

conversed with Dr. Pepper on the subject, and was now in communication with Mr. Nesbit, but the latter gentleman had not answered the question he now put.

Dr. VOELCKER said, this question was a most important one, which it would be most desirable to solve. About four years ago, he paid some attention to what was called "clover-sickness;" and, like most beginners, in two months he fancied he knew something about the matter, and threw out some suggestions, with a view to remedy the evil. Having, however, followed up the question in various operations, and in the laboratory, and after some long correspondence, he had come to the conclusion that, upon the subject of clover-sickness, he knew as much or as little as the man in the moon.

Mr. DAVIES asked if the fermentation of ordinary manure would render chipped bones sufficiently soluble to be of use to the crop?

Dr. VOELCKER thought it would be quite sufficient; and, after one turning, the bone-dust would disappear. It would, in his opinion, be a very great advantage to use bone-dust in that way.

Mr. PAYNE inquired if the Professor recommended long manure to be ploughed in, or used as a top-dressing?

Dr. VOELCKER said, in a very stiff land it would be better to plough it in, as in that way they obtained the full advantage of the manure.

The CHAIRMAN, in the course of some observations, asked if the plan recommended for keeping up the wheat was by stiffening the straw? If so, superphosphate would be much more likely to do that than ammonia.

The PROFESSOR said he knew, in some instances, that superphosphate stiffened the soil; but that was a different thing from recommending it for the purpose of stiffening the corn. Ammoniacal manures certainly had a tendency to make corn go down, and should, therefore, be used very carefully.

Mr. GEORGE DAVIES then moved, and Mr. GEORGE WATSON seconded, a vote of thanks to the lecturer, which was cordially carried and acknowledged.

THE PROGRESS OF AGRICULTURE.

(From the Mark Lane Express.)

Forward! forward! was the watchword of one, who for a quarter of a century held almost the whole of Europe in abject submission to his iron will. In taking leave of the old, and welcoming the new year, we shall use this signal in a far different and more beneficial sense—that is, if to promote the welfare of mankind, and render the means of subsistence more abundant, and consequently more accessible to the masses, be preferable to spreading misery and destruction among them. We apply it to the progress of agriculture, and call upon the cultivators of the soil to adopt it as their principle of action—not to rest satisfied with past attainments, but to bear in mind that the extent to which improvement may be carried is indefinite, and that every fresh advance in its career opens up new sources of power.

In the cultivation and general management of the land a great advance has been made. Twelve months ago the subject of steam-ploughing was warmly debated, and many practical men were of opinion that, owing to physical impediments, it never could become of great utility. We, however, then spoke of it as a prospective victory; and its practicability has since been demonstrated by Fowler, Boydell, and others. The American reaper and the thrashing machine have received important improvements at the hands of various machinists. The general labour of the farm has been facilitated and rendered less onerous and expensive by the modern improvements in implements, long in use. And thus the processes of husbandry, aided by the machinist, have been largely accelerated.

The management of the land, too, has occupied the attention of agriculturalists; and if the vexed question of deep and shallow drainage is as unsettled as ever, the general principle is far better understood. It is by collision that sparks are produced from flint and steel, and it is equally by the collision of opinions that truth is elicited. When practical men cannot agree upon such points, a Way or a Nisbet steps forward, and by laying down general rules, and applying the principles of science to the subject, goes far towards showing that both may be right; and that the difference of opinion may