

thirty days, and that the average yield of milk per day was 22½ quarts for each cow.

As we are authorized to state that Mr. Vail will sell at private sale a portion of his present stock, consisting of cows, heifers, bulls and spring calves, an opportunity is thus afforded those who wish to improve their herds by communicating to them the best strains of blood of the most celebrated herds of Short Horns in England; and affording too to those who may purchase, an opportunity of exhibiting choice stock at the State and County Fairs to be held in the ensuing fall. By reference to the premiums awarded by the U. S. State Agricultural Society for several late consecutive years, the esteem in which this stock is held may be seen.—*Communicated.*

**DIBBLE FOR TURNIPS AND MANGEL.**—A round block of wood, like the nave of a cart wheel, and mounted between two handles like a wheel-barrow. In this block, dibble points, two inches in diameter, two inches long, and convex at the point, are inserted at eighteen inches apart.

When the drills have the manure in them, and are ready to receive the seed, a man should pass down the drill with a garden rake, removing the under surface, if there are any clods or turf, but in well-pulverized soil, this will not be required. Another man then follows with the dibble, which he wheels along the top of the drill, forming clean, smooth, and equal holes. A person then follows with guano (if that is the manure applied) and drops a little guano into each hole with an iron spoon, and with the spoon, draws a little mould oh the guano. If guano is not used, the dibble points might be only an inch long. There are then three or four seeds put into each hole, and a person then follows with a hoe, drawing mould into the holes to cover the seed. The work is finished by a man drawing a light hand-roller, covering two drills at once.

By this plan much seed is saved; the only thinning required, is, to draw out the weaker plants when above ground, leaving the strongest, one in each hole. The hand now can be easily applied, to clean the ground of annual weeds. The distance between the holes, as well as the depth, can be regulated in the dibble, according to circumstances.—*Farmers' Gazette.*

**TO PRESERVE WATER IN SEA CASKS AND CISTERNS.**—Water may be preserved quite pure, either in long voyages, or in cisterns, by the addition of about 3lbs. of black oxide of manganese powdered; stir it well together, and the water will loose any bad taste it may have acquired, and will keep for an indefinite length of time.—*Christian Almanack*, 1848.

## TIMOTHY GRASS.

This plant forms the "third" in our list of the grasses ranged in the order of utility. It is the "*phleum pratense*," or the "meadow cat's-tail" of botany an arundo, or a graminetyphium, growing in moist places. "*Fleau de prés*" (French), and called "cat's-tail grass," from the resemblance of the spike to the tail of the cat.

General character:—Calyx glumæ, one flowered, with two valves nearly equal, spreading at the top, pointed or awned, compressed, oblong, parallel, corolla two valved, shorter than the calyx, awnless, concealed within the calyx, the larger valve embracing the smaller; nectary of two scales, ovate, concave; filaments capillary, longer than the calyx forked at each end, oblong, linear, prominent; germen roundish, superior; stigmas feathery; styles capillary, reflex; seed solitary, elliptic, oblong, loose, clothed with the corolla, but separating from it; stem leafy; inflorescence, spiked or very densely panicked; flowers numerous crowded.

Essential generic character:—Flowers dispersed; calyx two-valved, containing two or three flowers, with a solitary floret, equal, awned, truncated, enclosing the awnless two-valved corolla; seed, clothed with the unchanged corolla, but loose and not united.

The English Flora enumerates six species of this grass, and of these only "one" claims the notice of the farmer, which is called "meadow cat's-tail;" and very often, "Timothy grass," from the name of the gentleman who introduced it by recommendation and example.

Specific character:—Spike cylindrical, very long; calyx abrupt, fringed and awned; culms erect, from one foot to three feet in height, according to the richness of the soil; the blunted spike resembles the fox-tail, but is harder, and different in colour and in the forked calyx; leaves lanceolate, pointed rough on the upper surface; sheath striated, smooth; flowers, crowded on partial subdivided stalks; root perennial, creeping, sometimes tuberous and bulbous. The whole plant varies much in many places from local influences, and along with some other grasses it often has a leafy spike by the seeds, germinating in wet weather without falling.

This plant constitutes the best grass on the continent of North America; and in Sweden it is much cultivated, and reckoned very productive, and more agreeable to cattle than any other grass. In our country it has rather undeservedly sunk in estimation, as being harsh, late, and yielding little aftermath, and from possessing no quality in which it is supposed not to be excelled by the fox-tail grass. This last observation must have proceeded from a very limited experience; for, for general purposes, and in a variety of soils and climates, it very far exceeds the fox-tail, and also in yielding readily an abundance of sound healthy seed, while many of the seeds of fox-tail