gault's Rural Economy.) Now any stoppage in its short career, by bad tillage, or making land naturally cold, more susceptible of radiation, which will favour the insects,—which will, further, favour the spread of parasite plants, rust, mildew, and their train of evils,—the agriculturist should know how to obviate all these evils, and he should at the proper time prepare food for his growing crop; every plant artificially cultivated, should have its proper food abundantly in the soil; he who understands this is an agriculturist.

When a naturalist has discovered the habits, and accurately described an insect, Entomology is satisfied, the labour allotted to this branch is finished; it is not his business to seek their destruction. Man, the lord of creation, in his various occupations and subdivisions of his labours, finding himself incommoded by these insects, puts his superior powers into requisition for their destruction Insects are commissioned to consume some dead animal and vegetable matter; others have their existence in and upon those animals and vegetables while living; and so true are they to their trust, that they dispute the possession of the objects committed to their care with man when he attempts to appropriate them; so that the lord of creation is obliged to employ all the resources of his superior faculties, to invent means of keeping at a distance so minute and insignificant an enemy, every time he seizes on its destined food. But as this necessary, not wanton, usurpation of man on the food of insects is continual, his clothes, and indeed everything he makes use of from the animal and vegetable kingdoms, coming within the description, he is obliged to be incessantly on his guard, to keep off the right owners. This makes the study of Insects a necessary branch of economics, as it is difficult to guard against an enemy you scarcely know by sight, and of whose strategems, hiding-places, metamorphoses, &c., you are perfectly ignorant. As to the insects represented, and the increase and introduction of a host of others never seen here before, it may be an order of an all-wise Providence to send them, seeing that the avarice of man is excited by excess of cultivation over and above actual consumption,—straining lands to raise grain, in order to fill his coffers with a mineral substance which has a nominal value, and makes the possessor what he ought not to be, proud of accumulated wealth, while at one and the same time his fields, and the majority of his fellow-creatures, are in a state of starvation.

> How proud are we! how fond to show
> Our clothes, and call them rich and new;
> Though the poor sheep and silk-worm wore
> The self-same clothing long before!

The land that did once raise abundant crops of wheat, and that useless weed tobacco, will do so no more; the equivalents that were once in the soil have been taken out, nothing being returned; the land is worn out, and when corn-dealers have lost their thousands, and the corn-wevil eat up what is now in vast storehouses, (which they are doing,) and the starving population all dead, the present insect army checking the further accumulation of grain.—when all these things cease, perhaps the plague will stay its devastation. It seems likely that this generation must pass away before any remedy will be adopted. If this is not the case, some person will find an antidote; then to apply it, there should be *unity*.

An American in the south, being tormented by the Hessian fly, tried several methods to abate the nuisance; the most effectual was quite accidental. It so happened that a skunk was killed in or near his field of wheat, so that neither the owner nor anything else visited that vicinity, not even birds, beasts, nor insects, while other parts partially suffered. The hint was not lost; next season he procured another animal of the same kind, treated his exquisite scent with alcohol, saturated some cotton cord with it, and run it up and down through his standing grain; it effectually prevented all insects, while his neighbours suffered as usual. He sold this receipt for a good sum; but few availed themselves of it, on account of its stench, here unity was wanting. If these insects have an olfactory nerve, other things may be found equally efficient; perhaps the gas-house lime would be found efficient for the whole. As I am certain that the insect in the centre of the straw is of the bug family, this lime would be useful, being charged with chloride and ammonia, two things destructive to this family of insects.

A period of four years has shewn us a vast number of strange insects, never seen here before; others have multiplied to an alarming degree. We know the stated periods of the army-worm and the locust, but these we know little about. The stramonium or thorn-apple plant, a narcotic and poisonous plant, never before touched by animal or insect, has been attacked by the same insect that injures the potato; the two plants are in the same class in botany,—the insect is of the bug family. The cherry and plum trees have got a new visitor, which will in a few years kill the largest trees; these have been about 10 years coming from the Southern States to this place. The agriculturist, the horticulturist, the husbandman,—all are concerned in the destruction of these insects. *They* must find a remedy, and from no other source will it come. It is in vain to ask the sciences; even agricultural chemistry will never explain the diseases of plants, whose proximate principles or parts are injured by insects.

S. H.

Growing Wheat from Oats.—"If the gentlemen at the dinner of the Sittingbourne Agricultural Association, who met the observation of the Rev. G. B. Moore, respecting the wheat grown upon plants produced by the sowing of oats, with a burst of derisive laughter, had been asked Where is wheat indigenous? where is its native home? and after posing them by the questions, crowning their perplexity with a 'D'ye give it up?' they might in future be less disposed to laugh *at matters which were new to them*, when they were informed that *wheat is not known to be indigenous any where!* Consequently the reasonable presumption is, that, as in the case mentioned by Mr. Moore, it is a variety produced by some such accidental means as those mentioned by that gentleman. Let us *think* before we laugh.—Let us throw off the shackles imposed on us by an erroneous education. Let us consult—*if we dare*—such books as the one quoted by the rev. gentleman, and then, and not till then, shall we *think* before we laugh."—A Member of the Maidstone Farmers' Club.

Corn (Wheat) in the state in which we have it, when cultivated, does not grow wild in any country; and the field of Wheat, or Rye, of Oats or Barley, as well as the Maize and Millet crops of other lands, attest, whenever they are found, that man has been there, not as the roving Arab or the restless Indian, but as the tiller of the soil and the settled inhabitant of the Country.

How to make Hens lay all winter.—Now that eggs are at tenpence a dozen, it may be of importance to the Farmers' wives to know how to make their hens lay all winter. The following directions, if attended to, will secure that object:—Keep no roosters, give the hens fresh meat, chopped up like sausage meat, once a day, a very small portion, say half an ounce a day to each hen, during the winter, or from the time insects disappear in the fall till they appear again in spring. Never allow any eggs to remain in the nest for what is called nest eggs. When the roosters do not run with the hens, and no nest eggs are left in the nest, the hens will not cease laying after the production of twelve or fifteen eggs, as they always do when roosters and nest eggs are allowed, but continue laying perpetually. My hens lay all winter, and each from seventy to one hundred eggs in succession. If the above plan were generally followed, eggs would be just as plentiful in winter as in summer. The only reason why hens do not lay in winter as freely as in summer, is the want of animal food, which they get in summer in abundance, in the form of insects. I have for several winters reduced my theory to practice, and proved its entire correctness.—*Inverness Courier.*

Fermentation in Manure Heaps.—When a piece of paper, moistened with spirit of salt, held over the steam arising from a dunghill, gives dense fumes, it is a certain test that decomposition is going too far; for this indicates that ammonia is formed, and is escaping.

Gold is worshipped in all climates, without a single temple; and by all classes, without a single hypocrite.