

HOW TO EXAMINE WELLS.—The following simple mode of examining a well to ascertain whether it contains any offensive substances, has been recommended as efficient:—"Place a common mirror over the well in such a position as to catch and throw the rays of the sun to the bottom of the well, which will be immediately illuminated in such a manner that the smallest pebbles, &c., at the bottom, can be distinctly discerned as if in the hand. The sun is in the best situation to be reflected in the morning or afternoon of the day."

NICOTINE.—This peculiar principle is a product of the leaves and seeds of tobacco, by infusing them in acidulous water, adding lime, and distilling, and then washing the product with ether, when an ethereal solut on of nicotine is obtained. One drop will kill a dog. It causes the pupil of the eye to contract, has a bitter acrimonious taste, and a pungent smell, and on the whole, is one of the nastiest things in creation. It is composed of 73.26 per cent. of carbon, 9.25 per cent. of hydrogen, and 17.09 per cent. of nitrogen. It is related to a class of bodies called *vegeto-alkalies*, and is capable of uniting with an acid. On the human brain it produces a soothing effect, which is thought very pleasant, but can never be considered otherwise than unhealthily.

FISH BREEDING.—A German gentleman named Muller has just put down about five million of the eggs of the Lake trout obtained from Lakes Ontario and Michigan, in streams leading into Lake Salstonstall, Connecticut. He has also put down about a million of the eggs of the white fish in the same lake. It is expected that in two or three years the fish will be of marketable size.

CONSTRUCTION OF STOVES.—The desirable points to be secured in the construction and management of stoves, are, first, ready contrivances for regulating the draft; second, accurate fitting in the joining, doors, dampers and valves, to prevent the leakage of foul gases into the room; third, inclosure of the fire place, with slow conductors, as fire-brick or stone; fourth, a high temperature, attained by the rapid and perfect combustion of the fuel; and fifth, to bring all the heated products or the combustion in contact with the largest possible absorbing and radiating metallic surface, so that the iron in contact with the air may not be overheated, but give out its warmth at a low temperature. Large stoves, moderately heated, are therefore most desirable. The cooler the surface of the stove, or the nearer it is in temperature to the air of the room, the more agreeable and salubrious will be its influence. This desirable result is to be obtained only by exposing the greatest quantity of heating surface to the least quantity of fuel—a condition almost reversed in modern stoves. In Germany and Russia, stoves are commonly made of brick, earthen-ware and porcelain. They are generally made to project into the room from one side, like a chest of drawers or a sideboard, the door for the fire being sometimes in an adjoining apartment. These stoves heat more slowly, and consequently give out their warmth for a longer time than those made of iron.

PLATINUM.—This metal, which is rather heavier than gold, is of a greyish white color, and is capable of receiving a very fine polish. The tenacity of pure platinum is almost that of iron, and for all practicable purposes it may be regarded as infusible; like iron, it yields to the hammer, and can be welded at a white heat. None of the simple acids will attack it, and therefore it is used to make vessels for their manufacture, its only drawback being the great expense. It is dissolved by a mixture of nitric and muriatic acids. When in an extremely divided state, platinum has a peculiar property of absorbing great quantities of gas, and also of igniting and becoming red hot in a stream of hydrogen. Platinum was not known in Europe until the middle of the last century, although it was known long before on this continent, where it had received the Spanish name of *platina*, or little silver. It is found in Peru and Russia, which last country affords about one thousand pounds annually, and about six hundred pounds are given to the world every year by Borneo.

WHY DRAIN TILE ARE DEARER IN AMERICA THAN ENGLAND.—1st. Men's labor in England is worth but 50 cents a day. In America we pay \$1.00. 2d. Horse labor is one fourth cheaper there than here. 3d. Boys in England, are hired for 25 cents per day, to set off the tile from the machine, and from their being born, as the saying is, with a tile in their mouths, can do it as well as men can here that we pay \$1.00 per day. 4th. Tile in England are fetched from the yard by the parties using them, while here they cost to deliver them on board railroad or boats, at least \$1.50 per thousand. 5th. Machines cost there about \$60, while here the cost is \$150. 6th. Bricks to build the kilns are worth but £4.80, and there is in each brick 150 cubic inches, while here there is but 62 cubic inches, and their cost is about \$4.00 per thousand. 7th. Fire brick can be bought there for \$10.00, while here their cost is \$40.00 per thousand, same size; the cost for building the kiln is in same proportion. 8th. Money in England, in ordinary times, is worth but three to four per cent, while here it is worth seven. 9th. And last but not least. Coal in England is bought upon an average for \$1 75 per ton, and one ton will burn two thousand tile, while here it is worth \$7.00 per ton, and poor at that, and requires two tons to burn three thousand tile—and if you burn wood, it will take one cord of wood worth \$5, to burn one thousand tile. Tile Making is not all profit; if it had been, tile works in Albany would not have changed hands so much.—*Albany Country Gent.*