

# Efficient Farming

## THE CARE OF HORSES' TEETH.

When a horse is thin, hidebound and "hard to keep," no matter how well fed, think of tooth troubles first of all. Of course, worms may be the cause, and sometimes after a severe spell of sickness, such as distemper or influenza, or even colic, the animal may remain thin and in a thrifless condition.

Many stock owners think young horses have nothing wrong with their teeth. This is a great mistake, as more trouble is found in animals between four and seven than at any other age. If a horse at this period of life is given a good examination by a competent veterinarian, often nothing more is needed for some years.

There are three common dental irregularities: First, sharp points, found on the inside of the lower grinders, which may cause ulcers on the tongue, and those on the outside edges of the upper grinders, which cut into the cheeks.

Second, unshed milk teeth, which may interfere with the normal position of the permanent ones. On the back teeth, these are known as caps, and often wedge in between two grinders.

Third, wolf teeth, which are small, unnecessary teeth, usually found just in front of the first upper grinder. Sometimes a wolf tooth is only as big as a grain of rice, and at other times may be as large as a person's front tooth, with a longer root.

In addition to these, we find long teeth, caused by the tooth in opposition wearing down faster than the others, which permits an uninterrupted growth of the other grinder. It is not unusual to find a tooth of this kind sticking up over an inch above its mates. This, in turn, wears a large hole in the tooth it grinds against, and we have an ulcerated condition that may involve the whole jaw bone.

When you suspect anything the matter in a horse's mouth, you can find out a great deal by using a flashlight. First of all, be very gentle

with the animal, and then grasp the tongue with the left hand. Pull the head out to the left side of the face and insert the flashlight in the right side of the jaw, just in front of the grinders and back of the tushes, if the animal is a horse—mares usually do not have these canine teeth or tushes.

You can now examine the right side of the mouth very easily. As stated, look at the inside corners of the lower grinders and the outside edges of the upper molars. If they look as jagged as the Rocky Mountains, your animal has sharp points.

If an extra little tooth struggles up in front of the first upper molar, it is a wolf tooth. Then shift the tongue to the right side and insert the flashlight in the left side of the face, and examine the left back teeth. Then look at the front teeth, taking care not to overlook any small unshed milk teeth.

A horse has forty teeth, or forty-two with wolf teeth. There are six lower nippers, six upper nippers, twelve lower molars and twelve upper grinders, with four canines or tushes. A mare has thirty-six, the four canines usually being absent.

Wolf teeth are common to both sexes; they usually come in pairs. A colt has twenty-four milk teeth. It has the same number of nippers or front teeth as a full-grown horse, but only half the number of molars—six above and six below, or three in each jaw. An April colt will have a full set of milk teeth to eat his Christmas dinner with, and keeps this set until he is about two years of age. Then he begins to cut teeth in earnest, and when he is between five and six is fully equipped with a brand new set of permanent ones.

Fully half of the colics and acute indigestions arise from imperfect teeth and poorly masticated food. Fixing the teeth is called floating, and is performed with a filelike instrument called a float. It is remarkable how quickly a horse will respond to having his teeth put in good shape.

## For Home and Country

### WOMEN IN AGRICULTURE.

Fifty years ago there were practically only three professions open to women—to teach school, to teach music or to get married. Nowadays all that is changed; there is really no door that is closed; we have only to pick and choose, for we may do what we desire to do, and it is surprising how many women have chosen agriculture. These women are working with chickens, with bees, with apple trees, with flowers, with dairy cows, with small fruits—indeed the list is almost endless.

To unmarried women and girls these occupations are often a way out from city life which has become distasteful. For the farmer's daughter, this business of income-earning at home is a blessing; she has all the joys of home life and still is tasting the sweets of independence. One of our short course girls, who helps her father in the orchard, says, "Earn your own money, girls—it's a lot nicer than asking Dad." To the farmer's wife "butter and egg money" have always meant that most precious possession, "my own money." Usually it is spent at the store for gingham for the children's dresses or shirting for father's shirts, or if everyone else is looked after, possibly shoes for mother. Still, it has been her own money, and she spent it as she wanted to.

And now, all through the country, we see a quickening of the activities of land women. In one section near Toronto, we see two nurses adventuring gaily with chickens, lacking experience, lacking caniness, but making a success of it, since they abundantly possess grit, backbone and vision. These women take all the help offered by their government, and every year are growing in knowledge and skill.

In another part of Ontario we find a widow (left with a farm and five children) doing what? Taking the short course in agriculture so that she may become a successful farmer and hold her farm for her sons. Not young in years, but with the spirit of eternal youth in this questing after knowledge.

From another small farm, seven hampers are sent each week to seven lucky city dwellers. Each hamper contains a chicken, fresh eggs, fresh butter, a jar of marmalade or jam, cookies, and often home-made bread. Everything is raised or made on the farm. Isn't this an experiment in agriculture worth trying?

On another farm where there is an invalid husband, the wife out of sheer necessity has built up a business of canning fruit, making pickles, jams, and jellies. There was an abundance of small fruit on the farm and this has been carefully tended and cared for.

In a section beside one of our summer resorts, a farmer is making an excellent income from growing and selling vegetables to the summer residents. His young daughter, aged sixteen, is also adding to her income by raising and selling flowers to these same delighted cottagers.

And so we might go on endlessly. These "new women" in agriculture are blaring the trail for young Can-

ada, and since they are in the work because of love for it, they are finding life "a great adventure and a glorious thing."—Mrs. H. M. Aitken, Beeton.

### A PIECE OF REAL NEIGHBORING.

We wonder if any organization ever had a more neighborly piece of work to its credit than this: The Institutes of South Simcoe were running a series of inter-Institute debates last winter. When Bond Head came to Tottenham, they had a debate, a musical program, a short play by the Tottenham Institute and refreshments. The proceeds amounted to \$46, with limited expenses to either organization. Three days previous, a woman living in the country near Tottenham had lost twin babies and her own life was hanging in the balance. The Tottenham Institute women hearing of it, immediately put in a trained nurse. The Bond Head women, learning that Tottenham was using its share of the proceeds from the evening for this purpose, phoned them the next day asking to have their share turned over to the same cause. The Secretary says, "We had a nice letter from the doctor in charge, saying it was the means of saving a life."

### WELCOMING THE NEW BRANCH.

In North Hastings when a new branch was organized at Rylstone last winter, the district president sent the news to every other branch in the district, and each branch secretary sent a letter of welcome to the new sister. At the time of this organization meeting, the roads were about as bad as they have ever been in the winter, but a sleighload of nine women drove out from Bonarlaw to help with the organization and they say they found "splendid material" waiting to be organized—twenty-one members for a beginning.

### A Lubricating Hint.

Recently an auto stopped in front of my home, and to my query as to why the driver did not apply grease to one of the car's bearings that had become so hot it was really smoking, he replied that he had no grease; with him and could not secure any until he reached the next garage, five miles distant.

Until the fact was pointed out to him this driver did not know or remember that the hub caps of the front wheels carry an excess of grease from which, in an emergency, the grease cup above a dry bearing may be replenished. The farmer auto owner would do well to remember this little point.

### Refitting Connecting Rod.

In some automobile engines the connecting rods are offset to the centre of the bearing and in refitting them offset is on the right side. Otherwise they may be installed backward or just the opposite to what they should be. In which case the connecting rod will be bent and great pressure placed on the bearings, so that they will burn out even though an ample supply of oil is present. This may happen after a careless assembling job.—H. E.

## Closing a Large Pipe With Air.

When a drain, large water or natural gas or other supply pipe requires to be disconnected it is often difficult to stop the flow by plugging, capping or otherwise stopping the pipe. Plumbers have a stunt called "bagging" that can be brought into use as follows:

Cut out a section of small diameter inner tube about eighteen inches long with the valve about six inches from one end. Vulcanize the end farthest from the valve and force a round stick covered with tire tape into the opening next to the valve and bind on solidly with cord.

When a pipe line is opened force the free end of the inner tube in as far as the valve, and pump air into it until it swells sufficiently tight to completely close the pipe and hold back any flow that might occur.

This stunt is valuable when opening tile drains, watertank supply pipes and any large piping about a farm where plumber's help is at a premium.

## Milk Preservative.

Investigational work carried out by the Department of Bacteriology, O.A.C., is of special interest to the cheesemakers and managers of factories. Many factory managers had experienced trouble in keeping the composite samples of milk in good condition for the period required by the Dairy Standards Act. The result of the O.A.C. Bacteriological Dept. investigation shows that not less than six grains of corrosive sublimate is required to keep a one-pint sample in good condition for forty days. This amount should be used if the butter fat tests are made either once or twice a month.

## Caring for the Defective Child

By Hilda Richmond

The idea of caring for the defective child outside the home is of recent origin. The old idea that the mother of such a child should give to it her whole life in loving and sympathetic care is so deep-rooted in the human mind, that grave mistakes have been made dealing with children who, at birth, or following an illness or accident, are not normal and can not be treated in the home as healthy, noisy, but sane boys and girls are treated. In every country there are children who are deaf and dumb, as well as those who are hopelessly feeble-minded, blind, crippled or otherwise defective, and the problem of caring for them affects not only the home in which such children are found but the community at large. The parents of a defective child should leave no stone unturned to see that the child get a proper examination and the opinion of a competent physician as to whether or not the case is hopeless. If the parents can not afford the expense of an examination, the local doctor can arrange to have the work done by some specialist connected with a hospital in a nearby city. Neither false pride nor the desire to conceal such defects should prevent parents from taking advantage of such help. Often it has happened that some operation or treatment will remedy a defect, and surely every child has a right to a fair chance from the very first moment of life.

If it is found that the defect is incurable, and the child must remain blind or deaf or crippled for life—should efforts be made to help the victim cease? Certainly not. No matter what anguish it causes the parents to part with the little one, the child should be early placed in a state or private institution for training and discipline.

### HUMORING THE UNFORTUNATE CHILD.

The average home is not the best place in which to train and instruct the unfortunate child; for while the parents may be able to pay for training, the tendency to spoil the child is too great. The mother who through mistaken kindness makes a domestic tyrant of the unfortunate little one, is not only sowing to the whirlwind for later years, but is shutting out all possibility of the limited happiness possible to such children through wise discipline and careful training.

A man who took his deaf and dumb daughter to an institution only after his wife's health had broken, was amazed a few months later to find the naughty little girl transformed into a healthy, intelligent, happy being, and he had hard work persuading her to accompany him to the door of the schoolroom to say good-bye, as she feared he would take her home. That girl grew up to be a fine housekeeper, a good scholar, a happy intelligent woman, able to speak after a long course in lip reading, and as nearly able to lead a normal life as her defect permitted. Had she remained at home she would have been a burden to herself and her family all her life. It is not kindness but cruelty to deprive such children of training, discipline and schooling.

### THE MOTHER'S SACRIFICE.

But if the child is incapable of training? If the poor little being is doomed to idiocy or invalidism—shall the mother sacrifice all her life to care for it, or shall that kind of a child be cared for in an institution? This is also a question which the trained doctor should answer. If the parents can afford to pay an

## HOGS.

Scours in young pigs take big toll and unless checked when it first appears is liable to spread through the herd with disastrous results. Overfeeding the sow, a too rich ration and cold damp pens, are the most common causes of this malady. Of course the obvious thing to do is to avoid the cause, but even with good care and careful feeding scours will appear. When it does a teaspoonful of sulphur in the sow's feed for a day or two will usually correct the trouble in the little fellows, but serious farmers say this remedy will dry up the sow.

Those who are afraid of this may obtain the same result by giving the pig about as much sulphur as will lie on the end of a penknife blade. If the case is acute a teaspoonful of castor oil in the morning to each pig and the sulphur treatment at night are mighty good.

## Breeding Stations.

The O.A.C. Poultry Department has distributed over the province 207 breeding stations with 12,786 hens. The Department supplied 845 pedigreed cockerels for these stations for the 1923 breeding season. The influence of this Extension work has been reflected in the great improvement of farm flocks over the province.

## Insulating.

Investigation carried on by the Physics Department, O.A.C., to determine the relative insulating value of ten different materials that are commonly used, gave the following results: (materials arranged in order of value) 1. Sphagnum moss, 2. new leaves, 3. flax fibre, 4. old leaves, 5. granulated cork, 6. cut straw, 7. sawdust, 8. shavings, 9. excelsior, 10. wood pulp. Sphagnum moss is abundant, cheap and highly efficient.

## The Sunday School Lesson

JUNE 15

### The Return and the Rebuilding of the Temple, Ezra, chs. 1, 3 to 6. Golden Text—Comfort ye, comfort ye my people, saith your God.—Isaiah 40: 1.

Fifty years passed and some of the most that the long, hard period of exile came back again. It was a purification and discipline was at an end. Israel was now to enter on a new life. The school period was over, and the pupils looked forward with panting hearts to the world in which they should now play their great part. So it was a time of joy.

2. The unknown prophet of the Exile proclaimed a religion that was far richer and diviner than anything associated with the old Temple. If only the people had risen to his high level when they returned to Palestine! He declared that the home-going meant that Israel now had her great second chance. She should become a missionary people to live, not for national glory, but for the spread of religion, and from Israel should arise prayer for all mankind.

3. But whether they forgot or not, in any event, they started off to their new vocation in the right way. Soon after reaching Jerusalem, they erected an altar on the site of the great brazen altar in Solomon's Temple. And so the new epoch was begun with religious sanctions and ceremonies. Then we are confronted with a note that is disconcerting, "the foundation of the temple of the Lord was not yet laid," Ezra 3:6. There follows in the book of Ezra, an account of the temple. It is a touching narrative, Ezra 3:12, 13. But languor settled down over these Jews from whom so much was expected. At last Haggai, a layman, an man of action, stirred the people to activity, and the Temple was completed—after twenty years had passed before that event was achieved.

4. The leadership of Haggai was of the utmost importance at this juncture. The student should read through the little book of Haggai at this sitting. This prophet rebuked the people for their supine selfishness and urged them to set to work on the erection of the Temple. But Haggai was far more than a critic. He was a singer with his face toward the future. Listen to his singer of a "yet more glorious day." At length the people responded to his courageous demand that they should realize their extraordinary privileges.

### Apple Recipes.

The charge is sometimes made that the Canadian people do not fully appreciate the excellence of their own fruit. In competition with other countries in the markets of the world, the Canadian apple stands high. Indeed, the Imperial exhibition recently opened in London, is attracting unusual attention and favorable comment. While it is regarded as important for the prosperity of the Canadian orchard industry that we have a good export trade, it would seem inconsistent for our people to continue to import fruit of the kinds that are available at home. Everyone, it is true, is not a lover of apples eaten out of the hand, but there are few who do not relish cooked fruits prepared and served according to the best practices. With a view to securing a greater home consumption of Canadian apples, which is understood to have a salutary effect upon the health, the Department of Agriculture at Ottawa has issued in Bulletin No. 35 a series of recipes for their use in various ways. The bulletin, available at the Publications Branch, names the apples that are specially good for cooking, for dessert. Apples are also classified according to the season in which they are best for use.

### Celatin and Bacteria.

With the great increase in the consumption of ice cream and the development of the ice cream manufacturing business, various schemes have been evolved to take care of the demand in a way profitable to those manufacturing selling this food. In making examination of various samples of gelatin sent to the Bacteriology Department of the Ontario Agricultural College some samples were found to have a bacterial content as high as 960,000 per gram. Whole-some ice cream cannot be made if low grade gelatin is used in its preparation.

### Re-gluing Joints.

It is sometimes necessary to re-glue joints that have become loosened or come apart, but a perfect repair cannot be made until every vestige of the old hard glue has been removed. Scraping alone will not accomplish the task with the desired degree of success. Hot water and a good stiff brush are the most effective means of putting the surfaces in the proper condition for rejoining. Needless to say, the wood should be perfectly dry before applying the glue and making the new joint.

### APPLICATION.

Let us endeavor to see the significance of the return from captivity. 1. It was the triumphant vindication of those promises that Israel's great men, like Jeremiah, Ezekiel and others had made to her. The Jews had not listened any too carefully to their mighty prophet-teachers when they declared that one day the Lord would bring back his scattered sheep and that they would find pasture on the mountains of Judah; but when the all-conquering Cyrus threatened Babylon they began to believe that after all their prophets had lied the conqueror was the "servant" of Jehovah. 2. As already indicated, the return



Short and Sweet. Professor Bug "Gives you what were you two fighting about?" The Victor "About half a substitute."