

they are immersed in conditions cannot easily escape "back to the land" show, but the average rural "The Farmer's Advocate" speaks of the means of culture, movement and recreation as the laws of the city. In so far as the most to be dreaded out- population is that it dries up the of virile young manhood and which for its work and leader- greatly depends. Very proper- the church itself and edu- ereliction and misdirection of to rural life and affairs, and he about going a step farther and nditions in the fiscal, political affairs of this country that will business end of farming a rela- ce with the powerful interests he cities. If rural life be "con- e expanded by the people of e rapidly as conditions are made

Poland.

no more shameful chapter ng the downfall and dismember- adjoining monarchies of Poland, ent nation of 25,000,000 "high- of noble traditions. Rent and who should have been her neigh- blood witnesses more than half ighting not against a common ach other. Anxious only to live as been outraged by Russians, russions. The average reader Russia as the traditional foe of et a half century of silence is disclose Germany as her most in- seless enemy. By the treaty of itions of which were shamefully eized the Western portion of an a policy of intellectual can- Treitschke and others designed e Poles as a "nation of inferior historical account of Poland by s shown that they were by de- n government positions, their and they were subjected to every dship and annoyance possible apparent legality. Under Laws ,000 men, women and children ee of March 25th, 1885, driven efore the year's end with orders nd some 10,000 followed later. ere looted. In 1886 the hich did not represent the un- ased a Colonization Bill and al Commission to convert the German settlements, which they ore-emption and entail. As late 7, a new Law of Exception was her facilitate driving out the easant from his land but he able, and after consultation omomists Prince Bulow intro- ation Bill which was passed to rute force if necessary. Dictated it practically defied the laws ing over religious persecutions e author quoted refers to the Polish schools which was taken from the secondary Posnania 87 from the elementary schools ge was banished. Since 1905 h language has not been heard Even the catechism was taught elligible tongue. A children's 0,000 refusing to be so taught. ular commanded their punish- ere fined and children unmerc- e of them crippled for life and ght in the name of "Kultur." a local affairs, be-devilled by or muzzled the European d have stirred the world to made but a passing protest " German officials were en- sk of Pole-worrying by receiv-

ing extra pay. In Posnania at a recent day let- ters, could not be addressed in Polish, a Pole wearing a Prussian uniform dare not use his own tongue to a comrade in barracks, and in Polish shops on Polish streets the wares must be displayed behind German inscriptions. In view of the foregoing and the events which precipitated the present war, the words of Arthur Symons, a well-known English author, written in 1908 seem singularly appropriate and terribly significant. Speaking of the Polish race as one of the noblest and most heroic in Europe, he adds: "Its existence should be as precious to Europe as that of a priceless jewel. The hand of Prussia is stretched out to steal it; the hand of a thief snatching at a jewel. If it is stolen there will be an end to its vivid, exquisite life; its light will be put out under bolts and bars in darkness. What has Prussia to do with a race which it cannot understand, a race which desires only peace and freedom."

Nature's Diary.

A. B. Klugh, M.A.

The southward migration of the ducks is now on, and the gunners are taking their toll of the flocks at the various shooting stations. We have in Canada a great number of species of ducks, and each species often has several different names by which it is known to hunters in various parts of the country. For instance the American Merganser is variously known as the Saw-bill, Shell-drake, Fish-duck and Goose-eater, while the Pintail is also called Sprig-tail, Spike-tail, Picket-tail, Sharp-tail, Spindle-tail, Pigeon-tail, Pheasant Duck, Pied Wigeon, Long-neck Cracker, and Water Pheasant.

Our ducks belong to three groups, these groups really being subfamilies of the Anatidae, or Duck Family. The first group consists of the Fish Ducks or Mergansers, in which the bill is long and narrow, with tooth-like projections along its sides. The second group contains the ducks with a broad bill and a hind toe without a lobe and they are termed the River Ducks. In the third group, which consists of the Sea and Bay Ducks, the bill is similar to that of the River Ducks, but the hind toe has a broad flap or lobe.

All those ducks which breed on our inland waters in the East belong to one of the first two groups, while the main breeding-grounds of the Sea and Bay Ducks, as well as many of the River Ducks, are the sloughs of the North-west. When the shooting season opens in the East the species which are at first secured are all River Ducks or Mergansers, and consist of those species which have bred in the immediate vicinity. Later on the Sea and Bay Ducks begin to arrive, and many of them, as well as some of the Mergansers, often spend the winter on the Great Lakes and on streams which do not freeze over.

An animal which we often see crawling about on the bottom, or swimming in the water near shore is the Crayfish. The Crayfishes are the only large representatives of the Crustacea which we have in our inland waters, and we have several species, which differ from one another chiefly in size and habits. The Crustacea is a class of animals, to which belong the Lobsters, Crabs, Shrimps, Prawns, Copepods, etc., closely allied to the insects. They possess an exoskeleton, that is, the supporting structures of the body instead of being internal as in the case of the Vertebrates. (animals with a backbone) are the hardened outside covering of the body. In the case of the insects this exoskeleton consists of chitin (pronounced kitin) only, but in the Crustacea the chitin is impregnated with Calcium carbonate (limestone) which renders it much harder than the integument of the insects.

The Crayfish has a wealth of appendages—antennae and antennules with which it smells, "pincers" with which it grasps its prey or defends itself, mouth-parts, legs, swimmerets, and a tail-fin which is used in swimming. It has two modes of progression, walking on the bottom on the tips of its feet, and swimming. It swims backwards in a succession of rapid jerks, the motive power being furnished by the tail-fin and the powerful muscles which operate it, and which alternately flex the tail-fin under the abdomen and extend it in a straight line with the body. These muscles are far larger than any others in its body, and in the case of the Lobster and the larger Crayfish, furnish most of the "meat" when these forms are eaten. The next largest muscles are those which close the jaws of the "pincers."

The Crayfish breathes by means of gills, and it has a very ingenious little appendage, called the gill-scoop or gill-bailer, which keeps the water circulating freely over the gills.

These animals are most active at night-fall and dawn, and spend most of the day beneath flat stones, though they are often active on dull days. They are omnivorous, that is feed upon every-thing edible, though most species prefer animal food. They are preyed upon by many other animals, such as the Water Snakes, Brook Trout, Black Bass, the Kingfisher and other water-haunting birds.

The eyes of the Crayfish are quite well-developed, and from an examination of them one would conclude that vision was one of the principal senses of this animal. But in this, as in many other cases in our studies of animal life, appearances are deceptive, as experiments have proved that the Crayfish can perceive only large moving objects, and tell light from darkness, but that it cannot perceive small objects. Its main sense is that of touch, which is particularly acute on the pincers, and the mouth-parts. Smell and taste, two senses very closely allied in even such high forms as man and practically impossible to separate in most of the lower animals, are acute and are particularly developed on the antennae, antennules, and mouth-parts. It has no sense of hearing, and when we think that a Crayfish hears, it is really the sense of touch which is operating.

The eggs are laid at night and are attached by small filaments to the abdominal hairs of the female. They hatch in about eight weeks, and the young keep with the mother for several days and take shelter under her if alarmed.

One species of Crayfish is known as the "chimney-builder" on account of the little chimneys of clay which it builds around the entrance to its burrow. It is a land species and is common in some places and absent from others.

THE HORSE.

Why Do You Prefer Your Horse to Any Other?

The other day, while talking with a young farmer interested in the horse business, we happened to remark that we did not think there should be a place in breeding classes for general-purpose horses at the fall exhibitions. Our friend took exception to this and held that there was certainly a place for the general-purpose horse on the farm and there should be a place for him at the fair. For his own work he stated that he would rather have a horse, which to his ideas, was a perfect general-purpose horse than any other type of horse. We agreed with him that there was a place for this horse on the farm, but never have we seen it proven that there is any distinct type of horses which represents the general-purpose idea in the minds of different judges and which, through breeding, could be relied upon to produce more horses of the same type. It is the breeding classes which we think should have no place for the general-purpose animal; harness classes might make a difference.

But this is not the point which we started out to discuss. In travelling through the country, one meets men who are farming with very light horses, and who seem to think they are getting their work done cheaper with the light horses than they could with heavy drafters. The next neighbors of such farmers may be equally sure that their heavy draft horses are the cheapest form of horse motor power they can get. Then on a third farm in the same locality one comes across the man who pins his faith to the farm chunk, the general-purpose horse, or the big carriage horse, which he can use on the plow, harrow, binder, or on the light wagon in a hurried trip to town. "The Farmer's Advocate" has always held that the heavy drafter was the best horse for the farmer, and that to make the most of his horses the farmer should keep a few brood mares and breed them regularly to the best pure-bred draft stallion of the same breed as the mares themselves.

It is an important question this problem of horse labor on the farm. As a general thing

the big horses eat very little more than the general-purpose horses or the lighter animals. True, they require a little more feed, but do they require more extra feed than is represented in the extra work done? We believe that two horses weighing 1,650 lbs. each will pull a two-furrowed plow just as easily and over just as much ground in a day as will three 1,100 lb. horses, and the question is which will require the more feed? If they will pull the plow as easily they will do as much work on the cultivator or other three-horse implements as will the smaller type of three-horse teams, and they will do it with less outlay in harness and equipment. They will not require as much stable room and when it comes to breeding value, mares of this size would raise, when mated with the best of heavy sires, colts worth on the market one year with another much more money than colts raised from lighter mares. The actual cost of raising a colt from a light mare is almost as much as that from a heavy mare.

These are only some arguments which might be brought up in favor of the heavy horse. The man with his lighter animals claims that they are much handier to work, not so clumsy, make better time at the light work such as harrowing, and are certainly of more value on the road. His arguments are quite justifiable and for certain special conditions there is no doubt but that a light horse is very useful on the farm, but we cannot get away from believing that the real valuable horse for the farmer is the drafter, as big as he can get him and retain high quality.

We would like our readers, interested in horses as most of them are, to feel themselves free to discuss this matter through our columns. Let us have both sides of the question and the reasons why the big horse, the medium-sized horse, and the small horse are preferred by different farmers. If you have a good horse and he fills the bill tell other readers just how he does it and why you prefer him to any other type of animal.

A Community Horse Show in England.

Editor "The Farmer's Advocate":

I have just returned from a flying visit to Derbyshire, the county of highest altitudes in England, and the coldest of all, where I have seen the best community Shire Horse Show it has ever been my lot to witness. The day ere the show opened, the Peak and all the highlands were enveloped in frost, the first of this fall and a severe one at that. Summer had fled in one night, as it were, and it needed no song from Tosti that, 30th of September morn to bid "Summer—good bye!"

But the foals which made the special feature of the show were all well grown. The champion of the lot was a January filly foal and she had a big advantage over all the rest on the score of size. This show, I should explain in parenthesis, is one that has developed into the front rank from a very small beginning. True, it is now the greatest Shire foal show of the year in England, and it began in 1880, when A. C. Duncombe, a local "squire" brought into the area to stand the great Shire stallion Harold, one of the corner stones now, of the English Shire Horse Society and its far reaching Stud Book. The farmers of Derbyshire, and neighboring Staffordshire, formed themselves into a Shire horse breeding community and they have bred such high-class young stock for 35 years that all the leading lovers of the breed go on a yearly pilgrimage to Ashbourne, a scenic town of small dimensions, nestling among the hills, where the exhibition is yearly held. There they study the stock submitted to the judge and they buy up all the most



A Light Team of Percherons.

Winners at London for J. W. Coulter, St. Thomas, Ont.