

The Use of Sawdust as a Litter in Stables

Though Inferior to Straw It is One of Its Best Available Substitutes

THE scarcity of straw and ensilage, two of the most important roughages on the dairy farm, is making rigid economy in the use of everything of feeding value necessary this year. Since the straw, which is usually used for bedding, has also a feeding value, economy usually begins in the use of bedding. The farmer reasons, and rightly so, that when the choice has to be made for the animals between comfort and hunger, comfort is the first to be sacrificed. Evidently the cow is of the same opinion, as she shows no scruples in eating her bedding, if it is edible, whenever the pangs of hunger become too pressing. She evidently agrees that a hard bed is rather to be chosen than an empty stomach.

The Wastage of Liquid Manure.

A shortage of bedding has two effects: discomfort to the animal and the loss of the most valuable part of the manure. Unless the liquid portion is saved, the fertilizing constituents to be returned to the land are very materially reduced. Nearly half of the nitrogen and potassium from farm animals occurs in the liquid excrement. It is therefore important that this be saved through the use of sufficient absorbents.

The claims of sawdust as a material for bedding, both as an absorbent and for providing comfort for the animals, should not be overlooked where a supply is available. It undoubtedly answers very well for this purpose. It is true, of course, that this product of the sawmills is not by any means the equal of straw in this respect, which latter, after all is said and done, is the best and indeed an ideal kind of litter for use in the stable, but despite its general inferiority to straw as litter, sawdust proves very useful. The outstanding feature of sawdust, in so far

as regards its suitability for litter in stables, is that it possesses great absorptive powers for liquid, and in this particular respect it ranks considerably above straw. Whereas the absorptive capacity for liquid of straw amounts to only about two and a quarter times of its own weight, sawdust—provided it is perfectly dry—is capable of absorbing liquid to the extent of about four times its own weight. Thus, thanks to its great absorptive capacity, sawdust makes both a dry and a cleanly bed. It does not afford such a soft bed as straw litter, but still animals are quite comfortable on it, provided the sawdust is put down sufficiently thickly.

In Cleanliness it Excels.

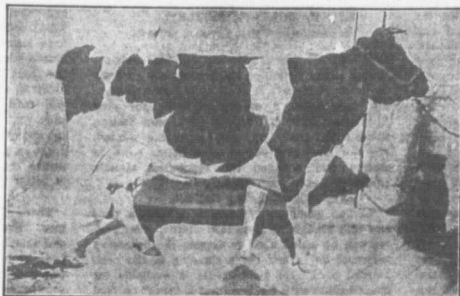
Besides possessing great absorptive powers, sawdust also has certain deodorizing properties, which considerably enhances its value and usefulness as a bedding material for use in stables. From a hygienic point of view it is certainly in every way excellent, it being absorptive, cleanly, deodorizing and cool to the feet. Those who have never used sawdust as bedding in the stable may perhaps think that it is not particularly cleanly, but practical experience of it will soon prove to any one who has any doubt about it that there is no cleaner kind of litter. It is true that when the animal lies down on a bed of sawdust particles of the latter adhere to its coat, while some is also apt to adhere to its legs, but it can be easily brushed off, and there is certainly no reason why sawdust should be objected to as a bedding material on this account.

An epidemic of thrift and economy is sweeping over Canada. The man who contracts it, will find it has been no misfortune, during the adjustment days after the war.

Factors of Successful Management

Why Some Farmers Do Better Than Others

WHY is it that one man is more successful in farming than another? The answer usually given is that he is a better manager. But what are the factors of successful management? They must be susceptible of knowledge. They must be open to ascertainment. But little has been done in analyzing the business of Canadian farmers; of singling out the different factors which contribute to the success of those who are making the most progress, and of comparing the relative values of these factors one



Madam Pauline Canary—Guelph Winner of Total Solids. Not—Fat. She was second in her class and third in general standing at Guelph Winter Fair. A fine type of animal with plenty of size, quality and constitution. Owned by A. E. Hulet, Norwich.

—Photo by an editor of Farm and Dairy.

with another. It is for this reason that we have got to look to the United States for sources of this information. There, investigations have been conducted in many different states and under wide differences of climatic and soil conditions. One of the best of these investigations was conducted in Missouri, where conditions are not dissimilar from those found in many of the southern counties of our Eastern provinces. This investigation, says O. R. Johnson, of the Missouri College of Agriculture, has indicated that the reasons for the difference in the degree of success attained by the different farmers, lies in the following points:

A Good-sized Business.

The first is a good-sized business. A man must have enough land so that he can use his time and the time of his work stock and tools with the greatest efficiency. This means not less than 120 acres and not more than 500 acres for general conditions, the preferable size being between 200 and 400 acres. The proper amount and distribution of capital is necessary. The investment should not vary widely from the average of the region—either in investment per acre or in the distribution of invest-

ment. A farming system which furnishes a maximum amount of labor from which returns are realized either directly or indirectly, and which includes a minimum of labor from which no return is realized. Each workman on a farm should have provided for him not less than 160 days of productive labor, and each horse should have not less than 60 days of productive labor. Many farms run much below these figures.

Quality Next.

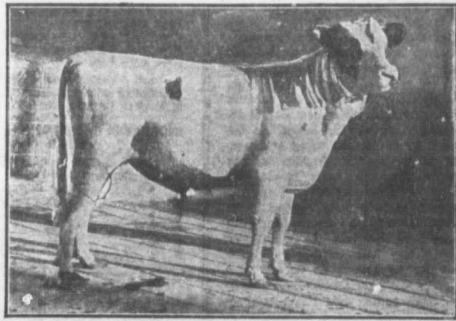
The second essential is a business of high quality. The first point in this connection is crop yields. Yields should run from average to about one-fifth above the average for the region. The man who falls below the average in yields has an up-hill job. Not only must crop yields be good, but on farms where some feeding is done the feeding operations must be efficient. All classes of live stock should return at least \$10 for every \$100 worth of feed consumed, if good wages are to be realized for a man's time. Some of the best feeders get much more than this. Some classes of stock can pay a profit by returning less than this, but in general this rate of return will give good wages and pay market price for the feed consumed.

Diversification Necessary.

A reasonable degree of diversity is also necessary for successfully operating a farm. Unless special or unusual conditions justify a highly specialized type of farming, a farm should have several sources of income to depend on. The cotton farmers of the south at the time the boll weevil appeared severe as a good illustration of the danger of having only one source of income. A man who is depending entirely on the sale of hogs is in bad shape if the cholera gets his hogs one year, but if a man has several sources, he can lose one or perhaps two sources and still have some income. The most successful farms in the region studied had from three to seven or eight sources—probably three to six sources will give the best

results.

In preparing cows for the test, it is well to have them dry for two, or better, three months, before freshening. In order to dry them quickly take away all feed including straw for bedding for 48 hours. Follow this up by putting them on half ration for one day and then gradually back to the full ration. This procedure serves to check the milk flow.



Humeshaugh Invincible Peter—Winner of Sr. Bull Calf Class at Guelph. He is a champion and the son of a champion, being a son of the Sr. champion bull at the Toronto National. A calf of quality and a coming star. Owned by A. S. Turner & Son, Ryckman's Corners.

—Photo by an editor of Farm and Dairy.