not stay, they were one purpose breeds and had to wait their time for accumulated wealth to handle them.

This, then, is the present of the Shorthorn, numbered by many thousands, valued at millions, scattered from Maine to Oregon, and from Wisconsin to Florida, between 6,000 and 7,000 of them thrown upon the public markets annually when times are dull with new and promising rivals in the hands of moneyed individuals and corporations, what shall their future be?

Three classes of breeders want cattle, those who look to beef alone, those who look to milk alone, and those who want both.

The Shorthorn has strong rivals in appealing to the first two classes, but is unsurpassed in claims to favor by the third; this third class outnumbers both the others.

The average good farmer in the West wants cattle both for beef and milk, he cannot afford to keep a cow a year simply to raise a calf; he cannot afford to disregard size and form for beef making.

The best specimens of the breed are unsurpassed as beef animals, and naturally the breed has good dairy qualities.

It always has been, and still is, the chief dairy breed of England in practice and at the dairy shows, taking more prizes than all other breeds combined.

There is a great home market among our own farmers not yet supplied, many thousands of pure bred bulls could be used, and nine out of ten have none.

The general farmer's aim is to possess a cow, that at her best will fill the pail, and when dried off will rapidly pad her ribs with meal; for this purpose, no breed has ever been found that affords the requisite better than the improved Shorthorn, they have taken more prizes for beef than all other breeds combined, and many hundreds of cows have records of milk from 50 to 75 lbs per day for long periods; yet a cow that will milk abundantly and fatten heavily at the same time, will be broad over the crops and loaded with rounds when in full yield of butter and cheese, remains a desideratum—yet daces "Wil-o'-the-Wisp" like in the distance.

Shrewd speculators have, from time to time, rushed different breeds as they saw their chance, and prices went up in accordance with the demand; but these booms no more last than does the tempest. When the air clears and we come to quiet times again the placid Short-

horn will be found in possession of the deck; we cannot do without her.

But we presume the question of future prospects of the breed means what value will it maintain in the market.

No man can more than guess at the probable prices of Shorthorn in the future; but this, at least, is certain, that it will pay the breeder to increase his efforts and sharpen his attention as regards the material he has to work on.

Give to every family and breed fair play, and trust to the good sense of American farmers and breeders. The best will win in the long run and the Shorthorn is in no danger of being last in the race.

We esteem the Shorthorn as the best and only animal of general utility, and as the equal of any other at the block, the pail, the churn or the cheese press; but I need not recount the purposes which this breed in its purity, with or without pedigree, and in its crosses so admirably serves.

Look what it is to England, look what it is to Scotland, look what it is to the breeders of our own country.

We know it has a foot-hold here and we cannot look over a fence in the great dairy and grazing districts in our Northwest without seeing evidences of its wide-spread influence. The producers of beef and butter and cheese are the men who must and will have this breed.

Sales may fluctuate, pedigrees may be raised in credit or thrown into disgrace, but the Shorthorn will flourish and the breeders who can give us these cattle in their milk and beef perfection at prices in reach of these producers will deserve well of their country.

Poultry Farming

[By S. L. Porter, Mukwonago, Wis.]

Thanking you for the invitation, I will invite your attention for a few moments in stating to you what I know about successful poultry farming.

Five years ago we left the city, came here and engaged in farming on 280 acres of land. We early conceived the idea that we could make money easier and faster in poultry, as my taste ran that way, than I could in carting early potatoes and sweet corn to the Milwaukee market, over twenty-two miles of very stony roads, a vocation the most of the neighboring farmers in this vicinity are engaged in during the summer and fall months. With this idea in mind
we erected a hen house 26x80, two stories high, costing about $900. I know it to be a fact, that some of my neighbors were disposed to make fun of me, chucked each other in the ribs and got off that glorious old adage. "A fool and his money"—you know the rest. I started in with three breeds of fowls, added to them as the trade demanded, until they out grew the $900 hen house, and I was obliged to build more; until now I have three—besides using an old house during the breeding season. I am disposed to be charitable toward my neighbors; but I thank the Giver of all good things that I have made a success of the business, and have proven the fact to some that "he laughs loudest who laughs last."

One of my neighbors said to me one day, "Why! you don't do a good day's work in a month." Says I, "perhaps not, the way you work; but when the year rolls around I can show the most ducats for the season's work."

"But," you say, "suppose we all went into the fancy poultry business?" All do not want to. Its a good thing all do not think alike. If everybody thought as I once did, everybody would have been after my wife as fierce as I was.

In the four years past, poultry has paid us over and above all expenses estimating $100 per year for feed as follow: 1883, $460; 1884, $1,269; 1885, $957; 1886, $945.40. How do we do this? By breeding the best, taking good care of the chicks, and advertising judiciously. Some people are adapted for poultry culture; some are not. To some a common dung hill is as good as a magnificent light Brahmis.

The poultry business is one of the neglected industries of this country. As a rule the poultry on a farm is allowed to shift for itself; their quarters are filthy, ill-ventilated and cold. Perhaps they are fed once a day, more generally not at all. If other stock was treated the same way what would be the result? A farmer could not raise enough meat to live on, or sell enough to pay his taxes or buy the children shoes. But where poultry is given attention, it is the best-paying investment on the farm.

By veteran breeders it is estimated one bushel of corn will grow as many pounds of poultry as it will of pork. On an average poultry sells at double price of pork.

One bushel and twelve quarts of corn, or its equivalent in other grain, will keep a fowl a year. An average hen will lay 100 eggs a year, if properly taken care of, which at 15 cents a dozen, an average price, will on an honest calculation bring in $1.25.

If attended to, that hen will raise you as well eight chicks, which at six months old, making allowance for feed, will net you, at the lowest calculation $1.50 more. We now have a total of $2.75 and the original stock on hand.

As a rule farm fowls are not as good as they should be. Now, there is no place where finer fowls can be raised than on the farm. Instead we find a great many poor ones—no pure blood introduced for years. Very often they are allowed to roost in the trees or any place they can find, having no house of their own. Small wonder that so many say that their fowls do not pay. How can such care and breeding be expected to pay? We would not expect to realize very large profits from our other farm stock if handled in that manner.

Which variety shall we keep? is a question often asked. That just depends upon what you keep fowls for, whether for eggs only, or meat, or the two combined. If for eggs the Leghorns or Hondans. The eggs of the Leghorn are smaller than those of the Hondan, but the birds, likewise, are smaller, requiring less to keep them; so that the weight of eggs produced for food consumed will equal, and, I think, surpass the Hondan. As it is always necessary to kill off the older birds to make way for a certain number of pullets yearly, flesh value must also be taken into account.

For a general purpose fowl the Wyandotte, Brahmis, or Plymouth Rock are superior to all others. I have tried many varieties, and have found none to compare with them.

As regards the poultry industry of this country, I want to call your attention to a few figures. The report of the Department of Agriculture gives the total cash value of several farm products per annum as follows:

<table>
<thead>
<tr>
<th>Product</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>$480,000,000</td>
</tr>
<tr>
<td>Wheat</td>
<td>394,000,000</td>
</tr>
<tr>
<td>Hay</td>
<td>271,000,000</td>
</tr>
<tr>
<td>Oats</td>
<td>118,000,000</td>
</tr>
<tr>
<td>Potatoes</td>
<td>76,000,000</td>
</tr>
</tbody>
</table>

It has been clearly shown that the annual value of the poultry and eggs consumed and sold in this country amounts to the respectable sum of $475,000,000, or more than that of any
product in the country, with the exception of corn, and is exceeded by this product only five million dollars.

We occasionally find people embarking in the poultry business, and on investing a small amount expect to realize enormous profits, even more in the aggregate than from all other sources combined; and at the same time they give other matters nine-tenths of their time and attention. An article in the New York Herald a short time ago expresses my views on the subject.

"He who adopts the poultry business as his principal employment and depends on it for a livelihood, must not forget what his business is. If before entering into it you sit down and carefully count the cost, as any wise person should do, and decide that on your few acres of worn-out, worthless land you could raise $1500 worth of chickens more easily than you could raise 500 pounds of hay and 20 bushels of potatoes, don't forget the conclusion you have thus carefully arrived at. Don't imagine you are a farmer, for you are not. Don't leave those chicks to shift for themselves while you turn those few spears of hay or those few hills of potatoes. Remember your business is to raise chicks, and fight hawks and weasels, and not to raise potatoes, and fight potato bugs. If you have time to take all necessary care of your chicks, and also time to hoe potatoes, and if it is settled that chickens are more profitable than potatoes, then the obvious conclusion is that you have not enough chicks to employ your time to the best advantage, and you had better set more hens as soon as possible."

Certainly the large profits in poultry raising do not lie with the common barn yard fowls now-a-days. There is occasionally a person so completely fos-silized as far as the more useful and valuable qualifications of fine bred poultry and other domestic live stock is concerned as to declare that the regular old-fashioned breeds of barn yard fowls are better than the new-fangled ones exhibited at shows and sold at high prices. Such erroneous ideas never find place in the minds of intelligent people. They know better. We know by experience and comparison that there is as much difference between our modern improved fowls and the dunghill scrubs as there is between the fine grade Poland China pigs and the "prairie roost-

ers," or a Norman horse and the Mustang.

There is no question but the poultry industry is enormous and increasing yearly. Today there are fewer industries in the United States that show a healthier growth or yield so vast a return to the American people, in proportion to the amount of capital required and employed in following it. It is certain fowls have been greatly undervalued in past years, but now-a-days the breeding of improved poultry has in a pecuniary point of view come to be one of the most important and remunerative pursuits in this country.

Is the business overdone? I say no. The fact that 350,000 eggs formed a part of the cargo of the steamer Herm-del, which took fire, one day last year, on its way to this country from Copenhagen, suggests some observations regarding a curious class of articles imported into this country, says a Washington dispatch.

It certainly seems a little odd that the United States, with its large agricultural population, should have to go to Copenhagen, or, indeed, to any point outside of this country for eggs! — Yet a statement recently published by Chief Mimmo of the bureau of statistics of the treasury show that there were imported into this country last year no less than 150,000,000 eggs. More than that, the reports show that this is not a spasmodic movement in commerce, but that the egg trade from abroad has been a flourishing industry for some years, having grown so rapidly since its inauguration that the hens of the country ought to be startled by it. In the fiscal year 1883 the number of eggs imported was 110,000,000, in 1884 it was 140,000,000. In 1885, 150,000,000; and in the past year will probably exceed 200,000,000; with a value of $3,000,000.

There is money in raising good poultry. There can be no monopoly in this rural industry. No business is more evenly divided or generally distributed. The average farmer, mechanic, cottager, poulterer and fancier usually keeps a limited number — just as many as they can tend and make profitable; and while our country is increasing in population our poultry stock is becoming more valuable.

It is about time farmers should wake up to their own interests, give poultry culture a fair trial, build suitable ac-
commodations for them, feed and tend them well, keep the best breeds for utility, market the eggs and chicks in season, and my word for it, you will find poultry breeding a profitable business.

---

Ensilage.
[By Dr. H. S. Weeks, Oconomowoc.]

However, I take it for granted that I am selected to say something about "Ensilage" because I am, to the best of my ability, carrying on the work of my father, the late Dr. L. W. Weeks, who, though taking up dairy farming at an advanced age, was yet progressive enough to adopt the ensilage system when it was comparatively in its infancy, and built, I believe the first silos ever used in this state, becoming an enthusiastic on the subject, and urging others to follow his example.

Since then the merits of ensilage have been recognized by progressive farmers everywhere, and silos have multiplied all over the land until they are no longer looked upon as an experiment, but a solid fact, and "have come to stay." Yet I suppose there may be some here to-night who have never investigated the subject and who hardly know what a silo is, but have a general idea that they are a sort of luxury which those only can indulge in who have money to spend in "fancy farming."

To such, if any there be, I will address myself, because there has been so much said and written on the subject, that to the initiated I can hardly hope to offer anything new.

My good father used to say, "Ensilage solves the problem of carrying a large amount of stock on a small amount of land," and when I tell you that I carried last season forty head of cattle, old and young, from Dec. 1st to June 1st on the product of sixteen acres of Southern White corn converted into ensilage, you will think agree with him; this of course refers to forage, for my objective point being cream, to reach it I feed liberally of grain and milk feed the year round. This year, owing to the great drought, which, as you all know, extended over the entire growing season, my crop of ensilage corn was light, and I was unable to entirely fill my silos, and have had to supplement my ensilage with other coarse feed. This however, might have been avoided had I adopted the "new departure" which has lately been taken in cultivating and curing ensilage. As at first introduced into this country the practice was to sow the corn in this latitude from the 1st to 10th of June, and cut about September 1st, while it was quite green and juicy. Experience, however, has proven that better ensilage as well as much cheaper, is produced by sowing a month earlier and allowing the corn to become quite mature and the ears partially glazed before cutting.

Had I done so this season my corn would have got a start which would have enabled it to stand the drought, or rather, it would have all germinated and grown, and I should have had a full crop. And here let me give an experience which will apply to cultivating corn whether for ensilage or other purpose, viz.: Never despair of a corn crop, for as they often say of a very sick person, "while there is life there is hope." About the middle of last July, by reason of having been sown in perfectly dry soil and not having been even dampened with rain, my field of ensilage corn looked sick indeed, and my friends advised me to look sharp about me for something to feed my cows the coming winter. Advice which I was not slow in heeding, but at the same time, with the energy of despair, I set about doctoring the invalid, or in other words, cultivating the corn. I put all hands at work with hoes and cleared it of every weed, and kept it clear, also stirring the soil with cultivators every few days the balance of the season, and was rewarded by witnessing the most astonishing growth that could be imagined though the hot sun poured down upon the thirsty earth and the simoon from the south parched it day after day, and no alleviating showers came to its relief, yet it continued to grow, and many stalks reached the full height and size that had ever been attained in the best of seasons. The drought had also matured it to a greater degree than usual, and I was enabled to make comparatively sweet ensilage, which is a point in the new departure mentioned above, the merits of which can not be doubted.

By the old method it was necessary to have a large force of men to get the crop into the silo, as haste must be used, and this made it expensive. As now practiced, however, the cost of building silos and of filling them is cheapened so that it is within the reach of any farmer. All that is required for the building is lumber, in the form of