

Hawk, (*Accipiter Nisus*) shown in our last illustration, belongs, have the form more slender, the wings more rounded, and short, and, when assisted by the ample tail, are better adapted for a gliding or sitting progress. The Sparrow-Hawk is of decidedly sylvan habits, wooded countries and extensive forests being its favourite haunts. A large sized tree is generally selected as the breeding place;—the nest is seldom placed on bare and precipitous rocks. The prey of the male Sparrow-Hawk consists principally of smaller birds, his weight not permitting him to carry off a heavy quarry. As in the Falcons, a marked disparity exists between the size and weight of the sexes. The female Sparrow-Hawk has been known to kill partridges and pigeons. Swallows and other swift-winged birds are accustomed to raise a hue and cry on the appearance of a Sparrow Hawk, and even attempt to drive him from their retreats. The general colour of the adult male is dark brown, upon the upper surface of the head, body, and wings, softening into grey as the bird increases in years. The female is coloured differently from her mate, the upper parts of the body and wings being hardly so rich a tint as in the male bird, and covered with numerous little white spots, caused by the white hue which is found on the base of each feather."

There are several other Falcons as well as Hawks found on this continent, but the three specimens we have described, may be regarded as fair types of the whole family.

**THE APPETITE OF A FISH.**—The labrum is a fish, mentioned by Pliny, and rather vaguely described as a kind of ravenous fish, seeing that every fish is by nature utterly and entirely ravenous. The elegant trout, who flies in the wildest terror if you show the tip of your nose, will eat nearly his own weight of bleak and dace on a hot, still June evening. A pike has been well known to rush at a fish well nigh the size of himself and even to dash at a male's nose. We have known a fishing frog lose its life in an insane attempt to swallow a wooden scoop, the proprietor of which objected to the proceeding. It is a short time since we read an account of a fish which had swallowed, among other matters, two broken bottles, a quart pot, a sheep's head, a triangular piece of earthenware, and a lobster, while in its liver the spine of a skate was comfortably embedded.

**DON'T SHOOT THE OWLS.**—In our days it was the custom to hunt through the forests for all sorts of game, whether on the wing or the leg. Many an innocent bird fell a victim to an almost utter ignorance of its habits and its haunts. Owls were always popped off without the slightest remorse. The fact that at rare intervals they would swoop down upon a plump chicken was enough. We hadn't read the Ettrick Shepherd's remonstrance.—Shooting a hoolet! I'd as soon shoot my barn cat. The fact is that as a general rule, the owl is not only one of the most useful, but one of the most harmless birds in creation. He destroys moles and squirrels and field mice and weasels, all of which do a vast deal of harm on every landed estate and about our homesteads. Now boys, when your gun is raised, think twice and don't you do it. Just bear in mind that Margery does a thousand times more good than harm. It is only the great horned owl that robs hen roosts, and eats up little turkeys and chickens anyhow, and he also eats rats and mice and insects.—*Mass. Ploughman*

**A BEAR ON FIRE.**—The guardians of the Garden of Plants, Paris, were lately surprised by hearing extraordinary howlings proceed from the bear pit. On going to the spot they found that one of the bears was on fire, and, after vainly attempting to extinguish the flames by rolling the poor animal on the ground, they at last succeeded in plunging him into the large basin of water intended as a bath for him and his fellows. It appears that the bear's fur was set on fire by one of the new fireworks, playthings, which a mischievous person had lighted and thrown into the pit.—*Galignani*.

**NOTE BY ED. C. F.**—The bear in question must have been remarkably quiet and sagacious to suffer himself to be roughly rolled on the ground, and afterwards unceremoniously plunged into a cold bath! But "they manage these things better in France."

## The Dairy.

### Dairy Farming.

At a recent meeting of the Wilmot Farmers' Club, an interesting paper on this subject was read by Mr. Henry Brown of Haysville. After glancing at the history of dairy farming in Britain, the lecturer proceeded to trace its rapid development and popularity in the United States, and more recently in the Western districts of this Province. The gradual impoverishment of the soil by injudicious cropping was then discussed. The gradual extension of stock raising was adduced as a hopeful sign of the times. The suitability of Canada as a field for dairy pursuits was then shown. The lecturer proceeded:—

I know many believe it is more profitable to breed and fatten stock than to keep cows. To show that dairying is more profitable than stock farming I will make use of an argument which I found in THE CANADA FARMER [of March 1st, 1864], where it is stated that "it is doubtful if the amount of food which will produce, when fed to a good cow, 2 gall. of milk will secure a return of more than 4 cents, as used by farmers in raising young stock for the market. This is not mere conjecture; calculations have been most minutely made on this subject, and while some set down the return at only 3 cents, a few of the most sanguine stock-raisers put it at 5 cents. Now a gall. of good milk will make a pound of cheese. Cheese commands 9 cents per lb. wholesale." Another authority, Sir John Sinclair, has stated that it is supposed that the same quantity of herbage that would add 224 lbs. to the weight of an ox would produce 900 gallons of milk. Now, if we reckon a pound of cheese the average weight from a gall. of milk, we get 900 lbs. of cheese, and if we would turn that into cash, even at the lowest computation of 6 cents per lb., it gives us at once \$54. If these statements are correct it is the interest of the farmer to adopt the dairy system in preference to the feeding of cattle. But even granting that the difference between beef and butter or cheese be not as great as here stated, yet it is generally admitted that there is a wide margin in favour of the products of the dairy.

I can give you the number of pounds of milk produced last year from a dairy of 10 cows, 6 of which were heifers (the first calf) the rest common cows. A friend of mine delivered at Mr. Harris's cheese factory, at Ingersoll, in 6 months, 31 883 lbs. of milk, which would make 3,188 lbs. of cheese. The Sunday's milk was not included. Now the product of these cows for cheese alone would, at 8 cents per lb., be \$255 04; besides, there would be a considerable item to add to it for the value of butter made from the Sunday's milk.

The factory system of cheesemaking was then examined by the lecturer. Its advantages were stated as follows:—

It supplies a want much felt, in that it enables the farmer to become his own manufacturer. Hitherto he has been content to confine his efforts to the production of the raw material, disposing of his surplus to be manufactured and marketed by associated labour and capital. Those who now manufacture his staples secure to themselves a profit which, in most instances, exceeds that of growing the raw material. Now, if farmers would associate together and erect factories in different neighbourhoods, they can adopt a system by which they may secure to themselves the profits of manufacture. Fears may be felt lest the cheese-factory system should be overdone. But I think you will find it the opinion of men who are best able to judge, that it is almost impossible to overdo it. If this business is largely entered into in Canada, and their appears every prospect of it—European houses will, I think, appoint agents in Canada, and thus they will be able to buy direct from the producer, instead of under the present state of things, having to make their profit after already some three or four hands have made a good commission out of it; for you know, under the present system, the country buyer gets one commission, the house in Montreal another, and the shipper another, when it might just as well have gone direct from the producer to the European house. In adopting the dairy system of farming, there is one argument which cannot fail to recommend it to us. The Reciprocity Treaty is on the eve of expiring, and even should another be made, we cannot expect the same advantages we derived from the first. Uncle Sam seems to think that Canada must be dependent on him for the sale of her produce. Now, Canada wants to act as independently of the States as possible. Hitherto in the matter of selling our grain and cattle, we have in a measure been dependent on them for a market, and hence follows an argument in favour of dairy farming. We can sell the produce of our dairies without the help of our neighbours. We can—as well ship—and

with greater profit to the country and ourselves—to Europe from Canada as to let the Yankees do it for us from New York. Again, the demand for cheese is increasing in a ratio beyond that of the business of manufacturing, and as quality improves, foreign markets will gladly take all the surplus; while a large quantity is required for home consumption, and prices can be found which will render the business permanent and profitable.

You will perhaps think I have confined my remarks too exclusively to the manufacture of cheese, and that I might have said more of the profits derived from making butter. But the price of butter must be almost three times the price of cheese to make it as profitable, for where we can make 1 lb. of butter, we could make 3 lbs. of cheese.

I believe it is a great mistake to make butter when we can make cheese with greater profit and less labour. But if people won't be convinced of this, let them make butter, and our neighbours on the other side will not be slow to profit by the mistake, but will be glad enough to make all their own milk into cheese, and to buy their butter in Canada.

### Ayrshire Cows.

At a recent meeting of the Massachusetts Board of Agriculture a resolution was introduced by the Secretary, for the purpose of obtaining the sanction of the Board to the opinion that the Ayrshires are best adapted to the wants of farms in the middle and eastern portions of the State. The resolution was not adopted by the Board, who no doubt are aware that the recommendation of any particular breed by a board, society, association, or any other body, has now very little weight in influencing public opinion, particularly when such endorsement is given in direct opposition to the judgment of practical men, who, it is presumed, are best qualified to decide such questions. The Ayrshires have a great name as dairy stock, and, no doubt, some of them give large quantities of good milk, but their excellence begins at the milk pail and ends there too. They do not make superior beef, nor do they grow to a large size; their oxen are not renowned as working cattle, and the breed does not take root and extend in places where it has been established and fostered with cost and care.

The most extensive dairy farmers in Europe and America, after many trials, have abandoned the idea of stocking their dairies with cows of any particular breed, as they find that strong, vigorous cows having all the points of good milkers are very rarely found among those breeds which have been for some time known as improved stock. Many attempts have been made to establish dairies of pure bred Devons or Durhams, but unless the owner was a man of large capital, who could afford to keep an expensive hobby, the purely bred by degrees gave way to grades, and sometimes to very common stock, whose valuable properties consist not in shape or colour, but in their capacity for yielding a large quantity of excellent milk, and a heavy carcass for the butcher when they are no longer of any use in the dairy. It is well known that the best milk cows in the celebrated dairies of Orange County, N. Y., are not purely bred Shorthorns, Devons or Ayrshires, but of a selection from all these breeds mixed up with natives, grades, and crosses of every kind and colour; the points of good milk cows being held in higher estimation than those of pure blood.—*Western Rural*.

**BREEDING OF DAIRY COWS.**—In the last Report of the New York State Agricultural Society, recently published, we find that Hon. Lewis F. Allen, who, by the way, is very high authority on these matters, having had a large experience and a wide observation, concludes that dairymen should raise their own cows, as the most economical and sure way to obtain a prime herd. He believes also, that if a heifer is well fed and well cared for, she will make a better cow if she comes in at two years old than at three.

Mr. Allen also favours in-and-in breeding, and says, "the thing has been too long and too persistently tried by the best breeders the world over knew, in domestic animals of every known variety, to need farther argument or elucidation, and the best and most popular cattle now in England or America, are the fruits of this practice." We have so great respect for Mr. Allen's judgment on this point that we will only say that it must be done with great caution, and only the skillful breeder should undertake it.

He also states "that our dairy herds, instead of yielding 350 lbs. or 400 lbs. of cheese, or but 150 to 180 pounds of butter to the cow, on the average, as they now do, can, by properly breeding and care of the cow, be increased twenty-five to fifty per cent., beyond these figures. We agree fully in the main idea, that it is better, on the whole, to breed one's own stock for the dairy.—*Rural N. Y.*"