

ST. JOHN, N. B., SATURDAY, AUGUST 8, 1891.

DO NOT TOUCH THEM.

PARASITES THAT THRIVE ON HUMAN BLOOD.

Poisonous Plants That Children Should be Taught to Avoid—How to Distinguish Unwholesome Plants from Harmless Ones—What to do After Being Poisoned.

I want to tell the hundreds of thousands of persons, young and old, who are abroad at this season everywhere through the woods and fields about certain poisonous plants that they should avoid.

In order to avoid a plant it is necessary to know it when you see it, and it can only be known by reading about it, and then going out into the fields and determining it. The information and the drawings in this article should be studied carefully, es-



Fig. I.—POISON OAK OR IVY.

pecially by children, and then by carefully observing bushes and shrubs when rambling about, the poisonous ones can be easily avoided.

Every one does not know what is the meaning of the term "poison ivy." They do know that in a little while after touching the leaves or branches of a poisonous tree or ivy, a vivid rash appears upon the hand, wrist or leg, and then spreads over the whole body. A microscopist removes a little of the rash, puts it on the slide of his microscope, and under a glass with a magnifying power of three hundred diameters sees an active little parasite. This parasite lives in millions on the poisonous tree or plant, but when the leaf or stalk where they clustered is touched by one's hand or wrist a score or more of them may be found clinging to the skin. They cannot be seen with the naked eye, but they may be removed by the edge of a sharp instrument and put on the slide of a microscope. They are rather oval in shape and have a wonderful power of reproduction. Supposing a child touches a leaf or stem with his hand or wrist, five or six of the parasites get upon the skin huddling close together and remaining in the same spot for hours. The child doesn't feel them and can't see them, but the pests at once begin to burrow under the skin feeding and building nests. In a short space of time they have increased a thousand fold, after which they all move about making little settlements all over the body, turning the skin rough and red and producing a torment of itching.

These parasites are communicated even by shaking hands, though the bacillus (which it really is) will not burrow so readily in the skin of an adult as in the softer skin of a child. I have known about eighty per cent. of a school consisting of nearly sixty pupils to be contaminated by one small boy who had the rash of poison ivy upon his wrist. He was the only one in the school who had been in the woods, and he



Fig. II.—HARMLESS FIVE-LEAVED IVY.

had brushed through a clump of poisoned ivies.

So, for all these reasons, every boy and girl, and indeed every man and woman who goes camping, berry picking or wandering through the field in summer should know all about the *Rhus* or sumach, for this is the family that harbors in its branches the millions of this pest.

It may be stated that there are six species of the sumach, all of them being pretty common in the Eastern North America; but only two of this group are poisonous; namely, the *Rhus toxicodendron* and the *Rhus venenata*. The first named of these both the popular name of poison-ivy and is not generally considered to be a sumach, owing to its peculiar method of growth. It is likewise known as the poison-oak, itch leaf and by other local designations, for it appears in a great variety of form, these varieties differing so widely that a careless observer would see no resemblance.

For example one branch of this family grows in the open meadow and is a thick shrub with leaves resembling the oak; another twines round the trunk of a tree having a hairy brown stem covering limbs and bole, sticking very close to its support, and you will find it branching off like a bramble bush, completely covering rocks or fallen trees. The ivy is fond of fences and stone walls covering both thickly almost after the manner of Virginia creepers and Scotch and other ivies, but it does not cling so close to the wall, but branching out at the top like a tree. It likes to cling around old posts and decaying fences

beautifying the decaying wood with its vivid green; so little children come along and thrust their hands through the rich screen carrying away with them hundreds of the parasites that swarm in its leaves.

The other venomous branch of this tribe, namely the *Rhus venenata* flourishes by the side of stagnant pools and wet or swampy places where the air is not wholesome. But it looks harmless because its branches are intertwined with those of the willow and alder. Its green is so rich and its berries so attractive in color that the children who go into these damp places like to take the branches in their hands and examine them; but they go away with scores and probably with hundreds of the parasites upon their skins. The drawing describes the form of the leaf of this sumach, and with care it can be determined. This bears the names "poison elder," "poison sumach," and "poison dogwood," and grows all the way from five to twenty feet high, presenting five pairs of opposite leaves ending in one leaflet. Though it is the richest green in summer, in the autumn it runs to crimson, garnet, and even maroon, one careful naturalist remarking that its sins are as red as its own scarlet. I may say, however, that its colors run more to crimson and purple than to scarlet. One of our most careful observers of natural history says that "on careful examination it will be seen to have a distinct, pert, mischievous, all-on-end look about it, caused by a peculiar upward inclination of the leaflets."

However, let me give some specific descriptions by which anyone may be able to distinguish between a poisonous and a harmless sumach. The hairy trunk or bole is a general feature of the malignant variety, but there are two other points which are unquestionable. The leaves of the poison ivy, as a rule, are grouped in threes, the fruit being of a bluish or greenish white, the flowers invariably a greenish white, no matter what the outlines of their margins may be. This malignant plant is known in most country regions, and the children avoid it, for at a very early age they come to know that they must not go near what is called "the three-leaved ivy." There is, however, a three-leaved sumach



Fig. III.—POISON SUMACH AND PICTURE OF POISON IVY PARASITES MAGNIFIED NEARLY A THOUSAND TIMES.

resembling the dangerous trifoliol described which is not harmful, and it may be determined from the fact that it bears red berries which at their first appearance are crimson, but deepen down to garnet towards winter. This is known as the fragrant sumach which is not common, but is used as other sumach berries are to flavor sweet apples and other fruit which are not pungent and acrid.

The five-leaved ivy, a shrub with habits very similar to the dangerous one described is often regarded as poisonous. but it is really a wholesome Virginia creeper, or the *Ampelopsis quinquefolia*, otherwise the woodbine. Study the engraving and it will be impossible not to know the plant when you see it; but it is very often the terror of old and young folk and is avoided as a pestilence. It is really one of the most graceful and beautiful of American climbers and is not unlike the grape vine which smother fences and the walls of buildings.

If the readers of these lines will not find themselves able to distinguish the poisonous shrubs from the form of the leaves, let them bear these facts in mind:

First—Every three-leaved ivy or sumach is dangerous (unless its berries are red, as described.)

Second—All five-leaved sumachs or ivies are harmless. See drawing for the form.

Third—All the pale blue or pale green berries sumachs are poisonous, but all bearing red fruit are wholesome. It has to be added that the poison-ivy, so called, and the poison-sumach, though much unlike in appearance, have blue or green-white berries which grow in small slender clusters from the axils of the leaves. They grow

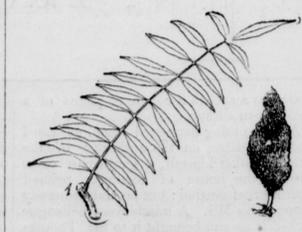


Fig. IV.—A HARMLESS SUMACH.

from one end of the continent to the other and infect the skin of probably 500,000 children in the United States every year.

It was the belief down to a very late period that the poison from these plants was an acid or sharp juice, which, getting upon the skin, irritated the part and set up an inflammation. The modern microscopists know that it is a parasite which can live on the petals or stems of the two plants named, or on human blood, and thrive best on the latter.

As I have said, every wholesome sumach berry is red and grows in a large bunch at the end of the branch. The most common is the "stag sumach" from which fruit preservers gather the berries to put

into their jars and crocks; the smooth sumach is also used for a similar purpose. The little sumach a wholesome shrub has three leaves, and is, as often stated, often mistaken for the poison-ivy. Take notice that its leaves are aromatic and its fruit red. The flowers on all the wholesome sumachs grow in compact bunches, whereas on their two poisonous counterparts they grow loose and scattering as shown in the drawing of the fruit.

The malignant sumach, known as "poison dog-wood," so-called, has from seven to thirteen leaflets, with an ovate or egg-shaped leaf, with the large end uppermost, and an even or un-serrate margin; the other sumach which it closely resembles has a far greater number of leaflets, often as many as thirty in a group. I have frequently seen young ladies come from picnic parties, their hats decorated with the leaves and berry bunches of the poison-sumach. They like the color of the berries, it is so delicate, but wise advice is to beware of all white berries except those which grow on the maiden-hair fern and a few others, or those slightly tinged with green, blue or a carbuncle red.

The two poisonous sumachs are provided with a thick, viscid juice, which exudes when a branch, stem or leaf is crushed or broken. In this matter are myriads of the parasites, but, as already stated, they are communicated to the skin by the brief contact with any exposed portion of the hands, arms, face or any other part of the body. This sticky fluid will often get upon the skin and not be detected for some time, but if you have any suspicion that you have any of them upon you, wash immediately. If it is not washed off it will very soon reveal itself, becoming deep black, much like turpentine when dry; in fact, an indelible black ink may be elaborated from this substance.

When the discoloration becomes plain on the surface the best way remove it is by applying ether, and a good wash to apply to a surface, soon after being affected, is lime water, a lead wash or oxalic acid. There are many ointments having a specific poison in the grease, anyone of which put thickly over the inflamed part will kill the parasite, as it does not burrow very deeply into the skin. The animals will not of their own accord colonize on different parts of the body, but if the affected parts are scratched, the nails will communicate new groups of them to any other place that they touch. The creatures will sometimes take several days to develop, and they run their course on any part of the skin in a few days, dying off each day in hundreds of thousands, but members of the expiring colony when planted by the nails or through some other means on any other portion of the skin they again flourish and this may go on for months.

Figure 1 shows the poison oak or ivy. It is found in low ground or thickets and flourishes in moisture.

Figure 2 represents the five-leaved ivy or Virginia creeper, so often mistaken for a poisonous plant. It is harmless.

Figure 3 is a drawing of the poison sumach, otherwise known as "poison dog-wood" and "poison elder," and prefers to habitate swampy places. It is the more poisonous, but that shown by figure 1 is the more prevalent. I also a group of ivy and sumach parasites, which, when they enter into the human tissue, should be described as bacilli. They differ very little in shape, the general form being oval. The drawings represent them magnified many hundred times.

Figure 4 is a representative of the general non-poisonous sumachs, except for the non-malignant, three-leaf sumach already described. All the harmless varieties differ very little from this general type, as shown in the leaf and especially the fruit.

EDMUND COLLINS.

True Courtesy.

A pretty story is told by the Princess Louise, which has the merit of being true, and also of showing that the daughter of England's much-beloved Queen has a kind heart, and none of that spirit of snobbishness which destroys the instincts of courtesy in so many people when they are brought in contact with those whom they consider their inferiors.

It was in a large store in Chicago, and an Eastern girl was shopping with an Irish lady whose home was in that city. Suddenly the lady's face lighted up. She touched her companion's arm and said, "There's the Princess Louise at the very next counter! How I wish I dared speak to her!"

"Are you sure?" asked the American girl, who had never had such a close sight of royalty before.

"Yes, indeed," replied the other; "I have seen her in London with our Queen, and I could not possibly be mistaken."

"You wait here, then," said her friend; and with the fearlessness and independence which are said to be characteristics of this nation, she walked straight up to the princess, before the Irish lady had time to remonstrate.

"I beg your pardon," said the girl, blushing a little as the pleasant eyes looked somewhat inquiringly into her own, "but are you the Princess Louise?"

"Why do you ask?" said the other in a surprised, though gentle tone.

"Because," replied the girl, nothing daunted, "that lady over there says she is sure you are, and she is one of your mother's subjects, and she wanted dreadfully to speak to you, but didn't dare!"

"Which lady?" asked the princess, smiling kindly on the girl; and when the timid but adoring "subject" was pointed over to her, she left her purchasing, went over to the next counter, and spoke for several minutes with great cordiality and sweetness to the delighted pair, winning a subject for herself for ever after, in the person of the young American.

A Superior Artist.

Long—I know an artist who painted a runaway horse. It was so natural that the beholders jumped out of the way. Down—Humph! My friend McGilp painted a portrait of a lady that was so natural that he had to sue her for his bill.—Life.

The best remedy for Summer Complaints is Feltow's Speedy Relief. Speedy in results as well as in name.

NOT TRIFLES.

Little Things Which Have Much to do With Success.

A man applied to a western farmer for work. The farmer looked at the applicant, asked him a few questions, and then told him to go to the pump and fetch a pitcher of water. The man did as he was directed, went to the old-fashioned chain pump, filled the pitcher, a narrow-mouthed one, and brought it to the farmer without spilling a drop of water.

"You'll do," the farmer said, "you can begin work for me tomorrow morning."

When the farmer was asked what filling the water pitcher had to do with it he said:

"Well, it's a dry time, and if the fellow had pumped too hard he would have sent the water over the pitcher as well as into it, and it he hadn't pumped hard enough 't would have been the same. But he pumped just right; and I judged that he'd work just right, not too hard at first to slack up afterward, and not too slow either."

The farmer was right in his estimation of the man, for he has not a better farm hand on his place.

A merchant refused to hire as a clerk a young man whose pantaloons, he noticed, were worn at the knees and seat, because he judged that a good clerk would not thus wear his clothing. In another case a merchant chose from twenty applicants a boy who stopped to wipe his muddy feet before entering his office, and whose finger-nails were clean.

"It is attention to little things that makes a good clerk," the merchant said.

It was a clever young man who, undecided which of two young women to choose for a wife, gave to each a skein of snarled silk. One of them threw the skein away as worthless, and the other picked out the snarl. The patience, desire to please, and prudence of the latter young woman left the young man no longer in doubt.

"How long have you been out of work?" asked a lady of a girl who came to apply for a position as chambermaid.

"Ten days," was the reply.

"And in that time you have not found opportunity to mend your frayed-out dress? I do not think you would suit me," the lady said.

"I was on the point of asking that lady to be my wife some twenty years ago," said one of New York's prominent lawyers, indicating a maiden lady of his acquaintance, "but she was needlessly late in keeping two appointments with me, and I didn't ask her. The woman who makes a friend wait will be liable to try her husband's patience too sorely for happiness."

"Why! you engaged that governess for your children without a recommendation," said a lady to her friend.

"Her neat, plain dress and pleasant manners were a better recommendation than any written one," the friend replied; "and then in the hour's conversation I had with her I weighed every word, every movement, and I am convinced that Miss Snow is a lady worthy to be entrusted with my children."

It is the little things which help us to

Economy: "100 Doses One Dollar." Merit: "Peculiar to Itself." Purity: "Hood's Sarsaparilla."

make up our estimate of a person's character, and it is the trifles of every day life by which our friends and acquaintances judge us.

Constipation and Insanity.

It is now generally admitted that constipation is productive of serious disorders, that it aggravates other ailments, increases the susceptibility of the system to infectious diseases, and produces a state of general physical disturbance. The nervous system is especially affected, and it must be remembered that the nervous centres are in the brain. The deleterious effects of constipation were formerly explained by the pressure of the hardened mass on the blood vessels and nerves of the intestines. But a different view is now taken. It is believed that they are due to powerful poisons, which have been proved to be developed in the process of incipient decomposition.

There is reason to believe that extreme cases of constipation may result in insanity. A journal devoted to mental diseases, gives three marked cases which seem to confirm the view. In the first case, a woman, without any nervous tendencies, hereditary or acquired, and every way healthy, began to suffer from constipation, with loss of appetite and general debility.

After a while, she had attacks of fainting and vomiting. At length there were developed marked symptoms of insanity—restlessness, sleeplessness, incoherence, hallucinations, and delusions of a melancholy character. The skin was of a dirty brown and covered with branny scales. It took ten daily injections to bring away the accumulated mass of hardened feces.

After this was done, the bowels began to act regularly, the mind became clear, and the patient entered on full convalescence.

The second case was that of a man with suicidal tendencies, who had refused food for months. He was restored to mental soundness, after being relieved of an immense quantity of accumulated feces. The third case was that of a young man who had become morose, suspicious and quarrelsome. He was similarly treated and restored. In some of the worst cases of constipation, there is a free passage through the compact mass, the latter adhering in thick layers to the walls of the intestines, while the patient has no suspicion of his real condition.

That grave diseases do not often result from constipation is due to the constant use of cathartics on the part of those affected. But such use is itself injurious. The true course is to establish habits that will effectually remove the tendency to constipation. The muscular vigor of the intestines needs to be increased by invigorating the muscular system generally with proper out-door exercise.—*Youth's Companion*.

He Did His Best.

On one occasion when John Kemble played "Hamlet" in the country, the gentleman who acted Guildenstern was or imagined himself to be a capital musician. Hamlet asked him—"Will you play upon this pipe?" "My lord, I cannot." "I do beseech you." "Well, if your lordship insists upon it, I will do as well as I can." And to the confusion of Hamlet, and the great amazement of the audience, he played "God Save the King."

"GOING IN SWIMMING."

It is Healthy, But Often Attended With Danger.

The liking for bathing in the open air, in water deep enough for swimming, is so universal, so natural and so conducive to cleanliness and health, and the ability to swim so useful a thing, that no boy can be blamed for a liking for it.

But the risk attending ordinary swimming is often great. Every interior town or village usually has a swimming-hole, where the boys go to swim after nightfall.

Very often this place is in a mill pond, where reeds and grass grow from the muddy bottom to entangle swimmers' feet, or where there are dangerous water-wheels or race-ways near by.

Rough and disorderly boys or men, who delight in throwing small boys into the water or dragging under it, as a joke, those who cannot swim, often resort to these places. Altogether, it is not a matter for wonder that anxious parents often refuse their boys permission to learn to swim, or that boys are often drowned in trying to learn.

Certainly no other useful art is taught in such a haphazard, life-or-death way; nor is it necessary that swimming should be so taught.

With a little work in odd hours, the men of each community might easily provide a proper swimming-place.

Such a place would have water of varying depths, clear of obstructions and dangers. A very little public spirit and enterprise would clear the swimming pool of each neighborhood of things dangerous to swimmers, and would surround it, in two or three years, with a thick screen of bushes and trees, so that swimming in daylight would be an offence to no one.

A little additional attention on the part of the public authorities or the older people would prevent boys who cannot swim from running any risk except when good swimmers and prudent persons, boys or men, were present.

It is always a pleasure to such persons to teach the young to swim; and under such circumstances there would be plenty of opportunity for all to learn to swim, and enjoy a bath and a plunge in cool, deep water with almost no risk at all to human life.

Feminine Tact.

In a little episode of village life we had lately another interesting instance of feminine tact. Upon the conclusion of a marriage in a village church the bridegroom signed his register with his x mark. The pretty young bride did the same, and then, turning to a young lady who had known her as the best scholar in school, whispered to her, while love and admiration shone in her eyes: "He is a dear fellow, but he can't write. He is going to learn from me, and I would not shame him for the world."

To be able to say the right thing at the right moment is a great art, and said only to be acquired by those who have a natural talent that way. When a careless talker, who was criticizing a young lady's father severely paused a moment to say: "I hope he is no relation of yours, Miss B.," quick as thought she replied with the utmost nonchalance: "Only a connection of mother's by marriage."