

Never lay drains near trees; particularly Ash or Elm, for fear the roots should choke the pipes.

Keep your ditches clear, and the mouth of the main open—your drains will, then, last a lifetime.

The narrower the drain, the less earth to be moved.

Divide the earth thrown out between both sides of the drain—less danger of caving-in from pressure.

Water will enter clay-pipes through the pores, as well as between the joints—proof: soak one in water for 24 hours; it will weigh more than when dry.

Air follows water as it sinks through to the drains: in spring, the air is warmer than the subsoil: evaporation produces cold: drainage prevents evaporation; therefore, drainage increases temperature, and supplies fresh air to the subsoil.

Drainage by unskilled workman, with improper tools, will cost from 50 0/0 to 100 0/0 more than it ought to cost.

"Drainage is the most important, the most judicious, the most remunerative, of all land improvements." Lord Stair.

If the main has to receive water from both sides, the small drains should never enter it opposite each other—they should meet the main at an acute angle; thus avoiding, blocking back the water and washing down the sediment, which would prefer subsiding and choking the pipes.

Drain one acre perfectly rather than two partially.

Plough as deeply as possible two years *after* drainage.

Clays once dried and pulverised will be loath to cohere again—a brick won't, if broken.

White Grapes.

The Fruit Grower's Association of Abbotsford had upon their Exhibition Tables 27 varieties of White Grapes alone. Among them are the most refined and most delicate flavored of our outdoor grapes; yet many of them are also the most delicate in constitution, and such as are successful only in certain localities, and in the hands of careful cultivators.

At the last meeting of the American Pomological Society, the great international fruit society, the most marked advance in any fruit was that in the white grape of native parentage: that is white grapes of which the leaf is large and thick, and woolly on the under side, the pure off spring of the *Labrusca* or Fox grapes species. It was then felt that white grapes could be grown throughout the country generally.

Our descriptions may seem tediously minute. We could not be more brief and say what was needed.

This is in fact a descriptive catalogue of our best white Grapes. It is as unreadable as a page of dictionary. A page of dictionary, however, may be interesting to a philologist, and in the same way, we hope that there are those, who, while wading through this, will lighten the task by propagating thoughts about good grapes which may bear fruit in the near future.

NIAGARA—This is a grape of great promise. It is a seedling of Concord and a small sweet grape but little known named the *Cassidy*. We are told by disinterested parties, who have seen the vine, that it is large and leathery in leaf, and very vigorous in growth, and that it ripens its wood well; in fact that the vine is equal to its parent the Concord, than which we have no better.

The bunch is of good size, and quite compact, and the berry holds well to the bunch, which is important. The quality has been variously stated, and sometimes over-rated. Mr. J. J. Thomas states that in quality, "it appears to be intermediate between the Hartford and Concord on the one hand, and the Croton and Duchess on the other." This opinion coincides exactly with our own. The skin is tough,

the pulp soft. It is sweet and juicy, and of good flavor, with a little of that peculiar muskiness or foxiness, which shows its native origin. We are told by a friend who has more than one year compared the growing vines side by side with Hartford, that it is eatable rather earlier, and ripens with that early variety. Hence its great promise of usefulness to us in the North. Mr. C. L. Hoag, of Lockport, N. Y., owns this variety. It has not yet been put upon the market, but we hope that when it is, it will have an immediate trial in different parts of this province.

POCKLINGTON is a seedling of Concord grown by Mr. John Pocklington, Sandy Hill, Washington Co., N. Y. It was sent by Stone and Wellington, of Toronto, who have control of it. The vine is said by independent sources to be strong in growth, and to have very large leaves of heavy texture. The leaves of the young vines we have seen are thick and leathery, and show its good parentage in this respect.

In bunch it is large, or very large; in berry large, round, and a pale yellow. It holds pretty well to the bunch, but not as well as Niagara. The skin is thin, with slight pulp; pulp tough, but not acid. In flavor sweet and quite luscious, with slight muskiness or foxiness. It is said that when fully ripe, the pulp disappears, and it becomes sweet to the very seeds. In quality it is stated by Messrs. Stone and Wellington to be "fully equal to Concord at its best." As we tasted it upon our Exhibition tables it was superior to any Concord we have grown here. Superior to that sent to the Montreal Market from Ontario. Ontario Pocklington we may expect to be fully equal to Ontario Concord and Quebec-grown Pocklington equal to our Quebec Concord. It is a fine grape but should be grown only where Concord has proved a success.

PRENTISS.—This fine grape originated with Mr. J. W. Prentiss, of Pultney, Steuben Co., N. Y. About 15 years ago, Mr. Prentiss sowed some seed of the *Isabella*, from which came a number of seedlings of which this was one. We are told by a friend that the vine is as healthy, and the leaf as thick as its parent the *Isabella*. It is, as is well known, a very heavy bearer, in fact, the bunches need to be thinned somewhat as it inclines to over bear.

The bunch and berry are of good size, in color a whitish, or yellowish, green. In flavor, as has been said, very like *Rebecca*, and without any of that muskiness or foxiness so common in the native grapes. It ripens with the Concord, but would bear being picked a little before ripe better than the Concord. We see in the October number of the *Horticulturist*, that interesting monthly, which is sent by the Fruit Grower's Association of Ontario to all its members, that this grape has been exhibited at the meeting of the Western New York Hort. Soc. on 22nd Jan., in perfect condition, which speaks well for its keeping qualities. It appears to us, too, to be a grape that will ship well.

Mr. T. S. Hubbard Fredonia, N. Y., owns this vine; and has this fall, for the first time, offered it for sale. It ripens, as we said, with the Concord, and we hope it will be tried by those whose gardens have proved the Concord to be a fairly-sure ripener.

DUCHESS is a delicious grape. It was sent by its originator, Mr. A. J. Caywood, Marlborough, Ulster Co., N. Y., and must be mentioned here, although by some delay in transit, it did not arrive until after our Exhibition. A cut and also some notes on this grape appeared in the June number of this Journal, and are mainly correct, except as to time of ripening. It is the offspring of a white seedling of the Concord crossed with Delaware.

The bunch is long, and shouldered on one side, the berry medium only. In color greenish at first, and when fully ripe a golden amber. The skin is thin, the flesh firm, and fleshy