

a few specimens of the diminutive Kerry cattle. Among the vegetables, the Early Rose potato occupied a prominent position.

DRAINING LARGE SWAMPS.

Those of our readers whose farms run on to large swamps, which can be drained only by the concurrent action of all their proprietors, will be interested to know what is being done on a similar swamp near New York. The swamp is a long and narrow one, and winding through it in the most tortuous course is a brook of considerable size, which, owing to its many curves, to the obstruction of trees that have fallen into it, and to a profuse growth of water-cresses, is always so sluggish that at ordinary stages of the water it runs bank-full; and after heavy rains, the whole swamp is overflowed and is kept constantly in such a condition as to be worthless even for pasture. The plan for its improvement consists chiefly in a project for straightening and deepening the course of the brook. It is estimated that by striking a bee-line from the lower to the upper end of the swamp the length of the stream will be reduced more than one-half; and it is in contemplation to make the excavation to the depth of four feet below the level of the banks, at which depth, almost throughout the whole course, the bottom of the brook will be not in muck, but in hard subsoil. In order to prevent the washing away of the banks, the bottom of the brook will be but three feet wide, the width at the surface being fourteen feet. This will give a very gradual slope, to be soddled immediately, and on which grass will grow down to the ordinary level of the water.

At the upper end of the cutting a pond of considerable size is to be made, with a sluice-way through the bottom of its dam communicating directly with the mouth of the brook. Ordinarily this pond will be full, and its overflow will pass through a curved wooden "shute" by a very easy descent to the level of the bottom of the new ditch; so that there will be no danger of the cutting away of either the bottom or the sides by the force of the water. The silt and *detritus* washed during autumn and spring freshets from the mountain regions above, will be largely deposited in the pond, and during the driest seasons of the year the gate in the sluice-way will be opened, drawing the water from the pond, and allowing the deposit to be removed. This removal will restore the capacity of the pond to the original point, and will yield a valuable fertilizer. As the work is to be undertaken by the joint action of the riparian owners, the articles of association require that no open ditch shall be cut through the banks for the draining of the

adjoining lands; but all side drains, whether they be opened or covered, will be taken into the brook through covered passages, curving towards the outlet of the ditch or down stream and delivering on a level with its bottom, so that instead of cutting away the sides or leaving rough edges against which the stream or the ditch itself could take effect, they will add to the velocity of the stream while they add to its volume, and will obviate the most serious objection to such improvements as ordinarily made.—*Agriculturist*.

CALLA ÆTHIOPICA.

The Æthiopian Lily or Calla is a great favourite with Window Gardeners. It will stand all the excessive watering and other cruel kindnesses to which plants are usually subjected in their window prisons; it is an elegant and showy plant when in flower, and even the green leaves have a refreshing look of robust health, pleasing to contemplate. The *Gardener's Monthly* for October offers some valuable suggestions in regard to the successful management of this favorite plant:—

"It is a native of the lower Nile regions and will not endure frost. It does not require great heat, however, as it will live out all winter under water in ponds, where the water is deep enough for the frost not to reach it. Many persons use the plant for aquariums, but an idea prevails that it is not healthy for fish in such water. Its great value is for winter blooming in windows and greenhouses during winter. It does best in very rich soil in a tolerably large pot—about ten inches—and must have abundance of water while growing. It likes light, but not the brightest light. About June the leaves die away, and the roots may be suffered to get nearly dry. Most people set them away under the shade of a tree or fence, letting them take their chance

WHEN WILL TOP-DRESSING PAY?

We think always, when we have any fertilizer to spread upon the mowing. Of course we must not rob the plowed fields, but every thrifty farmer can afford to do something for his meadows every year. Material for top-dressing is by no means confined to barn-yard manure. The wash of roads is very good, and this can sometimes be gathered in large quantities in the hollows. The subsoil of clay lands produces very marked effects upon gravelly meadows. Peat, taken from near the surface and weathered one winter, will sometimes double the grass crop. Ashes, the waste of factories, lime, gas-lime, sea-mud, rock-weed, kelp, sea-mosses, and eel-grass, all pay well for top-dressing. On almost all farms near cities it pays well to sell hay, and there is no objection to keeping land in meadow and selling the crop as long as one will keep it up to a production of three tons to the acre by using fertilizers. These farmers are favorably situated for purchasing fertilizers. They can generally get stable manure and night-soil on very favorable terms, and have but a short distance to carry it. With top-dressing, we have no doubt that meadows may be kept indefinitely in grass. Without it, most lands will run out in a few years, and must be plowed to make them profitable. As to the best time for applying manure, there is probably much less choice than most farmers think. Well-rotted compost can be safely put on at any time. Fresh stable manure and coarse barn-yard manure we prefer to apply in the fall. It will tell more upon the grass of next season than if spread the following spring. There is probably some loss of ammonia if green manure is applied in the summer, but we do not hesitate to apply all other manures to grass at any time when it is most convenient to cart them.—*Am. Agriculturist*.

TETOFISKY.

The new Russian apple, the 'Tetofsky,' is likely to be a great boon to the fruit growers of Minnesota, Wisconsin, and Northern Iowa. A correspondent of the *Iowa Homestead* says: "It is a great prize to us of the far Northwest. It is very early (a trifle earlier than Red Astrachan), good size, always fair, a very young bearer, and enormously productive. It is also at the very head of the list for hardiness, ranking with the Siberian crabs and Duchess of Oldenburg. In one respect, I consider myself very fortunate in having this comparatively new and rare sort in bearing in a situation so exposed as to thoroughly test its many good qualities."