

equal to 14 lbs. increase in live weight, or 9 lbs. of mutton.

196. We thus see that food has two drawbacks in its conversion into meat. It has to pay a life-tax for maintaining the animal in a healthy condition, and it has also to construct out of the food the machinery necessary for the conversion of the residue into meat. But whilst we fully recognize these unavoidable duties, they distinctly indicate the economy of making a full use of the advantages thus purchased. To keep an animal intended for the production of meat, in such a manner that it makes no progress, is practically paying for a privilege which you do not make use of. If, on the other hand, having paid out of the food these necessary demands, care be also taken to give the animal such food as shall promote rapid production of meat, you then take advantage of the opportunity you have purchased.

197. From the same point of view we may also more fully realize the value of artificial food such as linseed cake, corn, &c., in acting in a **supplemental capacity**. For instance, assuming an animal feeding upon grass or roots to be receiving therefrom **just sufficient** food to keep it from losing weight, the daily demand of the body will have been thereby satisfied. If such an animal received some additional food, it would be able to **turn that supplemental food into a marketable form, with much less loss of useful material**. In the one case the toll is paid for an empty cart; in the other case we pass a profitable load. But if a given quantity of good food were supplied to an animal at a rate **not equal to the waste** of the body, then we not only do not get any increase of live weight for the food used, but the **animal loses** weight. In fact, it makes up the deficiency in the supply by feeding upon itself, and if the treatment were continued long enough, the animal would starve for want of a **sufficiency** of