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Cooling Rooms.

The warm weather will shortly be here, and every one will be seeking the refreshing influence of a cool and shady place, whereunto they can retreat from the blazing sun; so we will give our readers a few hints concerning the cooling of their houses. The first necessity is a thorough draft. This can always be obtained by opening every door and window in the basement, the top of every window above, and by throwing each door wide open; but above all, be sure that the trap door in the roof is open, and there is plenty of air room from it down the stairs, so that whichever be the direction of the wind, there will be at least one ascending current of air in the house. Another requisite is shade. Our common slat shutters answer well for the windows, but the most cheap and convenient shelter for the roof is to cover it thickly with straw, dried reeds, or rushes. These will resist the influence of the noonday sun, and keep the garret almost as cool as the basement. One of the most simple methods, and at the same time cheapest means of artificially lowering the temperature of a room is to wet a cloth of any size, the larger the better, and suspend it in the place you want cooling; let the room be well ventilated, and the temperature will sink from ten to twenty degrees in less than half an hour.

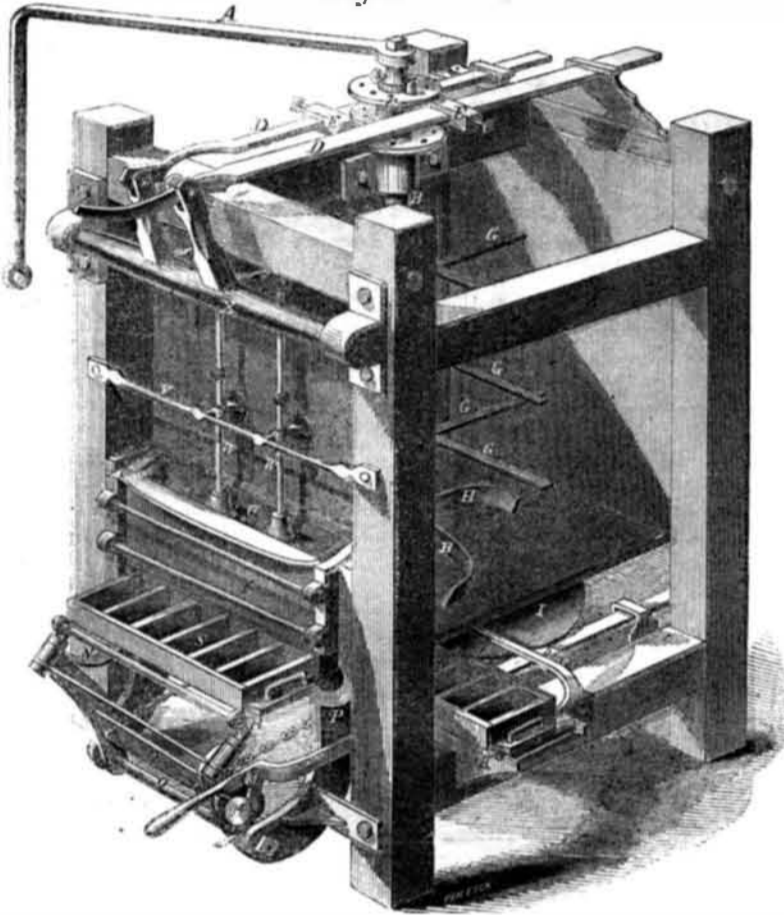
The above hints will be useful to many, and as a last suggestion we will inform the reader that, in summer, it is well to keep a solution of chloride of lime in the house, and occasionally sprinkle it in the more frequented parts, as the passages and stairs.

Cleansing Printed Cotton Fabrics—Calicoes.

A patent has been secured by Jas. Goodwin and Andrew Boyd, of Milton, Scotland, for a singular mode of cleansing printed goods from dirt and extraneous colored matters that may have been diffused over their surfaces during the process of printing. The invention consists in taking the cinders of mineral coal or coke, but the former are preferred, and sifting them to separate the ashes and dirt. The sifted cinders are then placed in a suitable copper vessel or boiler, with boiling water, and the printed calicoes after being first washed in cold water to remove all the dirt possible, are introduced into this boiler and boiled for an hour, when they are taken out, washed in cold water, dried, and are then fit for calendering. This process of cleansing newly printed calicoes in printworks is stated to be an improvement which deepens the colors of the dyed parts of the goods, clears the light or white parts, and is a superior and cheap substitute for soap and other chemicals now employed for the same purpose. It has generally been supposed that the ashes, and especially the cinders of mineral coals, have no detergent qualities, but this novel application of them goes to establish a contrary opinion.

CARNELL'S BRICK MACHINE.

Fig. 1



This machine is intended to temper the clay and make the bricks, within the limits of the one machine, and it is provided with a box large enough to contain sufficient clay to supply it for a day. This box is filled over night, and the clay left in soak until the morning, when the machine is worked by horse power or steam. Our engraving, Fig. 1, represents a perspective view of the whole machine, which we will now describe.

A is a beam crossing the top of the machine; this must be kept high enough to clear the arms that press the clay, and to the ring in this is attached the horses or oxen; when steam is used, this is dispensed with, bevel or spur wheels taking its place. B is a shaft passing perpendicularly through the box, having on the top, C, a three-plate piece with twelve holes in it, six in each division, for the purpose of regulating the pressure and the number of bricks to be made by each revolution of the machine, and to accommodate the slot piece, 2, Fig. 2, which draws the molds under the grating, and carries those that have been filled to the side; D D are two levers passing across the top of the machine, resting in guides with friction rollers; E E are two lug pieces fastened with set screws, and so arranged as to give the plunger box any desired movement; G G G are a number of knives on B, for the purpose of cutting and tempering the clay; H H are four pushers fastened with a wedge, to push or force the clay into the plunger box.

Beneath the hopper box is a table, I, which revolves with the shaft, B, and brings the molds, S, out at the side—this table should be placed about one-eighth of an inch below the mold—which D draws from under the grating, and it should be fastened on the shaft, B, with four set screws, so as to be raised or lowered; an arm with a roller pass-

es across the top of the table, which prevents the molds from revolving further than the post, see Fig. 2. J is a lug piece beneath the table, with six slot holes, having an arm or arms, this arm is placed in one of the slots arranged with pins; it revolves with the shaft and draws D in. The arm or arms should be so placed in the holes that while the molds are being drawn from under the grating, the plunger, U, is standing still; 5 is a lug

Fig. 2

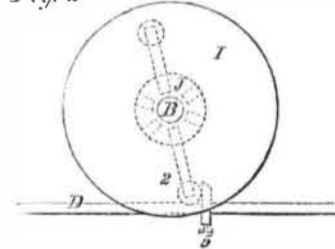
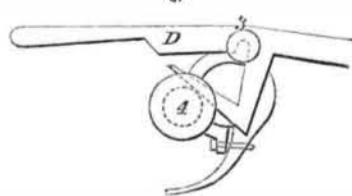


Fig. 3



piece so arranged as to bring the molds in their proper place; K is a table on the side with three rollers regulated with the height of the table for resting the molds on; 3 and 4 is a slip clutch attached to the lower rockshaft, which draws the molds under, and fastened on by stud bolts together in two semi-circular pieces; D, Fig. 3, hooks in 3, and when stones get in between the grating and the mold, S, it draws 3 tight to the molds, and should there be any strain, 4 revolves and unhooks, and

the machine goes on working, and the clay goes back into the hopper without making bricks until the obstacle is removed. N is a spring on the lower rockshaft, so arranged that when D draws in sufficient to bring the molds in their proper place, it throws the rock shaft immediately back, and leaves it standing still seven-eighths of the time, giving the operator ample time to place his molds upon the carriage. O is an axle which passes across the lower rockshaft, regulated by screws in each side; P are supports for the axle of the apparatus, Q, which pushes the molds under the plungers upon the table, R. S is the mold box. There is a box in front of the machine kept two-thirds full of sand, (which should be clean and free from dirt and as fine as can be got,) in which the molds are immersed, they being first soaked two or three hours in water, so that the sand will stick to them. Being well sanded, they are then placed on the carriage between the two washers on the rockshaft, which always guides them under the grating to their proper place. T is the plunger box which has a plate in the front with grooves on each side for the purpose of taking the clay or substance out. There is a grate on the bottom which slides in grooves on either side, so arranged as to be drawn out and others placed in for the purpose of making different shape bricks; this must be so arranged as to suit the shape or size of the molds—as the clay is always pressed through the center of the grate, and the clay being pressed through small surfaces shields the sides of the molds and prevents the sand from being rubbed off. U is the plunger follower, which fits inside of the plunger box and presses the clay into the molds, tightened by two cross rods, and on the back by a wedge in case it gets loose or wears; V is a cross rod or guide for the plunger rods, W W; X is a heavy rockshaft on top for the purpose of pressing the clay into the molds. The molding parts and plungers are thrown out of gear for the purpose of grinding the clay when first starting the machine, or for any other purpose. The whole machine is operated by two simple levers. This machine is put together by sixteen wood screws, the frame is mortised and substantially put together. A large number have been put in use, and there has been no difficulty in working the machine, and no complaint made about its not giving good satisfaction—this is a rare thing for brick making machines. When the machine stands three or four days, it should be entirely cleaned out. It should be placed in the center of the floor, so that the bricks can be carried all around, say from 100 to 150 feet—the bricks can be taken away from the machine by wheelbarrows, railroad, or by hand.

Any brickmaker will be able to judge of the qualities of the machine from the description and engravings, and we have no hesitation in saying that it is a serviceable and compact machine. It is the invention of Charles Carnell, of Germantown Road, above Fifth street, Philadelphia, Pa., from whom machines or any information can be obtained. It was patented February 2nd, 1858.

Gas-light in American Cars.

Several cars on the New Jersey Railroad have been lighted with gas as a matter of experiment, and with such satisfaction, it is stated, that all the trains are to be furnished with it permanently. Cylindrical reservoirs are placed under the floors of the cars, and these are charged, from a supply gas pipe at Jersey City, with a quantity sufficient to give a bright light for fifteen hours.