

it has stood a few hours, rub the parts with finely pulverized slacked lime, or Spanish Whiting, until the rust is all removed. If red rust is allowed to accumulate until the polished surface is corroded, sweet oil and a severe rubbing will seldom remove it. The entire surface must be re-polished with emery, or some other grit, before black rust will disappear from polished steel or any other metal.

VALUE OF ICE.

Independently of the use of ice as a cooler of food and drinks, of late years it has been applied to a vast number of purposes in the arts and sciences, and in trading operations. Without ice it would have been impossible to lay the Atlantic electric cable. In order to secure a calm passage, without which it would have been impossible to have paid out the three thousand and odd miles of cable, the summer months were fixed upon for the operation; but the heat is so great at this time that the cable, coiled up in vast cisterns, would have lost its gutta-percha covering by melting. To obviate this insuperable difficulty, the tanks were enclosed in surrounding tanks of ice, and in the most sultry weather the cable went over the stern, notwithstanding the tremendous friction, as hard as a bar of iron.

HOW TO CLEAN OLD AND MUSTY BARRELS.

At this season of the year the farmer and beef and pork packers are often greatly troubled with musty, filthy-smelling barrels, bottles, etc. How to cleanse them for use is an important question which chemistry will answer satisfactorily.

Permanganate of potassa will entirely destroy all fungoid growths and fermenting matter, and render the barrel or bottle perfectly sweet and clean.

A pint of the permanganate is a sufficient quantity for a cider or beer barrel. Its deodorizing and disinfecting qualities are wonderful, as it contains five equivalents of oxygen, and will even deodorize carbolic acid and remove its pungent smell from the hands immediately.—*Hearth and Home.*

A NOVELTY in street locomotion is now attracting attention in Paris. One of the road-steamers, with india-rubber tires to the wheels, invented by Thompson, of Edinburgh, Scotland, is running through the streets of the French capital, dragging behind it a heavy omnibus with fifty passengers, compared to which the six-horse power engine looks like a steam-tug towing an Indianman. On the report of the French government engineers, leave has been granted to the road steamer to ply over two routes, several miles in length, and including some busy parts of Paris. The engineers report it more handy and manageable than horses, and in no way dangerous to the public. The huge India-rubber tires save the machinery from jolting and the road from ruts. The speed is that of a fast omnibus, and it travels up and down rising ground without the least difficulty.

There will be a domestik eklipse this year (visible only tew the naked eye), kaused bi the new Comet Sorosis jumping out ov her pasture, and cantering around promiskuss.

Hearth and Home.

FARMING FOR BOYS.

CHAPTER III.

A POOR DINNER—WHAT SURFACE DRAINAGE MEANS—THE VALUE OF DRAINAGE—WET BARN-YARD—WHAT CONSTITUTES MANURE—HELP YOURSELF—THE YOUNG PEDLER.

As might be expected, the party thus invited to dinner had anything but a hospitable time of it. In a general way, the boys received pretty fair treatment from Mrs. Spangler; but on that particular occasion they saw that they were called in merely to be fed, and, the feeding over, that it would be most agreeable to her if they would thereupon clear out. Things had gone wrong with her on that unfortunate day, and they must bear the brunt of it. The good man of the house was absent at the neighboring tavern, it being one of his rainy days; hence the wife had all the remaining household at her mercy, and, being mostly an uncomplaining set, she could serve them with impunity just as the humor of the moment made it most convenient. The dinner was therefore nothing to speak of, and was quite unworthy of the great noise which the tin horn had made in calling them to it. There was a bit of boiled salt fat pork, almost too fat to eat, with potatoes and turnips, while the dessert consisted of pumpkin-sauce, which the dinner-party might spread upon bread, if they thought proper.

Uncle Benny devoured his share of this rainy-day repast, but inwardly concluded that it was next of kin to the meanest dinner he had ever eaten, for he was too well bred to take open exception to it. As boys, especially farmers' boys, are not epicures, and are generally born with appetites so hearty that nothing comes amiss, Joe and Tony managed to find enough, and were by no means critical,—quality was not so important a matter as quantity. It is true there was a sort of subdued mutiny against the unseasoned pumpkin-sauce, which was a new article on Farmer Spangler's table, that showed itself in a general hesitancy even to taste it, and in a good long smell or two before a mouthful was ventured on; which being observed by Mrs. Spangler, she did unbend sufficiently to say that she had intended to give them pumpkin-pies, but an accident to her lard had interrupted her plans, so she gave them the best she had, and promised the pies for next day.

As Uncle Benny and the boys all knew that they had been called in merely to eat, and not to lounge about the stove, and were therefore expected to depart as soon as they had dined, when the scanty meal was over, they stepped out on their way to their wonted rendezvous, the barn. The rain had ceased, and there were signs of a clearing up. But