

proved by the following applications, according to the result of analyses above given :

APPLICATION PER ACRE.

Plaster of Paris, . . . . .	2 bushels for both soils.
Common Salt, (Refuse Salt,) . . . . .	1 bushel for No. 2.
“ “ “ “ . . . . .	1½ bushels for No. 9.

Which will bring up the respective deficiencies of sulphuric acid and chlorine in the above soils :

Peruvian Guano, . . . . . 100 lbs. for both soils.

which will give to the crop a quick start and increase the action of the phosphates naturally contained in the above soils.

An application of any article, rich in phosphates, as Mexican guano, bone earth, bone black, &c., is quite unnecessary, and will be without the least effect, inasmuch as a natural supply of this substance is here furnished by the soil itself.

The result of the applications, recommended above, was of the most favorable kind, giving a very large return in the first crop over all other means. I regret, for the cause of agriculture, that the death of this noble, true-hearted, sincere, honest and intelligent gentleman has prevented me from giving a detailed statement of his particular experiments, the loss is great to the cause which he so ably defended and so successfully advanced, teaching both by precept and example. His death is no less a loss to the whole community than to the immediate circle of his relations and friends. May he rest in peace.

Several other specimens in different parts of this valley, show nearly the same composition ; and so nearly the same are the great proportion of the soils of this valley, with the exceptions hereinafter named, not included on the mountain slopes, that directions for one will extend to all, and with the *same practical skill* in cultivation, nearly the same results will be attained. All the soils of this valley can be improved by lime. When I say *improved*, I mean that they will be made by it more permanently fertile, and will give better returns for the outlay than any other single application.

Some of the soils in this part of the valley are much lighter than others ; these should especially be limed, as by this their texture will be much improved, and when convenient, the strongest and most adhesive clay should be spread over them. Much benefit may not be realized the first year, but the improvement will, though slow, be sure and continued. In the lightest of those soils coarse stable and barn-yard manure should be plowed under. Coarse manure should never be applied to the