 1224 Chestnut Street, San
Francisco: 428 California Street, Pittsburgh: National
Lead Bldg., Chicago: 530 North Ave., Philadelphia:
John C. Lewis & Sons, Corporation, 272 Chestnut Street



This advertisement appears in the following publication:
Engineering Record (Jan. 2)

0000-NLI-000017294



In the nooks and corners of details, moisture lurks constantly trying to start corrosion. A film of pure red-lead not only protects the large flat surfaces of holders, but insures extensive penetration to the important joints and angles, thereby determining the strength of the structure.

To keep your holders on the job

Keep every square inch of surface covered with weather-proof paint

THE best way to protect your holder steel is to paint it as the steel above is painted with the standard three-coat covering of pure red-lead. The weather-proof red-lead film, kept unbroken, insures the absolute protection of your metal equipment — protection against air and moisture — the causes of corrosion.

But you can't expect a single painting, even of pure red-lead, to last forever. At regular intervals the surface should be inspected and the paint film renewed when necessary. By keeping this film of pure red-lead intact, you keep your holders in service for their full life.

In painting holders and metal equipment, be sure that red-lead paint is used for all three coats — and be sure it's pure red-lead, such as Dutch Boy red-lead.

This pure red-lead provides the best protection possible for iron and steel surfaces. It spreads evenly under the brush; it has unusual covering power. It dries to a hard, moisture-proof film that is also elastic enough to expand and contract with the metal without cracking and scaling.

You can get Dutch Boy red-lead in both paste and liquid form. The paste comes in the natural orange-red color, which can be shaded to light and dark brown, light and dark green, and black. The liquid comes in the natural orange-red color, light and dark brown, light and dark green, and black for finishing coats.

Our Department of Technical Service has made a special study of paint protection in the gas industry. Experts will be glad to consult with you regarding your particular problem. All you need do is write to our nearest branch.



NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 200 West 15th Street; Cincinnati, 659 Freeman Avenue; Cleveland, 320 West Superior Avenue; St. Louis, 123 Chestnut Street; San Francisco, 385 California Street; Pittsburgh, National Lead & Oil Co. of Pa., 316 Fourth Avenue; Philadelphia, John T. Evans & Son, Co., 47 Chestnut Street.

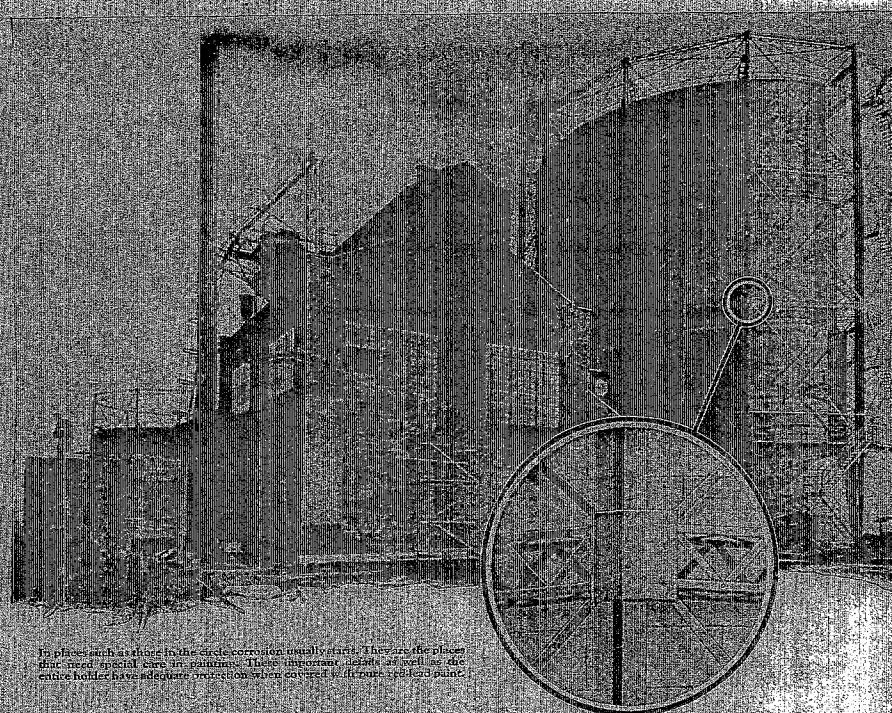
Give the surface and you save all — *red-lead*

Dutch Boy Red-Lead

This advertisement appears in the following publication

Engineering Record, Vol. 28

0000-NLL-000017295



In places such as those in the circle corrosion usually starts. They are the places that need special care in painting. These important details as well as the entire holder have adequate protection when covered with pure red-lead paint.

A never-ending struggle— will your holders come through it safely?

A BATTLE is on above. Smoke is attacking from the left side of the holder. Sun is beating down on the right. All around are air and moisture—the principal causes of corrosion.

Each day this holder—and every holder must fight for existence against these destructive influences. Will your holders continue to come through safely? They will, if they are kept painted with pure red-lead paint.

Just an initial painting is not enough. The holder must be kept painted. For not even a protective coating of red-lead can be expected to last forever against such strenuous attacks.

At regular intervals the holder should be inspected and wherever

necessary, the paint covering renewed. To get the fullest service from your holders and other metal equipment, make sure the red-lead is pure.

Because Dutch Boy is pure red-lead, it gives metal surfaces absolute protection against the daily attacks of the elements. It sticks tight to the metal and becomes in effect a part of the holder. It covers evenly and smoothly, drying to a tough, moisture-proof film that does not crack and scale.

You can get Dutch Boy red-lead in two forms—the paste and the liquid. Both come in the nat-

ural orange-red color. The liquid also comes in light and dark brown, light and dark green, and black, for finishing coats. The paste can be shaded to these colors.

If you have a particular problem in paint protection for metal holders just write to our nearest branch. The experts of our Department of Technical Service will be glad to do all they can to help you.



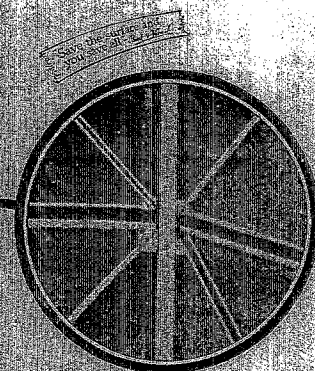
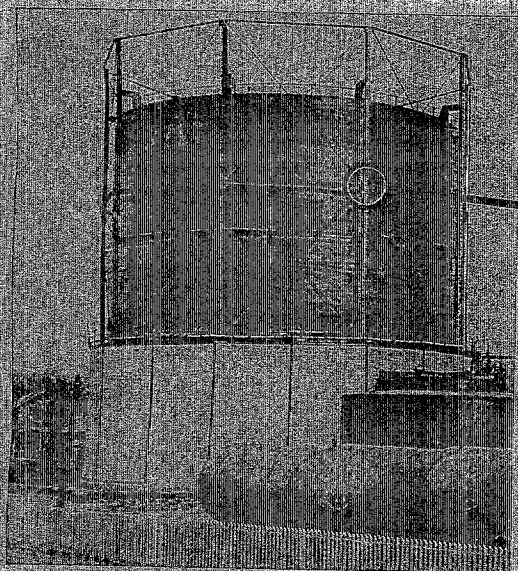
NATIONAL LEAD COMPANY
New York, 115 Broadway; Boston, 125 State Street; Buffalo, 270 Oak Street; Chicago, 990 West 34th Street; Cincinnati, 200 Fremont Avenue; Cleveland, 280 West Superior Avenue; St. Louis, 727 Chestnut Street; San Francisco, 235 California Street; Birmingham, 1000 1st Ave. S. E. Co. of Paints, 376 Fourth Avenue; Philadelphia, John A. Young & Sons, 141 Chestnut Street.

Dutch Boy Red-Lead

This advertisement appears in the following publication:

Eng.-Arch. Record—March 28

0000-NLI-000017296



One of the holders at the Wisconsin Valley Electric Company at Stevens Point, Wisconsin. The strength of its details, such as you see in the circle, determines the strength of the entire structure. These details, including the covers of the holder, have been protected with Dutch Boy red-lead. The wood at the bottom of the holder is painted with the Dutch Boy white-lead.

How a Wisconsin gas company protects its holders

NO better protection is known to the industry than that received by this holder. It is one of the holders of the Wisconsin Valley Electric Company. All its metal, including the important details such as the guides and braces, bolt heads, and plate connections, was thoroughly painted with Dutch Boy red-lead.

These details, such as you see in the circle, require special protection from corrosion. For they are the very places that determine the strength of the whole structure. At the same time they are the parts where air and moisture concentrate their attacks. All these details should be carefully inspected at regular intervals. When-

ever necessary, the paint film should be renewed.

Most important of all, the paint used should be pure red-lead.

Dutch Boy is pure red-lead

Because it is pure red-lead, Dutch Boy red-lead gives holders and other metal surfaces the protection they need. It sticks tight to the metal; it is impervious to air and moisture. It spreads easily under the brush and does not crack and scale.

Dutch Boy red-lead comes in both paste and liquid form. You can get the liquid in the natural orange-red color, light and dark green light and dark brown, and black. The paste comes in the natural red-lead color

and can be shaded to browns, greens, black, etc. You can be sure that you have adequate protection if you see that Dutch Boy red-lead is used for all three coats.

Our Department of Technical Service has made a special study of paint protection in the gas industry. Paint specialists will be glad to give you specific advice on how you can best protect your equipment. Just write our nearest branch.



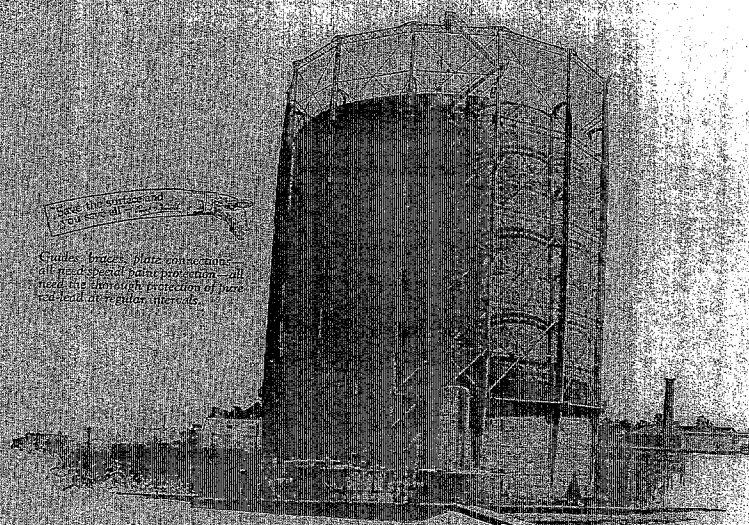
NATIONAL LEAD COMPANY

New York, 114 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 500 West 18th Street; Cincinnati, 149 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 717 Chestnut Street; San Francisco, 485 California Street; Pittsburg, National Lead & Oil Co. of Pa., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

DUTCH BOY RED-LEAD

This advertisement appears in the following publication:

Forbes-Cost Accounting—April 25



This steel holder guards the gas— but what protects the holder?

OWNERS of this gas holder can be sure their gas is safe. It is protected by a combination that you can not beat—a steel holder covered with pure red-lead paint.

This pure protective paint sticks tight to holder steel. It provides adequate protection for the nooks and corners of guides, braces—all the important parts of the holder where special protection is needed.

The covering of pure red-lead becomes in effect a part of the steel itself. When rust-forming elements attack the holder, they cannot get at the metal if its surface is thoroughly covered with pure red-lead.

But to be sure of this protection you must be sure that the red-lead is pure—such as Dutch Boy red-lead. Gas men find that Dutch Boy red-lead provides the metal in their holders with full and lasting protection against rusting. It forms a dense, tough film that is still elastic

enough to expand and contract with changes in temperature without cracking and scaling.

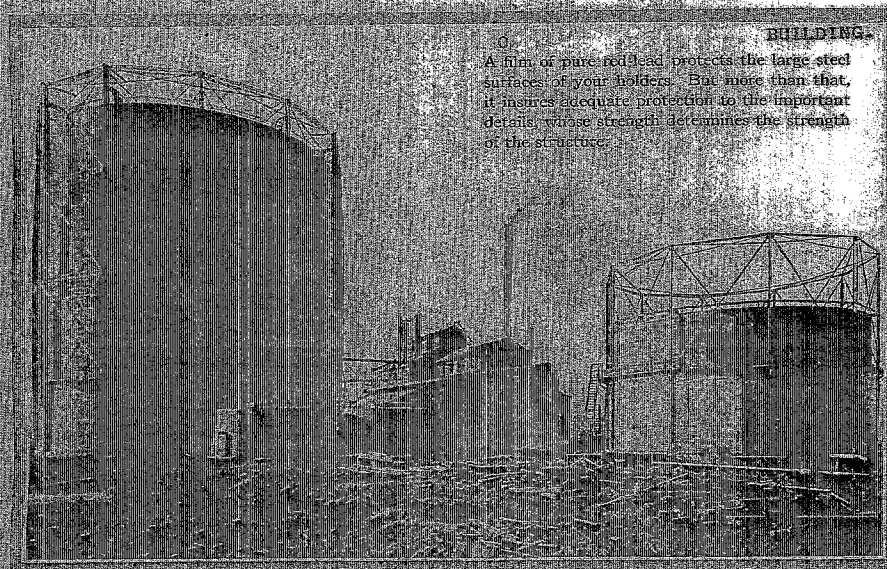
You can get Dutch Boy red-lead in paste form and as a liquid ready for application. The liquid comes in the natural orange-red color and also in light and dark green, light and dark brown, and black. The paste may be obtained in the natural orange-red color and can be shaded to browns, greens, and black.

Experts in our Department of Technical Service—men who have made a special study of paint protection in the gas industry—will be glad to do all they can to help you if you have a particular problem in paint protection. Just write our nearest branch.



NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 220 West 18th Street; Cincinnati, 539 Avenida Avenida; Cleveland, 230 West Superior Avenue; St. Louis, 721 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of Pennsylvania, 318 Fourth Avenue; Philadelphia, John T. Lewis & Sons, 144, 67 Chestnut Street.



BUILDING.

A film of pure red-lead protects the large steel surfaces of your holders. But more than that, it insures adequate protection to the important details, whose strength determines the strength of the structure.

Longer Life for Gas Holders

There is one best way to get full, long-lasting service from gas holders. Paint all the steel thoroughly

IN preserving the life of gas holders there are two

points to remember. The first is that no paint will last forever when exposed to the attacks your holders have to fight each day. Regular inspection—touching up of the paint film when necessary—and a definite repainting schedule—will add years of life to your holders.

The other point is the paint. Hundreds of tests conducted by experts to determine the best method of preserving metal from corrosion, have given one conclusion—that the best protection known for metal surfaces is found in pure red-lead.

When you use Dutch Boy red-lead for your holders you can be sure it is pure red-lead. It forms a dense, tough film that is still elastic enough to expand and contract with changes in temperature without cracking and scaling. It

—including guides, braces, bolt-heads—when the holder is first erected. Then keep it painted.

covers evenly and smoothly.

You can get Dutch

Boy red-lead in two forms—the paste and the liquid. Both come in the natural orange-red color. The liquid also comes in light and dark brown, light and dark green, and black, for finishing coats. The paste can be shaded to these colors. If you have a particular problem in paint protection for metal holders just write to our nearest branch. The experts of our Department of Technical Service will be glad to do all they can to help you.



NATIONAL LEAD COMPANY

New York, 411 Broadway; Boston, 171 State Street; Buffalo, 116 Oak Street; Chicago, 900 West 18th Street; Cincinnati, 659 Freeman Avenue; Cleveland, 620 West Superior Avenue; St. Louis, 724 Chestnut Street; San Francisco, 785 California Street; Pittsburgh, National Lead & Oil Co. of Penna., The Fourth Avenue; Philadelphia, John T. Lewis & Sons, Co., 437 Chestnut Street.

This advertisement appears in the following publication:

Engineering News-Record—July 18, 1925

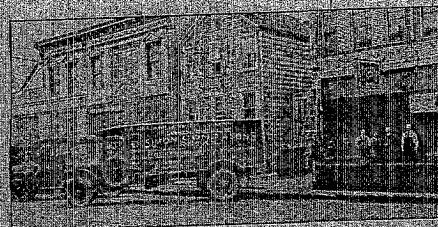
0000-NLL-000017299

IN 1917

Simon Gold's delivery equipment was a horse and wagon. He had but one clerk in the store. He sold 35,000 lbs. of Dutch Boy white-lead.

IN 1924

with sales well over \$75,000 the Simon Gold had his two sons own the stock of buildings in the future. They have three delivery trucks and a force of six in the store.



Simon Gold & Sons

PAINTS, OILS, VARNISHES AND WALL PAPER
1015 BRADLEY AVENUE
CHICAGO, ILL.

General and Special
All Branches
Are Free
Delivery

For 1924 we have increased our sales of Dutch Boy white-lead from 35,000 lbs. to over 575,000 lbs. We have built our business with Dutch Boy. We find that people who buy Dutch Boy paint and white-lead are the best customers. They are the ones who buy the most and who are the most loyal. If we received nothing but Dutch Boy we undoubtedly would be a successful business.

For 1924 we have increased our sales of Dutch Boy white-lead from 35,000 lbs. to over 575,000 lbs. We have built our business with Dutch Boy. We find that people who buy Dutch Boy paint and white-lead are the best customers. They are the ones who buy the most and who are the most loyal. If we received nothing but Dutch Boy we undoubtedly would be a successful business.

Best regards,
Simon Gold

Another business grows as Dutch Boy sales go up

GOLD & SONS have built their fine business chiefly in the last seven years. In that time they have increased their sales of Dutch Boy white-lead from 35,000 lbs. to over 575,000 lbs.

There's no secret—no magic—about Gold & Sons' success. It is typical of the experience of merchants everywhere who are building their business on the solid foundation of Dutch Boy white-lead.

Many merchants say it is the fastest turning item in the store; it never gathers dust, for it isn't there long enough. They are surprised to see in a year's time how large a quantity of white-lead they can sell on a small investment. But that isn't all!

They make an additional profit on white-lead, as Mr. Gold points out. When customers come in for Dutch Boy, they seldom leave without buying other materials—brushes, oils, ladders, turpentine, dryers. "If we were not pushing Dutch Boy," says Mr. Gold

in his letter above, "we undoubtedly would not have made these sales."

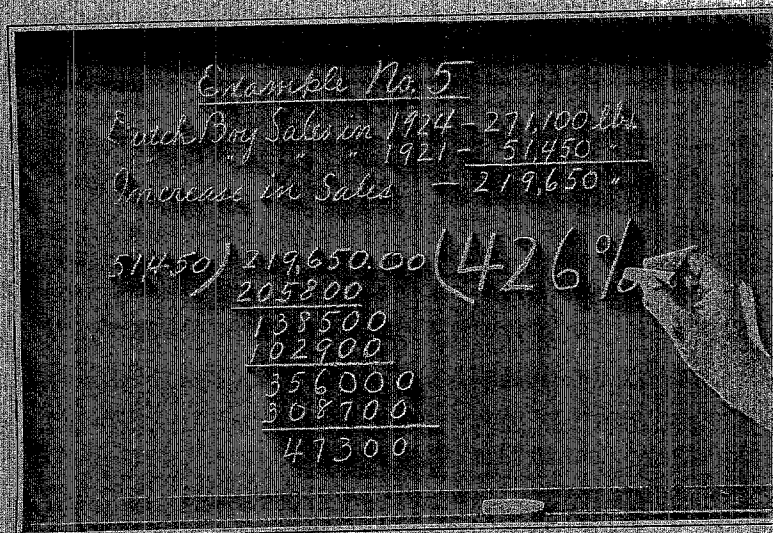
Make everyone in your community think of your store when they think of Dutch Boy. Tell them about it with window displays and movie slides. Use a picture of the Dutch Boy on your bills and letterheads. Reach the home owners, painters and business men in your section by means of Dutch Boy advertisements in your local newspaper.

We'll send you any of these helps you want, if you will write to our nearest branch. Or just speak to the Dutch Boy salesman the next time he calls.

NATIONAL LEAD COMPANY
New York: 111 Broadway; Boston: 121 State Street; Buffalo: 116 Oak Street; Chicago: 200 W. 18th Street; Cincinnati: 639 Freeman Avenue; Cleveland: 420 West Superior Avenue; St. Louis: 727 Chestnut Street; San Francisco: 943 California Street; Pittsburgh: National Lead & Oil Co. of Pa.; 316 Fourth Avenue; Philadelphia: John T. Lewis & Sons Co.; 47 Chestnut Street.



This advertisement appears in the following publications:
Page—Hardware Age—Jan. 15
Hardware Retailer—Feb.
American Paint & Oil Dealer—Feb.



The answer the Dutch Boy gave Wellston Paint & Glass Co.

THE Wellston Paint & Glass Co., of St. Louis, Mo., sold last year more than five times as much Dutch Boy white-lead as in 1921, its first year in business.

This is a splendid record, but it is not surprising in view of the many increases in sales of Dutch Boy white-lead recorded by merchants all over the country.

Mr. Heninger, secretary of the company, writes:

"This (the sales increase) we consider a rather remarkable showing for a store of this size."

"Let us say in conclusion that the coming year affords an even better record than the year just ended."

What factors brought about this increase in Dutch Boy sales? Mr. Heninger lists:

*Judicious and continued advertising
 Distribution of paint literature
 Efficient, prompt service, making for
 overhead*

*Maintenance of standard quality of
 product*

*Recognition of merit on part of buying
 public, resulting in greater sales
 and quick turnover*

Besides the direct profit merchants make on Dutch Boy white-lead, there is another. The purchaser of Dutch Boy needs other paint materials. He is influenced to buy those products where he can get Dutch Boy. In other words, Dutch Boy helps to sell other paint items.

Don't let these two profits escape you. Stock Dutch Boy white-lead and let your customers know about it. We shall be pleased to send you free the popular Dutch Boy window display, newspaper electrotypes, movie slides, color folders and paint booklets to help in your sales campaign. The result of adding your own advertising and sales efforts to ours naturally brings larger sales and profits.

Just drop a line to our nearest branch for any of the advertising material you want, or tell your requirements to the Dutch Boy salesman.



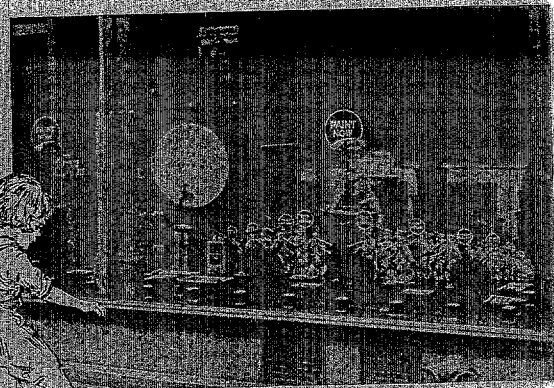
NATIONAL LEAD COMPANY
 New York: 111 Broadway; Boston: 131 State Street; Buffalo:
 116 Oak Street; Chicago: 900 W. 18th Street; Cincinnati:
 1609 Freeman Avenue; Cleveland: 310 West Superior Avenue;
 St. Louis: 710 Chestnut Street; San Francisco: 488 California
 Street; Pittsburg: National Lead & Oil Co. of Pa., 316
 Fourth Avenue; Philadelphia: John T. Lewis & Bros. Co.,
 337 Chestnut Street.

Dutch Boy White-Lead

This advertisement appears in the following publications:

Peter-Matthews Ad. - March 10
American Paint & Oil Dealer - March
Hardware Retailer - April

0000-NLI-000017301



ADVERTISING

HIGH QUALITY

The team that brought more sales to Keith, Simmons & Co.

IN 1920 Keith, Simmons & Co., of Nashville, Tenn., sold 13,800 pounds of Dutch Boy white-lead. Sales in 1921 jumped to 44,050 pounds. A further increase occurred in 1922. Last year their sales were still higher, when they sold 51,500 pounds.

Mr. Britton, of Keith, Simmons & Co., attributes this increase to two things: the uniformly high quality of Dutch Boy white-lead and Dutch Boy advertising. This combination is a never-failing aid to every paint merchant. Mr. Britton writes in addition:

"This item (Dutch Boy white-lead) shows a nice profit, has quick turnover, requires only a small amount of store space and very little effort to sell."

Many a merchant has proved these facts to his profit. Dutch Boy white-lead is as much a staple to the paint merchant as bread is to the grocer. It is a nationally-advertised product that is known and used

by professional painters throughout the country.

Remember also that there is for the Dutch Boy merchant another profit—the sale of brushes, oils, and other products needed by the purchaser of Dutch Boy white-lead. And time after time the fact that you carry Dutch Boy impels the purchaser to buy these other things.

Stock Dutch Boy white-lead and let your customers know you sell it. We will gladly help you in your sales campaign by furnishing the popular Dutch Boy window display, newspaper electrotypes, color folders, movie slides and other advertising helps. These features are free to all Dutch Boy merchants. Just send your request to our nearest branch or let the Dutch Boy salesman know your requirements.



NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 900 W. 18th Street; Cincinnati, 659 Freeman Avenue; Cleveland, 820 West Superior Avenue; Cincinnati, 722 Chestnut Street; San Francisco, 48 California Street; Pittsburgh, National Lead & Oil Co.; Philadelphia, 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 337 Chestnut Street.

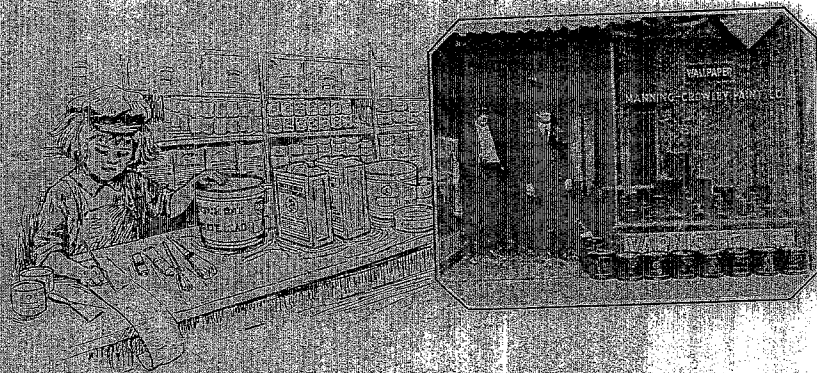
Dutch Boy White-Lead



This advertisement appears in the following publications:

Paint Hardware—Aug.—May 21
American Paint & Oil Dealer—April
Good Hardware—April

0000-NLI-000017302



Dutch Boy sells itself and other paint materials for Manning-Crowley Paint Company

MANNING-CROWLEY Paint Company, of Monroe, La., find that Dutch Boy white-lead brings in two profits. One is a direct profit on Dutch Boy sales; the other is an indirect profit made on paint materials purchased at the time the customer buys Dutch Boy.

J. M. Manning, Manager of Manning-Crowley Paint Co., says:

"The sale of Dutch Boy white-lead will cause our store to sell a customer for a job sometimes as high as four times the cost of the lead in other materials."

Figures supplied by this paint company on Dutch Boy show that 16,000 lbs. were handled in 1921, 19,750 lbs. in 1922 and 35,000 in 1923. About sales and direct profit from Dutch Boy white-lead, Mr. Manning says:

"After handling Dutch Boy white-lead from the opening of our store in 1913, we find that the demand has steadily increased in this locality for this product."

Dutch Boy practically sells itself. We are able to supply the demand with a very reasonable investment, and turning this investment three to four times per year gives us a good margin of profit on the original investment."

Use these sales helps

Just as Manning-Crowley and other merchants have found two profits in handling and selling Dutch Boy white-lead, you can, too. To help your sales campaign, we will be very glad to supply you with window display material, display cards, color folders, movie slides, newspaper advertisements and other advertising helps free. Just drop a line to our nearest branch or tell your needs to our salesman.

NATIONAL LEAD COMPANY

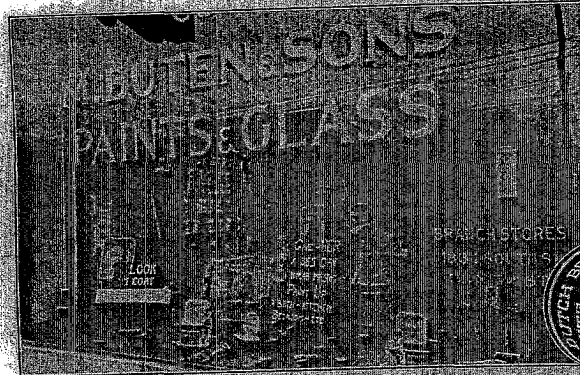
New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 950 West 18th Street; Cincinnati, 659 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 48 California Street; Pittsburgh, National Lead & Oil Co. of Penna., 110 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

Dutch Boy White-Lead

This advertisement appears in the following publications:

Paints and Paints—June 27
Paints and Paints—June 27
Paints and Paints—June 27

0000-NLL-000017303



BUILDING.
Successful paint merchant, today, is
those who drop slow-moving items and
concentrate on live, quick-selling prod-
ucts such as Dutch Boy white-lead.



The fastest-turning product in all three of Buten's stores

WHAT is the secret of making money in the paint business? "It's turnover," say M. Buten & Sons, paint merchants of Philadelphia. In all three of their successful stores this live concern concentrates on quick-selling, fast-turning items.

Take white-lead for instance. They sell but one brand—Dutch Boy. They have sold it for seventeen years, increasing sales from 7½ tons in 1907, to 162 tons in 1924—an increase of over 2000%.

"We have found the fastest-turning product in our three stores is Dutch Boy white-lead," say M. Buten & Sons. They write that since they began handling Dutch Boy white-lead exclusively "we have been able to cut down our stock and lessen our investment and overhead."

Alert merchants like Buten & Sons are making money on Dutch Boy white-lead itself; but more than that, they are reaping an additional profit from the sale of brushes, oils, turpentine and other

products that go hand-in-hand with white-lead.

Do home-owners, painters, business-men in your community place your store as the Dutch Boy store? Make them. Install a Dutch Boy window, use a Dutch Boy movie slide, put a cut of the Dutch Boy on your bills and letter-heads, enclose Dutch Boy folders with each package that leaves the store.

We shall be glad to send you any of this material if you will write our nearest branch, or mention it to the Dutch Boy salesman next time he calls.



NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 200 W. 16th Street; Cincinnati, 659 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 484 California Street; Pittsburgh, National Lead & Oil Co. of Pa., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

Dutch Boy White-Lead

This advertisement appears in the following publications:—

Home Hardware Age—July 23
Hardware Retailer—August
American Paint & Oil Dealer—July

0000-NL-000017304

A LETTER FROM EKHOLM BROS. ON HOW THEY MAKE MONEY SELLING DUTCH BOY WHITE-LEAD

Everybody in Montevideo, Minn. knows Ekholm Bros. store as the Dutch Boy store.

For a long time the people in town have been reading about Dutch Boy white-lead in the magazines and farm papers. Then Ekholm Bros. told the world they were the local Dutch Boy merchants. Here's how, from Ekholm Bros. themselves:

In recent years we have found that constant advertising has educated the public to prefer Dutch Boy white-lead.

"We discovered this fact after having many of our customers ask for Dutch Boy lead. We thought that if people really wanted this lead in preference to others, and that as long as we were handling this same lead, why not advertise it with other commodities.

"We first ran advertisements in the weekly papers on Dutch Boy lead only. We passed out blotters to school children--both town and rural. We secured small paint books containing paint tablets and pictures to be painted, which we also

gave to children who were old enough to read and carry our little message home to their parents.

And lastly, we decorated the window with Dutch Boy white-lead only. All people, both old and young, have become so familiar with the little Dutch Boy picture that they know at a glance what it stands for; and then when they see this little boy figure in our show window marching around on the revolving table, two thoughts enter their minds:

"1. That Dutch Boy white-lead is the best lead to be had; and

"2. That this lead can be secured at our store."

Go get your pen and ink or your stenographer and write our nearest branch for window display material, movie theatre slides, pictures of the Dutch Boy for your own newspaper advertising and circulars. All this material will be sent to you without charge.



NATIONAL LEAD COMPANY

New York: 111 Broadway; Boston: 131 State Street; Buffalo: 316 Oak Street; Chicago: 900 West 18th Street; Cincinnati: 339 Freeman Avenue; Cleveland: 320 West Superior Avenue; St. Louis: 722 Chestnut Street; San Francisco: 435 California Street; Pittsburgh: 410 Broad Street; C. O. of Cream: 116 Fourth Avenue; Philadelphia: John T. Howell & Bros. Co., 437 Chestnut Street.

This advertisement appears in the following publications:

Page-Herald, Aspen, Sept. 14
Hudson River, Oct. 1
New York, Oct. 14

0000-NLL-000017305

IF THERE ARE ANY WOLVES IN GALVESTON THEY STAY AWAY FROM BAULARD'S DOOR

Down in Galveston, U.S.A.,  right on the Gulf  of Mexico,
the V. L. Baulard Company plays sweet music on the old cash register 
ringing up their sales of Dutch Boy white-lead. They sell as much as six
car loads  a year, concentrating  on this one brand with
its uniform quality and quick turnover.  But wait—
They make more than a profit from the white-lead sale itself. Customers
who come in  for Dutch Boy white-lead  take along other
merchandise such as brushes,  linseed oil, turpentine and flating oil 
Here's what the V. L. Baulard Company themselves have to say about it:

For nearly fifty years we have been represented on your
books continuously as distributors of your well-known Dutch Boy
white-lead, which has enjoyed a consistent demand in Galveston
all these years, and its quality has remained uniform.
Our sales (mostly at retail) have been as high as six
carloads a year, possibly more some years, and due to the many
turn-overs a year we enjoy a very satisfactory margin of profit
in handling Dutch Boy white-lead.

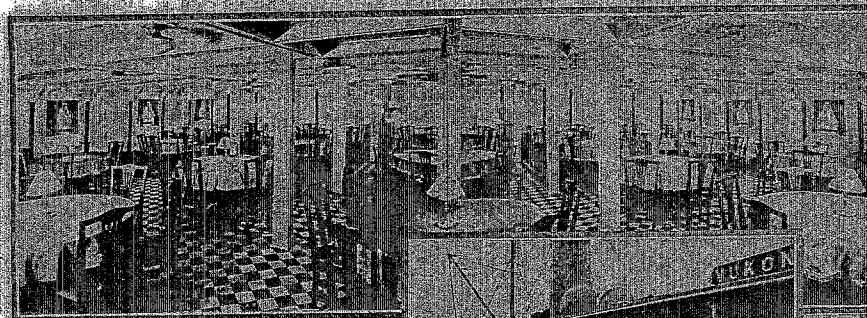
We are of the opinion that we are one of the oldest
continuous names on your books, and it is always a pleasure for
us to re-order Dutch Boy white-lead (always in carload quantity),
as we know that our investment will soon turn itself, and that
we are making friends and satisfied customers with every sale.

Yours very truly,

V. L. Baulard Co.

Do people know you are the Dutch Boy  merchant in your town?
Broadcast it— let the little Dutch Boy make friends  for
you. Put him on your bills and letterheads  You'll smile 
when you see how a Dutch Boy window pulls in  the
customers. These helps are free. Just drop a post card  to our
nearest branch or tell the Dutch Boy salesman next time he comes.

NATIONAL LEAD COMPANY, New York, 141 Broadway, Boston, 151 State Street, Buffalo,
110 Main Street, Chicago, 123 West Madison Street, Cincinnati, 107 Sherman Avenue, Cleveland, 120 West
Superior Avenue, St. Louis, 222 Chestnut Street, San Francisco, 48 California Street, Pittsburgh, National
Lead & Oil Co. of Pa., 1014 Fourth Avenue, Philadelphia, 10th & Locust, 601 13th & Locust, 601 13th & Locust.



These pictures of the dining saloon of the S. S. Yukon and the upper deck show how Dutch Boy white-lead was used for the double purpose of beautifying and protecting.

Save the sugar and
you eat all - *as is*

For beauty inside and protection outside

Owners of the S. S. Yukon use Dutch Boy white-lead
and Dutch Boy red-lead

A NEW vessel, the S. S. Yukon, was recently put in service between Seattle and Alaska by the Alaska Steamship Company.

The picture of the dining-saloon will give you an idea of the luxurious appearance of the walls and ceilings, which are the same throughout. The smaller photograph shows where white paint was used on the outside woodwork to protect it against the weather. The same paint material that makes the Yukon's interiors so beautiful protects its outside woodwork. It is Dutch Boy white-lead in both instances.

How beauty was achieved inside

The walls and ceilings of the Yukon are all painted with Dutch Boy white-lead mixed with Dutch Boy flattening oil. With this combination a beautiful flat finish was secured that resembles a rubbed-down job. Its use means a real saving, too, for this paint will stand repeated washings over a period of years without losing its rich, silky finish.

How exposed woodwork is protected

All the woodwork on the Yukon that is exposed to wind and waves is thoroughly coated with Dutch Boy white-lead mixed with pure linseed oil. This forms a tough, elastic covering and gives adequate protection to the wood itself. As the S. S. Yukon goes between Seattle and Alaska, with marked changes in the temperature, this paint is not affected, for it expands and contracts

along with the wood. For that reason it does not check or scale.

Metal protected with Dutch Boy red-lead

The S. S. Yukon has all its metallic surfaces—hull, bulkheads, cargo holds, chain lockers—safeguarded from rust by a thorough covering of Dutch Boy red-lead. With careful inspection and repainting when necessary, the steel on this vessel will be kept safe indefinitely from the attacks of Arctic weather.

Dutch Boy red-lead protects metal whether exposed to salt or fresh water. It is highly oxidized and finely ground. It is put up in both paste form for mixing with pure linseed oil and as a liquid ready for immediate application. Both forms come in the natural orange-red color that is usually used next to the metal. The liquid also comes in black, browns, and greens for finishing coats. The paste can be shaded to black, browns, and greens.

If you would like detailed information with regard to paint protection for your vessels, write to our nearest branch.

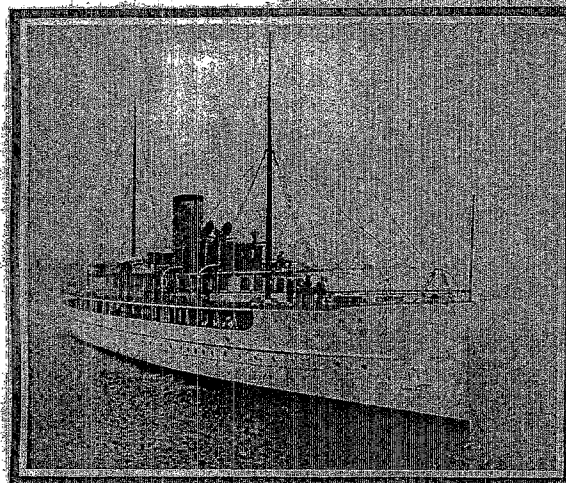
NATIONAL LEAD COMPANY

New York 111 Broadway; Boston 131 State Street; Buffalo 116 Oak Street; Chicago 606 West 123d Street; Cincinnati 309 Tremont Avenue; Cleveland 620 West Superior Avenue; St. Louis 722 Chestnut Street; San Francisco 235 California Street; Pittsburgh National Lead & Oil Co. of Pennsylvania; South Atlantic Petroleum Co. 117 Lewis Street; St. Paul 317 Chestnut Street.

This advertisement appears in the following publication:

Port Marine Engineering, January

0000-NLI-000017307



The steel steam yacht "Delphine" built for Mrs. Florence Dodge of New York and Detroit. Its dimensions are 267 feet over all—250 feet on water line, beam 35 1/2 feet, depth of hold 22 feet. Cost \$1,000,000. Built by Great Lakes Engineering Works, Detroit, Mich.

Lead paint beautifies and protects the million-dollar "Delphine"

SNOWY white and spotless, the steel steam yacht "Delphine" looks the million dollars that she cost. Her beautiful finish was secured with lead paint, the use of which also insures complete protection against corrosion.

All the steel of the "Delphine" received undercoats of pure red lead. Then the handsome white finish you see in the picture was obtained by applying finishing coats of pure white lead. It is standard practice to use red lead next to the metal with succeeding coats of white lead either kept white or tinted to the color desired for the finishing coat.

The undercoats on the steel of the "Delphine" are of Dutch Boy red lead—a highly oxidized red lead whose greater fineness results in a more uniform paint film and therefore better protection. This superior red lead is obtainable in paste form for mixing with pure linseed oil and also as a liquid ready for immediate application. The paste comes in the natural orange-red color and can be shaded to browns, greens, black and other dark colors for finishing coats. The liquid comes in six colors—orange-red, light and dark brown, light and dark green, and black.

The finishing coats on the steel of the "Del-

phine" are of Dutch Boy white lead. This pure white lead also protects and beautifies all the wood surfaces. In using paint made of Dutch Boy white lead, you have the widest possible choice of colors. The paint can be left white as in the case of the "Delphine" or it can be tinted to whatever color you desire simply by the addition of colors in oil.

Ship builders and owners everywhere use lead paints for preserving and beautifying the metal surfaces of their ships, as well as all wood surfaces. It produces a solid tough film, does not crack and scale, whether exposed to fresh or salt water, and is extremely economical because of its great covering power and long life.

Our technical staff has made a special study of ship painting and will be pleased to consult with you regarding your paint problems. Just drop a line to our branch office nearest you, marking your inquiry for the attention of our Department of Technical Service.

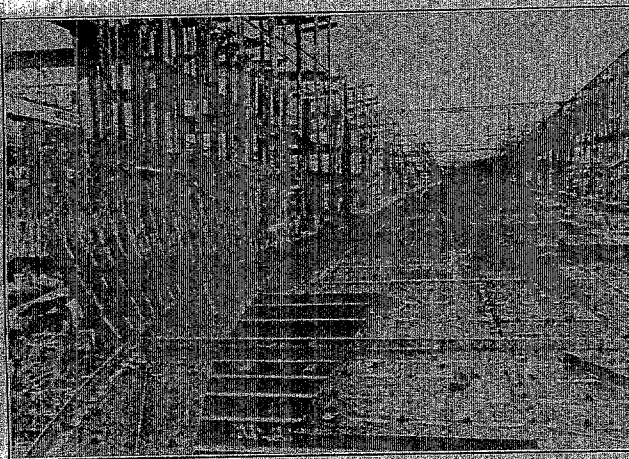
NATIONAL LEAD COMPANY
New York, 111 Broadway, Boston, 11 State Street, Buffalo, 116 Oak Street, Chicago, 300 W. 18th Street, Cincinnati, 609 Freeman Avenue, Cleveland, 378 West Superior Avenue, St. Louis, 722 Chestnut Street, San Francisco, 485 California Street, Pittsburgh, National Lead & Oil Co. of Pa., 318 South Avenue, Philadelphia, 10th & Locust Streets, Pa., 627 Chestnut Street.



This advertisement appears in the following publication:

Engineering News-Record

0000-NLI-000017308



Though this steel framework will be out of sight—
It will be safe against corrosion

THE ship-builder has a painting problem similar to that of the builder of a skyscraper. That is to give steel which is to be concealed full protection against rust.

All steel that is visible only for a short time during the building of a ship, and then goes out of sight, requires special protection. Particular care should be exercised in painting the details such as contact surfaces where metal joins metal, bolt heads, etc. It is at such places that corrosion usually starts. And a vessel like a skyscraper, is only as strong as its details.

Look at the picture above. If it were in color, the white spots about bolt heads and the white lines on steel deck plates would be flaming red. For these places—the important details—have received a special application of pure red-lead paint preliminary to the complete paint-

ing of the steel framework. Pure red-lead has long been the standard for ship painting. Its use on steel establishes an impenetrable barrier to air and moisture—the rust-forming elements.

Dutch Boy red-lead is pure red-lead. It gives the complete paint protection you need for all ship steel—exposed surfaces as well as those that will be concealed. It spreads uniformly and forms a hard, yet elastic coating that expands and contracts without cracking.

Dutch Boy red-lead is sold in both paste and liquid form. The liquid comes in the natural orange-red color, in greens, browns and black. The paste comes in the natural color and can be shaded to these colors.

More detailed information regarding protective paint coating will be sent you if you will write to our nearest branch.



NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 731 State Street; Buffalo, 111 Oak Street; Chicago, 906 W. 18th Street; Cincinnati, 508 Broadway; Cleveland, 830 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 425 California Street; Pittsburgh, National Lead Sales Co., 15 First Avenue; Worcester, Franklin, John S. Lewis & Co., 43 Chestnut Street.

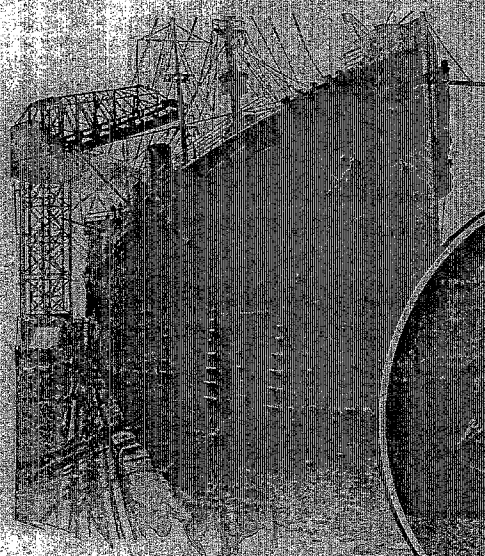


Dutch Boy Red-Lead

This advertisement appears in the following publication:

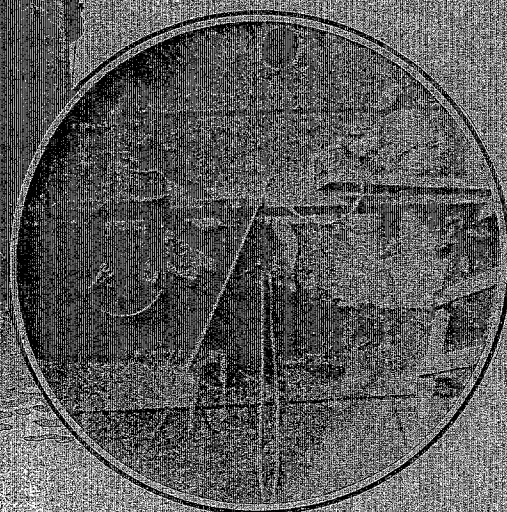
Page Marine Engineering, March

0000-NEL-000017309



S.S. George Washington, operated by the U. S. Shipping Board, receiving lead paint protection.

Save this surface and you save all.



Preparing for future battles with the sea

A HULL of steel can hold back the waves with a giant's strength. But even the great strength of steel can be broken down in time, if it is not fully protected by paint. So ship-owners cover steel hulls with a protective armor of red-lead made from the metal lead.

The standard practice is to give steel hulls and other steel surfaces throughout a ship a three-coat covering of red lead before it is put into service. That means a coat of red lead in its natural orange-red color next to the metal; a second coat slightly shaded to a darker color; and a finishing coat of red lead fully shaded to the desired color. It means, also, painting both heads, contact surfaces of steel plates, steel surfaces that are hidden from sight after construction, against rust.

Because Dutch Boy red-lead is pure red-lead and insures complete protection against corrosion, many steamship companies operating on salt and fresh water routes use it exclusively. Dutch Boy red-lead covers an unusually large area per gallon—is waterproof—sticks tight to the metal surface—expands with temperature changes without cracking.

Dutch Boy red-lead is sold in both paste and liquid form. The liquid comes in the natural orange-red color and also in light and dark green, light and dark brown and black for finishing coats. The paste comes in the natural color and can be shaded to browns, greens and black.

For white finishing coats

When a white or light-colored finish is desired above the waterline, Dutch Boy white-lead is used for the top coats. The body coat is tinted gray to cover the red-lead better; then a finishing coat of Dutch Boy pure white-lead follows.

If there is any specific information you desire regarding protective paint coverings for ships, a letter to our nearest branch will receive immediate attention.



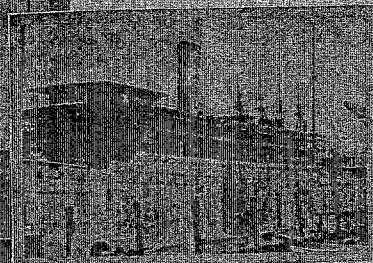
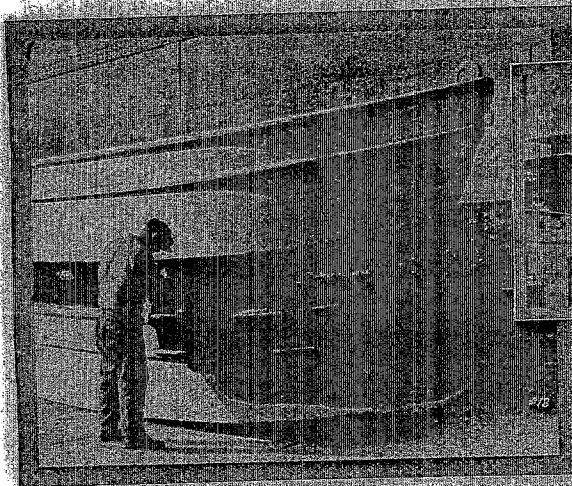
NATIONAL LEAD COMPANY
New York, 141 Broadway; Boston, 151 State Street; Buffalo, 116 One Street; Chicago, 210 W. 12th Street; Cincinnati, 621 Freeman Avenue; Cleveland, 123 West Superior; Denver, 1241 1/2 Chestnut Street; San Francisco, 185 California Street; Birmingham, 171 Main Street; St. Louis, 100 North 4th Avenue; Philadelphia, 101 N. 11th Street; New Orleans, 101 Chestnut Street.

Dutch Boy Red-Lead

This advertisement appears in the following publication:

Page Marine Engineering, April

0000-NLI-000017310



A shipboard life and a vessel's life are lengthened as they receive the protection of pure lead paint. The man in the picture is applying a white lead finishing coat over the red lead undercoating.

LEAD PAINT

... the life-preserver

LIFEBOATS that insure safety for passengers and crew must have their own protection. They need the same adequate protection that the huge steel ship receives—the protection of pure lead paint, applied at regular intervals.

Pure red-lead paint—such as that made of Dutch Boy red-lead—is the standard for preserving the life of small boats and large ships. It forms a tough film which the elements cannot penetrate. It sticks tight to the surface; becomes, in effect, a part of the metal itself. It is economical to use because of its unusual covering power and its ability to resist the attacks of corrosion.

Whether the surface is exposed to salt or fresh water, Dutch Boy red-lead provides complete protection. It sticks tight to the metal surface—is weatherproof—expands and contracts with temperature changes without cracking. It is economical to use because it has unusual covering power and is easy to apply.

Dutch Boy red-lead is put up in both paste form for mixing with pure linseed oil, and as a liquid, ready for immediate application. Both forms come in the natural orange red color that

is usually used next to the metal. The liquid also comes in black, browns, and greens for finishing coats. The paste can be shaded to black, browns, and greens.

For white finishing coats

When a white or light-colored finish is desired—as in the case of the lifeboats above—white lead paint is used over the red-lead undercoating. For this purpose, there is no white lead superior to Dutch Boy white lead.

We shall be glad to furnish you with more detailed information regarding protective paint coverings. Your problem will be considered by our technical staff consisting of men who have made a special study of paint protection in the marine field. There is no charge or obligation for this service. Just address our nearest branch.



NATIONAL LEAD COMPANY
New York, 111 Broadway; Boston, 141 State Street; Honolulu, 110 Oak Street;
Cleveland, 100 West 18th Street; Cincinnati, 151 Freeman Avenue; Cleveland,
110 West Superior Avenue; St. Louis, 222 Chestnut Street; San Francisco,
425 California Street; Pittsburgh, National Lead & Oil Co. of Pa., 316 Fourth
Avenue; Philadelphia, 100 N. 10th & Broad; Chicago, 300 Chestnut Street.



Metal of boilers needs the best protection possible for the boiler plate, after painting, is covered with asbestos and is made suitable for inspection, preventing the boiler from rusting and cracking.

SHIP METAL that needs pure red-lead

THE boilers you see here, and the smokestacks and ventilators shown below, have all just received a flaming red coat of protection. They have just been thoroughly painted with pure red-lead paint.

This protective covering on ship metal—whether on the hull or on other metal parts—wards off the attacks of rust-forming elements. A covering of pure red-lead, such as Dutch Boy red-lead, sticks tight to the surface—is impervious to air and moisture—expands and contracts with changes in temperature without cracking and scaling.

Dutch Boy red-lead is obtainable in both paste and liquid form. The liquid comes in the natural orange-red color and also in light and dark green, light and dark brown, and black for finishing coats. The paste comes in the natural orange-red color and can be shaded to browns, greens, and black.

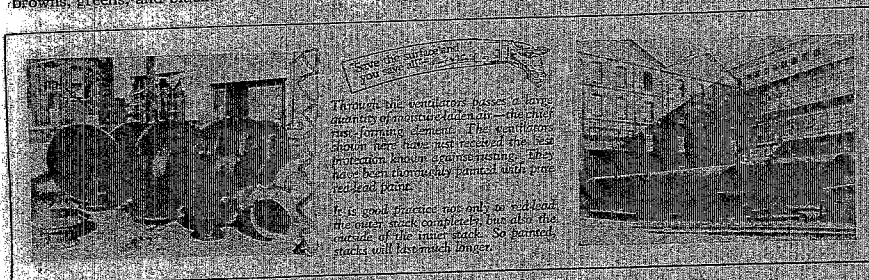
When a white or light-colored finish is desired, white-lead paint is used over the red-lead undercoating. For this purpose there is nothing superior to Dutch Boy white-lead.

We shall be glad to furnish you with more detailed information regarding protective paint coverings. Your problem will be considered by our technical staff, consisting of men who have made a special study of paint protection in the marine field. There is no charge or obligation for this service. Address your letter to our nearest branch.



NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 101 State Street; Buffalo, 116 Park Street; Chicago, 1800 West Madison Street; Cincinnati, 439 Chestnut Avenue; Cleveland, 320 West Superior Avenue; Detroit, 227 Chestnut Street; San Francisco, 487 California Street; Pittsburgh, National Lead and Oil Co., of Penna., 216 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.



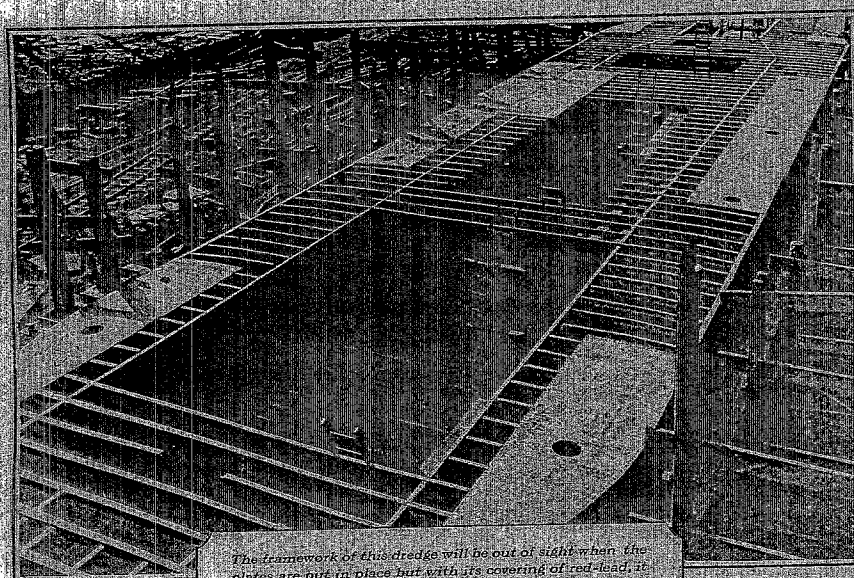
Save the engine and you save the ship.

Through the ventilator bases a large amount of moisture enters the ship, forming a cement. The ventilators shown here have just received the best protection known—scum-busting. They have been thoroughly painted with pure red-lead paint.

It is good practice not only to red-lead the outer stack completely, but also the inside of the inner stack. So painted stacks will last much longer.

This advertisement appears in the following publication:
Page—Marine Engineering—June

0000-NLL-000017312



The framework of this dredge will be out of sight when the plates are put in place but with its covering of red-lead, it is safe from corrosion.

On with the plates!

The framework is protected with pure red-lead

SOON all the plates of this dredge will be laid. Then the framework will be hidden from view. What if the hidden steel starts to corrode?

On with the plates! When the framework is out of sight, it can be put out of mind. For the entire framework of this dredge has been painted with pure red-lead. The plates, too, will receive this same protection.

Pure red-lead, such as Dutch Boy red-lead, is the best protection man has found against corrosion. Dutch Boy red-lead sticks tight to the metal. It becomes virtually a part of the steel itself. It is impervious to the attacks of air and moisture.

Dutch Boy red-lead comes in both paste and

liquid form. The liquid comes in the natural orange-red color and also in light and dark green, light and dark brown and black for finishing coats. The paste comes in the natural orange-red color and can be shaded to browns, greens and black.

Our technical staff will be glad to help you solve any problem on paint protection. There is no charge or obligation for this service. Address your letter to our nearest branch.

NATIONAL LEAD COMPANY

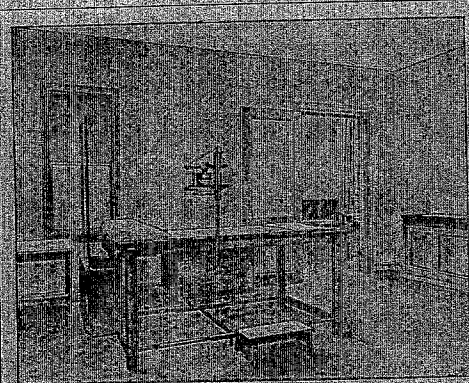
New York, 111 Broadway; Boston, 131 State Street; Buffalo, 115 Oak Street; Chicago, 990 West 18th Street; Cincinnati, 629 E. Third Avenue; Cleveland, 328 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 945 California Street; Pittsburgh, National Lead & Oil Co., 116 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.



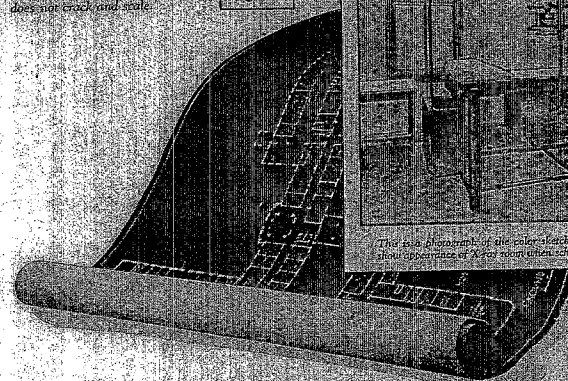
This advertisement will appear in the following publication:
Marine Engineering Digest

0000-NLI-000017313

Dutch Boy white lead and flaking oil make an economical and sanitary paint for hospital interiors. It can be tinted any color, can be washed repeatedly, and does not crack and scale.



This was photograph of the color stock prepared by the Department of Decoration to show appearance of a room when other color of the room is specified in card on



Save the wall and you save all — Dutch Boy's

How colors were selected for Colorado's new hospital

THE University of Colorado Medical School and Hospital, recently completed, presents a convincing example of the new use of color instead of bare white walls in hospitals. For every one of the 658 rooms, colors were chosen primarily for their proved ability to aid in healing the sick and for their favorable influence over student and surgeon.

The task of selecting the proper colors and of harmoniously relating them was considered by the hospital authorities and by Biscoe, Fisher and Fisher, Denver architects, as "of the utmost importance," and one that needed the attention of color experts. So they passed this work over to the Department of Decoration of National Lead Company.

A staff of color specialists who have back of them a wealth of experience in color therapy as it relates to hospital decoration were put upon the problem. First blueprints and other data were carefully analyzed. Each room was

Scientific method of color selection is now available to any hospital interested in securing color treatments that embody both decorative and therapeutic value.

studied to determine the important elements, such as purpose, size, height, floor covering and amount of natural illumination. The particular use of each room received special attention. This is one of the factors that largely determine the proper color selection for hospital interiors.

Appropriate color treatments were then prepared. These included: 1, panels of the colors selected; 2, formulas for producing them; 3, reasons for their use in each room; 4, their light reflection factor; and 5, specifications and practical painting directions.

Suggestions delight Dean in charge

Not only were the architects well satisfied with the recommendations, but they also write us:

"The Dean of the School of Medicine is particularly delighted with your

assistance. Your color suggestions appeal to all hospital and most attractive, a heavy solution to the difficult problem of correctly decorating these new buildings."

In this same thorough manner our Department of Decoration will gladly work with any hospital administration board, superintendent, architect and others who realize the tremendous importance of scientifically selecting colors for hospital decoration. This valuable service is rendered without any obligation on your part. You are free to use it whether your decorative problem concerns but a single operating room, a solarium, or an entire building.

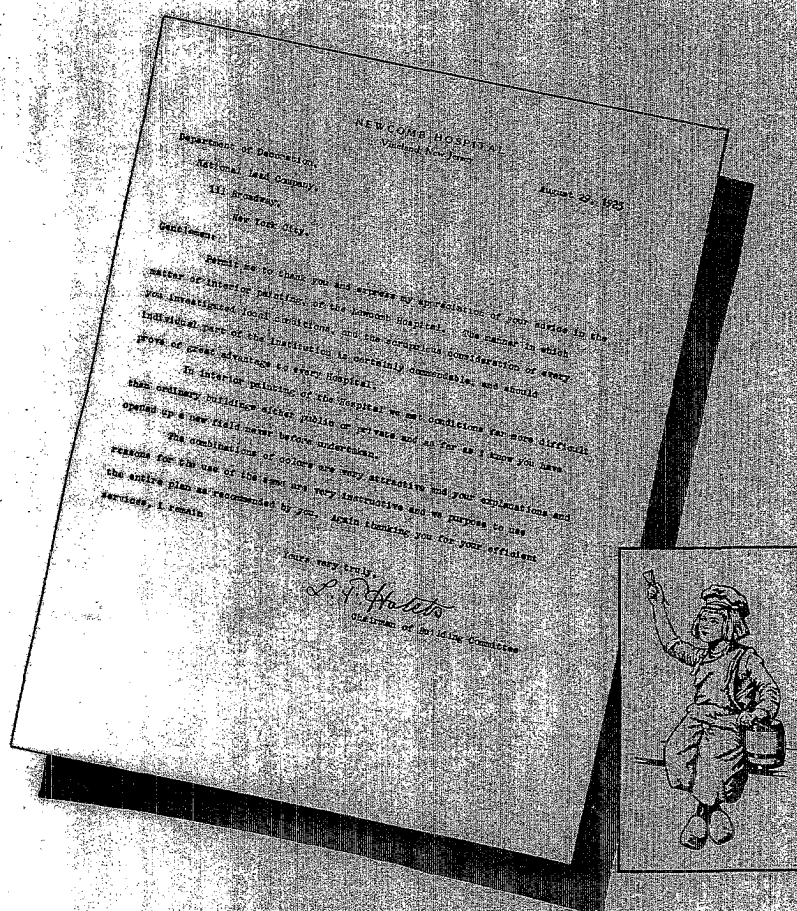
NATIONAL LEAD COMPANY

New York, 114 Broadway; Boston, 151 State Street; Philadelphia, 170 Old Street; Chicago, 200 W. 38th Street; Cincinnati, 632 Freeman Avenue; Cleveland, 890 W. Superior Avenue; St. Louis, 727 Chestnut Street; San Francisco, 433 California Street; Pittsburgh, 100 Broad Street; Oil Co. of Pa., 314 Fourth Avenue; Philadelphia, John T. Lewis & Sons Company, 437 Chestnut Street.

This advertisement appears in the following publication:

Page-Medical Hospital—January

0000-NLI-000017314



You can get this same service

THE service to which the Newcomb Hospital refers in the letter is available to any hospital, without charge or obligation. All you need do is state your problem to the Department of Decoration of National Lead Company, just as the Newcomb Hospital did.

Your problem will be carefully considered by a staff of experts who

have made a special study of hospital decorations and the therapeutic value of colors. The recommendations submitted will include not only the reasons for using certain colors but color specifications, paint formulas and color samples.

If you are interested in this service, write to the Department of

Decoration, addressing your letter to our nearest branch.

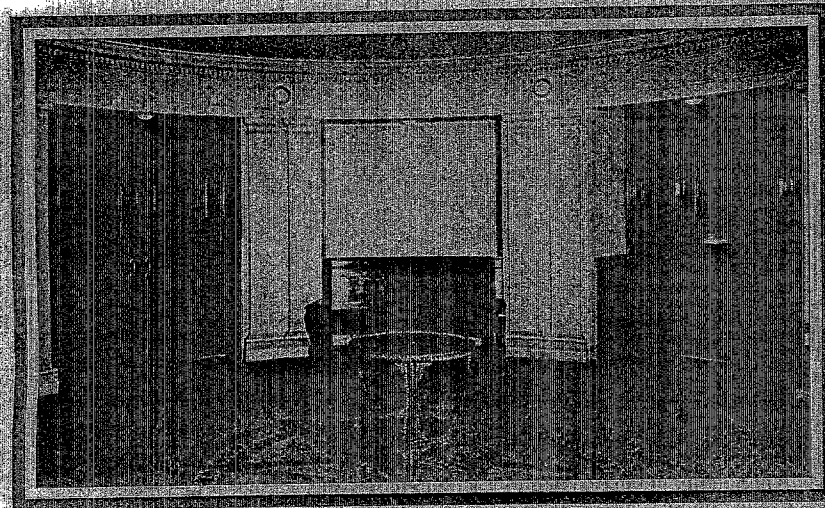
NATIONAL LEAD COMPANY

New York, 111 Broadway Building 141 State Street
Buffalo, 116 Oak Street
Cleveland, 820 W. Superior Avenue
Cincinnati, 222 Chautau Street
Chicago, 435 California Street
Detroit, 100 W. Main Street
Houston, 100 W. Main Street
Los Angeles, 100 W. Main Street
Milwaukee, 100 W. Main Street
Minneapolis, 100 W. Main Street
New Orleans, 100 W. Main Street
Philadelphia, 100 W. Main Street
Pittsburgh, 100 W. Main Street
Portland, 100 W. Main Street
San Francisco, 100 W. Main Street
Seattle, 100 W. Main Street
St. Louis, 100 W. Main Street
St. Paul, 100 W. Main Street
Tampa, 100 W. Main Street
Washington, 100 W. Main Street
Wichita, 100 W. Main Street

This advertisement appears in the following publication:

Page-Modern Hospital-14

0000-NLI-000017315



Shown above is the reception room of the Newcomb Hospital, Vineland, N. J., where scientifically selected, cheerful colors help ease the visitor's mind.

Does your reception room say "Cheer up!" to visitors?

THE atmosphere of a hospital has a depressing effect on many patients and visitors. In modern hospitals, physicians and superintendents are helping to remove this feeling of dread by means of carefully selected color treatments on walls and ceilings.

The reception room of the Newcomb Hospital, Vineland, N. J., is a notable example of how color has been used to create cheerful surroundings instead of bare, cold, depressing white.

Not only in the reception room, but all through this hospital, the proper color combinations were selected and recommended by the Department of Decoration of National Lead Company. Color experts, after careful thought, recommended color treatments for every room.

These recommendations were carried out in every detail. They included color specifications, paint formulas, color samples, and explanations showing why the various color treatments had been selected.

The Newcomb Hospital is but one of many hospitals all over the country that have been delighted with the color recommendations of our Department of Decoration.

This service available to you

Our Department of Decoration will gladly work with any hospital administration board, superintendent, architect, and others who realize the tremendous importance of scientifically selecting colors for hospital decoration. This service is rendered without obligation on your part.

Your problem will be carefully considered by a staff of experts who have made a special study of hospital decoration and the therapeutic value of colors. If you are interested in this service, write to the Department of Decoration, addressing your letter to our nearest branch.

NATIONAL LEAD COMPANY

New York, 310 Broadway; Boston, 121 State Street; Buffalo, 116 Oak Street; Chicago, 300 West 18th Street; Cincinnati, 459 Freeman Avenue; Cleveland, 320 West Superior Avenue; St. Louis, 727 Chestnut Street; San Francisco, 395 California Street; Pittsburgh, National Lead & Oil Co. of Pa., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.



This advertisement appears in the following publications:
Page-Moder Hospital—March

0000-NLI-000017316

KENTUCKY BAPTIST HOSPITAL

T. J. MCINTY, Superintendent

Head Office and Delivery Point

LOUISVILLE, KENTUCKY

March 15, 1925

National Lead Co.,
211 Broadway,
New York City.

Attention Mr. A. E. Paul

Dear Mr. Paul:

Referring to your favor of the first of February, concerning the proposition for the assistance which your company is rendering to institutions throughout the country, I wish to say that your Doctor Irwin and also your local representative both have indeed been very helpful to me in the selection of colors for our interior decorations.

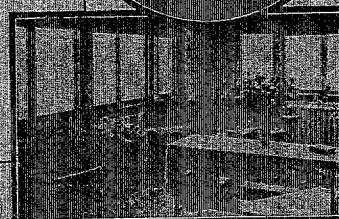
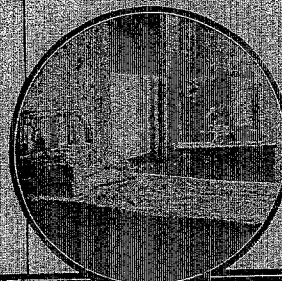
I wish to say that I can conscientiously recommend your products to any institution that is contemplating interior painting, and the suggestions and color schemes which you suggested for my approval are appreciated. This is indeed a service which we appreciate very much and I am sure all institutions would do well to consult your company before doing any interior decorating.

Sincerely yours,

T. J. McInty, Super.
KENTUCKY BAPTIST HOSPITAL

RMH/MP

A PRIVATE room and a corner of the auditorium in the new Kentucky Baptist Hospital, Louisville, Ky. Color treatments used throughout this hospital were recommended by the Department of Decoration of National Lead Company. These same color services are available to your hospital.



This color service is yours for the asking

THE Kentucky Baptist Hospital is only one of many modern hospitals using special color treatments recommended by the Department of Decoration of National Lead Company.

This color service is available to any hospital. Just state your problem to the Department of Decoration. A staff of color experts—men who have made a special study of hospital decoration and the therapeutic value of color—will give your problem their individual attention. They will recommend definite color treatments for one room or an entire

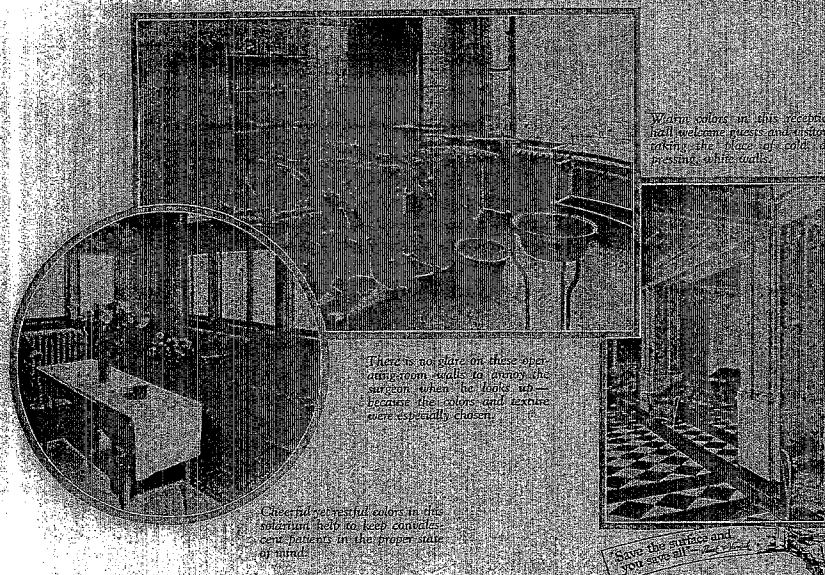
hospital. They will give reasons for using certain colors, and furnish you with color specifications, paint formulas, and color samples.

There is no charge for this service. Simply address your letter to the Department of Decoration in care of our nearest branch.



NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 606 West 10th Street; Cincinnati, 659 Broadway; Cleveland, 60 West Superior Avenue; St. Louis, 777 Chestnut Street; San Francisco, 342 California Street; Pittsburgh, National Lead and Oil Co.; St. Paul, 135 Fourth Avenue; Philadelphia, John T. Lewis & Bros., 28 Chestnut Street.



Each of these rooms has its own color treatment

WALLS and ceilings in each of these rooms in the Kentucky Baptist Hospital, Louisville, Kentucky, are decorated in specially selected colors. Each color treatment was chosen not alone for decoration but, more important, for its proved therapeutic value.

The colors were recommended by a staff of color experts of the Department of Decoration of National Lead Company. From blueprints and information furnished by the hospital, these men made a study of each room. They considered such factors as size, height, amount of natural illumination, and the use to which each room was to be put.

Then they prepared appropriate color treatments for each room, based upon their experience in planning decorations for hospitals all over the country. In the reception hall, for example, they recommended warm, friendly colors to help ease the minds of anxious visitors. Cheerful yet restful colors were chosen for the waiting room, while in the operating room colors were used that do not glare back at the surgeon as

he looks up from his work. Color treatments for all rooms in the Kentucky Baptist Hospital were carried out as recommended by the Department of Decoration. Dr. R. J. McGinley, superintendent of the hospital, writes that he is delighted with the results.

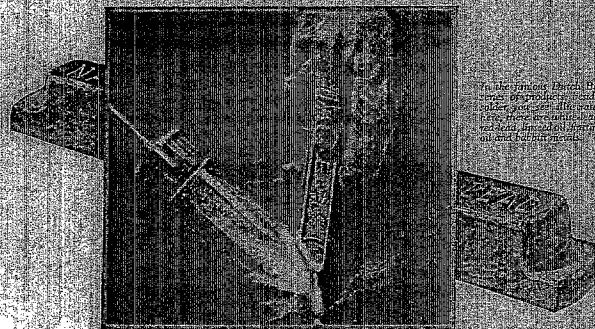
This service available to you

Just as our Department of Decoration worked with the Kentucky Baptist Hospital, they will be glad to assist any other hospital superintendent, administration board, or architect. Color experts who have made a special study of hospital decoration and the therapeutic value of colors, will give your problem individual attention. This service is free. If you are interested in it, write to the Department of Decoration, addressing your letter to our nearest branch.



NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 900 W. 34th Street; Cincinnati, 659 Franklin Avenue; Cleveland, 200 West Superior Avenue; San Francisco, 482 California Street; Pittsburgh, National Lead and Oil Co. of Pennsylvania, 140 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 337 Chestnut Street.



"SODDER"

The Glue of the Metals

SOLDER is to the metal worker what glue is to the cabinetmaker. The origin of the word *solder* means "to make solid." Lead mixed with tin makes this solder, whose use is to join metal to metal, to seal metal containers, and to patch holes in metal.

Why is lead used in soft solders? Because pure lead combined with pure tin produces an alloy whose melting point is below that of either of these metals and therefore is below that of the metals to be joined, even though these metals be lead and tin themselves. This alloy also adheres to zinc, copper, brass and even iron and steel, joining them in perfect union.

Thousands of workers use the soft solders made by National Lead Company under the Dutch Boy trademark. The Dutch Boy series of solders, numbered from 111 to 888, has been scientifically selected to cover every possible requirement of the solder user.

National Lead Company also will furnish solder of any formula required, in a variety of shapes, sizes, lengths and weights. It makes bar, wire, ingot, triangular, drop, segment, round, half-round, strip, and ribbon solders.

Lead in paint

Of all the important uses of lead the most general of all is the use of lead paint. From

lead is made white-lead, famous for generations for the protection it gives to the surface it covers.

House owners, more today than ever before, protect their properties by covering them with constantly maintained coatings of white-lead paint. They know they can depend on it to save the surface and thus save their houses from rot and decay.

National Lead Company makes white-lead of the highest quality and sells it mixed with pure linseed oil, under the Dutch Boy trademark.

National Lead Company also makes lead products for practically every purpose to which lead can be put. If you desire specific information about the use of solder for any purpose or about any of the other uses of lead, write to our nearest branch for complete information.

NATIONAL LEAD COMPANY

New York, 411 Broadway; Boston, 152 State Street; Buffalo, 316 Oak Street; Chicago, 400 West Third Street; Cincinnati, 400 Madison Avenue; Cleveland, 200 West Superior Avenue; St. Louis, 222 Chestnut Street; San Francisco, 185 California Street; Birmingham, National Lead & Oil Co. of Pa., 315 Fourth Avenue; Philadelphia, 1000 N. 10th & Broad; Co., 427 Chestnut Street.



Lead, in its pure form, is a soft, malleable metal. But when mixed with oil, it becomes a hard, durable material. This is the secret of the famous Dutch Boy Red Lead paint, which has been used for centuries to protect metal surfaces from rust and decay.

Red-lead helps man win the greatest war of all time

THIS war is between man and Nature. What man builds, the forces of Nature try to destroy. Nature is everlastingly striving to return all materials to their original and most stable form. So it has been since the beginning of time.

Man uses in his structures, among other materials, the strongest metal he has—steel. Opposed to it is one of Nature's strongest elements—moisture-laden air. The air attacks this metal which man has won from Nature and tries by what is known as rusting, to draw it back to its original state. If the metal is left to face the attack alone, it soon weakens. It crumbles—is destroyed.

But few steel structures are permitted to rust rapidly away. Man thwarts Nature by protecting his steel with an armor of lead paint. With pure red-lead such as Dutch Boy red-lead he makes a paint covering through which air and moisture do not penetrate. The life of steel is prolonged indefinitely with this armor of paint derived from the metal lead.

Dutch Boy red-lead has stood all tests for durability. It makes a hard, tenacious film that gives full and economical protection to the metal surfaces it covers. It comes in the

natural red-lead color and can be shaded to browns, greens, and black.

We shall be pleased to send you "The Handy Book of Painting," which has a special section devoted to the protection of metal surfaces.

Other Dutch Boy Products

In the famous Dutch Boy series of products, besides red-lead, there are white-lead, flaking oil, solder, linseed oil, and habbit metals.

National Lead Company, in addition, makes lead products for practically every purpose to which lead can be put in art, industry, and daily life. Among the products are litharge, sheet lead, lead bars, lead cables, lead pipe and lead tubing.

If you desire specific information about any of these or other uses of lead, or on any special painting problem, write to our nearest branch.

NATIONAL LEAD COMPANY

New York: 611 Broadway, Boston: 121 State Street, Buffalo: 170 Oak Street, Chicago: 123 West 18th Street, Cincinnati: 101 West Main Avenue, Cleveland: 320 West Superior Avenue, St. Louis: 722 Chestnut Street, San Francisco: 234 California Street, Pittsburgh: National Lead & Oil Co. of Pa., 316 Fourth Avenue, Philadelphia: John T. Lewis & Son, Company, Chestnut Street.

24119: Buy National Geographic—March.
Nation of the Future—March.

Cellianus Kirkly, March

American Magazine March
Nation's Business April



LEAD PAINT

the fire extinguisher

WHEREVER unpainted surfaces are exposed to the atmosphere, they burn just as surely as when a match is applied. This burning, or combustion, is simply oxidation, during which oxygen is taken from the surrounding air. There are three kinds of combustion: almost instantaneous, or explosion; rapid, or fire; and slow, or rot. Slow combustion is destroying millions of houses, rotting wooden porch columns, window sashes, and exterior walls.

You can keep the wooden surfaces of your house safe from slow combustion, or rot, by keeping them covered with a constantly maintained film of lead paint that is impervious to air and moisture.

Thousands of master painters and house owners use lead paint made of Dutch Boy white-lead. It makes a tough, elastic and waterproof film that sticks to the surface, does not crack and scale, and has great hiding power.

For exterior work use a combination of Dutch Boy white-lead and linseed oil. For flat finishes (usually desired for interior painting) mix Dutch Boy white-lead with Dutch Boy flaking oil. In either case the paint can be tinted to any color desired. Dutch Boy white-lead and flaking oil, either white or tinted, makes a paint

that gives particularly soft, beautiful flat finishes that rest the eye and withstand frequent washing.

We will be pleased to send you a new booklet, "Painting—Protective and Decorative," that contains color plates of house exteriors and interiors and also of interesting and unusual artistic wall finishes that can be obtained with paint. This booklet sent free on request.

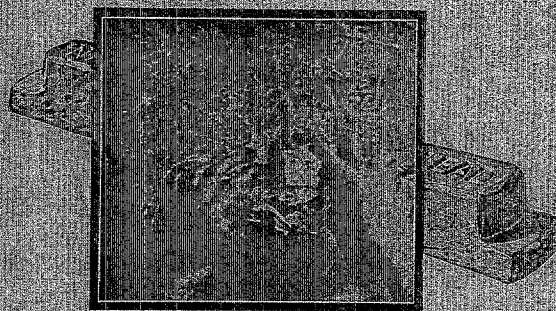
Other Dutch Boy Products

National Lead Company makes, in addition, lead products for practically every purpose to which lead can be put in art, industry and daily life. Among these products are pressure die castings, pinch expansion bolts, Hovr Handlead products for buildings and printers' metals.

If you desire specific information about the use of lead paint or of any other use of lead, write to our nearest branch.

NATIONAL LEAD COMPANY

New York 217 Broadway Boston 311 State Street Buffalo 116 Elk Avenue Chicago 200 West 18th Street Cincinnati 50 Hudson Avenue Cleveland 325 West Superior Avenue St. Louis 721 Chestnut Street San Francisco 284 California Street Pittsburgh 1000 North 10th Street Philadelphia 1000 North 10th Street



Interiors of rare beauty now within the means of all

WHEN great-grandfather was a boy, the interior charm of Colonial homes was due in large measure to woodwork finishes of rare beauty—finishes built up with as many as five or six paint coats.

Up to a short time ago, such handsome finishes were a luxury that only the wealthy could afford. Today, however, a new flat paint puts similar interior finishes within the reach of all, not only for woodwork but for walls.

This new flat paint costs less because fewer coats are required and because it can be applied more quickly. It leaves a finish free from brush marks, laps and streaks. It forms a durable, moisture-proof film that becomes a part of the covered surface. It can be washed repeatedly without injury. It can be tinted to any desired color. With it many very beautiful and distinctive effects can easily be obtained, among them two-tone figured finishes like the one shown above.

This new flat paint is made of Dutch Boy white-lead and Dutch Boy flattening oil. White-lead, which is the pigment ingredient, is made from the metal lead.

Send for samples and booklet

Our booklet, "Painting—Protective and Decorative," gives further information about

this new flat paint. It also contains color plates of house interiors and exteriors and of interesting and unusual artistic wall finishes that can be obtained with paint. We will be pleased to send you this booklet accompanied by actual painted samples of the two-tone figured finish.

National Lead Company maintains a Department of Decoration made up of experts who will gladly give advice on the proper selection of the colors for interiors of new houses or old. Address your inquiries to Department of Decoration in care of our nearest branch.

In addition to Dutch Boy white-lead and flattening oil, National Lead Company makes lead products for practically every purpose to which lead can be put in art, industry and daily life. If you desire specific information about any use of lead, write to our nearest branch.

NATIONAL LEAD COMPANY

New York, 115 Broadway; Boston, 231 State Street; Buffalo, 120 Oak Street; Chicago, 929 West 10th Street; Cincinnati, 159 Lee Street; Cleveland, 447 West Superior Avenue; St. Louis, 1715 Chestnut Street; San Francisco, 485 California Street; Philadelphia, 1500 Arch Street; Portland, 1000 Commercial Avenue; Pittsburgh, 1000 North 10th Street; St. Paul, 1000 Commercial Avenue; Washington, 1000 Commercial Avenue.



The trademark of the Dutch Boy Painter always indicates an ever-ready supply of Dutch Boy white-lead and flattening oil.





Oil and Steel—both burn

LEAVE steel tanks exposed to the atmosphere. They will burn just as surely as the oil is burning in the tanks pictured above.

All burning or combustion is simply oxidation. When oil burns, it takes on an, or oxidizes. That is just what metal does. The oxidation of metal, however, is slower (it is slow combustion, while the burning of oil is rapid combustion) but it is just as sure.

How to combat oxidation

Modern methods of fighting oil fires involve keeping air from reaching the flames. A similar method is used to combat the costly burning or oxidation of tank metal. This method is to keep every detail of metal equipment sealed against air and moisture with a film of tough, long-wearing, red-lead paint.

Over and over again pure red-lead paint proves its value in completely protecting and lengthening the life of iron and steel oil equipment. Complete protection, however, means more than coating the metal with red-lead when you first put it into service. It calls for regular repainting afterward. It demands always keeping an unbroken

film of paint between the metal and air and moisture. When you give such protection, you prolong the life of your oil tanks indefinitely. Also, you can maintain your tanks at a *minimum painting cost per year*.

Oil operators find that Dutch Boy red-lead gives the metal in their tanks full protection. Dutch Boy red-lead is pure red-lead. Mixed with pure linseed oil and spread on the surface of clean metal, it sticks tight. It is impervious to air and moisture. It makes an elastic paint covering that expands and contracts with heat and cold without cracking.

Litharge

For oil burning you want litharge of correct physical character and extreme chemical purity. Such litharge is made by the makers of Dutch Boy red-lead and Dutch Boy white-lead. At all times you can rely on its unvarying uniformity.

Our nearest warehouse can give you quick shipment in any quantity you desire.

You can get Dutch Boy red-lead in both paste and liquid forms. The liquid comes in the natural orange-red color, light and dark green, light and dark brown, and black. The paste comes in the natural color and can be shaded to browns, greens, black, etc.

Paint also cuts evaporation

When you want finishing coats of light-colored paint to reduce heat-absorption and decrease oil evaporation, use Dutch Boy white-lead on top of first coats of Dutch Boy red-lead.

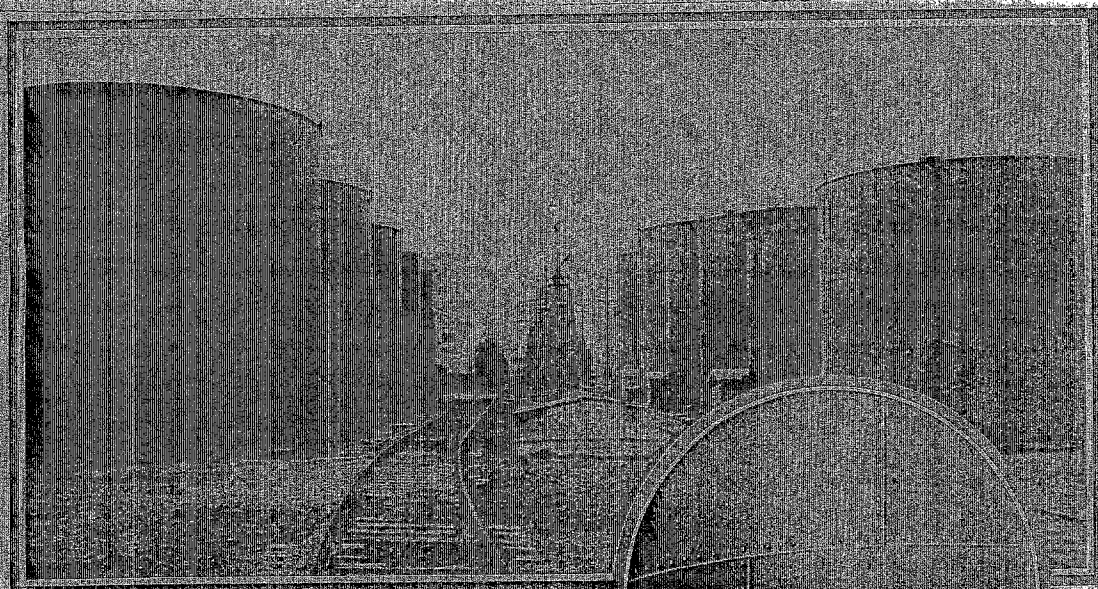
Dutch Boy white-lead also has the properties that enable it to resist the penetration of air and moisture.

Write to our Technical Service Department at our nearest branch. Our specialists will be pleased to give you full information about metal protective paints to meet your specific requirements.



NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 151 State Street; Buffalo, 116 Oak Street; Chicago, 908 West 38th Street; Cincinnati, 659 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chippewa Street; San Francisco, 865 California Street; Philadelphia, National Lead & Oil Co. of Pa., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.



This battery of eleven tanks holds 1,350,000 gallons of oil. The oil is kept safe by the steel tanks, which in turn are protected with pure red-lead paint.

It pays to give special attention to the thorough painting of bolt heads, plate connections, and other details, because it is at these places that corrosion is most likely to start.

These steel tanks guard a million gallons —but what protects the tanks?

THIS battery of eleven tanks safeguards more than a million gallons of oil. The owners can be sure that their oil is safe, for it is protected by a combination that can't be beat—steel tanks that are covered with pure red-lead paint.

This pure protective paint sticks tight to tank steel. It becomes in effect a part of the steel itself. When rust-forming elements attack the tank, they can't get at the metal if its surface is thoroughly covered with pure red-lead.

But to be sure of this protection, you must also be sure that the red-lead is pure—such as Dutch Boy red-lead. Oil tank owners find that Dutch Boy red-lead gives the metal in their tanks full and lasting protection against rusting. It forms a dense, tough covering that is still elastic enough to expand and contract with changes in the temperature, without cracking.

You can get Dutch Boy red-lead in both paste and liquid form. The liquid comes in the natural orange-red color for coats next to steel and also in light and dark green, light and dark brown, and black for finishing coats. The paste is obtainable in the natural orange-red color, and can be shaded to browns, greens, black, etc.

Government tests prove that light-colored coats reduce heat absorption by tank metal and decrease oil evaporation by keeping the oil 8 to 10 degrees

cooler. For this purpose, many oil operators use Dutch Boy white-lead for finishing coats on top of undercoats of Dutch Boy red-lead. Tanks painted in this way reflect the hot rays of the sun, and are fully effective in repelling the attacks of air and moisture, the causes of corrosion. If you have a problem in protecting your metal equipment from corrosion, we will be glad to help you solve it. Experts in our Department of Technical Service have made a special study of paint protection for metal in the oil industry. They will be glad to consider your specific problem. Simply address our nearest branch.



NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 121 State Street; Buffalo, 115 Oak Street; Chicago, 990 West 18th Street; Cincinnati, 659 Broadway Avenue; Cleveland, 118 West Superior Avenue; St. Louis, 272 Chestnut Street; San Francisco, 60 California Street; Pittsburgh, National Lead & Oil Co. of Pa., 316 North Avenue; Philadelphia, John T. Lewis & Sons, Co., 67 Chestnut Street.

Litharge

For oil refining you want litharge of correct physical character and extreme chemical purity. Such litharge is made by the makers of Dutch Boy red-lead and Dutch Boy white-lead. At all times you can rely on its unvarying uniformity.

Our nearest warehouse can give you quick shipment in any quantity you desire.



The tank pictured here is painted in light color, to reduce heat absorption to a minimum. For this purpose, Dutch Boy white-lead is the paint to use for finishing coats, over an undercoating of Dutch Boy red-lead.

How much of your oil does the sun take away?

Government tests prove you can cut evaporation losses

THERE will always be some oil lost through evaporation. But the industry is ever on the watch for methods of cutting these losses to a minimum. One of the modern ways of reducing evaporation losses is to reduce heat absorption by means of painting.

According to tests conducted by the United States Bureau of Mines, storage tanks painted white or in light colors, reflect heat and keep the oil cooler. Oil in light-painted tanks, government experts have found, stays from eight to ten degrees cooler in temperature than that in dark-colored tanks.

Many producers, refiners and marketers are profiting from this knowledge. They are having their storage equipment painted like the tank above—with finishing coats of light-colored paint. For the undercoating next the metal, they still use Dutch Boy red-lead because there is nothing that will

protect a clean metal surface better than pure red-lead. Then for the finishing coats they apply Dutch Boy white-lead over the red-lead.

Dutch Boy white-lead makes an ideal finishing paint because it has the necessary whiteness, and in addition adds its protective qualities to the protection provided by the red-lead undercoating. Painted with these pure lead paints, your tanks are not only ready to resist the attacks of the sun and cut evaporation losses to a minimum, but they

are also adequately protected against air and moisture—the rust-forming elements.

If you have a problem on evaporation, or would like to know more about keeping your metal equipment protected, we will be glad to help you. Experts in our Department of Technical Service have made a special study of paint protection in the oil field. Without obligation they will be glad to help you with your specific problem. Simply address our nearest branch.



Litharge

For oil refiners, you want litharge of correct physical character and extreme chemical purity. Such litharge is made by the makers of Dutch Boy red-lead and Dutch Boy white-lead. At all times you can rely on its unvarying uniformity.

Our nearest warehouse can give you quick shipment in any quantity you desire.

NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 300 West 18th Street; Cincinnati, 631 Broadway Avenue; Cleveland, 220 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of Pa., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros., Co., 422 Chestnut Street.

Dutch Boy White-Lead

This advertisement appears in the following publication:

Page—Oil & Gas Journal—March 26

0000-NLI-000017325

SUNK in the ground or EXPOSED to the weather

WHEN a skyscraper is built, the steel framework is thoroughly protected with pure red-lead paint before it is encased in masonry. Once the building is up, the steel is hidden and inaccessible—there is no chance to inspect it or repaint.

You have a similar problem in protecting the hidden steel of your tanks. Once the steel is sunk in the ground it is inaccessible to inspection and repainting. Therefore the paint applied to it should provide the best protection known against corrosion.

More and more the practice of the industry is to cover tank steel with pure red-lead paint before it is sunk in the ground. Such protection enables the steel to give its full life of service.

Whether tank steel is sunk in the ground or exposed to the attacks of rust-forming elements, it is properly protected when covered with pure red-lead paint.

Dutch Boy red-lead is pure red-lead. It forms a dense, tough film that is still elastic enough to expand and contract with changes in temperature without cracking and scaling.

You can get Dutch Boy red-lead in both paste and liquid form. The liquid comes in the natural orange-red color for coats next to steel and also in light and dark green, light and dark brown, and black for finishing coats. The paste is obtainable in the natural orange-red color, and can be shaded to browns, greens, black, etc.

Paint cuts evaporation

When you want finishing coats of light-colored paint to reduce heat absorption and decrease oil evaporation use Dutch Boy white-lead on top of an undercoating of Dutch Boy red-lead. Dutch Boy white-lead also has the properties that enable it to resist the attacks of rust-forming elements.

Light-colored tanks reduce heat absorption and decrease oil evaporation. For white or light colors, use Dutch Boy pure white-lead for top coats over Dutch Boy red-lead next to the metal.

Tank steel is properly protected from corrosion when covered with pure red-lead paint



Covered with pure red-lead paint, tank steel has complete protection. Particular attention should be given to the painting of bolt heads and plate connections—the places where corrosion usually starts.

We will be glad to help you solve any problem on protecting your metal equipment from corrosion. Experts in our Department of Technical Service have made a special study of paint protection for metal in the oil industry. They will be glad to help you. Just address our nearest branch.



NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 500 West 28th Street; Cincinnati, 609 Freeman Avenue; Cleveland, 470 West Superior Avenue; St. Louis, 1210 Chestnut Street; San Francisco, 435 California Street; Pittsburgh, National Lead & Oil Co. of Penna., 218 Fourth Avenue; Philadelphia, John F. Lewis & Sons Co., 427 Chestnut Street.

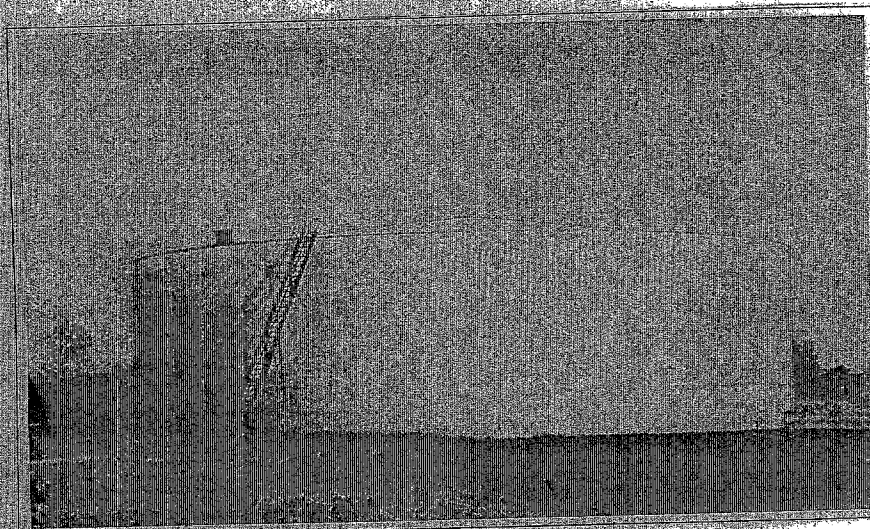
Litharge

For oil refining you want litharge of correct physical character and extreme chemical purity. Such litharge is made by the makers of Dutch Boy red-lead and Dutch Boy white-lead. At all times you can rely on its unvarying uniformity.

Our nearest warehouse can give you quick shipment in any quantity you desire.



Make this test yourself. Some day when the sun beats down, put your hand against a dark painted tank. Feel how hot it is. Then try a light-colored one. Even with your hand you can tell the difference.



Ten degrees cooler under the blazing sun

Storage tanks painted in light colors reflect the sun's heat and cut evaporation losses.

THE blazing sun always takes away some oil through evaporation. But the number of gallons can be reduced by a simple method of painting tanks.

It is a fact, proved by tests conducted by the U. S. Bureau of Mines, that storage tanks painted in white or in light colors keep oil from 8 to 10 degrees cooler in temperature than do tanks that are painted in dark colors.

There is a marked tendency in the industry toward the use of light-colored paint for finishing coats. The method of protecting the tank steel remains unchanged. Nothing better has been found for undercoatings next the metal than pure red-lead, such as Dutch Boy red-lead. But for finishing coats, more and more the practice is to apply coats of Dutch Boy white-lead over the Dutch Boy red-lead.

Dutch Boy white-lead makes an ideal finishing paint because it has the necessary whiteness. It can be tinted to



So hot, the dusty sun. Down it beats on the tanks. It takes less oil from these tanks, for they are painted in light colors that reflect the heat.

any desired light color. In addition, it adds its protective qualities to the protection provided by the red-lead undercoating. With tanks protected by Dutch Boy pure red-lead, and finishing coats of Dutch Boy pure white-lead, you can cut evaporation losses to a minimum. At the same time you can be sure that the tanks

are secure against the attacks of air and moisture—the chief causes of corrosion. We maintain a Department of Technical Service. It is conducted by paint experts who have made a special study of paint protection in the oil industry. They will be glad

to consider your particular problem, or provide you with information about metal protective paints. Write them in care of our nearest branch.



NATIONAL LEAD COMPANY
New York, 111 Broadway; Boston, 121 State Street; Buffalo, 116 Oak Street; Chicago, 500 West 18th Street; Cincinnati, 639 Tremont Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 405 California Street; Pittsburgh, National Lead & Oil Co., 179, 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 227 Chestnut Street.

This advertisement appears in the following publication:

Pittsburgh Courier-Journal—June 1, 1934

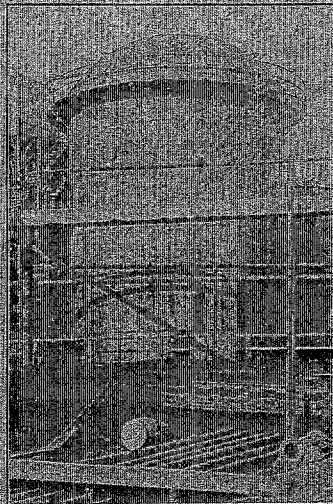
0000-NLL-000017327



A red-leaded steel tank is a
long-lived tank

Dutch Boy
red lead

You can get Dutch Boy red-lead in both paste and liquid form. The liquid comes in the natural orange-red color for coats next to steel, and also in light and dark green, light and dark brown, and black, for finishing coats. The paste is obtainable in the natural orange-red color, and can be shaded to browns, greens, black, etc.



Save the surface and
you save all.

Only careful inspection and repairing at regular intervals will keep your metal equipment unharmed.

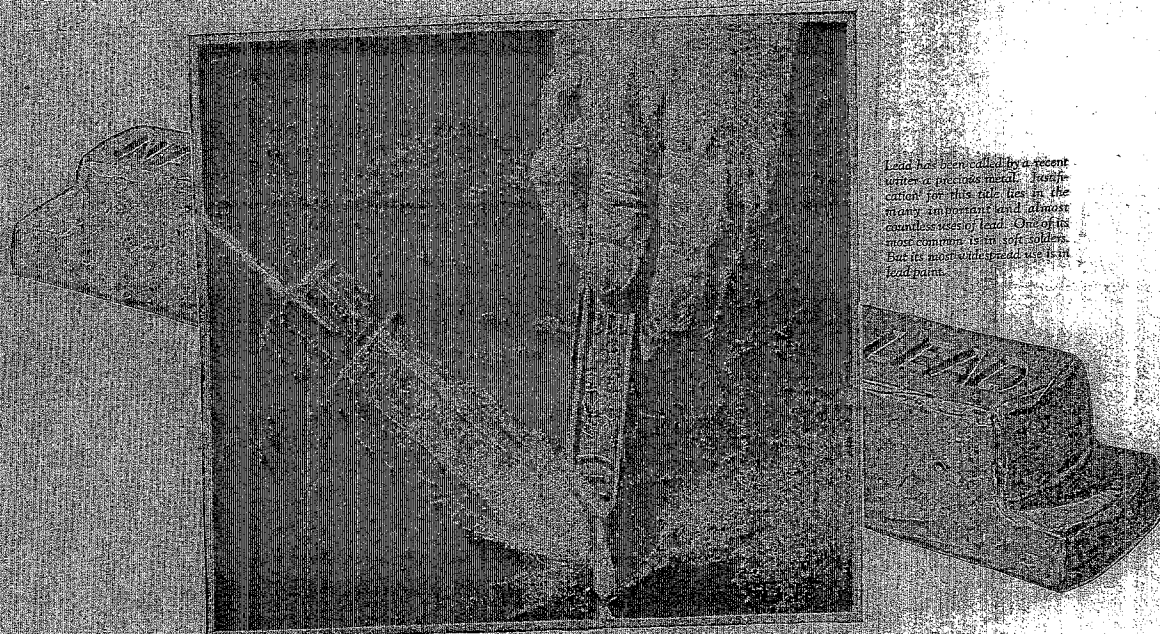


Litharge For oil refining you want litharge of correct physical character and extreme chemical purity. Such litharge is made by the makers of Dutch Boy red-lead and Dutch Boy white-lead. At all times you can rely on its unvarying uniformity. Our nearest warehouse can give you quick shipment in any quantity.

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116
Oak Street; Chicago, 900 West 18th Street; Cincinnati, 639 Freeman
Avenue; Cleveland, 320 West Superior Avenue; St. Louis, 722 Chestnut
Street; San Francisco, 485 California Street; Pittsburgh, National
Lead & Oil Co. of Pa., 316 Fourth Avenue; Philadelphia, John T.
Lewis & Bros. Co., 437 Chestnut Street.

This advertisement appears in the following publication:
Pace—Oil and Gas Journal—July 10,

0000-NLI-000017328



Lead has been called by a recent writer a precious metal. Justification for this title lies in the many important and almost countless uses of lead. One of its most common is in soft solders. But its most widespread use is in lead paint.

"SODDER" The Glue of the Metals

Why pronounce it *sodder* and spell it *solder*, though there have been as many different ways of spelling it as there are letters in the word? *Solder*, *souders*, *solter*—have all been used. The origin of the word *solder* means "to make solid." Lead mixed with tin makes this solder, whose use is to join metal to metal, to seal metal containers, and to patch holes in metals. Lead tin solder is to the metal worker what glue is to the cabinetmaker and the bookbinder.

Why is lead used in soft solders? One reason is that pure lead combined with pure tin produces an alloy whose melting point is below that of either of these metals alone, and therefore is below that of the metals to be joined, even though these metals be lead and tin themselves. This alloy also adheres to zinc, copper, brass and even iron and steel, joining them in a perfect union.

Dutch Boy solders

Thousands of workers use the soft solders made under the Dutch Boy trademark. The Dutch Boy series of solders has been carefully and scientifically selected to cover every possible requirement of the solder user. Dutch Boy Solder No. 1 is the acme of solder quality. There is no finer better. It is 30% lead and 70% tin, which is not true

or many so-called "half and half" solders. In the grades from 222 to 338 the proportions of lead and tin vary according to the number, but each number is always uniform in composition and quality. The Dutch Boy trademark guarantees absolute uniformity at all times.

National Lead Company also will furnish solder according to any formula required, in a variety of shapes, sizes, lengths and weights. It makes bar, wire, ingot, triangular, drop, segment, round, half-round, strap and ribbon solders.

If you are interested in the many uses to which solders can be put, or are concerned with the use of solder for any particular purpose, we will gladly send you complete information. We will also send you free on request an illustrated leaflet, which tells in non-technical language how solders are made, what they are used for, and the importance of lead in these alloys that contribute to your comfort and safety.

Lead in paint

Of all the important uses of lead in the arts and industries of civilized peoples, the most general of all is the use of lead paint. From lead is made white lead, famous for generations for the protection it gives to the surface in covers. Manu-

facturers use white-lead as the principal ingredient of their best paints. Professional painters use "lead and oil," a mixture of pure white-lead and pure linseed oil. House-owners more today than ever before save the surface of their properties by covering them with constantly maintained coatings of white-lead paint.

National Lead Company makes white-lead of the highest quality and sells it, mixed with pure linseed oil, as Dutch Boy white-lead.

Other Dutch Boy products

IN the famous Dutch Boy series of products, besides white-lead and solder, there are red-lead, linseed oil, flating oil and babbit metals.

National Lead Company makes, in addition, lead products for practically every purpose to which lead can be put. Among these products are sheet metal, lead tubes and tubing, calking lead and US Cartridges and Shot Shells.

If you desire specific information about any of these or other uses of lead, write to any branch of National Lead Company.

NATIONAL LEAD COMPANY
New York, 114 Broadway; Boston, 111 State; Buffalo, 116 Park St.; Chicago, 901 West Madison; Cincinnati, 619 Broadway; Cleveland, 200 W. Superior; Detroit, 222 Chestnut St.; San Francisco, 441 California St.; Pittsburgh, National Lead and Oil Company, 316 Fourth Ave.; Philadelphia, 14th St.; London, 10, Ave. des Arts, 101 Victoria St.



The figure of the Dutch Boy Painter shown here is a reproduction of the original trademark of the Dutch Boy Paint Company.

0000-NLL-000017329

The Dutch Boy Digest

A page of discussion and comment of interest to users of National Lead Company products, digested chiefly from The Dutch Boy Quarterly and The Dutch Boy Quarterly

Published by National Lead Company

MONDAY, MAY 18, 1925

Manufacturers of Lead Products

Why Harder Film Greenhouses Particularly Hard on Paint; Yet White-Lead Stands the Test

It Makes Paint Workable; Then Evaporates

It is well known that by using more turpentine and less oil a harder paint film will be produced. It is not always clear, however, just how and why this happens.

In the first place, as far as is concerned on what is concerned, turpentine may be thought of as a thinner and a thinner solvent, and that is it is a thinner and a thinner solvent of the paint. It is not a paint thinner in a strict sense. The degree of its hardness is determined by the relative proportions of white-lead and linseed oil. The less oil used the harder will be the paint film.

On many jobs a roof for example, is necessary to secure a harder surface than any workable mixture of paint and oil could possibly give. For it is as much oil as would be required to make the paint workable as is used, there would be so much oil that the film would be comparatively soft. But by the addition of turpentine the proportion of oil can be reduced without decreasing the workability of the paint. In this way, turpentine has an indirect effect on the film secured. Once the paint is applied, the turpentine is no longer needed and it evaporates, leaving a film of lead and oil properly proportioned to make a hard film.

Thus for an average body coat one and a half gallons of linseed oil to 100 pounds of lead is about right. Such a heavy paint would be difficult to apply and would not give a thin uniform film. But by adding a gallon and a half of turpentine the paint becomes perfectly manageable and after application it evaporates, leaving the same and a half gallons of oil in the film, which is the desired proportion.

LEWIS Linseed Oil

Under this brand we manufacture raw, refined and double-refined linseed oil, all well tested and carefully filtered.

We also make the following special oils:

SEED OIL, adapted for making special printing and varnishes, heat-treated, leather and glue.

AAA Banned Oil, of the high character for making clear varnishes and white printing ink.

SEED OIL, Cold pressed raw linseed oil of clear light color, used to give a natural high gloss for exterior painting.

LEADY OILED and "Air-Treated" Oils, of high specific gravity, used special for making printing inks and plate oils. Also used in the manufacture of preparations having a linseed oil base.

For our simple stocks we can fill your orders promptly.

John T. Lewis & Bros. Co.
412 Chestnut St. Philadelphia, Pa.

The King Construction Company of North Tonawanda, N. Y., who have been manufacturing greenhouses for twenty years, supply their customers with the following information relative to painting their structures. Their statements will interest everyone concerned with paint and painting, as on greenhouses, paint is subjected to unusual conditions.

All greenhouses are first protected with paint," say the King Company, "before they are placed on the ground. The paint is a film which is not equalled by any other structure."

For example, a greenhouse situated in northern New York State is subjected to frost and moisture-laden winds and excessive snow and rain storms and the hot sun in summer in three months of the year. The temperature may be in degrees below zero on the outside of the greenhouse, and less than an inch of ice on the inside may be seventy or eighty degrees warmer in a summer day.

"You can see how this affects the paint. It causes expansion and contraction that tends to crack the paint, causing it to chip and peel off so that the metal and woodwork is soon exposed to rust and rot that eat up and weaken the greenhouse."

"Greenhouse walls are also subjected to sprays, emulsions, etc., and for killing insects, fungus and weeds, which are not wanted in the greenhouse. Many of these sprays are made of lime, sulphur, soap, etc., and when they come in contact with paint they have the tendency to take it off right down to the bare wood unless the paint is of the right kind."

"Now let us see what goes on inside of the greenhouse. The ground is forcing plants to have them ready for some day, say, like Christmas, Easter or Memorial Day. He says his house now and around the plants often. This creates a steam or humidity, which comes in contact with the cold glass and ironwork and condenses on the glass and woodwork, which is subjected to a dampness and heat which tend to eat through the paint, rust the metal and rot the wood."

"The King Construction Company, greenhouse builders for twenty years, have experimented with paint and the way they paint with a special paint. They have finally decided on pure Dutch Boy White-Lead and Bleached Linseed Oil mixed according to their formula, developed after years of experience. They have found that Dutch Boy White-Lead withstands the extremes of heat and cold, dryness and dampness, without cracking and flaking and endures the structure exposed to rust and rot. It has also been found that the Dutch Boy White-Lead the greenhouse does not have to be repainted as often as when other paints are used. This alone means a big saving in the cost of labor to the greenhouse owner."

Are You Receiving Our Free Publications?

If you would like to be put on our mailing list to receive free of charge the Dutch Boy publications which contain items of interest to you, give your name, address, telephone and mail to our nearest branch. If you are interested in any of our products, our nearest branch will also be glad to quote prices or give you any information desired.

NATIONAL LEAD COMPANY
General Office, 100 Broadway, New York, N. Y.
Branches: Chicago, 100 W. Lake Street; Cincinnati, 100 W. Broadway; Cleveland, 100 W. Broadway; Detroit, 100 W. Broadway; Kansas City, 100 W. Broadway; Los Angeles, 100 W. Broadway; London, 100 W. Broadway; Manila, 100 W. Broadway; Mexico City, 100 W. Broadway; New Orleans, 100 W. Broadway; New York, 100 W. Broadway; Philadelphia, 100 W. Broadway; Pittsburgh, 100 W. Broadway; St. Louis, 100 W. Broadway; San Francisco, 100 W. Broadway; Seattle, 100 W. Broadway; St. Paul, 100 W. Broadway; Toledo, 100 W. Broadway; Washington, 100 W. Broadway; Wichita, 100 W. Broadway.

Save the Surface Yourself; Others Will Follow You

Those in the Industry Must Set Example

The fact is, a man who saves a Save the Surface poster is a powerful thing. If our property does not appear, how can we expect other people to paint theirs?

Keep this thought in mind. We are property owners. We own homes, warehouses, stores, motor cars and trucks.

We are urging people to buy paint to protect and preserve their property. We believe in the use of paint and varnish. It is up to us to see that our own property is painted and protected regularly.

An ordinary citizen may neglect to paint, saying "next spring or next fall." But we can't afford to talk this way. We must show our neighbors that we believe in saving the surface, not in any superficial way, but with all the faith we can put, and with our good money too.

Every store that sells paint and varnish products should set a shining example for the whole street. Merely to look at it ought to inspire people to follow suit. Every master painter should keep his property thoroughly protected. Then when he advises people to paint or varnish, they will realize that here is a man who believes sincerely in his own profession.

Let's keep our own homes, our automobiles, our stores, painted and varnished so they shine. It's our responsibility in the first place. In the next, it's good business for us. Lastly, it makes our property look better and last longer. But more important, we can put new force and conviction into our selling. We can show our own property. We will lead more of the jobs we now call "impossible."

If paint and varnish are good for our trade and our trade's trade, surely they are good for us. Let's volunteer to show others the way by using paint and varnish on all property of ours that needs it.

Red-Lead Adds Years of Life to Buried Tanks

Tests on 26 Tanks Prove Value of Painting

A recent report of the Factory Mutual Laboratories published in the quarterly of the National Fire Protection Association indicates that a tank may be buried without serious impairment to its condition, provided it receives proper treatment.

Tanks that had been in service from eighteen months to twenty-six years and buried from ten inches to nine feet below ground level were investigated. The soils were sand, gravel, loam, clay or cinders, or a mixture of part or all of these. In some cases ground water was present and in a few cases salt tidal water. The tanks varied in capacity from 1,100 gallons to 33,000 gallons.

The report states that of all soils it is best to surround the tank with sand, since sand acts as a filter, preventing many surface impurities from reaching the tank. Only sand gives the best protection. Gravel is not quite so good as sand.

It is interesting to note that the report emphatically supports the prevailing practice of using red-lead as the paint which goes on next to the metal. It recommends that this practice be strictly followed in all cases, regardless of the type of soil in which the tank is buried, as one which will enable the tank best to resist corrosion. Twenty-six tanks buried in different types of soil throughout the New England States were investigated. It was found in practically every instance that wherever the tank had been painted with red-lead its condition was excellent. Our own experience has shown that three coats of Dutch Boy red-lead will give excellent protection even when conditions most favoring corrosion prevail.

It was also found that tidal water and ground water do not stimulate corrosion to any great extent. Salt water usually forms a hard encrustation. Ground water acts similarly but may stimulate corrosion when the oxygen content is great. Stray electrical currents stimulate corrosion but they are rarely encountered.

In conclusion it is estimated that steel tanks buried under favorable conditions should last more than thirty years. Rigid adherence to the rule of applying red-lead next to the metal will materially aid in prolonging the life of the tank. In damp ground the tank's life is estimated to be from fifteen to twenty years. Tanks should be buried in clean sand three feet deep or more below surface, avoiding ground water and tidal water if possible.

This advertisement appears in the following publications:

Oil, Paint and Drug Reporter, May 18, 1925
May 25, 1925
Drug, Oil and Paint, June 1925

0000-NLI-000017330