

soluble. If we save the ashes of the wood we burn and utilize it, we leave the soil in as good condition as before. The Dominion Government export potash, and the farmers of the United States take it. I do not think the ordinary farmer realizes the amount of value there is in that article we call ashes. With regard to nitrogen the atmosphere is full of it, but we cannot utilize it, except to a certain extent. Every thunder-storm converts a certain portion of that nitrogen into ammonia. Hence nitrogen being absolutely necessary for the growth of every plant, we have it brought to us from an unseen source. Yet a sufficiency is not brought, and we have to add to that. A great many of the advanced agriculturists import cotton-seed oil which contains a very large proportion of nitrogen. You know how valuable manure is when the animals are fed on linseed meal. I don't know whether you have noticed that bones are scattered around this country very freely, but it is an agent that it is hard to make use of. If you send to town or to any of the agricultural fertilizing companies, they will sell you bone at a pretty fair figure. I have often heard farmers say that they could not see how by paying forty dollars for bone they got forty dollars back. But we must bear in mind that by utilizing bone we do more than that. Bone is composed of about one-half its weight in water, and one-half a nitrogenous article. This is the most valuable article in the nutrition of a plant. The article is so valuable that the world has been searched for guano,—containing largely nitrogen with a certain proportion of phosphate of lime. We know that the nitre beds of Chili are most valuable, and we have all heard of the Nitrate King who lately made such a flourish with his vast fortunes in England. That article is used altogether for agricultural purposes.

But to return again to our bone, it must be remembered that we want the whole of the bone, and do not want the nitrogeneous portion removed. I can sympathise very much with the men who boil the bones before they crush them,—but the agriculturist should not want it boiled. He wants the bone brought into a condition into which it can be utilized by the soil. The natural bone has this advantage over phosphate of lime,—that it is not soluble in water. We want something that will not wash away, and the bone furnishes us with that something. It is also taken up more readily by the plant. The cost of phosphate of lime is very great, but bone is not so expensive. Being interested in the question I went to a bone man, and he agreed