

expensive entertainments; for it requires no small share of moral courage, to risk the loss of consequence which may result from allowing the world, as it is called, to surmise, that we are not so rich as may have been imagined. And when the time comes, as sooner or latter it assuredly must, when the means are not adequate to the demands, what sacrifices are made, and what unseemly contrivances are resorted to, in order to keep up, at last, a poor remnant of 'appearance!' and, when this can no longer be effected, then comes the humiliation, with all the bitter feelings attendant upon retrenchment; of all which feelings, the bitterest is, the dread of being degraded in the world's estimation.—*Selected.*

**SUGAR BEET FOR MILCH COWS.**—An intelligent gentleman from the eastward, assured us a few days ago, that by giving his cows a peck of sugar beet twice a day, cut up with their hay, he was enabled to get just as rich milk and butter during the winter, as in summer, when the pasture was at its best. Now, as an acre of ground well manured, planted in this root, and well attended, would yield beets enough to keep ten cows, from the 1st of November, till the 1st of May. Should not every farmer make his arrangements for planting beets this spring? From our own experience, we have no doubt, that this addition of beets to the ordinary feed of the cows, would make a weekly difference of 2 lbs. each, in their product of butter. From the 1st of November to the 1st of May there are 26 weeks. This number of weeks at 2 lbs. additional butter, would give us 52 lbs. for each cow during the period named, or 520 lbs. for the ten cows, and if we set down the butter as being worth 25 cents per lb., it will give us \$130 as the value of additional yield brought about by the feeding with the product of an acre in beets. But this is not all—the proprietor of the cows in the spring, would have the gratification to know that he had treated his animals well, and the satisfaction of seeing them in good condition.—*Farmer and Gardener.*

**IMPORTANCE OF CHEMISTRY TO AGRICULTURE.**—If we strew the floors of our stables with gypsum from time to time, they will lose all their offensive smell, and none of the ammonia which forms can be lost, but will be retained in a condition serviceable as manure.

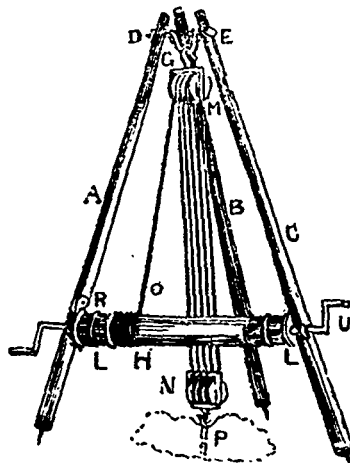
Pastures act a most important part in returning to the soil a supply of nitrogen in place of that taken away in the hay and grain. In large farms, where each field in rotation is in grazing, the nitrogen is completely replaced, and where the manures made on a farm are carefully returned to the soil, the quantity of this important ingredient must increase every year. When the night soil of cities shall be converted into poudrette, as it now is some places, no nitrogen of consequence will be lost, as the quantities used in the shape of corn and cattle will be returned to the country, and made available for new crops and the feeding of new animals. The following extract will show the loss farmers sustain from not attending to these powerful manures:—

"When it is considered that with every pound of ammonia which evaporates, a loss of 60 pounds of corn, (grain) is sustained, and that with every pound of urine, a pound of wheat might be produced, the difference with which these liquid excrements are regarded is quite incomprehensible. In most places only the solid excrements impregnated with the liquid are used, and the dung-hills containing them are protected neither from evaporation or from rain. The solid excrements contain the insoluble, the liquid

all the soluble phosphates, and the latter contain likewise all the potash which existed as organic salts in the plants consumed by the animals."—*Cultivator.*

### Mr. Richardson's Machine for Removing Stones.

A, B, and C, are three strong wooden posts, about 14 feet in length, through the ends of which are holes, for the reception of the strong iron pin DE, upon which is made to slide the curved iron bar G. The holes through which the pin passes being of such a size as to allow a little play to the posts, these may be stretched out like the legs of the common theodolite, in the manner represented in the figure. To the curved iron bar are then attached the fixed block M, and the moveable block N, containing the like number of pulleys. Each of these blocks must be hooped with a strong bar of iron, and the pulleys must be of a size sufficient to admit of a thick rope passing over them. To the lower block N is to be hooked the iron plug P, consisting of a ring for attaching it to the apparatus, of a flat part through which the ring passes, and of a cylindrical part. This cylindrical part may be 2 inches in length,  $\frac{3}{4}$  of an inch in diameter at the point, and gradually increasing to about 1-16 part of an inch more at the neck, where it joins the flat part. The rope O, passing over the fixed pulleys, is attached to the windlass H, which is fixed to the posts A and C. At each end of this windlass is a winch, T and U, for the purpose of saving time in tightening the ropes previous to the windlass being worked. To work the windlass there are stout bars or levers, for the reception of which are mortises at L, L, as shown in the figure. At one end of the windlass is fixed a ratchet-wheel, with a catch R fixed to the post A, for the purpose of preventing the weight from falling when the moving power is withdrawn. The posts A and C should be connected by a bar, to keep them steady in their place.



The machine thus formed is to be placed over the stone to be raised, by extending the posts on each side of it, and then the windlass is to be attached. Of the stone to be thus raised, however large it be, it is enough that the smallest part of it can be seen. At this part let a workman, with a mallet and the common boring chisel of masons, make a circular hole, about 2 inches deep, and as perpendicular as possible, so that a stroke or two of the hammer may be necessary to drive the pin home. When thus driven an inch more or less into the stone, it is attached to the block, and the ropes are tightened by turning the winch. Nothing more is now necessary but to set the men to work the windlass with the

levers; and with no other fastening than this simple pin, stones of some tons' weight may be easily raised from the ground. Being raised up by the pulleys, the stone may be hoisted into a cart or other convenient carriage, and removed from the ground.—*David Low, Esq.*

\* An account of this curious machine, the invention of Mr. RICHARDSON, Keawick, and an explanation of the principle on which the iron pin is retained by the stone, though simply driven into it, were given by me in the Edinburgh Philosophical Journal. An account of it was subsequently published in the Transactions of the Highland Society of Scotland. The iron pin, it was shown, is retained in its place by the elasticity of the stone.

### Useful Recipes.

#### TO CURE SCRATCHES IN HORSES.

Wash the feet, or parts affected, with soap suds, wipe them clean and dry, and then apply white lead ground in oil, as thick as can be smoothly and evenly laid on. Exercise moderately, keep the animal dry, and in most cases, the first application will cure effectually. Should a second be necessary, wash off the old lead, and apply with a brush as at first. Six or eight days should intervene between the application.

#### STAGGERS IN SWINE.

To cure this disease, DeGrauchy recommends cutting a knot in the roof of the mouth till the animal bleeds liberally, and then rubbing it with powdered loam and salt, and giving it a little urine to drink. Pigs have openings on the inside of the fore legs below the knee, from which, when in health, a small discharge is kept up. A stoppage of these orifices, is supposed to be one cause of the staggers; and rubbing them open with a cob or other rough material, will usually effect a cure.

#### SCOURS IN ANIMALS.

A writer in the Maine Farmer, recommends for this disease, finely pulverized bone. We have never seen it tried, but from the nature of the substances that constitute bone, such as lime to correct too great acidity, and gelatine to smooth the irritated surfaces, it is probable its employment would be useful.

#### CROUP, OR HIVES IN CHILDREN.

Cut onions into thin slices, between and over them, put brown sugar. When the sugar is dissolved, a teaspoonful of the syrup will produce almost immediate relief. The Editor of the Farmer's Advocate, says he has known the onion used for this formidable disease, but prepared differently.—"Wrap the onion in a wet cloth, or cabbage leaf, cover it with hot embers, and roast it slightly which may be done in a few minutes; the juices then pressed out and sweetened with sugar." Prepared in either way, it is pronounced effectual.

#### SCOURS IN CALVES.

When the calf is attacked, it should be put in a warm, dry stable, and not be permitted to suck more than half the quantity of milk it is wont to do; but should be put to the cow regularly three times a day. Make a tea of equal portions of white oak, beech, dogwood, and slippery elm bark, and give small doses twice a day, and the calf will soon recover.—*Agriculturist.*

#### HORN DISTEMPER.

A "Practical Farmer," in the Boston Cultivator, while he admits that the application of spirits of turpentine is good, asserts the use of hot brimstone is still better, for the cure of the horn ail. He turns one spoonful of boiling hot into the cavity just between the horns.