most luxuriant; that with the barn yard manure was good, but inferior to the former; the quick limed portion gave a poor crop, and the remaining three ridges were not worth the cutting. Hence we see, that the lime itself had some fertilizing influence—that the dung was superior to the lime alone, but neither would bear comparison with the compound as manure; for four years afterwards, the part of the field dressed with the compound yielded a superior crop.

We may conclude from these experiments, "that when quick lime has ceased to promote fertility, if compounded with earth, its effects as a manure become highly valuable"—"almost any kind of soil is suitable for making this compound, but soil similar to that to which it is to be applied is preferable. Many of the subsoils make good compounds with lime. Sand and lime should be mixed for a clay soil, and subsoil clay and lime for sandy land, gravels, free loams, and moss lands in particular. No farmer need complain of want of materials, since every sort of land can be used for this purpose. These compounds produce immediate fertility, and correct the constitutional defects of the soil."

Farmers should study the nature of their soils, and the lime should be proportioned to the lightness or heaviness, the coldness or warmth of them, as experience has proved that light soils have been injured by too free and frequent use of lime. The farmer must ascertain by careful experiment and observation the quantity of lime that his soil may require.

One part of lime compounded with six to ten parts of earth, answers for light soil, and one of lime to two, three, or more of earth will answer for heavy lands.

The failure of lime by itself upon land long under tillage has been proved, particularly in the neighbourhood of Edinburgh; but it is not doubted, that if the same quantity of lime had been applied in a compound state, it would have fertilized the soil, and produced the best effects.

Quick lime may be applied with advantage on deep loams, but the compounded lime will be much better.

Lime is well adapted for marsh lands, which contain a large quantity of matter, capable of being stimulated by it. It may also be applied on rich, deep, dry and loamy soils, which frequently require the stimulus of quick lime. Clay lands combine well with lime, and bear the repetition of it better than light soils; grain growing on such limed soils preserves its healthy appearance in wet weather, whilst that upon a similar soil not limed is yellow and sickly. Upon sandy land, which seldom abounds with much vegetable matter, lime exerts a mechanical influence, it combines with finer particles, gives consistence, and attracts moisture from the atmosphere. Such lands however may be injured by the too frequent, long continued, and inconsiderate use of lime. A state is thereby induced which requires the aid of putrescent manures.

The advantages of lime are most conspicuous in the *breaking up of fresh and coarse lands*, upon which it acts more powerfully than upon land which has been long cultivated; the first application of it upon such lands should be abundant; upon grass-lands the quantity required is less; it is best to apply it upon these in a compost with earth, except when the soil consists of clay; upon such lands lime is found to be a great corrector of acidity, and pastures which without lime bore nothing but sour grass which cattle would not eat, have by the application of lime yielded the sweetest and most abundant herbage. In Derbyshire the farmers have found that by spreading lime in considerable quantities upon the surface of their heathy moors, after a few times, the heath disappears, and the whole surface becomes covered with a fine pile of grass, consisting of white clover, and the other valuable sorts of pasture grasses.