shareholder delivering more hogs than fifty per share, the hogs above that number will be considered as bought hogs from non-shareholders and profits on the same will be divided equally amongst shareholders, as per the number of shares held by each individual. The profits on all hogs bought from non-shareholders will also be equally divided amongst shareholders, as per the number of shares held by each individual. Each shareholder shall be entitled to deliver fifty hogs per share, on which he will receive all profits earned by said hogs, lest the six per cent mentioned above. No shareholder will be allowed to hold more than $500 worth of stock.

The progress of this movement will doubtless be watched with the keenest interest. The fact that the co-operative cheese and butter factory has been a success is no guarantee that the co-operative pork packing establishment will be successful also. They are two different lines of business, the one involving comparatively little capital and risk, while in the other a large amount of capital is necessary for buildings and plant, and the risk to be incurred proportionately great. The co operative cheese factory is almost co-extensive with the development of your cheese industry, while the co-operative pork packing concern appears on the scene when the business of pork packing in this country has been pretty well developed. The co-operative cheese or butter factory has practically no competitor to-day, for whether the factory is owned by one individual, or by the farmers themselves, the co operative principle is practically the same. The pork packing industry to day is under the control of the large pork packing establishments which have almost unlimited capital at their disposal for carrying on the business. With these large concerns the co-operative pork packing establishment will have to compete, and we are safe in stating that they will not give up any share of the business which has formerly been theirs without a struggle.

However, we wish this new venture every success, and only draw attention to some of the difficulties, as it is well that our farmers should consider every phase of the question before investing very largely in any new scheme. There is a good precedent for the farmers' co-operative pork packing establishment to be found in Denmark. In that country a large share of the bacon is produced in packing establishments owned and controlled by the farmers, or the producers. As far as we can learn these have been successful. Whether the conditions there are such as would be more conducive to success than they are here remains to be seen. The Danes are much nearer the market than we are, and may have other advantages that we know nothing about.

Hard Times.

For the past two or three years people have been accustomed to talk somewhat glibly about hard times, without seriously considering how they might be overcome, or without making any direct effort in applying a remedy. The lack of economy, or not applying our best knowledge and skill to the work we have in hand, very often results in so-called hard times to the individual True, there are circumstances sometimes which the individual cannot always control, which make it impossible for a person to make the most out of his resources. But in a very large measure, if the individual would use all the resources he has at his disposal in the very best way, the complaint regarding hard times would not be so prevalent.

The farmer sometimes complains of hard times when, if he had utilized his resources in the very best way, he would have had no reason to complain. A speaker at a farmer's meeting recently said:

> The lack of economy has much to do with hard times. Economy is not meanness, but a good and intelligent use of all of our faculties and the good things which nature and a kind Providence has put within our reach. We should economize our time. The value of time cannot be estimated in dollars and cents; much of our time is wasted. We should be content to live within our means. Be content to ride in a second-class wagon until able to buy and pay for a new one. We should economize the strength of our body and give our brains a chance. We should do more thinking, and think to a purpose.

The last sentence of this extract puts the whole matter in a nut-shell. Our farmers as a rule do not do enough thinking. If they would take a little time to study out the various phases of their business, many lines of farming practice which they are now following would be quickly abandoned. They would find out what lines of farming paid, and what lines did not pay. They would learn to discard the unprofitable cow and to keep only those which return a profit. They would discard many of the idle horses that are no use, and not paying for their board.

Many farmers fail to make farming profitable because they neglect to give particular attention to the little details of the business. For example the hen is totally neglected in many instances as being unworthy of attention, when, if managed properly there is no branch of the farm that will return as much profit for the capital invested and for the time and labor expended upon it as poultry raising. There are other ways also in which the farmer may improve upon his opportunities and make his business more profitable. It is a concentrated system of farming that entails special attention to every little detail of the business that will be successful in the future, and our farmers, if they are not working along that line should adopt it at as early a date as possible.

The Poultry Industry of Canada.

By Thomas A. Duff, Toronto, Ont.

(Continued from last week.)

KEEP THE MALE BIRD AWAY FROM THE LAYING HENS.

This, in my opinion, is really the key note to success. Though the object of the egg is undoubtedly to envelope the germ, yet impregnation of an egg by this germ has no influence upon the actual laying, and a hen will lay at the proper season independently altogether of her being mated with a male bird. Millions of eggs are laid every year which would never hatch, simply because they contain no germ, not having been fecundated. There are, therefore, two classes of eggs—fertile and infertile. A fertile egg is one in which the vital impulse has been communicated by fecundation, and by the term "infertile" is meant an egg which has never been impregnated, and consequently one that cannot possibly hatch.

My experience has proven that a hen when never mated to a male will lay seventeen per cent. more eggs than when so mated. Supposing, by way of illustration, that a hen, properly cared for, fed and housed, lays one hundred and fifty eggs a year; this would mean twenty five more eggs, which, at fifteen cents per dozen, means thirty-one cents more profit made from each hen than you make by allowing the male bird his liberty. On one hundred hens the profit is $31—a considerable item towards the cost of feeding.

In addition to obtaining more eggs, there are other advantages to be gained. You gain an egg of a better flavor, and one for which a better price will be paid. An infertile egg will keep very much longer than a fertile one, because there is no germ in it to spoil by the heat. If fertile eggs happen to be left in the nest for a day or two the heat from hens laying in the same nest, will, to some extent, spoil the flavor and keeping qualities of the egg.

To better exemplify the above, permit me to give you the result of an experiment which came under my personal notice:

In July last, several dozens of eggs, some of which were fertile and some infertile, were placed on bran in the drawer of an egg cabinet and kept in a cellar, where the temperature ranged from fifty to sixty degrees.

About the 15th of August, some of these eggs were broken, but no perceptible difference could be seen in them.

On the 15th of September, more were broken with the same result, except a slight entargement of the germ in the fertile eggs.

On the 15th October, more were broken, when it was quite apparent that the white of the fertile egg was much thinner than that of the infertile egg, and the germ was larger than at the previous test.

At the November 15th test, this was still more apparent, for in the fertile eggs the white was so very thin as to entirely leave the yolk and run over the saucer like water, while the white of the infertile egg had apparently not changed at all.

On December 10th, the last test was made, and the result was still more pronounced. The whites of all the fertile eggs broken were like water, and in a majority of cases the yolks broke and mixed with the whites, while on the yolks of those which did not break were to be noticed many dark spots and discolorations, showing clearly that the eggs were decaying. All of the fertile eggs broken at this December test were totally unfit for table purposes, and of little or no value for culinary purposes. In the infertile eggs, however, the whites and the yolks were in the same condition as when tested in August, and showed no signs whatever of decay. These were quite fit for any purpose, but, of course, could not be called "fresh" eggs. From the fertile eggs a bad smell was noticed, while from the infertile eggs nothing of this nature could be detected

During the conduct of this experiment, other prominent features were observed, namely:

(*a*) The loss by evaporation in brown shelled eggs was less than in white eggs.

(*b*) The loss by evaporation was greater in small eggs than in large eggs.

(*c*) The brown shelled fertile eggs were in a much better condition than the small white fertile eggs; while little difference could be detected in the keeping qualities of the large white colored eggs and the brown eggs.

The evaporation depends upon the conditions under which the eggs are kept, and will vary in accordance with these conditions. It is much more rapid in hot weather than in cold—in warm places than in cool.

When eggs are stored in other than cool places the transpiration of oxygen and hydrogen invariably renders them stale. This loss and evaporation are scarcely perceptible in the first week, but are more marked in the second, and of considerable importance in the third. An egg exposed to the weather, but protected from sun, rain and frost, will lose more than half its original weight in twelve months. Under similar conditions twenty seven eggs at the end of six months will weigh less than twenty two newly laid ones. Evaporation is half the daily average in winter and double the annual daily average in summer, or a daily loss four times greater in hot weather than in cold.

Experiments have proved that evaporation is very unequal. It is influenced by the size and form of the egg. In a series of experiments made with new-laid eggs, weighing eight, nine and ten eggs to the pound, it was found that eggs weighing ten to the pound lost double that of eggs weighing eight to the pound, and with very small and long eggs the loss in weight assumed a still greater disproportion.

Placing eggs in a cool place minimizes evaporation, and a low temperature is not favorable to the multiplication of the micro-organisms associated with the decomposition of eggs. A pure air where the eggs are stored is absolutely essential.

Upon two rules, apart from preserving processes, depends success in storing eggs for food—cool storage in a pure atmosphere reversing the eggs at least twice weekly.

COLLECTING EGGS AND HOLDING UNTIL MARKETED.

Be sure and gather your eggs every day. Under no consideration neglect this. After they are gathered, and all dirty eggs washed, see that all small, cracked or thin-shelled eggs are removed and set apart for home use. Those intended for market should then be placed in the cellar. It would pay everyone to have a rack made in which to keep these eggs. It can be made at home and will cost but a trifle. The frame can be made out