

reader, if this is impressed on your mind, you will perceive, that the chiefest things to be regarded in urine, are first, the circumstances which affect the quality, and quantity. Second, the best mode of promoting a change of urine to ammonia. Third, the time required for the process, and fourth, the best mode of preserving the ammonia, when formed. You will perceive, reader, that all along, I have endeavored to point out the principles on which manures act. If you go by general principles, then for a plain practical farmer, like yourself, with only chemistry enough to understand a few of its terms, it must be quite a thankless service, to point out to you in detail, all the various things contained in urine. It would confuse you more than the names, aye, and hard ones too, which are given to the varieties of pears and apples. All you want to know is this, does urine contain, as solid dung does, water, mould, and salts?

It does. The mould is so small a part, it may be left out of view. The salts are like those in the solid dung, mineral salts, and then we have the peculiar principle urea, which for all practical purposes may be called ammonia. We may then with this division present in a table the composition of the urine of various animals at one glance:—

Water. Salts. Ammonia.			
Cattle urine, per 100 lbs.	92.62	3.30	4
Horse urine, per 100 lbs.	94.00	5.03	.70
Sheep urine, per 100 lbs.	96	1.20	2.80
Hog urine, per 100 lbs.	92.60	1.76	5.61
Human urine, per 100 lbs.	95.75	1.88	2.36

Now cast your eye carefully over this table, the figures at once tell you the value of these different liquids. The last column gives the true value. The other salts vary much in quantity, and this affects the quality. The actual amount of ammonia in human urine and cattle dung is about the same; yet on actual practice it is found the effects of urine are nearly double those of dung. Look now for the reason of this; in the first place, the principle which gives ammonia in urine runs at once by putrefaction into that state. It gives nothing else, whereas in dung, the ammonia arises from a slower decay, and the principle which here affords ammonia may, and without doubt does, form other products. Hence we have a quick action with the liquid, a slower one with the solid. A second cause of the better effects of the liquid, is that it contains, besides its ammonia, a far greater amount of salt, and these give a more permanent effect. The amount of salts in human, cow, and horse dung is about one pound in every hundred. While the urine of the same animals contains nearly six pounds, in every hundred. A third cause of the greater fertilizing action, is found in the peculiar character of some of these salts, which are composed of soda, potash, lime, &c., united to an acid formed from urea, in the animal body. This acid is like the acid of saltpetre; it is a nourisher of plants, as much so as is carbonic acid.

(To be Continued.)

From the Boston Cultivator.

RURAL SOUNDS.

You must know, Mr. Editor, that Nature has endowed me with what is termed a musical ear, and the situation in which my life has been cast by an all-wise Providence contributes not a little to the development of that bump of mine; for I have the happiness to live, where every one hopes, if he be successful in life, to die—in the County, the peaceful country which, according to my favourite poet, God made with his own right hand. And this distinctive feature I consider about the greatest blessing that could have been bestowed upon me. But is not the subject upon which I am writing rather novel to my brother farmers, I wonder, and will they be prepared to accompany me to the length to which I may be carried in my flights of imagination? It is true we are told of the music of nature, and even read of the music of the spheres, but few seem to be aware of the meaning of the term.

"Sounds inharmonious in themselves and harsh, Yet heard in scenes where peace forever reigns, And only there, please highly, for their sakes."

And though there are few who do not willingly admit that

"Sweet is the breath of morn, here rising sweet, With charm of earliest birds."

yet far different to most imaginings is the raging of the dreary winter storm, the roaring of the billowy ocean, or the creaking of an old gate on its rusty hinges! all pleasing, however, to a musical ear, when found in keeping with surrounding objects. This being premised, Mr. Editor, if I thought your readers would consider the following description of my domestic worthy regard, I should be tempted to offer it for your acceptance as a portrait of a well-tuned farming establishment. Suppose, then, that I venture, and observe—My farm consists of 150 acres of land, five miles from a market town. It has been long enough in my possession, for all the shifting bars to become gates hung on hinges, shutting off their own accord; the latches falling into their catches with so distinct a musical sound, that in a calm evening I can tell what gate is being shut by its key note, my front gate being A sharp, and my barn yard gate, B flat; while the distant and approaching team is known to be mine or my neighbour's, so soon as I can distinguish the sound of the waggon wheels, there being two notes of difference between them, as they pass the front of my premises. Then come the doors of the out-houses and stables, all in their proper key-notes: while the bells of the sheep, selected in 3ds and 5ths, and the major key, enliven the day and sometimes the night, by their harmonious tinklings. And it may appear trifling, but I intend to have 3 horns to call the men from labor—that at a break-fast, sharp, clear, and of a high tone, for dinner, lower in tone, but in the major key, while the evening horn will be in the minor, of a soft and mellow tone, in harmony with the close of the day and its duties. I have regulated the going of my clocks, after much trouble and some expense, having had to change them more than once, neither the ticking nor striking pleasing me, in time or tone; for I know of nothing more sinister than an old slow, asthmatic clock, with a grating face every stroke, which a length comes for him in the minor key; or more irritating, than one that strikes too quick, in an impudent and careless way, with a sharp and unmusical ring that absolutely makes one nervous. My parlor clock now strikes in the open key of C, in common time, and with a noble cadence that invites you to count the hours and improve them; the kitchen clock being a third higher in tone, and somewhat sharper in time. I have had some trouble with my chickens also, several of my roosters had voices in the minor key, and were too slow in their ejaculations, while others were too shrill and quick in their movements for my ear and feelings: I therefore took some pains in regulating their voices, so they now crow in 3ds and 5ths, and in perfect time and tune, and my yard now sends forth a concord of "sweet sounds." Some of the hens also had voices of arrant scolds—these I have

stopped, and the "music of the farm-yard" is now more than mere pot-try. Then come the dogs, all in gamut, the watch dogs with a deep and sonorous minor for the night; the sheep-dogs softened and attenuated bark, which neither terrifies nor hurries the flock; and the terrier, or rat-catcher, with a yap so sharp, that the vermin are half frightened to death before they are caught. Our cats, of which we have about half a score, now caterwaul in perfect cadence, having exchanged some flats and sharps with a neighbour fifty miles distant, who considers himself benefited by the transaction: I have now, therefore, nothing but the true music of Nature, and can enjoy their nocturnal concerts hugely. I have had less trouble with my dairy than I expected, having had to part with one cow only, which had a most terrific bellow for a female, indeed, truly awful;—while the bull is a fine deep, majestic bass, of great power and compass; the calves in general being remarkably well in tune. My hogs, being all of the soft and cellular breed of Chester county, milk-white and sweet-handlers, are no longer grunts, but whine in soft accord, very unlike, I expect, from the round barreled Berkshires, whose black color and barrel frames must, one would conjecture, give forth sounds in accordance with the peculiarity of their conformation, and I fear too much of the *esqualtra* stop for my feelings; for I must confess, I consider the hog about the least musical of all the animals on a farm, if you except the mule, which, by the bye, reminds me of the promise that my neighbor has made to me to exchange a mule, as one of mine has a most unearthy yell.

And then come the inmates of my family, of whose musical talents I can truly boast. Here is the true large or organ style embodied in human frame; my wife's soprano, for which I echo her as a partner, and whose voice and keeping has never varied a demi-semi-quaver from the true pitch since our union, leads the whole family in perfect accord; her voice being at once soft and commanding, mellifluous and exciting; in the minor as well as the major key, first treble and leader in all our family concerts; while our sons and daughters fill the subordinate parts of the piece, leaving no room for discord or disagreement in any, and making such harmony as I never heard at a theatre in all my life. It is true we have had some trouble to tune our heels, some of them being too flat and others too sharp, but the harmony of my establishment seems at present to be about as perfect as anything, whether human, animate or inanimate, can be supposed to be. Thus our labors are sweetened, and the effect of such a state of things is so apparent, that many of our friends have made the remark, "I know not how it is, friend Dapson, but I visit no house where I am so comfortable as at yours; there is such a feeling of truth and harmony, seemingly in the very atmosphere with which you are surrounded, that I know not how to leave. All goes with the regularity of clock work, and a peace and happiness that may be felt; nothing seems out of tune with you." Ah, there it is, says I; that's a devotion we pay to Nature! But if I were to go into particulars, would they not smile? and am I sure that this is not the case with you at this time! So, then, Mr. Editor, I take my leave.

"Nature inanimate employs sweet sounds, But animated Nature, sweeter still, To soothe and satisfy the human ear."

To take Film from a Horse's Eye.

Blow loaf sugar and a little salt into the inflamed eye, and in most cases it will be relieved. Sassaparilla buds pounded, and put in water, to stand till it becomes nearly as thick as cream, applied to the eye, is an excellent remedy for inflammation.

For stings of the adder or slow-worm, apply immediately strong spirits of horshorn, for sting of bees, apply chalk or whitening mixed with vinegar.

Poisons swallowed by oxen are commonly the yew, the water dropwort, and the common and the water hemlock. One and a half pint of linseed oil is the best remedy.