

## POULTRY.

## Away With the "Dunghill."

The Editor of the "Farm Poultry Monthly" thus describes a recent visit to one of the immense packing-houses of Kansas City:—

"Armour & Co. are killing and dressing three thousand to six thousand head of chickens a day; it would pay you to see their place; you would get some interesting facts," wrote Mr. Hawk, of Kansas City, when we were considering the advisability of a trip West this winter. A few days later, while turning over the pages of the Midland Poultry Journal (of Kansas City), we came upon an advertisement of Messrs. Armour & Co., urging farmers to get thoroughbred Wyandotte, Plymouth Rock, or Indian Game males to improve the quality of their poultry. "That, certainly, is unique," we thought. "There is a meaning in that, if we could only get at it. Business men are not, as a rule, paying advertising bills without there being reasonable grounds for expecting returns in the shape of profits."

Armour & Co. have added poultry dressing and shipping to their beef, mutton and pork packing and shipping. One day last fall there came to the slaughter houses, among a great many other coops of chickens, several coops containing "culls" from a farm where are kept Wyandottes only. Instructions were given to have that lot kept together and by themselves, so that they might be compared with the common "dunghills," of which the bulk of the receipts consisted. When dressed and arranged for comparison, it was easy to see that the pure-bred Wyandottes were far superior in plumpness, fullness of breast, smooth, fair skin, yellow legs,—in fact, that it was a far better average lot of dressed poultry than the common stock. Mr. Armour's attention was called to the display, and he instructed the foreman in that department to pack five cases, of one hundred pounds each, ship one of them to each of five commission houses at different points in the East, and hand him a special report of the returns—also reporting prices returned on common chickens sent to same places the same day. When the returns came in it was found that the five cases of Wyandottes graded as "A No. 1," and the price was three cents a pound more than for the common chickens.

What an object lesson!

Armour & Co. are killing three thousand to six thousand head a day—six to ten tons. Calling it an average of eight tons, three cents more a pound makes a difference of \$480 a day—a hundred and forty-four thousand dollars a year. Is it any wonder that they urge farmers to improve the quality of their stock?

If it is worth the while of Armour & Co. to pay advertising rates to get that advice before the farmers, how much more it is worth to the farmers to heed that advice, and improve the quality of their stock! The bulk of that additional hundred and forty-four thousand dollars a year goes into the pockets of the farmers. It is only their commission, a small per cent, for killing, dressing, packing and shipping, that Armour & Co. get. If Armour & Co. get but eight cents a pound for the common stuff, they can pay the farmers but six and a half or seven cents a pound for it; while if they get eleven cents a pound for the "A No. 1" lot, they can pay the farmers nine and a half or ten cents for it. It costs as much, and takes as long, to kill and pick a scrub as it does a pure bred—and the expense of handling (dressing, packing and shipping) is the same. If Armour & Co. get three cents a pound more for the good stuff, they get their commission on a third more returns; but the farmer gets the full third more. It costs him no more to hatch and raise good stock than it does to hatch and raise scrubs, and he will get three cents (probably thirty-three and a third per cent.) more a pound for it.

It was worth the cost (and fatigue!) of our journey to get that one object lesson.

The point would be better understood if one could walk through the cold-storage room, where is about 300,000 pounds (a hundred and fifty tons!) of dressed poultry and game, the good stuff carefully wrapped in paper and packed in boxes ready for shipping. Each box has stenciled on it the kind and quality of the contents; as, for example, "40 broiler chicks, 1½ lbs.," "30 roaster chicks, 3½ lbs.," "25 fowls, 4 lbs.," etc. In one corner was half a carload of lean, skinny things, piled up. "What are those?" we asked. "Those are 'soupers'; three or four cents a pound for those," said our guide. Now, it cost as much to coop and send in those lean "soupers" as it did to coop and send in those "A No. 1" Wyandottes—and it takes just as long to dress, pack and ship them. The farmer gets almost nothing for the "soupers" he sends in, and Armour & Co. get hardly enough for them to pay for handling. After seeing that great pile of "dunghill soupers," we could well understand why Armour & Co. advise farmers to improve their stock!

Fortunately, the writer had his heavy ulster on, else he would have invested in a severe cold, so many interesting things attracted us in that immense cold-storage room, where the thermometer varies little from six degrees above zero the year around. There were stacks and stacks of spareribs, tenderloins, etc., piled up like cord-wood; long rows of boxes of poultry of all kinds, from the broiler chick to the huge turkey-cock; and of game of every class, including frogs' legs, frozen up in buckets of water. It was all very interesting; but the most interesting (most valuable) thing was that

great pile of "soupers" contrasted with the "A No. 1" chickens. The former bring three or four cents a pound; the latter three times as much—and it costs just as much to hatch, raise, feed, coop, dress, pack and ship a mean "three-cent souper" as it does an "A No. 1" thoroughbred.

He would be dull, indeed, who couldn't see which would pay him the best to raise.

## ENTOMOLOGY.

## The Periodical Cicada or Locust.

M. V. SLINGERLAND, CORNELL UNIVERSITY.

These curious and wonderful insects appear in different parts of the country at definite intervals of either thirteen or seventeen years; hence they are known as the Thirteen-year (*Cicada tredecim*) and Seventeen-year (*Cicada septendecim*) Cicadas. Their appearance began to be noted in the last century, and several years ago the entomologist at Washington made an extensive study of the creatures, with the result that the different broods of them are now numbered and the localities where they occur have been mapped; so that the years in which they have appeared during the present century are known, and it is possible to foretell where a brood will appear above ground at a certain time in the future century. There are thus numbered and mapped thirteen seventeen-year broods and eight thirteen-year broods of the insect in the United States. I find no record of the occurrence of the insects in Canada. This year two broods will appear above ground—one (brood XII.) a seventeen-year and one (brood XVIII.) a thirteen-year brood. Brood XII. will appear in N. Car., Ind., Mich., Va., Md., Northern Penn., throughout New Jersey, in Connecticut, and all along the Hudson, in New York. This brood has been observed in some of these localities every seventeen years since 1724. Brood XVIII. is a Western and Southern one, occurring from Illinois southward, and thence eastward to the Atlantic coast of the Carolinas. This brood was first noted in 1803. Next year broods II. and XIII. are expected; the first occurs in Georgia, the second in Iowa. One or more broods will appear somewhere in the United States every year during the present century; but none will again occur in New York until 1898, 1899, 1900, 1902.

The sharp, shrill screech of the adult insect will soon be ringing in the ears of many who may read this, in different parts of the United States. The adults appear in the latter part of May and in June. Egg-laying soon begins; and it is by this operation that they do most of their damage. The eggs are laid in slits cut in the twigs of trees—both fruit and forest trees. However, the injury then done is rarely so great as to necessitate the use of remedial measures; so, ordinarily, the insect need cause no serious alarm. There is but little danger of their spreading to other localities; the areas over which they appear increase but little, if any. Field crops will not be injured by it. The eggs hatch in about six weeks; the little creature drops to the ground, and, burrowing therein, begins its seventeen years of underground life. These nymphs feed upon the roots of vegetation, often going to a depth of several feet. The years roll on. What sort of a calendar can the little buried nymph have? What a Rip Van Winkle sort of an awakening it must be when, after nearly two decades have passed, with all the marvelous changes in this busy world above them, the nymphs—curious, crab-like creatures—push their way to the surface, crawl up the trunk of some near-by tree, and there undergo their final transformation to the winged state. They can now fly about and view the changes that have taken place since their mothers confided their embryonic forms to a slit in a twig, nearly a score of years before. Ordinarily, in coming from the ground, the nymphs do not continue their galleries above the surface; but it has been observed that in low, flat, wet localities, they often do continue the gallery from four to six inches above the ground, forming a sort of chimney, in the top of which they may be found in May. The adult insects live but a few weeks at most; they do not return at sunset to the holes from which the young emerged, as some have thought. It seems strange that it should require nearly a score of years of toil beneath the ground to prepare these creatures for their brief residence among nature's beautiful things above ground. But of such are the mysteries of nature. [An excellent account of these wonderful insects, accompanied by a colored plate, can be found in the Annual Report of the Commissioner of Agriculture, at Washington, for 1885, p. 233.]

The chinch bug has been the cause of much loss to the farmers of Kansas and other Western States. Many remedies have been tested, but none have been so effective as that discovered by Prof. Snow, of the University of Kansas. This remedy consists in spreading an infectious disease among the chinch bugs. Bugs which have been infected with the disease are placed in the fields, and in turn infect others. So successful has this treatment proved that we are informed that in some counties people are employed to make a business of applying the infection.



## THE STORY

## A Curate's Temptation.

The Rev. Oswald Campion sat, deep in thought, in a small room in Walworth. His thin and naturally thoughtful face wore a worried and hopeless look, and his tall figure seemed to stoop under some heavy burden. "How will it all end?" he murmured; "God help me in this trouble." Wearily he arose and crossed to the fireplace. He strove to warm his numb fingers over the small handful of embers in the grate, then with a sigh rested his long thin hands over his brow. A sudden terrible thought occurred to him. "God of mercy," he cried, "add not that to my cup of bitterness!"

He started violently as the door was opened and a gentleman entered quietly.

Campion tried to speak, but his lips refused their office. Seeing his agitation, his visitor said, calmly:

"I congratulate you, Mr. Campion; you have a son."

"And my wife?"

"Is doing as well as can be expected; but, as you know, she is far from strong, and requires every care."

"I know," said the clergyman, sadly. "May I go and see her?"

"Certainly, but do not excite her."

Campion's pale face flushed, but it was by excitement rather than joy, for the weight on his heart was too heavy to be easily raised. With merely a slight bow to the medical man, he went upstairs.

During the few minutes he was allowed to remain in his wife's room, he strove desperately to hide his anxiety and encourage the girl-mother, who glanced at him wistfully as he looked at his new-born heir.

"Cheer up, Edith, my darling," he said, brightly, as he kissed her pale face; "you will soon be well again now, and then we will get away from this dreadful London."

"Ah, Oswald," she whispered, pressing his hand affectionately, "if we could do so! But I am so troubled to know how we shall manage now."

"You mustn't bother yourself, dearest; we shall do splendidly. I have heard of a first-class curacy, and I have every hope that I shall obtain it. So keep up your spirits."

"But meantime, dear, what are we to do?"

"Do! Why, pull on as best we can."

"But have you any money, Oswald? You know you told me yesterday you did not know what to do for some."

"Yesterday! Oh! that was a long time ago. I have plenty now. Robinson has paid me that thirty shillings that has been owing so long, so for the present we are quite rich," he said, gaily.

"But, Oswald—"

"There, darling; Dr. Thornton said you were not to be excited, so I must not let you talk any more."

He kissed her again, as an old woman, who was doing duty as nurse, entered, and then quietly withdrew.

He paused on the landing, and a look of blank despair settled on his features. "God forgive me for those lies!" he thought. "But I could not let my poor girl lie there, weak and ill, and fret about money affairs. It is bad enough to have to do so when you are well and strong, but for her now it would be terrible."

He reentered his room and sat down at the table. Then he proceeded to turn out his pockets. He found a solitary sixpence and fourpence half-penny in bronze and placed it before him. He surveyed his possessions and murmured bitterly: "Something must be done at once. I will cast my ridiculous pride on one side, and will call on Mr. Pearson. I don't suppose it is much after three, so I shall have time to catch him to-day." Without hesitation he put on his hat—which, unfortunately, gave too evident signs of its owner's impetuosity—and left the house.

Oswald Campion's was a common case. The only son of a struggling professional man, he had received a good school education, and had finally been sent to the University of Oxford. He obtained his degrees with honors, and then had decided to take "Orders." Almost as soon as he had done so, he obtained a curacy in the Midlands, with a stipend of £80 a year.

Here he had met Edith Burton, the orphan daughter of a local lawyer, and their acquaintance had speedily ripened into love. Meanwhile Campion's father died, leaving only sufficient property to ensure his widow a bare maintenance. As time went on, the young man pressed his sweetheart to marry him at once, and painted such glowing pictures of their future, brightened by love and ennobled by their religious work, that the girl at last consented.

Their bright views early received a rude shock. Campion's marriage much displeased his rector, who fully understood that a "single" curate made a church attractive to the splinter element of the congregation. So one day, when Oswald had preached a sermon embodying bold and striking views, the rector seized the opportunity to cast doubts on the young man's orthodoxy, and to gently hint that he might find a more congenial sphere of work elsewhere.

The curate's sensitive nature was wounded, and without weighing the consequences, he promptly resigned his charge. Then he came to London, where he thought his sincerity would ensure him success. Alas! he knew not the modern Babylon. Too proud to play the toady, he was overlooked by the powerful. Too sincere and intellectual to preach commonplace, but "taking" sermons, he could not impress the masses, and, lacking assumption and confidence, he was pushed aside by inferior but stronger men. Thus it was that after six months' struggle he felt that he had exhausted every resource, but found himself with a sick wife and young infant to provide for on a capital of 10 l. 2s., and prospects nil.

## II.

Wearily, and with flagging footsteps, Campion took his way along the Borough, and over London Bridge. He looked longingly at the omnibuses going westward, but he felt that his small capital would not justify the expenditure of even a penny; so he plodded onwards. It was February, and snow was falling thickly, so that the streets were "slushy"; and the cold air affected even the well-clad. The poor curate in his threadbare clothes, and without an overcoat, felt the keen weather intensely; and his body suffered an amount of discomfort that coarser natures never experience. Every step reminded him that his boots were worn down at the heels, and a suspicious "whish" and feeling of dampness to his toes warned him that one of them was not even weather-proof. At last he paused in front of a large warehouse in Cannon street. He glanced up and saw the name, "Pearson & Co., Papermakers," and knew that he had reached his destination. He paused, however, on the threshold, feeling that terrible sinking that occurs to nervous men when they find themselves in a position repugnant to their feelings. At last he summoned up sufficient courage to enter the office. A dapper young clerk stared at him rudely, and then, with an easy air of insolence, asked him what he required.

"I wish to see Mr. Pearson."

"Hum! I know he is very busy. Can you state your business?"

"Certainly not, to you, sir," said the curate, in a tone that caused the other evident surprise. He, however, crossed to a