

we should reply, that in winter, a thin glossy coat is not desirable. Nature gives to every animal a warmer clothing when the cold weather approaches. The horse acquires a thicker one, in order to defend himself from the surrounding cold. Man puts on an additional and a warmer covering, and his comfort is increased, while his health is preserved by it. He who knows anything of the horse, or cares anything for his enjoyment, will not object to a coat a little longer and a little roughened, when the wintry wind blows bleak. The coat, however, need not be so long as to be unsightly; and warm clothing, even in a cool stable, will, with plenty of honest grooming, keep the hair sufficiently smooth and glossy to satisfy the most fastidious. The overheated air of a close stable saves much of this grooming, and, therefore, the idle attendant unscrupulously sacrifices the health and safety of his horse. Of nothing are we more certain than that the majority of the maladies of the horse, and those of the worst and most fatal character, are, directly or indirectly, to be attributed to the unnatural heat of the stable, and the sudden change of the animal from a high to a low, or from a low to a high temperature.

The decided bad effects of confined air, we find exhibit themselves in apparently a much quicker manner in the case of the smaller animals; for example, the pernicious effects and offensive odours of the small granivorous birds, and the short duration of their lives, when placed in close rooms and densely populated districts, is well confirmed by the London bird-fanciers. "It is well known," observes Dr. Arnott, the celebrated philosopher,* "that a canary bird, suspended near the top of a curtained bedstead, in which people have slept, will generally, owing to the impurity of the air, be found dead in the morning; and small close rooms in the habitations of the poor, are sometimes as ill-ventilated as the curtained bedsteads." With respect to cattle, slaughter-men have certainly cogent reasons for arriving at the conclusion that it is the effluvia of the slaughter-houses which causes them to lose their appetites, and, as a matter of course, their general health must suffer to a greater or less extent.†

That the effects of cold are exceedingly prejudicial to the fattening of animals every farmer is aware; that they require cleanliness, quietude, and warmth every proprietor of live stock, who has paid the slightest attention to the subject, readily allows that these are highly conducive to the health of the horse and the ox. The same observations apply to the pig. Those pigs whose styes have a southern declination, thrive much better than those which are situated in a colder aspect; they can hardly, perhaps, be kept too warm or too clean, and the more recent ex-

periments of Mr. Childers and others have demonstrated the fact, that the domestic sheep is not an exception to the rule. This sheltering of sheep, on an extensive scale, can, and ought to be generally practised, and doubtless the farmer will find it to his profit in doing so.

If the benefits which are to be derived from a close and unrenitting attention to the dwelling of the animal is paid when it is in the field, how much more important is it that such should be the case when the creature is placed in a confined situation. It is, however, but seldom, I regret to say, that the proprietors of live stock avail themselves of the practical benefits which the labours of philosophers, and more especially modern agricultural chemists, have clearly demonstrated that it would be for their own interest to pursue. They have very evidently proved that animals cannot be properly managed without attention is paid to the situation of the buildings in which they are placed, so that, in point of fact, the farmer must pay regard to the purity of the air, the temperature, and even the light of the dwelling-places of his cattle, if he is anxious to make them profitable to him. A few practical facts may not be without their value to the agriculturist; consequently, I shall detail some which illustrate this important subject.

From what I have already stated, I think that I have proved the necessity there exists that the animals should enjoy pure air. It is of great importance to their health that they should enjoy it. For want of it, medical men who have paid attention to the comparative pathology of animals, attribute the origin of those extensively fatal pulmonary maladies to which stall fed cows are frequently subject. In a government publication,* it is remarked, that "the spread of the knowledge of the fact, that animals are subject to *typhus*, *consumption*, and the chief train of disorders supposed to be peculiarly human, will, it may be expected, more powerfully direct attention to the common means of prevention."

CHEMICO-AGRICULTURAL SOCIETY— MODEL FARM.

Dr. Hodges proceeded to make the following observations on the resolution of the Society to establish a model farm. I have, he said, so frequently stated my opinion on the subject of connecting a farm with the Society, and you are all so fully agreed upon the advantages which may be expected from combining the researches of the laboratory with field experiments, that it is unnecessary to urge them upon your consideration. It may, however, be useful to make a few observations with respect to the plans which I trust you may be enabled to carry out, in the contemplated establishment. We have, in Ireland, several model farms, as they are called; and it is to be expected, that the farm of

* First Report on the Health of large Towns, p. 61.

† Report on Inierment in Towns, 10.

* Report on the state of large towns, p. 41.