

closely covered tin, expose it for half an hour or an hour to heat, not exceeding that of boiling water, and then remove the tin, and allow it to cool, the loaf, when taken out, will be restored in appearance and properties to the state of new bread.

The quantity of water which well-baked wheaten bread contains, amounts on an average to about for y-five per cent. The bread we eat, therefore, is nearly half water ;—it is, in fact, both meat and drink together.

The flour of wheat and of other kinds of grain contains water naturally, but it absorbs much more during the process of conversion into bread. One hundred pounds of fine wheaten flour take up fifty pounds, or half their weight of water, and give 150 pounds of bread. Thus, 100 of English flour and 150 of bread contain respectively—

	The flour contains	The bread contains
Dry flour.....	84	84
Natural water,.....	16	16
Water added,	50
	100 lb.	100 lb.

One of the reasons why bread retains so much water is, that during the baking a portion of the starch is converted into gum, which holds water more strongly than starch does. A second is, that the gluten of flour, when once thoroughly wet, is very difficult to dry again, and that it forms a tenacious coating round every little hollow cell in the bread, which, coating does not readily allow the gas contained in the cell to escape, or the water to dry up and pass off in vapour ; and a third reason is, that the dry crust which forms round the bread in baking is nearly impervious to water, and, like the skin of a potato which we bake in the oven or in the hot cinders, prevents the moisture within from escaping."

CONCRETE CELLAR BOTTOMS.

The facility and cheapness with which the bottoms of cellars may be made clean, sweet, and impervious to water, is generally but little known to house owners ; nor the ease and certainty with which water may be excluded from cellars where it is difficult to drain.

In soft and pervious soils, this process is best performed by paving with small stones, laid in sand ; but in common, compact soils, the natural surface, well leveled, will answer all purposes. Make a thin mortar with water lime and coarse sand, of the consistency called *grout*, or so thick that it can be poured from a pail on the ground. Commence with a portion of about eight or ten feet at one end, and throw on sufficient to cover it an inch or more thick, and with a scraper or rake-head, spread it evenly and smooth : then throw on as much clean, coarse gravel as it will absorb, and so continue until it is finished. In twelve hours, or as soon as it has set, sweep the overplus gravel evenly on the surface, and ramp it down with a short plank and pounder, until it is smooth and compact, and in a few days of good weather, it will become like a solid rock. It assists its durability and firmness, to give it several good dashes of water after it is dry.

To render the sides impervious to water, where drainage is difficult or costly, requires that the wall should be laid with mortar originally ; and at the time of constructing the bottom, a good well portioned water-lime mortar should be plastered on, a little higher than the source of water, and well and firmly sticked down when about half dry, and followed by another coat of the same ; when, if a proper time intervenes before there is any outward pressure of water, it becomes as tight as a barrel or tub ; it is always sweet, clean, and cool, and no vermin can enter nor find lodgement.

The sand used in the grout and mortar should be coarse, clean and sharp, and the gravel from the size of walnuts down to coarse sand.—*Rural New Yorker.*

SINCERITY is to speak as we think, to do as we pretend and profess, to perform and make good what we promise, and really to be what we would seem and appear to be.

THE IRON INTEREST. —The Secretary of the Treasury has issued a circular to iron and ore, manufacture that they may be submitted to scientific tests, in order to ascertain their comparative excellence. Congress has made an appropriation of \$2,500 for this purpose. The Secretary also asks for a variety of information in respect to the mines and the processes to manufacture. The facts which will thus be collected will be of great value to the iron interest.