

ment in bringing about unhealthy conditions. For instance, the owner of half a dozen cows, who is subjecting them to exactly the same treatment in every respect, is annoyed by one of them bloating, while the others maintain perfect health. Now of course this cannot be attributed to anything else but a weakness somewhere in the animal affected, either from inability of the stomach or from defective mastication, the result of bad teeth, the process of dentition, or from the habit of greedy feeding. Such an example as this is frequently seen in a veterinary surgeon's practice. Another example, differing somewhat from the one just instanced in predisposing an animal to disease, may be cited in the peculiarities of formation of limbs in horses, placing these members at a mechanical disadvantage, as sickle-shaped hocks becoming curly, or too oblique, or too upright pasterns becoming the seat of ringbone, even before the possessor of them has been put to ordinary work. Those experienced in such matters recognize this as an unfortunate influence, and carefully guard against it in making a selection of horse either for work or breeding purposes. Unfortunately there are not ill-shaped limbs to warn us of an innate tendency to bone diseases existing in particular subjects, which have inherited a taint of body. Although no fault can be found with the shape of limb or form of bone in some cases that show this tendency, yet in the great majority of cases there are some defects in these points, or in other words, they are a usual accompaniment of this inscribable disposition to develop these long affections. Weakness of constitution, as shown by external form of an animal, although not pointing to any particular organ or group of organs as likely to become the seat of disease, evidences an inclination to numberless ills, the nature of which will depend upon the existing cause. In horseflesh, the form so much to be avoided, is portrayed as follows. Narrowness and shallowness of chest, short hind ribs, weak flank, confined loin, thin neck, split up quarters, round bone, small joints, long-backed, long-legged, washy-colored, coarse skinned and flat footed. The same defects or modifications of them are often seen among horned cattle, and confer a like tendency. Diseases as well as defects or a tendency to disease are transmitted from parent to offspring, no better example of which need be mentioned than the form of consumption so common in horned cattle.

Extrinsic causes of diseases may be defined to be any influence acting from without that tends to lower the healthy standard in the animal economy. There are a great variety of these.

First and foremost the *medium* in which animals live, ordinarily termed the air, should be as free as possible from impurities, for the atmosphere has very important duties to perform in keeping the blood in a healthy condition. Every animal, in the process of breathing, keeps contributing poisonous materials to the air, so that if a fresh supply of pure air is not continually provided, by proper ventilation, these noxious matters accumulating have a more or less evident deleterious effect, which shows itself most conspicuously when any disease or injury exists, aggravating and intensifying them, and then rendering what is usually simple and benign, serious and fatal. The baneful effects of impure air are markedly noticeable in strangles or distemper in horses, which disease usually runs its course in a week or ten days, but if the surroundings are unfavorable, or the ventilation bad, serious results follow and greatly complicate matters. The air of a building is also contaminated from the accumulation of filth in the form of liquid or solid manure, and the slovenly habit of allowing the excrement to remain in boxed stalls from day to day or week to

week results in poisoned air, particularly when the temperature is high, which favors fermentation, and the consequent evolution of noisome gases. *Over-crowding* also brings about the same condition of unwholesomeness, every inhabitant contributing its quota of impurities; therefore sufficient space admits of the dilution of the harmful emanations so that their activity is lessened. The difficulties in the way of keeping the air pure are, that the temperature must be of a suitable degree in order that animals inhabiting the building shall be comfortable and not subjected to draughts. It is an easy matter to keep up a supply of fresh air by opening the doors, but it is incompatible with health and results in a loss of food if the temperature is below 45° fah. for cattle and 55° fah. for horses. Although cold is itself injurious, when it falls with force upon an animal body, as it does in draughts, it is extremely likely to produce disease of a congestive or an inflammatory type. In order to attend to these principles, and have pure air, we must so construct our building as to admit this important element of health in such quantities as not to dangerously lower the temperature nor produce a draught. In bringing this condition about, the inlets for the pure air should be somewhat numerous and their calibre not more than a couple of inches; they should be situated as far as possible from the animals in order that the freshly introduced air may be diffused and mixed with that already heated, thus not perceptibly lowering the temperature. The outlets for removing the impure air should be near the bottom of the stable, not communicating directly with the outside, for there they would act as inlets, but forming the entrance to pipes which pass up to the ceiling before they discharge their contents, thus acting in the same way as a fire place or stove. Where holes in the roof are left, the warm air is rapidly got rid of, for it being lighter than the cold ascends and escapes. I am not in a position to submit a plan for ventilating stables, which would be applicable to all buildings, but attention to the principles described will aid in bringing about a proper sanitary condition. Some may think this subject unworthy of much attention, and that the only efforts necessary are to keep animals warm in the winter. To those that have poor and unsubstantial buildings this is of course the chief concern, but to those who house their stock in bank barns, and especially where there are many of them in the same compartment it is a matter of much importance, whether it is acknowledged to be so or not.

Although there may be no decided manifestation of disease in many cases from improper ventilation, yet there is frequently a want of thrift not to be justified by lack of food, and consequently there is loss sustained.

These bank barns are in many cases marvels of convenience, but are often not as wholesome as they might be. One often sees on opening the doors of one of them, steam rushing out like out of the vent of a steam engine, which shows there is far too much dampness. Although a moderate amount of moisture is beneficial, yet anything like wetness is detrimental, the ill-effects of which will be felt if the doors are allowed to remain open in the morning, which is generally the case. It will be opportune here to draw attention to the custom of letting animals out during the day. Of course, this is both necessary and beneficial, so long as it is properly done, but if not managed in a rational manner harm results, to which I can testify from personal experience. In most cases the plan is to allow the cattle to run out for from one hour to the greater part of the day. Now so long as they are engaged in drinking, frisking around and enjoying them-

selves, benefit is being derived from the change, but as soon as this ceases—which it generally does in 15 or 20 minutes—chilling begins, and harm is being done, and the ill-effects are to some extent proportionate to the excessive warmth and dampness of the stable and to the degree of cold outside. When the sun shines brightly on the animals and the cold wind is broken by some protection, there may be advantage in extending the time somewhat. But it is against the freezing-out process that anyone can see going on in half the barnyards of this country, that these remarks are particularly directed. In summing up, we may say, that the attributes of a healthy stable are purity of air, sufficiency of warmth, absence of dampness, and, last of all, but not of minor importance, is plenty of light. Light is essential to the health of all the higher forms of life as well to the lower. It exerts a vital influence of some sort necessary to the proper development of the blood. Only view the plant that is almost continually sheltered from the sun; the person whose employment is indoors, and it will lead to the conclusion that light has an action on life, and that a beneficial one. It would seem as if most of our stables in this country were designed especially to elude it.

(To be continued.)

Fitting Animals for Exhibition.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR,—In the July number of the JOURNAL I see an article on "Shearing Sheep for Exhibition." I was rather astonished to see it there without any comment from the editor. Surely there is already too much deception practiced by exhibitors without having such work openly encouraged through an agricultural paper, especially one that has earned for itself the high moral reputation of the JOURNAL. The open encouragement of the thing is bad enough, but the statement that one who cannot shear a sheep so as to hide its defects and make it appear better than it really is, is not fit to be a judge, is simply unbearable.

In looking over the prize lists of the different Ontario exhibitions, I see there are no restrictions in regard to shearing, and exhibitors will no doubt make good use of the privilege. I know flocks that are being fitted for show, that now carry on their backs most of last year's wool; and as the time for exhibition approaches they will be blocked into shape to attract the eye of the people. In looking over the lists of several American shows, I see they require sheep to be clipped close to the skin not earlier than April 1st, and any that have been blocked so as to conceal defects, will be excluded from competition.

I think the system of judging from points would be a great improvement over the present haphazard way. It would then be necessary for breeders to adopt a standard of excellence, as has been done by the American Shropshire Registry Association, a copy of which I enclose, which may be of some benefit to judges of that breed at the coming exhibition.

Judges are too apt to be carried away by size. This should be guarded against, especially in young animals, when the age is not known. At one of our leading shows last fall a shearling Shropshire ram was shewn among the ram lambs and was awarded first prize; and although his face had the appearance of a shearling, the judges did not think of looking at his mouth. Doubtless such blunders seldom happen. At another show one judge was heard to remark to another that he was judge on Southdowns, but that he really knew nothing about the breed. Better have only one good judge and pay him for his services.

Yours truly,

JAS. GLENNIE.

Guelph, July 18th.

Mr. Glennie stirs an important question when he touches upon the moral aspect of the practices referred to in his letter. We thank him for the compliment he has paid us in reference to the character of the JOURNAL. If there is any one feature of it regarding which we have a greater anxiety than another, we think we are safe in saying that it is its