

The farmer feeds and clothes the world, and every product of the soil has its waiting consumers.

*Country Gentleman.*

*More authorities on the legumen-nitrogen question.* M. Ed. Solly, F. R. S., F. L. S., F. G. S., F. C. S., and a host of other initials, showing that he was a man of reputation, besides being professor of chemistry to the Royal Horticultural Society of London, England, and Lecturer on Chemistry in the Hon. East India Co.'s College at Addiscombe, says, in a work called "Rural Chemistry," published just 34 years ago: "There is no evidence to show that plants are able to absorb nitrogen from the air. It might have been supposed that plants could obtain the nitrogen which they require directly from the air, which contains nearly four-fifths of that gas; but there is very good reason to believe that this is not the case."

Forty-three years ago, Mr. James Johnston, professor of chemistry in the university of Durham, in his lectures on agricultural chemistry and geology, spoke as follows: "Nitrogen, though it forms a large part of the atmosphere, is not supposed to enter *directly* into plants in any considerable quantity; it enters into them chiefly, it is supposed, in the form of ammonia and nitric acid;" p. 14, ed. 1845.

A. R. J. F.

—CONSUMING VALUE.—I have, says a reader, this Martinmas entered to a farm, the lease of which binds me to take over on entry, and to leave on quitting, the turnip crop as it stands on the ground at a fair "consuming value." Does this mean feeding value? and what proportion does it bear to market value? ["Consuming" value and "feeding" value are not always synonymous; the "custom of the country" being usually held to decide this point. In some districts they are interpreted to mean one and the same thing; in others the consuming value is rated at about two-thirds or three-fourths of the feeding value, the difference professing to allow for the risk and labour of converting the crop into beef or mutton. Thus a ton of turnips is held to be capable of making 14 lbs. increase of live weight in the animal; and this, at say 6d. per lb., puts the feeding value at 7s. per ton. But where the incoming tenant is to get credit for converting the crop into meat, the consuming value would not be put at more than about 5s. 3d. per ton. "Market" value is a totally different thing. It is feeding value *plus* manurial value. In the case of turnips, the manurial value is commonly estimated at 4s. per ton. Adding this to the feeding value, we get 11s. per ton as the market value. The market price varies, however, with the price of meat, and with the scarcity, or otherwise, of turnips. The main thing is to distinguish aright between market value and feeding or consuming value. A crop of turnips with a yield of 20 tons per acre would on the above data have a market value of £11; but its feeding value would only be £7, and its consuming value not more, perhaps, than £6 5s. An ingoing tenant, then, who pays market value for a crop he is entitled to receive at feeding or consuming value, is a loser to the extent of £4 or £4 15s per acre.]—*Eng. Ag. Gazette.*

On page 465 the N. Y. Times is quoted as advising farmers to let law-making alone. We have heard this old story about farmers being the "salt of the earth" about long enough. It is getting stale. We have had our backs patted until they are sore. Such palaver does not make us forget that farmers have to carry the heaviest part of the burden of supporting these "law makers" and paying their junketing bills. We also have to bear the heaviest part of unwise legislation. We can't hide our property from the tax collector as

the holders of stocks and bonds can. The question of law-making is not merely a question of morals and principles, but a question of finance as well. The farmer should devote as much attention to such questions as he does to any proposed expenditure of his capital. We shall always have those among us who will swallow anything in the line of political bait. We want to increase the number of those who will not forget the action of many legislators on railroad matters, oleomargarine, and the various questions directly affecting farmers. Extortionate charges for transportation and monopoly oppression, are legalized and made possible by these legal legislators. It is the direct business of the lawyer to make money, and he cannot help being the sworn friend of monopoly. I say do not follow the advice of the Times. If we did there would be no use in our going to the polls at all, unless to vote upon some question that affects farming directly. Let us rather take more interest in politics and protect our own rights.

R. N. Y.

Hog cholera visits this section quite frequently, yet I have never had a case among my hogs. In the majority of cases that have come under my observation, the hogs were in small pens, which, as a general thing, were not kept clean, or in places through which ran weak, dried up streams of water. Stagnant water is always unfit for hogs. Many persons bed their hogs in stable manure or under the straw stack. This does not pay me. If they are too hot in their beds and come right out into the frosty air, they are sure to suffer. A hog is a good deal like a man in his make-up.

R. N. Y.

#### Hillhurst Short-horns.

My readers will see by the advertisement that the whole herd of shorthorns belonging to the Hon. M. H. Cochrane will be sold by auction on April 28th, 1887.

The families of which the herd consists are of the *remarkably hardy* Scotch blood, topped by bulls of the Booth lines.

A. R. J. F.

#### NON-OFFICIAL PART.

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by sending your address to Hallett & Co., Portland, Maine; they will send you full information about work that you can do and live at home wherever you are located. Work adapted to all ages and both sexes. \$5 to \$25 a day and upwards easily earned. Some have earned over \$50 in a day. All succeed grandly. All is new. You are started free. Capital not required. Delay not. All of the above will be proved to you, and you will find yourself on the road to a handsome fortune, with a large and absolutely sure income from the very start.

**The Benefits of Thorough Tillage.**—Do farmers think enough of thorough tillage of the soil? We should say they do not, judging by the condition of their fields when they have sown the seed and completed the preparations for a crop. A farmer whose skill and success are well known, who is painstaking in all his work, fitted a field of rye by thorough working with the "ACOME" Pulverizing Harrow, Clod Crusher and Leveler. A neighbor passing remarked that such work as that would not pay. "Why," said he, "we don't put as much work as that on our gardens." To-day, when the winter frosts have done their worst on the fall grain, this field shows that it does pay to take all this care and expend work upon even a field of rye for the grain has an even stand over the field, and the grass and clover have made a perfect catch. With this implement a field may be made to look as well as a garden, and yield as good a crop as any garden could. See advertisement.