

An express train on the Alleghany Valley Railroad, running at the rate of forty miles an hour, was lately brought up all standing against an obstruction on the track, consisting of rocks and dirt, the result of a land-slide. This train was fitted with Miller's platforms, buffers, and couplers. Notwithstanding the fearful velocity of the train no lives were lost, as the cars did not telescope, as ordinary fastened cars would have done under the same circumstances. Miller's inventions should be adopted on all railroads without delay. On the Missouri Pacific Railroad nineteen passengers were lately killed by telescoping of the cars.

ART GLEANINGS.

PURIFIED benzine has lately been prescribed for cases of trichiniasis in Europe, with good results.

A EUROPEAN chemist has prepared and put into the market extracts of garden vegetables, to be used as flavorings for soups and other culinary dishes.

THE saving of expense by recent improvements in machinery is marvelous. Chipping and filing iron surfaces used to cost by hand nearly three dollars per foot, but it is now done for two cents!

IN some parts of Germany every bottle containing poison is labeled with a death's head and cross-bones as black as printer's ink can paint them. Every parcel of poisonous medicine sent to a patient has a similar label over the address. "Pray help me," writes a traveled parson, "to urge upon our chemists and druggists the adoption of this very simple method, which is plainly within the comprehension of the dullest boy that ever handled a pestle and mortar."

A CHEAP substitute for per-manganate of potash in purifying water from vegetable substances has been found in the black oxide of iron. It may be readily prepared by heating the common red hematite, finely pulverized, with sawdust in a crucible. Probably the black scales collected about blacksmith's forges would answer the same purpose if they are first cleared of dust. A portion of this oxide of iron placed with the sand in a cistern filter, is said to be very effective in removing vegetable impurities.

A NUGGET of pure copper, weighing 117 pounds, was discovered in an Iowa field the other day. It had been kicked about for years, under the supposition that it was a stone. Finally, the tooth of a harrow scraped against it, making a bright streak, which revealed its true nature. It is pure metal without the least alloy, stone, or quartz. The locality where discovered is in Cedar township, Monroe county, and hopes are entertained that extensive deposits may underlie the whole region.

MARBLES are chiefly manufactured, says the *Journal of the Society of Arts*, at Oberstein, on the Nahe, in Germany, where there are large quarries and agate mills. The substance used is a hard calcareous stone, which is first broken into blocks nearly square, by blows with a hammer. These are thrown, 100 or 200 at a time, into a small sort of mill, formed of a flat stationary slab of stone, with a number of concentric furrows upon its face. A block of oak or other hard wood, of the same diametric size,

is placed over the small stones, and partly resting upon them. This block, or log, is kept revolving, while water flows upon the stone slab. In fifteen minutes the stones are turned to what are henceforth termed "marbles." One establishment, containing only three of these rude mills, will turn out as many as 60,000 marbles in each week. Agates are made into marbles by skillfully chipping the pieces nearly round with a hammer, and then wearing down the edges upon the surface of a large grindstone.

Hearth and Home.

FARMING FOR BOYS.

CHAPTER XII.

A GREAT BRIER-PATCH.—PUTTING IT TO GOOD USE.—
AMAZING THE NEIGHBORS.

On Spangler's unwieldy farm of a hundred acres there was a large piece of neglected land, which had long been known as the "old field." For many years it had been grown up with common wild blackberries, which so completely occupied the ground that almost every other kind of plant was smothered out. There were a few straggling grape-vines among the dense mass of briars, but these could not have survived had they not been able to climb to the top of the blackberries, and so and so get up into air and sunshine. Neither man nor boy had ever been able to traverse this immense thicket. Hence it was selected by the birds for building their nests in summer, and by rabbits as a hiding-place in winter. It was therefore a choice neighborhood for the boys to set their traps and snares, and many a fine stew for dinner did they secure by thus trapping its timid inhabitants.

One day in July, Uncle Benny and the boys were walking on the outside of this great brier-patch, and wondering at the immense crop of berries it was producing. The tall canes had shot away up above their heads, and were bending down with a heavy load of fruit, forming, with the old canes, a tangled mass of dead and living wood, into which no one could force his way. They could reach the fruit on the outside of the patch, and here they stopped, and began to pick and eat. This the boys and girls of Spangler's family had been in the habit of doing as long as they could remember, without any thought of turning the great crop upon the "old field" to any other use.