

THE MIXING OF SALT WITH LIQUID MANURE.

Some years ago Mr. Parkes, the author of *The Chemical Catechism*, got up quite an excitement among the farmers of England on the application of common salt as a manure. As the extraordinary expectations raised, even not borne out by trial, the article of salt again became neglected by agriculturists. Still it would appear, that even in the insular position of Britain, whose atmosphere is always strongly impregnated by the saline influence of the surrounding seas, salt has of late years come into more general use on the farm, particularly for mixing with compost heaps.

It has been stated, on good authority, that M. Barral has proved satisfactorily that common salt is a fixer of ammonia. If this be correct, the use of salt in compost manures, in which fermentation and decomposition are always more or less active, admits of an obvious solution. In Switzerland it has of late become a common practice with farmers to mix salt with their liquid manure in the tank, in the belief that it tends to prevent the escape of ammoniacal gas. This practice is said to have arisen from an accidental circumstance, which it will not be uninteresting briefly to narrate. The import duty on salt in Switzerland is very high and oppressive, and therefore not unfrequently leads to a breach of the law. A peasant having tried to defraud the authorities by carrying off a bag of salt, was discovered and pursued. In his anxiety to escape the punishment which would be inflicted if the bag was discovered, he threw it into his manure-tank. After all risk of exposure had disappeared, he thought that his liquid manure must be greatly injured by the salt, and accordingly diluted the moisture largely with water. To his great surprise he found that the grass was better and more readily eaten by stock on that part of his meadow where the liquid manure was applied containing the salt, than those portions which were irrigated by the ordinary liquid manure. The experiment was several times repeated, with a similar result; till at length the Government allowed refuse salt to be used for manure with little or no duty. Such salt usually contains from 75 to 80 per cent. of saline matter. About 1-10 lb. of salt is used for every 22 gallons of liquid manure; in gravelly, dry soils a larger proportion of salt is employed, and in soils naturally damp a smaller proportion.

In soils liable to suffer from drought, on dry hill-sides, salt is employed, after being first mixed with earth. Its effects are most apparent on peas and leguminous plants of every kind, or roots; potatoes, carrots, &c. It has little effect on clay soils, excepting when drained. In some districts it is used for improving the quality of the dung. The salt is first mixed with earth, and this mixture is spread on every layer of dung.

These and other details, communicated by M. Fellenberg, are worthy of a careful consideration from farmers of all countries. In Upper Canada, which is shut out, in great measure, from oceanic influence, it is well understood how necessary salt is to domesticated animals, and how greedily they devour it. Plants must obtain the salt they require, either from the soil or the air; if both be destitute, it must evidently be supplied artificially. Salting hay, especially when injured in the making, is found to be a beneficial practice; and the application of this material to our barn-yard manure, compost heaps and yard drainage is deserving a fair and general trial.