

## LIQUID MANURE,

*The Wealth of Towns—and, we may add, of Farms also.*—This tract was referred to by the Duke of Richmond, at the meeting of the Society at Shrewsbury, on Thursday last. He said—"I think that on this subject we might with advantage take a leaf from the Chinese. I think we do allow to run to waste a great quantity of manure in this country. I believe that instead of allowing the water to flow into and out of our yards, by which we spoil a great quantity of our manure, we ought to have tanks for the reception of this liquid manure, and I would recommend to the landlords to build these tanks."

We called the particular attention of our readers to this subject last year. It was then shown what loss was sustained on every farm where the liquid and soluble portions of the manure made on it were allowed to waste. But there is a great difficulty in the way of applying this liquid manure. It is easy to fix it mechanically and chemically—to accumulate it in tanks, and deprive it of volatility; but it is by no means easy to find an economical mode of applying it. The use of the water-cart on extensive farms is impracticable. If the liquid be applied in its natural condition, the plants which receive it will be injured—perhaps burnt up by its strength; if it be diluted to the proper degree, its bulk and its weight become such that the expense of its carriage destroys its value to the farmer. If we exclude its use in irrigation, perhaps the only economical mode of applying home-made liquid manures is by soaking the ordinary farm-manure with it. Care must then be taken to hinder its dilution by water. All the rans of urine in a farm steading should be directed to one point, around which stores of dry absorbent vegetable rubbish, capable of fermentation and decomposition have been accumulated during comparatively idle periods, and around which also it is customary to place the dung-heaps. Let the liquid be received into a vessel capable of holding two or three days' produce of it; and at such intervals during the winter, let this vessel be regularly emptied on the materials here gathered together. Of course it will be well to place in this vessel every time it is emptied such a quantity of sulphate of iron or other fixer of ammonia as shall be able to neutralize all the ammonia which such a quantity of urine is capable of generating during fermentation. The liquid manure thus preserved will be applied to the land in a properly diluted condition; diluted not by a useless material such as water, but by valuable decomposing vegetable matter.

The pamphlet before us, however, refers to liquid manure as the wealth of towns; unquestionably a great source of wealth to those who would dispose of it, and a vastly greater source of wealth to those who would purchase it, is now altogether neglected in the present management of the sewerage of our towns. "It has been calculated that the human refuse of London is worth annually five hundred thousand pounds." The

great waste under the present system of neglecting these sources of wealth must ultimately force itself on public attention, and we doubt not that when in the opinion of our capitalists this country shall have been sufficiently intersected by railroads, the next great engineering operation of the day will be the execution of plans for collecting, storing, and transmitting, the sewerage manures of towns. Whether the method adopted be that of dilution by water, and conveyance by pipe or channel to *water-meadows*, or that of all possible condensation and desiccation, and conveyance by barges, &c., to the place of its application on *arable land*, we may be assured with the author of this pamphlet that "ere long measures will be adopted in all large towns for the collection and sale of this most important substance."—*Lon. Eng. Ag. Gaz.*

## PROPORTION OF BUTTER IN MILK.

Every farmer's wife knows that there is a vast difference in the milk of cows, in regard to the quantity of butter that they will afford. We once owned a cow which gave a great flow of milk, but from which very little butter could be obtained.

Boussingault, in his 'Rural Economy,' relates the following experiment. From 100 lbs of milk he obtained

Cream,	. . . .	15.60
White curd cheese,	. . . .	8.93
Whey,	. . . .	75.47
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		100.00

The 15 pounds and 60 hundredths of cream yielded by churning—

Butter,	3.83 or 21.2 per cent.
Buttermilk,	12.27.

The reckoning with reference to 100 lbs. of milk, consequently stands as follows—

Cheese,	. . . .	8.93
Butter,	. . . .	3.33
Buttermilk,	. . . .	12.27
Whey,	. . . .	75.47
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		100.00

He goes on to state that, taking the whole of the milk obtained, and treated at different seasons of the year, he finds that 26,000 lbs. of milk yielded 1080 lbs. of fresh butter, which is at the rate of 3 per cent.—*Alb. Cult.*