Ground may be too poor even for navy beans, but, if manured with rank, fresh manure, it is worse than if poor. A sharp, dry soil of medium fertility is most suitable for the bean—one on which its growth will be quick and its ripening early.

The rule for the time of planting corn holds good for bean planting. Early planting is best, but not so early as to run the risk of being killed by June frost, nor so late as to be in danger of injury from an early autumn frost. The ground being in good tilth at the time of planting, as it may be then without much unusual labor, the growth will be rapid.

There are several varieties of the white bean, such as is generally grown in garden and field. The small white bean, known to many as the navy bean, is considered the hardiest and earliest in ripening. It is a good bearer, and in good demand for soup and for baking. The larger variety, so well known as the Marrowfat, is preferred by many for all cooking purposes. With us it is an especial favorite. It bears well. Its handsome appearance, when well saved, ensures a ready sale at good prices, and it is very tender and well-flavored. There are different varieties of small white, as well as of the larger white beans. Among the latter another favorite is the large white Kidney. Of the smaller beans the Cockstone is preferred in some localities; it is one of the smallest white dwarf varieties. It is said to be the best for cooking with pork. We omit colored beans of every variety from any list of those suited for field culture. Some of them we find excellent for garden crops, and for use when green, but, when ripe, not at all comparable to the white.

The quantity of seed for an acre is from four to eight pecks—four of the small, and six or eight of the larger varieties; the produce—30 to 40 bushels, in some instances more. They may be planted by hand, but if the quantity be large, it is better to use the hand-drill, which will open the drills, drop, cover and roll very expeditiously. When the beans are four or five inches high, earth them up carefully with a narrow-breasted plow, and when the buds appear, earth a second time. Keep the ground free from weeds. Harvest them when they have assumed a light yellow color; pull them up and throw in heaps till dried. Guard against rain.

It is well that a first experiment in bean culture be on a small scale. If properly conducted, it will be found profitable, paying better on a light soil than many other crops, and leaving the ground in good tilth for succeeding crops.

UTILIZATION OF THE SUDS FROM THE WASHING OF WOOL.—In nothing has the advance of practical science been more clearly evinced than in the extent to which substances formerly wasted and lost are now reclaimed and made to constitute an important element in the profits of the manufacturer. One of these applications consists in the recovery of the soap-suds from the washings of wool in woollen factories. These were formerly allowed to run down the sewers and into the streams, to the great pollution of the latter; but in Bradford, in England, they are now run from the washing-bowls into vats, and there treated with sulphuric acid. The fats rise to the surface in a mass of grease a foot or more in thickness, which is carefully collected and treated in various ways, mostly by distillation. The products are grease, used for lubricating the cogs of driving-wheels in the mills; oleic acid, which is worth about $100 per ton, and used at a substitute for olive oil; stearin, worth $400 per ton, etc. It is said that some large mill-owners are now paid from $2,500 to $5,000 a year for these suds, which a few years ago were allowed to run to waste.

THE importation of butter into England last year in quantity was 1,467,183 cwt., and in value 8,468,-299*l.*, and in the preceding year, 1,620,676 cwt., and 9,053,157*l.* In the same period the importation of poultry and game, alive and dead, was 328,034*l.*, which was an increase on 1874, when the amount was 171,137*l.*

NOTES ON THE GARDEN AND FARM.

THE *Journal of Horticulture*, London (Eng.), contains an excellent paper on grape growing, as exemplified by Mr. Dickson, of Arkleton. England, one of the prize-takers for grapes at the recent great show in Edinburgh. It will be remembered that his best bunch was one of the largest ever seen, so that any information relating to his methods of culture cannot be devoid of interest. One of the main elements of success with this particular fruit is certainly the formation of the borders, and Mr. D. has shown such excellent judgment in selecting the ingredients for his that we feel assured vine-growers in this country need not fear to follow his example. The border rests upon a natural bed of gravel, which is a great point gained, namely, perfect drainage. The soil was excavated 3½ feet deep at the back, sloping to 2½ feet at the front. The compost for filling in was composed as follows: To every 12 cart loads of fibrous loam add 2 cart loads of old lime rubbish, 1 of horse droppings, 1 of charcoal and 5 cwt. of inch bones. These ingredients were thrown in fresh, without previously rotting in a compost heap, and the border has been annually enriched by three doses of liquid manure before the fruit begins to color. In addition to this, the border is annually dressed with about three inches of turfy loam and inch bones, which tend to keep the roots near the surface—one of the greatest secrets of success.

FINE YOUNG CATTLE.—We had much pleasure in weighing some well bred steers lately:—First, a pair of three year old Devons owned by Mr. Thos. Dunlap, of Lower Village. They are after the famous Devon Bull, Captain Jinks, lately owned by the Onslow Agricultural Society. One of these splendid animals weighed 1,580 pounds and the other 60 pounds less; making the pair 3,100 pounds, the weight of a good pair of fat oxen this time of year. We doubt very much whether the Dominion can turn out six pair of grade Devons, of the same age, heavier and better matched. Then a pair of grade Durhams, same age, property of Mr. Richard Christie, Salmon River. They are after the Onslow Society's grade Durham Bull, Sir Henry. One of these fine animals weighed 1,400 pounds, and the other 1,300 pounds. They are a very neat pair of cattle. The next pair—also three years old—after Captain Jinks, belonging to Mr. Israel Longworth, Truro. One weighed 1,366 pounds and the other 1,314 pounds. They are thrifty looking animals. We also weighed for Mr. Longworth a pair of yearling steers after the Onslow Society's thorough bred Durham bull, Oliver Twist. These likely animals turned the scales at 1,536 pounds. They bid fair to make a pair of cattle some day. We would here call the attention of farmers to the sale of imported stock which took place in Halifax on Tuesday, November 10th; and, to show how much good does and will accrue to the province from the importing of good stock, it is only necessary to refer to the foregoing article and other statistics which we have from time to time given in reference to stock in this country itself.—*Sun, Truro, Ort*

HUNGARIAN GRASS FOR COWS.—The following is the testimony of Dr. Loring respecting Hungarian grass: I believe I can make more milk with this grass, cut and mixed with cornmeal and shorts, than I can with the best timothy hay, cut and mixed in the same manner. And when you remember that you can raise on ordinary land, by sowing the seed of Hungarian grass late in June, from two and a half to three and a half tons of good fodder to the acre, and that this crop can be sown after we have ascertained whether we are to have a good crop of hay or not, you will see the value of this grass. I have such a high opinion of it that, on my own farm this year and last, I raised from seventy-five to one hundred tons of it for the purpose of feeding to my milch cows during the winter.

BARLEY.—The *Western Farm Journal*, in a leading article on the culture of barley, says: There is perhaps no grain cultivated in the United States that pays better for care bestowed upon it, nor one that pays more indifferently for common culture than barley. It may also be said with perfect truth—there are none of our cereals the true condition of culture of which so little is known by the average farmer. In the West we have comparatively little soil capable of producing the finest qualities of barley, even if our seasons were just suited to it, which they are not.

ORCHARD GRASS.—Mr. Harvey Smith, of Montgomery county, has been treating a piece of ground of two acres for the last three years with eminent success. On the first of May he sowed two bushels of the grass seed and eight quarts of clover per acre. The land was in the finest possible condition, and black—I may say jet black—composed largely of muck or vegetable matter. The season was dry, and it was feared there would be a failure; but the grass appeared, grew at once, and by the middle of July was cut, the crop not yet in blossom. The two acres cut three tons of the finest possible (dried) feed. The clover had merely obtained a footing, and contributed nothing to the crop, the grass taking the lead of the clover. The growth that followed was very rapid, and in a short time fit to cut again; but it was desirable to see what effect it would have as pasture, so the stock was turned in and luxuriated and thrived upon it. To-day, the last of October, it still affords good feed, the clover during the season being kept back, yet showing between the small tufts of grass.—*Cor. Co. Gent.*

The warm weather in December and January swelled the fruit buds in Lake county, Ohio, so that the subsequent cold has killed the peaches generally throughout the State, and in many parts the sweet cherry also. Pears and plumbs are also hurt in some localities, but I think not seriously. Apples will be likely to yield a heavy crop, owing to the trees having a rest last year. Grapes and small fruits generally promise well, at least in this northern section of the State. Wheat looks well, and our farm stock came through the winter in good order. The hay and grain are not used up as close as usual, owing to the large amount of potatoes used as feed.

SUPERPHOSPHATE.—From a contribution to the *Farmer*, Baltimore, Md., we take the following: There are two kinds of phosphates, the one called mineral and the other bone phosphate. Chemists say they are similar in value and properties, but the bone phosphate is generally preferred. About 40 years ago the average yield in wheat of the soils of England had been run down to about 12 bushels per acre. They found that the soils had become in a great measure exhausted of the phosphates. Since that time they have ransacked the world for bones, and they have restored the fertility of their soils, and run up their average yield of wheat from 12 to 28½ bushels per acre.

HEREFORDS FOR BEEF.—A writer in the *Ohio Farmer* says: As a beef producing breed, the Herefords are second to no other. They produce more beef, and of a better quality for the food consumed, than any other breed. To those who are breeding native cattle or grades of any breed, I would say—use a thoroughbred Hereford bull, if the object is beef. They also excel all other breeds for early maturity, often selling at one year old for choice Christmas beef.

PRINCE EDWARD ISLAND.—We are glad to hear of the progress this island—the garden of the St. Lawrence—is making in industrial pursuits. Agriculture is greatly benefited by extensive improvements in process in the water channels. Mud-diggers are at work in all directions, and the rich deposit taken from the channels is utilized by supplying the drain made by farming upon the fine soil of the island.

THE AVERAGE OF CEREALS IN THE WEST.—The *Prairie Farmer* says: The average of all the cereals will far exceed that of any previous year in the history of the West; and with careful tillage and good seed, the farmer may safely trust to nature to bring forth a harvest that shall render the Centennial year a memorable one in the history of the agriculture of America.

EXERCISE FOR HORSES.—With colts and valuable horses, exercise is necessary, for without exercise, they are not improving, but really deteriorating. Horses should not be kept in stalls two days at a time. Turn them out where there is pure air and sunlight, and the natural soil for their hoofs to stand upon.

It is reported that in the township of Knoxville, Iowa, four thousand hogs, having an average weight of one hundred pounds, have died this season of the epidemic known as hog cholera. The entire loss in Marion county is estimated at current prices to be $128,000. What is true of Marion is true of nearly every county in the State.