

the hay is calculated to be worth from £1 to £2 a ton more than that made by the ordinary process. The drier is worked by a portable engine of 4 to 6 horse power.

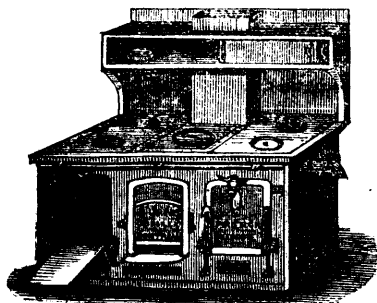
Washed or unwashed Butter.

I beg to call attention to the above excerpt from "The Country Gentleman." It contains in a few words most of those ideas which this journal has been trying to impress on the minds of the butter-makers for the last eighteen months. The principle contained in the passage in italics is, I am convinced, a most important one, all the Norman butter, which brings the highest price in the London market, being treated thus. The buttermilk is drawn off and the butter is *gathered* (still in the churn) in successive portions of cold water. Mr. Crawford, of St. James' Street, Montreal, expresses himself very forcibly on the merits of the butter-worker mentioned in another part of this number of the Journal as a *non-grinding* implement, as, indeed, from its construction it must be. The old lever-worker will soon be thrown aside by any one who tries the new tool.

New wheat in Mark Lane, London, E. Wheat of the crop 1880 was sold in this market for 56s. the quarter (8 bushels), on the 16th of August.

ARTHUR R. JENNER FUST.

Cheap method of warming Houses. — We have, for several years, employed a peculiarly constructed stove (copied



from the French "economical range"), which warms the whole our house at Varennes with great economy in fuel. The house is built on the banks of the St. Lawrence, and is exposed to the full power of the wind. The same stove serves for cooking, and would answer for a large establishment, such as a College, a

Convent, or an Hotel, &c. The hot water furnished by this stove, by means of pipes surrounding the fire without taking up much room, is sufficient in quantity to supply a pretty well filled stable. The hot water is sent there by a pipe sunk in the ground, and arrives with very little loss of heat.

After several years' trial of this arrangement for combined heating, we think ourselves justified in recommending it very warmly to our friends.

Poultry manure.—An article on this subject in another part of this number of the Journal might be supposed to be aimed at one I wrote in the issue for November last; but it can hardly be possible that my lucubrations have travelled so far as Philadelphia.

The vague idea, not experimentally tested by comparison or analysis, that a substance is valuable as a manure, cannot, nowadays, be allowed much weight. It is precisely the style of notion which is aimed at, in the new regulations in England for teaching the elements of scientific agriculture in the common schools.

I founded my statement as to the value of "Poultry manure," on the analyses of the two wellknown chemists Voelcker and Anderson; the former analytical chemist to the Royal Agricultural Society of England, and the latter occu-

pying the same distinguished post in the laboratory of the Highland Society of Scotland. One principal duty of these gentlemen is, to analyse all manures sent in by members of their respective societies, and to give an estimate of their real value. I am, therefore, inclined to place full confidence in their decisions, and the sooner the farmers and the gardeners of the great state of Pennsylvania make up their minds to employ well skilled chemists to examine their commercial manures, the better it will be for their pockets. I subjoin, for the information of my readers who may not have seen the article on "Poultry manure" in the Journal for November, the three analyses of the mixed manures of hens, geese and ducks, by Professor Anderson, and an analysis of farm-yard dung, (horse, cattle, and pig,) by Professor Voelcker

HEN DUNG.

Water.....	60.88
Organic matter and ammonical salts.....	19.22
Phosphates.....	4.47
Carbonate of lime.....	7.65
Alkaline salts.....	1.09
Sand.....	6.69
	100.00
Ammonia	0.74
Phosphoric acid in alkaline salts equal to15 Phosphate of lime

GOOSE DUNG.

Water.....	77.08
Organic matter containing ammonia	13.44
Phosphates	0.89
Alkaline salts.....	2.94
Sand	5.65
	100.00
Ammonia.....	0.67
Phosphoric acid, &c., equal to...	0.12 Phosphate of lime

DUCK DUNG.

Water.....	46.65
Organic matter containing ammonia.....	36.12
Phosphates	3.15
Carbonate of lime.....	3.01
Alkaline salts.....	0.32
Sand.....	10.75
	100.00
Ammonia	0.85
Phosphoric acid in alkaline salts.....	a trace

HORSE, CATTLE AND PIG DUNG.

Water.....	66.17
Organic matter	28.24
Inorganic matter.....	5.59
	100.00
Containing ammonia.....	.78
" phosphate of lime } in ash..	12.23
" potash	12.14

All these samples were collected in a fresh state, and analysed after being dried at temperature of 212° F.