

J. L. STOCKTON

THE OLD WHITE CORNER



NEW TAN HOSE FOR LADIES

The famous Wayne make which has no equal in all America owing to the decrease in the price of cottons we can give you the—

50c Qualities for 40c



Stockton's Special

A Wonderful Black Hose for

25c



This Hose is made to our order according to our own whimsical ideas of Hose making. It is a full gauge stocking that sells all over the country at 35c or 3 pairs for a dollar. We are using nearly a thousand dozen a year therefore can afford to sell them at a quarter a pair.

OUT SIZE HOSE ALL BLACK

25c pair



OUT SIZE HOSE WHITE FOOT

30c pair

FOR THE WHOLE FAMILY

TIMBER CULTURE A GOOD THING

Preservatives and Processes in the United States.

Of the many antiseptics which have been proposed for the preservation of timber only four have been largely used with success in the United States. These are creosote, zinc chloride, corrosive sublimate (bichloride of mercury), and copper sulphate. At the present time copper sulphate has fallen into almost total disuse, and corrosive sublimate is restricted to two plants in New England. The use of this latter is the so-called "cyanizing" process which is frequently referred to in all the literature of wood preservation. In general, the process consists in steeping the timber in a dilute solution of corrosive sublimate long enough to insure thorough penetration.

Creosote and Zinc Chloride.

Thus in the United States creosote and zinc chloride are the only preservatives in common use. There are many other patented substances known by various names; but most of them have for their base one or the other of these two preservatives. Creosote is a by-product of coal tar, which is produced at most plants for the manufacture of illuminating gas and at by-product coke-oven plants. This tar is distilled, and during the process the condensed vapors are run into three separate vessels and thus separated into the light oils of coal tar or naphthalene, the dead oil of coal tar or creosote, and pitch. Creosote is not a simple substance like zinc chloride. On the contrary, it contains a large number of constituents of great chemical complexity.

Wood tar, when distilled in a similar manner, gives "wood creosote," which like that derived from coal tar, possesses strong antiseptic properties. There is also on the market

June Birthday Emblem

There is a difference of opinion as to the proper birth emblem for June. Some hold that Agate is the emblem for this month, while others regard the Pearl as proper.

We can supply either. The beauty and value of a pearl depend on form, quality of texture of skin, color, transparency and lustre. The pearl set jewelry of our stock will afford a June birthday selection that will give most pleasure to the receiver.

We invite comparison of our showing of "quality jewelry." Look around, but come to us, sure, before you buy. We can show you what we have better than cold type can tell. It is a pleasure to us, and will be a pleasure to you to look.

Barr's Jewelry Store
State and Liberty Streets.

a so-called creosote, a by-product of water-gas tar or tar manufactured from kerosene oils, which for wood preservation is probably inferior to the true creosote. In general, however by "creosote" is meant the dead oil of coal tar.

Zinc chloride is obtained by dissolving metallic zinc in hydrochloric acid. This is further diluted by water before it is used for wood preservation.

The Open Tank Process.

The injection of the preservative by the open-tank process depends upon a different principle. The wood is first thoroughly seasoned, and much of the moisture in the cells and intercellular spaces is replaced by air. If the timber is peeled soon after cutting, and stacked in open piles the time required for seasoning can be greatly lessened. The seasoned timber, or that portion of it which is to be preserved is immersed in a hot bath of the preservative contained in an open iron tank. This hot bath is continued for from one to five or six hours, depending upon the timber. During this portion of the treatment the air and moisture in the wood expand and a portion of them pass out, appearing as little bubbles on the surface of the fluid. At the end of the hot bath, as quick a change as possible is made from the hot to a cold preservative. This causes a contraction of the air and moisture remaining in the wood, and since a portion of it had been expelled, a partial vacuum is created which can be destroyed only by the entrance of the preservative. Thus atmospheric pressure accomplishes that for which artificial pressure is needed in most of the commercial plants. Whether the open-tank or pressure-cylinder method is the more desirable depends upon the particular conditions of each case. Both methods have their particular uses and neither can always be wholly substituted for the other.

The Brush Method.

A less efficient but cheaper treatment can be secured by painting the surface of the timber with at least two coats of hot creosote or some similar preservative. The liquid may be applied with an ordinary paint brush, but care should be taken to fill thoroughly with the preservative all checks, knot holes, and similar defects. The liquid can penetrate only a very short distance into the wood, but as long as there remains an unbroken antiseptic zone around the surface, the spores of the wood-destroying fungi can not enter. It is especially important in this method

Kennedy's Laxative Cough Syrup

Relieves Colds by working them out of the system through a copious and healthy action of the bowels. Relieves coughs by cleansing the mucous membranes of the throat, chest and bronchial tubes.

"As pleasant to the taste as Maple Sugar"

Children Like It
For BACKACHE—WEAK KIDNEYS Try DeWitt's Kidney and Bladder Pills—Sure and Safe SOLD BY ALL DEALERS

od that the timber should be thoroughly air-dry before treatment. Otherwise the evaporation of water from the interior of the stick will cause checks to open up and so expose the unprotected wood to fungous attack.

This process finds its principal use where the amount of timber to be treated is too small to justify the erection of even a small treating plant; where the land is so rugged, as in the building of mountain telephone lines, that it is impracticable to transport the timber for even short distances, or where it is necessary to restrict the cost of the treatment to the lowest possible figure. **The Effect of Treatment on the Strength of Timber.**

The question is frequently asked whether or not the strength of timber is impaired by the processes in common use for wood preservation. No general answer to this can be given, since it depends altogether upon the character and strength of the preservative and the care with which it is injected. It is probable that creosote does not penetrate the wood fibers, but merely forms an external coating around them; hence, in itself, it can not appreciably affect the strength of the timber. In general the ultimate strength of treated timber depend, first, upon the percentage of moisture remaining in the wood; and, second, upon whether or not the wood has been subjected to injuriously high temperatures during the preliminary processes of steaming and vacuum. If these processes were employed, the degree of temperature which can be applied without risk of serious injury depends upon the duration of the temperature, the moisture content and quality of the wood, and upon the pressure to which it is subjected.

If proper care is observed in the treatment of the timber all danger of injury from excessive temperatures can be avoided. The amount of moisture remaining in the wood is therefore a point of greater importance. As the moisture in a piece of wood is reduced by drying, the strength of the wood increases, and as moisture is subsequently reabsorbed, the strength up to a certain limit is again reduced. Creosote retards both the absorption and evaporation of water; hence its presence is thoroughly seasoned wood exposed to humid conditions tends to conserve its strength, whereas, on the other hand, if it is applied to green wood the strengthening action of water-evaporation is retarded. Some processes tend to increase the moisture content of the wood and others to diminish it. Therefore, whether the strength of timber is increased or decreased during creosoting depends chiefly upon the process employed.

The effect which live steam at safe temperatures has upon the moisture content of wood is now being made the subject of a special study. It is safe to say, however, that during steaming the amount of moisture in air-dry timber is increased, with a consequent decrease in strength, and that the succeeding vacuum falls to remove all of the added moisture before the introduction of the preservative. With many kinds of air-dry timber, however, the steaming can be dispensed with altogether, and this is done in many commercial plants. Whether or not it can be omitted with all kinds of wood is not yet certain.

These considerations, of course, do not apply to the open-tank method, or to similar processes where the timber is immersed directly in the preservative, without the preliminary steaming and vacuum. Immersion in hot oil tends to evaporate some of the moisture in the wood and so to increase its strength.

Zinc chloride and the other preservatives which are in water solution have a wholly different effect. Unless the wood structure is already filled with moisture to the point of saturation, more water is injected into it with the preservative, with the result, if the wood is partially seasoned, of decreasing its strength. The original strength may be regained, however, by seasoning. If the zinc chloride is injected into the timber in too concentrated a solution it may cause a chemical dissolution of portions of the wood fiber, with the result of permanently decreasing the strength of the timber. But for the solutions in common use this danger need not be taken into consideration.

Both creosote and zinc chloride are excellent antiseptics, and both can be obtained in large quantities. Creosote's principal point of superiority however, lies in its insolubility in water. Hence, once it is injected into timber it will not wash out, no matter how wet may be the situation in which the treated timber is placed. On the other hand, zinc chloride is much cheaper than creosote, and since it is shipped in the form of a solid the freight charges

Great Clothing Sale

20 PER CENT REDUCTION ON EVERY SUIT IN THE HOUSE



TRUMP CLOTHES

We have too much Men's and Boys' Clothing on hand, owing to the backward spring Season. Now is your opportunity to buy high grade clothing at an enormous saving. Our men's clothing bears the B. K. & W. label, which stands for high grade fabrics and expert tailoring. Every suit reduced 20 per cent. Every two-piece outing suit reduced 20 per cent. Every young man's suit reduced 20 per cent. Every boys' knee pant suit reduced 20 per cent--this does not include boys' percale wash suits. This is a genuine reduction in price on every suit in the house, to reduce our clothing stock. It will pay you to investigate.



GREAT SALE OF MEN'S, WOMEN'S AND CHILDREN'S OXFORD TIES

Every Oxford Tie in the house reduced 20 per cent. We still have a complete assortment of styles and sizes.

Barnes' Cash Store
E. J. Barnes, Prop.

are considerably less than they would be for enough creosote to treat the same amount of timber. But zinc chloride is soluble in water, being in fact injected into the timber in water solution, and so when timber treated with zinc chloride is exposed to moisture the leaching out of the salt is only a question of time. Hence, zinc chloride is most commonly used in comparatively dry situations. Creosote, on the other hand, is used where the timber will be subjected to moisture. Moreover, creosote is one of the very few preservatives within commercial reach which offer absolute protection against the marine borers, which work such havoc among the wharves of the Atlantic, Gulf and Pacific coasts. Since it is insoluble in water it can not wash out of the piles into which it has been properly injected, and since it is more than a mere external coating there is no danger of its being broken off by floating debris.

The Tendency of Wood Preservation in the United States.
In the United States the tendency in wood preservation is to modify the processes rather than to change the preservatives. At present, creosote and zinc chloride, pure or in mixture, are the only preservatives which are in general use. A constant effort is being made to overcome the chief drawbacks to the

(Continued tomorrow.)

FORCED OUT SALE

STORE LEASED OVER OUR HEADS

This is our last Summer here. Our entire Stock of Spring and Summer Goods to be sold regardless of cost. Big sale now on.

Remember this is our last summer here and everything must be sold. Bring in the entire family to be shod. It will be the best investment you have made this year. Money saved is money earned.

OREGON SHOE COMPANY
THE HOME OF GOOD SHOES—SALEM, OREGON