Then there is that restlessness incident to the settlement of new countries. Farmers fleece the soil, and, win it gets poor and foul, they move on to new soils to repeat again the operations And many of the pioneer settlers are frequently lacking in knowledge as to the best modes of tilling land. This is against what may be termed successful and thorough farming. When settlements become older the feeling of unrest will somewhat subside, and the desire for change will moderate. Men who own farms will take more pride in tilling them because of the fact that they expect to live upon them the rest of their days.

It is somewhat strange that so many farmers look upon it as an impossible thing to have clean farms; that is, they look upon it as impossible in the sense of being able to clean the farm and to make it pay well while the work of cleaning is going on. And yet it is not so strange that they should conclude thus. They have tried to destroy weeds, and they have not succeeded. When a man fails in an undertaking, he is averse to concluding that he himself has been the sole cause of failure. It is natural that he should conclude that the task is a hopeless one, and that, in consequence, effort should be measurably paralyzed. A man does not care to fling his energies against a wall which he has repeatedly tried before, and to but little purpose.

Notwithstanding, farmers, our lands can be cleaned. Just how this will be done will depend largely upon such conditions as soil, climate, and other things—as the kind of weed, and the extent of the hold which it has upon the soil. It would make a long story to tell how the principal weeds may be destroyed. Such a story cannot be told in our paper, and we shall not attempt to tell it. But we do want to urge upon our farmers the desirability of having clean farms. May the number of these be increased from year to year! This should be the earnest desire of every lover of his country.

## Experiments Which are Costly

"Where ignorance is bliss, 'tis folly to be wise"; so reads the proverb. But where ignorance is not bliss, then it is wisdom to be wise. It is not bliss by any means to be in ignorance with reference to the discoveries that have been made bearing on practical agriculture. To be ignorant with reference to these oftentimes means loss, and loss of a very serious nature, for such ignorance oftentimes leads a man to go to large outlay in conducting an experiment which only repeated what had been done long years before,

and it may have been done much more effectively.

Such experimenting is usually costly, for all experimenting in agriculture is more or less costly. But when the experiment is a failure, as many experiments are, then it is certainly costly, more costly than the average farmer can afford. It is important, therefore, to keep abreast of the times. It is certainly important to keep well posted as to what has been done, and what can be done. It is idle to try to prove what has been proved, and to demonstrate again what has been demonstrated, it may be, under conditions that were far more likely to lead to definite conclusions.

But it is not easy always to keep posted. It is not easy for those who conduct experiments at experiment stations to keep fully posted, so rapidly is work being done, and so much is now being attempted. On this continent no fewer han fifty or sixty experiment stations are engaged in active work. With nearly all of these the law requires that no fewer than four bulletins be issued every year. This would mean the conducting of no fewer than four experiments every year, for a bulletin cannot be issued without an experiment first having been conducted. many of the stations issue no fewer than a dozen bulletins a year; hence the average number is more than four. Say that the average number issued is six. This means that at least three hundred bulletins are issued yearly by the experiment stations; hence the person who is to keep well posted with regard to all phases of experimental work would have to examine a bulletin every working day in the year. This would pretty well occupy his whole time. But few persons are desirous of covering so wide a field. While that is true, they wish to keep posted on some one phase of agriculture, and even then much research will be required and much time occupied in keeping well abreast of the times.

We have already said that experimenting is costly work. This is true, at least, of some kinds of experimenting. And it may be added that it is critical work. Some experiments may be so simple in character that they do not require much thought and skill. But this is not the character of experiments generally. Usually there are complications which require the most careful consideration, and which one who is not a professional experimenter is very apt to overlook. Hence it is easily possible to come to incorrect conclusions regarding the precise value of an experiment, and more especially one that has not been considered in all its relations to the attendant conditions. While every farmer should