ses some other power beside that of merely separating the earthy parts, and hastening the decay of the vegetable or animal substances in the compost. Mr. Nasmyth says "that the lime and sand communicate some degree of friability to clay when separately applied; their united effect is much more powerful, and nothing has been found to improve the condition of hard, thin soils, more than the old mortar of ruined buildings."

The term *Friability* implies the reduction of calcareous, and bony substances to small particles.

In China the plaster of old kitchens is greatly prized as a manure, so much so, that the Chinese husbandmen will frequently put new plaster on a kitchen for the sake of obtaining the old for agricultural purposes. "This might be imitated" says Mr. Nasmyth, "by slaking the lime with foul putrid water, or the juice of a dung hill, and mixing it with six or seven times the bulk of sand or friable earth, and keeping the mixture for some months sheltered from the sun and rain." Jackson admits the efficacy of the putrid water, but thinks "there must be something in the compound itself approaching the nature of animal and vegetable manure, to give it the effect it has been known to produce." The late Sir John Sinclair observes "compounds of all kinds are valuable; they so act upon one another in the mass, that the chemical properties of the whole are changed, so as to render it an efficient manure. Earth and lime make good compost; and when the lime is applied in the ordinary quantity in addition to the earth, its effects are truly astonishing."

In China, the kitchens have no fireplace; the smoke escapes through an opening in the top—the old mortar must be consequently filled with the various properties of the smoke; add to this the carbon, which escapes from the human body during respiration, and the various exhalations in a kitchen, and in this manner we may account for the preference of old mortar as a manure.

Various experiments in Scotland have established the superiority of lime in a compound as a manure, over the lime in a hot and powdery state, and used alone.

In the compound state it promotes the friability and expansion of the soil, and increases the luxuriance of vegetation. The fertility of a soil dressed with the compound is much greater than that, which is dressed with quick-lime, followed by a liberal manuring from a compost without lime in it.

The good effects of the compound are alike valuable upon all the crops of the rotation, and especially upon wheat, to which it is generally applied after a naked summer fallow. The compound is applied every second course without dung upon naked summer fallow for wheat, and all the crops in the rotation, wheat, barley, oats, grass, and at times peas, and then oats, are all as good, if not superior to those in the preceding crop with putrescent dung.—The compound is not exhausted the first season of its application, for it assists the following dung course in fertilizing the soil.

The quantity of lime applied in compound is from 40 to 60 bolls of 4 Winchester bushels with about three times that quantity of earth. The earth used was from the top ridges of fields, the scouring of ditches, the scraping of roads, &c.

In another experiment, one proportion of a field was dressed with the compound, at the proportion of 50 bolls of shells per Scotch acre, incorporated with three times the bulk of ridge earth; another proportion of land was dressed with quick lime by itself, at the rate of 60 bolls of shells per acre; a third proportion was manured with barn yard dung thirty loads to the acre; and there ridges were left without dressing. The whole was sown with oats and grass. The part manured with the compound was