

in this pupa state, buried as we have described, and thus protected from the casualties and inclemency of the season. What the circumstances are which influence the duration of this state, are only imperfectly known. Where a brood of caterpillars has been hatched at the same time, fed on the same food, subjected to the same treatment, kept in the same place, and passed into the pupa state nearly at the same time, they yet differ as to the time when they become perfect insects. Most of them do so in a fortnight, others not before the same period next year, and some not before the third season; but all, whether appearing this year or next year, come out at the same period of the year. Temperature and moisture are the principal agents in this. The knowledge of this fact ought to guard us against neglecting precautions, in the belief that they are unnecessary, because the insect has apparently disappeared for some years.

(To be Continued.)

SMITHFIELD CLUB CATTLE SHOW.

This great annual exhibition of fat cattle, sheep, and pigs, agricultural implements, &c., was held in the usual place in Baker Street, during the second week of December. Upon the whole, it is not considered in the estimation of several competent judges, to have been superior, perhaps, in some respects, hardly equal to previous years. The stock was not so extremely fat as used to be the case formerly, so that their natural points were more visible, and the quality of meat better for human food. The interest usually felt in the show by the general public, does not seem to have abated. We have been disappointed of an original report; but the following from the *Times*, (our usual authority in these matters, the *Mark Lane Express*, not having come to hand) will be interesting to our readers:—

The problem how capacious a girth and how ponderous a mass of fat may be aggregated upon the limbs and ribs of an animal by dint of corn, meal, roots, oil-cake, and multifarious foods is giving way to the more utile one of how much prime meat can be furnished most thriftily to the

hungry yet dainty consumers of flesh populating this kingdom of great cities. And though the microscope may spy out unhealthy tissues and membranes in the prize carcasses—though a few monstrous obesities may protrude themselves in the cattle classes, and collops of greasy bacon, more fit for the chandler and soap-boiler than for breakfast-eating epicures, may disguise the proportions of some unsavoury swine, yet the general character of this year's fat stock show is, that of well-bred animals of the most valuable description, so far developed as to prove their capability of laying on flesh in the best places, and displaying the kindly properties and fineness of bone indicative of thriving and profit. In Baker-street Bazaar, not a coarse or plain beast is to be found: and but few animals in any department of the exhibition are wanting in that refinement of form manifesting the breeder's judgment as well as the feeder's cost and care. This fact is of high importance, because such a first-class order of competing specimens tells us throughout our country the herds and flocks, here so widely and comprehensively represented, must be in an improving condition, and that the possession of the most profitable properties by their stock is an object more eagerly and extensively sought by our graziers. Pedigree in beef is a great thing, whatever it may be accounted in the generations of human kind; and a "Duchess," a "Duke of Oxford," and a "Master Butterfly," impress their special characteristics upon their progeny, so that the peculiarities of each "strain" of a particular blood are known. A great deal of the "good breeding" enters an animal by his mouth, and the show steer eats cake from his youth upward; but it is undoubtedly the judicious and long-continued improvement of the frame and proportions of animals by selection and the other arts of breeding, far more than any advance in the mode or means of feeding, that has enabled such magnificent specimens to be produced.

In glancing through the cattle classes on the present occasion, we observe that there are fewer mere butchers' animals sent to chance a fancy market in the show-yard, and thus the classes of stores and oxen are in a more forward state of farness and good feeding, and the excellence of the exhibition is still further raised by the stock of several crack local owners, who have not ventured to Baker-street before.

The gold medal in the oxen and steer classes goes to the animal that won the same distinction at Birmingham in the past