WHITEWASHES FOR FARM USE

BY E. W. KENDALL, B.S.A.

Whitewash has a wide application to farm use and deserves a much greater popularity than it at present enjoys. Its ingredients are inexpensive and readily obtained; it is not difficult to make and it is easy to apply it. In addition to these advantages, it protects the surfaces to which it is applied, brightens up dark interiors and is sanitary. A fact not generally known is that whitewash may be colored provided that light tints and shades are used and that the pigments are not affected by lime. Among such are yellow ochre, raw and burnt umber and raw and burnt sienna.

Preparation of the Surface.—The surface to be whitewashed should be just as clean as one that is to be painted and it is a first essential to good results that all dirt, dust, grease and scaley material be removed before there is any attempt to apply the wash. This implies a liberal use of scrapers and stiff brushes. When the cleaning is finished and the surface dusted, it is well to dampen it slightly just before applying the wash.

APPLICATION OF WHITEWASH.

Whitewash may be applied with the brush or sprayer. In applying with the brush use one at least 4" wide and work rapidly, making no attempt to "brush out" as in painting. Let the coat be fairly thin and transparent and it will be opaque when dry. The small hand sprayers sold by the seed firms may be used. These will cost around $10 and should be of brass if you expect them to last for a number of years. In using sprayers it is quite necessary that the wash be strained through at least two thicknesses of cheese cloth. Spraying has many advantages over brushing under certain conditions and it forces the material into cracks and crevices that would not be reached with the brush. In using the sprayer always hold the nozzle so that the wash is applied at right angles to the surface; this gives even application. The sprayer should be thoroughly cleaned after use and especially the nozzles, as a small particle of dirt clogging one side of the nozzle will cause it to send out a lop-sided stream and the work will be patchy.

In estimating the quantity of material required many problems and conditions are encountered, but the following general figures may be used as a basis. One gallon of whitewash will cover approximately 225 square feet of wood, 180 square feet of brick and 270 square feet of plaster. Using a 4" brush a man will cover 200 square feet of ceiling, 200 square feet of rough wall or 350 feet of smooth wall in one hour.

Example:—Basement 36' wide x 60' long x 9' high.

Distance around wall is 192'.

Area of walls is 192' x 9'—1,728 square feet.

Area of ceiling is 60' x 36'—2,160

Total area—3,888 square feet.

225 square feet require 1 gallon.

3,888 square feet require 3,888 divided by 225—18 gals. approx.

200 square feet are covered in one hour.

3,888 square feet are covered in 20 hours.

NOTES ON THE PREPARATION OF WHITEWASH.

(a) Prepare the lime and water paste a few days before you wish to use it.

(b) Where casein, glue or formaldehyde are to be used, the solutions must be brought together only when they are quite cold. This is very important.

(c) The solutions mentioned in (b) should be added quite slowly and at the same time they should be stirred vigorously and constantly.

(d) In no case should you mix more of the wash in one day than you can use in that day when any of the solutions mentioned in (b) are used.

(e) Skim milk may be used as a substitute for casein but it is not quite so effective.

(f) In place of one sack (50 lbs.) of hydrated lime you may use the paste made by slaking ½ bus. (38 lbs.) of fresh quick lime with about 6 gallons of water. This slaking is sometimes done by placing the quicklime in a barrel and adding the water boiling hot. If cold water is used the water may be added a little at a time stirring each time; when heat ceases to be given off the lime is slaked.

Before using, strain this paste through a fine screen.

(g) Molasses is said to render the lime more soluble and to give it greater penetrating power. Use in proportion of 1 pint of molasses to 5 gallons of the wash.

(h) Alum tends to prevent rubbing and is used in proportion of 1 oz. to 1 gal. of the wash. It would not be needed in the formulae C, D, or E given below.

(i) If a gloss is desired, dissolve 1 pound of bar soap in a gallon of boiling water and when it is cold add it to 5 gals. of the thick wash.

SOME COMMON FORMULAE.

A. 1. Dissolve 15 lbs. of common salt in 7½ gallons of water.
2. Slowly add one sack of Hydrated Lime, stirring vigorously.
3. Thin this to a milk-like consistency with water.

B. 1. Make a paste of one sack of Hydrated Lime and 7 gallons of water.
2. Dissolve one pound of common salt and half pound of zinc sulphate in one gallon of boiling water. Allow this to cool.
3. Pour this last solution into the lime paste solution a little at a time.
4. Stir in 2 gallons of skim-milk.

C. 1. Soak 5 lbs. of Casein in 2 gallons of hot water for 2 hours.
2. Dissolve 3 lbs. Trisodium Phosphate in 1 gallon water.
3. Mix these two and allow the Casein to dissolve and cool.
4. Make a cream of 1 sack Hydrated Lime and 7 gallons water.
5. Slowly add 3 to 4, stirring vigorously.
6. Just before using, dissolve 3 pints Formaldehyde in 3 gallons water and add it very slowly to 5, stirring vigorously. Do not mix more than can be used in one day.

D. 1. Soak 5 lbs. Casein in 2 gallons hot water for 2 hours.
2. Add 3 pints of household ammonia to 1 gallon water.
3. When cold mix 1 and 2.
4. Make a cream of 1 sack Hydrated Lime and 7 gals. water.
5. Slowly add 3 to 4, stirring vigorously.
6. Just before using, dissolve 5 pints Formaldehyde in 3 gals. water and add it very slowly to 5, stirring vigorously.
7. Thin to a milk-like consistency.

E. 1. Dissolve 3 lbs. of Glue in 2 gallons of hot water and allow to cool.
2. Make a cream of 1 sack of Hydrated Lime and 7 gallons of water.
3. Mix 1 and 2, stirring vigorously.
4. Thin to a milk-like consistency.

F. 1. Make a cream of one sack of Hydrated Lime and 8 gallons of water.
2. Slowly add 1 quart of crude Carbolic Acid, stirring vigorously. The quantity of acid may be doubled if desired.
3. Thin to a milk-like consistency.

G. 1. Make a cream of 1 sack Hydrated Lime and 7 gallons of water.
2. Dissolve 6 lbs. of salt in 3 gals. of boiling water.
3. Mix 1 and 2 when cold.
4. Stir 3 lbs. of Portland cement into 3.

USES FOR THE DIFFERENT FORMULAE.

Formulae No. A and B—Unimportant outdoor work, sheds, fences and trees.

Formulae No. C and No. G—Higher grade of work on dairies, buildings and trees.

Formulae D—Basements that tend to be damp.

Formulae E—Dry basements.

Formulae F—As a disinfectant wash but liable to rub.

My Water-Lily Pool.

Last spring I decided that I could not, would not, do without water lilies another season. So I coaxed my husband to saw in two a big water barrel. He took rather more than half of it and sunk it in the back yard at the end of a rose hedge.

He left a couple of inches above the top of the ground, filled the barrel about two-thirds full of rich soil and turned on water, keeping it full till the soil settled.

Instead of buying roots I sowed the seeds myself—after the directions on the packet—in a shallow crock and a tin washbasin. I prepared these for the seed by putting in each three or four inches of rich garden soil and filling with water. All the refuse that floated to the top I skimmed off till the water was clear. In the water I dropped the seeds and they presently sank to the surface of the soil.

After keeping the vessels in the sunshine for some time the seeds began to sprout and I had a number of tiny plants with their odd, prettily-shaped leaves getting green and growing wonderfully fast. I had to thin them out ruthlessly, and when the largest had grown three leaves I took it up with care and transplanted it into a box of soil. I used a quart-size strawberry box which had opening sufficient to allow the roots to grow through but affording a hold for the plant. Three of these boxes I placed in the tub, with the water just deep enough to permit the leaves to reach the surface. Whenever the water sank away from evaporation we replenished it gently through the hose. The outer edges of the barrel we hid with blooming alyssum.

I have never grown anything to compare with these lillies in interest for all the family. As each pert, strangely large leaf appeared on the tiny plant all must throng to see it. And how fast these leaves developed! Then, when they got into the pool and began to get really big, we forsook all other flowers to watch these. Finally a bud appeared, long, pointed and rapidly developing, and one hot morning, about ten o'clock, we discovered the open bloom, pale blue lavender with a golden throat and a sweet, quaint fragrance.

After that we were constantly marveling at the enormous leaves or guessing whether the flower would open again, for it only stayed open two or three hours the first day. It did for about four days in succession. Meantime other buds opened. And the procession went on, the leaves spread out over the border, a happy frog hiding under the thicket of leaves. The blooms continued until quite cool nights toward the last of September. We had thirty or more blooms in all from those three plants, together with a fourth that we desperately saved by planting it in a bird bath. It bloomed too, a rich royal purple, and the birds respected it though they ragged the leaves somewhat when they bathed. If you want a source of eternal joy and interest for the family, make a lily pool.—L. E. O.

I Seed My Swamp.

I have found that it pays to sow grass seed, preferably Kentucky blue grass, in swamps and low places where there is poor pasture. The cattle will tramp down the seed. It grows and makes a good pasture.—A. G. H.

The primer class in dairying, please learn this rule: The cost of grain is about half the total cost of feeding a cow.

Wilson Publishing Company

AN ATTRACTIVE FROCK FOR MANY OCCASIONS.

This frock shows to special advantage the charm of combining two materials—so smart this season. The skirt has two godets in front and two at the back and is gathered to a bodice having a becoming round collar and long tight-fitting sleeves finished with trim cuffs. A narrow belt of the contrasting material completes this chic frock. No. 1502 is in sizes 8, 10, 12 and 14 years. Size 10 years requires 2½ yards 36-inch material for the dress, and ¾ yard 36-inch contrasting for godets, collar, cuffs and belt. Price 20 cents the pattern.

Home sewing brings nice clothes within the reach of all, and to follow the mode is delightful when it can be done so easily and economically, by following the styles pictured in our new Fashion Book. A chart accompanying each pattern shows the material as it appears when cut out. Every detail is explained so that the inexperienced sewer can make without difficulty an attractive dress. Price of the book 10 cents the copy.

HOW TO ORDER PATTERNS.

Write your name and address plainly, giving number and size of such patterns as you want. Enclose 20c in stamps or coin (coin preferred; wrap it carefully) for each number and address your order to Pattern Dept., Wilson Publishing Co., 73 West Adelaide St., Tororto. Patterns sent by return mail.

Tea leaves should not be thrown away. Place a pint of used leaves in a pail, pour over them one quart of boiling water, and leave for one hour. Strain and bottle the brown liquid. If used with a piece of soft flannel on mirrors, glasses or windows, it makes them shine like crystal. It is also a good cleanser for varnished wood and doors and furniture; also for linoleum. A little liquid put on flannel will clean linoleum better than water, and if the linoleum is polished afterward with a soft duster, you will get a polish like that given by beeswax.

The best measure of a cow's efficiency is the feed cost of 100 pounds of milk. If you use this yardstick you will not be misled by changing factors, such as selling price of milk.

Conductor Rance Norton

One of the most popular conductors in Canada, who has completed fifty years' service with the C.N.R. He is chief conductor of Toronto division No. 17, Order of Railway Conductors.

A CORNER FOR YOUNG CANADA

WATERPROOFING YOUR SHOES.

Although you can buy several good waterproofing combinations on the market, every one of you fellows should know how to mix a simple waterproofing solution at home so that you can "doctor" your high-topped hiking boots or other shoes.

First scrape all the mud from the shoes to be treated and then get them perfectly dry. It's a good idea to use an old discarded toothbrush or a piece of heavy woolen cloth wrapped round a stick when you put the mixture on the shoes, as you want to work it into the leather to get the best results.

Now for the materials you need to make waterproofing mixtures. Ordinary beeswax and harness oil when combined make a dandy waterproofing compound and they are quite inexpensive. Melt together equal parts of beeswax and harness oil and apply it with cloth or brush to the warm leather. If you don't have any beeswax around the house you can substitute paraffin, which is cheap. Lacking either of these materials, use tallow.

The main thing is to use equal parts of the oil and either paraffin, tallow or beeswax and apply it when hot. Don't forget to work it into the crack between the sole and the upper part of the boot. Usually two coats are enough. It won't hurt to apply three, however.

When I waterproof my boots I use an old pan to hold the hot liquid and then I set the sole of the shoe in the mixture while I rub the stuff into the tops. This assures the soles of a good application, with all the pores of the leather absorbing as much waterproofing compound as they can hold. —Robert Beckwith.

THE SMARTEST ANIMAL I KNOW.

The smartest animal I know? Bears, coyotes, foxes, wolves, horses, cats, dogs . . . they are all smart. But in my experience, and I am writing only from that standpoint, I think that the bear is the smartest.

As a ranger I have been more used to bears than to any other animal. Last spring, when I was alone at the ranger station and in the region where grizzlies and black bears were thick, I ate my meals at the house of the hotel caretaker. In order to reach his house, I had to walk a mile up the hill, and I knew by heart the best trees along the way—the best for climbing. For there were a dozen or so of the silvertips around, and they were in an especially mean humor that year.

I was coming back to the ranger station one evening and saw, to the west, a sight that I shall never forget. An elk, a monstrous creature, stood silhouetted against the rosy curtain of the sky and he seemed to be intensely interested in something which was between him and me. Then I saw what that was; it was five grizzlies and they didn't see me. As I started for my favorite tree—it being the nearest at that moment—the elk started running, and the grizzlies went after him.

And how they ran! I honestly believe that a grizzly, big as he is, could outrun the average Western cow hoss. But the grizzlies began to spread out! Two kept on the trail of the elk, and the other three, one on one flank and the two on the other, gradually overhauled the elk. The animal was hemmed in on all sides. Finally they had the elk surrounded and started in on him, but he gave a magnificent leap and was off, and this time he outdistanced the pursuers.

The grizzlies evidently gave the elk up as a bad job, for I could see them returning from the forest after several minutes. But the way they spread out to get the elk was a sight.

For hold-up work, the bear is well known. Several bears will get right in the middle of the highway and stay there. When they have held up a string of yellow busses or a fanatically honking stream of auto campers and have been fed with sweets, they lumber to the side of the road and grin at everyone.

For almost human intelligence, it is hard to beat a bear.—Ralph Pierson.

Government Encouragement of the Hog Breeding Industry.

The field work which the Dominion Live Stock Branch is doing in aid of the hog breeding industry is meeting with considerable success. The demand for hog grading demonstrations is continuous, and they have been the means of convincing many farmers of the stability of the bacon hog for both domestic and export trade. The boys' and girls' swine clubs have also proven to be valuable educational features.

So popular has this work become in the Province of Quebec that a number of representative commission agents and packing companies have sent a signed statement to the Life Stock Branch enthusiastically commending the field work of the Government and suggesting that even more intensive efforts be made in districts which have already shown gains. They state that there has been a marked improvement in the type and quality of hogs offered for sale and that the improvement in hogs in terms of dollars and cents has been at least $1 per hundredweight on the average quality of all stock sold.

Giddap!

"Oh boy, but that sweetie of mine is a regular Adonis and he has such a wonderful carriage."

"Carriage! Say, do you expect to go for a buggy ride?"

THE ONTARIO GARDEN

VEGETABLE CALENDAR.

The following arrangements of vegetables will guide the gardener in planning his first planting of various crops.

(a) Crops that can be planted in the open two or three weeks before the last frost are asparagus, rhubarb, onion sets, radishes, spinach, kale, lettuce (seed and plants), turnips, early potatoes, early cabbage plants and parsley.

(b) Crops that can be planted just before the last frost are onion seed, chard, early carrots, salsify, early beets and late potatoes.

(c) Crops to be planted after danger of frost has passed are bush beans, sweet corn and carrots.

(d) Crops to be planted after all danger of frost is over, and the soil has become warm, are tomatoes, peppers, cucumbers, eggplant, squash and melons.

ASPARAGUS CULTURE.

Every garden should have at least a small patch of asparagus which, if looked after carefully, will last from twenty to thirty years. Asparagus seed is sown thinly in rows three feet apart in April or May. When the seedlings are two or three inches high, they should be thinned out to stand about three inches apart in rows. To establish a patch more quickly, one year old roots may be secured and planted. The Washington variety, which is very disease resistant and produces stocks of excellent quality, is undoubtedly the best to plant. Cultivate well during the summer, and in the fall cut tops off and burn. Mulch well with straw before the frost arrives. A light cutting may be taken the third year, but full crops cannot be expected until the plantation is four years old. In cutting use a long knife and sever the young shoots about an inch below the surface of the ground. The patch should be gone over every other day and the season will last until about July. Manure heavily after the cutting season is over, and apply a top dressing of nitrate of soda early in the spring.

FLOWERS IN SHADE.

The sandy portion of the garden may be brightened up by special varieties of flowers which will give best results when not exposed to full sun for the whole day. Among these are the tuberous begonia, columbine, foxglove, lobelia, viola, Kenilworth ivy, godetia, and many others which are specially listed in any seed catalogue. Among the perennials which do well in partial shade are the delphiniums, or more commonly known as the larkspur, iris, bleeding heart and pansies.

FOR EARLY VEGETABLES.

It is a good plan to plant a few rows of the hardy vegetables, such as spinach, radish, lettuce, carrots and beets as soon as possible. If they come through a considerable gain has been secured in earliness; if frost cuts them down the loss is really trivial.

FOR A LASTING GARDEN.

Too often one sees a garden fade after a few years. Sometimes the soil gives out, or it may be the gardener's enthusiasm, or perhaps the plants become so crowded together that the whole thing reverts to a wild, jumbled state with little or no bloom. Choice flowers are often crowded out by vigorous growers, whose only existence at all is to act as a limited background to show off their more richly colored neighbors. A good plan and thorough preparation in the first place would probably have prevented any of these failures. Whether it is intended to grow flowers, fruits or vegetables, the ground should be plowed or spaded. In the case of flower-beds, it is best to go down a couple of feet. Work in plenty of manure; if the soil is stiff clay, strawy manure should be used. The top soil should be raked fine and fertilized with fine, well-rotted manure or bone meal. Walks may be made with gravel or sod. If the former is used, dig out at least six inches of soil and fill with gravel. Decide where your flower garden is to end and the vegetables start, and divide with a fence or hedge.

COVER A MULTITUDE OF SINS WITH PAINT, BUT FOLLOW THESE RULES

BY FRANCES N. HENRY.

Paint covers a multitude of sins. When the kiddies or the carpenter bang holes in the plaster, we say, "I'll paint it over." Or when the woodwork and the furniture gets to looking the worse for wear, we can call paint or varnish to our rescue.

But before we begin our spring campaign of painting, there are a few things we should "brush up on."

The covering capacity of paint per gallon is about 550 square feet on old work. On new work it is about 450 square feet. One gallon of liquid varnish remover will clean off about 250 square feet of surface.

Paint should be neither too thin nor too heavy. For those who intend to do their own painting of any kind, it is wise to purchase good paints from some reliable firm. All of these firms furnish free color cards, stating what colors should be used for the body of the work, and what color or colors should be used as a trimmer. You can purchase from these firms most of the colors in the flat or glossy finish, whichever you desire.

PRINTED INSTRUCTIONS.

Always read carefully and follow the printed instructions on every can. Now to the work. If it is on new work, go over the entire surface lightly with No. 1 sandpaper and dust off carefully. With a broad wooden paddle, stir up the entire contents of the can untill all the lead and other heavy matter at the bottom is thoroughly mixed. Then, through an old piece of fly screen, strain the entire contents into another can or container. This is done to remove all lumpy or other rough matter.

To every quart of the liquid add about a tablespoon of Japan dryer. Apply the first, or priming coat, always in the direction of the grain. Use a small brush for the corners and tight places. When this priming coat has been allowed to dry for thirty-six hours at least, go over the entire surface very lightly with No. 1 sandpaper and dust it off carefully.

Then putty all nail holes and splintered places. Color your putty with some of the paint. If it is too smeary, stiffen the putty by adding enough whiting. Give the entire surface another coat, and successive coats, if necessary, until an even color appears over the entire surface of the work. Always allow thirty-six or more hours for the drying of each coat, and never apply a coat unless the previous coat has been lightly sanded if you wish to secure a smooth job. The last coat should not be sanded.

PROPER TREATMENT FOR OLD WORK.

Before proceeding to repaint old work, examine the entire surface of the work very carefully. If this surface is badly cracked, blistered or peeled off, your only remedy will be to purchase liquid varnish remover and apply it according to the printed direction on the can, using bunches of excelsior with the remover until all the old finish has been removed. Then go over the entire surface with a rag saturated with turpentine to destroy the injurious effect that any remaining remover would have upon the new finish. Then finish as directed for new work.

If the surface of the work is free from these defects, clean the entire surface with a rag, soap and water. Then dry sand the surface lightly with No. 1 sandpaper and finish as new work. I have an Irish friend who says that he is successful in all things because what he lacks in (EddyKShun he makes up in (Injun-Unity). If you make up in ingenuity what you lack in experience, you will, like my Irish friend, be successful in this work.