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air tion side e of s of two s of Under the second head, namely, distribution of fresh air in the stable, it is necessary to admit the air directly into the stable through a number of small openings rather than one large opening. How this may be done is shown in the plans of ventilation given below.

The third point, namely, temperature, constitutes a great difficulty in the ventilation of stables in winter. To introduce fresh cold air into a stable at any considerable rate and to draw off warmer air, necessarily cools the stable, and may cool it below the point of comfort and safety. Without artificial heating, the only safeguards against a temperature too h ware: (1) A crowded stable, in which the animal heat given off is sufficient to warm large quantities of incomi g air; hence the amount of ventilation may be, as it should be, in proportion to the number of animals in the stable. (2) A naturally warm, tight stable, which allows but little cold or drafts to enter the stable, other than by ventilating arrangements. (3) Shut-offs in the inlet and outlet pipes, so that the amount of ventilation can be controlled according to the temperature of the incoming air, the principle being to get as much fresh air as is consistent with a proper stable temperature,-between 35° and 45°. (4) A sub-earth duct, by means of which the fresh air, before being admitted to the stable, is carried for some distance through an underground pipe, 6 feet deep or more. The earth-temperature at that depth being much higher than that of the outside air, the air is warmed in passing through the duct, and enters the stable at a much higher temperature than it would if admitted directly. (5) Provision for drawing off the foul air at the floor, as an alternative to ceiling outlets. With floor outlets, the air drawn off is colder than that drawn off at the ceiling, and hence the stable is not chilled so much. Ceiling outlets, however, encourage a more rapid ventilation, and it is therefore advisable to provide both,-by extending the foul air box to the floor, leaving the lower end open, and providing a flap in the box near the ceiling, to open or shut as is required.

The fourth problem in ventilation is to prevent dripping, or condensation moisture in the stable. In ill-ventilated stable, the moisture from the breath and from other subscripts of the condenses on the cold ceiling or walls In a well-ventilated stable, the moisture is carried off with the impure air before condensation can occur. There are two cases, however, in which ventilation is sometimes the cause of dripping. First, the moist 're may condense on the pipes or boxes carrying the cold fresh air. This is more likely to occur if these pipes are at the ceiling of the stable, and especially if the cold air is admitted at the ceiling—the condensation occurring where the cold air comes in contact with the warm moist air at the ceiling. Secondly, dripping may occur from the outlet boxes, especially if these are long. The preventives c dripping are generally, a brisk movement of air, forcing the moist air out before condensation can occur; fresh air inlets at the floor; and outlet pipes as sh rt and direct as possible.

PLANS OF VENTILATION IN DETAIL.

Following are various plans of ventilation that are actually in use in this country. There are advantages and disadvantages in all.