

by some, that town tradesmen take up vacant land and farm it on their own account. As a solution for the immediately pressing problems of unemployment and diminished food production, that plan is not practicable. Everything is against it. Lack of experience and lack of capital would be fatal to any such enterprise. Of course, a man out of work may till a few acres near a town in the meantime until industrial prospects clear up. But that would not be farming. It would not help either to solve the rural problem or to maintain the food supply. It is not cabbages and asparagus and strawberries that the world will be wanting next year, but bread and meat. These prime necessities the general farmer must supply. There must be a

have little or no difficulty in getting help. Those who begin now should certainly have little difficulty.

The problem of townspeople, now or later, becoming farmers on their own account is a more difficult one. Experience, capital and business ability, all are wanted in this enterprise. And of these, capital and business ability are the most essential. An amateur farmer can gather, in a comparatively short time, much information that will take the place of experience. But he cannot start without capital, whether his own or borrowed. And he must have business ability to study the available markets, to produce what those markets demand, and to sell to the best advantage. Our agricultural colleges have done well heretofore in teaching farmers how to produce the biggest crops, and how to raise the best cattle, hogs, and poultry. So much information in the line of production is now available that a shrewd man can begin farming with little or no experience, and do well from the start. But the colleges would do better still by starting a course of instruction in marketing. Marketing is quite as vital as production, and the farmer is at a disadvantage in marketing, compared with the protected and centralized industries, quite as great as he is producing. A system of marketing farm produce can be devised, which will place the farmer more nearly on a par with the manufacturer, who can afford to advertise widely and to place expert salesmen on the road. To this end, co-operation and efficient central management will be the final solution. In the meantime, while the farmer has to sell his mixed produce without co-operation, he could learn much from a systematized course of instruction in marketing.

If farming were the profitable business that some, who are not engaged in farming, claim that it is, there would be no difficulty, in ordinary times, of securing plenty of capital. As a matter of fact, the average farmer, even if intelli-

the consumers' burdens. Thirdly, he must be enabled to borrow money at a lower rate of interest than at present. Chartered banks cannot be expected to aid much in this direction. The chief function of banks is to make exchange easy. The Canadian farmers will never get money at easy rates of interest until they organize loan societies of their own, after some of the European systems. The Department of Agriculture for Ontario sent a representative to Europe last year to make enquiries into these European systems of co-operative loan societies. The farmers of Ontario and of Canada generally, are patiently awaiting a report on these matters. Meanwhile, scientific farming, intelligent buying and selling, permanent and efficient help, with the introduc-



Fig. 1—Large Gallery.

revival of mixed farming, when every acre shall be brought up to its maximum yield, and every farm carry its maximum load of live stock.

The urgent need in agriculture with us to-day is—labor. Not so much need for more farmers, as for more help on the farms already occupied. In mixed farming,—and mixed farming must continue to be the general practice—a certain minimum equipment in buildings and implements is necessary, whether the farm be large or small. A small mixed farm is unprofitable, because of the relatively high fixed charges. Farm laborers, married or single, that prove themselves to be capable and honest, are now generally well paid. Now is the time for the turn of the tide of labor back from town to country. Let the town tradesman act upon his frequently-expressed desire "that he might get a steady job on a farm." Let him and his family make up their minds to accept the conditions of country life in a contented, hopeful and helpful spirit. Let him seek a trial engagement with a farmer, making first some reasonable conditions. Let him demand a house to live in, either on the farm or nearby. There are scores of partly deserted villages in older Canada where houses might be had for the asking, within easy reach of neighboring farms. Let him insist upon a ten-hour day, so that he may get home to his family and his garden every evening at six o'clock. If the ten-hour a day system prevailed on the farm, as it ought to prevail, the man hired by the month might live a mile away from his work as well as the factory hand or the rural day-laborer. On the other hand, he must be willing to accept certain inevitable conditions that would lessen the number of free hours that as a factory-hand he might enjoy. Factory machines do not need to be fed on holidays, but cattle, hogs and horses must be fed every day, and these are the machines by which raw materials are turned into finished products. A farm hand, to be acceptable even to a reasonable farmer, must be willing to forego part of his holidays to keep the farm going. This is one of the chief difficulties between farmers and their help, and a difficulty that would be most likely to occur in the case of a man used to taking every legal holiday. Lack of permanence is another difficulty. Unless a man seeking employment on the farm will guarantee his intention to stay at farm work, he need not expect much consideration except in the busiest season of the year.

Farmers are strongly advised to take advantage of the present situation and secure permanent help, for their own and their country's good. But if they hope to induce men who have lived in town to accept permanently the conditions of country life, they must be willing to change some conditions that now prevail. There must be some good reasons to account for the general lack of efficient farm labor in Canada, and some of those reasons may be removed by employers with proper consideration. Lack of all-year round employment is one. Lack of dwellings is another. Want of conveniences, in the house and in the stables, is a third. Long hours and few recognized holidays is a chief cause of trouble. Farmers must accommodate their arrangements to the need of meeting the permanent competition of town factories in bidding for efficient labor. Those who have done so



Fig. 2—Small Galleries and Honey-comb Rock.

gent and capable, does not succeed in paying current rates of interest on the total capital invested, and at the same time reserve for himself a sufficient labor income. The rural problem is only confused by those who fail to admit this very obvious and persistent fact. To bring the profits of farming under ordinary conditions up to the point where a competent accountant would pronounce it a going concern,—that is, to pay maintenance charges, a dividend on capital invested, and a labor income—three changes are

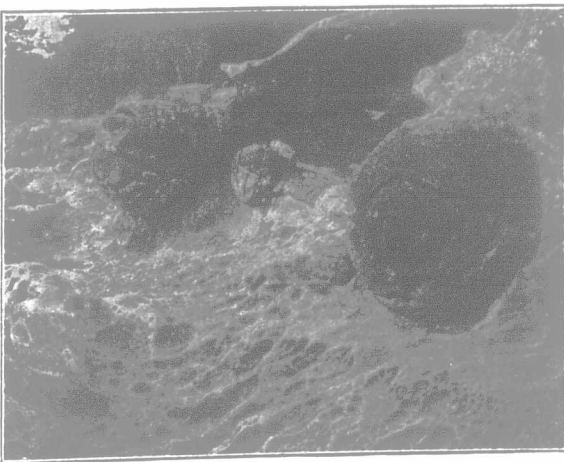


Fig. 3—"Stone Cannon Balls."

necessary. First, the cost of operation must be reduced. For example, the United Farmers' Co-operative Company is calculated, among other functions, to enable its members to buy machinery at lower prices than generally prevail. That alone, if effected, would result in a considerable lessening of running expenses. Secondly, the farmer by a proper system of marketing, must be able to make more from his produce. This he may do, in general, without adding to



Fig. 4—The Skull.

tion of modern conveniences, will do much to make farming in Canada a more acceptable business than it is at present.

O. A. C.

J. B. REYNOLDS.

Nature's Diary.

A. B. Klugh, M.A.

To the lover of outdoor life there are few things more interesting than the handiwork of nature as exhibited in her carvings in the rocks. The old idea of rocks and of the surface of the earth in general as something absolutely unchanging and unchangeable has now given place to the idea of change. We now realize that mountains, hills and rocks have their birth, youth, old age, and death just as truly, though certainly far more slowly than animated things. We also see that these changes are in few cases the result of any sudden or violent agency, such as earthquakes or volcanoes, but are very gradually brought about by the work of those forces which the geologist knows under the term of "weathering." This includes the action of rain, running water, frost, waves and wind. The rocks in many parts of Canada are carved into caves, natural bridges, columns and many other forms by these forces, but in no locality which I have seen are examples of this sculpturing as numerous and striking as on Vancouver Island in the vicinity of Nanaimo. The rocks of this region are composed of sandstone and sandstone conglomerate, and are evidently of very different degrees of hardness, so that the softer portions weather away far more rapidly than the harder parts, leaving the latter in relief. Most of the most striking examples of rock-sculpture are on the shore of the Pacific at a little distance above high-tide mark, but from the sheltered location of some of them it is apparent that waves are not the prime factor in their carving, though they probably play some part in it. In Fig. 1 we have a view of a large natural gallery at Duke Point. This gallery is high enough to allow a man to stand upright in it, and at the front, in the centre, is a natural chair which can be seen in the photograph.

Fig. 2 shows some small galleries, one with a column across its mouth, and also shows the honey-comb rock which is so characteristic of the region around Nanaimo.

In Fig. 3 we see what are apparently huge stone cannon-balls, which have been shot into, and are half embedded in the rock. These are in reality harder masses of rock (known geologically as "Concretions") which have been exposed by the weathering of the softer rock around them.

Fig. 4 shows the most fantastic rock-carving which I have ever seen; an almost perfect representation of a human skull. It is situated in a little niche in the vertical face of the cliff of Newcastle Island, on the channel between Nanaimo and Departure Bay.

These are the first photographs which have ever been taken of these most interesting rock-carvings. We hear much of wonderful natural "curiosities" in the United States and in various parts of the world, and but little of those "Made in Canada." Some day, however, Canada will come into her own as a wonderland of scenic effects.