



**CHAPTER VIII—Continued**

"I'll take the responsibility," said Ashton. "Until I know some reason that isn't absolutely farcical for arresting a man, I won't arrest him. At the same time I shall be glad to hear this story of yours."

The doctor nodded. "Well," he said, "since you're in no hurry, I think I'll take time to light a cigar myself."

He had it drawing comfortably and had got himself comfortably ensconced in a big easy chair, his feet stretched out in front of him upon a tabouret, before he began to talk.

"Do you remember," he asked, "what we chatted about on our drive to St. Martin's hospital the other night?"

"If my memory serves me correctly," said Ashton, "we didn't talk about the murder at all. You spent most of the time, unless I am mistaken, telling pirate stories."

The doctor nodded. "Do you remember my telling you how Bully Franklin came to his end? He was killed by one of his crew as the result of jealousy and a love affair. Now that murder had some rather interesting consequences—"

"What is this," Ashton interrupted, "a parable? Am I supposed to draw some subtle, devious psychological connection between that murder and this one that we're concerned with?"

"Not at all," said the doctor. "I know you much too well. The connection between that murder and this is literal. It's about the most direct connection that could possibly exist between two events separated by half a world and nearly two decades of time. The second murder was the logical consequence of the first; the second act of the tragedy. I don't say the last act, because I suspect there's another still to come."

"You've actually traced a connection?" Ashton asked with a gasp.

"Let me tell my story right-end-to," said the doctor. "You'll see the connection plainly enough when I come to it. I told you, I think, that Franklin's crew became completely disorganized after his death, and that most of the members of it were apprehended and paid the penalty of their crimes. There were two, however, who escaped. One of them was his first mate, Josiah Haines. The other man was Franklin's murderer. He disappeared, too, at least he was never brought to justice. The authorities, for some reason, didn't seem to regard his capture as especially important, for no price was ever put upon his head. That man's name was Henry Morgan."

I had seen what was coming, but it was clear that Ashton had not. His eyes opened wide, his jaw dropped slack, the cigar he held fell from his nerveless fingers.

"Henry Morgan?" he repeated. "The same man?"

"Undoubtedly the same. He fled almost immediately after committing the murder, but not until he had gone through his chief's pockets, and possibly rifled his stateroom besides. At any rate, he got away with what ready cash Franklin had upon him—and he was famous, I remember, for carrying a good deal—and also some papers. The money he got was utterly insignificant compared to the potential value of another thing he took with him. That other thing was the map, of which I spoke just now."

He stretched out his arms, rose from his chair and took a turn or two about the room.

"I ought to amend that last remark," he continued. "I don't know myself how great the potential value of that map may be. Its importance in the eyes of Josiah Haines was undoubtedly very great, and Haines was in a position to know, if anyone was. Franklin always had a reputation for possessing a good business head. Many as were the robberies he committed, numerous as were the unfortunate people whom he murdered outright, he gained more by fraud than by violence. He cheated vastly more men than he killed. I have little doubt that he laid up a really considerable fortune. But whatever it amounted to, he hid it in that particularly forsaken corner of the world which is indicated by a cross upon that map. As I said, Morgan got the map and fled to America with it."

"It seems to me," Ashton interjected, "that he would have done better to have gone straight to this forsaken island and collected the treasure first. But then, so far as that goes, how do you know he didn't?"

"Because he couldn't," said the doctor. "Franklin had outwitted him after all. He had to make a map, for the location of the treasure was too complex to trust to memory. But he made the map perfectly worthless to anyone who was a stranger to his secret, by omitting latitude and longitude from it. There was nothing about it to inform its possessor where, in the whole South Pacific, that island

was located; and the South Pacific is a big place. So Morgan did what was, perhaps, the most sensible thing he could have done; he hid himself in the sequestered place he could find and began making a collection of maps."

Ashton shook his head in perplexity. "Well," he said, "if applied psychology will enable you to make discoveries like that, I apologize to it most humbly."

"That wasn't psychology at all," said the doctor; "it was plain logic. I found torn up scraps of maps in his waste-paper basket, making it perfectly evident that he had destroyed them after they had served, or had failed to serve some purpose of his. That put him at once out of the class of the mere geographer. I knew he must have some standard he tested these maps by; knew that he must keep it in some easily accessible place. Finding it, after I had discovered a principle like that to guide me, was comparatively easy business."

"Go on," said Ashton; "I won't interrupt any more. The strangeness of this tale makes me feel as if I were losing my wits; but it's altogether too well corroborated not to listen to."

"Now," said the doctor, "for a moment we go back to Haines. I am inclined to think that he got possession of the other half of Franklin's secret, namely, the latitude and longitude of the island where the treasure was buried."

"If he knew that," I ventured, "why wasn't it enough for him? Why didn't he go and find the treasure for himself?"

"He couldn't dig up the whole island," the doctor replied. "I think it not unlikely that he went there, only to learn the futility of proceeding any farther without the map. There is another possible alternative; that he never happened upon the secret of latitude or longitude at all, though he had it lying right under his hand. At any rate, he knew that Morgan had the map. He knew, or felt sure, that with the map he could recover the treasure, and he believed the treasure well worth the trouble of recovering. I can't tell you whether he searched the world for his man, with the definite purpose—the sole purpose of finding him, or whether it was chance that at last, after a lapse of many years, put him upon the trail. But this much I do know, that he found him at last, and that Henry Morgan was murdered as the result of an attempt Haines made to recover the map."

"But the woman?" cried Ashton. "You've told me nothing about her?"

"No," said the doctor. "In order to simplify the story, so far I have left her out, but she plays a very vital part in it. To tell you what that part is, I shall have to go back to the beginning of my story again. I hope I am not boring you." His smile, as he made that polite observation, had a touch of satirical grimace about it.

Ashton laughed a nervous laugh, and wiped his forehead with his handkerchief.

"Bored!" he ejaculated. "Go ahead with the yarn."

"You remember the Maori girl about whom Franklin and Morgan had their quarrel? They were both in love with her. But Morgan murdered Franklin and then disappeared, so that from having two lovers, the girl was left without any. Franklin was, no doubt, the one she cared about, in spite of the fact that he was fat and bald-headed, by no means a romantic type of lover. But he had a charm about him, there's no getting away from that, and he carried it to the day of his death.

"Anyhow, some months after Franklin's death she bore him a daughter. She must have been bitterly disappointed that it was not a son; but, making the best of a bad matter, she swore the child, upon her deathbed, to avenge the murder of her father."

"Well, the girl grew up, and in some way or other—I don't know whether it was by chance or design—she fell into the hands of Josiah Haines, and was used by him as the mere instrument in carrying out his purpose. I don't know certainly whether it was by her aid that he got on Morgan's trail; but this I do know, that he dispatched her to the Oak Ridge house that night for the purpose of stealing Henry Morgan's precious map from him."

"I do not know positively whether he ordered her to murder him by way of exacting recompense for all the trouble his flight had caused, but that is what she did. She made a tourniquet out of a violin string, with two loops in it and a pipe stem, with which she strangled the old man, exactly according to the etiquette of the part of the world from which she comes. And then she came away, but without the map. Two days after the murder she escaped from the hospital, a fact which can't be much of a mystery to anyone who saw her get out of the third story window of Henry Mor-

gan's study, as Phelps and I did the next night."

"An amazing tale," commented Ashton when he had finished. "And yet I've lived in this world long enough to be aware that amazing things are always happening in it, infinitely more amazing than the things men make up to put in books. But you haven't yet told me what connection Wilkins and this housemaid can have with the crime, except by pointing out the coincidence that the girl comes from New Zealand."

"But the thing I most want you to do, the thing I most earnestly beg you to do is to suggest how I can set about finding this wild girl, in whose actual person the crime was committed. I beg of you to give over these elaborate experiments upon people who can't have an important connection with the crime and devote this great mind of yours to the apprehension of the real criminal. If we can get the girl, we shall get hold of her accomplice fast enough, or, perhaps, I should say her principal."

The doctor smiled. "This morning at the breakfast table," he observed, "you were very confident that the police would be able to get hold of her in the course of the day. You said a wild creature like that couldn't remain at liberty. I say it's true she couldn't."

"But," objected Ashton, "she has."

The doctor shrugged his shoulders impatiently. "Why can't you be reasonable?" he asked. "If a thing's impossible, it can't happen. If it's true that a wild creature can't go at large in this community for twenty-four hours without being apprehended, and if it's also true that in twenty-four hours no such creature has been apprehended, then there is only one logical conclusion to come to, namely, that she has ceased to be a wild creature, gibbering in an outlandish language, and has become a much more inconspicuous member of society."

Ashton opened his eyes wide. "What do you mean?"

"Psychology," said the doctor; "hocus-pocus and any of your other names for it that you choose to apply. Didn't you hear me tell Reinhardt at the hospital that that girl was in a hypnotic or subjective state? When a person is in such a state, they can come out of it, and when they come out, they're likely to be altogether different from what they were when they were in that state."

Ashton sprang to his feet. "Do you know where she is?" he demanded. "Or can you describe her so that I and my men can find her?"

"I don't know where she is at this moment," said the doctor quietly. "She was in this room half an hour ago."

In that moment my chief had his revenge for all the flippancies, tolerant contempt, and good-natured sneers with which Ashton had belabored the profession and science which was dearest to his heart. For once the lawyer was beyond the power of speech.

The doctor, too, kept silent for a while to let the momentous nature of the astounding fact which he had just disclosed sink in. Then he began to explain to the astonished attorney.

"I want you to understand very clearly, in the first place, that it has been by my own methods, with the addition, I'll admit, of a little plain, unadorned good luck, that I've solved this mystery. Harvey's testimony at the inquest was my clue. In my examination of him, which I conducted without asking him a single question, without once referring directly to the crime that was committed at Oak Ridge, I proved him innocent as convincingly as the strongest alibi would have proved him innocent, more convincingly, in fact, because the real criminal in this case could prove an alibi, too. And in my further examination of him I discovered Jane Perkins, and without learning her exact address, I ascertained the neighborhood in which she lived. She was the woman with whom the profile on the window shade in the Morgan house associated itself in his mind. Only by a very extraordinary coincidence could this woman, with the same sort of profile, the same colored hair and the same kind of cloak, have been any other than the one whose hands strangled old Morgan."

"The telephone conversation which you held in my laboratory with one of your subordinates settled her identity almost beyond a doubt. The fact that her name was Jane Perkins and that she was a perfectly conventional type of English chambermaid didn't throw me off the track for a moment, because I knew, as you might have known, that the strange, wild personality of the girl we found in the hospital was fugitive, and possibly accidental."

(TO BE CONTINUED)

**Hard to Eradicate Myths About Snakes**

Fear of snakes has led to a belief in various myths about the habits of different species. Children pass along the legend that the hoop snake possesses the power to form itself into a hoop and roll in pursuit of its victim.

Tradition holds that the so-called glass or jointed snake has the ability to break into pieces, and may reassemble itself later—if its head has not been captured or destroyed. Then there is the myth of the stinging snake. Although this snake has a somewhat formidable tail shaped like a horn or spike, it is incapable of piercing or stinging anything with it. Perhaps the most popular of these myths concerns the belief that if one throw a hair from a horse's tail into a river or lake the hair will promptly turn into a water snake and swim.

**POULTRY**

**FEED REQUIRED FOR CHICKENS**

From time to time we receive inquiries asking how much feed is required for producing chickens, says the Iowa Homestead. These people appreciate that the feed cost is one of the important considerations in raising poultry. Too often people believe that it is the whole cost, for some do not make allowance for other costs, such as mortality, depreciation on buildings, labor, etc.

The Connecticut experiment station determined the amount of feed which was required to grow White Leghorn and Rhode Island Red chicks till they were 24 weeks of age. At that age Leghorns had consumed 22.13 pounds per bird and the Red 25.77 pounds. The Leghorns weighed 3.28 pounds and the Reds 4.3 pounds per bird.

The Indiana station reports that it took approximately 30 pounds of feed to raise White Rock pullets to 28 weeks of age. From these two reports it would seem likely that average amounts of feed needed to reach maturity would be approximately 25 pounds for Leghorns and from 30 to 35 pounds for the heavy breeds.

Some figures are also available on the amount of feed that will be consumed by hens in a year. The smaller breeds require less than the larger breeds and hens that do not lay heavily will consume less than those that are heavy layers. Heavy laying Leghorns will consume approximately 75 pounds of feed yearly per hen, while the heavier breeds will need about 85 pounds.

**Skim Milk Recognized Feed for All Poultry**

Skim milk is a recognized feed for poultry from the baby chick on up to the laying pullet, and as a supplement to either home-grown feeds or the commercial product, it is recommended by successful poultrymen and specialists the world over.

Those engaged in the poultry business must necessarily have high production. Unless they have an abundance and a variety of feeds and know how properly to mix them, the commercial feed must be used. This is also the case with every farmer who seeks high production.

Commercial poultry feeds, in most cases, are the result of scientific research. Their efficiency has been demonstrated so many times that there is no room for argument, but no farmer will make a mistake if he seeks to lower the cost of production by producing his own grains and by utilizing all the skim milk available.

**Preventing Egg Losses Is Not Difficult Task**

The season is near at hand for converting feed crops into eggs. No one wants to put labor into the production of feeds and then lose their value. It is estimated that about 17 per cent of the eggs shipped to wholesale markets have no commercial value because of their being dirty, broken, or having chick development, or being shrunken, rotten or moldy. The following conditions will almost entirely eliminate losses from these sources: Eggs for market should weigh from one and one-half to two pounds per dozen; be uniform in size; be free from dirt, but not washed; be strong shelled, fresh and fertile. They should be laid in clean nests, gathered often, never taken from an incubator nor from stolen nests; they should be kept in a cool, dry place until delivered at the market.

**No Difficulty Is Met in Picking Out Layers**

No difficulty should be met in picking out the best-laying or the poorest-laying hens in the farm flock. With some birds, however, the distinguishing marks are not so distinct and may sometimes be rather contradictory. Thus one hen may be an early molder and yet show good body depth. Another bird may molt late and at the same time show poor quality. Birds of this type are usually medium producers, and the owner must decide whether they should be kept or sold.

**Affects Egg Size**

It is possible in forcing feeding when the hen lays day after day for a week or two that the egg will gradually lose in size, depending on the hen and the kind of food eaten. If the hen has inherited capacity to lay many eggs, and she gets the right kind of foods, she will lay normal-sized eggs even though laying heavily. To lay many normal eggs the hen must be fed plenty of protein foods, such as are found in the mash, especially during the winter.

**Avoid All Drafts**

There should be no drafts in the poultry house in fall and winter. The sides of the house should be as nearly air-tight as it is possible to make them. This applies also to the roof. This is one reason why shingle roofs are not satisfactory. The air sifts through and considerable heat is allowed to escape. Drafts are responsible for the birds contracting colds. Cracks should be completely closed so that comfort will be afforded to the laying flock.

**The DAIRY**

**MUST FEED COWS FOR PRODUCTION**

If the dairy industry of North Carolina is to profit most from the introduction of pure-bred cows and bulls brought in by farmers in recent years, the offspring from these animals must be well fed.

"In the three dairy improvement campaigns conducted in this state during the last three years about 850 pure bred, well selected dairy bulls have been placed on that many farms," says John A. Arey, dairy extension specialist at the North Carolina State college. "This does not include a number of other fine animals brought in through private sales. If the dairy industry is to derive any great benefit from the use of the animals, their offsprings must be well fed. This is true from the time the calf is dropped until it has passed its usefulness as a milk cow. Many heifers sired by good bulls have been disappointed and have been stunted in growth and production by under-feeding when they were young."

Mr. Arey states that good breeding is very important in building up the milk and cream production of a herd, but it is ineffective unless the good breeding is accompanied by good feeding. Underfeeding, he states, is largely responsible for dairy cows of this state averaging only about 150 pounds of butterfat a year. This quantity of butterfat selling for 45 cents a pound brings only \$67.50 which will not pay for the feed the cow eats. In many cases, the production may be increased from 150 pounds to 225 pounds by liberal feeding. At 45 cents a pound the 225 pounds of fat will bring \$101.25 which is enough to give the farmer a good profit for all the feeds he produces on his farm and feeds to his cows.

These animals which will not produce as high as 225 pounds of fat when well fed, should be culled from the herd and sold to the butcher; but, no cow should be so condemned until she has had a chance under good feeding and care, states Mr. Arey.

**Winter Water Supply Is Important for the Cows**

Dairy cows which are giving from 25 to 30 pounds of milk daily will need from nine to ten gallons of water daily, while cows that are giving only a small amount of milk can get along on half of this amount. This fact alone demonstrates that a good water supply is a prerequisite of successful dairying.

When dairy cows are forced to go out into a cold northwest wind and shiver while they are trying to drink out of a trough partially covered with ice, it stands to reason that they will not drink a sufficient amount to produce efficiently. From a standpoint of feed alone, it is cheaper to heat the water with coal or oil than it is to heat it in the cow's body by the use of high-priced feed.

If the question of economy alone were the only point to consider, it would not be so important. However, cows will not produce to their maximum capacity when they are forced to drink ice water. When such conditions exist, it is only natural that cows will drink only sufficient to keep up their body requirements.

**Electricity Is Needed to Operate Water Motor**

It is easy to install a water system that will give a supply of water at all times under pressure. The old-fashioned elevated tank in the attic or outside on a tower will work, but the latest development is a little compact, self-contained automatic pump that costs less than \$75. It consists of an automatic electric pump, a little pneumatic tank and the necessary pipe connections. Set it at the pressure desired—when the pressure drops the pump starts working and keeps on until the pressure is up again. The tank helps to maintain a steady pressure, which means a uniform flow. Of course electricity is necessary to operate the motor, but this is rapidly being made available almost everywhere.

**Cream Separator**

A cream separator properly installed, lubricated and operated under normal conditions from day to day should not have a wide variation in tests, but there are so many factors, such as temperature, speed of the machine, etc., that affect the tests that it is well to give all of these factors consideration before becoming suspicious of your cream buyer. When the cream screw is turned toward the center it will deliver a much richer cream.

**Modern Dairy Methods**

The saving of time and labor which is possible with modern dairy-barn construction may easily make the difference between profit and loss. Handled by old methods, the management of a dairy herd was a hard grind which took all the strength a man had, and gave a basis for the assertion that dairying was a dog's life. The newer methods and modern equipment make it possible to handle the job with much less labor and yet do it better.

**Horticultural News**

**PRUNING IS VERY NECESSARY WORK**

Instead of being satisfied with a shabby neglected orchard producing mostly scabby wormy fruit which cannot be relished by the family nor sold to advantage, the farmer can manage his orchard so that his home will be abundantly supplied with clean, sound, wholesome fruit from September until late spring and in addition the surplus will find a market at fair prices.

To accomplish these results it becomes necessary that the farmer adopt the orchard practices in use by successful orchardists.

Pruning is necessary as a means of reducing the number of cull fruits in the crop. This is accomplished partly by removing many of the badly shaded and crowded branches making very little growth. This kind of wood cannot bear large apples. Most of the large apples grow on strong growing branches which have abundant access to light and air. Ordinarily, bearing trees are apt to become dense in the upper parts of the tree, thus shading all branches below it. This must be regulated by opening the top of the tree. Remove upright parts of branches at a place where another part of the branch grows to the outside of the tree. Attend your local pruning demonstrations and learn how to prune for better size and color of fruit.

Trees must be fertilized regularly if best results are to be obtained. On the average farm, stable manure is available and should be used for orchard fertilization. If it is not applied in the fall of the year chances are that the work is delayed until winter or spring and no application made.

**Mulch for Strawberries Gives Good Protection**

A mulch for strawberries is desirable in nearly all sections. Strawberries are very shallow-rooted and much damage from alternate freezing and thawing is likely to result unless there is a protective covering. Mulching is also desirable because it saves soil moisture, prevents the soil from baking and aids in weed control. In the spring it tends to keep berries clean and to make picking easier, says Successful Farming.

Straw and hay are the most common mulching materials, though cornstalks, pine needles and straw manure are sometimes used. The material should be cheap, not easily shifted by winds and free from weed seeds.

The time of application will vary with the climate. In colder sections it is desirable to wait until the ground is well frozen. In sections where winters are mild and many fall freezes occur it is best not to wait until severe weather occurs. Uniform mulching is desirable but when material is scarce the area over the plants should receive first attention. A rather light mulching will be ample since the mulch need only prevent abrupt changes.

**Woolly Aphis Injurious to Young Apple Trees**

Woolly aphis attacks young apple trees both on the roots underground and on the branches and twigs above ground. Above ground it is easy to control the insect by spraying with nicotine sulphate 1 part to 800 parts of water. High pressure should be used in order to drive the material into the woolly masses. The material must be brought into contact with the insects' bodies if it is to kill them.

It is not an easy matter to destroy the insects beneath the ground. Some persons report they have controlled the insect by digging away the earth for several inches, then distributing tobacco dust over the roots and covering with soil. Others have reported success from injecting carbon bisulphide in holes punched in the ground about the trees and then filling the holes. The bisulphide is quite volatile, and the fumes in spreading through the soil kill the insects as they are reached. Since the material is quite inflammable, one should not smoke when applying it.

**Planting a Windbreak**

Do not plant windbreaks too close to the buildings. The ideal way is to have space for the garden and small fruit plantation between it and the house. Where space is limited, of course, conditions will determine otherwise sometimes, but about 300 feet from the buildings is about right. A temporary windbreak of soft maple or golden willow would live long enough so that in the meantime the evergreens would grow and get a fair start.

**Trimming Trees**

In trimming trees, it should be remembered there are two kinds of cells, fruit and wood cells. One kind of cell will predominate at the expense of the other. If you are planning to grow fruit, eliminate the wood cells, or if you are developing the tree, eliminate the fruit cells. Branches larger than a 50-cent piece that are cut should be covered with paint to fill up the wound. Where trees have a weakness on one side, careful pruning will make it shape up.