THE PREVENTIONOF FARM FIRES

BY E. S. H OPKINS.

Owing to the increased losses to farm property caused by fire and to the higher rates of insurance which are being levied, it may be of some interest to examine the chief causes of farm fires and the methods by which they may be avoided. The rates of insurance on farm property have very materially increased during the last ten years. This increase varies with different territories but it is safe to say that the present rates average from 50 per cent. to 75 per cent. above the rates prevailing ten years ago. However, notwithstanding this increase in rates, fire insurance companies paid in losses on farm property in Canada, from 1921 to 1924 inclusive, twenty per cent. more than they received in premiums.

Farm property is more liable to suffer loss by fire than city property. Barns are always constructed of wood, while straw and hay are always present. Lighting is done usually by coal oil lamps and lanterns. Threshing engines operate near barns filled with grain and straw. Moreover, as there is rarely any adequate means of fighting fires on the farm, when a fire does start, it frequently destroys completely all the buildings and their contents. As the insurance payment does not cover the *entire value* of the property destroyed, considerable loss is always suffered by every fire. The greatly increased cost of building makes the replacement of any building very expensive. Moreover, the inconvenience after the fire and the danger to life caused by the fire, renders necessary the exercise of all possible care to prevent it. In fact, eighty per cent. of all fires is caused by carelessness.

METHODS OF PREVENTING FIRES.

Defective flues and heating equipment are a serious source of fire. This source is almost entirely preventable. The chimneys and stovepipes should be properly constructed and cleaned as frequently as required. Stoves should be provided with supports or legs to elevate them at least four inches from the floor and should be placed about two feet from walls. Where this cannot be done, the walls and floor should be protected by the use of sheet metal or other incombustible material. Stovepipes should be run as far as possible from unprotected walls and ceilings and, when passing through walls, should be protected by suitable thimbles. Any openings in the chimney, which are not in use, should be kept covered with a metal cap. Coal oil should never be used to light fires as many serious fires are started in this way. Oil should always be kept in a metal can, a glass container being liable to be broken and the contents spilled.

Children should not be allowed to handle matches as this is a very frequent source of fire. Smokers sometimes throw down matches, cigars and cigarettes before they have been extinguished, thereby creating a source of fire especially around the barn. Matches should not be carried loose in the pocket as they are liable to be accidentally dragged out and dropped where, if ignited, they might cause a fire; matches should always be carried in a metal case. Lightning is a frequent cause of fire as well as injury and death to animals and human beings. The proper installation of lightning rods on buildings will almost entirely eliminate this risk. Gasoline should never be handled by lamplight or where a fire is burning; it vaporizes rapidly and the vapor is highly explosive.

Spontaneous combustion is a serious source of fire on the farm. If hay is stored in the barn or in the stack when it contains too much moisture, there is always some danger of fire starting by spontaneous combustion. This danger can be entirely avoided by properly curing the hay which not only eliminates the fire but also makes a superior quality of hay. Fire by spontaneous combustion may also be caused by the storing of damp grain or straw. Bonfires are the source of many destructive fires but care in watching that they are not allowed to spread and seeing that they are completely extinguished before being left, will eliminate this hazard.

METHODS OF FIGHTING FIRE.

While the prevention of fire is by all means the best method of control, nevertheless, when a fire does start some effective means should be readily available to extinguish it. The main point is to quench the fire when it is small as soon as it is detected. One of the best types of fire equipment for farm use is the placing of a number of fire buckets full of water in convenient places in the house and barns. These buckets should be kept only in case of fire and not for any other purpose; they should always be kept covered to prevent evaporation so that the water would be available whenever it was needed. The prompt application of a small amount of water, thrown carefully where it is needed on the material which is burning and not higher up into the flame, may prevent a serious fire. Many hand fire extinguishers may be purchased which are very effective in checking small fires. One type of these extinguishers employs soda, sulphuric acid and water, producing carbonic acid gas, which together with the water, is very useful against ordinary fires. For fires caused by grease, oil or gasoline another type of extinguisher employing carbon tetrachloride is to be preferred. The smothering of small fires with a blanket is very effective. In case of oil or gasoline catching on fire, it is unwise to use water as this merely spreads the flame; ashes, sand or earth, even flower pots, are very effective in smothering this type of fire. A long ladder which will reach to the roof of the house and the barn should be kept in some place where it will be easily accessible. Finally the person fighting the fire should keep cool so that the fire may be fought more intelligently. Sometimes, in the excitement, an important means of controlling the fire is completely forgotten.

Fattening Young Ducks.

Young ducks when properly treated and fed should be ready for market when from eight to ten weeks old. After being allowed the freedom of a considerable range up to six or seven weeks of age, it is recommended by the Dominion Poultry Husbandman that those intended to be marketed should be placed in feeding pens without range or water to swim in and fed three times a day. The ducklings will by this time have developed vigorous digestions able to take care of the large quantities of food that their appetites crave. No being able to run or swim off the flesh they make, the gains will be rapid from day to day and the flesh put on will be tender and of excellent flavor. The food recommended in the bulletin "Poultry Feeds and Feeding," distributed by the Publications Branch of the Dept. of Agriculture at Ottawa, may consist of one part bran, two parts shorts, three parts ground corn, ten per cent. beef scrap, and about five per cent. of sand. These ingredients should be mixed together along with a bulky green feed such as chopped up clover leaves, lettuce, or vegetable tops. This mixture is moistened to a crumbly state with milk, and an abundance of drinking water is kept before the flock at feeding time. Three or four weeks of this feeding should make the birds a desirable market product that sells for a good price. If kept much beyond this age the birds commence to throw out another crop of feathers, which not only requires considerable food for their growth but gives the carcass when plucked a less attractive appearance.

Sow Good Seed.

Make use of the seed cleaner to select the best grains.

Experiments conducted at the O. A. C. Field Husbandry Dept. testing grounds show that for best returns, it is very important to sow seed wheat which is large, plump, well-matured, unbroken, and unsprouted. The weather you can not control, but you can select the best seeds, wherewith to propagate a crop. It pays to use the best grade of the best variety.

Ducks have been successfully bred up until seven years of age. The age of vigor and productiveness in a duck is double that of the hen.

Age of Queens in Brood Production.

The project started by the Bee Division of the Dominion Experimental Farms in 1924 to determine the average daily egg-production of young versus old queens was continued in 1925. Two of the colonies used were wintered in the cellar, one with a queen in her first year and the other with a queen in the second year. Two other colonies were wintered outside in packing cases queened in a similar way. Counts were taken every seven days from May 16 to July 25. Very full statistical tables in the report of the Dominion Apiarist for last year give the results in 1924 and 1925. These show that in both years the youngest queens gave in the outdoor colonies the highest egg-production during the earlier part of the year when, as suggests the report, which can be had at no cost on addressing the Publications Branch, Dept. of Agriculture, Ottawa, high brood-production is of vital importance, especially in localities where the main flow comes early, such as from alsike clover. This condition, however, the report shows, was reversed in the colonies wintered in the cellar.

To Remove Mildew.

Mildew is one of the most subborn stains with which the housewife has to deal. If it will not yield to exposure to sunshine, javelle water is the next treatment to use. As a last resort a solution of potassium permanganate should be tried, followed by an application of oxalic acid solution to remove the permanganate stain. For the potassium permanganate solution, dissolve half a teaspoonful of the crystals in a pint of water. For the oxalic acid solution, use 1 teaspoonful of crystals to a pint of water. Before using the permanganate dampen the spot with clear water, apply with a scent dropper and rinse by pouring water through. Apply oxalic solution in the same way and rinse. Repeat as often as necessary. After the final application wash the cloth very carefully to remove every trace of the chemicals.

Goslings dress easier in warm weather than they do in cold, as the feathers do not set so tightly, and in picking them the flesh is not so likely to be torn.

S.S. LESSON

September 5. The Tent of Meeting. Exodus chap 33. Golden Text—The Lord spake unto Moses face to face, as a man speaketh unto his friend.—Exodus 33: 11.

I. EVIL TIDINGS, 1-6.
II. THE TENT SANCTUARY, 7-11.
III. THE PROMISED PRESENCE AND THE DIVINE GLORY, 12-23.

INTRODUCTION—Chapters 32-34 contain a series of incidents, connected with the giving of the law and the use of the sanctuary, of quite extraordinary interest, and of high religious value. In these the character of Moses is presented with impressive dignity and beauty,—his love for the people over whom he is placed, his devotion and self-sacrifice on their behalf, and his prevailing intercession for them with God.

I. EVIL TIDINGS, 1-6.

Vs. 1, 2. *And the Lord said unto Moses.* This paragraph is in direct continuation of the preceding chapter in which has been told the story of the Golden Calf. Moses is now commanded to depart from Sinai and to lead the people to Canaan, the land promised of their fathers. The Lord *will send an angel* before him, but will not himself go with his people. The reason is, apparently, their turning away from him to the worship of another god under the image of the Golden Calf. The distinction here made between Jehovah's sending an angel and going himself is not easy to understand. In ch. 23:20-33 it is said of the promised angelic guide, that Jehovah's name is in him, 23:21. His presence and his activities there appear to be those of Jehovah himself, or at least of one who is his full representative. In ch. 14:19 the angel of God goes with the pillar of cloud "before the camp of Israel." There is some reason to believe that the whole of v. 2 may be a later addition to the narrative based upon the promise in 23:20. If v. 2 is omitted a direct connection is restored between verses 1 and 3. Compare also v. 12 in which Moses seems to be unaware of any such promise as that in v. 2.

I will not go up. The penalty of sin is the loss of the consciousness of God's presence. Moses is compelled to look into a future without that consciousness and that assurance which has thus far sustained and strengthened him. The presence of God in the midst of a sinful people, such as Israel had now become, could only be as a consuming fire. It would seem that Moses had been tempted at this time to abandon the "stiffnecked people," who were causing him so much trouble and distress of mind, and to go on toward Canaan with a few faithful followers, hoping that he himself would then become the founder of a great nation (ch. 32:9-10), but had courageously resisted the temptation. Instead he had made the noble intercession on behalf of the people which is recorded in ch. 32:31-32.

II. THE TENT SANCTUARY, 7-11.

Now Moses used to take the tent. It is rather surprising to find this account of the use and disposition of the sacred tent introduced here. We have been told, in chaps. 25-27, of the instructions which Moses received for the building of the tent, but the story of the actual building of it is told in chaps. 36-38. There is distinct evidence here, as in other parts of the Pentateuch, that the narrative is drawn from two or three older sources, and that the pieces which are woven together are not in exact order of time.

The original tent sanctuary, here mentioned, may have been much smaller and simpler in construction than the large and splendid tabernacle described in chaps. 25-27. Joshua, Moses' *minister*, had the care of it and it was pitched *without the camp, afar off from the camp.* Those who *sought the Lord went out* from the camp to it, as also in the narratives of Numbers, chs. 11 and 12. The other and larger tabernacle was in the care of the Levites and was in the centre of the encampment, and on the march was carried by the Levites in the midst of the marching hosts. In either case it was looked upon as the dwelling-place of God. It was called the Tent of Meeting (tabernacle of the congregation, 27:21), because there Moses met and talked with God, and to it might go every man who sought the Lord. It was called the Tent of Witness, or of Testimony (38:21), because it contained the ark in which were the tables of stone bearing the Ten Commandments, the witness, or testimony, or declaration of God's will and man's duty to God and to his fellows. It also bore the significant names, Dwelling, Dwelling of Jehovah, and Sanctuary. Its presence on the march, and in or near the encampment was to all the people a visible witness of the presence of God with them, and to Moses a constant reminder of the fulfilment of the promise made to him at the burning bush, 3:12.

III. THE PROMISED PRESENCE AND THE DIVINE GLORY, 12-23.

Shew me now thy ways. In answer to Moses' prayer, God promises to go with him. His *presence* is, literally, his *face*, that is, God himself. Moses is unwilling to adventure upon the further journey without this assurance (v. 15). In this assurance his mind will have rest, and by it he will know that he has *found grace* in the sight of God. He continues to pray for a revelation of God's *glory*, but receives a glimpse of it only in the visible evidences of God's goodness and gracious favor.

One Night.

One night as I did wander,
When corn begins to shoot,
I sat me down to ponder,
Upon an old tree root;
Auld Ayr ran by before me,
And bicker'd to the seas;
A cushat crooded o'er me,
That echoed through the trees.
—Robert Burns.

In market, cockerels with spurs are classified with old fowls.

FROCK OF YOUTHFUL LINES.

For any hour of the day, and a type of frock that could be pressed into service for sports is this smart frock of cotton voile. The collar and short sleeve ruffles are plaited and are fashioned of plain contrasting color to match the long set-in vestee. The front of the dress is slashed at each side over the bust and gathered, while an inverted plait in each side seam provides ample fulness at the lower edge of the frock. The back is quite plain, and the sleeves may be either long or short. No. 1040 is in sizes 34, 36, 38, 40 and 42 inches bust. Size 36 requires 3⅞ yards 36-inch plaid material, and 1 yard plain contrasting color. Price 20 cents.

Every woman's desire is to achieve that smart different appearance which draws favorable comment from the observing public. The designs illustrated in our new Fashion Book are originated in the heart of the style centres and will help you to acquire that much desired air of individuality. Price of the book 10 cents the copy.

HOW TO ORDER PATTERNS.

Write your name and address plainly, giving number and size of such patterns as you want. Enclose 20c in stamps or coin (coin preferred; wrap it carefully) for each number and address your order to Pattern Dept., Wilson Publishing Co., 73 West Ade-

Does Away With Scouring.

Time heretofore spent in scouring may now, with the advent of metal wool, be spent in pleasanter pursuits. This material will remove instantaneously burnt food from aluminum, baking glass, tin or enamel. Rust vanishes like magic before it, and the nickel and enamel portions of the gas stove can quickly and effectually be cleaned with this medium.

If used carefully with a light touch, it will not injure enameled woodwork, painted shelves, or other such surfaces. Stains on mopboards are easily removed with metal wool as well as stubborn foreign matter on linoleum. If the metal wool is disliked when it comes in contact with the fingers, place a folded cloth on top of the pad. Wet the wool slightly before using and dry it out carefully afterward to prevent it from rusting.

Delicious Fudge Cake.

A particularly delicious dessert, one that is almost a confection, is fudge cake. It is made as follows:

Cream together 1 cupful of granulated sugar, 1 unbeaten egg, and ¼ cupful of melted butted. Add to it 2 squares of unsweetened Baker's chocolate that has been melted separately. Then add ½ cupful of flour, ¾ cupful of broken nut-meats, and ½ teaspoonful of vanilla.

Bake in a cake pan which has been covered with buttered light brown paper. Spread the cake mixture, thinly in the pan and bake in a very slow oven. Careful, slow baking is most important with this kind of cake. When done, remove the paper at once and while the cake is still hot, cut it into squares.

Gladiolus Bloom.

The blooms of the gladiolus take ordinarily seventy to one hundred and ten days to appear. Varieties vary and conditions make a big difference. In cutting early season spikes, leave at least three or more leaves on the plant, that the corms and cormels may be worth while for the next season. Should the spikes be cut close to the ground corms and cormels will not develop. If flowers are wanted to last a long time cut when one or two florets are partly opened and place in water in the cool and shade prior to packing and using. Spikes in water should have the stems diagonally cut at the base one-half inch every day and be placed in fresh cold water.

Cut flowers to last well should be kept cool, but the best coloring can be obtained by exposing for two or three hours to sunshine each day.

MAKING MONEY AT HOME

BY EMMA GARY WALLACE.

The woman on the farm often feels that her opportunities for money-making are less than those of her town sister, and yet if she will but stop to analyze her own opportunities she is sure to discover that she has many ways of adding to her income.

Making jellies, preserves, Dutch cheese, canning vegetables, and securing customers for these things, as well as poultry, fresh eggs, etc., are means of earning money which have not been used at all to the limit. One woman who sells such products has no trouble in disposing of her offerings. Some of them are purchased by her regular patrons in town and others are eagerly snapped up by motorists. On her neat verandah, which is located reasonably near the provincial road, she displays a small upright glass showcase which she purchased at a second-hand shop. In this she arranges a few glasses of preserves, a basket of fresh eggs, or fresh fruits or vegetables in season. Near the road is placed a neatly printed sign which reads:

"Choice Home-Raised and Home-Preserved Products for Sale Here."

Her earnings from this source net a substantial sum.

If any member of the family takes produce regularly to a public market, a small sum can be added to one's pin-money by selling freshly cut flowers. In a little town which is the shopping centre for a large summer population, the proprietors of gift shops, candy and drug stores and tea rooms use quantities of both wild and garden flowers for decorative purposes. In the gift shops a vase of flower-holder filled with flowers advertises that special vase or basket, increasing the sales. Flowers add to the attractiveness of the other places of business, and more than one woman increases her income by supplying them. The flowers are cut in the evening, placed in pails with their stems in water and delivered fresh in the morning.

MONEY IN FIR TIPS.

Some years ago a boy advertised in a city newspaper that he would furnish balsam-fir tips at so much a pound. He received so many orders that he was soon obliged to hire other boys to help him, and a considerable sum of money was earned toward his college expenses. Gathering fir tips is pleasant work, as easily done by women and girls as by boys. The tips could be placed in unbleached-muslin bags and sold by the dozen to the needlework department or house-furnishing department of a large store. If balsam firs grows near your home, write to the boards of trade of your nearest large cities for the names of firms that are likely to buy such products in quantities.

A young woman who had studied dressmaking, but could not leave home nor give more than a portion of her time to sewing desired to turn her knowledge to account. She had her own sewing machine and her mother's as well. She prepared a conveniently located room by leaving the floor bare and putting in a work-table and chairs. Then she advertised through her friends that she would open a sewing class which would meet two afternoons in the week from 1.30 to 5.30. The class would be limited to six. Each of the pupils would bring her own sewing and be assisted in cutting, fitting and making. The charge for the afternoon would be 50 cents a pupil. Each pupil would be taught just how to do the work in hand properly. This meant that a single afternoon netted her $3 and the two afternoons $6. She was soon obliged to form another class which met two afternoons a week also, and her income was $12 a week for four afternoons' labor.

CAMPING SITES.

A number of local newspapers will pay a bright correspondent for items of interest, and it is possible to correspond for several papers if one is on the alert—a rural weekly or two, and a more distant city daily which perhaps gives occasional space to local items of general interest. Some women succeed as magazine subscription agents for their localities. They take both new and renewal subscriptions and keep track of the subscriptions about to expire.

Those who live on roads used by autoists gather in many stray dollars by offering camping sites to tourists. Such travelers are glad to buy fresh produce and cooked food. Sometimes the "spare" room proves to be a money-maker. Rooms for the night, with supper and breakfast are very welcome when hotels are few and far between. Taking an occasional boarder is not a difficult task, as the work does not go on indefinitely. It is often possible through physicians or nurses to get some one who needs the quiet and wholesome life of a farm. An extra price is usually obtained for convalescents.

Just what are your assets? How much spare time have you? What is there about you which you could turn to account—moss or ferns to sell to a florist, rich earth mould for a greenhouse, or what? Think out the thing you would like to do, then see if it is not possible to spend part of your time doing it. Many a woman makes quite a substantial sum of money making use of her spare time and any talent she may have. Success is gained by using what we have to the best purpose.

My Crazy Kimono.

Six weeks before I was to start to college one fall I found that all my money was either spent or budgeted and I had not yet provided myself with what I had found the year before to be much needed—a good-looking lounging robe for midnight fudge parties and spreads.

I was dolefully thinking it over in my room when my eye caught the shimmering reflection in the mirror of an old patchwork quilt thrown across the foot of the bed. I snatched it up and drew it about my shoulders. It had all the richness and charming variation of a Persian shawl. A silk patchwork kimono, I decided, would be just the thing. The rag bag should furnish my negligee.

First I cut out from muslin a one-piece pattern fashioned after the butterfly waists. I made the armholes very wide and then attached long, wide, straight sleeves. I pieced each sleeve before I tacked it on. Then I cut out a round neck, slashed it up the middle of the front and pieced it before I sewed the underarm and side seams.

I do not know what the accepted method for doing patchwork is, but I laid my muslin pattern out on the dining-room table and first arranged the patches and pinned them to the muslin, and then basted them securely to the cloth, turning the rough edges under. Across the back and around the bottom I used rather large patches.

In a week and a half I had it ready to work in fancy stitches with colored floss. It happens that we had enough odds and ends of thread about the house, so that I did not have to buy any. It took me only a month of casual application to finish the decorative stitching. I used every color of silk thread imaginable, outlining dark patches with light floss and vice versa. An old rose-colored party dress was used for lining it and braided ribbons made an appropriate rope. Joseph was never prouder of the coat his father gave him than I was of my coat of many colors.—V. C.

Sand From the Sea.

When the summer holidays are spent by the sea, all housewives should take the opportunity of securing some sand to bring home. The housewife who does this will save both money and time, and many visits to the grocers for the purchase of cleaning fluids and powders.

For cleaning all stained kitchen utensils, sand mixed with a quantity of soap is excellent. A kitchen table which appears hopelessly dirty is restored to its pristine state by the application of sand and soap, not water.

To remove stains on the hands merely dissolve some oddments of soap in boiling water to which about a handful of sand has been added.

Cut flowers will remain fresh much longer if set in moist sand instead of water.

Why Trees Die.

"One of my trees is dying—what is the cause?" A lot of folks ask us this question every summer, and it is a hard question to answer. There are a great many things that kill trees. The quickest and surest tree-killer is illuminating gas. If a tree dies suddenly, see if there is a leaky gas-main near its roots. Another deadly material is the plant-poison, sodium arsenite. This poison has not been used extensively to kill trees, but in certain cases it has proved very effective. A few notches cut in the tree at the ground level, and these treated liberally with the sodium arsenite—pouring a pint of the strong solution on the cuts and about the base of the tree—does the trick. As one man said of this treatment: "It acts like dynamite."

Some folks think that trees will die of old age, but death in old age is usually the result of slow death by rotting. Nature provides the tree with a splendid armor against these rots, in the form of bark. Accidents or the thoughtlessness of man usually opens the way to heart rots which will finally lay low the greatest monarchs of the forest. Anything that breaks the bark, leaving a great gaping wound that can not be healed quickly, opens the door to easy inroads by these heart-rot fungi.

One of the most common causes of a tree's dying is dry weather. As a rule, the first thing to do when a tree's leaves begin to wither or turn yellow is to spade some manure into the soil and give the soil a good soaking.

Tree butchering, beheading and dehorning are also causes of trouble. Some people believe dehorning does the tree good. They point out the massed clusters of branches which spring out from dehorned branches as evidence of the increased vigor. But every time a great branch is cut off, leaving a stump which can not heal, just that often a pathway is opened for decay.

The guinea cock is more compact than the hen. His wattles stand out wider than those of the hen, are a brilliant red, and sometimes hide a portion of the beak. Those of the hen are more pendulous. Also, there is a distinguishing difference in the "call," as the hen uses only the curious, petulant cry, "come back."