

great deal depends upon the skill and habit of the animal. We see this in every department of human labor, sometimes carried to an almost incredible extent, as shown by the porters in the Mediterranean and East Indies, who will habitually carry burdens of 300 to 400 lbs., and sometimes it is alleged as much as 600 to 700. The well-broken New-England oxen, will, with apparent ease, back a loaded cart up a steep hill, which many indifferently trained would hardly draw in the same position.

Long-continued labor is injurious to the horse, though it may be indulged in, occasionally, with impunity. A horse should not be kept dragging from morning till night, with an incessant jog, however slow that may be. He should be put to his work, early or late as you please, and when there, let him move briskly, with an interval of rest now and then, to relieve the muscles and take breath, till his work is accomplished preparatory to lunch; or if his day's work is for four or five hours only, he may do it all with more comfort and advantage to himself without, than with food. A tolerably quick step and activity while out, is better for the animal than delving all day at a snail's pace.

When put up for the night, the horse should be thoroughly rubbed down, the dirt brushed from his legs, and his hoofs cleaned out. Many are in the habit of washing the legs with cold water while the animal is warm, and afterwards allowing him to stand exposed to the cold air. Nothing could be more injurious. If the weather or stable be warm, and the water not too cold, this may be done with impunity, or may be done at any time, if the limbs exposed to the water are constantly rubbed till dry. Let grooms use common sense in this, and a small amount of it will convince them of what is proper. Whatever would injure a man, will injure a horse under similar circumstances, though in a less degree. It is certainly very grateful to the tired beast to have his limbs gently rubbed after a hard day's work; but if this cannot be done properly with water, then remove the dirt with the brush, the curry-comb, or by the hand. The hoofs should also be carefully cleaned; and if he has been driven hard over a pavement or M'Adam road, they should be well stuffed for the night with fresh cowdung and clay. This will give a requisite degree of pliability and elasticity to the hoof, and remove any tendency to soreness, feverishness, or foot cracks.

Frequent injury is done to horses by allowing them to stand, after exercising, in a cold air, or exposed to a draught. Consider how the man would fare in his shirt sleeves, in the open air of January, after having induced a profuse perspiration by exercise. Just so will it be with the horse. A cold, cough, catarrh, and what not, is very likely to follow this wanton exposure. Always have an ample thick blanket to throw over the horse when thus exposed; nor should he, especially, ever be lashed into a sweat in cold weather, unless brought directly into a stable to cool off. It is better to rub him thoroughly till dry; but where this cannot be done, and the weather is cool, blanket or house him till all moisture is removed. Never wash the animal, nor drive him through the water, unless under such circumstances of weather, or subsequent care, as would secure yourself against injury.—*American Agriculturist*.

APPLICATION OF PLASTER AND ASHES TO MEADOWS.—If a meadow be manured only with plaster of Paris, the crops of grass will be at first greatly increased, but will afterwards diminish; for the silicate of potash, which the soil contained, is soon exhausted by the rapid growth of the grass, and its further increase is checked. But if the meadow be strewed from time to time with wood ashes, which contain potash, the grass will thrive as luxuriantly as before.

SPECIAL MANURES FOR RUTA-BAGA TURNIPS.—The result of the application of artificial manures in increasing the average produce of ground, cannot but be interesting to the agricultural community, even though these experiments should not have been conducted on American soil; and as every successful result leads to the extended use of special manures, and in most cases, to more economical farming, I submit the following instance of what has been accomplished in raising turnips by their means.

Having been applied to in the spring of 1844 by the steward of Lord Charlemont, to analyze a sample of soil from the estate lying two miles from Dublin, and to point out how the soil might be improved as to grow Swedish (ruta-baga,) turnips for a prize crop, I found, after examination, that the soil was in good condition, having been manured the summer previous, but that it was to a small extent destitute of potash salts and phosphate of lime, to the degree that a heavy crop would require to find readily in the soil. On this account the following manure was recommended:

56 lbs. pearl ashes,
28 lbs. nitrate of soda,
14 lbs. coarse Epsom salts,
56 lbs. bone dust.

To be mixed in with ditch scorings, road sweepings, some burnt earth, and other refuse off the farm, so as to make the compost sufficiently bulky; the whole to be laid on a statute acre.

The object in using nitrate of soda was two-fold; first, it supplied the small quantity of soda found in turnip ash (10 lbs. in every 20 tons), and then, the form in which it is added, containing, as it does, nitrogen, (nitric acid,) rendered it peculiarly serviceable in pushing on the early growth of the turnip. The bone dust and pearl ash were supplied because the crop requires them; and the Epsom salts, because it was desired to put in wheat immediately after in the soil.

The result of this manure more than equalled expectation; their size was superior to any exhibited, and they received the first prize from the Royal Agricultural Society of Ireland, as well on that account as for the total yield amounting to 56 tons the English acre.

The above-named manure cost about \$6 per acre; and whether we consider it in the way of economy, or of an addition having a wonderful effect in stimulating vegetation, it recommends itself strongly to notice. The wheat crop following was one-third greater yield than usual, or more than a portion of the ground unmanured did yield. As this compost was applied to a soil in rather a good state, with the object of forcing a great growth, there is no reason why the same special manure might not be applied to all soils intended for Swedes, and where condition is not exhausted by neglect of manure.

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KARKER ON CATTLE BREEDING, &c.—At a late meeting of the Probos Farmers' Club, Mr. Karkeek, after some statistics on the quantity of cattle bred in the kingdom, proceeded to argue that it was not so much the quantity or quality of food which caused an animal to attain a heavy weight in a short period, as the peculiar disposition, derived from inherited and transmissible tendencies, to acquire flesh and fat, and come early to maturity. He reprobated the system of breeding from cross-bred animals, and recommended in all cases where a cross was attempted, that *pure blood* be had on one side. "Breeding in the line" he considered the safest way; that is, by first selecting the best of