

The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN
THE DOMINION.

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JOHN WELD, MANAGER.

Agents for "The Farmer's Advocate and Home Journal,"
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Renew your own subscription for 1914 at half price. From all whose subscriptions are paid up to the end of 1913, we will accept \$2.25 any time from now to December 31st to pay your own renewal and one new subscription to December 31st 1914. This offer is made on condition that the new subscriber pays you \$1.50 for his year's subscription. This is a Christmas Box to our present subscribers; we want you to get the benefit; take advantage of this special offer at once; tell your neighbor how valuable The Farmer's Advocate and Home Magazine is to you and your family every week in the year. You will have no difficulty in obtaining his subscription. Tell him it costs \$3.00 a year to produce the 52 copies he will receive for \$1.50; tell him The Farmer's Advocate and Home Magazine gives its readers more sound, practical reading matter than any other three agricultural papers combined.

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Nature's Diary.

By A. B. Klugh, M. A.

Over large areas of Canada the sedimentary rocks are extensively developed. The materials of which these rocks are composed, were in the first instance at least, derived from the breaking down of the Igneous rocks, and they have been laid down under water. Consequently wherever we now find these rocks was once the bed of an ancient sea or lake. Tennyson, who grasped the fundamental scientific conceptions far better than the great majority of poets, wrote:

"There rolls the deep where grew the tree.
O earth! what changes hast thou seen!
There where the long street roars, hath been
The stillness of the central sea."

"The hills are shadows, and they flow
From form to form and nothing stands;
They melt like mist, the solid lands,
Like the clouds they shape themselves and go."

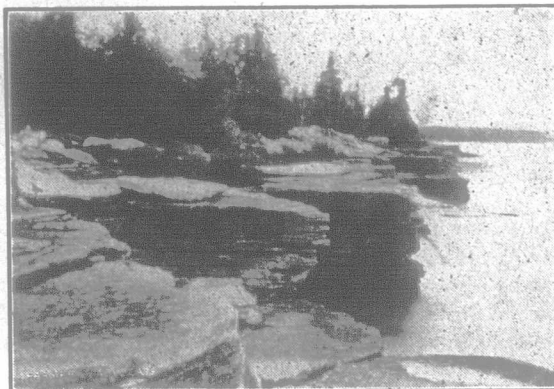


Fig. 1.—Shore of Fitzwilliam Island.

The sedimentary rocks may be divided into two main groups, organic deposits and mechanical deposits. The first group is composed of rocks whose materials were accumulated by living beings, on the death of which more or less of their substance was preserved, added to by successive generations, and finally compacted into rock. The main representative of the organic group which we meet with is limestone, and it is one of the most interesting rocks we have on account of the fossils which occur in immense quantities in it. These fossils are casts in the rocks of animals and plants which fell to the bottom while the deposit was accumulating, and whose bodies gradually became replaced by limestone. They give us an insight into the types of living forms which existed when these rocks were being laid down, and we are thus able to trace the ancestry of the forms which exist today, for as we come to more and more recent rocks, so we find the forms more nearly approaching our present-day types.

From the way in which they were laid down we can readily see that the sedimentary rocks would naturally be arranged in layers. Figure

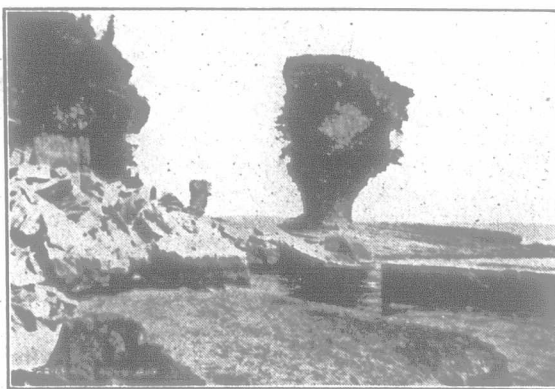


Fig. 2.—The Flower Pots.

one shows the shore of Fitzwilliam Island, south of Manitoulin, and the layers show very plainly, some of the superficial ones having been split off as huge slabs by ice-action. These slabs were simply filled with fossil corals and shells. In many places the limestones form high cliffs along shores such as along the Georgian Bay shore of the Bruce Peninsula.

On the shore of Flowerpot Island, ten miles off the head of the Bruce Peninsula, we have excellent examples of the way in which weather and waves can carve rocks. By the action of these agencies working along joint-planes columns of limestone have been cut off from the cliff, and subsequent wave-action has cut into the base of the columns until they are extremely slender. In fact there were once three of these "Flowerpots" but one was cut completely through and fell some years ago, and it will not be very long until its companions share its fate, though on account of the falling of the water in Lake Huron

the wave-action is not so severe as it was at one time. Figure two shows the one of the "Flowerpots" in the foreground, and the other in the distance.

Of the mechanical deposits the one we meet with most frequently is sandstone. When the sandstone has been formed with rounded stones and pebbles included in it, it is called conglomerate. A good example of this is the cliff of sandstone conglomerate on the shore of the Bay of Fundy at St. Andrews, N. B., where the stones included in the cliff may be seen and also the result of weather and waves in forming the beach of sand and small stones.

THE HORSE.

Avoid drafts in the stable at this season.

A little bran will aid in keeping the horses thriving. It tones up their systems.

Good ventilation is the carrying away of foul air and the bringing in of pure air from the outside without drafts.

Idle horses do not require as much feed as workers, but seldom is it good practice to allow them to go down in flesh.

Let the colt, in a measure, look after himself; do not pamper him, but on the other hand do not allow him to be neglected.

Vermont State Fair held an endurance test for horses. Nearly all those entered were Arabs and Morgans, and seven of them covered 154 miles over hilly roads in less than thirty-one hours. All the horses were ridden.

If intending to purchase a stallion for next season why not do so now? Purchasing at this season places one in a position to winter his horse and prepare for the breeding season according to his own ideas. Many a stallion has been ruined by injudicious winter care.

A Rapid Grower.

Editor "The Farmer's Advocate":

I noticed in a recent issue of "The Farmer's Advocate" a request asking any readers to write in if they ever heard of better gains than those made by L. M.'s colt, and I thought a description of a filly colt which I raised last year would interest your readers. This colt at birth weighed 203 lbs. and at six months weighed 965 lbs. She was not forced in any way. She only got milk from her dam while the dam did her share of the work on the farm. When I weaned her I fed three or four quarts of separator milk twice per day and a mixture of bran and oats which I kept increasing until she was getting a gallon three times a day and all the hay she would eat. I intended to weigh her when she was one year old, but owing to the pressure of other work I neglected to do so, but her estimated weight passed upon by several parties was 1,300 lbs. She was turned out to grass last spring, and she got no other feed whatever. As a result she came in rather thin this fall, having only a loose skin over her ribs, yet she weighs 1,550 lbs at 18½ months old and is 16 hands 3 inches high. Had I fed her some grain this summer and kept her in flesh, which she lost owing to her rapid growth and dry pasture the latter part of the summer, she would easily weigh 1,700 lbs now, and I am looking for her to beat a ton by the time she is thirty months old.

Bruce Co., Ont.

SAMUEL HILDRED.

The Foal's First Winter.

Whether or not the colt has been weaned earlier in the season he is generally separated from the dam when stabling time comes. With winter at hand and nothing but dry feed to take the place of milk and grass the colt is at the most critical stage of his development. Upon his care from now until next June depends largely his value when mature. His growth may be forwarded or badly checked, and altogether the care of the colt should be the first consideration in the stable. The starved colt loses heart, his stamina wanes, he becomes susceptible to disease and vermin and is generally a sorry sight humped up in his stall or often in a corner of the farmyard. A colt poorly fed seldom makes the best class of horse.

What does the colt require? First, we may mention exercise. He has been accustomed to the free range of the open fields. He has exercised at will on the cool, moist ground so well suited to the best development of his feet. He