Winter Warmth for Stock.

For several years past writers in agricultural papers have been laying great stress upon the importance of warm stabling for all classes of stock; investigators have been experimenting upon the effects of cold upon the production of flesh and milk, and now the craze has taken such a firm hold of peoples' minds, that recent writers have been insisting upon the necessity of putting stoves in stables. They have become so scientific that they know that food is fuel used for the production of animal heat, and so proficient mathematics that they can calculate to a nicety that wood or coal is cheaper in the production of heat than hay or corn.

This boom is a natural sequence of others that have demoralized our stock industry. Fancy stock has always been tenderly reared, the fancier the stock the tenderer the rearing, and it is therefore no matter of surprise that such an extreme has been considered justifiable. Experiments have been abundant enough to prove that animals will not gain flesh so rapidly under a low, as under a high temperature, and that the warmth of the body, at a low temperature, when the food is insufficient, is sustained at the expense of accumulated fat. Under such conditions we find that hardy cattle, such as our natives, have an accumulation of muscle to protect their bones from cold, while fancy stock soon becomes literally reduced to skin and bone. Muscular tissue is developed by exercise, and as our aristocratic breeds enjoy little of it, their supply of muscle must be proportionately reduced. We have only to look to the human family for examples of the same tendency. Our enemies will here giggle and jump at the conclusion that we are advocates of straw-stack accommodation, and wish to revert to the dark ages of our stock industry. We are the champions of moderation, and much as we deplore the system of our fathers, if we were called upon to pronounce judgment between the two extremes, it is quite probable that we would raise two cheers for our forefathers for every one for the modern speculators. When a cow gets "on the lift," occasioned by a superabundance of chink holes in the stable walls, and wheat straw in the manger, the disease is not actually contagious, and no veterinary is required to establish the cause, symptoms, and treatment. If veterinary science must be encouraged, no better law could exist than one enforcing the present system of high temperature and high feeding. The feeding of warm food is a boom in the same direction.

However desirable it may be to encourage a good quality, care must be taken that this be not secured at the expense of a still more desirable quality. Healthfulness demands that all domestic animals should have a considerable amount of exercise, and if they are prisoned up in warm stables, they will suffer more from an hour's exposure to cold than they would otherwise suffer in a whole day. It is quite natural that hardiness should be entirely overlooked by our city "authorities," for this quality is specially characteristic of our natives. It is forgotten that heat can be more cheaply produced by keeping the skin in a state of constant activity by cleanliness and friction, and this method, with requisite exercise, makes the stove effectual in the barnyard as well as in the stable. Another loss sustained by warm stables is this:—In autumn cold weather begins, while the pastures are still green, and here hardy animals will thrive better than tender ones in the stalls, and besides there is a great economy of labor.

If hardiness were estimated at its intrinsic value, there wauld be a great re-action in our live stock industry. This quality is more valuable in dairy than in breeding breeds. What farmers want is a breed that will give a large flow of milk under average normal conditions as to food and temperature; the forced or abnormal system is prejudicial to the health and longevity of any breed. Hardiness gives health; health produces vigor, and none but healthy and vigorous animals can give wholesome products, or sustain quantity for any considerable length of time.

It seems to us that the average farmer has been progressing rapidly enough without the aid of booms; he soon finds out for himself that comfortable stables and liberal feeding, with plenty of exercise, are all that is necessary for his present requirements.

Stabling for Cattle.

The *Milch Zeitung*, a dairy paper published in Bremen, Germany, contains many practical articles from the pen of able authors, and in a recent issue it has a lengthy treatise on the above subject, from parts of which we make the following translation:—

It is a great mistake to believe that cattle can live without injury to their health, in narrow, uncleanly stalls, where there is defective ventilation. The breathing of impure air is very prejudicial to their health. The unhealthy condition of the stalls is unquestionably the cause of many diseases, and frequently brings on abortion. It cannot be too emphatically insisted upon that farmers should not shut up their animals in these narrow prisons, where there is little light or air, where dung and filthy water and other unbelongings collect, and where cleanly people cannot enter without disgust. Such cattle cannot thrive, and more especially do young, growing cattle suffer, and with a regard to cows, both the quantity and the quality of the milk are seriously affected.

Every stall requires the following conditions: that it offer sufficient room for the comfort of its occupant; that it be dry, no dampness being permitted to penetrate the floor or walls; that the temperature be easily regulated; that there be sufficient light; that the ventilation be sufficient to draw away the foul air with becoming haste; that it be kept thoroughly clean without wasteful labor; that the passages be spacious enough for purposes intended; that the mangers be so arranged as to produce a minimum waste of feed; that the arrangements be such as will promote a hasty retreat of the cattle in case of fire.

Having dwelt on the importance of saving the manure—"the soul of agriculture," the writer continues:—

1.—All the food and water utensils should be kept scrupulously clean, and when necessary washed out with lime water or lye. The waste food should be completely taken out before a fresh supply is placed in the manger. Such animals as hens, which render the food uncleanly, should not be tolerated in the stables.

2.—Don't be too saving of the litter; it should be frequently renewed; no wet or dungy portion of it should remain in the stall, and it should be frequently shaken up and evened about. This is specially necessary to the thriving of the stock, and to the production of clean and healthy dairy products.

3.—The animals, especially the younger ones, should be kept clean by rubbing them at least once a day with a wisp of straw, and grooming them thoroughly with comb and brush at least once a week, being careful not to use a sharp-toothed comb. Never forget to keep the cows' udders clean, rubbing them often, but not with ice-cold water, drying thoroughly with a coarse woollen cloth. Cattle breathe, as it were, through the skin, and the importance of maintaining atmospheric communication between the air and the blood through the pores is so great that the animal may become excruciatingly tormented if this hide-breathing be prevented by artificial plugging up of the pores. The exterior dirt must therefore not only be removed by grooming, but also the finer dust and loosened scales, which, owing to the sweat from the paste, cause a plugging up of the pores and an exclusion of the air. This condition throws two much work on the lungs; the more active the skin is kept, the less work will the lungs have to perform. Neglect of this important consideration is a fruitful source of disease; and the animal products, as articles for human food, greatly suffer in point of healthfulness.

4.—The feeding, drinking, milking and outing of the cattle should be punctually attended to; otherwise they become restless, which circumstances have an injurious effect on their thrift as well as on their products.

5.—The cattle must have sufficient time between meals to allow their food to digest, so that the more difficult the food is to digest, the longer should be the time between meals; or in other words, keep the most digestible food for the evening meal, so that it will be fully digested before morning.

6.—Feed according to the natural appetites and digestive capacities of each class of animals; and arrange them so that the greatest eaters come together in one stable, thereby causing less labor in the distribution of the coarser and more indigestible foods.

7.—Keep away as many strangers as possible, and never permit dogs or hogs to enter the stables. Anything which disturbs the comfort and peace of the animals has an injurious effect upon their thrift.

8.—Plenty of exercise should be given to each animal daily, according to its ability to stand it. This advice should be strictly followed in reference to growing animals.

9.—Gentle conduct cannot be too strongly recommended. Rough handling not only makes the animals mistrustful and excitable, but also produces profitless results from the food given. Rough, soulless, and irritable cattlemen should never be tolerated about the premises.

Now is the time to gather up all the bones scattered about your yards. Smash them with an old axe or a sledge hammer, the finer the better, and place the broken pieces into a barrel or other vessel, interspersed with layers of good hardwood unleached ashes. Keep the mass moist, not allowing the lye or potash to escape; in a few months the bones will become jelly, and you will have a fertilizer superior to much of the stuff that costs $40 or $50 per ton in the market.

Mr. Henry Stewart expresses the safe opinion that phenomenal butter yields, secured under the current reckless system of cruel feeding, can no more serve as a test of the productive capacity of a breed of cows than would the time record of a spirited horse driven with lash or spur and dropping dead at the end of the course, suffice for measure of normal speed.

A firm in Pennsylvania has planted 600 acres of the *Catalpa speciosa* and contemplate enlarging their plantation.