

reliance when necessary, in the second place. In the first idea there was nothing new. In the second, all is new—so new that, if the United States Patent Office recognized such inventions, the system could be patented as Shaw's system of pasturing sheep, without infringing on the rights of anyone.

In growing such foods it is not absolutely necessary to have a grass pasture, but it is greatly advantageous to have one where food is thus grown in a large way. It is necessary, first, because it is not good practice to pasture the sheep on forage sown for them when the forage or the ground is wet. They would impact the ground too much at such times, and other disadvantages would result. And it is necessary, in the second place, because the summer food thus grown may not always be sufficient in supply, so that it may be necessary to have a pasture, as it were, in reserve. The flockmaster could not bother with many little plots in doing such work, nor should he attempt it. But he can sow one, two, or three of these foods to carry his flock through the season on succulent foods in time of need.

The plan to be adopted would, in outline, be as follows: First, sow foods for summer forage in proportion to the probable needs of the flock. Second, choose those kinds which will provide food in abundance when they are most needed. Third, only attempt to grow such foods as are adapted to the climate and soil. Fourth, it will seldom be found necessary to sow more than two or three kinds in the one season. Fifth, it will be necessary to have as many fields as there are kinds of food sown. And, sixth, it will frequently be found practicable to grow two pasture crops on one piece of land the same season. The application of the principle will have to be wrought out by each individual for himself.

Of all the foods grown for the purpose thus far, sorghum and rape are the two most valuable. Usually it will be found that these two aids will carry the flock through the season, along with the grass pasture. The first-mentioned carries the flock through the hottest and driest weather on ample supplies, while the latter grows both early and late in the season, but not so well in hot weather. Winter rye is also an excellent aid. When spring-sown, rape may advantageously be sowed along with it, and fall-sown rye may be followed with sorghum when there is enough moisture in the land.

And it is well to bear in mind that when a crop which grows a second or a third time is eaten down, the harrow may be used with much advantage by running it over the land after each season of pasturage. It not only kills small

weeds that have sprouted, but it causes other weeds to sprout upon which the sheep will feed when they are young and tender, and the harrowing helps rather than hurts the growth of the crop.

The advantages of such a system include the following: First, it enables the farmer to grow many more sheep on a given piece of land. Second, it enables him to furnish them with foods succulent and nutritious from spring until fall. In other words, it makes it quite possible for him to grow mutton equal to the best English-grown. Third, it is death on weeds. By no other possible method can they be so cheaply, so easily, and so effectively destroyed. Fourth, the land is left in an excellent condition as to enrichment for the succeeding crop. It is manured without any labor involved in drawing and distributing the manure. And, fifth, it will usually answer simply to disc the land thus pastured, when preparing it for the following crop. The labor of plowing it is, therefore, rendered unnecessary.

Flockmasters, look into the question. It is a question of questions among those that relate to the sheep industry at the present time. The system is applicable to the East as well as to the West. The only difference is that which relates to selection of the crops that should be grown. And the drier the season and the more shyly grasses grow, the more advantageous will the system be found. By this system enough sheep could be grown in the United States to supply the world.—*Prof. Thomas Shaw, in National Stockman.*

### Cooper's Dip.

E. J. W., Dundurn, Assa: Where can I get Cooper's Sheep Dip?

ANS.—Messrs. Wm. Evans & Sons, Toronto, are the head agents for this dip. Small packages for 25 sheep cost \$6 per dozen, and large packages for 100 sheep \$24 per dozen.

### Grain Feeding Lambs on Pasture.

Breeder: Will it pay to feed grain to lambs while running with their mothers on pasture?

ANS.—There are a great many features that influence this question asked by "Breeder," but it is possible to offer enough data on it to enable him to determine whether it will pay or not under his conditions. The price of the lambs, the time they are to be marketed, and the discrimination of the market as to the condition of the lambs, all have an important bearing on the