

s also returned. The skin is then removed from the neck. The next thing is to separate the skin from the head. By the assistance of the knife, it is taken off as far as the nose; while great care must be taken not to injure the eyelids, and to cut the ears as close to the skull as possible; and also to avoid cutting the lips too close. All this having been performed, the head and trunk are separated from the skin. The next operation is to remove the head from the trunk at the upper bone of the vertebrae. The external muscles of the head and face are then cut off, and the bones left as free from flesh as possible. The occipital bones are next opened with a strong knife, and the brain all carefully removed. The fore legs are now pulled out of the skin, by pulling the legs one way and the skin another, as far as the claws of the foot. All the muscles are then cut off the bones, while care is taken not to injure the ligaments and tendons. They are then returned into the skin again. The hind legs are then treated in like manner. The tail is the last part skinned, and this is a more difficult task than the other parts of the body. Two or three of the first joints of the tail-bone are first laid bare by pulling the skin back. They are then tied with a strong cord, which must be attached to a strong nail or hook on the wall. A split stick is then put on the tail-bone and forced to the extremity, and the tail-bones come out of their enveloping skin. The skeleton head having been divested of all its fleshy matter, tongue, palate, external muscles, and brain, is now returned to its place in the skin, which is in a condition for commencing the operation of stuffing.

A. B. B.

 A Chicago school marm while giving her class some oral instruction, in natural history, defined an amphibious animal as one that could not live in the water, and that died if you took it on dry land.

HINTS FOR THE MANAGEMENT OF GOLD FISH.—Gold fish may be kept ten or twelve years in vessels, (their average period of existence), by the following precautions: 1. Allow not more than one fish to a quart of water. 2. Use the same kind of water, whether spring or river water, and change it daily in summer: every other day in winter. 3. Use deep rather than shallow vessels, with small pebbles at the bottom (to be kept clean), and keep them in the shade, and in a cool part of the room. 4. Use a small net rather than the hand while changing the water. 5. Feed them with cracker, yolk of eggs, lettuce, flies, etc., rather than with bread, and then only every third or fourth day, and but little at a time. 6. Do not feed them at all from November to the end of February, and but little during the three following months.—*Ed.*

ENGLISH SPARROWS.—In the spring of 1866 four pairs of English sparrows came to the Union Square Park, New York, and there built. Three pairs occupied the trees, one ejected a wren from her little house, the only bird-house then in the square, and took possession; a fifth built in the ivy of Dr. Cheever's Church, facing the square. The industry of these little fellows in devouring the measuring worm (so great a nuisance that most persons avoided passing through the park, preferring to go around during their occupancy; and so numerous were they that they did not leave a leaf on any tree except the *Platanus*), was such that boxes were provided on almost all the trees for them. They were very prolific, those hatched in the spring rearing a brood in autumn, and the old pair rearing four or five broods. In one year they increased from five pairs to a flock of seventy, and they are now estimated at six hundred. Last summer a reward of one dollar a head was offered for worms, but the birds had eaten the last one; they also eat moths, grasshoppers, and many other insects. These birds have extended about forty miles in every direction. The estimate that they destroy in Europe one-half million bushels of grain was probably correct; but how much, more or less, would the insects they devour destroy? The question is, simply, which is the greatest evil, worm or bird, and which most readily controlled?—*Ed.*

Stock Department.

An American's Account of a Canada Stock Farm.

MR. SANFORD HOWARD, Secretary of the Michigan State Board of Agriculture, gives the following interesting details of a visit recently paid by him to Moreton Lodge Farm, Guelph:

"Fred, Wm. Stone, Esq., of Guelph, came from England and settled on land which he now owns, before it was surveyed, upwards of thirty years ago. He has now under occupation, in two farms, about eight hundred acres. Much of the soil of the principal farm, near the town of Guelph, required draining, which has been done with tiles to a considerable extent. It is very productive in grass, barley and oats. A large field of barley on a drained swale or swamp is very promising, and a field of twenty acres of oats, on another part of the farm, is the most luxuriant I ever saw—the oats standing thick and even on the ground to the height of nearly five feet. Spring wheat is grown instead of winter wheat, as being generally a more sure crop. Several large fields of this grain look well. Some fields of winter rye indicated a large yield. Roots, chiefly mangel wurtzel and swede turnips, are largely cultivated, that is, what a "States" man would call so, but not very largely compared with English practice. Mr. Stone usually has fifty acres a year. The crop is stored partly in pits and partly in cellars at the barns. The bulbs are chiefly pulped and mixed with hay and straw, according to the most approved English custom. Mr. S. thinks this much the most profitable mode of feeding roots.

The Stock bred by Mr. Stone consists of Suffolk horses, Short-Horn and Hereford cattle, Cotswold and South-Down sheep, and Berkshire swine.

Of the Horses, there are an imported stallion and three imported mares. The former is only three years old. He was bred by Thos. Crisp, of Batley Abbey, Suffolk, a well-known breeder of this kind of horses, as well as of Suffolk and Essex swine, whose *Show* stock I have several times looked at with much satisfaction in England. Mr. Stone's horse—or rather colt—is seventeen and a-half hands high, well proportioned, of strong bone, and good action. He has worked on the farm, at the plough, or whatever implement it was most desirable he should draw, every working day since the season opened. He works kindly, has a quick, lively walk, which carries him over a good deal of ground in a day, and does not tire or sweat much. He is in good condition—though doing service as a stallion, besides the work mentioned. The mares also work on the farm, and work well.

The Cattle consist of about fifty head of each of the two breeds mentioned, together with several grades of various ages, which are reared chiefly for beef, though heifers are occasionally selected and kept for milch cows. The origin of the Short-Horn and Hereford herds is so well known that I need not refer to it here. The number of prizes annually awarded to Mr. Stone, at Provincial and other shows, indicates the position which his stock occupies before the public.

Among the Short-Horns is the superb bull Grand Duke of Moreton, 5732, which took the first prize as a three-year old at Kings' on last year—an animal of great weight for his age, and one of the best shaped I have ever seen of the breed. The even balance of his fore and hind-quarters, the obliquity of his shoulders, fulness of crops, depth and rotundity of carcass, the perfect straightness and great breadth of back, combine to make him one of the most majestic animals I ever looked at. Of the young Short-Horn bulls, several are very promising, particularly one about nineteen months old, by Grand Duke of Moreton, out of Duchess of York 3d, by Moreton Duke, 5225. He now promises to equal his sire in beauty, if not in size. Several cows of the Isabella and Margaret tribes maintain their places in the herd, never failing to attract the attention of visitors. I have not space to speak of their respective points in detail.

The Herefords have latterly been increasing in numbers on the farm, and this increase will probably be allowed to continue. After seven years' experience with them, their good qualities have been so prominently displayed that Mr. Stone has determined to adopt them as a permanent stock. They are found to be healthy, hardy, easily kept, fattening rapidly whenever they have a fair chance, and producing the finest quality of beef. They are by no means the inferior milkers which the advocates of rival breeds frequently represent. Comparing them with the Short-Horns kept on the farm, all persons who have had anything to do with them concur in stating that the Hereford cows give, on the average, at least as much milk by the season as the Short-Horns, while some experiments that have been made show that in richness of milk the Herefords are superior.

I think Mr. Stone is entitled to the thanks of the

public for the fair comparisons he is making of the two breeds. We want just such means of estimating their real merits as he presents us. The course too often adopted rests merely on the question of how the most money can be made by *speculating* in cattle. The profits which stock would afford if kept for ordinary products, and disposed of in the legitimate markets, are but little regarded; and we get but little light on the question whether one breed or another would be more profitable under given circumstances.

I have on former occasions spoken of the individual characteristics of some of Mr. Stone's Herefords. I will only remark here that the animals reared from year to year keep up the standard formed by the imported stock; and when it is considered that the original stock was selected from herds accounted among the best in England, this result must be regarded as of much importance in reference to the uniform excellence of the breed.

Many of Mr. Stone's grade cattle are half Hereford, and a few are three-quarters of that breed. They show the leading characteristics of the Herefords very strongly. Some of them are cows, now giving milk, and they are good-sized, handsome animals, with indications of being good milkers. A lot of yearling and two-year old steers are about as promising, in reference to thriftiness and fattening tendency, as any grade animals of their age that I remember to have seen. Some of the steers have been subjected to the yoke, and bid fair to make active and powerful oxen.

The Sheep consist of about five hundred head, three hundred and fifty of which are Cotswolds, and the rest South-Downs. They are all in fine condition. While I was there, Mr. Stone sold fifteen yearling Cotswold rams and two ewes to Mr. E. Whitby, for Dr. B. Bryant, of San José, California. The rams are to be used in crossing with sheep which have been bred from the old Mexican stock and the Merino. The result will be known in due time.

Mr. Stone has about thirty Cotswolds which he proposes to fatten next winter. Some of them would be called "hog-fat" now. If they go to "the States" when they are "made up," we shall probably see some of the fattest and heaviest carcasses of mutton that have been known in the country. Mr. S. informed me that the fleeces of his yearling Cotswold rams (upwards of forty, I think,) averaged this year about eighteen pounds each, unwashed. One weighed twenty-four pounds. The sheep, after being shorn, weighed from 210 to 300 pounds—the weight depending, of course, much on the manner in which they had been fed.

Mr. S. informs me that, when he introduced the Cotswolds, there was nearly as strong a prejudice manifested against them as there was subsequently to the Hereford cattle. The sheep have nearly conquered the prejudices against them, and the cattle will probably do the same, if Mr. S. carries out his plan.

The South-Down sheep are bred from the Webb and other noted English flocks, and many of them are very handsome specimens of the breed.

Some of Mr. Stone's land lies so far from his principal farm steading, that it cannot well be manured in the ordinary way. Very large quantities of rich manure are made, but it is chiefly applied within a distance convenient to haul it. The mode adopted with the out-lying lots, is to feed off successive crops with sheep, until the desired fertility is obtained. First, a crop of rye is sown in the fall. If it gets strong enough before winter sets in the sheep are put on it. The next spring the sheep are turned on at the proper time, and the rye kept fed down as long as it continues to grow vigorously. When the growth of the rye is checked, the ground is ploughed, and sown to oats and vetches, which are fed off, and, when this crop is done, the ground is again ploughed and sown to rape or turnips, which are fed off in like manner.

Mr. S. has several fields where this course is now going on. His rams, which are intended for sale this fall, are on a field on which the second crop (oats and vetches) is just giving way to turnips and rape. The sheep are in high condition, and the ground is already well manured, though the feeding off of the third crop will enrich it still more. The sheep, of course, have been well fed; when the green crop would not afford them enough to eat they have had peas, or other additional food. The mode of feeding the green crops is that adopted in England, enclosing with hurdles a certain extent, on which the sheep are put from day to day.

This is a practice which I think might be introduced into this country with good results. Our people hear of the English farmers enriching their land by sheep farming. But it is quite a different thing from turning sheep on to the land, to live or die from the grass and weeds that may grow—often to gnaw the grass to its very roots, and starve the sheep besides. The sooner it is found out that this kind of sheep farming does not enrich the soil or its owner the better for the country."