

The Farmer's Advocate AND HOME MAGAZINE.

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IN THE DOMINION.

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JOHN WELD, MANAGER.

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It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.

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Nature's Diary.

By A. B. Klugh, M. A.

BY THE SEASIDE.

To the nature-student a trip to the sea coast is a revelation. Here he finds forms totally different from those occurring inland. The very water strikes him at first as unique in its behavior; at one time it reaches well up on to the shore, six hours later it is a long way out and great stretches of sand or mud or rocks are exposed. Thus the state of the tide makes a wonderful difference in the appearance of the country.

Let us visit a rocky shore at low tide. We find the rocks covered with large, brown, slippery sea-weeds. These belong to the lowest divisions of plants—the Algae. One of the commonest kinds bears little bladders which act as floats, and keep it upright when it is covered with water.

Lying on the rocks we see numbers of Starfish, animals with five rays radiating from the centre. If we turn one over we see that down the middle of each ray are two rows of projections; these are the "tube-feet," by which the Starfish moves, breathes, and feels. They can be protruded, or contracted, depending upon the amount of water which is forced into them.

The colors of the common Starfish vary a good deal; some are whitish, some pink, and others are greenish gray.

The Starfish has a peculiar method of feeding as it turns its stomach inside out over its prey and digests it.

Further down towards extreme low-tide mark we come across a colony of sea urchins, almost spherical forms covered with long, movable spines.

On the rocks are the limpets, flattish, cone-shaped shells, which stick very closely to the rock.

On the mud between the rocks we find shells quite different from those found inland. There are the whelks with their spiralled shell, the periwinkles, and the large sea snail.

In pools left by the retreating tide between the rocks we find the beautiful Sea Anemones, animals short-cylindrical in form, with several rows of feathery tentacles around the top. They are most exquisitely colored—pink, purple, yellow,

red, and mauve, different individuals being of different colors. Here we find also the Sea Cucumbers, so named from their resemblance in their usual condition to that vegetable. But they can assume any shape, from long and thin to perfectly spherical; and are often seen "hour-glass shape," that is, contracted in the middle. In these tide-pools we also find a sea-weed which looks almost exactly like a lettuce, and is termed the sea-lettuce.

Under ledges of the rocks near low-tide mark we see the Sea-orange, a form allied to the Sea Cucumber, but quite different in appearance. It is shaped like half an orange when it is contracted, as it is when the tide is out. But when covered with water it has at one end a bunch of plume-like, yellow tentacles.

At low-tide mark we also find an interesting lot of sea-weeds, tufts of bright green forms, like fine grass; red-brown tubular species; forms with large, brown blades, known as "devil's aprons"; fine, hair-like species, bright red in color; sea-weeds which are hard in texture like corals, and are pink and white in color; and the dark-red, flat-bladed Alga, known as Dulse. This last species is gathered, dried, and eaten.

In the mud between the rocks we find the Clams, marine species, which differ from our fresh water Clams in possessing long siphons, through which the water is taken in and expelled, and which lie buried in the mud with the siphons projecting when they are covered with water. It is these marine Clams which are used in the "Clam Chowders" for which many sea-side resorts are famous.

Lying on the top of the mud, usually with their tails still in their burrows, are the large worms called Nereis, shiny green above and red beneath.

Hopping about among the wet sea-weed we see little crustaceans which resemble miniature shrimps.

In addition to the forms of life which we have mentioned, there are hundreds of species which have scientific names only, in fact in this narrow strip of shore we have a whole world, a world very interesting to investigate, and totally new to the visitor from inland.

THE HORSE.

The fall exhibitions are now getting closer. Does the colt lead well and behave as an educated colt should?

In reply to a question in the British House of Commons, the Secretary of War stated that as few as possible docked horses were being purchased for the army; and an order has been issued that no horses docked should be accepted after three years.

When the stallion is placed in his home stable after the breeding season is over he needs exercise just as much as at any other time. Too often he is neglected, poorly fed, and badly groomed. He cannot be expected to continue a first-class breeding horse if he is only cared for three or four months out of the year, and is forced to rough it the remainder of the time.

It costs a certain amount of money to keep a working horse every year. When horses are high in price every mare owner seeks to avail himself of the opportunity to raise colts, but when the price drops fewer colts are raised. Now if brood mares are kept to do the farm work it is just as wise to breed them when the market is easy as any other time. The life of the horse is short and very soon younger animals will be needed to take their places. Surely they can be raised more cheaply than they can be bought, and surely a profit may be made on them to reduce the cost of keeping the workers.

Here is a bit of good advice taken from the rules of the Boston Work-Horse Parade Association.

Give a bran mash Saturday night or Sunday morn, and on Wednesday night also, if work is slack. Put very little salt in the mash.

Let the horse have a chance to roll as often as possible; it will rest and refresh him.

Do not forget to salt the horse once a week; or, better yet, keep salt always before him. He knows best how much he needs.

Bring your horse in cool and breathing easily. If he comes in hot, he will sweat in the stable, and the sudden stoppage of hard work is bad for his feet.

In hot weather or in drawing heavy loads, watch your horse's breathing. If he breathes hard or short and quick it is time to stop.

Remember that the horse is the most nervous of all animals. Remember that he will be contented or miserable accordingly as you treat him.

The Lesser of Two Evils.

While looking at a first-class pure-bred Clydesdale filly a short time ago, the owner said, "What do you think of her bone? Many who look at her say, 'What a pity she hasn't more bone.'" This brought up the point, "Which is the greater fault—to have bone a trifle light but of the best possible quality, or to have bone in abundance, but coarse and badly off in quality?" The mare in question was not heavy-boned, neither was she very light in this particular, but a somewhat sparse feather made her appear a little deficient in size of bone. Feather is sometimes deceiving. Very often what appears to be extra heavy bone gives the impression simply because the size of the limb is augmented by a profusion of long, coarse, curly hair. But to get back to the point—small bone of good quality or large bone of rather questionable quality—by all means choose the former. Clean, flat, flinty bone is strong, and is not so likely to become blemished as bone of the coarse, soft order. For work the clean-boned animal wins every time, and, for breeding purposes has a large margin on the coarse-limbed animal. The light, clean bone may be increased in size in the offspring by mating with a heavier-boned animal whose bone is also of high quality, but mate the coarse-boned animal with what you will, a degree of coarseness is likely to crop out in the progeny. Of the two evils the lesser is the fine, clean bone, but it must always be remembered that it is possible to get a sufficient quantity of bone, and, at the same time, bone of first quality in the same animal. This should be the aim of all horse breeding. Nevertheless, few indeed are the horses without some defects, and it often becomes necessary to choose between certain peculiarities of type and conformation, neither of which come up to the highest degree of perfection. Horse matters must always be weighed carefully.

The Big Gelding.

In this department of this issue is illustrated a massive gelding. He is of the Shire breed. There are other breeds which produce big geldings as well as the Shire. One of the best features of horse breeding, or, in fact, any live stock breeding, is that there are so many really good breeds that one may be found to suit the fancy of each enthusiast. If a man prefers an abundance of hair on the horse's legs and massive bone, he has a horse to his liking in the Shire. If he likes just a fair amount of hair and a tidy, trim horse, he is satisfied with the Clydesdale. If he wants a drafter with no hair on his limbs and a big, heavy horse, he gets the Percheron or Belgian. All of these breeds have produced and are still producing big, strong, heavy geldings. No matter what draft breed is preferred, the breeder should always aim to produce the big gelding for the market, and the big filly to stay in the stud or be sold to the farmer or smaller breeder for breeding purposes. Keep your ideal set on size in the drafter, and, at the same time, do not forget quality. The small draft horse does not fill the bill on the city streets where heavy loads must be moved six days a week. Aim to make the individuals of all our breeds of draft horses bigger and better than ever.

What about the Two-year-old?

We wonder how many owners of real good two-year-old fillies have been halting between two opinions this season, as to whether or not it is advisable to breed their mares. All have noted cases of success, and also of failure resulting from the practice. This success and failure is largely responsible for the difference of opinion which now exists in the minds of horsemen, as to the merits and demerits of the practice. No set rule can be laid down regarding this subject. If a mare is a little undersized or is likely to be called upon to do a great deal of heavy work in her three-year-old form, generally speaking, she would be better not bred. If the horseman does not feel able to give the mare a little extra consideration during her first period of pregnancy and while she is nursing her foal, breeding had better be deferred. On the other hand, if the filly is a well-grown two-year-old and is in good health and condition, and other horses are plentiful enough on the farm to permit of her doing little work while her foal is nursing, her owner need have no fear regarding breeding her at this early age. Many of the best breeding mares dropped their first foals when three years of age. They were good mares when bred, and got good care as breeders. Just now, when the season is getting a little past its heaviest, is not a bad time to breed any mare, the two-year-old not excepted.