

AMERICANS VISIT CORN BORER AREAS IN ESSEX AND KENT

BY L. CAESAR, ONTARIO AGRICULTURAL COLLEGE.

On September 30th a party of about one hundred leading men of the United States visited the worst infested corn areas in Essex and Kent. The party was composed of representatives of the government at Washington, the state commissioners of agriculture, heads of agricultural colleges and experiment stations, entomologists, agronomists, managers of canning factories, representatives of large farm implement companies and members of the press. These men came from all parts of the United States, some of them from as far away as Kansas and Nebraska.

On the following day they met with the Canadian entomologists at the Prince Edward Hotel, Windsor, for a general discussion of the borer. In this meeting, without exception, the visitors expressed amazement and alarm at the devastation they had seen in the corn fields visited, most of which had been totally ruined by the borer. The majority of those who spoke said they had been somewhat skeptical until now of the importance of this insect, but no longer had any doubt that it was an exceedingly dan-

gerous pest and one worthy of the closest attention on the part of all corn growers. A committee of their own number was formed to arouse the interest of farmers in the United States and to get the support of the public in taking whatever measures seemed necessary for dealing with the pest wherever it appeared. They realized that should the borer get into the great corn belt of the United States and cause the same sort of devastation there that it is doing in parts of Essex and Kent that it would be a terrible blow to these states; for, they said, so far as they could now see there was no crop which could be grown nearly so profitably in these areas as corn.

In the discussion on control measures it was seen that the American investigators in their recommendations agreed entirely with the methods advocated by Professor Caesar and Mr. Crawford for Ontario. Briefly these are to destroy all borers by feeding, burning or plowing down all the corn remnants including the stubble, and having all the work completed by not later than June.

MUSHROOM CULTURE

Attempts at growing mushrooms are not always successful, but as failures are due to mistakes in management or location. A cellar, building or barn where the temperature can be kept fairly uniform between 45 and 65 deg. F. answers very well for a winter bed preparation should be made about the end of October. The bed consists of horse stable manure, wheat or oat straw has been used for bedding. As much as possible of the long straw in the manure should be removed. The heap should be sheltered from rain, and covered by forking over at intervals of four to five days until the first violent heat comes, which will take from two to three weeks. By this time it should be thoroughly mixed, and uniform consistency, and have lost its rank odor. If during heating of the manure it becomes very dry, sufficient water may be added to make it moist, but not too wet. A good way to determine whether the manure is of the correct consistency is to take a handful and squeeze it tightly; on opening the hand, the manure should fall in pieces, it is too dry, or if it is squeezed out, it is too wet. If it retains its shape without any being squeezed out it is in perfect condition to use for making the bed.

MAKING THE BEDS.

The manure may be placed on the ground against a wall so that the sides of the bed in front and sixteen inches deep. It may be spread on a floor or another. Suitable mats, and ten inches deep, should be placed on the bottom of the shelf above the surface of manure in the bed. These measurements should be taken to the size and space available. If the manure is to be placed on the floor, it should be taken that the beds are properly bottom and not directly on the floor. The manure should be spread with a spade or other tool being made.

At least once a week or ten days after the bed is made it will gradually heat. The temperature can be determined by inserting a common glass thermometer into the manure. When the temperature is found to be 65 to 70 deg. F., when taken in various parts of the bed, it is then time to sow the spawn.

SPAWNING.

Spawn can be obtained at a moderate price from any reliable dealer in seeds and garden supplies. The bricks should be broken up into twelve pieces and these should be planted eight to ten inches apart each way in the bed, and to three-quarters inch deep. This is done by making a hole on the surface of the manure, inserting the brick, covering it over and watering the spawn.

Two weeks a piece of the spawn should be dug up and examined for white threads. If none are seen, it is then time to water the bed. It is then time to water the bed. It is then time to water the bed.

WATERING.

Water should be put on the bed until the mushrooms are about six to eight inches high. It is then time to water the bed. It is then time to water the bed. It is then time to water the bed.

the condition of the beds. If they get very dry quickly, water often.

In a pamphlet on mushroom culture prepared by Mr. F. L. Drayton, Plant Pathologist at the Experimental Farm, Ottawa, it is pointed out that old manure or manure mixed with shavings or sawdust are not suitable for growing mushrooms. The curing of the manure should not be attempted too late in the season when continuous frosty weather will hinder the proper heating up. It is important that the spawn be not planted until the temperature of the manure is constant at about 65 deg. F. for three or four days, because manure will heat up again after the bed is made. Overwatering is especially to be avoided as the manure must be kept just moist. The spreading of the soil over the manure must be delayed until the spawn has started to make a mould-like growth.

With these precautions observed, the growing of mushrooms should not prove difficult.

Preventing Winter Ailments of Sheep.

Sheep are subject to a number of ailments, such as colds, catarrh and indigestion that, while not considered dangerous, impairs the health of the flock. Prevention is advised, particularly with ailments attacking sheep during the winter when access to limited quarters, and are dry.

My experience has been that sheep do much better and keep in healthier condition when allowed to remain in the open air as much as possible, and protected from storms by well ventilated sheds. I have made the mistake, like many other flock owners, during the winter, of confining my flock too closely during stormy and severe weather, only to discover in a few days that I had done my sheep more injury than good.

Sheep are abundantly protected by nature against severe cold, and too close housing is very likely to cause a great many members of the flock to take cold. Here, proper management will help one out. Hardy sheep, in good flesh condition, possess wonderful disease-resisting power and, if properly protected against storms and housed in well ventilated stables, need not become victims to attack.

Sheep during the winter months should be kept in good flesh, well nourished, and caused to take plenty of outdoor exercise. Confinement makes them sluggish, impairs the digestive and circulatory systems, and reduces physical vitality. Well nourished and properly housed sheep seldom become diseased.—L. C. R.

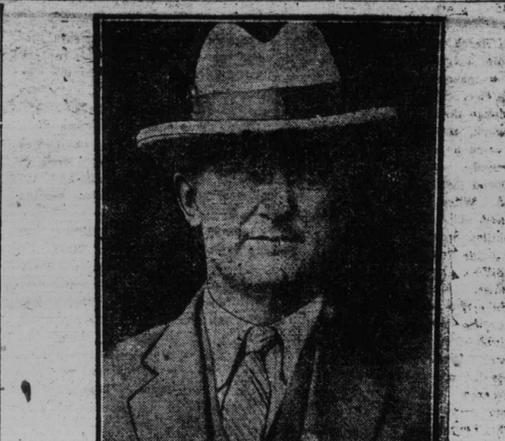
The Under Surface—Save It, Too.

Paint and varnish save the outer surface on most automobiles, but the under surface is neglected. The underside of automobile fenders suffers most. Recently, in a small town where nearly all of the cars parked belonged to farmers, I counted and found that one out of every six cars parked on four blocks had fenders rusted through from the under-side.

All of us still regard paint and varnish as beautifiers rather than as protectors, and where scratched and rusty spots are not exposed to view they are not given attention. Even on cars with the best of finishes, mud, driven sand, and loosely adjusted chains soon play havoc with the finish given the chassis and under-side of fenders. Metal surface is exposed. It rusts. Paint or enamel applied immediately would stop the damage.

As the surfaces are not exposed to view, extreme skill in applying the finish is not essential. There is, therefore, less excuse for the unskilled man not attending to these neglected under surfaces. As a rule they demand attention every six months. It is well worth while, in fact, to paint or enamel the whole car chassis once a year.

The best way to make money is by helping others to make money.



Ty Cobb, great baseball star and manager of the Detroit Tigers, photographed in Toronto en route to his annual hunting and fishing vacation in Northern Ontario.

UNCLE BEN AND THE BEAR

BY M. P. HANDY.

Uncle Ben was going to his wife's house when he met the bear. He lived on one plantation, and she on another, five miles apart, and twice every week, on Wednesday and Saturday, he went to see her.

Usually he started in the afternoon, those many years ago, but on this particular day he had been detained, and it was after nightfall before he had halfway accomplished his walk. However, he cared but little for that, since, knowing every foot of the path by heart, he could travel it by night as easily as by day, and he trudged along at a rapid pace, thinking only of Betsy and his children.

He was in the depths of a thick piece of woods, when he heard a rustling in the undergrowth near him. "One or Squire Thomson's hogs done run off," he thought. "Well, I ain't got time to catch 'em for him 'dis night, suah!" and he kept on his way, looking neither to the right nor the left.

The rustling continued, and in a few moments, as he came to a place where the path widened a little, and the trees grew further apart, letting in a little moonlight, what should come out of the bushes just in front of him but a great black bear!

Now Uncle Ben knew a bear when he saw it, but none lived in that part of the country, and he could hardly believe his eyes. "Brother Moses!" he said to himself, and stopped short, looking at the bear. The bear looked at him, and then, growling, came toward him.

The old man felt scared, and with good reason. The bear was really a very large one, and here was he, alone in the woods, a mile from any house, with no weapon except the thick walking-stick which he held in his hand.

As the bear drew near him he grasped his stick, and, with the energy of despair, held it up threateningly. To his joyful surprise, the bear, at this, stopped immediately, and rising on its hind legs, began to dance.

Doubtless many of you have seen a dancing bear, but not one of you ever enjoyed the spectacle as did Uncle Ben.

As the bear stood up in the moonlight, he saw that a rope was tied around its neck, and the long end dangled on the ground.

He understood from this, together with the dancing, that the bear was a tame, or at least an educated one, and he realized the necessity of not showing his fear of it.

So he walked boldly up to the bear, and seized hold of the rope. At once the bear, feeling the pull, came down on its forefeet, and followed its captor, who kept tight hold of his stick, inwardly thankful that he had not very much further to go.

Near the edge of the wood, and directly on the path, was a young persimmon tree, loaded with ripe fruit. When the odd companions reached this, the bear showed a strong desire to stop, and Uncle Ben, wisely reasoning that if he suffered to satisfy its hunger on persimmons it would be less likely to eat him, paused readily, and shook the tree for it again and again, until it would eat no more.

Then they took up their line of march once more, Uncle Ben leading the bear, which showed no signs of resistance whatever.

Great was the astonishment of his good wife Betsy and their children when, at nine o'clock at night, after they had given him up for that night at least, he appeared with his captive. Opening the door at his knock, Betsy started back, with both hands raised.

"Ben Harrison!" she exclaimed, "whar'pun the top er yerth did you git dat bar?"

"You're a lucky fellow, Ben, in more ways than one," said he. "The bear belongs to a traveling menagerie which stopped in the village to-day, and will give a show to-morrow. The bear escaped from them on their way, and they have offered five dollars reward for it."

The bear was secured for the night in an empty out-house, and by daylight the next morning a boy was sent on horseback to the village with the news of its capture.

Very soon its owners appeared, much rejoiced to recover it in good condition, since they had been very uneasy for fear lest some one might have shot it, not knowing its value. "I'd a-killed it, suah, suah," said Uncle Ben frankly, "ef I had a gun; but when I held up my stick at it, an' it begun ter dance, I know'd it wa'n't really savage. Thank you, suah!" he added, as he pocketed his reward.

"He would have been savage, though, if that fellow had shown any fear of him," said the man, to the white people around him. "His courage and coobness saved his life."

And then, having muzzled the bear, he made him dance and go through the manual exercise for the entertainment of the household, and then to their great relief he took him away.

Care of the Greenhouse.

The growing of vegetables and flowers under glass has become an industry of great importance. It is estimated that there is about six million square feet of space under glass in Canada devoted to the growing of these crops which are valued up to about three million dollars per year.

These crops are subject to innumerable insects the ravages of which entail heavy losses. It was to reduce these as far as possible that the bulletin, entitled "Insects Affecting Greenhouse Plants" was prepared by Dominion Entomologist Arthur Gibson, and his assistant W. A. Ross.

As the authors say, much of this loss may be avoided if growers adopt the remedies that are recommended in the bulletin, which is freely obtainable by application to the Publications Branch, Dept. of Agriculture, Ottawa.

How prolific and consequently how destructive these insects may become is illustrated by the fact that scientists have estimated that if all the progeny of a single aphid were to survive they would in 300 days be equal in weight to the teeming population of China seven-fold. General recommendations given in the bulletin are as follows:

Working among his plants the grower should keep careful watch for any insect pest before they become destructive and have time to spread. Hand-picking for leaf-eating caterpillars should be practiced whenever possible and infested material burned or otherwise ruthlessly destroyed.

Weeds should be rigidly kept down. In selecting soil see that it is free from insects, such as cutworms, white-grubs and wireworms.

If there is reason to believe the soil of manure introduced is affected sterilize it before planting. Examine carefully any new stock imported.

Rotation is often advisable. The common white fly is, for instance, very injurious to tomato, primrose, and other plants and if new locations are used for such crops control of the insect will be easier.

ELECTRIC HEAT, LIGHT AND POWER

BY CLARA WOOLWORTH.

There's a modern little wonder-working djinn that lives in the wall of every one of the thousands of electrically wired homes in this country, ready instantly to do our bidding. And since no one ever has been able to give a satisfactory definition of electricity, and we summon it to our aid by the mere touch of a button, why not look upon it as a friendly, helpful spirit that will step in and relieve us of just as much of the heavy burdensome part of housework as we are willing to let it do?

Until within the last dozen years people thought of electricity for the home principally in terms of light; and of the quantity of light rather than the quality. When homes were wired for electricity in the earlier days one outlet in the centre of the ceiling was considered enough. Even now in some sections this idea still persists.

It means that the only way in which a floor or table lamp or some electrical appliance may be added to the equipment is by a dangling cord. Of course this emergency may be met by the use of a two-way plug, but that is never very satisfactory.

LIGHT WHERE YOU NEED IT MOST.

Certainly having just enough outlets to furnish enough lights to read and see by, but not enough for well-distributed, comfortable lighting, is a long step in advance over candles and oil lamps, but it is not getting the most out of the investment you have made in your power and light outfit in your wiring.

It is an easy matter to add baseboard and side wall outlets, even where the wiring has been installed for some years. But putting in enough outlets at the time the original wiring is done, to take care of all possible future needs, is considerably more economical than adding them later.

The main thing to be considered in planning your original wiring, or for additional outlets, are the comfort and convenience of the whole household. For good lighting that means having fixtures and lamps of a type that will give you the right quality and quantity of light where you need it most.

But there are a few general rules which anyone may follow for the placing of lighting and appliance outlets throughout the house.

In the kitchen the most important thing is to have the lighting source so placed that there will be no shadows on your work. Usually this means one centre light, 75 or 100 watt, placed quite close to the ceiling with the bulb itself inclosed in a white glass bowl of any favored shape. This costs a little more than the fluted glass shade that is open at the bottom, but it gives a much more comfortable light to work by and is just as easy to keep clean.

If your kitchen is a large one and you stand in your own light while working at the sink or at the stove, you will need a bracket light, protected by a shade, so placed that it will do away with the shadows. Two lights ought to be enough for any except the largest kitchens. Sometimes two ceiling

outlets, one toward each end of the kitchen, give the best results. As you may do most of your ironing and perhaps your washing in the kitchen, a side wall outlet, placed at a convenient spot and height for operating the electric iron or washer, will be a big help.

In the dining room, where the table is the main thing to think of, a dome of a candelabra fixture, so shaded that no lamps are in sight from any place at the table and hung high enough to avoid shadowing any part of the table, will give all the light needed. Of course side wall brackets for supplementary light are nice to have, but not absolutely necessary to that comfort and convenience we are talking about here. A floor outlet under the table, for connecting the table appliances—percolator, toaster or waffle iron—is a real convenience if you can manage it without cutting the rug.

Some of the newer dining-room domes are made with a convenient outlet concealed in a fassel hanging underneath. A baseboard outlet at a convenient point where no one will catch the cord in passing will do for table appliances, the vacuum cleaner or an electric heater on cold mornings.

In the living room, "local" lighting—that is, by floor and table lamps, placed where they will be most useful for reading or sewing or playing games, is pleasant, but if the room is quite large, a central light close to the ceiling is almost necessary.

LAMPS FOR EVERY TASTE.

If you know just about how your large pieces of furniture are to stay, you can plan your baseboard outlets so that you can connect your lamps with the least display of cord.

There are all kinds of attractive bridge and floor and table lamps, from the simple wrought-iron ones with parchment shades, to be had around four dollars, up to the very beautiful and expensive porcelain ones with wonderful silk shades. But you can probably make your own silk shade at a very small cost.

Whether or not you have a baseboard outlet in the hall depends a good deal on its size and shape. If it is one of those lovely big wide ones you will want an outlet for a table lamp and side wall brackets on either side of the mirror, in addition to the lantern or candelabra fixture near the door. If the hall is small you need only the one fixture.

In some bedrooms one well-shaded overhead light will do for general lighting, but to prevent shadows at the dressing table it is well to have side-wall lights on either side and a baseboard outlet for connecting a bedside lamp or curling iron.

A small table lamp by the bed for reading and another outlet to connect the vacuum cleaner, heating pad or electric heater will give you everything you possibly need in the larger bedrooms.

In the bathroom, either a centre light, which may be a small edition of the kitchen unit, placed to throw a good light on the mirror, or side lights at the mirror, with one baseboard or side wall outlet, will do.



THE LONG-SLEEVED SATIN FROCK.

The straight-of-line is well portrayed in this gown of shining satin, individualized by shaped jabots set under the edges of the panel front. The back is in one piece, and the narrow belt girdles the hips, passing through slots in the jabots and ties gracefully at the front. The long sleeves are finished with narrow pointed cuffs made of the same material as the jabots. The diagram pictures the simple design of the partly finished frock, No. 1216, which is in sizes 16, 18 and 20 years (34, 36 and 38 inches bust). Size 18 years (36 bust) requires 3 3/4 yards of 36-inch, or 2 3/4 yards of 64-inch material. If contrasting color material is used for the panel and jabot, the dress requires 3 yards of 36-inch and the panel and jabot 1 1/2 yards. Price 20 cents.

Many styles of smart apparel may be found in our new Fashion Book. Our designers originate their patterns in the heart of the style centres, and their creations are those of tested popularity brought within the means of the average woman. 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 Adelaide St., Toronto. Patterns sent by return mail.



Only Run Down. "Hubby—'Our old clock-mender has gone out of business.'"
Wife—'Huh?'
Hubby—'No—only run down.'"

Wifely Pride.

"Splice, dear," whispered the house prowler's wife as she handed him his burglar tools and kissed him good-night, "try to be a little more quiet when you come in to-night."
"Smatter, babe?" inquired the fond husband. "Did I wake youse up last night?"
"No, but you awakened mother," was the reply. "And I don't want her to go home and tell father I married a snatcher."