

the young animal, even when its final destination is merely the shambles; so that it will always be a point for skill to determine when the preponderance should be given to the aliment which repairs the waste former heat giving, when to that which renews the blood after it has been exhausted by the repair of the active organs of locomotion."

It thus appears obvious that in a country like this, subjected to long and severe winters, protection against cold not only promotes the comfort and health of animals, but that it also economizes their food to a degree few, perhaps, comprehend. Cold draughts rapidly lower the temperature of living bodies, which in such circumstances consume a larger amount of aliment to keep up their natural temperature than would be required if they were surrounded by a warmer atmosphere. In short, when animals are exposed in this manner, much of the food they eat is consumed merely to keep up the requisite degree of heat, that would otherwise be converted into bone, fat, and muscle. Hence the necessity of suitable buildings for the proper management of stock. Where, however, such superior accommodation cannot be obtained, much may be done in the rudest structures by the exercise of a little ingenuity and ordinary attention, by way of protecting a farm animal against the inclemency of the weather. To see them as one sometimes does, exposed to the rigors of winter in an apology for a building, or shivering under a rail fence, violates alike the feelings of humanity, and the most ordinary and obvious rules of correct economical management.

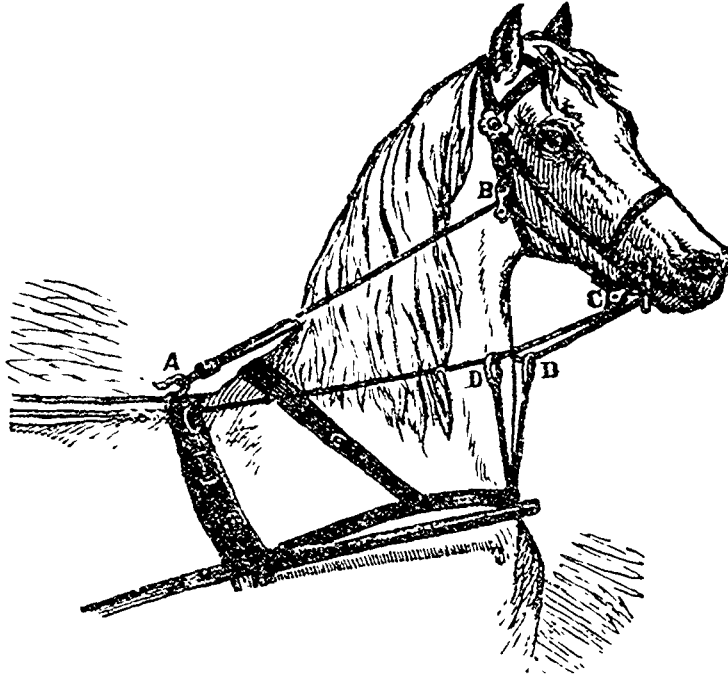
IV. VENTILATION AND CLEANLINESS. While we strongly insist on the stock being warmly housed and protected from cold draughts, both for comfort and economy, it must be distinctly understood that all our arrangements for the accomplishment of these objects should be perfectly compatible with a constant admission throughout the building of pure atmospheric air, without which the healthy functions of the animal body cannot be performed. We have no space for entering on an exposition of the philosophy of this great fact, which in the abstract is readily recognized, but in practice too often unheeded. In this country, it is true, our animals suffer far more from too much exposure than from close and confined stables and byres; but in brick or stone buildings, and sometimes in wooden ones too, there is frequently a want of efficient ventilation, that is, a ready ingress of a sufficient amount of fresh air, and the egress of that large amount which has been rendered foul by breathing, and the exhalations arising from the bodies of animals, their excrements, &c. Sheep, perhaps, are more likely to suffer from close confinement and want of fresh air than any other kind of live stock; they suffer little inconvenience from cold, provided they be kept dry, and allowed plenty of room and exercise. Indeed all young and breeding stock require freedom to promote healthy growth and development. Fattening animals, on the contrary, should be kept as much confined as is compatible with a state of health, for all motion involves waste. Under all conditions, however, a free admission of pure air is equally indispensable.

Cleanliness, in the winter management of stock, is of the greatest importance. The solid excrements should be regularly removed, and systematic attention paid to general cleanliness, as much as in the cases of punctuality in feeding, watering, and ventilation. Clean, dry straw for bedding animals, is a bad conductor of heat, and consequently keeps them warm—a condition most favorable to thrift; and a building from which all organic matter in a state of

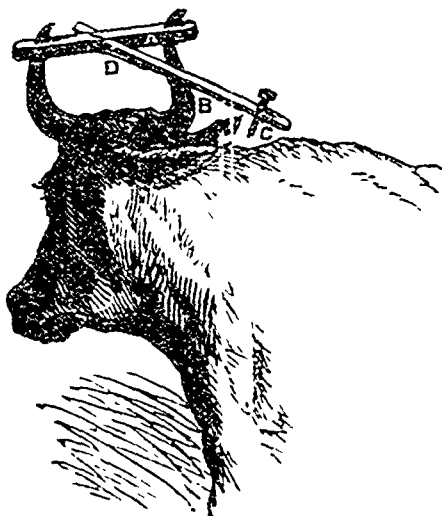
partial decomposition is regularly removed, will in a great measure be free from injurious miasma, which, mixing with the air and entering into the lungs, becomes a fruitful source of disease and death.

Improved Check and Driving Rein.

Our engraving, copied from an American exchange, shows a method of connecting the check and driving reins on single horses which secures to the driver



some important advantages. At A the check rein is attached to the usual fastening on the saddle of the harness, and immediately in front of this it is looped firmly together. At this point the reins divide, one passing on each side of the horse's neck, through the small light pulleys, B and C, and back through the martingale rings, D, and the terrets, to the driver. This contrivance enables the driver to exert great power on the bit, and to control to a great extent, the position of the horse's head. The animal can also lower his head to drink without necessitating the driver's descent from his seat to loosen the check rein. The contrivance can be readily attached to any harness with trifling expense, and is worthy attention from those who drive hard-mouthed and unreliable horses.



Preventing Cows from Taking Down Bars.

Messrs. Editors—Four years ago I bought a cow, which had a habit of taking down bars whenever she desired, and going wherever she pleased. I tried

various ways to cure her, such as putting boards, leather aprons, &c., over her eyes, but they availed nothing. If she ran against the fence, and it was possible for a rail to be taken out, she would do it, even when blindfolded, much quicker than a man could. After repeated experiments, I made the following machine, which completely cured her. I kept her two years afterwards, but she never took down a bar after it was put upon her head.

A is composed of two pieces of wood, each one inch thick, fitted to the horns and then bolted together. B is a piece of wood two inches wide and three-quarters of an inch thick, fitting loosely into a mortice in A, so as to play up and down easily, and secured by a bolt. C is a 2½ inch screw, and turned in or out, as occasion may require. D is a thin steel spring, six or eight inches long, fastened to A with a screw, and running through a staple in B, to hold it in place. This spring is merely to hold up B, so as to prevent the pointed screw from coming in contact with the cow's neck when she is feeding or minding her own business; but, when she undertakes to take down a bar or rail, the weight of the bar coming upon B, and the spring D being very limber, the screw is forced into her neck, and she jumps back with astonishment, leaving the bar in its place.—Cor. in Country Gentleman.

"Native" Hogs Classified.

We extract from an American exchange, the *Farmers' Advertiser*, the following description of certain undesirable breeds of hogs, specimens very similar to which are sometimes to be met with on Canadian farms:

"This old stock of hogs might, for convenience, be classed into several varieties, and a short description given of each variety, so that farmers could know and avoid them.

First, those that are of a miserly disposition, have a will and a determination like iron, and bore their nose into the ground as if they were trying to stand on their head, may be called the *subsoil* variety.

Another variety is a tall, razor-backed kind, that are always hungry, will grab an ear of corn and run a half mile before they stop to eat it, and when opportunity occurs will climb a rail fence to where the rails are some distance apart, and then either go through or over it. This variety is always known by the marks it bears of many a well and hard fought battle with the neighbourhood dogs, and may be classed as *feesoilers* or *windsplitters*. This variety is best adapted to the wants of those farmers who are strong advocates of the "economy of labour," as it will save them the labour and expense of building corn cribs.

The remainder of this species of hogs may be classed under one variety, and will come up to the idea of what some moralists conceive to be "total depravity." They are a half dead and half alive kind of things, that trot before and canter behind when required to get up a motion. It usually requires two of this kind to make a shadow. They appear to be cross-eyed, but upon a close examination it will be found that it is not the case, but only an optical illusion, caused by both eyes coming so near out of the same hole.

This variety originated at Lynn, Mass., the town of shoemakers, where it was bred exclusively for its bristles, and may be called, for the want of a better name, *old liners*."