

Some plan for saving and applying manure, adapted to small farms with limited means, without rebuilding a great deal, would be very useful to some of us in this region. I have noticed in some of our papers a plan for catching it in tubs or troughs, placed under the stables; but how to preserve and apply, rather troubles us. If you could furnish the requisite information, it would be thankfully received. J. B.—*Virgil*.

The following extract from a communication in the *Journal of the Royal Agricultural Society*, may perhaps answer the inquiries of our correspondent:

"Knowing something of the value of urine, and the profit to be derived from it, I am the more anxious to induce others to try it, and will therefore take this opportunity of saying something about the mode I have adopted to collect it, and the expense of the tanks to retain it, which may be useful to those who have not yet set about so important an operation in agricultural pursuits.

"My land is clay, 250 feet deep; in this soil only have I had experience, so for this only do I prescribe. Having well considered where the liquid is to be used, as well as where it is to be made, and resolved upon the most convenient situation, I have a hole dug full seven feet in diameter and twelve feet deep, the bottom being shaped like a basin, and well rammed, with a little water, into a good puddle. The construction of the tank is commenced by the bricklayer forming a circle with bricks (four inch work) round an opening of five feet, leaving a space behind the brick work to be filled and rammed well in with clay-puddle by the laborers as the building is worked up, no mortar being used with the bricks, or anything else till the dome is to be formed; mortar or cement is then required, the roof is then arched in, a man-hole left in the center of each tank, and covered with a three-inch yellow deal cover (two-inch oak would be better.) One of these tanks, containing 1000 gallons, costs £2 17s. 6d. [about \$14] in the following items, calculating to farmers who have the horses and carts in possession:

	£	s.	d.	
Two farm laborers, each $\frac{1}{2}$ day...	0	2	0	Occupied in digging the hole, carting away clay, preparing puddle, and ramming.
Two laboring lads, each 1 day...	0	3	0	
One man 1 day...	0	2	0	
Two others, 1 day...	0	5	0	
One bricklayer, 1 day...	0	4	6	
One ditto laborer, 1 day...	0	2	6	
Three horses and carts drawing away $\frac{1}{4}$ mile, for want of nearer shoot, $\frac{1}{2}$ day...	0	4	6	
8 feet of 3-inch deal for cover, at 5 $\frac{1}{2}$ d. per foot...	0	3	8	
Labor and nails...	0	0	10	
Lime and sand for man-hole...	0	2	6	
900 place bricks...	1	7	0	
	£2	17	6	

Several of these tanks should be made adjoining each other; they then form a most excellent filter to keep back any hay or straw that would prevent the egress of the liquid from the water-cart, receiving it into the first from the stables, and pumping it out from any other one of them. It must be observed, also, the tanks being formed, the drainage into them is the next feature to be considered. I have adopted a mode economical and effectual, by laying down in the pavement what is called at the iron works an angle-iron gutter of very small size, and covering the surface of it with a flat iron bar, just to lay within the surface of the gutter, wherein all the urine is received and conveyed away immediately, and all the straw, dung, and dirt is kept out. This is highly advantageous, as the urine is conveyed away immediately, without escape of ammonia, and the little gutter may be uncovered as often as you please, and swept out with a broom. There is no under-drain to get stopped; all can be seen and kept in order by a commonly useful person, without the aid of what is called a tradesman. I should like to see three of these little gutters down a stall, whereby all the urine would be caught; three gallons per day from each moderately-sized horse, more from cart-horses that drink freely, considerably more from cows, and a much larger quantity from pigs than is usually calculated. If all the water is caught from

farm-horses, cows, pigs, farm-servants, and household-servants, the tanks would be filled very quickly; and whenever the tank containing 1000 gallons of urine is filled the second time and properly applied to Italian rye-grass, the result will show it is not too high an estimate to calculate the tanks and drains paid for. The first application will convince the grower of ten acres of this grass, that his present stock is insufficient to eat it. He must add to it and thereby increase the quantity of urine considerably, and so go on to keep a much larger farming stock altogether. The often-asked question, 'How shall I obtain urine enough?' will cease to be asked, and the amount of solid faeces so much increased as to obviate the necessity for a constant outlay of capital to procure it."

I WOULD like to be informed through the columns of your journal, the causes and the cure of the disease in cattle called hollow horn, or wolf in the tail. ELEAZER LEWIS, JR.—*New Market*.

The remarks of Dr. DADD in a recent meeting of the Massachusetts Legislative Agricultural Meeting, will be found of interest in reference to the query of our correspondent:

"Dr. DADD, of Boston, said veterinary science had been too long neglected in this country. There were many who pretended to prescribe for diseases of animals without knowing anything about them, and would commence some funny operations.

"They would examine the horns and would sometimes bore into them, and perhaps let out a little pus, if they found the horn cold.

"He considered, however, that heat or cold on the surface were only symptoms. If the surface was hot, the circulation was active; if cold the reverse was true.

"There was a communication from the horn to the nares, or nostril, and any pus in the horn would of course run down through the nostril, instead of upwards into the horns!

"Sometimes this might become tenacious, so as to stop the passage. Then it was requisite to steam the nostril to make it run down. By penetrating the living membrane, or by admitting the atmospheric air by boring, inflammation was apt to ensue.

"He maintained there was no such disease as 'horn ail.' Has examined animals said to die of horn ail. Has found a softening of the brain. And this arises often from an improper condition of the stomach. Many diseases of the brain originate in the stomach.

"There is a perfect channel to the tip of every horn. There are longitudinal divisions of the horn, and if in boring, the gimlet hits one of the partitions, it seems to be solid. If it chances to go between two of these partitions it would appear to be hollow.

"The cold horn is really only a circumstance indicative of the state of circulation in the system."

I WAS much interested in your article in the February number on bones and their uses; and in your quotation from Prof. NORTON, it is stated that fifty pounds sulphuric acid would cost \$1.50. Mr. NESBITT, in his lectures in England, quotes it at £7 per ton, which is about the same. But our druggists here say that they never heard of any such price, and their commercial circulars quote it at ten cents per pound by the quantity in New York. Now, if you will show where the discrepancy lies, you will oblige one subscriber, and perhaps more. X.

Ordinary sulphuric acid, under the title of oil of vitriol, our correspondent will see quoted in any of the New York papers which give full reports of the market, at from three to three and a half cents per pound by the carboy. It is somewhat higher in price now than in former years, owing to the great demand for sulphur in the manufacture of powder. The acid commonly purchased and used by druggists is the concentrated sulphuric acid, which must be largely diluted before it can be applied to the dissolving of bones.