

HINTS ON THE USE OF VARIOUS MANURES.—GUANO, when good, ought to be of a light-brown or fawn-colour, dry and powdery, not sticky or clammy to the touch, and the lumps when broken showing numerous small, clear, shining crystals, and giving out a strong smell of ammonia when mixed with a little quicklime, and moistened with water. Guano should be kept quite dry till used, as damp renders it liable to decomposition and the loss of ammonia; and it should never be brought in contact with quicklime, which, as has been remarked, drives off the ammonia; but guano may be used on land that has been limed a short time before, and the lime well mixed with the soil, particularly after heavy rain. Bone-dust and gypsum are too well known to require any remark. The burned gypsum is the best—costs about 30s. per ton. Sulphates of soda and magnesia can be got, the former at about 3l. 10s. per ton, the latter from 6l. to 7l. per ton. In using guano for Potatoes it ought to be applied at the rate of three cwt. per acre, either sown by the hand in the drills, or broadcast just before the drills are formed, and 18 cubic yards of dung spread below the Potato cut, and the whole covered in the usual manner; the Potatoes set, as they are cut, being first dusted with gypsum in powder. Or the guano may be mixed as follows:—3 cwt. guano, 1 cwt. gypsum, 1 cwt. sulphate of soda, $\frac{1}{2}$ cwt. of sulphate of magnesia, and 1 cwt. of common salt, sown broadcast as above mentioned, and 18 cubic yards of dung in the drills. This last mixture appears, after repeated trials, the best for Potatoes, and to give a larger crop than 40 or 50 cubic yards of the best farm manure; and the after-crops, as far as can be judged of from trials for the last three years, do not seem to be inferior, and in some cases are better than when farm-yard manure alone had been used. The same mixture as for Potatoes answers well for Turnips with a little dung; but a cheaper one without dung seems to answer as well, viz., guano, 2 $\frac{1}{2}$ cwt., bone-dust, 6 cwt. or 15 bushels, and of gypsum, common salt, and sulphate of soda, 1 cwt. each, to be sown broadcast on the land, which is immediately to be formed into drills in the usual manner, or with the double-mould plough, and the Turnip-seed sown with the barrow. *Mixture for Top-dressing Hay, Pasture-Grass, and Outs.*—Hay to be cut (if top-dressed with the following mixture), viz:—1 cwt. guano, 4 cwt. or 10 bushels fine bone-dust, 1 cwt. gypsum, and 1 cwt. of common salt, give a third more produce in Hay, and the after foggage, both of that and the succeeding years, is much improved. The same dressing may be applied to old or young pastures with great benefit, and makes the land to carry at least one-third more stock, besides benefitting the after crops. This dressing may also be applied with benefit to Corn, Barley, Wheat, particularly in poor lands, and where the straw is likely to be short. All top-dressings of ammoniacal and other salts should be applied in rainy or moist weather, early in the season, i. e., in April, just as the Grass or Corn is beginning to spring.

IGNORANCE.—It is impossible to make people understand their ignorance; for it requires knowledge to perceive it; and therefore he that can perceive it hath it not.—*Bishop Taylor.*

STEAM POWER.—A pint of water may be evaporated by two ounces of coal. In its evaporation it swells into 216 gallons of steam, with a mechanical force sufficient to raise a weight of 37 tons to a foot high.

Human life is a donkey race, in which the winner is he who comes in last.

CHLORIDE OF CALCIUM.—A correspondent, in reference to the communication of Mr. Bernays, of Manchester, to the Royal Agricultural Society, on the advantages of chloride of calcium in dry seasons, wishes to know the proper portion of spirit of salt to be applied to common chalk to produce chloride of calcium, or, to use the more common name by which the substance is known, muriate of lime. This will, we apprehend, depend, in great measure, upon circumstances, and we should recommend our correspondent to apply to any practical chemist in his neighbourhood. In the meantime, as the subject is one of considerable importance, the following extract from the invaluable Lectures on Agriculture Chemistry and Geology, by Professor Johnstone, will be acceptable to our readers:—"This substance is said to have been beneficially applied to various crops, but to potatoes especially, with surprising effects. Under its influence maize and Jerusalem artichokes have grown to the height of from 14 to 18 feet, and potatoes have attained the weight of two to three pounds. When prepared in a dry state, this substance rapidly deliquesces and runs into a liquid. The most convenient way of applying it, therefore, would be in a state of solution, so largely diluted as to have only a slight taste. In this condition 500 gallons per acre may safely be applied, by means of a watering cart, so contrived as to allow it to flow on the tops of the ridges and young plants, by which means unnecessary waste will be avoided."

Boys that have been properly reared, are men in point of usefulness at sixteen; while those that have been brought up in idle habits, are nuisances at twenty-one.

That day in which a man neither does some good action nor acquires some useful knowledge, should not be (if possible) numbered in the days of his life.

If vice is permitted to sap superior abilities, they only become as gay colours upon a reptile.

Evil thoughts are for a time companions; evil deeds are companions for eternity.

The consequences of one hour become conditions for the next.

The first great gift we can bestow on others is a good example.

An humble man is like a good tree; the more full of fruit the branches are, the lower they bend themselves.

Public favour, like sunshine, is apt to weaken while it warms, therefore it is best never to remain too long under its influence.

The officers taken prisoners at Afghanistan are to be indemnified for the loss of their property on that occasion.

The advice of a wise man is to be considered as a prediction.

Nobility is nothing, unless supported by good actions.

Desire not more of the world than is necessary to accommodate you in passing through it.

Reason ought to oblige every man to pursue the general happiness as the best means to procure and establish his own.

Envy and evil are the natural fruits of laziness and ignorance.