

in direct opposition to preconceived views, "a practice condemned by three-fourths of the old school of breeders." He adds that he could not find any one, however, who has tested the practice, but they "believed it to be erroneous because their great grandfathers had so noted it down."

As history so frequently repeats itself, and this has already begun, as I have already intimated, in respect to crossing Long and Shortwoolled sheep, it will be interesting to quote again from Mr. Twynam's letter of November, 1837:—

"I have thus far spoken," he says, "only of obtaining a uniform breed of the first crop. I will now proceed to observe that to render this breed still more useful and profitable, and to adapt it for every purpose for which the full-sized Down is now used, a good-coloured, good-woolled ram of this first cross should be used with Down ewes. Where good judgment is here exercised, the produce is the handsomest, the most compact, and, all purposes considered, the *most profitable* sheep that has ever yet been produced."

Here our authority may be open to the charge of a slight inconsistency, considering what he had previously said about the value of first crosses. The words in italics, "most profitable," are his own, but he continues to anticipate what the Oxfordshire Downs, and, in a less complete sense, what the Shropshire sheep now are:

"Here you have combined," he says, "all the advantages of the Leicester, Cotswold, and South down, a capacity for folding with increased aptitude to thrive, a kindness in nature without tenderness, a frame so improved as to come to greater weight when fatted than the Downs, without the inconvenience of too much size, an increase of wool, not only in length and weight, but in value; this second cross bearing beyond all dispute the most valuable combing wool England can produce."

As I have shown, the relative prices of mutton and wool are not now what they were upwards of forty years ago, and for several years after that time. Mutton was then selling at less than 6*s.* per lb (1) The present obvious practical tendency, as I have also shown, is to cross longwoolled sheep with Downs or first crosses, such as Oxfordshires, or with more mixed dark faced breeds, such as the Shropshire, and this with a view to improve the quality and value of the mutton rather than to increase the weight of wool. But Mr. Twynam proceeds:—

"On my farm, where the moderate-sized Hampshire Down will live, I do not hesitate thus openly to declare that the *second* cross of Cotswold and Down shall beat them, taking the average annual sales, at least 25 per cent. in profit, keeping the same numbers and performing the same folding. On this point, I have twice before ineffectually dared my brother farmers of Hampshire to a trial, and now for the third time I solicit some spirited Southdown breeder to select 100 ewes, one-half of which shall be coupled with his own ram, the other with a cross-bred of my own production; let the lambs fall and live together in any manner, good or bad, as he pleases; let them be shorn when tegs, and their wool and carcase valued. By the event, I am willing to let the merits of the cross stand or fall."

There is much in the above close and confident description that may be applied to current events in regard to the progress of British and foreign flocks of sheep. Mr. Twynam, however, concludes the paragraph from which the above are extracts in a way I cannot think is so happy or trustworthy. He says, in his emphatic way:

"As to pure breed, nonsense! There is no such thing in this country! And I much question, if a close investigation

took place, whether the celebrated Ellman's breed did not derive their "mould" from Bakewell's Leicester."

I have been among Southdowns forty or more years, but do not remember ever having seen a trace of a stain of Longwool in any sheep that came from a reputed true-bred Southdown flock. This strain would crop out, even after many generations if it had ever been there. As I have previously shown, it crops out in "watery" or "open" fleeces in the Shropshires, in which it is admitted there is a strain of long woolled sheep. It crops out, too, among the sheep in question, the Oxfordshires, an occasional lamb having almost a pure long-woolled fleece to look at. When these have appeared, however, they have been discarded from the flocks of professional Oxfordshire breeders. Hence the present prevailing uniformity of the wool and general character of the established breed of Oxfordshires. (1)

W. W. G.

#### Starting Cabbage and Cauliflower.

EDS. COUNTRY GENTLEMAN—Some four or five years ago I urged in the COUNTRY GENTLEMAN that for that part of the country north of the 40th parallel of latitude, cabbage and cauliflower plants started early in spring, if properly attended to, were equal if not superior to those started in September and wintered over. Additional years of practice confirm the opinions then held, not only by myself, but also by the majority of market gardeners. I am acquainted with.

Plants may be either started in greenhouse hotbeds, or, when only a few dozen are wanted, the seeds may be sown in boxes and started in the window. (2) Every farmer may raise his own plants by this last method. I would not advise sowing the seeds before the first of March. Get a box about three inches deep and of a size suitable for the size of the window, sow the seeds thinly and when the first two characteristic leaves are formed transplant in another box, putting the plants down to the first leaves in the soil. Keep well exposed to light and air; set the box out of doors on all suitable occasions, so that they shall neither be tender nor drawn in growth; keep them stocky and hardy, and when time comes for setting into the open ground, they are in a condition to grow right along without any apparent check.

Mr. Bailey, on page 69, advises, for early hotbeds, a foot of manure, and on this a foot of soil, for raising early plants. I think he makes a mistake in recommending a foot of soil on such a small quantity of manure, before the first of April. I do not think there is sufficient heat in a foot of manure to heat a foot of soil, unless the heating properties are more powerful than I can find in any manure I handle. Five or six inches is enough of soil for the raising of any kind of plants, and then the heat of the manure is not wholly exhausted in heating a large body of soil.

I consider flats or boxes the best, however, to start cabbage cauliflower, and in fact all kinds of early vegetable plants, when they are raised in large quantities. Last season I raised 50,000 early cabbage plants, and, with the exception of 15,000, had them all in boxes 18 by 24 inches and 3 inches wide. The manner in which I make these boxes is as follows: I use half-inch lumber cut to the width of 3 inches and 12 feet long, (by having it in this size, it cuts to the proper

(1) When Lord Ducie brought Jonas Webb's best ram (hire, 95 guineas a season) into Gloucestershire, the wool of his get was open, or watery, in the second year. I am as convinced as a man can be of anything he cannot prove, that Webb's sheep had a touch of the long-wool in them.

A. R. J. F.

(2) Possibly, if they are sown *very* thin. As a rule, I never saw any cabbages or cauliflowers succeed when started in a window.

A. R. J. F.

(1) In 1850, I sold no end of Down-sheep at 3*s.* 8*d.* the stone of 8 lbs. - five pence halfpenny a pound.

A. R. J. F.