

*Sulphuric Acid* is, less than one bush. Plaster Paris contains in No. 2  
do in No. 3  
less than 2 bushels in No. 6, (A)  
less than 1 bushel in No. 9  
*Chlorine* is, more than 2 bushels of common salt contain, in No. 2  
less than 1 bushel in No. 3  
do in No. 6 (A)  
less than 2 bushels in No. 6, (A)  
*Potash*, from 0.07 to 0.14 per cent.

*Improvement of the mechanical texture of the soil.*

Considering the respective quantities of lime and magnesia in No. 6, (A,) and No. 6, (B,) of which the former contains a predominant quantity of lime against magnesia, the latter on the contrary a predominant quantity of magnesia over lime, and judging from the fact that the yield in grain and grass has been considerably less on the part represented by No. 6, (A,) than that by No. 6, (B;) and considering farther the similar qualities of both soils in all other respects, both being parts of one and the same field, we must come to the conclusion that the proportion of lime and magnesia best adapted for these particular kinds of soil is such that magnesia, if not exceeding the lime in quantity, should at least, be equal to it.

In accordance with this conclusion, the following applications may be recommended for the improvement of the mechanical texture of the soils, with reference to the analyses of limestones hereafter given:

*Applications per acre in the Fall.*

No. 2.....	20 bushels of No. 4, (Young's.)
No. 3.....	10 bushels of No. 3 (Woodsboro'.)
No. 6, (A).....	10 bushels of No. 4, (Young's.)
No. 6, (B)	
No. 9.....	10 bushels of No. 4, (Young's)

*The directly nourishing properties of these soils will be improved* by the following applications, according to the result of analyses above given:

*Application per Acre.*

	No. 2	No. 3.	No. 6, (A)	No. 6, (B)	No. 9.
Mexican Guano.....	300 lbs.	—	300 lbs.	300 lbs.	300 lbs.
Plaster of Paris.....	2 bush.	2 bush.	1 bush.	2 bush.	1 bush.
Common Salt.....	—	1½ bush.	1½ bush.	1 bush.	1 bush.

These three applications will supply the respective deficiencies of phosphoric acid, sulphuric acid and chlorine.

Peruvian Guano.....	80 lbs.	80 lbs.	80 lbs.	80 lbs.	80 lbs.
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