

could be made, the system could be instituted here, to the decided advantage of all concerned. Meantime, however, it is not universally applicable. The matter is merely introduced here in order to indicate a further important line along which agricultural economy may be effected. Of course, the stamping on the bag of the guaranteed minimum analysis and the forms in which the three constituents exist is of decided advantage to the purchaser of manures, but the "unit basis" method of purchase in addition is decidedly equitable to both farmer and manure-vendor.

The co-operative purchase, by more or less remote farmers, of manures is also an economic factor of some importance to agriculture.

The application of manures, mixed by the farmer himself after instruction, suited to the conditions of soil, crop, and climate (only after the soil has been first treated from the physical standpoint), is another important factor in the agricultural economics associated with this country. Through the use in many cases of manures that are obviously unsuited to the soil, crop, and climate many farmers lose considerably, or produce much less from their land than they would otherwise. It is true that in many instances manure-vendors send out satisfactory manurial mixtures for particular crops, but as the soil and climate of this country vary very much, even within a not very extensive area of country, these mixtures, while well suited for definite conditions, frequently do not fully suit the varying conditions obtaining throughout a given stretch of territory. Then, again, the farmer is often found using for a particular crop a standard single fertilizer that, from an examination of the soil and a knowledge of the climate—particularly the rainfall—of the locality, the trained man can readily see is entirely unsuitable for the crop in question. The need for more knowledge of the application of fertilizers, from the point of view of crop, soil, and climate, on the part of many of our farmers is, indeed, most apparent.

The free use of manures during times of high prices for produce, and the small or moderate use of such during periods of low prices, involves an economic factor of some importance. At any time, in a country of plenteous rainfall more especially, there is loss of manurial constituents from the soil, particularly of nitrogen, hence the economy in reducing the quantities of manures used in times of low prices of produce. The losses are reduced to a minimum, and satisfactory production is maintained mainly on the natural fertility of the soil. On the other hand, high prices justify costly methods, manurial or otherwise, being employed in pushing production.

On the (comparatively few) farms where farmyard manure is produced in quantity this material should as far as possible be