

By the use of this lime, the purchaser will have all the good effects of ordinary lime, and at the same time, save the expense of the cost of plaster as an addition to the soil.

The mode in which this lime should be applied, depends on its peculiar properties resulting from its composition, which is constantly changing on account of the presence of the hydrosulphates of lime and iron in it. These substances cannot long exist under the influence of atmospheric air, and are finally converted into sulphate of lime, (plaster of Paris,) and peroxyd of iron. The quantity of sulphate of lime which is contained in this article, indicates to what extent this process of decomposition has already advanced, and which, of course, will be quickened when the lime is scattered and exposed to the full influence of the atmosphere. Besides these substances, we meet with a large per centage of water-slacked lime, which also undergoes a change under the influence of the atmosphere, being converted into air-slacked lime. 100 parts of this lime will therefore eventually become converted into 72.87 parts of air-slacked lime, and 30.13 parts of plaster of Paris; the other substances as given in the analysis remain unchanged.

This lime should therefore be applied to the surface in the fall, suffered to remain there, and then turned in in the spring, for any summer crop; or it may be applied on the surface in the spring, and turned in in the fall, for a wheat or any other winter crop. In this way no possible damage could happen from its use; on the contrary, reliable gentlemen have informed me that they have experienced most excellent effects from it when used in this way. There is another valuable effect of this lime not possessed by any other, which is its tendency to destroy insects.

I have been informed of many applications of gas lime, always with beneficial effects when applied properly, and here insert a note from a gentleman who has extensively used it in Anne Arundel county:

DR. JAMES HIGGINS,

*Dear Sir:*—In compliance with your request, I would briefly state my experience as to the application of "Gas House Lime" upon my land in Anne Arundel county.

I put at the rate of from 50 to 60 bushels of lime per acre upon the sod of old worn-out land and plowed it down, and with the application of guano and salt agreeably to your directions, (after analyzing the soil,) I made a fair crop of oats and corn. The entire breadth sowed in oats had the benefit of the lime, but not so with my corn crop, a portion of which was not limed, and that portion was distinctly marked by the pale color of the corn during summer, and the inferiority of the crop at maturity.

Very truly yours,

L. W. GOSNELL.