

certainties, and one of these is the leaky roof and undrained gutter, and he knows the rea-

f Keeping Young.

er's Advocate":
In a recent reminiscent mood, I made a self-congratulation of the boyhood chores of the past; as he calls them, of old time indispensable duties that have with the days that had need of to enumerate exhaustively all the years, but yet, he might have gory that he gave that which De Musset had, by dying in ed to his mourning contem-growing old." For that was "the passing genera-at-grandfather down to the light, the idea dominated that as born and existed almost for of growing old; and that the that is the sooner the child and the man matured into the rather ripened into the pat-and more worthily would one's fished, and the greater the and hereafter. It did not d was made to miss the most y delights, or that the youth, some flowers of a more for-ose of his own had scarcely r in ignorance the marvelous most expansive years; or that prematurely apprehending the d bequeathed to their offspring ntuation of their own deficien-atter that the whole course sed life into mere existence hing mattered but the speedy the pre-eminent and universal owing old.

er, and I gladly recognize that not, that modern boys work s of the past but they work nise and remuneration. The become so valuable an asset of e can no longer afford to ambition and vitality on the on-paying chores that we did ink it cheaper to buy gates nd temporary fences for the an occasional hill of corn with n to was'e our boys who have g moment of a too fast pass-ssionable facility and dirigible the antithesis of the task of is the art of keeping young. spoken "in jest strikes home nancy of earnest truthfulness n Dr. Osler passed sentence on d over, the words went around use they constituted a joke, gave expression to a long-our time,—the truism that the rule or teach or exortate. In he day of patriarchal leader-ay.

ed are less loved and revered d but that they are no longer ortance that they once were; e reason that they have to stay far behind the present nt and sentiment. We respect sition but we resent bitterly y their efforts to draw us in admire their achievements but sired to strike out in our own worth of their opinion and out it constantly for the he more youthful functionary, has not yet its own peculiar s no longer representative and l it is no longer the objective

as at last realized that in the promise of the future fulfilment have failed to accomplish, and World, with all that it con-ed its allegiance from the old Church is now so busy in the that the old sinner bids fair g in his own chosen way. The dom. of the Dominion is like-ith the proper education and n boy that the old farmer bids o till his fields in his own on. Between day, Sunday, els, between long, and short, urses your boy has so little if you still need some one for you will have to employ an

of it all is, that as the World allegiance, as it has supplanted task of growing old by the g young, so must we, if we ith the World, do likewise.

For being old we cannot compete with a World made anew every day. Being old we can only be in the helpless minority, and cannot force our influence on a majority that will have nothing but youth and the spirit of youth. Being old we are strangers to even our nearest and dearest, and as much isolated as if we were quite alone in the World. Being old we are out of fashion.

Being old we are only as old as we have allowed ourselves to become, for it is the spirit rather than the years that counts with age, the feeling within rather than the looks without. If you can still learn interestedly and laugh heartily; if you can still understand the recreative as well as the serious pursuits of your boys; if you can be the confident and companion of your girls, if you have acquired the art of keeping young, you are not old though your skin may be wrinkled and your hair as white as snow.

Carleton Co., Ont. MRS. W. E. HOPKINS.

Nature's Diary.

A. B. Klugh, M.A.

A tramp afield in early August is sure to yield some interesting observations to those who have eyes for the insect world. On such a tramp the other day I witnessed a combat which culminated in an unusual way. A large Orb-weaving Spider had spread its web between two branches of a Juniper bush and was waiting "with its fingers on the wires" for prey to strike the web. The first insect to strike was a Blue Mud-dabber, one of those steel-blue, thread-waisted Wasps that build the little nests of mud, and in a moment it was entangled. Out came the spider on the run and jumped on the wasp and there ensued a battle royal, during which the spider bit at the wasp and the wasp stung the spider. So fiercely did they struggle that the wasp broke free from the silky net and flew off with the spider. Its burden was evidently too heavy and it alighted on a branch of the bush where the struggle was renewed. After a few moments the wasp once again rose still clasping the spider, but as it flew it struck another web. From this web it soon broke free, but as it flew off it left the spider hanging by one leg from the web. The spider gave one or two convulsive twitches and remained hanging—stone dead.

In the short grass of a dry field I found young Red-legged Locusts abundant. This species is one of our commonest so-called "Grasshoppers." These young are termed nymphs, and in the early stages are very small, have no wings and have heads large out of all proportion to their bodies. All the stages of nymphs were present in this field from the smallest, recently hatched pale green and soft, to those with wings half grown, brown in color and with heads more nearly the proportionate size of the adults. On many of the grass-stems were the empty skins or exuviae from which nymphs had emerged. Insects which do not pass through a complete metamorphosis, that is, which do not go through the larval and pupal stages in their development, have a series of moults, and after each moult they resemble more and more the adult form.

I next came across some Milkweed plants and on them were several Milkweed Beetles, scarlet beetles with four black spots on the head and four on each wing-cover. The larvae of these beetles feed on the roots and lower part of the stem of the Milkweed.

A little farther on were some poplar trees on the tips of many of whose twigs were large convoluted galls. These large galls, called the Vagabond Poplar Gall, were hollow and in the interior was a colony of aphids. The galls are formed by a coalescence of the leaves of a twig resulting from the secretions of the aphids. The egg is laid in the bud and the wingless aphid which hatches from this egg is the parent of the whole colony. Towards autumn all the aphids produced in the colony have wings and all leave the gall before winter, though the old, blackened galls hang on the twigs for several seasons. Those galls which I cut open contained both winged and wingless forms.

The most striking insect music was that of the Cicada. This shrill, long-continued "z-i-i-n-n-g" is a sound familiar to everyone, but is attributed to various animals, some declaring that it is made by a locust, others that it is a wasp, while some have the idea that it is produced by a snake. The Cicada is really one of the true bugs and is a blunt-headed insect, black and greenish in color and about two inches in length. The intense sound made by this species is produced by the rapid stretching and relaxing of a pair of parchment-like membranes, which are situated at the base of the abdomen by means of a pair of muscles attached to their centres. The sound-chambers in which these membranes are located are incompletely closed by a pair of semi-circular disks, which are opened and shut by movements of the body, thus giving the "song" its peculiar rhythmic increase and decrease in loudness. The common Cicada, which is closely allied to the famous Seventeen-year Cicada, lives for two years, the first year as a larva, the second as pupa and adult. The pupa of this species is able

to move, and when it is time for the adult to emerge from the pupa case it crawls up a tree-trunk, the pupa case splits down the back, the adult Cicada emerges and rests on the tree until it is dry and hard enough to fly away.

Along the road the Carolina Locusts were very common. This species is from one and a half to two inches in length, pale yellowish-brown with black hind-wings with a broad yellow or yellowish-white margin. The males have the habit of hovering in the air a few feet above the ground and making a loud "clacking" sound by striking the hinder edge of the front wings against the front edge of the hind wings. When on the sandy road or on dried grass this insect is quite inconspicuous because its color matches that of its surroundings.

An Acre of Grain to the Cause.

Already 10,000 farmers on the prairie have signified their intention to donate one acre of wheat each for patriotic purposes. The estimate of the value of this crop is given at \$200,000, and the movement is yet in its infancy. Out West the grain growers are much better organized than they are in the East, and it was a comparatively easy matter to organize to handle such a donation. But it should not be a difficult matter for farmers in Eastern Canada to donate a part of their crop to the aid of the fighting men. If all agricultural Canada could donate one acre out of every hundred acres it would roll up a big fund for furthering the fight. Which one will you donate?

THE HORSE.

Will Horse Breeding Pay?

In view of the fact that horsemen in Canada are none too optimistic regarding the outlook for horsebreeding in this country some idea of conditions in the Old Country might tend to change our views of things. The following from the "Live Stock Journal" is certainly good reading for anyone having horses on hand for sale. It may pay to hold for a while rather than sacrifice at this time.



Lady Betty.

Clydesdale filly; champion at the Royal.

As this exceptional season advances and the number of show fixtures abandoned owing to the war increases, it is matter for congratulation that at the earlier exhibitions of the year horses were comparatively well catered for. All the spring horse shows were held, if in some cases the program was contracted, and at the Royal and other important outdoor exhibitions that have taken place horse-breeders have given excellent support and made displays that, under the circumstances, have surprised visitors by their extent and the excellent quality of the exhibits, particularly in the breeding classes. The industry was thus encouraged, and there never was a time when this was more necessary. One has, however, only to look down the list of summer and autumn fixtures that have been postponed to realize that many of the usual opportunities for the exhibition of horses will not be available in the later season, and to that extent the needed stimulus to breeding will be lacking. Fortunately, a few

important shows will take place, and at several of these the horse classes are always important and representative.

It is well known that other customary aids to breeding are in abeyance or much contracted, such as those which arise from racing, Polo and hunting. The chief encouragement to horse-breeding must therefore at present be looked for in the market demand, and this has rarely been better, while breeders may safely anticipate an unprecedented inquiry in the near future.

In the absence of many of the opportunities usually afforded to breeders for meeting together and discussing the situation, it may be useful to emphasize this point. The wastage of horseflesh in the war has already been enormous. It is a war in which many nations are engaged, and the horse-breeding resources of the whole world are being rapidly exhausted. In the siege operations in Flanders and the north of France the use of cavalry, it is true, has recently been curtailed, though at the outset this arm took its accustomed position of prominence and importance. The occasion for its use will come again on that front, and it has never been absent in the East, where, in their widespread and rapid movements the combatants (Russian, German and Austrian) must have used up an immense number of horses. So long as the Germans were operating from their eastern frontier, slightly in advance of their network of strategic railways, horses may have been dispensed with to some extent, but in the present huge advance away from these lines the waste of horses must be very great; and the Russians have always had to trust chiefly to their horses for mobility in places far distant from railways. Artillery and transport have also called, throughout the whole area, for many thousands of horses, and this has been a war in which the demands for both have been extraordinary in all the war areas.

No doubt motors have figured prominently for transport of men and material and for ambulance work, but it is quite evident that now, as in the past, horses are indispensable in warfare, and the wastage has never been anything like so great. What all this means in respect to the future of horse-breeding must be apparent. It is not only in the countries that are closely engaged that the horse supply is being rapidly depleted. Great Britain is being gallantly helped by Colonial and Empire troops—

Canadians, Australian, New Zealanders, and Indian. The horses from these wide Dominions are also being used up in the war. Extensive purchases are being made wherever they can be obtained by all the combatant Powers, and a world's serious diminution of horses is not an improbable result. At the termination of the Franco-Prussian war in 1870 it was found that these two States had used up all the available surplus horses in their own territories, and many bought from other countries. Compared with the present conflict that was a war of restricted area and duration, but the demand on horses was such that the nations were impoverished for years. There is no doubt that the war of 1870 had unlooked for effects

on horsebreeding all over the world. In our own country the depletion caused a search into resources, and aroused the strong feeling that something must be done to preserve our valuable breeds. Prior to that time only one variety had a Stud Book, and none had a society watching and working for its interests. The solitary Stud Book was that for the Thoroughbred racehorse. One ultimate result of the scarcity was the establishment of numerous Breed Societies for horses and Stud Books which gradually extended until every distinct variety came under the influence of its breed organization, and was furnished with an official record of pedigrees. Much more might have been done here, and far more was done by the State in other countries, for horse-breeding. But under the voluntary principle which has always been regarded with so much favor in the United Kingdom, a great deal was accomplished. The numbers did not show a large increase, but without an adequate enumeration it