THE DYING WAIF.

By Blance Langdon Ammen.

It was while I was resident physician at the Emergency hospital that the following case came under my notice. There had been brought into the charity ward a boy of about twelve years of age. He was badly mangled, and I knew from the moment I saw him that he could not recover.

"Jimmie," I said one day, "how did you happen to get all broken up this way?"

"Well, yer see, I'm a newsboy on the P. & R. road, and I was a passin' through the train a lappin' all the latest novels. (Yer know how they does in trains). And as I was agoin' from one car to the next with my arms piled high, the train give a lurch and my books took a tumble; next I knowed I was here." After a pause he murmured, "I spose I must have fell overboard tryin' to catch 'em."

"You had better have lost them, Jimmie," I said, stroking his thin little hands.

"Oh, but yer don't know what a time there'd a been with the boss when I checked up." His eyes flashed, and his hand trembled with emotion. "Them's awful times, sir, when yer comes in short." Feeling that he had talked enough, I went on down the ward examining others. As each day passed, he grew steadily worse. In his delirium, he talked incessantly of "checking up." Sometimes he would cry piteously, "Am I short, tell me, tell me, am I short?" Then he would be incoherent words and moans ending, oftentimes, in heart-rending sobs. I concluded that he must be worrying about these books, therefore I decided, the next time his mind was clear, to set him at rest about them.

So I said to him, "Jimmie, you needn't worry any more about those books. I've paid the debt, you won't come in short."

He looked at me blankly for a moment; then he sighed. "I ain't a worryin' about no books."

"Well," I said, sitting down beside him, "what is it? Tell me."

He lay perfectly quiet for a time, and I wondered, as I stroked the long locks back from the oblish face, what burden there could be that could so torture the soul of this dying child. Suddenly he turned his large hollow eyes upon me, and looked piercing into my face. "I'm agoin' to die—I know that straight."

"We are doing the best we can for you, Jimmie."

"Oh, I'm not a-kickin' about you, nor the nurse, neither; you've been real good to me. I wisht I could tell yer, though, all what worries me; but

"AND I'VE NEVER DONE NOTHIN' FER HIM."

you've no time to listen to the likes of me," he added, turning wearily from me.

I longed to shed some comfort into the little life that was slipping away so fast, so I said, "Jimmie, tell me;—I have time."

Then he told me his story—words that touched my heart as nothing else had ever done.

"There was a feller on board my train t'other day," he began, "a nice lookin' old chap—and he says to me, 'soon as you're through, I want to talk to you about yer job and some other things. I tell you I was scared awful; I took him to be a 'Spotter,' and I thought he'd got on to some of mother's own stuff now and then; 'tain't right, yer know, but all the fellers do it. Well, I 'owed I had to face what was up; so directly I went and set alongside of him. That was the day afore I got hurt. I'm glad I seen him. I never knowed about them things he talked about afore." His lip quivered, "I oughter a knowed afore, it's too late now."

"What is too late, Jimmie?"

"Then things he talked about."

"What did he say?"

"He asked me about the office, and I told him as how things wus. Yer know, I works the 4:30 train to New York. The boss gives me a basket of stock, and I'm held responsible. I carry all the latest novels, candy, cigars, Florida oranges, bananas; yer know them things yer get on the train. We gets 20 per cent on all we sells. Every night we turns in our money and stock to the boss, and he checks us up; sometimes we're right, and, sometimes we're short. This old chap he listened and asked the most questions about all I'm a-tellin' yer. Finally he says, says he, "We've all got to 'check up' some day, do you ever think of that?"

"I asked him what business he wus in. He said he was connected with somethin' or nother. I don't just remember now; then he said he wusn't referin' to business, but that we all, when we died, would have to give an account to the One what give us our lives as to what we'd done with 'em. He said it was sumthin' similar to my business. My Heavenly Father had gimme some stock,—such as my health, my right senses, lots of chances fer doin' good, and so on "the like o' that, and when I died, I'd have to check up, and He'd ask me what I'd done with all He'd gimme; then if I'd used all them things just for my own pleasure, and not tried to do no good fer Him, I'd be short when I checked up. He told me of a beautiful home prepared for them as wus all right in their stock. When he talked about havin' a home, I fell to longin'—I never knowed what that wus—to have a home, yer know."

Jimmie paused for a moment, then with the saddest expression I ever saw, he murmured, "but that's not fer the likes o' Me, it's too late now; if I'd only a-knowed sooner, I might have had some show, but I've got to check up just as I am, and I never done nothin' with all He gimme."

There was silence—silence which I could not break. Why could I not comfort this dying boy? I was able to relieve his body, but his soul was suffering now. Several times I essayed to speak, but no words came. I knew the old, old story, but my own misspent life reproached me. Should I tell him that that which he had listened to was a mere fable, or should I give up, now and here, the stand which I had taken for so many years, and own to myself that all the doubts I had held to so tenaciously were false? Here in the presence of death, I knew I did believe—there was a God—this child had shown Him to me.

Jimmie was looking to me for comfort; his large eyes fixed on my face, wondering why I did not speak. All at once the words came, and I preached to him Christ—I, the doubter, the atheist, told him of Jesus and His love; how many, many years ago He had died that we, believing on Him, might enter that home and be saved. He had paid all our debt with His life, and set us free. Jimmie listened eagerly, tears trickling down his cheeks—"And I've never done nothin' fer him," he said, slowly."

"Yes, you have, Jimmie, you have been the means of saving my soul."

The next morning the nurse told me that Jimmie had been asking for me. I went over and stood by his bed. He lay very quiet,—just drifting away. I took his hand. "Jimmie," I said, "I am here, do you know me?"

A bright smile overspread his face as he pressed my hand. Then all the life that was left exerted itself, and I bent low to hear the whispered words—"I'll not be short. He'll make it right, I'm—" I could not hear what he would have said, for the spirit, which a moment before had been speaking to me, was now giving an account of the deeds done in the body. Jimmie was "checking up."—Ram's Horn.

A BEAUTIFUL GAME.

A New Swindle Which Has Been Very Successful.

Swindling is as monotonous as ethics or mathematics, and the various ways and means resorted to in the last decade of the nineteenth century for obtaining possession of other people's money were matters of common knowledge in the Egypt of Brameses the Great, says the London Telegraph. But the Parisian police now affirm that a new departure has been made on the banks of the Seine. And this is how it was worked: An office was hired in a good business street by the inventor of the trick, who assumed the title of somebody and company, chemical agents. Being convinced advocates of women's rights, they employed men members of the fair sex who, dressed in the height of fashion, used the most fashionable perfumes, and then visited singly the best apothecary's shop. One of these fair, false emissaries would stop her cab at the chemist's, come in and, taking out her purse, ask for another bottle of Dr. Beaumont's elixir. "Dr. Beaumont's what?" said the young man behind the counter. "The elixir, don't you know?" "No, I'm afraid I never heard of it." "Oh, how tiresome, and my poor rheumatic husband will be so disappointed. Are you sure it was not here that our servant bought it before?" "No, madam, it was not here." "Where is it sold wholesale?" "It is sold wholesale, I think——" and here the lady showed the ticket on the bottle. "It costs 8 francs." The same days the chemist bought the elixir wholesale, laying in a fair stock of it, and meanwhile many of the confreres were doing likewise. But as nobody called any more on the obliging chemists to buy the elixir, one of the curious confraternity analyzed this specific which was supposed to relieve rheumatism. He found that it was at least perfectly harmless, consisting of water colored by coffee grounds. The police were then let loose upon the ladies and the chemical agents, but they had all moved on, leaving no address. They are said to have netted about 10,000 francs by the trick.

How Inventions Provide Work.

Cassier's Magazine for January gives some figures that show in a striking manner how new inventions benefit wage earners by providing employment in new lines of industry. In 1880 there were no electric street cars. Less than 12,000 men operated 1,050 miles of street-car lines then in existence. There are now over 13,000 miles of electric lines, employing 160,000 men. In 1870 the census reported only 154 shorthand writers in the United States. Owing to the invention of the typewriter there are now about 35,000 stenographers and typewriters, of whom 21,000 are women.

Czarowitz' Petroleum Tricycle.

The czarowitz is going to ride a petroleum tricycle. At his order a silver mounted machine of this description has just been shipped to him from a Paris factory. The tricycle is also provided with a car which can be attached and in which at times the Russian majesty will sit, while his brother, the grand Duke Michaelovitch, will mount the motor and do the steering.

Business Pressure.

"Are you much rushed now, Foozer?"

"Rushed? If I were to die to-night my employer would expect me to come down town to-morrow and work until the hour set for the funeral."—Chicago Record.

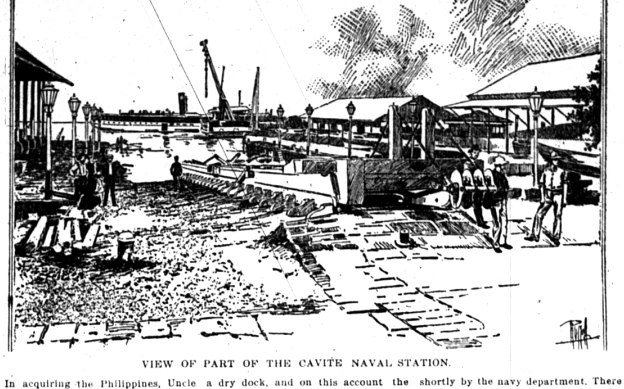
Church Insurance.

The Methodist Church in Canada is inaugurating a fire insurance business to take risks only on churches and parsonages. The profits will go to the fund for superannuated ministers.

Giant Flies.

A fly is not very tall, yet it stands over six feet without shoes or stockings.

OUR NEW NAVAL STATION AT CAVITE.



VIEW OF PART OF THE CAVITE NAVAL STATION.

In acquiring the Philippines, Uncle Sam has secured a naval station at Cavite, in Manila bay. This is well enough, so far as it goes, but the plant is not very adequate, and a couple of millions of dollars will have to be spent on improvements, in order to bring it up to date and make it thoroughly serviceable. There is not even a dry dock, and on this account the Spaniards were accustomed to send their ships to Hong Kong to be repaired or to have their bottoms scraped. Admiral Dewey has already made an inventory of the property at Cavite, including machine shops, warehouses, machinery, etc., and a report from him on the subject is expected shortly by the navy department. There is an apparatus on the premises, by means of which small vessels may be floated into a sort of cradle and then pulled up out of the water, but nothing can be done in the way of extensive repairs to large ships without a dry dock.—Manila Letter to Chicago Inter Ocean.

BUYING ANNUITIES.

CUSTOM WHICH IS POPULAR IN SOME PARTS OF EUROPE.

We Are Getting More Selfish—Number of Bachelors and People Who Do Not Wish to Be Bothered with Matters of Business Increasing.

There has been much inquiry of late on the subject of annuities and it is believed by the corporations doing business in that line that the custom of buying them, which is popular in some parts of Europe, is growing in favor in this country, says the New York Tribune. To some people who have given the matter attention the fact that annuities are gaining in popularity is a demonstration of the fact that Americans are growing more selfish, that the number of bachelors is increasing and that the class of people who do not wish to be bothered with matters of business is gaining in numbers. "The business of annuities," said William H. Whitney, "which is widely known in Europe, is of recent growth here. The inquiry on the subject is extending more and more as the rate of interest falls. With a further drop in interest, which is probable in the near future, the inquiry will be more extended, especially by those who are desirous of securing a fixed income for themselves or others, free from the vicissitudes of interest, expense and worry attending business operations. Heretofore the rates of interest offered in business enterprises were too great to permit the establishment of companies that had to take all the risk of a probable drop in rates of profit and interest. But it was hard enough to convince the public of this. A large company, by its ability to average out the risk of individual investment by reason of the various investments into which it enters and greater facility and economy in doing a wholesale investment business, makes the annuity policies attractive for persons who desire a fixed income and no bother. Another point in connection with annuities is that the annuitant converts his chance of dying into interest, because in case of death the principal sum paid for the annuity remains with the company. For instance, if the rate of interest free from losses and expenses of investment is estimated at 3 per cent, and the man's chance of dying is estimated at 2 per cent, then he may obtain in the form of an annuity an investment which will yield him 5 per cent per annum as long as he may live, which he could not obtain in any other way. On the other hand, it must be quite apparent that annuities are not desired by persons who wish to leave an estate to others." The annuitant looks out for himself only, while the man whose life is insured provides for those who survive him. The annuitant is selfish, the insured man is frequently self-sacrificing, denying himself luxuries and sometimes necessaries in order to pay premiums for the benefit of wife and children. The bachelor, the man without a family, the man who has become estranged from his kinfolk and wants to make sure that they shall have none of his money when he passes away, and men past middle age, who fear that stocks and cards may make deep holes in their capital, have been among the first to become interested in the annuity business. Some years ago Lester Wallack and a number of actors made up a purse with which they bought an annuity for a fellow-actor who had become incapacitated. The man received only one annual installment before he died, and the money which the old actor feared to handle reverted to the annuity company. This is not an infrequent occurrence, because the annuity companies require no medical examinations and do not hesitate to say that it is immaterial to them how soon the annuitant passes away. In Europe annuities are provided for younger sons, incompetents and marriage portions, but little has been done in that direction in this country. "As to the revenue derived from money placed with annuity concerns," said an actuary, "that depends on the age of the annuitant. There are certain established rates based on 3½ per cent interest. They differ as to age, sex and the frequency of payments. Those who receive their proceeds annually receive more than the annuitants who draw their interest quarterly or half-yearly. Money deposited for an annuitant 45 years old will yield 6 per cent; the rate increases to 8 per cent when the beneficiary buys at 55 years. At 65 the rate is equal to 12 per cent; at 75 years, 17 per cent, and at 85 years, 22 per cent."

CAN THIS BE TRUE?

Every Living Being Said to Be Partially Blind.

It will probably be a shock to many to learn that, without any exception, they are all partially blind and insensible to pain. It has been clearly demonstrated by exhaustive experiments that every human eye is blind in one particular part, varying in locality and size with the individual. This can be easily proved by tracing 100 curved and parallel lines on a large sheet of paper, and passing up and down each meridian in turn a disc of black paper one inch in diameter, until the whole area of the sheet of paper has been covered. In following the movements of the disc it will be found that at certain parts of its progress it cannot be seen at all, and this is when the "blind spot" in the eye is focused on it. This blind spot, which is irregular in shape, is caused by the optic nerve, which enters the retina, and thus obscures part of the picture photographed (as it were) on it. The entire scene looked upon is clearly depicted with the exception of the part which should appear on the point of the retina covered by the optic nerve at its point of entry. Similarly, scientific experiment proves that there are thousands of minute parts of the body which are incapable of feeling. You may touch them with a hot needle, or even, to push the experiment further, you may thrust the needle deeply into the part without any pain being felt. All parts of the body share this peculiar insensibility to pain, but the unfortunate thing is that these "dead points" are so mixed up with parts that are keenly alive that, unless the point of contact is confined to the dead point, the pain is all too manifest.

An Insect Engineer.

Several members of the United States corps were interested witnesses of a feat of insect engineering near the road on which they were working. One of their number found a blue ground wasp dragging along the ground a dead swamp spider, one-quarter the size of a full-grown tarantula. Whether the wasp killed the spider or found it dead, is a question beyond solution. He was having a hard time dragging his prey along, and presently left it to go prospecting for his abode.

The discoverer of the wasp called his companions, and one of them stepped upon the wasp's ground hole, crushing down some blades of dried grass across it. This caused no little trouble to the insect, which, upon locating the hole, nipped away at the obstructing stalks with his strong mandibles until he had cleared a passage. Then he went back and sized up the spider, walking around the big body and surveying it from all sides.

"He's reckoning that the hole isn't big enough," said one of the engineers.

"That's all right; he'll fix it," said another, as the insect went back and commenced vigorously widening the entrance to his abode.

Again he returned to the spider, seized it and dragged it to within a foot of the orifice. To the spectators it was evident that more work would have to be done before the spider could be dragged in. This struck the wasp, too, for again he ran around the body, examining it carefully, and returned to the hole to take measurements. He went to digging a second time.

Having dug for two minutes, he brought his prey to the edge of the hole, nipped out a piece of dirt here, cut away a grass stem there, and after fifteen minutes of hard and skillful labor disappeared underground, dragging the spider after him, doubtless to form the "place de resistance" in a winter storehouse. The engineers then resumed their work exchanging comments of admiration.—Chicago Inter-Ocean.

Bread of Chestnuts.

In France and Italy chestnuts are made into bread by the mountain peasantry. After the nuts have been blanched they are dried and ground. From this flour a sweet, heavy flat cake is made. It resembles the oaten cakes so popular among Scotch peasants.

NEW ARTIFICIAL SILK.

Late Improvements in the Methods of Manufacturing the Article.

The United States Consul of Bremen reports (advance sheet of Consular reports No. 204) the following improvement in the methods of producing imitation silk: Artificial silk consists of prepared cotton and wood fiber, and has been known to the trade under this denomination for the last nine years. It possesses an extremely silky luster, and can therefore be employed as an imitation of silk. Count Chardonnet, a Frenchman, the inventor of this material, converted the cellulose (cotton or purified wood fiber) by a process described in German letters patent of the year 1884, through nitrosulphuric acid, into nitrocellulose. He then freed the same from the acid and dissolved it in a mixture of alcohol and ether. The solution thus obtained—collodium—is pumped through glass pipes which are provided with extremely fine holes, and these collodium threads are passed through warm water (acidulated) which causes the alcohol and ether to evaporate, and only the fine nitrocellulose threads remain. A number of these fine threads are brought together, slightly twisted, and spooled. This extremely lustrous, but also easily inflammatory—even explosive—tissue was put on the market at the time of the Paris exhibition in 1889. Owing to its liability to catch fire it did not come into parctical use, but after this difficulty was overcome by removing the nitro groups (a process called denitrating) the harmless fibre was employed in the textile industry. By similar method artificial silk was produced by a certain chemist of Augsburg, Germany—Dr. Lehner—who is at present residing in Switzerland. Lastly, however, a method has been invented by Dr. Fremery and Civil Engineer Urban, in which the use of the injurious nitro-cellulose is omitted. These two inventors dissolve cotton waste in copper-oxide of ammonia, and pump this solution through fine tubes. The delicate threads are passed through diluted acid, which separates the copper and ammonia, the result being an extremely fine, lustrous fibre, which is employed as an imitation silk. This process, patented in Germany (D. R. P. 98,642) and in all other civilized states, is said to have the following great advantages over those of Chardonnet and Lehmer: That the manufacture as well as the product is in no way dangerous. That the production is much simpler. As a consequence, that imitation silk can be manufactured by this process at considerably less cost.

Royal Headgear.

The coronet of a duke consists of alternate crosses and leaves, the leaves being a representation of the leaves of the parsley plant. The princes of the blood royal also wear a similar crown. The state headgear of a marquis consists of a diadem surrounded by flowers and pearls placed alternately. An earl, however, has neither flowers nor leaves surmounting his circlet, but only points rising each with a pearl on the top. A viscount has neither flowers nor points, but only the plain circlet adorned with pearls, which, regardless of number, are placed on the crown itself. A baron has only six pearls on the golden border, not raised, to distinguish him from an earl, and the number of pearls render his diadem distinct from that of a viscount.

Hindu Widow's Lot.

Action is being taken by certain enlightened natives to ameliorate the shocking condition of the average Hindu widow, says the Bombay Advocate of India. To begin with, the Indian widow is shaved bald, and can only hide her baldness with her cloth. She is deprived of all jewelry, wears coarser clothes than the rest of womenkind, must fast on certain days and every day has fewer meals than are taken as a rule by the rest of the family. The scheme of relief afoot is that no widow shall be shaved until she is 21, the age at which it may be supposed that she will be able to show a will of her own in case she objects.

The Sirdar's Namesake.

A registrar in the east end of London has recently recorded the birth of a child who has been named Sirdar Kitchener.

Her Only Comment.

He called me a pale gray ass. She—He must be color blind.

FARM AND GARDEN.

MATTERS OF INTEREST TO AGRICULTURISTS.

Some Up-to-Date Hints About Cultivation of the Soil and Yields Thereof—Horticulture, Viticulture and Floriculture.

Do Commercial Fertilizers Pay?

From Farmers' Review: If it pays to grow a crop at all it pays to use commercial fertilizers on it, provided the soil is not already rich enough, or we lack the necessary animal manures for fertilizing the place. In other words, it does not pay to work poor soil. It requires no thought to say that it does not pay to use fertilizers on potatoes when the crop sells for ten cents per bushel, but we cannot tell when we plant a piece to potatoes, what those prices will bring. If we knew sometimes it would be well not to plant them at all. But as we do not know it is best to plant enough for home use any way and these ought to be well fertilized that the tubers will be large and smooth and the crop worth the labor of planting and caring for. Even though we could sometimes buy potatoes in the market as low as it costs to produce them it is best not to run the risk and anyway potatoes grown at home are better because not exposed and bruised so much by handling. * * * Keeping the thought in mind that farmers rarely credit manure made on the farm with any particular value, we notice that when they apply this kind of manure to a piece of land they put in very liberally. Now it is no uncommon thing to see 40 loads of manure drawn on to an acre of land for the corn crop. Now, this manure cannot be made and applied to the land provided it is rich grain fed manure for less than $2 per load. This costs the farmer in reality $80 for fertilizing the acre. Now what farmer would think of applying $80 worth of commercial fertilizers to an acre of land for the corn crop. Does anyone doubt if a farmer did this that he would be bountifully repaid with a good crop, in fact, a more satisfactory crop than that produced from the acre fed with animal manure. This is not said to encourage farmers not to feed grains and make more manures, but to show them that they should consider that any manure is worth just what it actually benefits a crop. * * * A good rule to go by in figuring whether it will pay to use commercial fertilizers is to first see whether the crop is worth, even though it be a good one, the cost of fertilizers. Of course in this calculation it is fair to estimate the value to other crops to follow and the permanent value rendered the soil. It is quite safe to say that the crops of potatoes, small fruits and buckwheat are always better and repay any expense incurred in the purchase of commercial fertilizers. The use of 75 to 100 lbs. of commercial mixed fertilizers on an acre of buckwheat will increase the growth of straw so that the reaper will pick it all up when the crop is cut and increase the crop of grain four-fold. When used on any crop, a well mixed commercial fertilizer containing a proportion of potash will increase the grain yield wonderfully. This is especially true when used in conjunction with animal manures. * * * A common mistake of farmers is that they are purchasing the poorer grades of fertilizers instead of the higher grades. Manufacturers are putting these out in large quantities in the present time and this is a result of the demand for something cheap. As the filling of cheap fertilizers is worth no more than the earth around our farms, I do not see where farmers gain in paying freight and sacking expenses on something that can be gotten for the asking at home. Farmers should buy the higher grades of fertilizers only and no matter what agents or others tell you a ton of actual value $40 fertilizer is more profitable for you to buy than two tons of fertilizer that has an actual value of $20 per ton. Do not be deceived. Study the analysis closely and buy the higher grades.

A Leaf-Hopper Destructive to Wheat.

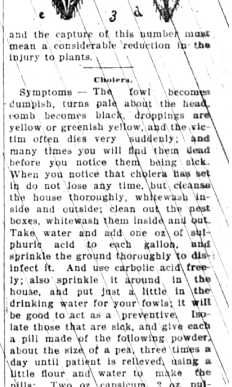
The wheat fields in the vicinity of Columbus during the last summer were swarming with small leaf-hoppers, the most conspicuous species being the Hurtful Leaf-hopper (Deltocephalus inimicus), writes Prof. Osborn in the Agricultural Student, published at the Ohio Agricultural College. This species has been recognized as a destructive form since first of its first description, when its character was indicated in its name, but it is not given the attention which its power for injury would seem to deserve. The adult insect, the form now most abundant, is about three-sixteenths of an inch long, the color pale green with brownish markings and six black dots—two on the front of the head, two on the prothorax, and two on the scutellum. The larval forms are yellow, and after the first two moults are distinguished by the presence of a conspicuous black margin from the eyes back.

Both larvae and adults are concerned in the injuries, and their mode of attack is to puncture the leaves and stems and suck the sap, thereby causing wilted and deadened spots and the weakening of the plant, especially above the point where the punctures are made. According to the first record concerning the insect—that accompanying the original description—the larva attacks the wheat. Say remarks: "When in the larva state, this species is said to depredate on the roots of wheat. Several specimens were sent me by Professor Green in the year 1822, who received them from a farmer in Virginia." This would be a rather exceptional method of feeding for a member of this family, and as the observation has, I think, never been verified, it may be questioned whether some other form was not observed on the roots while the adults were found on the plants above ground.

The insect is probably primarily a grass-feeding species, as it occurs in great abundance in blue grass, as well as upon a variety of other grasses, where it feeds the year through, but its abundance in wheat fields in autumn shows that it finds in the young plants a very attractive food.

In blue-grass there are two distinct broods each year, the larvae of the first brood appearing in May and maturing by the middle of June. Adults begin to appear early in June and are found until the middle of July, while the second brood of larvae appear by the middle of July and are mostly mature by the latter part of August, the adults of the second brood occurring from the middle of August on through September and October. While it is possible there may be a greater number of broods under favorable circumstances, these are all that have been determined with certainty. Adults are often found till late in autumn, or even as late as early winter, but not in spring, and it appears that the eggs are deposited in late fall, but precise observations on this point are still needed.

While this insect does not occur in such enormous numbers and with such conspicuous damage as the chinch-bug, its work is of the same character, and there can be no question as to the effect of its sapping the plants, but, like the chinch-bug, it is a difficult insect to treat. So far as wheat is concerned, it will doubtless be of some service to select fields as remote as possible from pastures or meadows, from which the leaf-hoppers probably migrate. For direct treatment the only feasible plan is the capture of the hoppers on tarpans, and the trouble and expense involved in this may be too great for its profitable application, except in fields very badly infested. This method consists in the drawing of a long strip of sheet iron, the upper surface of which is coated with coal tar, over the field, the hoppers as they jump up, on being disturbed, falling into the pan and adhering to the tar. By this method hoppers have been taken in grass land at the rate of half a million to the acre,



and the capture of this number must mean a considerable reduction in the injury to plants.

Cholera.

Symptoms — The fowl becomes dumpish, turns pale about the head, comb becomes black, droppings are yellow or greenish yellow, and the victim often dies very suddenly, and many times you will find them dead before you notice them being sick. When you notice that cholera has set in do not lose any time, but cleanse the house thoroughly, whitewash inside and outside; clean out the nest boxes, whitewash them inside and out. Take water and add one oz. of sulphuric acid to each gallon, and sprinkle the ground thoroughly to disinfect it. And use carbolic acid freely; also sprinkle it around in the house, and put just a little in the drinking water for your fowls; it will be good to act as a preventive. Isolate those that are sick, and give each a pill made of the following powder, about the size of a pea, three times a day until patient is relieved, using a little flour and water to make the pills: Two oz. capsicum, 2 oz. pulverized asafetida, 1 oz. pulverized rhubarb, 4 oz. carbonate of iron, 6 oz. Spanish brown, ½ oz. sulphur. To those fowls not affected, give as a preventive in soft feed every morning a tablespoonful to every dozen hens, until all signs of cholera have disappeared. However, if houses are kept clean, and poultry free from lice, you will seldom if ever have the cholera in your flock.—B. H. Westlake.

Weeding Out.

Weeding out the flock improves it every year, as a higher standard will result. By an observation of the individuals much can be learned, says Mirror and Farmer. The good hens become pets, and pride in their individual excellence on the part of the owner results. The young stock will be hatched only from the best producers, instead of from eggs taken indiscriminately from the egg basket. No farmer will carefully cull out the drones need depend on breeders to produce breeds for him. Pure breeds should be used, however, and especially pure-bred males. Even with the choicest stock the matter of selection should be carefully looked. There are drones and idlers in aristocratic flocks as well as in the flocks of low degree. There is room for improvement in every direction. The object should be to impress upon poultrymen and farmers the importance of a close scrutiny of the stock, and to teach the fact that a profitable flock can be made up of what may look like unpromising material.

Swill Feeding.

—The feeding of swill, brewery slops, dry, ripe corn husks, straw and other food that has little or no substance left in it for nourishment and warmth, will eventually and surely lead to impoverished animals; milk poor in per cent of solids, and consequently high in the per cent of water, skin troubles, falling out of hair from the tail, scurvy, and susceptibility to tuberculosis, and other dangerous diseases. The law prohibits the sale of milk produced from any cow fed upon the refuse of a distillery, or of a brewery, garbage, swill, or upon any substance deleterious to the quality of the milk.—Michigan Dairy and Food Commissioner's Report.

While there is a class of farmers who never feed their fowls and give them no shelter, yet the greatest drawback to successful poultry raising is the overfeeding of the fowls on grain. It is estimated that a quart of corn or its equivalent should be ample for a dozen fowls one day.

Do not winter late pullets that have failed to make a good growth.