

the potash and ammonia, but leaving the soda and lime, which are less important to the plant, at the mercy of the rain. The discovery of these facts has thrown an entire new light on the chemistry of the soil, for they have shown that it must be studied not merely by itself, but in relation to the various substances with which it comes in contact in the course of cultivation as to trace the influences which they mutually exert, and thus a subject already sufficiently complex has become more difficult and laborious than it was before.—*Scottish Farmer*.

"THE SPIRIT" IN GINGER BEER.—As many temperance men are in the habit of drinking ginger beer under the impression that they are still "keeping the pledge," by abstaining from alcoholic liquor mixtures, it may perhaps be as well to tell them the real truth, that all good ginger beer contains a notable portion of spirit. The more the beer is "up," the more certain it is that alcohol is present. It is well known that ginger beer is made with sugar, ginger, &c.; and that it is "set" to ferment before it is bottled; now, it is during the fermentation of the sugar that spirit is produced, and, to show its presence, it can be easily separated by distillation. Making this statement we do not wish to bias the opinion of any man, but merely to correct popular error—the belief that ginger beer is "from spirit!"—*Septimus Piesse*.

WHITEWASHING SHINGLES.—Fresh or caustic lime, applied during the heat of summer, and when the wood has become thoroughly dried, opens the pores, and tends strongly to prevent decay. We have recently examined a board fence, which had been whitewashed in successive years about 18 years ago. The boards were sound and sound, and had not become covered with moss, as was the case with another fence built at the same time. There is no doubt that a great advantage would result from whitewashing shingles before laying them. We were on a former occasion, given some instances of the durability thus imparted to them. A late number of the Boston Cultivator gives some additional examples. J. Mears of South Abington performed the experiment in substance as follows:—He procured a vat (a lime vat at a very good price,) and applied salt with a small quantity of potash to the lime, and immersed the shingles for four hours. The wash was afterwards washed over the shingles when laid. This made a proof roof on a blacksmith shop, now eleven years. Silas Brown, another correspondent, 25 years ago, he dipped shingles into a kettle of lime wash to which salt had been added, and the whole kept boiling. A few shingles were dipped in all over at a time, long enough to soak them well, and then thrown out to dry. In a short time all the shingles were thus prepared. Although what are termed "shingles," they have now lasted 25 years,

"and may do so for years to come." Several experiments of a similar character have been made since, with very successful results. *Cultivator*.

WHY YOU CURSE THE SEED STORES.—Do you want to know why? "Certainly?" Well then, let me tell you what has been often told you before:—*You plant too deep!* You don't believe it? I do, and I know it. There are hundreds of western farmers who as conspicuously believe that they must plant their corn from four to six, and in some instances, eight inches below the surface, as they believe there is a God in Israel, or a McCLELLAN to swear by. And you can't make them believe differently. They know; they've tried it; and their experience proves them and their practice right, all "book-learned" farmers to the contrary notwithstanding. And they despise "book-farmers" as bad as they hate gophers; and they kill all the gophers they can find.

Why do they plant so deep? Because they think the soil is peculiar. And in that they are right; it is peculiar. But they have made it so by their manipulations. They plow it when it is wet, harrow it when it is dry, and it is cloddy and lumpy, and rough as a Down-East field of stone. Then when planting comes they must get down to moist earth, or it will not germinate. They have to get down deep to do it. The roller is not known to the majority of farmers in corn culture. It ought to be. On such land as I have described, it ought to be used before the corn is planted, and again afterward. But I speak of the practice in corn planting show to the more clearly where the fault is in the case of smaller seeds, such as are purchased at the seed stores, planted in the gardens, and never grow at all! Why, only yesterday, I heard a lady say that she put her lettuce seed in three inches deep—down where the ground was moist—and it had not come up yet; and she was indignant! The seed stores were the matter, of course. "You know they do cheat so in seeds," said she to her companion. How sweet, and innocent, and indignant, and disappointed she looked, poor woman! For she was really a splendid woman; but she had not learned to garden. And she confessed that she planted her peas nearer a foot than six inches deep; and her flower seeds which she had got all the way from the Hub of Creation, were equally well planted—and O, the seeds men!

It should be remembered that the season is backward, the ground wet and cold in most localities; and then the fate of the good woman's seeds will be apparent. So of other sensible people who undertake farming and gardening. They know little of the laws of production, and less of the mode of manipulating soil. The more completely pulverized the soil the deeper they plant. It would seem hardly necessary to say