

To Prepare Bones For Manure.—As mills for grinding bones are very costly, it is a great desideratum for the farmer to know how he can otherwise prepare them for his crops. By the following simple method he can reduce them to a fine powder and increase their value four fold.

Take one hundred pounds of bones and place them in a kettle, or in an old tub unfit for further use, or even in a hollow scooped in the ground, and made tight by lining with clay. Next take from thirty to thirty-five pounds of oil of vitriol (sulphuric acid,) mixed with one-third to one-half its weight of water, and pour over the bones. In a day or two, the bones will dissolve into a liquid paste, to which there must be added, by stirring in wood ashes or fine mould, until it is of the consistency of thick mortar. Put the mixture under cover out of the way of rain, and in a few weeks it will become a light dry powder, which may be applied by the hand or otherwise, to any kind of land that may require it. In preparing this mixture, great care must be observed to keep the oil of vitriol from touching the clothes or skin, as it will burn them as badly as fire.

The oil of vitriol, for this mixture, must be of a first rate quality, otherwise it would require a greater quantity than given above to dissolve one hundred lbs. of bones. The mixture answers best for a turnip crop; but it is highly valuable for other roots as well as for grass and grain. It should be applied at the rate of twenty to forty bushels to the acre, sown broadcast on grass land, in the spring, or on grain and turnip crops after harrowing in the seed. For gardens or field crops planted in rows or drills, as roots, corn, beans, peas, &c., it may be applied in the hills or rows at the time of sowing, or it may be afterwards sprinkled around the plants at the time of hoeing.—*American Farmer.*

Improved Pumping Machine.—On Saturday last, some experiments were made on the Leeds and Liverpool Canal, with the view of testing a newly-invented hydraulic machine, by Mr. Michael Scott of Glasgow, engineer to the Liverpool water-works Company, to be applied to the pumping of ships and general purposes. A small boat, provided for the occasion, was drawn through the water, at the rate of about four miles and a half per hour; and though the water was allowed to flow in through the bottom in a powerful stream, the action of the pump—which was kept in operation merely by the pressure of the

finger and thumb—was sufficient to prevent an accumulation of water within the boat. The machine may be said to be nearly self-acting, the power being obtained by a column of water passing by means of a pipe through the boat, and producing a vacuum, which is, by an ingenious application made to procure the most extraordinary result. The action of the pumps is increased in proportion to the speed of the vessel, the ratio being the square of the distance, so that almost an unlimited power may be obtained. It is said that a vessel of 400 or 500 tons, might, with one of these pumps, be kept dry with almost any conceivable amount of leakage, and that by the labour of one man; besides, there is no probability of the machinery getting out of order, or the pump being choked, which is often the case with the ordinary pumps. The principle is exceedingly simple, and possesses the advantages of cheapness and durability, which must go far to bring it into general use. Several gentlemen were present at the experiments made on Saturday, and expressed themselves highly gratified at the results. Amongst others who attended was Mr. Stanley, engineer to the Leeds and Liverpool Canal Company. The experiment was to be continued yesterday.—*Liverpool Mercury August 31.*—[This ingenious young gentleman is son of the late Michael Scott, Esq., of this city and nephew of the late Michael Scott, an author of "Tom Cringle's Log," &c. He is likely to take a distinguished place in the scientific world.]

To Gather and Preserve Herbs.—Herbs should be gathered early in the morning, at the season when they are just beginning to flower. The dust should be washed, or brushed off them, and they should then be dried by a gentle heat, as quick as possible.

The British American Cultivator (FOR 1847, NEW SERIES)

Edited by W. G. EDMUNDSON, and
G. BUCKLAND.

It accompanies the *Provincial Advertiser*.—
Both papers, One Dollar per annum.

All payments to be made invariably in advance
and free of postage, addressed to the Publisher.

Printed for the Proprietors, by J. CLELAND
BOOK AND JOB PRINTER, Post Office Lane
King Street, Toronto.