

the flocks undergo. If *Shropshire* will take the trouble to read the article in the March number of the Journal, he will see that Mr. Morton, editor of the English Agricultural Gazette, is the person who speaks of the increase of weight in the Hampshire lambs. Any one who chooses may see without trouble that the "pound a quarter from day of birth," means *gain per week*; just as a farmer from Kent or Surrey would say, "this hog has made a stone (8 lbs.) since he was farrowed," i. e. at 20 weeks old he weighs 160 lbs. It is a local way of speaking and I did not think, when I quoted the passage, that it needed translation.

The lambs that weighed 33 lbs. per quarter at the last Smithfield Club show were not the property of rogues who entered them as nine months old instead of twelve months, as *Shropshire* seems to hint; and even if it were so, they would have been disqualified by the veterinary inspectors of the Club, who are quite capable of discerning between a March lamb and a December one. Hampshires do not begin to lamb *the year before*, as *Shropshire* insinuates: he is thinking of the Dorset horned-sheep, probably, which supply London with the earliest lambs.

My own statement as to the precocity of the Hampshires as compared with the Shropshires is admitted by my correspondent. Their hardiness is proved by Mr. Morton in his paper, even if my own testimony were worthless. As for the insinuation that "with cake, meal, grain, roots, &c.;" it shows clearly that the writer has never seen this breed of sheep at home.

Why should I wish to "write up" the Hampshires? I have not a sheep belonging to me of any sort, though if I had I would certainly import that breed. I never "wrote down" the Shropshires, as I have a high opinion of them as next in quality to the Hampshires, though inferior, as I believe, and as every one I know in England now believes, to them in hardiness.

Will my readers forgive a quotation from my notice of the sheep at the Montreal Exhibition, 1880? "These sheep (Shropshires) were superb specimens. Their necks, loins, and legs of mutton were splendid, and it was not till one handled them that their enormously good backs could be believed in."

Not very depreciatory—eh? But still, as a farmer's sheep I prefer the Hampshires; their home is in the almost barren downs of the chalk formation; the rich pastures of the midland counties, and the Red-sandstone soils of their own county, are the home of their rivals. I had in England a standing flock of 250 Hampshire ewes, and hardier sheep never went. *Shropshire* has a perfect right to his own opinion, but I do not think that such a statement as "The Hampshire requires more feed than &c." is a sensible way of arguing a point; it is merely "begging the question." Every one knows, who knows anything about sheep, that the Shropshire is a cross with the long-wool sheep. The Hampshire is a pure-bred as Eclipse.

ARTHUR R. JENNER FUST.

CAPONIZING.

It is desirable to submit the cocks to the operation when they are about four months old, and it is very important to choose a time when the weather is somewhat cool, rather moist than dry, and especially to avoid performing the operation during the heat of summer. The instrument employed in the operation should be very sharp, a surgeon's small operating-knife, termed a curved-pointed bistoury, is far better than an ordinary knife, as it makes a much neater wound, and so increases greatly the chances of healing; or a curved-pointed penknife may be used. A stout needle and waxed thread are also requisite; and a small curved surgical

needle will be found more convenient in use than a common straight one. The fowl should have had no food or water for 24 hours before the operation.

It is necessary that there should be two persons to perform the operation. The assistant places the bird on its right side on the knees of the person who is about to operate, and who is seated in a chair of such a height as to make his thighs horizontal. The back of the bird is turned towards the operator, and the right leg and thigh held firmly along the body, the left being drawn back towards the tail, thus exposing the left flank, where the incision has to be made. After removing the feathers, the skin is raised up, just behind the last rib, and an incision along its edge is made into the cavity of the body, sufficiently large to admit of the introduction of the finger. If any portion of the bowels escape from the wound it must be carefully returned. The forefinger is then introduced into the cavity, and directed behind the intestines towards the back, where it comes into contact with the left testicle, which in a young bird of four months is rather larger than a full-sized horse-bean. It is movable, and apt to slip under the finger, although adhering to the spine: when felt, it is to be gently pulled away from its attachment with the finger and removed through the wound—an operation which requires considerable practice and facility to perform properly, as the testicle sometimes slips away, and, gliding among the intestines, cannot be found again readily; it may, however, remain in the body of the animal without much inconvenience, although it is better removed.

After removing the left testicle, the finger is again introduced, and the right one sought for and removed in a similar manner. Afterwards the lips of the wound are brought together and kept in contact with two or three separate stitches with the waxed thread; these must be made through the skin only.

In making the stitches, great care should be taken to avoid wounding the intestines with the needle, or including even the slightest portion of them in the thread—an accident that would almost inevitably be followed by the death of the animal.

After the operation, the bird had better be placed under a coop in a quiet situation, and supplied with drink and soft food, such as sopped bread. For a short time it should not be permitted to roost on a perch at night, but be turned into an empty room, where it is obliged to rest on the floor, previously covered with some clean straw. For three or four days after the operation, the bird should be fed on soft food; after that time it may be set at liberty, for a short period, until it has recovered entirely from the operation, when it should be put up to fatten.—*The Farmer* (Eng.).

Whitfield Stock-farm.

As will be seen by our advertising columns, a sale of young stock will be held at Rougemont about the 15th June; a favourable opportunity for purchasers of all kinds of cattle as Shorthorns, Devons, Herefords, Jerseys, Polled Angus, Highlanders or Kyles, and Kerries, will be included in the catalogue. It is needless to say more, as the celebrity of the establishment must collect a crowd of attendants.

On Virulent Diseases, and especially on the Disease commonly called Chicken Cholera.

By M. Pasteur.

Virulent diseases may be ranked among the greatest of the evils that afflict living beings. To prove this, we have merely to name measles, scarlatina, variola, syphilis, glanders, the carbuncular disease, yellow fever, typhus, and the cattle plague. This