quantity of water over the whole, put the box in a sunny window, and just as soon as the plants show their heads, begin to pluck out some of them; never let one touch the other. When they show leaves, and signs of crowding, take a small tea spoon and carefully transplant each plant two inches apart into another box, you can leave every other one in the old box. If you do this and are content with a few plants, say a dozen: plenty for a family: you will have good hardy plants: more like little trees; but, if you crowd them, you will get long spindly plants, very little good to you. If your window is favourable to growth, you might have to transplant again before you can put them out in the garden as they are sensitive to frost, and must not be put out till all danger of that is over. When they grow up each plant must be tied with rag to a strong stake, give plenty of room in the garden and you will wonder why you have not grown such fine tomatoes before.

The time of sowing seed of early annuals is also near at hand By sowing in small wooden boxes, and setting them in the kitchen windows, and planting out the middle of May, we can have blossoms several weeks in advance of the usual season. Half the pleasure we receive from flowers is derived from growing and tending them ourselves, watching their growth, development and beauty, with something of the interest that we bestow upon a lovely child.

CURING HAMS AND BEEF.

For curing hams and shoulders I have employed, for forty or more years, 16 lb. salt, 8 gals. water, 4 oz. saltpetre, 2 qts. molasses (not manufactured syrup), 1 tablespoonful soda; mix and dissolve. This will be sufficient for 250 lb. beef, or like amount of hams and shoulders. For beef, select such as will weigh over (rather than under) 100 lb. to the quarter. Cut up as may be desired (as to size of pieces,) and pack as closely as can be pressed in by hand, in regular layers, into a clean barrel. When all are so packed, place above same four sticks, crossed, and lay upon them a clean stone of sufficient weight to retain meat below surface of brine. It is ready to commence using as soon as the little reserved for fresh is consumed.

For hams and shoulders, after properly trimming, pack in similar manner, and use the same formula for brine. After thirty days, remove from brine and hang for smoking.

N. A. WHITMORE.

Marietta, Geo.

Country Gentleman.

Fruit and Garden.

RAISING ONION SETS.

JOSEPH HARRIS.

There exists a wide difference of opinion in regard to the quantity of seed needed per acre for raising onion-sets. It is a common mistake not to sow enough. The old rule was thirty pounds per acre. In my experience I soon found that this was not enough and have been increasing the quantity every year and have never had them too thick. With row fifteen inches apart, a single row 34,848 feet or 418,176 inches in length would be an acre, There are about 128,000 seeds in one pound of onion seed. If we sow one hundred pounds per acre there would be thirty seeds to each inch of row. On the Morton farm we aim to get the drill mark as narrow as possible for the reason that the hoe can do more of the weeding. It is not easy, however to deposit the seed so that it will not spread out over an inch in width in the row. As a matter of fact, however we have no drill that will drop thirty onion seeds in an inch. The holes of the drill are not long enough, and if they were the seed would swiftly run out without any regard to the speed of the drill or whether it was in motion at all. When we use a drill, therefore, we find it necessary to go back and forth in the same drill two or three times. The result is that even with the most careful guiding, it is impossible to keep the drill from deviating more or less from the first mark and by the time the necessary amount is deposited, the drill mark is practically, two or three inches wide. We have frequently found considerable difficulty in getting the thick-sown onion seed to germinate. Unless the soil is very moist, such a quantity of seed close together, in a narrow row, cannot get water enough from the surrounding soil to swell the seed and cause germination. For this reason we have practised soaking the seed for forty eight hours before sowing. In fact, we frequently keep it moist till it germinates, and then sow it by hand.

It is very important to get onions started early, and this method of soaking and germinating the seed often makes a difference of two or three weeks. Sometimes the sprouts have been half an inch long before sowing, and in a few days the rows of green onions could be seen the whole length of the field. The great difficulty in growing onion sets is the tendency to produce scallions. Poor seed is a frequent cause of this. It requires so much seed per acre for sets that very naturally growers want the cheapest seed they can get, but unless they get well-bred seed they cannot grow good sets. Another cause of scallions is late sowing followed by dry weather which checks the growth of the plants before they have commenced to bulb. The advantage of early sowing is due probably to the cool moist weather giving the onions a chance to strike their roots deep into the soil before they form too much top growth. With a rapid top growth and comparatively shallow roots a drouth checks the growth of the onions before they begin to bulb, and then when rains come and a new growth is started we will get few nice bulbs and many scallions. Another thing that causes scallions is poor land. Great benefit is derived from a liberal dressing of superphosphate and nitrate of soda sown early in the spring, say 500 pounds of each per acre. A heavy dressing of manure will not answer the purpose, as the plant food is not available early enough in the spring, and we specially want to avoid late growth. If we do not get the greater part of the growth before the middle of July we rarely get good onion sets. The superphosphate and nitrate furnish soluble food for the plants as soon as they commence to grow and push them forward rapidly. The onions are so thick on the land that when growth is fairly started they have difficulty in getting sufficient water and need a very rich sap of the soil—in other words the water that is in the soil should be very rich in phosphates and nitrates. Onions for sets must be kept scrupulously free from weeds. The hoe will do most of the work, but weeds in the rows must be pulled out as soon as they can be seen. Hoe lightly, just deep enough to cut the weeds and form a mulch of loose earth on the surface to check evaporation and thus conserve moisture.

Am. Agriculturist

A PRIZE-WINNING AYRSHIRE HERD.

The property of Messrs. James Drummond & Sons, of Petite Cote, Montreal, P. Q. (*v. p. 43, March No.*)

THE HISTORY OF THE ROSE.

CLASSIFICATION AND VARIETIES.

Roses are divided into certain classes agreeing with certain peculiarities and habits of growth.

This it is essential for the cultivator to well understand because almost every class requires a different mode of culture.

First is the *Moss-rose*. The old fashioned Moss-rose, or Provence Moss has been a favourite from time immemorial and a Moss-rose bud encased in its delicate covering and peeping out of its calyx to win as it were the admiration of the beholder is a gem of the rarest beauty, perhaps unequalled in the floral world. The presentation of a Moss-rose bud is the first declaration of love, so it is easy to conceive that it is accompanied with tender memories by many.

There are quite a number of Moss-roses, some with pure white flowers, as the "White Bath-moss" which always was very scarce, and the Countess de Murinais. Some are deep crimson and purple in colour, and a few which are perpetual bloomers but none that can equal the original in a peculiar charm which it possesses.

Then we have the old English Cabbage rose, a flower by no means to be despised even at the present day. Its growth is vigorous, leaves of a delicious freshness, bright green, and flowers not quite so large as a cabbage but quite as solid at the heart, rose colour and full of fragrance.

The York and Lancaster is another old English rose full of historical interest, as regards the great civil war which raged between the two great houses of York and Lancaster, the latter represented by the red rose and the other by the white, in as much as it has the peculiarity of bearing both red and white flowers on the same plant. Yet another old English species is the Garden or Hortense rose; it may be seen in every cottage garden, its foliage is pale green, flowers white with a pink centre but alas it has no fragrance and is not held in much esteem.

There are also two diminutive roses, "Spongs" and "Demeant," they are