

# FARM MANURES

## THE MOST EFFECTIVE FERTILIZER

**F**ARM manures constitute the cheapest and most effective of all forms of fertilizers, no matter what the character of the land. For increasing soil fertility this by-product of the farm stands unequalled. It may be rightly considered as one of the most valuable assets of the farm. "The more manure the more crops, the more crops the more cattle, the more cattle the more manure." This adage tells an absolutely true story. It furnishes the explanation of the fact that mixed farming is the most rational and economical system of agriculture, the one best suited to keep up the productiveness of the soil and the one under good management most likely to give the greatest profits.

### THE WINTER'S MANURE.

The greater part of the manure applied to the land is produced in barn, stable and piggery between autumn and spring. It is the winter's manure that the farmer mainly depends on for the corn and root crops of the rotation. How can this manure be handled that the best possible returns may be obtained from it?

### THE GREATER VALUE OF LIQUID MANURE.

First the liquid excrement (urine) must be saved. It is far richer in nitrogen and potash, two most valuable fertilizing constituents, than the solid excrement (dung), as the following data clearly show.

### COMPOSITION OF SOLID AND LIQUID EXCRETA.

		Nitrogen.	Phosphoric Acid.	Potash.
		p.c.	p.c.	p.c.
Horse:	Solid.....	.55	.30	.40
	Liquid.....	1.35	trace	1.25
Cow:	Solid.....	.40	.20	.10
	Liquid.....	1.00	trace	1.35
Pig:	Solid.....	.55	.50	.40
	Liquid.....	.40	.10	.45
Sheep:	Solid.....	.75	.50	.45
	Liquid.....	1.35	.05	2.10

Thus it will be seen that, weight for weight, the liquid manure, except in the case of the pig, contains much higher percentages of nitrogen and potash than the solid excrement. Furthermore, these elements are in an immediately available condition for crop use, which greatly enhances their value.