to go to them in the evening and put on a Porter bee escape between the upper storey and the brood nest; in the morning you will find the bees all out of the upper stories, when they can be carried into the honey house and extracted, or, in the case of

comb honey, taken out of the cases.

No. 8.—" Is it necessary to use smoke always? I suppose our correspondent wants to know if it is necessary to use smoke every time we open a hive of bees. Well, I always do; I think it to be an advantage both to the operator as well as to the bees, especially to the operator. The best way I know of to make a colony cross and unbearable is to continue opening it. Without a little smoke you will soon have them so they will dart out at you and sting you as soon as they see you approaching the hive, while if you give them just a little smoke when opening the hive you will make them quite peaceable, but be sure and don't go to the other extreme and pour enough smoke into one hive that would do for half a dozen.

POULTRY.

Poultry Raising from Another Farmer's Standpoint.

BY WM. CLARKE, PRINCE EDWARD ISLAND.

The only hen-house I have at present is a little log house, built by my predecessor on my farm about fifty-five years ago. The same split-pine shingles are on the roof yet, the same boards on the walls, but, by a little patching up in the fall, I manage to make it quite comfortable for the fowls, but not frost proof; it has one small window, 20x24 inches, which admits a little sunshine every forenoon till eleven o'clock. A thorough cleaning out twice a year is, in my opinion, quite sufficient. Some of your readers may think my fowls are the victims of filth, disease, lice, and all manner of ills, but I may say I only lost two fowls last year out of my flock of seventy from disease or any other cause. To prevent filth I practice the following:-In the summer when we have a "dry spell" I get a couple of carloads of dry earth, or sand, and dump it in the corner of my root house, which is emptied first in the fall, and, as occasion requires through the winter, I throw a couple of basketfuls over the droppings. To prevent lice, I keep the hens supplied with a good dust pen, partly filled with this same dry earth; whenever it gets foul, I shovel it over the dropping and give a fresh supply; this, with a little sulphur thrown in the nests and kerosene sprinkled on the roosts occasionally, makes my hens almost louse proof.

And now, as to the food consumed by my flock of seventy hens. Their morning meal consists of one peck of potatoes, boiled and mashed, with 4 lbs. of bran, or shorts, and 4 lbs. of scraps from lard factory. This, at four cents for the potatoes, four cents for bran, and two cents for scraps, would total ten cents for morning meal. For noon meal, two days of the week, they get a feed of animal food, such as plucks, heads, etc., from the butcher's shop, and which costs me very little, and on other days green food, such as a big turnip or cabbage, halved, so the hens can peck it. Cost of noon meal, two cents. At night they are fed grain in a variety, such as every farmer's granary affords—oats, barley, peas, wheat, buckwheat, etc., mixed, and fed dry. Eleven pounds makes a good feed for the flock. Cost, at one cent per pound, eleven cents. As they get a considerable quantity of skim milk to drink, we will put it down at two cents per day, on a total cost of twenty for at two cents per day, or a total cost of twenty-five cents per day for food. This would make a total cost for food for year, \$91.25, less \$4.00 for scraps allowed in the above, but which are not fed during summer, or \$87.25 for the seventy fowls. As my fowls have unlimited range during the summer, I can raise seventy-five or more chicks on the same amount of food per day for the entire flock in summer as they get in winter.

As to receipts, last year, "1893," I gathered from my flock 720 dozen of eggs. These, at the low price realized for eggs here since the McKinley tariff came in force, net me \$93.60. Besides this, I raised and sold thirty-seven pairs of chicks, which net me sixtytwo cents per pair, or \$23.00 for the lot. For prizes won at the exhibition, and a few chicks sold for breeding, I realized \$15.85, which, added to the amount received for eggs and chicks, amounts to \$132.45 as receipts from the flock. Deduct the \$87.25, the cost of food, and I have left a net profit of \$45.20, besides a choice lot of the very best manure for any farm crop. I may say that, notwithstanding their uncomfortable quarters, my hens laid 150 dozen of eggs during the months of January, February and March of 1893, while in the same months of the year 1992, 180 dozen. But we do not realize for eggs here the fabulous prices of forty or fifty cents per dozen, which we see quoted in the papers as the prices of eggs in the Western cities during the winter months. As we are shut off from the rest of the world, as far as shipping eggs is concerned during the winter months, and as our local market is limited, when we can realize twenty cents per dozen in winter we think we are doing very well.

And lnow, as to the breed of fowls I keep. Ten years ago my flock of poultry were as nondescript a lot, as to breeding, as you could possibly find any

where, while to-day my flock are practically purebred Plymouth Rocks, which, to my mind, are a great improvement over my old mixed lot, both as regards appearance and general usefulness. In summer they are excellent foragers, making nearly half a living on worms, insets, etc., from the fields and orchard; while in winter, owing to their vigor and hardiness, they lay more eggs than perhaps any other breed of poulty. If you wish to use chicks for table use, the young cockerels of this breed are ready to kill at an earlier age than those of any other variety. I may say that I did not invest all at once in a large number of pure-bred fowls at great expense, but by making a small start and then introducing fresh blood every year or two, by pur-chasing a setting of eggs or a first-class cockerel from some reliable breeder, and by careful selection of my breeding stock, I have at present a practically pure-bred flock of poultry at very little expense for foundation stock. Last fall I selected from my flock of poultry in the barnyard two coops of chicks and one of aged fowls and exhibited them at our Provincial Exhibition. The chicks captured first and second prizes; the aged fowls also took first, and this in strong competition with stock from poultry fanciers and others.

I do not say this boastingly, but to give your

readers an idea of what a farmer can do in breeding up, in at least one class of farm stock, without any great expense for foundation stock. And now, to conclude, I have no doubt that if the average farmer would keep a small flock of poultry and give them the same good attention he bestows on his horses, sheep, or cattle, they would not only serve to beautify his barnyard, but would yield him a nice profit on the food and labor bestowed on them.

Poultry on the Farm.

BY MRS. IDA E. TILSON, WEST SALEM, WIS.

"March 31, three broods hatched, which I had set for an experiment." The sitters were of the same breed and age, differing little in weigh. They were similarly placed, as regards draughts, in one house, and simultaneously, on fresh eggs, all laid the previous day. I was particular not to get the nests too dishing, lest the eggs should crowd each other. Corners were carefully filled, so none could roll away there. The boxes' sides were lined an inch or more above nests, that a sitter, in stirring her eggs, might not hit and jar them against bare board. A medium amount of material was used, as too much will be elastic and uneven, and only eleven eggs apiece were allowed, since more cannot be thoroughly covered and warmed. The sitters had been previously trained to come off only at my bidding; therefore, after they were fed and watered, I set them, as is my custom, in the morning, and they gave twentyfour hours continuous, strict attention to business, till I myself relieved them again. If I had unreliable hens, I must, of course, set them evenings. The purpose of my experiment being to test three different kinds of nest material, all other conditions were made as nearly alike as possible. One nest was entirely of sawdust; another was half of sawdust, covered with June grass; the third had two inches of moderately dry soil, well packed, sprinkled with lime, and just covered with fine hay. The result was unexpected, or I should not have been at such pains. Each hen left one dead chick behind her, and brought off nine fine chicks apiece, reminding me of that ancient riddle about "seven wives going to St. Ives, each wife had seven sacks, each sack held seven cats," etc. Owing to great press of other work, we had no bread to spare, and used meal preparations at once, which, though necessary later, are harsh so early and exclusively After I had killed three by indigestion, we got a baker's loaf, and that, with drinks of sweet milk weakened by warm water, arrested all trouble. Over twenty nice little fellows never drooped under my heavy diet, but two are cured cases, reminding me of a green young housewife buying ham. The grocer pleasantly told her he had some very finely cured ones. "Oh," said she, "I don't want any which ever were ailing and had to be cured. The moral appears to be, that success is only a comprehensive name for faithfulness, and then readiness for the good time when it comes. Care is really more than conditions. Those chicks hatched on sawdust covered with some hay, which nest kept its shape better than clear sawdust, were decidedly the best lot of all. I call them the "little ravers," they eat and grow so, and must provide them more food then either of the other broods.

Liver, well boiled and chopped fine, has agreed with these broods, and always creates a relish for other things. In both meat and shell, there is an indirect value of appetizers, over and above their direct worth. I have given, as in other years, some boiled ham, and when the fat is carefully taken out, then the ham mixed and chopped with bread rumbs or cooked potatoes, it seems a safe and aluable food, which many farmers have at hand. Considerable discussion has occurred as to whether vater or food should be given first in the morning. heoretically, I would say that water taken after ood might wash away and carry along the latter faster than natural, and I know, practically, that many of my fowls do not eat much till they have a refreshing, lubricating drink first. Actually, I give both pretty nearly together, sometimes one earlier, again the other, because I have strength and time immediately,

to take but one trip to the hen-houses before break fast, The main thing is clean water-dishes, which an occasional washing in soapsuds will not harm. Charles Lamb said of a doubtful-looking beverage, "If this be coffee; give me tea, and if this be tea, give me coffee;" so, of some water-dishes, hens might say, "If this be water, give us a mud-puddle, and if this be a mud-puddle, give us water." One and it this be a mud-puddle, give us water. One lady poulterer, writing of her methods, was criticised because she spoke of feeding a warm mash at noon instead of morning. Now, it is true the tides of life are lowest mornings with people, and probably with animals, hence I give my soft, warm food as early as practicable; but perhaps that woman, like myself, has other cares, and cannot always reach her ideals, nor do everything first thing in the morning. I remember a neighbor used to fear his wife fed her mash so hot she would scald the fowls' fauces and crops. Of course, there might be such danger, but I take my pudding out pretty promptly, because considerable allowance must be made for putting it in cold troughs and dishes. In a late poultry paper, another poulterer inquired whether various vegetables are good for poultry, and was answered decidedly in the affirmative. I believe it is vegetables that win in every race, and they, with lean meat, make our future layers. I used to think a hen could eat anything, and may be she can, but ought not, and will not; still, I believe improper food causes less trouble than chills do. The former may occasion a simple diarrhoa, which soon rights itself by passing off the food, but chills create a congestion and inflammation that last. Have the young chicks warm first, last, and all the way through, which reminds me I lately read about a curtain tacked across the top of the nest and buttoned down at bottom, to keep layers from sitters. That would be both safe and warm. This cold spring, I sometimes put newspaper curtains inside my shingle doors, to make the sitters warmer and freer from draughts, Recollect, a coop is not as warm as the double-walled, well-inhabited hen-house, and put the former under sheds at night.

The many excellent poultry suggestions in the ADVOCATE remind me that the editor of a leading poultry monthly says, when he runs short on his regular contributions, he next goes to the poultry department of farm papers, where he has found so many practical things.

Poultry for Profit.

BY JOHN J. LENTON, OSHAWA.

There is small profit in eggs when they bring but 10 cents a dozen; and no profit at all, rather a loss, when hens have to be fed all winter, without eggs, and then only produce a few dozen in the spring. When the eggs laid barely pay for the food eaten during that season, all the food eaten previously is a loss. There is a regular ebb and flow of prices for eggs. The high tide is about the last of November and through January, and from that the price ebbs away steadily to about the first of May. Everybody's hens are laying then, and production is at its highest, consequently prices are at the lowest. Later on the supply gradually diminishes, and prices rise, the movement being facilitated by sales of fowls, to be served as "spring chicken" in the summer hotels, and the steady falling off of the egg yield. In the fall the old fowls are moulting, and are, almost without exception, resting from their labor, so that unless there are pullets to lay, there are few eggs, hence the demand exceeds the supply, and the price reaches high tide again.

A hen will consume a fraction over fifty cents' worth of food in a year. If she does not begin to lay until March, she will produce less than one hundred eggs, which must net her owner over a cent apiece to barely pay for her food and trouble. If she comes to laying maturity in October or November, she will lay vigorously all winter, if well housed and well cared for, and will give her owner, before moulting time, one hundred and fifty to one hundred and seventy-five eggs, which can be sold at an average of nearly two cents

apiece, and pay a substantial profit.

There is "a tide" in poultry raising, and that tide is early-hatched chickens and early-laying pullets

There is the whole secret of it in a few words; all the rest of the story is detail. We hear much complaint that "We couldn't hatch the chickens early; our hens wouldn't sit." That is one of the evils of late-laying birds. If they are got to lay in October, and kept laying, they will be broody enough in April, unless they are of the non-sitting March, they will be late in brooding, because nature impels them to lay a goodly number of eggs before the brooding fever sets in. Get them laying early, and early broodiness follows as a matter

Much can be done to further this plan by "selec-Choose only the early-laying and prolificlaying birds to breed from, putting them in a pen by themselves; and in two or three generations you will have a strain of naturally early layers. You have not to wait long for profits from our selection of early-laying pullets. You get immediate returns in eggs within the year. Breed from them, and no others, the next spring; then kill off the old birds. It is a decided advantage in poultry raising that the profits begin to come in

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