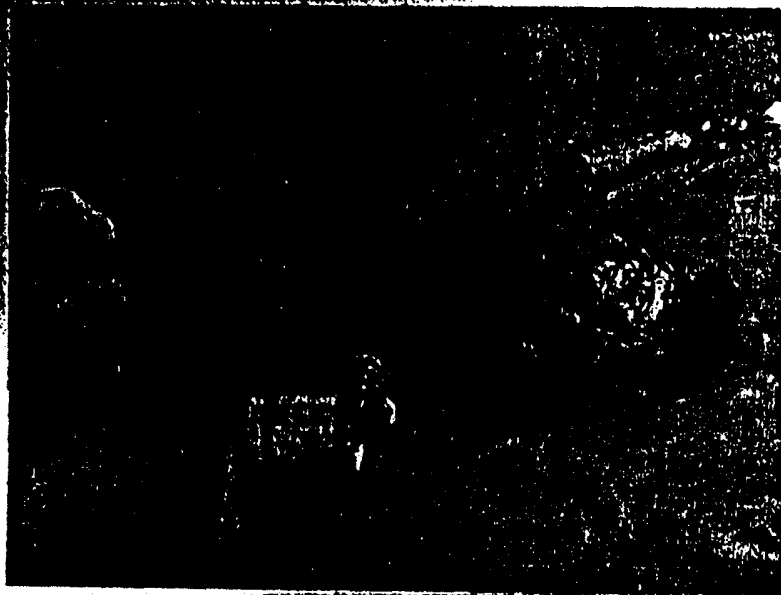


A TALK ON PAINT

NATIONAL LEAD COMPANY
NEW YORK, BOSTON, PHILADELPHIA, BUFFALO, PITTSBURGH,
CLEVELAND, CINCINNATI, CHICAGO, ST. LOUIS

Copyright 1914 by National Lead

"The Dutch Boy Painter"
From original oil painting by Lawrence Carmichael Esq.



0007-SWP-000008782

Index and Synopsis

FOREWORD

	PAGE
Why the Houseowner Should Know About Paint	7
Protective Paint <i>vs.</i> Merely Ornamental Paint	8

CHAPTER ONE—WHAT PAINT IS

Must Have a Drying Oil and Pigment which has Affinity for it	11
Why Linseed Oil and White Lead make a Natural Paint	12
Mixtures Used to Imitate White Lead	12
Other Pigments and Their Defects	12
How White Lead is Made	14
Why the Old Dutch Process is Best	17
Mixed Paints and Fraudulent "White Lead"	17
Labels Designed to Mislead	18
A Test for Adulterants	19

CHAPTER TWO—WHAT PAINT DOES

Wood is Porous	20
A Perfect Paint Anchors in the Pores	21
Adulterated Paint Stays on Outside	22
Why Bad Paint Peels Off	22
Paint Must be Elastic	22
Expense and Danger of Scraping and Burning	22
Priming Coat Most Important	25

CHAPTER THREE—WHAT PAINT COSTS

Cost per Gallon; Cost per Square Foot; Cost per Year	26
Why Low Priced Mixtures are so Expensive	29
Mixed Paints More Expensive than Pure White Lead and Oil	30

Some Comparative Figures	PAGE 31
True Test of Cost is Length of Wear	31

CHAPTER FOUR—HOW TO PAINT

Ten Things the Houseowner Should Know	33
The Priming Coat—Driers—Brush the Paint in Well—Wet or Frosty Wood—Proper Putty—How to Make Tints—The Best Tints to Choose for Durability—Mixing the Paint on the Premises—Use Paint While Fresh—Importance of a Good Painter.	

A WORD ABOUT OURSELVES

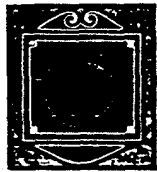
We Want the Houseowner to Investigate	39
What Painters and Dealers Say	40
The Best White Lead	40



shall
prote
point

F
comp
mate
adve
door
solic
brush
hires
hand
the v
for s
clima
to se

Foreword



CONSIDERING that it is his money which pays the bill, the houseowner, as a rule, has too little part in the details connected with the painting and repainting of his property. He chooses the color scheme, perhaps, but takes no precautions that the material used shall be such as to give permanency to the colors and protection to the surface beneath. The most important point—from the money standpoint—is thus neglected.

*The Man
Who Pays*

Fortunately for him, the majority of painters are competent, conscientious men, who of choice use good material and apply it with judgment and skill. The advent of ready-prepared paint, however, has opened the door to unskilled workmen—not real painters—who solicit painting contracts solely on their ability to wield a brush. These men know no more than the man who hires them about mixing paint to suit the particular job in hand and must resort to a ready-prepared paint, of which the very best that can be said is that it may be excellent for some surfaces, in a certain condition, in a given climate, at a particular season, but cannot be expected to serve equally well on all kinds of surfaces in all the

variety of circumstances for which differences in climate, altitude and atmospheric conditions are responsible.

*If there is
only one
bad one*

It may be your good fortune always to fall into the hands of good painters; they are in the majority and are trustworthy. But so long as the pretender is abroad there is a chance of your hiring him. That others have done so, shabby houses, with peeling paint, as well as too frequent visits of the painter mutely testify.

*Guard
Your Own
Interests*

The houseowner is by no means helpless. A very little knowledge of paints would enable him to guard his own interests, and to give some practical hints on the subject is the mission of this book. It will not make "every man his own painter." To become a painter takes long and studious application. But it will tell him what paint is; what a good paint, properly applied, may be expected to accomplish, and how to tell the good from the bad.

The real painter is always glad when good material is specifically named. It gives him a definite basis on which to estimate and enables him to furnish a completed job which will add to his reputation.

House Paint

The subject of this little book is house-paint, that is, protective paint, as distinguished from the various pigments and mixtures used in the arts purely for purposes

of color
exposed
is used
pleasing

In the
the nat
omitted.
if not a
stance
drying a
mix tint
anything
It would
instruct
tinting
practice
tions pe
depends
each pa

of color and entirely worthless, many of them, when exposed to the weather. Paint in this protective sense is used to preserve the wood from decay and to add pleasing color to the structure painted.

*The Attack
of Sun
and Rain*

In the discussion of paint which follows, all study into the nature of "driers" and tinting pigments is purposely omitted. It is generally considered desirable in practice, if not absolutely necessary, to add to paint some substance which has the power of hastening the natural drying action of the Linseed Oil. It is also necessary to mix tinting pigments with the principal ingredients, if anything but the natural white of plain paint is desired. It would be a waste of time, however, to attempt to instruct the houseowner on the correct use of driers or tinting pigments. *These points should be left to the practiced painter*, as each job of painting presents conditions peculiar to itself and the proper use of driers depends on the painter's knowledge of what to do in each particular case.



0007-SWP-000008787

ILLUSTRATIONS

Frontispiece, "The Dutch Boy Painter"
Oil painting by Lawrence Carmichael Earle.

FULL PAGE ENGRAVINGS FROM WATER-COLORS BY HENRY HUTT

"The Homestead"
"A House with Lawns Enclosing it"
"A Handsome House to Lodge a Friend"
"A Cool Veranda"

an
Pe
ex
ve
the
pig
fir
Pu

fla
fla
fla
inc

for
Er

Chapter One—What Paint Is



PAINT is a mixture of solid particles (called the pigment) and a liquid (called the vehicle), which, when spread out in thin layers upon a surface, dries solid and protects the surface to which it clings.

*A Liquid
and a Solid*

There is only one liquid which perfectly answers the purpose of a vehicle, namely, Linseed Oil. Poppy oil would do quite well, perhaps, but it is expensive and therefore does not compete with the vegetable, animal and mineral oils. The result is a substitute which is not so good. Pigments mixed with the oil may be accordingly a first caution to the houseowner to insist on having Pure Linseed Oil used in all his painting. It is vital.

Linseed Oil is a yellow liquid obtained from flaxseed, "lin" or "lint" being the ancient term by which flax was known. The oil is extracted by crushing flaxseed and is of tremendous importance in the paint industry.

The property which makes it "the oil par excellence for paint purposes" is, according to Hurst, the English lecturer on paint technology, that "white

[11]



exposed to the air it gradually becomes hard, 'dries up,' in doing which it takes up from the atmosphere a large proportion of oxygen, forming a new compound of resinous character. In this power of combining with oxygen, Linseed Oil is distinguished very markedly from other oils which have little or no power of combining with oxygen." *

*A Tough
Film*

The resulting film which the dried Linseed Oil makes is elastic, tough and insoluble in the moisture and gases to which ordinary atmospheric conditions would subject it.

*The
Pigment*

The other essential ingredient of paint is a pigment—the solid part—and here, too, nature has provided only one practicable material for the purpose. This is White Lead. As there are other usable oils besides Linseed, so there are other materials beside White Lead which can be used for pigments, but White Lead is called the natural paint pigment because it is the only white pigment known, which, when mixed alone with Linseed Oil to a consistency proper for painting yields a perfect paint. All other white pigments, if used at all, must be used with White Lead, or to form combinations which are imitations of White Lead. Barytes (sulphate of Barium), for instance, is so transparent that it will not hide the wood, and no one attempts to use it alone.

*Perfect
Paint*

* G. H. Hurst. "Painters' Colors, Oils and Varnishes," page 344.

Zinc oxide, or zinc white, is also very transparent if made thin enough to spread, and, contrariwise, is too stiff to work if made thick enough to cover. It is objectionable also because it dries very hard and inelastic, which causes it to crack and peel off as the material beneath shrinks and expands with the changes in the weather.

As remarked above, these pigments, and a few others less valuable, can be used if White Lead is mixed with them; or, in other words, White Lead can stand some adulteration without entirely losing the valuable characteristics which make it a natural paint, but its usefulness is impaired in direct proportion to the admixture of other ingredients. Thus, the addition of barytes and zinc or other material decreases the covering power, that is, necessitates a larger quantity of paint to properly obscure a given surface. More important still, the adulterations rob the paint of the lasting qualities which Pure White Lead possesses.

To put it in still another way, pigments which by themselves cannot be made to act even temporarily like paint can, by the addition of some White Lead, be made to assume the appearance, for a time, of nature's true paint. But it is beyond the power of this fractional portion of White Lead to make the mixture wear like the Pure White Lead alone.

*Why Lead
should be
Pure*

*What it
Cannot do*

*Zinc White's
Limitations*

Zinc white, though objectionable as described above, on account of its hard, inelastic nature, and impracticable as a paint by itself, is, when mixed with White Lead, useful for certain interior work and in attaining hard, white enamel finishes. It should be used for the last coat only. Barytes, on the other hand, is an adulterant without value. Its only mission is to cheapen—a subject which will be taken up in its proper place.

*What White
Lead Is*

Without going into technicalities, White Lead, nature's true paint pigment, is a white powder made by exposing metallic lead to the fumes of weak acetic acid (vinegar) and carbonic acid gas.*

*Slow, Care-
ful Process*

Commercially there are various ways of producing it, but the best is the method known as the old Dutch Process. It is simplicity itself. The lead is cast into perforated disks, or "buckles," about six inches in diameter, which are piled flat in earthen pots, so made that only the fumes of the acetic acid in the bottom come in direct contact with the metal. A bed of spent tanbark is first spread, and the earthenware pots placed thereon. A floor of boards is laid over the pots, and another layer of tanbark on the boards. A second layer of pots is then arranged on the tanbark, and alternating layers of tanbark and pots are built up until a "high stack" is formed. The acid fumes attack the

* Usually White Lead is a combination of carbonate of lead and hydrated oxide of lead.

[14]



" Here stays th
Here the wh.



The Homestead

*"Here stays the house, here stays the selfsame place
Here the white lilacs and the buttonwoods."*

—RICHARD WATSON GILDER

lead and the tanbark gives off carbonic acid gas. The chemical process continues until the metal "buckle" is corroded into White Lead. The process takes from 90 to 110 days.

The white substance is then ground between stone burrs—ground and reground with painstaking care in clear water, which washes out all acids and impurities—sifted through fine silk meshes, and when sufficiently fine, is mixed with Linseed Oil in the form of a paste, as desired.

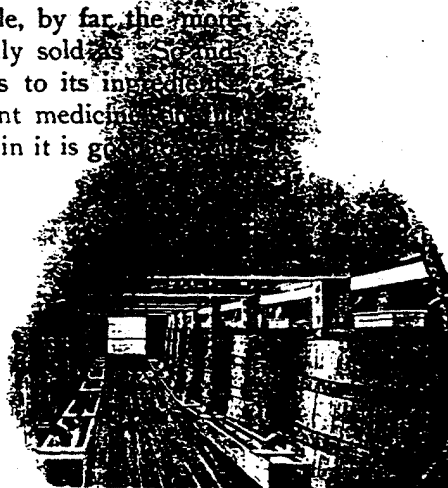
There are quicker processes, which produce chemically about the same product, but the latter is never so good for paint as that made by the old Dutch Process, being deficient in covering or obscuring power. The slow process gives the White Lead a seasoning or aging which baffles the chemist to describe but which the experienced painter recognizes instantly under the brush.

White Lead mixed with other substances is met with in the trade in two forms: first, that of mixed or ready-prepared paints, and second, spurious "White Lead." Of the two, the former is, as a rule, by far the more honest. The mixed paint is generally sold as "So and So's Paint," with no specific claim as to its ingredients. You buy it as you would a patent medicine, with the assurance of the maker that what is in it is good.

*Old Dutch
Process Best*

*Mixed
Pigments*

[17]



If you wish to accept on these terms, it is your privilege. Some ready-prepared paint makers, it is true, do claim a percentage of White Lead which analysis does not justify; but as a rule nothing is said about ingredients.

On the other hand there are almost countless brands of so-called "White Lead" on the market which are not Pure White Lead.

*Misleading
Labels*

Some have considerable White Lead and a small amount of adulterant. Many have absolutely no White Lead in them. Between these two extremes lie the remainder of so-called "White Leads," the quantity of adulterant varying with the avarice and nerve of the manufacturer. The labels on the spurious products are oftentimes ingenious. A popular expression is to say: "The White Lead in this keg is guaranteed absolutely pure." The manufacturer thus eases his conscience, for undoubtedly the small percentage of White Lead the mixture contains is absolutely pure!

As a rule, however, the manufacturers apparently have no consciences to appease, for in most cases the label says simply and flatly "Pure White Lead," and lets it go at that.

*Appear-
ances are
Deceitful*

It is impossible to detect the common adulterants in White Lead by the eye or any other organ of sense.

The
to a:
of t
pea,
dire
upo

red
adu
senc
mal

the
able
Dal
Wh
gre
cust
prot
lies
(Se

There is a simple and infallible test, however, accessible to anyone who cares to make it. Place a small quantity of the supposed "White Lead," say the size of a small pea, in a hollow scooped out of a piece of charcoal, and direct the flame of a gas or alcohol lamp, or a candle, upon it by means of a blow-pipe.

If the material is Pure White Lead, the heat will reduce it in a few moments to *metallic lead*. If it is adulterated, the reduction will not take place. We will send a blow-pipe, without cost, to anyone who desires to make this test.

*A Test
for Adul-
teration*

Little has been done in a legislative way to protect the public against these frauds, though there is considerable agitation from time to time in favor of it. North Dakota is the first State to compel all imitations of White Lead and patent paints to print the real ingredients on the label. It is a good start, but until the custom becomes general, the buyer's only practical protection (outside of the blow-pipe test given above) lies in purchasing only a well-known, reliable brand (See last page).



Chapter Two—What Paint Does

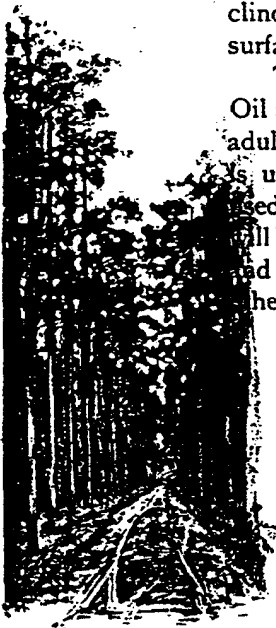


WHAT do we do when we paint? How does the paint act?

With the answers to these questions better understood, the folly of using certain of the materials we have described will be more apparent.

*Good Paint
Takes Hold*

*Pores in
Growing
Wood*



Wood is porous, and while the tree is growing these pores are filled with sap. As the sap dries out, the pores are left empty. The perfect paint takes advantage of these pores, and penetrates them while in liquid form, making, when dry, a tough coating on the outside anchored *into* the wood by innumerable little tentacles which are as much a part of the outside film as the clinched nail is a part of the head which remains on the surface of the wood.

To secure this hook-like hold in the wood, Linseed Oil and White Lead are both necessary. If Linseed Oil, adulterated with corn oil, fish oil, kerosene, benzine, etc., is used (we have already seen that these oils cannot be used at all alone because they will not dry) the mixture will break up the pigment and form a thin, spreadable mass, and it will even penetrate the pores (just as water or any other moisture will) but it has no affinity for the pigment

and therefore penetrates the pores *alone*, leaving the pigment to stick on the outside for a time, and then scale off.

Pure Linseed Oil, on the contrary, commingles with White Lead in so intimate a union that it penetrates the wood pores, not as oil, but as *oil and White Lead*—an inseparable compound. When the film hardens, we do not have oil in the pores and White Lead on the outside, but a new substance made of oil and White Lead, both inside and out, which cannot be separated from the wood either by force or time's changes. It will wear gradually down under the attacks of the weather, but wears uniformly, every part of the painted surface being protected by a smooth, even film.

*Penetrates
the Pores*

The intimate union formed by White Lead in Linseed Oil with a wood surface is comparable to a good glue joint, which everyone knows is harder to break apart than the wood fibres themselves. It is nicely shown, too, by the following experiment: Take two old painted wood surfaces, one painted with Pure Lead in oil and the other with mixed pigments. You can scrape the lead film off in fine dust with a knife blade or a bit of broken glass, just as you can scrape the wood itself away, but you cannot get a knife point under the paint film and *lift it off the wood*. Properly mixed, applied and set, it is to all intents and purposes a part of the wood.

*Like a
Glue Joint*

*Poor Paint
Peels*

With a film of mixed pigments, especially if they have a hard element among them like zinc, you will find a different state of affairs. The film may in spots resist scraping to a greater degree than the lead film, but if you insert the point of a knife into some of the cracks which you will find in the surface, you will be able to peel the paint off in little flakes or scales, leaving the wood clean. What your knife can do, the weather does in time, leaving the splotched condition alluded to before.

*Elastic
Paint*

The elasticity of White Lead paint is one of the secrets of its freedom from the "scaling" or "peeling" evil. As wood shrinks and expands from the action of cold and heat, or bends in response to the swaying of the wind, the lead paint film easily accommodates itself to the slight change of form and its tentacle hold is not loosened. Hard paint films cannot stand the action. Not being able to bend or give, they break, crack and scale off.

*Scraping
and
Burning*

The life of a paint that scales in patches must be deemed as terminating when the first scales begin to drop off, not by the length of time *some* of it will cling; for repainting must be done at once if the wood is to be saved. Not only so, but a scaling, peeling paint entails trouble and expense when repainting is necessary. The painter finds some of the paint clinging like glue, while

[22]

*"Flowers in the ga
A bin of wine a
A house with iau*



*"Flowers in the garden, meat in the hall,
A bin of wine, a spice of wit,
A house with lawns enclosing it."*

—ROBERT LOUIS STEVENSON

in other spots the wood is bare. He must smooth the whole surface by scraping or burning, which is dangerous and expensive. An old surface painted with White Lead is ready for new paint as soon as the accumulated dust is brushed off.

As we study the nature of wood and the action of paint upon it, we see the seriousness of the mistake which many make—that of using inferior materials for the priming coat on the theory that, as it is to be covered by a second and third coat, and therefore will be exposed neither to wear nor to the eye, anything will do for the primer. In reality it is the most important coat of the three. If you are under the necessity of using a mixed pigment anywhere, put it on last, not first. It will do less damage there. To put on a hard, unpenetrating paint as a priming coat, is to cover over the pores, making it impossible for the later coats to get an anchorage. Zinc in a priming coat, for this reason, is most dangerous, as it does not adhere well to the surface, nor do subsequent coats adhere well to it. The use of ochre for priming is nearly as bad, for paint applied on top of it is very apt to crawl and check.

*Priming
Coat most
Important*

Chapter Three—What Paint Costs

*Price is
not Cost*



YOU may pay a high or low price for paint and still be left in the dark as to its real cost. One paint may be cheaper than another at the same price because it takes less of it to cover the same surface. A third paint at a higher price per gallon and no more covering power might be the most economical of the three because of its longer life on the house.

*Some
Figures*

Should you consult a price-list in any paint trade journal you would find White Lead, zinc oxide and barytes quoted at wholesale at something like these prices per pound and in about this ratio: $7\frac{3}{4}$ c., 5c. and eight tenths of a cent. (Barytes is so cheap it is quoted by the ton, but when you figure it out it will be found as given here.) White Lead is as yet to be considerably the most expensive, yet when combinations of pigments are made to imitate it, the mixture of the low-priced ingredients costs the consumer approximately White Lead prices. This fact is easily understood. Not only does the manufacturer cover the large profit made by selling at White Lead prices, but he knows to sell at a low price would be to ruin his name, that the article is not what it pretends to be.

[26]



*"I've often wish
For the
A handsome h*

0007-SWP-000008802



*"I've often wished that I had clear
For life, six hundred pounds a year,
A handsome house to lodge a friend."*

—ALEXANDER POPE.

Accordingly, with genuine White Lead selling at 8 cts. we find alleged "White Lead" retailing at 6 and 7 cts. per pound, the ingredients of which, if bought separately would not exceed $1\frac{1}{2}$ cts. to 2 cts. The following is a sample of the make-up of one of these imitation White Leads, when freed from its oil, taken from a large number of analyses:

10 lbs. White Lead @ .0734	- \$.775
7 " Zinc White @ .05	.35
83 " Barytes @ .008	.664
100	1.789
1 lb. of Mixture	.0178

This is a fair sample of how expensive in reality the so-called cheap "White Leads" are. If you want what is in them, do not pay more than their market price. There are spurious "White Leads," of course, with greater proportions of real White Lead in them—some as high as 50 per cent—and, again, there are some which contain not a trace of White Lead.

*Expensive
in Reality*

The purchaser pays more, in any case, than he would have done had he bought the ingredients separately and mixed them himself; how much more depends on which mixture happened to be foisted upon him—the partly adulterated or the wholly fraudulent.

*He Pays
too Much*

*What the
Extra is for*

In the case of ready-prepared paints, the situation is different. The cost per gallon is sometimes higher than for Pure White Lead paint, although the ingredients substituted for White Lead are cheaper. You pay the extra price for the "patent," the manufacturer's special method, or because you believe the manufacturer when he tells you he has found a way to make a thing better by mixing it with something worse.

There is not a great deal of difference in the price per gallon of Pure White Lead paint and the more prominent ready-prepared paints. The White Lead will cost, including proper tinting materials and driers, from \$1.57½ per gallon to \$1.50, according to the local price of White Lead (varying with freight charges).

The better mixed paints run from \$1.50 to \$2.00 per gallon. A gallon of mixed paint, however, containing zinc and barytes, which are deficient in covering power (see page 13) will spread over only about 300 square feet of surface, two coats, while the pure lead and oil will cover 400 to 500 square feet, two coats, according to the conditions of the wood and the skill and care with which it is brushed out.

*Wear is the
Real Test*

When it comes to wear, we have seen White Lead outlast any imitation, however clever, and this still further reduces the comparative cost of White Lead Paint. "But, is there so much difference in the life of

two paints which sell at approximately the same price?"
—you ask. Undoubtedly. We quote some figures
given by a practical painter* from his own experience:

" Say a house painted with Pure Lead and Oil by
a first-class painter costs \$60.00 (material \$20.00
and labor \$40.00), and lasts six years; the same
house painted with cheap lead and oil will cost
\$51.00 (\$11.00 for material and \$40.00 in labor)
and may last two years. It will thus cost \$10.00
a year with the best material where it will cost
\$25.50 a year with the cheap. It's cheapest to
use the best."

The figures this painter gives and the difference in
the lasting qualities of two paints are a fair average,
which is what he intended them to be. It would not do
to say that this ratio would always hold good. A better
cheap paint (one containing more Lead and less adulter-
ant) might be used, which would last three years, and
extraordinary conditions might prevent even Pure Lead
and Oil from lasting six years. In such a case, the
difference in cost would not be so marked as he has
shown it. On the other hand, many a house painted
with Pure White Lead and Oil has remained bright
and well protected eight, ten and twelve years, and
many a cheap paint will scarcely last till your back
is turned. In such a case, the lower cost of the

*A Painter's
Figures*

*F. Holmberg, 6543 S. Halsted Street, Chicago, Ill.

higher priced paint would be more marked than in the painter's example.

*Savings on
the Next Bill*

Finally, the fact that White Lead paint wears down uniformly, leaving a perfect surface for repainting (page 21), takes off a good portion of the *next* painting bill; for it is not at all rare that a painter has to charge *more* for scraping and burning off an old splotched surface, owing to the mixed pigments in the original paint, than for applying the new paint when once the surface is ready for it. The great saving on this score will be appreciated only if account is kept of the outlay for painting in a dozen or more years.

In looking back over these cost facts, the showing of Pure White Lead paint from the standpoint of ultimate expense is so remarkable that we will close this chapter with a resume in a few words of its advantages:

*Four Points
on Cost*

It costs less per gallon than many.

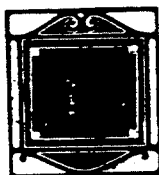
It covers more surface than any other.

It has no competition in lasting qualities.

It entails no extra cost for preparing the surface for repainting as other paints do.

In every respect Pure White Lead mixed with Linseed Oil is the most economical paint that can be used.

Chapter Four—How to Paint



THE houseowner can make his painting job doubly satisfactory if he will learn a few cardinal principles about painting as well as learn to know the genuine paint from imitations.

The first of these is: Do not try to save a little money on the quality of the materials used in the priming coat. It is the most important of all (see page 25).

*Penny Wise,
Pound
Foolish*

Second: This priming coat must be entirely different from the other coats in consistency. No absolute rule can be given for it. If that could be done, one of the greatest obstacles in the way of the success of ready-prepared paints would be removed. All depends on the kind of wood and its condition at the time. It is sufficient to say, however, that the primer will take more oil than subsequent coats, for the porous wood will absorb more of the priming coat than any other, and will also extract some oil from the pigment. Accordingly, enough oil must be used to satisfy the wood and still leave the mixture of pigment and oil in correct proportions to form the intimate union necessary for a perfect paint. New wood, in average condition, will require six to

*Priming
Coat*

seven gallons raw Linseed Oil to 100 pounds of White Lead, whereas, the following coats will need only four to five gallons to the same quantity of White Lead. If the job is repainting an old house, the first coat, although sometimes called a priming coat, is more like a second coat would be on a new house, and there should be less, if any, difference between it and the following coat. As intimated above, different kinds of woods vary in absorption power and it is the painter's business to know the nature of each.

Brush it in

Third: The painter should be instructed to brush the paint well into the pores and not simply "flow" it on as is frequently done. In the old days when round brushes were used more than now, the paint was brushed in more thoroughly and better jobs were the result.

Fourth: Use only the best liquid drier of some well-known manufacturer. Use as little turpentine and drier as possible for outside work.

Fifth: Never paint while the wood is wet or while rain or snow is falling, or immediately after a frost, however light. The pores of wet wood are already filled with moisture, and the paint film, therefore, does not get the anchor hold in them which is necessary to make it stick.

Sixth: For filling nail-holes, cracks, etc., use nothing but putty made of Linseed Oil and equal parts of White



*"A cool veranda where the vagrant breezes play
And just a hint of honeysuckle in the air."*

—FITCH C. LINTON.

Lead and whiting. Much of the putty sold at present is made of other oils than Linseed, and ground cliffstone-sand and its use explains the appearance of yellow nail-holes and cracks.

Seventh: Tints are produced with strictly pure White Lead by adding the proper colors in oil, which are staple in all paint dealers' stocks. For black and the very deepest colors the color pigments are used alone, principally for trimming.

*How to get
any Tint*

Eighth: If you would have the utmost wear out of your paint, choose warm tints rather than cold ones. Careful experiments in our laboratory, as well as general observation, seem to prove that White Lead tinted with burnt sienna, lamp-black and the oxides of iron, make the most durable paints possible to obtain. These give browns, olive-greens, reds, etc. Harsh greens, yellows and cold colors in general do not wear so well. The theory is that those tints which reflect or *turn back* the color rays mentioned also turn back the *heat* rays, which, if they penetrated the paint film, would help to disintegrate it.

Ninth: Have your painter bring his White Lead and Linseed Oil in original packages and mix them on the premises. Take a look at the brand he uses and see that you have the best (see last page).

*Look at
Original
Packages*

[37]



Tenth: Do not allow the paint to stand long after being mixed, but have it applied while fresh. Otherwise, it will be little better than factory-mixed paint. The amalgamation of oil, pigment and wood-fibre should be accomplished simultaneously. If the union of oil and pigment is allowed to proceed to some extent before touching the wood, the lead and oil never get into that close, intimate relation with the wood, which is the fundamental requisite of a good, lasting job of painting.

*Employ a
Good
Painter*

Finally, employ a good painter. This point is given last, but is of prime importance. It is not economy to set unskilled labor at a job of painting just because anyone can spread the paint on in some sort of fashion. The painter's experience in diagnosing the needs of the wood, and his knowledge of just the right proportions of lead, oil and drier to fit the case, make him absolutely necessary to a good, economical job of painting. Like good materials, a good painter pays for himself.

A Word About Ourselves



WE have said nothing about our own product so far, yet we have an interest in persuading the houseowner to learn about good paint. If the public more generally knew how expensive poor paint was in the end, more good paint would be demanded. Good paint cannot be made without Pure White Lead, and we make Pure White Lead. We may not get *all* the trade, which a better knowledge will stimulate, but we will get our share.

If the man who pays the bill does not see that the best paint goes on his house, it is quite likely that in a considerable number of cases the best will not go on. Every time a poor paint is sold it means we have lost a possible sale. We sell nothing but the best. Every time a customer decides to buy paint, our chances of business are increased. If we can induce the houseowner to invest more, we know what we shall find. Most painters and dealers will tell you frankly that there is no

Good Paint

*Where we
lose a Sale*

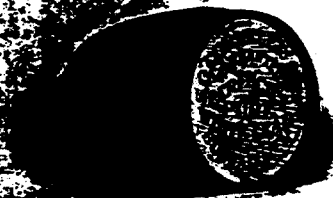


"Just as
Good"

paint so good as Cornell White Lead mixed with Pure Linseed Oil. Others may say to you: "Yes, Cornell is good, but here is something just as good, and a little cheaper." Someone has aptly said, "to say a thing is as good as gold, is a rare compliment *for the gold.*" Whatever merit the other paint may have, you are safe in buying the one which all take as their model. And a cent or two per pound is not enough saving to pay for the risk you run in buying something else.

For safety's sake, look on the side of the White Lead keg for the Dutch Boy Painter trade mark (see lower corner of this page) and on the head for the brand as pictured here.

Look for
these Marks



CORNELL

We are the largest manufacturers of Pure White Lead in the world, having factories in New York, Boston, Philadelphia, Buffalo, Pittsburgh, Cleveland, Cincinnati, Chicago and St. Louis, with additional warehouses at other points. We welcome investigation of our product, its reputation and our methods.

NATIONAL LEAD COMPANY.

