

THE USE OF LYE WATER.

Perhaps the best practical example of potash on concrete was the use of concrete in soap works, where it was discovered that lye water made a harder concrete in much less time than pure water and it was used in laying several thousand feet of concrete flooring, which wore well for two years, when crumbling in spots began.

In two years more the daily sweepings consisted largely of concrete until the four inches of concrete was entirely swept away in spots.

The owners believed it to be caused by certain acids used in manufacturing soap, but the theory that it was due to an overdose of lye water in making the concrete for those particular spots looks more plausible, as the original floor made of pure water is to-day without a blemish.—Cement World.

AN ODDITY AMONG NAILS.

A man who had often seen on the side of a building that he passes in his rounds down town a sign reading, "Cement Coated Nails," and who had wondered what cement coated nails could be used for, and made up his mind that they must be used in wharf building or something like that, under water, where the cement on them would protect

them against rust, learned upon inquiry that the cement on the nails did indeed have a protective purpose; but this purpose turned out to be one quite different from that which he had imagined.

For the coating on cement coated nails is designed not to protect the nails themselves, but the goods in the boxes in which the nails may be driven; and this in a manner that to the man of inquiring mind seemed quite novel and remarkable.

The cement coated nail is a wire nail. In these days there are more wire nails used than cut nails, because wire nails are cheaper; they cost about the same by weight, but there are more wire nails to the pound, and so wire nails have come into widespread common use for many purposes, one of them being found in the nailing together of many sorts of boxes.

A wire nail can be drawn more easily than a cut nail, and so with less likelihood of injury to the box, and this might seem only another recommendation of the wire nail in such use, as it reasonably might be if one of the chief considerations were the preservation of the box; but the primary consideration is, of course, the protection of the box's contents, and here is where the cement coated nail comes in, and in the manner that seemed novel and remarkable.

With time and the opportunity the cover of a light box wire nailed could be lifted and replaced and the nails redriven without showing any marks on the box, and thus there was the possibility of the abstraction of goods from such boxes in transit. For instance, a pair of shoes might be taken out of a shoe case and the cover put back without showing any signs of tampering. And with this requirement for it along comes the inventor of the cement coated nail, which is simply a wire nail covered with a very thin coating of material that makes the nail, once driven, stick so tightly that not only does it hold more securely, but it can't be drawn without marring or breaking the box.

Toronto building permits for the current year to the end of August totalled \$11,440,740.

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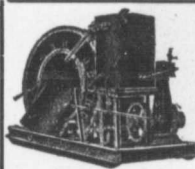
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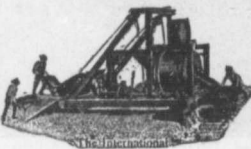
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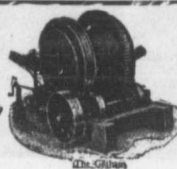
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