

Dry Soil Closets.

The deposits are at once deodorised by coal ashes or dry finely pulverised earth, and thus thrown out into a shoot or iron bin for removal by the dustman's cart, or for garden use. These closets are coming much into use in England, where drainage is imperfect. By the admixture of earth or ashes with night soil, it is not only immediately deodorised, but the ammonia and other fertilising properties are absorbed and retained for the field or garden.

A Cheap and Valuable Paint.

The *Genesee Farmer* says:—"One of our neighbors has painted his out-houses, fences, &c., with a paint made as follows, and found it nearly as good as oil paint, and vastly cheaper. In fact the cost is scarcely anything except the labor:

"Take half a bushel of nice unslacked lime; slack it with boiling water, cover it during the process to keep in the steam, and add to it a peck of clean salt, previously well dissolved in warm water; three pounds of ground rice, boiled to a thin paste, and stirred in boiling hot; half a pound of clean glue, which has been previously dissolved by first soaking it well, and then hanging it over a slow fire, in a small kettle within a large one filled with water. Add five gallons of hot water to the whole mixture; stir it well, and let it stand a few days covered from the dirt. It should be put on right hot; for this purpose, it can be kept in a kettle on a portable furnace. It is said that about one pint of this mixture will cover a square yard upon the outside of a house, if properly applied.

"Brushes more or less small may be used according to the neatness of the job required. It answers as well as oil paint for wood, brick or stone, and is cheaper. It retains its brilliancy for many years. There is nothing of the kind that will compare with it, either for inside or outside walls. Coloring matter may be put in, and made of any shade you like.

"Spanish brown stirred in will make red or pink more or less deep, according to the quantity. A delicate tinge of this is very pretty for inside walls. Finely pulverised common clay, well mixed with Spanish-brown before it is stirred into the mixture, makes a lilac color. Lamp-black in moderate quantities makes a slate color, very suitable for the outside of buildings. Lamp-black and Spanish-brown mixed together produce a reddish stone color. Yellow ochre stirred in makes a yellow wash; but chrome goes farther, and makes a color generally esteemed prettier. In all these cases, the darkness of the shade will of course be determined by the quantity of coloring used. It is difficult to make a rule, because tastes are very different; it would be best to try experiments on a shingle, and let it dry. We have been told that green must not be mixed with lime. The lime destroys the color, and the color has an effect on the whitewash which makes it crack and peel.

"When walls have been badly smoked, and when you wish to have them a clean white, it is well to squeeze indigo plentifully through a bag into the water you use, before it is stirred in the whole mixture.

"If a larger quantity than five gallons is wanted, the same proportions should be observed."

"Our friend says that thirty cents worth of coloring matter will be enough for the half bushel of lime. Spanish-brown, yellow ochre, cost three cents a pound. Lamp-black and Princes brown five cents a pound. The latter gives a handsome lilac shade."

Pins of Commerce.

The pins of commerce—so familiar to us all—are of various sizes, from the large three inch blanket pin to the smallest ribbon pins, of which 300,000 weigh only one pound. But then there is even a smaller; we allude to the smallest of the insect pins, used by entomologists. In Gloucestershire, pin making was introduced in 1662, giving employment at that remote period to upwards of fifteen hundred persons. In London it was established ten years later, and subsequently in Birmingham.

Previous to the introduction of machinery for the purpose, pin manufacture was one of the greatest prodigies in the division of labor, as it furnished 12,000 articles for three shillings—each of which engaged the united diligence of fourteen operatives. A workman could head fifteen hundred in the course of an hour, a boy could point 16,000 in the same brief space, and a smart child acquired the habit of papering 36,000 per day! Most interesting fact, connected with this branch of our subject, may be found in "Smith's Wealth of Nations," as well as in "Babbage's Economy of Manufactures." But all of these operations have since been brought within the scope of machinery of marvellous ingenuity.

During the war of 1812, in consequence of the interruption of commerce a paper of inferior pins sold *here* for one dollar, which can now be had for six cents. This exorbitant price induced Englishmen, confined in the Old State Prison in Greenwich village (now a part of the city of New York) to attempt their manufacture; but when the war was ended, this country was suddenly glutted with English pins, at a price so low that the Greenwich enterprise was ruined. In 1820, the manufacture was once more resumed in New York, and again was unsuccessful.

Pins were first made by machinery in England, in 1824, under a patent of Lemuel W. Wright, of Massachusetts—who invented the first solid-headed pin. Wright's *original* machine made forty perfect pins per minute—from the coil of wire—without any manual assistance. It was very easy of adjustment, as the pins could be lengthened and strengthened at pleasure; but the inventive genius of the forty years has greatly improved even it. J. J. Howe obtained patents both for the United States and England, in 1832-34, and established the Company in New York, which was subsequently located at Birmingham, Connecticut. S. Slocum obtained another patent, and in 1838 established their manufacture at Poughkeepsie—but his interest was finally transferred to the "American Pin Company" at Waterbury, Connecticut, which is now the largest factory of the kind on this continent, perhaps in the world. The papering of pins is likewise done by machin-