

if they were of good flavor than if they were unpalatable; second, we must have better grading. Third, better methods of distribution so there will be fewer glutted markets. Fourth, a better package, more attractive. Fifth, send better stuff to our local markets. Sixth, utilization of poor stuff for by products, such as evaporated apples, vinegar, apple syrup, etc. Seventh, middlemen cut out as much as possible. Eighth, introduce stock, hogs, etc., to eat up waste. Ninth, advertise thoroughly. Tenth, have public demonstrations of uses and different methods of serving apples.

Election of officers resulted in the choice of A. E. McMahon for President; F. A. Chipman, Vice-President; and the return of M. K. Ellis for Secretary.

R. J. MESSENGER.

Some Potash in the Soil.

The source of potash to be used in the immediate future is still undetermined. The majority of the potash that will be used on next year's crops was in this country before the war broke out and since that time scientists and manufacturers have been making every endeavor to manufacture potash from many sources. A rock known as feldspar contains a small percentage of potash. Sea weed also contains a certain amount but when the potash is manufactured from these various sources its price is prohibitive. Prof. R. Harcourt, of the Ontario Agricultural College, drew attention at the Experimental Union to the fact that some soils contain as much as 12,000 pounds of potash per acre to plow depth. A crop of mangel requires about 300 pounds to bring them to maturity while a crop of oats will consume about 40 pounds. The potash of the soil may be brought into availability by the use of lime and organic matter. It is a peculiarity of potash that it will not leach out of the soil, it becomes fixed there and the chemical reactions, which are encouraged by lime or organic matter, render it available for plants. Where the soil shows any deficiency of lime or organic matter it will be necessary for farmers who are growing crops that require a large amount of potash to make use of these two requisites to increase the availability of potash in the soil.

POULTRY.

Feather-eating in Fowls

Editor "The Farmer's Advocate":

Every winter we see inquiries in "The Farmer's Advocate" somewhat as follows: "My hens are picking the feathers off one another, how can I stop them?" Fortunate indeed are they if they stop at the feathers. Many a time I have seen hens eat part of their mates' bodies. First they start pulling a few feathers off the neck or rump. This may cause bleeding; the taste of blood seems to set the hens crazy, and in a short time they will have eaten through the skin and flesh and disemboweled the unfortunate fowl. When once a flock gets this habit it is very hard to stop them. Feeding fresh meat only seems to whet their appetites. Mutton seems especially bad in this respect. On several occasions I have seen hens take to eating one another after a short diet of raw mutton.

Sulphur fed in large doses is a partial cure, but is liable to taint the eggs.

Prevention in the case of feather eating is much better than cure. Hens laying heavily in the winter time unless specially fed are almost certain to become feather eaters. I have seen a ring of hens stand around a pair of fighting roosters and rush madly for the feathers the cocks tore from one another.

Last winter I fed skim-milk to my hens, and succeeded fairly well in controlling their taste for feathers. This winter I am feeding buttermilk and have not seen the slightest sign of feather eating, although my hens have been laying heavily for two months or more. The acid in the buttermilk seems to control the craving for feathers and blood. The buttermilk is also a splendid egg producer and keeps the hens in perfect health. No other drink is given but the buttermilk. It is very much cheaper than patent "tonics" and special "laying foods." If "The Farmer's Advocate" readers would drop a card to the Ontario Department of Agriculture, Toronto, and ask for Prof. Graham's Bulletin on Farm Poultry it would help them to understand the value of buttermilk as a laying food. At Guelph it gave better results in egg production than any other animal food. My own experience has so far gone to corroborate the results obtained by Prof. Graham. I can say that my flock consists of Arcenas divided among three houses containing about one hundred fowl each.

Middlesex Co., Ont.

W. E. WILLIAMS.

Fed on The Farmer's Advocate.

For about half a century "The Farmer's Advocate" has been the popular and permanent item on the farm home bill of fare, but a London manufacturer, M. L. Brown, discovered it doing business in a new place this season. Between the gizzard and the enveloping fat-layer of a particularly fine turkey being dressed for a holiday dinner he found neatly tucked in over half a page of a 1914 issue, containing part of the report of the Toronto Industrial Exhibition. Mr. Brown has his own theory of why the sheet did not follow the usual channel into the digestive tract and though somewhat of a practical poultry fancier himself, he never came across just such a unique case. Milk-fed chickens are hardly in the running now with discriminating turkeys that regale themselves on juicy and nutritious slices of the old yellow-backed "Farmer's Advocate."

Great Layers.

A Quebec correspondent, N. C. MacDonald, writes that thirty-two White Wyandotte hens have produced for him in thirteen months eggs which sold for \$222.95 at a feed cost of \$62.25, leaving a profit of \$160.70.

THE APIARY.

Apicultural Short Course at the O. A. C.

The fifth Beekeeping short course held at the Ontario Agricultural College opened on Tuesday, January 12th and continued till the 23rd. The excellent program arranged by Morley Pettit, the Provincial Apiarist, attracted an attendance of between forty and fifty beekeepers. The opening lectures dealt with "The Advantages and Disadvantages of Beekeeping," "A Microscopic Study of the Bee," Results of Co-operative Experiments in Beekeeping" and other topics that form a very fitting introduction to Beekeeping, and the ground work for the later lectures on the problems and methods of bee management. The use of lantern slides and the actual objects under discussion added to the interest of the lectures. A number of beekeeping supplies and appliances were exhibited about the classroom and many home-made "frames" or "jigs" were shown and explained by their inventors.

The use of a series of lecture plans, one for each lecture is proving very popular and the complete set will be very much valued by those taking the course, for future reference.

Save the Honeycomb.

Editor "The Farmer's Advocate":

Every beekeeper who will take a little trouble and save all odd pieces of comb, scrapings from frames, and scraps of old foundations, instead of throwing them into the garbage pan, can have a case of wax.

Sometimes it is difficult to know what to do with the wax when the cake is very large, since it is not always easy to obtain a good price locally from persons requiring beeswax. The best way out of the difficulty is to get into communication with a manufacturer of comb foundations, and it is not a difficult matter to ascertain the address of one or two firms. Either the manufacturer will be willing to pay a fair price for it, or to use it to make brood or super foundations at a nominal charge. Experience will show any beekeeper that it is worth while to preserve all waste comb, and very little trouble need be taken in the melting. The manufacturer will himself have to thoroughly cleanse and sterilize the material to ensure the destruction of any germs or foul brood.

As to the cappings and scraps of super foundations, it is desirable to keep these separate when extracting honey from comb, as they melt into a very much better cake of wax and one of a splendid color. Wax is a very profitable by-product of the beehive and it is surprising if scraps are collected, the amount one has put by in a few months.

There is a very simple method which can be followed by those who do not happen to have a wax extractor, for converting pieces and scraps of comb into cakes. First of all, wash the combs in cold water and squeeze them into balls; then place them in a canvas bag with a weight to keep them under water. Tie up the bag tightly and put it into a pot of hot water, boiling it steadily for two hours; then let it cool. When the wax becomes quite cold it will be in a solid cake on top of the pot and can then be broken into a large bowl containing a little boiling water. The bowl should then be placed in a saucepan of water and put on a slow fire until the wax melts. A bowl tapering towards the bottom is the best kind to use, as the wax can be more easily taken from it cold and solid. A jelly shaver or any other fancy mould might be used instead of a bowl, if one wishes to have

the wax figured and this of course enhances the value of a good quality wax.

Where a large quantity of comb is boiled together, a good deal of the wax will still remain in the canvas bag after the first boiling; to secure this, open the canvas bag and subject the comb to a second boiling, when a quantity of dirty wax will come to the top, but most of the rubbish will sink to the bottom. After cutting away the dirt from the underpart of the second cake of wax, it must be once more put into a canvas bag with a weight to keep it down as in the first instance, and boiled for a few hours, according to the quantity of it, and treated as in the first case. Care must be taken that the canvas bag does not touch the bottom of the pot, or it will be liable to burn; to prevent this, let it rest on a weight or a few stones.

Wentworth Co., Ont.

B. C. TILLET.

FARM BULLETIN.

Method Suggested of Securing Future Peace.

Editor "The Farmer's Advocate":

All the advocates of peace seem to agree that to secure permanent peace four things are necessary. First, there must be disarmament. Second, there must be an end of making preparations for war between nations. Third, there must be an international court of arbitration. Fourth, there must be an international police and naval armament of sufficient size and power to enforce the decisions of the International Court. The question is: are all these necessary? If the nations become convinced that there would be no more war between them, time would bring disarmament. If war should cease, while an international police would do no harm, there would be nothing for it to do. An International Court of Arbitration is, of course, a necessity, but is there not another entirely peaceful, friendly and yet efficient and inexpensive method of securing obedience to the Court's decision?

Remembering that nations, no matter how large, are made up of individuals, and that in each of these individuals the pocket is the most sensitive as well as the most vulnerable nerve, suppose that our country should take the lead in offering to combine with other peace-loving and non-military nations in a treaty agreeing that we and they would impose an additional duty of say ten per cent. on all products of any country sent to our markets or to the markets of the other nations joining in the treaty, which refused to discontinue making preparation for war. Also that the same duty should be paid on all products from other countries carried in vessels bearing the flag of the nation that persisted in preparing for war. Would not war between commercial and manufacturing nations automatically cease?

To illustrate: Suppose at the close of the present war Germany should decide to continue making preparations for future war. Germany is named, because while the terms of the treaty would apply to all nations alike, Germany in recent years has been making the most thorough preparation for war. Suppose France should complain to the International Court that Germany was arming and that unless she stopped, France too must arm in order to be prepared for war. The International Court would cite representatives of Germany to appear before it within a given time, and make answer to the complaint of France. If she declined to obey the summons within the specified time, or to obey the decision of the court, should it be against her, the terms of the treaty between peace-loving nations would automatically take effect, and just as automatically the whole subject would be transferred to the people of Germany. It would cease to interest other nations except as a matter of news. But it would become at once the question of questions, not to the rulers only, but to every man, woman and child old enough to think in all Germany. In this one fact lies the key to the situation and its solution. If the rulers and people decided to pay the additional tariff of ten per cent. rather than discontinue preparing for war, the tariff could be increased until it would become practically prohibitory. With such conditions and possibilities, all under the control of the nations signing the treaty, is it not safe to conclude that the German people would decide that preparations for war must cease? Of course, Germany or any other country which insisted on continuing preparations for war could retaliate by levying the same or even higher duties against the products of peace-loving countries, but would she do it? Would the people indorse such a course? It would seem that to ask the question is to answer it. We should never forget that war of its kind is punishment. Both parties are losers—the victor only less than the vanquished. Our efforts as lovers of peace should be against preparation for war. Would not this method be feasible? Would it not be successful if the United States alone decided to adopt it?

Cook Co., Ill.

THOMAS KANE.