

side of a huge mountain. Such ranches are frequently not visible from the level of the lakes which form one of the chief lines of communication.

#### CLEARING AND PLANTING THE RANCH.

The newcomer, having finally selected his location and cleared a portion of this ground, must next consider what to plant. Several plans are adopted, and each has its own advantages.

One practice is to plant apples, pears and cherries at twenty-five-foot distances, making seventy trees to the acre, and in between to sow clover, in order to prepare the soil well for small fruits and vegetables. The clover yield the first year is not worth considering, and it is left to itself to come up in the second year, when two or three tons per acre are taken off, the clover plants plowed in, and the ground, after being well worked, is now ready for the paying crops.

More frequently, because most men like or have to get some return as quickly as possible, the order is to clear, break and crop to vegetables or strawberries right off. These crops, of course, are planted between the orchard trees, as in the alternate plan above.

Having then arrived at the stage of putting in the strawberries, the subsequent treatment is to be considered. Most go on cropping the plants as long as possible, give one change to any root crop or garden stuff, and then resume with strawberries. But a few advocate the plan of Kellogg, the American strawberry-grower, who lays out his plants, say in 1906, takes a crop off in 1907, and then either scythes them down close to the ground or covers them with a dry mulch and burns them off. This drastic treatment is said to produce new growth of roots and enable the plant to make up for the waste of tissue due to such early cropping as the first year, and to yield a fine crop again in 1908. Similar treatment in 1909 is followed in 1910 by plowing under and a rotation for one year.

The Kellogg plan, which appears to answer well on the American's ranch, has not yet been thoroughly tested in British Columbia (so far as we can discover), so that we cannot say whether it would be equally suitable here.

#### SELECTING KINDS AND VARIETIES.

Now as to selection of species. Some localities will grow good grapes, some peaches, and some cherries. All lands that can be farmed at all will grow apples, plums and pears. It is for the individual to make careful inquiry and to get around to his neighbors (who are generally perfectly willing to help the newcomer with sound advice born of practical experience), and discover which of these three first seem most likely to suit his particular plot. The suitability will depend upon soil, aspect, moisture and altitude.

Having decided to grow one of the three first-named species, in addition to apples, plums and pears, the next point for consideration is the particular varieties of each. Here it is well to warn the intending rancher against the very common failing of purchasing a number of varieties from the first stock salesman that happens along. By so doing, many valuable square yards are cumbered with trees which, whilst they may yield fruit, are yet not the best commercially, and a large number of little lots will be more difficult to market than a few decent-sized consignments. By all means, if space allows, get one or two trees each of a few varieties which you cannot discover to have been already tried and found wanting by your neighbors, but let your chief space and your chief energies be concentrated on not more than six varieties of apples, three of pears and two of plums, and two of anything else. Some men consider even six kinds of apples twice as many as is necessary. Of the six, let one be an early variety like Red Astrachan, two fall apples like the Wealthy or Gravenstein, and three winter kinds, such as Cox Orange Pippin, Yellow Newton Pippin, McIntosh Red, Ribston Pippin, Grimes Golden Pippin, or Northern Spy.

In pears, the Flemish Beauty, Louise Bonne and Clapp's Favorite appear most in vogue, but the Bartlett is good also.

In plums, the Bradshaw, Burbank's Sugar, and Peach, seem a safe assortment.

In peaches, may be suggested the Early Crawford, Crosby, and Greensborough.

Campbell's Early grapes and Moore's Diamond were about the only winners at Nelson, but they can scarcely be regarded yet as a reliable breadwinner.

Crab-apples do well. The Transcendent and Hyslop are safest.

Magoon strawberries and Cuthbert raspberries are looked upon as the best for shipping over long distances.

#### THE FINANCIAL RETURNS IN THE KOOTENAY.

The financial end of the business is ultimately the object of most who take up land in these districts, and we have endeavored to obtain a fair estimate of the average yield of ranches in the Kootenay (others will be given later), and before

proceeding further, let it be thoroughly understood that these figures are based upon what has been done and is being done here now, and may be accepted by a proposed incomer as his prospects in normal seasons, when the trees are at maturity, providing he chooses reasonably good land and varieties, has sense enough to profit from the experience of his neighbors, and to use his own head.

Apples may be considered to yield \$350 to \$400 per acre; pears \$400 to \$500 per acre; plums \$450 to \$550 per acre; peaches \$500 to \$600 per acre; cherries \$600 to \$700 per acre; strawberries \$500 to \$600 per acre; potatoes, as much as anywhere else. These figures are arrived at after consulting numerous growers of from two to twelve years' experience. Individual cases of \$30 worth of cherries off one tree, \$1,000 worth of strawberries off one acre, and so on, have been known, but are still exceptional.

Apples are the staple, being safest, easiest to grow, and easiest to handle and pack; and, of apples, let the larger part be winter varieties. Pears are next, and cherries, plums and peaches follow in the order named.

One of the chief drawbacks about cherries—and still more does this apply to strawberries—is the difficulty of picking, packing and marketing quickly any large quantities, for labor is scarce and dear, and the rancher must depend mainly upon his individual efforts, a Chinaman being employed to assist on some ranches. As on the prairies, the man with a large family at the working age, has a great advantage over the lone bachelor, but there is this additional consideration, that the picking and packing of fruit is much more suitable to the women folk than laboring amongst hay in open field crops.

Strawberries are generally regarded as the "stop gap" for newcomers during the years until the young trees are in fruit. The happy possessor of a full-bearing ranch does not bother his head with these and similar crops that require such continuous hard work. Tomatoes can hardly be reckoned among the commercially successful crops of the district, since more often than not they fail to ripen satisfactorily. Tomatoes are, however, grown, and some fine results are obtained from time to time, but, commercially speaking, they are not regarded with favor. Garden stuffs will grow prolifically, but must be looked upon in the light of "stop gaps" only, and the Chinamen have this trade pretty well to themselves, peddling round with small carts from house to house.

Grapes do well in places, but only in places.

[Note.—Correspondence is invited from ranchers who can give us actual results obtained in dollars and cents over a period of years, and in the subjects of varieties, insect troubles and their treatment.—Editor.]

#### GOOD PRICES FOR VEGETABLE CROPS.

In spite of the lateness of spring and dry weather during summer, the vegetable-growers of the Province have had a satisfactory season, report the crop correspondents of the Ontario Vegetable-growers' Association. On the whole, prices have been good. Rains in early fall caused rapid growth, although most crops matured later than usual. To offset the unfavorable weather conditions early in the season, the gardeners have been favored with excellent weather for harvesting. The outlook for prices during late fall and winter is good. With potatoes bringing fairly high prices, and high prices in some localities, all kinds of vegetables should sell well.

In many localities, potatoes are turning out better than was expected, but the yield is only average. They are more uniform in size than usual, and the quality

is good. Garden roots, such as beets, carrots, parsnips and turnips, have yielded well, but, generally speaking, they will be scarce on account of the demand. The onion crop has not been much, except in the Ottawa district. Many growers complain of a large proportion of "thick-necks" or "scallions." It is probable that the marketable onions will not be hurried on to the market; a large percentage of them will be kept over winter. Celery has yielded a good crop, but the quality is not quite up to the standard. Lettuce and radish is fairly plentiful. Salsify, where grown, is plentiful and extra fine in quality. Late cabbage and cauliflower have yielded well, and are of fair quality.

#### BRIGHT PROSPECTS FOR APPLES.

John B. Jackson, Canadian Commercial Agent at Leeds, England, writes that later inquiries into fruit circles confirm his previous reports that there will be little apple competition from Belgium, Holland and Germany, while the English crop is anything but good. The prospect is, therefore, exceedingly bright for Canadian apples, on which the English dealers are relying, and it rests with Canadian shippers to make the most of their opportunities.

The Ontario Horticultural Association will hold a two-day convention Nov. 14th and 15th, during the Horticultural Exhibition in Toronto, with an excellent programme dealing with various phases of floriculture.

## POULTRY.

### POULTRY HOUSES.

OLDER AND NEWER STYLES—IMPROVEMENT ON OLD PATTERNS—WHAT HAS LED TO POULTRY-HOUSE DEVELOPMENT—A RETROSPECT.

By A. G. Gilbert, Manager Poultry Dept., Experimental Farm, Ottawa.

To be reminiscent is human, but all humans are not inclined to be reminiscent. To properly treat this subject of poultry houses, we must go back—for a moment or two—to some years past. Twenty-five years ago the writer and one or two others got eggs, it is true, in winter, but from fowls which had opportunity to enjoy unlimited run in spring, as soon as weather conditions permitted. The poultry house was primitive in construction. The idea was to keep the fowls warm at any cost, and feed them well, if winter eggs were desired. If early spring eggs did not hatch well, it was considered only a question of a short time when they would become all right—which they did, because the hens were running out meanwhile. At that time all was amateur. There was no attempt—indeed, no opportunity—to discover reasons for this or that. Poultry-keeping was little indulged in, less understood. New-laid eggs were a comparatively unknown quantity, and a fleshy, plump Rock or Wyandotte chicken was seldom seen on the market. I remember well meeting one autumn morning at that period, an elderly resident with eight chickens tied in a bunch and held by their legs. "Do you know," he said, "I paid only a dollar for the lot on the market." But such chickens!

#### DEVELOPMENT OF POULTRY-KEEPING.

But poultry-keeping gradually became more good.

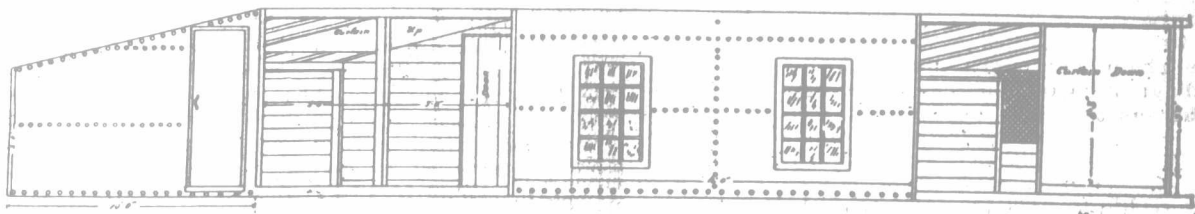


Fig. 1.—Laying House. Alternating Scratching Shed.

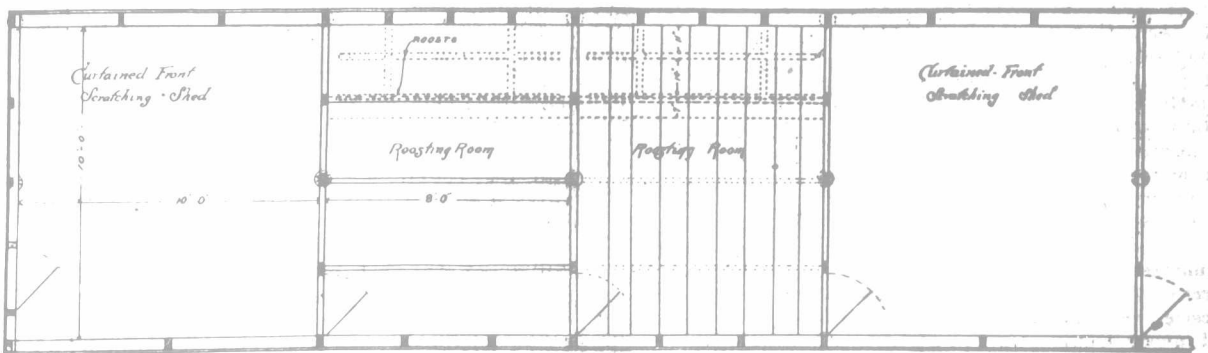


Fig. 2.—Laying House, Floor Plan.