WHAT TO DO WITH WINTER-KILLED BRANCHES

By G. H. COONS,
Research Assistant in Plant Patholoy, Michigan Agricultural College.

Apple Trees Showing Severe Winter Injury.

Following a most severe winter the apple trees in many localities present a very bad appearance and the condition has caused much alarm to be felt among fruit growers. In some cases whole trees have been killed, but in most cases a few of the large limbs have been killed and these persisting give the tree a "stag-headed" appearance.

In many cases it is found that those limbs that were weakened by scale, overbearing or other cause, are the ones which suffered the most from the continued cold.

Many of the limbs that were severely injured but not entirely killed pushed out a few leaves, but these never attained full size, but soon withered and dropped off. The majority of such limbs are now completely dead and are of course valueless.

Some limbs, not so badly injured as these just mentioned, produced almost normal foliage—in some cases differing from the healthy leaves only by the slight yellowness—and on these limbs fruit has been produced. This fruit also shows signs of the great disturbance that has taken place for it is frequently found to be gnarled, or even watery, and this condition is fairly uniform on any affected branch.

It is easy to tell now just which limbs are going to live and which ones are past recovery. It is the fruit grower's business now to help the tree recover from this damage. He can do this by pruning away the dead wood scientifically.

First of all he must be governed by the rules of good pruning, which require that all cuts be made flush with the main branch. If the fruit grower wishes to become convinced of the harm that can be done by leaving stubs, let him examine a poorly pruned tree and note how the growth of the wound tissue has been hindered. He will also find that the stub has rotted badly and endangered the limb.

Having pruned the tree properly and having rid the tree of all the dead wood, it is now essential that all wounds be covered to keep out the germs which cause heart rots. Few apple trees of any age have a sound heart. This is due solely to the work of fungi. These fungi have entered the heart wood through uncovered wounds.

To cover the wounds of the apple tree many substances have been suggested, but the matter is yet largely in the experimental stage. At present a good white lead paint, applied thoroughly and frequently repewed, seems to be the best recommendation. Some success has been had using the white lead paste, or thinning slightly with oil, but the former thing seems to be most convenient. It should be painted out that white lead is hard to obtain in some localities and many substitutes are offered. If one is painting the wounds for beauty only he can use the fancy mixed paints, but if he is painting the wounds to keep out fungi and to protect the trees, he must use good material.

It will be found in many instances that the trees that now appear to be badly used will recover from the injury, and in some cases the killing of the limbs has done considerable good in thinning out trees whose branches were hopelessly thick.

HARVESTING AND STORING THE APPLE CROP

By PROF. C. P. HALLIGAN,
Assistant Horticulturist, Michigan Agricultural College.

The indications are that the apple crop in Michigan will be much above the average this fall. The value of this crop will depend, in a large measure, upon the care exercised in picking and the methods used in storing it.

There seems to be much ignorance and carelessness in harvesting and storing apples, which always results in an inexcusable amount of waste and decay in the fruit. This statement is more apt to be true of the small grower who harvests only a few apples for home use during the winter than of the commercial orchardist who depends upon his fruit for his income. A few simple rules of caution will prevent much needless waste.

Time to Pick.

If apples are harvested too late, they will not keep as long in storage, although they will be of high color and of good size and quality when picked. If apples are harvested too early they are apt to be undersized and of poor quality. We do not expect a winter apple to be ripe at harvesting time. It should be full sized, however, well colored and should separate readily from the spur. If, when picking the apples the stems are pulled out or the spurs broken, it is too early to harvest that particular variety.

How to Pick.

Apples should be handled like eggs. Any break or rupture in the skin caused by worms or carelessness in handling is the starting point for the various rots and other forms of decay. No fruit harvested by shaking of branches or knocking the fruit off with poles, is worth storing. Hand picking is absolutely essential. The fruit should be grasped by the palm of the hand that no abrasion may be made by the finger nails. By slightly twisting the fruit and bending it upward, it should separate readily from the spur.

Apples should be placed and not thrown or let fall into the picking basket. A careless picker will ruin more fruit by letting it fall into his basket instead of carefully placing it there than his services are worth. A great amount of fruit is also ruined by pouring it from the picking basket into barrels. If barrels are used, the basket should be inserted into the barrel and carefully inverted that the fruit may not be injured.

How to Store.

The fruit should then be stored as soon as possible. Piling the fruit in the orchard is a wasteful practice. The fruit heats in the pile and ripens very readily. The aim in storing fruit is to retard this ripening process that the fruit may be kept longer. Do not store fruit that has been piled in the orchard for any considerable time after picking. Get a good spring wagon for hauling the fruit into storage. A springless wagon, especially over rough roads, will injure the fruit for storing. If the fruit is packed in tight boxes or barrels, it will store better than if open crates are used.

The storage house or cellar should be well ventilated, well drained and frost proof. A cellar that cannot be properly ventilated to allow foul air to escape, cannot keep fruit well. Drain the cellar so that it will never be wet and remove excessive moisture with a box of quick lime. In cellars having cement bottoms and where they are apt to become too dry and cause the fruit to shrivel up, supply water.

The amount of money invested in farm machinery on the average Michigan farm is nearly as great as the money invested in a barn. The barn is always insured against fire, but the machinery is never insured against rust unless a good shed has been made for it. Some machines ought never to be rained on and if the shed is handy they can be run in instead of being left in the field at night.

SHEEP LIKE SWEET CLOVER

Seem to Especially Relish the Plant, Both Green and in Hay—Also Good for Mules.

The question has been asked whether sheep will eat sweet clover. Yes, they will eat sweet clover, and seem to especially relish the plant, both green and in the hay. The statement has been made by a large sheep raiser that sheep can be successfully raised on an entire sweet clover diet, no grain being needed, says a writer in the Baltimore American. Now, as this plant will grow on rough land and sheep do well on it, we get good results by sowing rough hill land to sweet clover and allowing the sheep to graze on it. In this way we can make our rough lands profitable. As ground does not have to be plowed for sweet clover, it is well to sow during the freezing period. The freezing and thawing cover the seed, and as soon as the growing weather comes it will grow and flourish.

Sweet clover would also be a fine plant to grow in sections where mules are raised. It has been proved by actual experience that they, like sheep, can be raised on sweet clover alone. This is meant for growing mules, but the working mules should have some grain feed.

There is one thing noticeable, and that is stock fed on sweet clover looks well, and when butchered is found to be nice and fat. Traders like to buy sweet clover-fed animals. There must be good reason for this.

Think of Water for Cows.

What kind of milk, as to purity, cleanliness and sanitation, are you expecting from those cows that slip their water supply from stagnant puddles, cow tracks, or some old, hot, sloppy water tank? Never thought of that? Better think a little.

Aids to Cleanliness.

A litter carrier will add much to keep the barn clean because the boys and men will work more readily than if they have to depend upon the old method.

OLD ENGLISH CHURCH

QUAINT DURHAM STRUCTURE DATES BACK TO SAXON TIMES

Merrington Kirk, Apart From Its Antiquity, Is Interesting to the Tourist Through a Peculiarly Gruesome Happening.

London, England.—One of the old and interesting churches of England, dating back to Saxon times, is Kirk Merrington, a strong structure, which crowns a hill in the village of Merrington in Durham county. The few old, straight-backed oak pews, which it contains, as well as the gargoyles and elves, carved upon the ends of the roof beams, just under the eaves, which look down upon the beholder, some with protruding tongues, others with a hideous grimace, the quaint windows and the general air of antiquity, all tend to throw around the structure that curtain of mystery which highly encircles these landmarks of bygone England.

Merrington Kirk is also famous in another respect, for its eaves shelter the tomb of the victims of the last man gibbeted and hanged in chains in the County of Durham. It is inscribed as follows:

Here lies the bodies of
John, Jane and Elizabeth, children of
John and Margaret Brass,
who were murdered the 24th day of
Jan. 1683.
By Andrew Mills, their Father's servant,
For which he was executed and hung in
chains.
Reader, remember, sleeping
We were slain,
And sleep till we must
Rise again
"Whoso shedderth man's blood, by man
Shall his blood be shed."
"Thou shalt do no murder."
Restored by subscription in 1798.

As sample of English as it was written toward the close of the seventeenth century and of the involved and confusing method of composition then employed we reprint the following account of the tragedy as set down at the time of the murder, in 1863:

"A sad, cruel murther was committed by a boy about 18 or 19 years of age, nere Ferryhill nere Durham being Thursday night. The manner is by report, when the parents was out of dores a young man, being sone to the house, and two daughters was kill'd by this boy with an axe having knock'd yin in ye head, afterwards cut their throats, one yin being asleep in ye bed about 10 or 11 years of age, the other daughter was to be married at Candlemas. After he kill'd the eldest daughter, being about 20 years of age, a little lafs, her sister, about the age of 11 years, being in bed alone, he drag'd her out of bed, and kil'd her alsoe. This same Andrew Millus alias Miles, was hanged in irons upon a gy bett nere Ferry hill upon the 15th day of August, being Wednesday, this yeare, 1683."

Merrington Church.

There is little need of entering further into the details of this gruesome tragedy. Millus, or Miles, who said that the devil had told him to commit the cripes, was seized by troopers and after trial was gibbeted in chains on a common, by the roadside, near Ferryville. A tradition, let us hope untrue, exists to the effect that he revived after the gibbeting and lived in awful torture for several days, being in the meantime fed by his sweetheart. A portion of the gibbet on which he was hanged stood for many years afterward, until a belief grew up that it possessed a charm for the toothache, when the people ate it piecemeal.

"MOVIES" IN N. Y. SCHOOLS

Pictures Will Be Used in New York to Teach History and Geography.

New York.—The moving picture is about to be introduced in the classrooms of New York city public schools. During the past year it was tried out semi-officially in the assembly halls of several downtown schools. The principals have been very enthusiastic. The motion picture is able to render the greatest assistance in geography and history. Mr. Edison has perfected his miniature moving picture machine, especially suitable for the home and the schoolroom.

Wife's Blood Saves Life.

Baltimore.—Harry H. Aubrey, baseball player, has the heroism of his wife, Mrs. Margaret Aubrey, and skill of Johns Hopkins hospital surgeons to thank for his life. Lying side by side on the operating table, with her artery attached to his vein in the arm, her blood flowed into the life of the man with whom she was one. For an hour the transfusion went on, until the man was considered strong enough to stand a successful operation for the removal of a tumor.

Twenty-Eighth Child.

Niagara Falls, N. Y.—An eight-pound boy, her twenty-eighth child, was born the other day to Mrs. Philip E. Webster, Mrs. Webster is forty-four years old, was married when she was sixteen, and of her children there were three pairs of twins and two sets of triplets.

Eight of the twenty-eight are still alive.

DOWN THE AMAZON ON A RAFT

VILLAGE ON LOWER AMAZON

RAVENOUS whirlpools, tigers, sharks, cannibals and malaria are incidents of an amazing voyage of 4,000 miles made by a St. Louisan, part of the way on a fragile raft from near the source to the mouth of the Amazon, which is the longest river in the world. The marvel of the trip is increased by the fact that for most of the journey he was without money.

The hero of the adventure is Frank B. Farrar of St. Louis, a mining engineer. His thrilling story, with humorous episodes, is told in his own words.

I left home in February, 1906, under contract to take charge of placer mines in the interior of Bolivia. The company by which I was employed left me stranded and unpaid at La Paz, Bolivia, in debt to a hotel $200 for board and lodging. Unable to pay, I stole off in the night, stowed away on a boat crossing Lake Titicaca (which, 11,000 feet above the sea level, is said to be the highest lake in the world), and so made my way to Peru.

Here, with varying fortunes, I obtained work which occupied me for more than three years. I was employed at various times by the Peruvian Railroad corporation and by different mining companies. I was at one time superintendent of the Yanimina camp, 16,600 feet above sea level, in the Andes, and rich in copper and silver.

In the fall of 1910 I went to Lima, the Paris of South America, and passed three months. I also spent all of the money I had saved, not foreboding that I was soon to fall ill. I obtained work in a lead smelter at Huancayo and became poisoned with the metal. It was then that I determined to make my way to Yquitos, a city on the upper Amazon, to which, although 3,0000 miles from the coast, ocean steamers penetrate. I expected there to obtain passage to New York. It was 1,000 miles from Oroya, where my journey started, to Yquitos.

Two Hundred Miles Through Forest.

At Oroya I met a locomotive engineer named Paddy O'Neil, who was out of employment, and, like myself, without a penny. He decided to go with me to Yquitos where he had heard there was plenty of work.

The first leg of the trip was a 200-mile walk over the mountains to the Pachitea river, which is the beginning of the Amazon. This tramp was 15 days of nightmare. We followed a government trail through the impenetrable forests, in which at nights we could hear the roars of tigers and jaguars. We subsisted by begging from the natives whose huts we encountered. On the ninth day we were so nearly famished that I took O'Neil's watch, walked back ten miles on the trail and sold it for $4. With the money I bought a bag of corn and lima beans, on which we lived for the rest of the "hike."

We passed several "tambos," or government posts, in which we were permitted to sleep, but the officers of which never thought of inviting us to eat. At last we reached the river, and O'Neil built a raft of logs twelve feet long and five feet wide, surmounted by a bamboo platform, on which we were to sit to keep ourselves dry. The logs were tied together with the bark of the balza tree. We had no paddles, but only long poles.

The Pachitea river at that time was narrow, but very swift, and there were many logs floating on its surface. It seemed as if our raft perversely insisted upon striking every one of these logs, and at each collision I feared that the craft would go to pieces. Once it struck a stump and turned a complete somersault, flinging us into the water.

Our danger was extreme. The water was infested with venomous snakes, alligators and fresh water sharks. It was impracticable to swim ashore, because the dense tropical bamboo forests would not permit us to land, so thickly did they grow. But if we could have landed we should have been at the mercy of wild beasts. There was nothing to do but swim after the raft, which was floating swiftly down the current.

After great efforts we overtook it, and in a few days reached Porto Vermudis, where there is the first of a string of wireless telegraph stations extending to the coast.

Here O'Neil and I both fell ill of malaria. Despite the fact that we could scarcely lift our heads, the native hotelkeeper made us cut down trees to pay for the scraps of food he doled out to us. There was no medicine available. A native woman, struck with pity for me, took up a collection of money to buy me a ticket to the village of Marecasas, 50 miles down the river. O'Neil got a job as engineer on the same launch on which I traveled, but was put ashore because he was too ill to perform his duties.

Monkey Saved Farrar's Life.

Here I should have died but for a monkey, the property of an unfeeling native, the keeper of a hotel into whose tender mercies I fell. Although I was shaking violently with chills, he said to me:

"You've got to go to work." I protested and begged for quinine. "If you don't work," he replied, "I'll put you in the stocks." I was too sick to care and told him to go ahead.

The stock, an instrument of torture, consisted of a framework with holes through which my feet, arms and head were thrust. For two days and nights I sat in this machine, alternately freezing with chills and consuming with fever. The time passed like an evil dream. It was the custom of the people to pelt with missiles the unfortunate occupants of the stocks. But the natives pitied me, and some of them even gave me tea and food by stealth.

Finally the hotelkeeper, muttering that he didn't want me to "die on him," set me free and ordered the cook to give me the water in which he boiled the rice, so that I would not starve.

When my health was a bit better I revenged myself on the hotel man by appropriating his canoe one night and paddling away down the river. O'Neil, who had been almost as ill as myself, went with me. We made our way in 15 days to Cantumayo, begging our food as we went. The natives were more than kind to us.

The trip was made hideous by millions of huge mosquitoes which swarmed down on us until our feet and hands were black with the insects.

It happened that the chief of police at Cantumayo was an acquaintance of mine. He permitted me to sleep in the police station and paid for my meals at a neighboring house. The mistress of this house had a mania for medicine and insisted upon dosing me with a horrible mixture until I was sicker than ever.

This decoction was a bowl of strong liquor made from sugar cane, lemon juice and salt. I implored her to give me quinine, but she refused and felt that I had insulted her nostrum. I believe I should have died had I not met an American negro named Tolbit. He gave me a pound, or $4.86, with which I bought quinine and cognac. In four days the fever was broken. Tolbit obtained a canoe (I suspect he stole it) and we floated down the river for seven days, stopping at villages for the nights. But on the seventh night the negro disappeared.

I was picked up by a tall and pompous personage who called himself by the resounding name of Don Pedro Segunda La Jera, and who made an average of $100 a day by selling phony jewelry to the natives. He took me along to paddle his canoe. He was so stingy that he would not permit me to use the condensed milk he carried for his coffee, and refused to pay for the provisions he purchased unless compelled by force. I left him at Porto San Francisco, where I got work cutting down trees for 75 cents a day.

Here I remained 15 days and left only to avoid starvation.

Evidently Loved His Teacher.

It was a dry season, but a stern old farmer of a certain neighborhood had declined to attend the meeting called to pray for rain on the ground that he didn't believe that God would pay any attention to such petitions.

"Perhaps he would not listen to us, grown folk," remonstrated the district schoolteacher, devoted but not popular, "but all the children of my school are going to attend in a body. Don't you suppose that God will answer their innocent prayers?"

The farmer, not wishing to hurt the faith of the little son, who was present, hesitated, but the little son spoke up without delay.

"If God answered our prayers you'd have been dead long ago!" he exclaimed.

Old Servian Monastery.

In a hollow of the hills in the center of Servia there nestles a wonderful relic of the middle ages. It consists of a white church and monastery, entirely surrounded by turreted walls of exceeding thickness. The approach is by precipitous tracks, and Manassia, as it is called must have been very difficult to assault in the old days when bands of infidels roamed about the land. Once inside the walls, you find yourself in a pleasance of idyllic repose; there are verandas and creepers and vines and fragrant flowers, and in the society of the kindly monks you may while away many a happy hour. Every Servian is the soul of hospitality, and the Archimandrite is not backward in exhibiting the natural characteristic. The monastery was built 500 years ago by the son of the famous Tsar Lazar, who perished with the old Servian empire at the battle of Kossovo.—Wide World Magazine.

Her Fellow Feeling.

The children had been disobedient and troublesome, and the mother, instead of punishing them, brought them into line by telling them a pathetic story of orphans who had no home. Little Jack, in tears, rolled under the sofa to hide his grief. Mary stood out a little longer, and then called: "Come on out, Jack; I'm crying, too."—Lippincott's.

JOYS OF SUMMER.

Wifey—All flesh is grass!
Hubby—I suppose that's what the lawn mower thought when it cut my foot.

Different.

Albert J. Beveridge said in Chicago of a corrupt boss:

"He's very virtuous—h, very virtuous.

"A millionaire once went to him and said:

"'I want to get in the senate. Will you sell me your support?'

"'No, sir!' the boss answered, striking himself upon the chest. 'No, sir! I'm a free-born American citizen and I'll sell my support to no man.'

"'But,' said the millionaire, blandly, as he drew out his checkbook and fountainpen, 'but, if you won't sell me your support, perhaps you'll rent it to me for the term of this campaign?'

"Now you're talking,' said the boss in a mollified tone."

Forced to Work.

An Edwards county farmer was short a harvest hand. He went to Kinsley, a mile away, in his auto. He found a man there, dumped him into his auto and took him out to the farm.

Next morning, when the drunkard had come out of it, he asked how far it was to town. The farmer told him fifteen miles, and promised to take him in the following Saturday if he would help harvest that week. The man worked all week without knowing that he was only a mile from town.—Kansas City Journal.

HOW TO TREAT PIMPLES AND BLACKHEADS

For pimples and blackheads the following is a most effective and economical treatment: Gently smear the affected parts with Cuticura Ointment, on the end of the finger, but do not rub. Wash off the Cuticura Ointment in five minutes with Cuticura Soap and hot water and continue bathing for some minutes. This treatment is best on rising and retiring. At other times use Cuticura Soap freely for the toilet and bath, to assist in preventing inflammation, irritation and clogging of the pores, the common cause of pimples, blackheads, redness and roughness, yellow, oily, mothy and other unwholesome conditions of the skin.

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YOU CAN CURE CATARRH
By using Cole's Carbolsalve. It is a most effective remedy. All druggists, 25 and 50c. Adv.

The noblest service comes from nameless hands, and the best servant does his work unseen.—O. W. Holmes.

Don't buy water for luing. Liquid blue is almost all water. Buy Red Cross Ball Blue, the blue that's all blue. Adv.

A banana peel on the sidewalk is a standing invitation to sit down.

Mrs. Winslow's Soothing Syrup for Children teething, softens the gums, reduces inflammation, allays pain, cures wind colic. 25c a bottle. Adv.

Sufficient unto the day is the night that comes with them.

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Kearneyaville, W. Va.—"I feel it my duty to write and say what Lydia E. Pinkham's Vegetable Compound has done for me. I suffered from female weakness and at times felt so miserable I could hardly endure being on my feet.

"After taking Lydia E. Pinkham's Vegetable Compound and following your special directions, my trouble is gone. Words fail to express my thankfulness. I recommend your medicine to all my friends."—Mrs. G. B. WHITTINGTON.

The above are only two of the thousands of grateful letters which are constantly being received by the Pinkham Medicine Company of Lynn, Mass., which show clearly what great things Lydia E. Pinkham's Vegetable Compound does for those who suffer from woman's ills.

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At 6 months old
35 DOSES—35 CENTS
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