

The following quotations are for tight barrels :—

Baldwins, Boston	14/ to 17/
" Maine	16/ " 17/6
" New York	15/ " 16/6
" Canadian	16/ " 19/
Greenings	13/ " 16/6
Black Oxford	14/ " 15/
Newtowns	20/ " 25/
Rox Russets	12/ " 15/
Golden	17/ " 19/
" Canadian	22/ " 26/
N. Spy	13/ " 18/
Kings	20/ " 23/
Slack packed	12/ to 14/6
Slack and wet	9/ " 12/6

Arrivals for the week are as follows :—

Wyoming, @ New York	812
Britannic, " "	2215
Sardinian, " Portland	3983
Norseman, " Boston	4850
Virginian, " "	2439
Samaria, " "	1414
Istrian, " "	2146

Total arrivals for week. 17,869 barrels.  
to date. 409,070 "

14th February, 1884.

We are unable to report any improvement in prices this week, as the condition of arrivals has, with few exceptions, been anything but satisfactory, most of the Apples from Boston and New York having been touched with frost, which has caused our dealers to operate with extreme caution, and many of them to withhold buying altogether, until the condition of the fruit shows an improvement.

Maine Apples have mostly landed in good condition, and as prime fruit is wanted, prices for good stock from Portland has not varied materially.

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Slack packed	12/ to 14/9
Slack and wet	9/ " 12/

Arrivals for the week are as follows :—

City of Chicago, @ New York	288
Republic	1251
Parisian, " Portland	2980
Missouri, " Boston	2823
Roman, " "	5386
Montreal, " Portland	3210
Indiana, " Philadelphia	58

Total arrivals for week. 18,996 barrels.  
to date. 428,066 "

At Auction Sale of Keeling & Hunt, London, February 6th, 1885, were sold :  
Nova Scotian Apples, ex York City :—

Vandevere	16/6
Greenings	14/

We are pleased to see that the matter of Agricultural Education is exciting a good deal of interest. There are so many ways in which useful Agricultural Education can be given, that it is well to think of them. One of the most successful methods in vogue in Britain is that of the Agricultural Examinations of the Royal Agricultural Society of England, and of the corresponding Society of Scotland. These Examinations for Certificates of Proficiency, and certain prizes, are open to all. The training to enable young men to go up to them may be obtained by reading, by attendance at Mechanics Institutions, or Schools, or Colleges, or in any other way. The following specimens of a few of the answers given at one of these examinations will indicate the nature of the preparation, and the utility of the system :

QUESTION—"What are the circumstances or characteristics on which the fertility of a soil depends; and what processes, annual or occasional, does the farmer adopt for its maintenance?"

ANSWERS BY CANDIDATES :

I.

"The first requisite of a fertile soil is that it contain every element of plant food. It is necessary that it should contain every one, as a crop will not grow in a soil which, though it may contain a superabundance of every other element, yet lacks one. Since crops rob the soil of these elements, the farmer, if he wants to keep up the fertility of his land, must return them in some shape or other. He does this in the form of manures. The mineral matters that must be returned to soils in this way are:—Potash, soda, magnesia, sulphur (teroxide), phosphorus (pentoxide), lime, silica, chlorine, ferric oxide, and alumina. Nitrogen and carbon (dioxide) must also be returned.—The second requisite is that the soil contain these elements in a soluble state—that is, in a state in which soils can assimilate them. It is here that the use of the bare fallow comes in. Land is fr eed not so much to allow it to increase its store of mineral matter, as to give it time to allow the influences of the atmosphere and rain to act on the insoluble mineral matter, making it soluble, at the same time to allow it to assimilate nitrogen and carbon dioxide from the air. The bare fallow at the present time is restricted to wet and dirty pieces of land which are too wet to allow of much autumn cultivation,—the cultivation of root and forage crops, which are fed on the land by sheep, being used instead. Another plan to reduce the elements to a state fit for plant-food is in green-crop manuring, in which such crops as mustard, vetches, lupines, small turnips, &c., were allowed to grow, and were then ploughed in,

when they not only restored to the soil in a soluble form the mineral matters taken from it during growth, but also increased its store of nitrogen. This practice has gone out, the crops being fed off on the land instead of ploughed in. Lime is often applied to land to reduce the elements to a state fit for plant-food.—A third requisite is that nothing noxious to plant-growth must be in a soil. This can only be obtained by high cultivation, and the application of good manures, including lime.—The next requisite is freedom from weeds. This is obtained only by good cultivation—hoeing land well when under crops (in the spring for wheat and other cereals, about June to August for roots.) When the crop is taken off the land in August, the stubbles ought to be scarified to prevent weeds from growing. Paring and burning is also done with an idea to stop weeds; this process consists of raking the weeds together and burning them in heaps, and then spreading the ashes.—The fifth, and one of the most important requisites of a fertile soil is that its physical nature should be good. To obtain this, the farmer employs the ordinary annual farm operations—viz, ploughing, grubbing, cultivating, harrowing, rolling, &c. Of these nothing more need be said. The occasional means he uses are :—

(a) *Drainage* is perhaps the most important operation that is used for land. Its advantages, briefly put, are :—(1.) Opening up the land to the influence of the atmosphere, thereby allowing of the oxidation of noxious salts into salts good for plant growth. (2.) Allowing all the rainfall to pass through the land, taking with it warmth, nitric acid, ammonia, and carbon dioxide. (3.) Preventing stagnation of water on the surface, thereby lowering the temperature by surface evaporation, radiation, &c. (4.) Allowing more time for tillage operations, since the land does not get wet so soon in winter. (5.) By making land that is wet quickly dry, it promotes alternate contraction and expansion and so betters the tilth.—(b) *Mixing*.—A very good plan on light lands is to mix with it a large quantity of clay to give it a body. Chalk and marl are also used both to give body to light lands and to lighten heavy lands.—(c) *Clay burning*.—On heavy lands, in order to lighten them, burnt clay is spread over the land.—(d.) *Warping*.—On poor soils near rivers of slow current, the water of the river is often allowed to flow over them by means of canals, sluices, &c., and to deposit the mud with which it is charged, and so a rich alluvial deposit of some 1 ft. or 18 in. deep is obtained.—(e) *Subsoil ploughing*.—When a light soil lies on a clay subsoil, or *vice versa*, it is a good plan to