

Horn crosses, to Mr. Peverill, Windsor Road, and a number of half bred pigs. All the common and grade stock have been sold off the farm, except two cows kept as assistant nurses to the Short Horn calves. In future none but thorough-bred stock will be kept. An imported Cotswold Ram has been sold to W. T. Harris, Esq., Stewiacke.

The following are the weights respectively of three late Spring chickens, hatched in June, or beginning of July, 1877, and killed for the table the second week of January, 1878. They were just six months old, so that the heaviest one gained nearly a pound weight a month from the time of hatching. The weights without feathers:—1st chicken, 5 lb. 9 ounces; 2nd, 4 lb. 6½ ounces; 3rd, 4 lb. 8 ounces. These chickens were taken at random from the yard, and killed without being fattened.

In October, 1876, Mr. McCurdy purchased "Pearl Drop," one of the yearling heifers imported by the Central Board. This heifer unfortunately lost her calf—probably owing to injuries received on board ship—but she has been giving milk ever since, and is establishing her character as a milker. She was shown at Kentville and took second prize in her class, yielding the first to Mr. Blanchard's "Beauty."

In the spring of last year Mr. McC. made a second purchase of a bull calf from C. P. Blanchard. This is now a choice animal. It is from one of Mr. Blanchard's own cows by the imported bull "Lord Raglan." He is named "Lord Raglan, Junior," and took first prize at Truro and Kentville last autumn. This calf is of good size, stands low, is long in the body, and if he should improve in the future as he has done in the past, he bids fair to rank second only to "Bismarck" among the Ayrshires.

Mr. McCurdy's new purchase was at Kentville. He bought the two year old heifer "Lilly 2nd," bred, we believe, in Yarmouth. This is a large and handsome animal, has had one calf, and is due for a second early in spring.

Besides these, Mr. McC. at present owns the cow "Norm," and the yearling heifer "Lady Avon," bought lately from C. P. Blanchard. These are also fine animals. The cow is six years old and has proved herself to be a good breeder and milker, and to possess all the characteristics of a thorough-bred Ayrshire.

The heifer is both large and well-formed, and is a promising animal. Altogether, these five are a fine even lot, and will prove, doubtless, the nucleus of a superior herd.

Major Blair has also three or four very fine animals, and last year sold two very

promising calves, which took prizes in September last in Truro, but were not taken to Kentville, where, we are informed, they would have done well, as there were no better on the grounds.

In connection with this subject we would like to mention a pleasing feature, and that is the improved condition of thorough-bred stock in this County over that of common stock. The fact that a man possesses a well-bred animal seems to give him a higher idea of their requirements. Hence we see them better housed, better fed, and better groomed, and if the introduction of thorough-bred stock did nothing more than to raise the standard of cattle kept, the money expended in their purchase would be well laid out.—*Colchester Sun.*

THE CHEMISTRY OF FOOD IN RELATION TO STOCK FEEDING.

Dr. Stevenson Macadam last week delivered a lecture on "The Chemistry of Food," before the East Lothian Agricultural Society. At the outset of his remarks he explained the views advanced by Liebig regarding the composition of food, pointing out that there were two elements to be considered—the one the heat-producing and the other the flesh-producing ingredients. In wheat, he mentioned, there were 10 parts of gluten or flesh-forming ingredients to the 100; while of starchy or heat-producing material there was 70 per cent. present. He stated that with animals getting 100 lbs. of potatoes to eat we could only by any possibility get out of them 1½ lb. of flesh-forming matter; while in the case of turnips the proportion of this food obtained was even less, the maximum amount that could be got out of 100 lbs. being ¾ lb. Oatmeal, on the other hand, came up to 18 lbs., linseed cake gave 25 lbs., and decorated cotton cake yielded 40 per cent. By means of several interesting experiments Dr. Macadam afterwards demonstrated the presence of carbon in various kinds of food, explaining that a man required to be supplied daily with about 12 ounces of it, which represented about three times that quantity of food, and that a horse and an ox were generally considered in such matters as requiring as much as six men. In conclusion, he stated that of late it had been ascertained that Liebig was mistaken in holding that the force expended by animals was derived from the flesh-forming food (it being from the starchy or oily ingredients that it was obtained), and spoke of the important part played in food by saline matter. In reply to several members of the Association, Dr. Macadam gave it as his opinion that animals did not take the full 25 per cent. of flesh-forming food out of linseed cake; and that decor-

ticated cotton cake was much cheaper than the other, and, if given judiciously, was better for cattle than linseed. Replying to other questions, the Doctor mentioned that oat straw contained only half the feeding properties of hay, and stated that a bad season like the present was not only bad in the sense of not giving the proper yield, but also in the sense that the grain did not, owing to the absence of sun, contain the full amount of gluten. A hearty vote of thanks was awarded to Dr. Macadam for his lecture.—*London Agricultural Gazette.*

SCIENTISTS IN SAN FRANCISCO.—An interesting meeting of the California Academy of Science was lately held in this city, for the purpose of extending a formal welcome to a trio of distinguished scientists, who have been making a tour of the State, namely, Sir Joseph Hooker, C. B., Dr. Asa Gray, and Prof. F. V. Hayden. Sir Joseph Hooker is President of the Royal Society of London, England, Dr. Gray is Professor of Botany in Cambridge University, and Prof. Hayden is at the head of an exploration party of United States geologists.

The attendance was worthy of the occasion, and the address of Prof. Davidson, the President of the Society, who occupied the chair, must have been extremely gratifying to the distinguished guests to whom it was more especially delivered, while it displayed much literary and scientific acumen.

In addition to the evidences of substantive wealth, which usually form the subject of investigation when our resources are under discussion, it appears that valuable results, to be achieved in the shape of scientific deductions, will attract to our State, in increasing numbers, explorers in the fields of natural science, whose incidental observations will throw light on its more material resources, the existence of which we are desirous to make known. In this regard, the following observations of Sir Joseph Hooker are both interesting and instructive: "The President had asked him to say a few words with respect to the Academy. In England they knew well enough what it was to wait for results; but he might be believed when he said that the destinies of science on this coast are great, and in time will come with immense force, and for these two reasons. There is here a most intelligent and a most active and progressive population, and, in the second place, there is here one of the most remarkable assemblages of natural objects and physical phenomena that any part of the world possesses. In speaking thus, he included the whole coast, north and south of California. There is no section of the earth in which so many singular phenomena can be observed as in this.—*Resources of California (monthly paper).*