

state of barren karro fields. Nothing can be more forbidding than the appearance of barrenness which they exhibit; yet even those are not hopelessly barren. By plowing under the slight vegetation they produce, and following up the undertaking by a liberal application of lime, unless the soil itself is of a calcareous nature, and then sowing buckwheat, peas or clover, to be turned in when in blossom, a degree of energy will be communicated which will secure the continuance of increased and increasing fertility, and under a judicious system of rotary cropping, ensure good crops for a period of many years.

"'Tis folly in the extreme to till  
Extensive fields and till them ill;  
Shrewd common sense sits laughing by,  
And sure your hopes, abortive, die,  
For more one fertile acre yields,  
'Than the hugh breath of barren fields."

Some have recommended millet as an excellent article for turning in; but of all cultivated crops, with the exception perhaps of red clover, I consider buckwheat the best. By commencing early, three crops of this grain may be turned in in one season—a dressing which will be found sufficient, under ordinary circumstances, for the most exhausted soil, and which is by no means objectionable on the score of expense or cost."

**THE *Working Farmer* REMARKS ON THE ABOVE:**—The above plan of turning in green crops is very well in localities where organic deposits are not at hand; but when river deposits, muck, swamp muck, woods earth and leaves, or any other organic matter can be had and decomposed by the lime and salt mixture, and then applied to the land, it will be found to be a better practice to feed the clover and use the compost, as many tons of clover would be required, to be plowed in to equal in effect one ton of well decomposed organic matter, free from the immense proportion of water which green crops usually contain.

Many argue that by plowing in green crops the inorganic constituents of the sub-soil taken up by the roots of the green crops are added to the surface soil, and this is undoubtedly true, if the plowing be deep enough to turn up the lower parts of the roots, but an ordinary sub-soil plowing will probably enable future crops to find the inorganic constituents of the sub-soil themselves, beside the other advantages arising from sub-soil plowing, such as security against the effects of drought, the gradual increase of depth of soil, and consequent increase of crops, &c.

He who falls in love with himself will find no rivals.

#### AGRICULTURAL EXPERIMENTS.

It is the duty of the government to place some well educated men in the position to employ their time and talents in investigating the secrets of nature, for the advancement of agriculture and the general good. Agricultural societies, which are instituted for the advancement of science, should especially engage in the preparation of such experiments, and divide the execution of them among the several members.

Science would have made much greater progress if the false shame with which agriculturists conceal every unsuccessful experiment, and the exaggerated manner which they often relate all those in which they have succeeded, had not retarded its progress.

We can experiment either by means of simple observation, by examining the subjects and agents placed in relation with each other, and by considering their reciprocal action, and observing its results, or by means of trials or experiments, by placing some well known plants in certain situations determined with precision, observing their reciprocal action, and preventing as much as we possibly can, any foreign or unknown body from influencing the results of our experiments.

A trial is a question addressed to nature; when such a question is properly put, nature will necessarily reply either yes or no.

It is only within the last century that the art of making experiments has been clearly apprehended. It is on this art that the principal power of man over the material world is founded, and that power will become more extended in proportion as he brings this art nearer perfection, and carries it into practice. There is a particular kind of agricultural experiments which have arrived almost to perfection, can be regulated with a degree of precision equal to that which is attained in the other practical sciences—these are comparative trials in the open air.

It is true that experiments of this kind are not easily made; but, nevertheless they are in the power of every reflecting agriculturist. Whoever has accomplished one experiment, whatever may be the peculiarity of the circumstances under which it was made, and has given a faithful account of it, has well contributed to the advancement of science, and consequently to useful practice, and has entitled himself to the gratitude of his contemporaries and of posterity. It would surpass the power of any single individual to accomplish any considerable number of these experiments, and could not be expected from him.—*Von. Thaer.*