

FARM & GARDEN

APPLE BLOTCH.

In Extreme Cases a Crook May Almost Encircle the Fruit.

Apple blotch first appears on the surface of the apple as a small irregular brown spot, which slowly increases in size until after several weeks it reaches one-fourth to one-half inch in diameter.

Several blotches may occur on the same fruit, and in the Ozarks during the past season it was not uncommon to find twenty to fifty blotches on a single apple, covering practically the entire surface. The tissues of the in-



MAIDEN BLOSSOM APPLE.
The fruit shows effects of apple blotch, invaded area being dwarfed by the action of the fungus, further growth of the apple results in a cracking of the fruit similar to that produced by the apple scab fungus. The cracks range from one-fourth to one inch in length and frequently extend almost to the center of the apple.

In extreme cases a crack may almost encircle the apple, practically dividing it in half, and one crack may intersect another, forming a cross. Fruits only slightly affected with the disease may go through the season without developing cracks. These are more commonly developed shortly before the fruit matures, though a few may occur earlier in the season. The skin being thus broken, the fruit becomes an easy prey to other fungi and soon goes down in decay. As a rule, the affected fruit drops prematurely, and the unsprayed Ben Davis trees left as checks in the demonstration blocks at Bentonville, Ark., shed 50 per cent of their crop some days before picking time.

Infection does not begin to take place until the fruit is nearly half grown. The blotch was first observed on the check trees June 26, and only a few affected fruits could be found on that date. On July 16 a large percentage of the Ben Davis apples was affected, and by the middle of August it was clearly seen that the crop was practically lost. It developed first on fruit on the lower branches and within the shaded portions of the tree, but finally spread to almost the entire crop.—W. M. Scott.

Best Cows Are Cheapest.

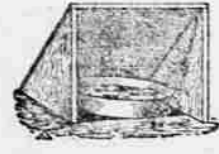
The high priced cow is not so expensive as she seems in view of what she produces. The average cow produces milk or butter to the value of \$52.50, and she costs \$51 a year, reckoning that the manure she produces offsets the care given her. This shows that the cow does not do a great deal toward raising the mortgage on the farm. Assuming that it costs no more to keep a good cow than a poor one, the figures will show that the good cow will produce 5,000 pounds of milk a year, while a choice cow will produce as high as 10,000, meaning a profit of \$225 against the almost even balance sheet of the average cow, while Pieterje H., a Holstein, has a record of 30,000 pounds of milk a year, which would make a profit of \$1,050.—Professor Cooley in American Cultivator.

Great Thing For Fruit Growers.

It would be a great thing for fruit growing if the market would distinguish sharply between apples for different purposes. Apples that are not recommended for dessert may still be very useful for many other purposes. It is not so much a question of not growing apples of different grades of quality as of finding the proper uses for these grades. I think it is a mistake at the present time to recommend that certain apples be not grown merely because they are not of high eating quality.—L. H. Bailey in Rural New Yorker.

Drinking Dish Protector.

A drinking dish protector in the poultry yard is the next best thing to a drinking fountain for keeping water clean. The dish should be of crockery so as to be lasting. The protector illustrated herewith is described by Orange Judd Farmer as being made of two one-foot squares of board. One is sawed across diagonally and the other nailed to the two triangular pieces thus formed.



DISH PROTECTOR.

The Shorthorns.

Perhaps the best claim to the qualifications of the two purpose breed is possessed by the Shorthorn. As is well known, there are two distinct types, one which is fair in milk production, but excellent in beef, and another tolerably good in beef, but valued most for heavy milking qualities. In this country the beef type is more common, while in English dairy sections the Shorthorn dairy strains are very prominent.—American Cultivator.

BROME GRASS.

It Grows in Dense Clumps and Spreads With Rapidity.

Bromus inermis is a perennial grass, growing in dense clumps and spreading rapidly by underground stems or root stocks.

Land broken this spring and sowed to cane, Kaffir corn or corn will make an ideal seed bed for grass next year by thorough disking and harrowing, writes a western man in Kansas Farmer. During the first year the grass makes but little growth above the ground and should be kept from being smothered by weeds by clipping with a mower until the 1st of July, when the weeds may be let grow for a winter cover and to catch the snow. Brome grass starts very early in the spring, from one to two months before buffalo grass, and therefore is a great aid to the cattle and other stock, as it comes at a time when they need it most.

Its Dense Root System.

Owing to its dense root system brome grass becomes sod bound in from three to five years. This can be remedied by severe disking every spring after the second year and harrowing with a tooth harrow. Owing to the fact that *Bromus secalinus*, or common cheat seed, is often found mixed with *Bromus inermis* or sold as *Bromus inermis* seed it would be well for parties contemplating the sowing of brome grass to secure a sample of the seed and have it examined by some one familiar with the grass. No reliable seed house sends out adulterated seed knowingly, and it is my opinion that the trouble frequently arises from the farmer sowing the grass on land already infested with cheat.

TOMATO INDUSTRY.

Some Varieties That Are Grown With Great Success.

This exhibit of tomatoes, shown at the 1906 Illinois fair, was remarkable for uniformity of size and color. The meat was tender, yet firm. The plants were grown in a cold frame, and were transplanted to the open garden about May, cultivated carefully and tied to stakes. The yield was satisfactory in every way. For central Illinois, Acme,



PRIZE TOMATOES.

Livingston, Prizetaker, Perfection and Paragon do well, says American Agriculturist.

In the same journal Professor R. L. Watts writes of the tomato industry in Maryland as follows:

"Tomatoes are grown very extensively in Maryland. Thousands of tons are used by the canning factories, local markets are well supplied and a large quantity is shipped to northern markets. The industry is most important in the Eastern Shore counties, but it is by no means restricted to this section. Thousands of acres of sandy and gravelly loams in different parts of the state produce the finest tomatoes. Climatic conditions are particularly favorable for this vegetable. The seasons are sufficiently long to sow the seed in the open ground and have plenty of time for the crop to ripen before severe frosts occur in the fall. Many varieties are grown for canning factories. The old standard Stone has numerous friends; the Greater Baltimore, the heaviest yielder at the Maryland station, is successful on many farms. The I X L is well spoken of by many gardeners, and a large number of other varieties are grown to a less extent.

Bagging Grapes.

If ordinary bags are put on before spores of the rot fungus have found lodging upon the berries, the latter will be as safe inside as they would be if the bags were soaked in a copper solution. Yet we cannot expect good fruit, especially of best quality, if the foliage is not perfect, says an authority on the subject. It is just as necessary to protect the foliage from disease as the fruit; hence we do not see how bagging can entirely take the place of spraying.

Rib Plantain in Iowa.

Rib grass or rib plantain, found in ninety-eight samples of red clover seed, is a weed that is of comparatively recent introduction into Iowa, but the numerous specimens sent to the Iowa station for identification during the past year would indicate that they are very rapidly spreading over the state.

Big Pea Garden.

An agricultural novelty which shows the magnitude of American operations is a big pea garden in Colorado. At this place there are 3,000 acres of peas. At a central point there is a large canner, and from this plant it is four miles to the farthest points of the garden.—Gardening.

Shipping Lettuce.

The best shipping carrier for lettuce is the veneer basket. As lettuce is light in weight compared with most truck, the one-half barrel size of basket seems to be most in favor.—W. N. Hunt.

OVERCROWDING.

One of the Greatest Evils in the Rearing of Domestic Poultry.

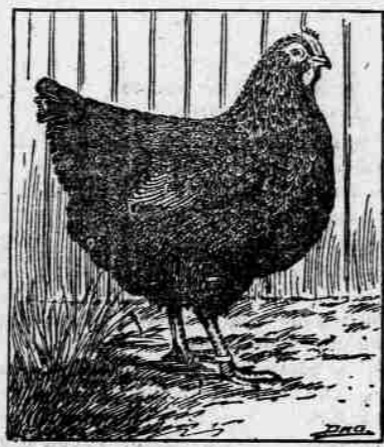
There are many poultry keepers who provide their fowls with a large enough house, but have only sufficient land to accommodate half or a quarter the number of fowls that are crowded on to it, while I have seen scores of cases where both houses and runs were of astonishingly small dimensions—in fact, so small that the idea of keeping poultry in them was absurd, writes George Scott of Pudsey, Yorkshire, England, in American Poultry Journal.

Now, it is impossible to state any hard and fast rules as regards the size of a poultry house or run requisite for a certain number of fowls, but it may be roughly stated that in building a fowls house about five square feet of floor space should be allowed for every adult fowl. This estimate is liable to modifications, according to the size of the fowls and the height of the house. In the open fronted or fresh air type of poultry house half this amount of floor space will be sufficient for each fowl.

In all cases it is advisable to give fowls as much liberty as possible, for they are never at their best when kept in confinement. In many cases, however, this course is inadmissible, and under these circumstances at least fifty square feet of ground should be allowed for each fowl, and a breed should be kept which is best able to stand confinement, for the varieties differ considerably in this respect. Of course it is essential for fowls to be confined during the breeding season and, provided the runs are large enough or the number of fowls in each run small enough, all will be well, but it is the packing and jamming of a large number of fowls into a small run that works such havoc among the birds and their progeny, overcrowding being responsible for more than half the diseases to which poultry are subject.

Partridge Plymouth Rock Hen.

The cut herewith shows the female of a new variety which, unless all signs fail, is destined to become very popular. It is the Partridge Plymouth



Rock. This variety of the Rock is just the same in every respect as the Barred variety, excepting that the feathers have the markings of the Partridge Cochins, which many persons contend is the most beautiful plumage seen on any domestic fowls.

A Rat Exterminator.

A subscriber of Reliable Poultry Journal suggests the following to rid the premises of rats: Make a small tin trough closed at one end. Insert this trough, closed end first, in the rat hole, leaving the other end exposed. Pour about a teaspoonful of chloride of sulphur or sulphuric acid into the trough, then three or four teaspoonfuls of ammonia water and stop the hole up with a rag or anything that is convenient. Await results with a stick. The rats will run out of the hole in about ten seconds after the operation in a very tired condition. They are easily killed, as they cannot run either fast or far after the dose.

The Weight of a Quart of Feed.

According to figures furnished by the Connecticut experiment station, the weight of one quart of feed is as follows:

	Pounds.
Cottonseed meal.....	1.5
Linseed meal, old process.....	1.7
Gluten meal.....	1.1
Wheat bran, coarse.....	0.5
Gluten feed.....	1.2
Wheat middlings, coarse.....	0.8
Wheat middlings, fine.....	1.1
Mixed wheat feed.....	0.6
Cornmeal.....	1.5
Oats.....	1.2
Rye bran.....	0.6

White Feathers in Brown Leghorns.

The subject of white feathers in Brown Leghorns is quite an exhaustive one. There are many reasons for it besides heredity. It often occurs when the parent stock showed no trace of it. The appearance of white is no sign of impurity, but it is a very objectionable feature, as it is a disqualification according to the Standard of Perfection. The fact that chicks show white does not indicate that they will when mature have white feathers, though they may.

Egg Eating Hens.

Egg eating is one of the worst habits that fowls can acquire, and it is almost impossible to break them of it. This habit is generally acquired during the winter or early spring and is due to close confinement and lack of something else to do. Where fowls are kept busy continuously this habit is unknown. All nests should be placed as much in the dark as possible and plenty of china nest eggs supplied.

Food For Ducklings.

Stale bread moistened and mixed with sand makes a good food for young ducks. Cornmeal can also be given. After three or four weeks they can be fed cracked corn. Animal food is not absolutely necessary, although a certain amount will assist the growth.

WAYS OF SAVING WASTE.

Skimming River For a Living—Fishermen Who Net Corks.

Skimming a river for a living may be said to be one of the most striking examples of the utilization of waste. This is done in Paris. There is one individual at least in the French capital who makes it his daily business to skim the Seine. He is out at early morning in an old flat bottomed boat, armed with a skimming pan. With this he skims off the surface of the river the grease which collects there during the night and which he disposes of to a soap factory. Generally he makes a quarter or so by his morning's work, which enables him to live.

In Paris, says the Chicago Tribune, also there are a number of people who make a living out of waste corks, which they fish from the Seine. They collect on the river bank at daybreak, each with a short pole, at the end of which is a small net. They set to work to gather in the floating corks, subsequently selling them to the cork merchants in the neighborhood.

There are about a score or so of these cork fishermen, who have formed themselves into a sort of craft and who guard their interests jealously. If they catch sight of a stranger netting corks they fall on him in a body. Only recently the police rescued one of these novices barely in time to save his life.

The sweepings of a floor might well be considered as so much waste. Yet through a fire in London the other day, which consumed a quantity of sweepings stored in the basement, a certain firm lost several thousand dollars. The heap of dust and rubbish contained silver filings, which it was intended to extract later on.

This is done regularly at all works where silver or gold is used. In gold refiners' premises even the soot in the chimneys is not allowed to be treated as waste. It is found to contain minute particles of the precious metal, which are far too valuable to be lost.

In places where sheep are bred extensively one frequently sees little bits of wool adhering to briars and hedges. These are no longer regarded as waste. From such wool rubbish, whether coming from sheep or goats, valuable oil is now extracted.

Cogitation.

The gentlemen of the bar, who not infrequently have to take rebukes from the bench, greatly enjoy a chance to make a legitimate retort against the court. The story is told that a certain judge who during the plea of a rather prosy lawyer could not refrain from gently nodding his head in sleep was caught at this by the lawyer, who looked significantly at him.

"Perhaps," said the judge testily and prevaricatingly, "the counsel thinks the court was asleep, but he may be assured that the court was merely cogitating."

The lawyer talked on. Presently the judge, again overcome by his somnolency, nodded off and aroused himself with a little sudden snorting snore.

"If it please your honor," said the lawyer, "I will suspend my plea until the court shall have ceased to cogitate audibly."

"You may go on," said the judge, and he did not fall asleep again.

A Great Awakening.

"Richard, why do you wish to stay at home this evening? You promised that when we were married you would go to church with me every Sunday evening."

"Well, my dear, I have been keeping my word."

"But this is only the third Sunday. I think you ought to tell me frankly why you do not wish to go. Is it that you have ceased to love me so soon?"

"No, Susan, it isn't that at all. The fact is, I can't stand your favorite preacher; he is too dull for me."

"Too dull, Richard? Why, the reverend gentleman is regarded as a great revivalist!"

"H'm, yes, I have noticed that there is always a great awakening after his sermon!"

Then she began to cry, and he had to go to pacify her.—Pearson's Weekly.

Disraeli as a Real Humorist.

Disraeli's absorption in politics, which never quite destroyed his love of literature, is, of course, familiar to the most superficial student of his singular career. His "profound contempt for frivolity" referred to by Lady Dorothy Nevill in her "Reminiscences" strikes those who knew him as absolutely true. Disraeli, it must be remembered, was a real humorist, and in nine cases out of ten a real humorist despises flippancy. He was also, like many humorists, a melancholy man, isolated from his fellows, leading an inner life, of which glimpses may be seen in his biography of Lord George Bentinck.

FINDING MISS FILSON

By NORA BAYNE.

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"Find Miss Filson," directed the "old man," and Andy Brant, with a prompt and respectful "Yes, sir," tucked the letter into his pocket and finished adding the column of figures upon which he had been working.

Had Lowell & Lowell told him to go out and find the north pole Andy would have replied in precisely the same tone and would have started on the trip in precisely the same spirit. Nominally the assistant bookkeeper, Andy Brant was the general utility man. It was he who had given first aid to the injured water pipe with a piece of rubber overshoe and some adhesive tape from his bicycle kit and who had treated the office cat when it had fits.

But the present quest was not so promising. A correspondent had asked that his daughter be located. "We know that she was to have gone to the Y. W. C. A.," wrote the westerner. "No doubt it will be easy to locate her."

Andy grinned as he replaced the letter in his pocket and started for the association office.

The elderly woman in charge was willing to tell what little she knew



"I'M FRANCES ELIZABETH FILSON," SHE EXPLAINED.

when Andy showed his letter as authority. Miss Filson had come to them three months before, but had soon moved to an address far uptown. She smiled approvingly upon Andy as he thanked her. She liked this clean skinned, honest eyed young fellow, and she even unbent so far as to venture the hope that he would meet with success.

Andy's answer was a grimace. Young women had a trick of losing themselves in New York. Miss Filson had left the association three months before. It was not likely that she could endure life in one cheap boarding house for that length of time. Most places were endurable for less than a month.

His suspicions were verified when he reached the uptown address. Miss Filson was dimly remembered by the rosy cheeked servant girl who answered the door. She stayed only two weeks and departed on an express wagon, explaining that she could not trust the driver with the trunk. It was this incident and the fact that she did not leave her new address that fixed her more clearly in the girl's mind than most of those who came and went.

Andy interviewed express wagon drivers in an increasing circle for the remainder of the morning and wound up so conveniently near his own boarding place that he stopped in for lunch.

Mrs. Lennon's establishment was different from the average New York boarding house. Andy had lived there for a year and still liked it. Now that golden haired Bess Saunders had taken up her residence there he was willing to remain indefinitely. Andy was not susceptible, but the first time Bess had come into the stuffy dining room he had fallen in love, so deeply in love that when she had lost her position as stenographer and could not pay her board bills, unknown to Bess, he had arranged with Mrs. Lennon that he would be responsible for the bills until Bess found a new place, when the landlady should reimburse him.

"Any luck?" he asked as she slipped into his seat opposite the girl. She shook her head.

"Well, I have some good news for you," he went on. "Our typewriter is to be married week after next. She's going to quit the job, and the 'old man' says you may have it."

Bess clapped her hands delightedly, and Andy beamed upon her.

"Let's celebrate," he suggested. "I've got an order that I can't fill. Let's go to the matinee, will you? Might as well do that as tramp around town for nothing."

Bess nodded, and Andy sat on the front steps smoking a cigarette and building air castles while the girl dressed. They had only cheap seats in the rear of the balcony, but it was a treat, and occasionally Andy could feel the slight pressure of the girl's arm against his own, emphasizing her nearness. He did not think much of the vaudeville performance. What mattered the accomplishments of the trained seals and the toe dancer when he could lean back with closed eyes and conjure up visions of light house-

keeping with Bess as the housekeeper? He was earning enough salary for two. After all, she need not take that place with Lowell & Lowell.

"Isn't that great?" asked Bess. Andy crouched himself with a start to observe the accomplishments of a pair of acrobats.

"Sure thing," he assented. "I was thinking of something bigger and greater."

"What's that?" she demanded. "I was thinking," he explained, "that perhaps you wouldn't need Miss Austin's place in the office. What's the matter with our getting married? We could get a bit of a flat and live—not board."

Andy's voice made the distinction eloquent, and the girl's gray eyes grew. "But you don't know anything about me," she protested wistfully.

"I know you're the girl I want to marry," he insisted stoutly. "Mrs. Lennon's known me for a year, and the 'old man's' had me working for him for three years. You can write to Brewster and find out the rest about me if you want to. I'm not from Missouri where you're concerned."

There was a sudden darkness as the lights went out for the motion pictures, and in the gloom a tiny hand sought his and was quickly captured.

"Is it yep?" he asked, his breath coming in sharp aspirations.

"I can't write back home," she said softly. "But if you will take me as I am, Andy, it's—yep."

"There's nothing wrong," he declared stoutly, "but if you were a shoplifter I'd marry you just the same." The audience was filling out before the last pictures were thrown on the screen, but he leaned over and kissed her.

"We're engaged," he declared, "but you'll have to wait until Saturday for the ring."

The lights flashed on again, and unwillingly enough Andy gathered up their belongings and prepared to join the departing crowd. The boarding place was but a short distance away, and they decided upon walking, but he felt as though he were in the clouds that dotted the evening sky.

"I don't want you to think I've done anything wrong," whispered Bess. "It isn't that, dear. It's just that I have no family and don't want ever to be reminded of them. My father married a second time, my stepmother and I did not get along well, and I—"

"Lit out," he said. "I don't blame you. Lots of girls won't put up with a secondhand mother. I'm looking for one this very minute—that is, I'm supposed to be," he added.

"That was what took you out of the office this afternoon?"

"Yes, you see, her father buys goods from us, and he wrote Lowell & Lowell to look the girl up and tell her that her near mother had decided to be good and begged the girl to come home. It's too far for him to come and look for her in the busy season, but we're to find her and ship her back to Elton, O."

"Elton?" she echoed. "Andy, is his name Filson?"

"Sure thing. Do you know her?"

"I'm Frances Elizabeth Filson," she explained. "Saunders was my own mother's name."

"That let's me out," sighed Andy. "Why, your father has seven different kinds of money."

"But I am richer, for I have you," she whispered.

"Do you mean it? You still want to marry me now you've won your father back?"

"You know I do," she said reproachfully.

"And to think," mused Andy, "that I was cussing the old man for chasing me out on such a fool job."

Bess laughed. She knew what Andy meant.

The Tomb of Walter Scott.

In Dryburgh abbey, standing among the ruins of the ancient chivalry, with the afternoon sun shining upon it, we saw the tomb of Walter Scott in St. Mary's aisle. A noble block of Aberdeen granite marks the last resting place of Sir Walter and Lady Scott. The simple inscription records the dates of birth and death of the husband and wife. Here also are the mortal remains of the novelist's children and of his son-in-law and biographer, John Gibson Lockhart, of whom Scott wrote affectionately, "Lockhart is Lockhart, to whom I can most willingly confide the happiness of the daughter who chose him and whom he has chosen."

As we turned from the grave of Walter Scott and wandered across the now roofless and grass grown refectory we recalled his last connected words to Lockhart: "My dear, be a good man—be virtuous—be religious—be a good man; nothing else will give you any comfort when you come to lie here."—Book News.

The Change in Surgeons.

"The surgeon of the past was a huge, coarse, red faced brute, a very terror," said a surgeon of the present. "And no wonder. What type of man but the brute type could cut off legs or saw through the skull while the patient, perfectly conscious, howled and wept? In the past surgery was barred to gentle and refined men. Whatever their interest in anatomy, in medicine, they shunned surgery. They could not endure to operate upon a conscious subject. The advent of anesthetics caused the advent of new men into surgery. Men of delicacy, of sympathy, of imagination—a higher type—took the profession up. That is why surgery is continually advancing now, whereas in the past it stood dead, still."—Cincinnati Enquirer.

That Little Bill.

Hewitt—I always know what I am going to get at my boarding house.

Jewett—Why don't you pay it and instead?—New York