



"A dark object hung over the canoe's stern."

THE CHINAMAN.

By HAROLD BINDLOSS.

(Continued from page 87.)

FOR a moment or two Dawson stood stupidly still. He was startled; the thing had come so suddenly, and he had never seen a man look like that. Only for the feeble movement of his hand and his winking eyes, one could have imagined that he was dead. Then the boy braced himself, and felt for the painter that held the canoe. As he pulled her up, Jake jumped on board, and she rocked and lurched as if she were going to capsize. Indeed, Dawson wondered to see her keep upright. Jake shouted to him to let her go, and picked up the paddle as she drifted astern.

Dawson stood in the cockpit and tried to pull himself together. He had obeyed, almost without thinking, and now saw the risk his comrade ran. The swell broke angrily, the canoe was half full of water, and even if she did not capsize, he doubted if Jake could paddle back against the wind and current. Still, he could not help, and while he waited and felt his heart beat, a cloud drove across the moon.

The light faded, and a shower broke about the sloop; but he saw the canoe, a dim, black object that lurched upon the tossing water. Jake was just distinguishable; he had thrown down his paddle, and was leaning over the stern. Dawson knew the caution this would need, because a rash movement would upset the canoe. Besides, since it would be impossible to pull a heavy weight on board, he did not know what Jake meant to do, but was sure he would not leave the helpless man. It looked as if he and the other would drift up the sound until the canoe was swamped and both were drowned.

Then a hoarse shout came out of the dark: 'Got him! Slack out the cable quick!'

Dawson scrambled forward to the bitts, where the anchor chain was made fast at the bow, because he now saw his comrade's plan. Since he could not get the man on board, Jake had, no doubt, thrown a loop of the painter round him and fastened it to the stern. Although he could not drive the craft back to the sloop, he might perhaps, by paddling desperately, prevent her being swept astern while the sloop drifted down to him. In order to let her do so, Dawson must pay out the chain, and kneeling on the wet deck, he threw the links off the timbers round which they were wound beside the bowsprit end.

The splash at the bows got quieter, the plunges were not so violent, and when the boat's head rose the chain came out of the water in an easy curve. It ran with a jarring rattle over a little wheel at the stem; but the sloop was not drifting fast enough, and Dawson knew Jake could not keep up his efforts long. Then another shout came out of the dark, and although he could not hear the words, he imagined Jake meant he must be quick.

He threw another turn of chain off the bitts, and the rattle got furious. He could not stop the cable now, and wondered anxiously whether the end was made fast in the locker under the deck. This he knew is not always done, because it is seldom necessary to use all the chain. If the end were not made fast, it would run out and plunge into the sea, and the sloop would be adrift, without an anchor. Dawson thought he could

not hoist sail enough to give him control of the boat. Although he knew the effort was hopeless, he seized the clanking links, but they tore the skin off his hand, and he let go as they ground across the bitts. If he had been a moment later, his fingers would have been smashed.

The sweat ran down his face as it dawned on him that the cable might not be long enough. If it were not, and the end was fast, the sloop would stop short of the canoe, and he could not get up the anchor without help. He jumped up, wondering whether he could find a rope to throw. The main sheet was too short, but there was a coil of line on board, and, scrambling across the cabin-top, he fell into the cock-pit. The side of the locker stuck, and when he kicked it open a pile of odds and ends fell out. He durst not waste time by looking round to see what Jake was doing; he must find the coil, but could only feel some blocks, a roll of canvas, and a marling-spike. Then, while he threw the things about, there was a heavy bump against the planks, and, jumping up, he saw the canoe beside the counter.

The *Wapiti's* counter was shaped like a duck's tail, and as she plunged it rose and came down with a splash. If the canoe got underneath, she would be knocked to bits. Dawson leaned over the side and pulled the canoe forward until Jake could jump on board. Next moment there was a bang like a pistol-shot and the sloop seemed to forge ahead while the cable rang. All the chain had run out, but its end was fast below, and fortunately it had not broken. But a dark object hung over the canoe's stern, half in the water, which washed on board. There was not a moment to lose, and Dawson, seizing the man, with Jake's help pulled him up on deck. He lay there, looking like a bundle of wet clothes, while the boys loosed the rope from his shoulders and made fast the canoe. Then Jake leaned against the boom, breathing hard.

'I'm 'most used up, but we must get him below, out of the cold,' he gasped.

They had some trouble to drag the man into the cabin, and when they had done so he lay on the floor, with the water draining from his loose blue clothes. He wore neat blue slippers and a tight skull-cap; his face was a waxy yellow, and at first his eyes were shut.

'A *Chink!*' said Jake. 'Make some coffee with plenty canned milk, as strong as you like.'

Dawson poked the stove, for there was some hot water in the kettle, which fitted in its top, and then looked round.

'The fellow's badly played out, but I guess he ought to recover,' Jake remarked. 'Suppose we ought to do something, but I sure don't know what.'

They felt helpless as they studied the half-drowned man. Dawson had a hazy idea that they might help him by moving his arms about, but did not know how.

'To begin with, we'd better take off his wet clothes,' he suggested. (Concluded on page 102.)

THE STORY OF OUR ROADS.

I.—THE ROADS THE ROMANS MADE.

TO realise the great importance of roads during the days when Rome was mistress of the world, and for many centuries afterwards, we must remember that they were almost the only channels along which

trade and wayfarers could travel. A certain amount of traffic could go by river, but this always depended upon there being a navigable stream from the place where the traveller happened to be, to the place where he wanted to go; so that, except in the case of a few big rivers, the roads must serve every sort of travelling purpose.

I have explained this because, nowadays, with our great network of railways and our many canals, roads seem to take a much less important place, and it is difficult for us to understand the immense usefulness of a good road in Roman times.

Although they lived so long ago, the Romans in many ways were as up-to-date as we are now, and they saw from the first that if they wished to extend their power throughout Europe, they could do nothing without good roads, along which their troops might march and the merchants could journey. It is said that they learnt the art of road-making from the Carthaginians, with whom they had often fought; but be that as it may, it is certain that very early in their history they were experts in this branch of building, and that as road-makers they have never been excelled by any later nations.

Their splendid highways were built so solidly, that in some cases they are still in use, after two thousand years, and are quite as good as ordinary modern roads. The Romans were a direct race, who went straight for whatever they wanted, and their roads show the same trait. Unless a mountain or some other great natural obstacle was in the way, they were built in a straight line between two points—usually from one high point to another. They seem to have taken the sites which could be seen a long way as guide-posts in laying the line of road.

In later days, when coaches and other heavy vehicles came into use, roads were made winding up a slope, so as to make the ascent more gradual and lessen the strain on the horses. But in Roman days this was not necessary, because wheeled vehicles were not greatly used. Men walked, or rode on horseback, and their luggage was piled on the backs of mules.

If in your walks to-day you come to a road which goes straight up and over the crest of a steep hill, without any attempt at winding, it is quite probable that you may be walking on an old Roman road. Because these highways mount so high, instead of winding round the bases of the hills, they afford particularly fine views over the surrounding country.

The Romans had a definite system of road-making, planned to be very strong and durable. First of all they prepared a solid foundation or substructure, from which all loose soil was taken away. Above came several layers of different kinds of soil and rocks, each stratum firmly cemented in place with lime. On the top of all was the pavement, which was made of large hexagonal (six-sided) blocks of stone. These blocks were cut to fit into each other exactly, so that when the paving was laid it had the appearance of being all in one piece.

Roman roads varied in breadth from eight to fifteen feet, and were often provided with raised paths for foot passengers at each side. Ditches, called *sulci*, ran parallel to each other at each side of the road, and carried off the rainfall.

The Romans began by building roads through Italy—the Appian Way, which an old writer named 'the queen

of roads,' and which connected Rome with different districts in Southern Europe; the Flaminian Way, the New Appian Way, and many others. As they extended their conquests into other parts of Europe, they needed more and longer roads, which ran through Spain, Gaul (now France), and many other parts. When they conquered Britain, they built splendid roads there, too, and we shall learn something about these and other highways in another article.

THE LIFE HISTORY OF MR. BRACKEN.

I WONDER whether you have ever taken much notice of the changes which take place in the life of our Common Bracken Fern? I think it more than likely that you have *not*, because he is so very common. He grows in such quantities on heaths and mountainsides, as well as in sandy woods, that he seems to be nearly everywhere. He is certainly always to be found within walking distance of most country places. And the very fact of his commonness makes his chances of being carefully observed much less. I have asked my friends, young and old, 'Have you ever watched a plant of Bracken grow?' They have replied that they have never thought of such a thing. Well, perhaps I should not have thought of such a thing, but it happened last year that I had to take an early holiday, and I was attracted to him day after day, as my series of sketches will prove to you.

I had never been in that part of the country—in Wales—in the spring before, and so, of course, the whole aspect of the spot was quite different from what I knew—the trees were only just coming into leaf, and the slopes of the great mountains were brown with quantities of dead bracken lying about where it had not been harvested for bedding for cattle and for thatching. I only knew these mountains purple with heather, and green and gold with acres of waving bracken fronds.

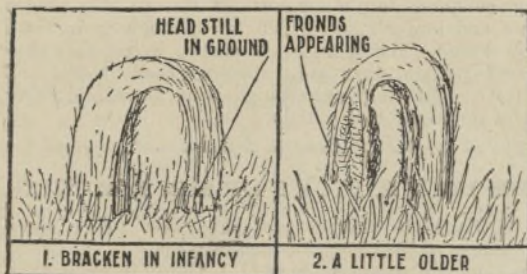
One day I was sitting on the mountain-side to rest, when I noticed a number of funny little brown humps on the ground around me. Upon examination, I found these to be Mr. Bracken making his first advances towards coming up for the summer, after his winter below. Fig. 1 shows you what I saw; you see he is like a tiny fat croquet hoop! He was covered thickly with beautiful golden-brown silky hairs.

I have since read that Mr. Bracken, although very hardy, seems to be curiously afraid of cold and frost in the spring. But at the time I first noticed him I did not know this, but I remarked to my companion, 'Did you ever see such queer little fellows?' I believe the roots say to the fronds (you never speak of a 'leaf' of a fern—it is always a 'frond'), 'Now then, hurry up and go up to the open world.' But the frond replies, 'You may push up behind as much as you please, but I shan't put my head up until I am ready. I have not slept long enough yet.' For they all looked so odd with their heads in the ground as well as their roots!

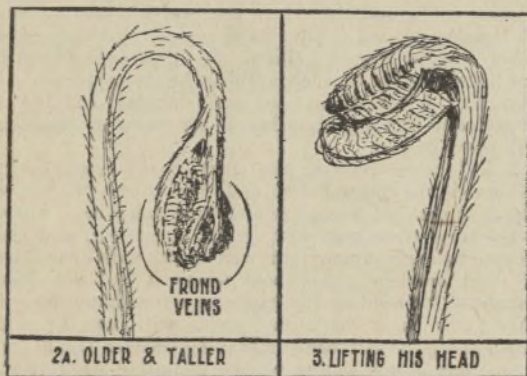
About two days later I looked up my young friends, and I found they had come up just a wee bit more, so that I could now see the green fronds all rolled up tightly inside with their warm covering of brown hairs (fig. 2; fig. 2A shows a little later stage).

Several days later I again visited them, and I found them just beginning to lift up their heads (the stems were now perhaps three inches high). I was at once

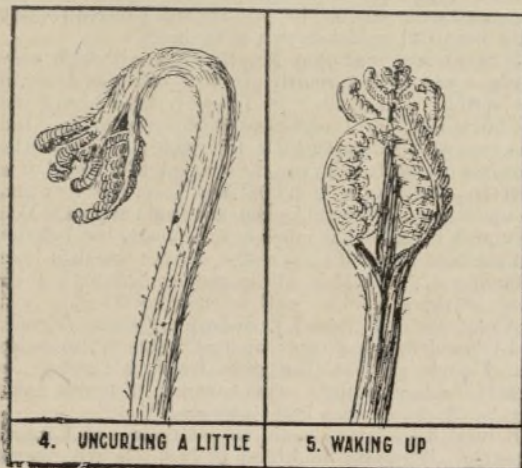
struck by what I call their tired appearance. They reminded me of children who have been waked up before they have had their sleep out; they put their



arms up and rub their eyes with their knuckles to rub away the sleepy feeling. Fig. 3, I hope, shows you what I mean; and here you can distinctly see some of the pinnas (the proper name for the divisions of the frond of a fern).



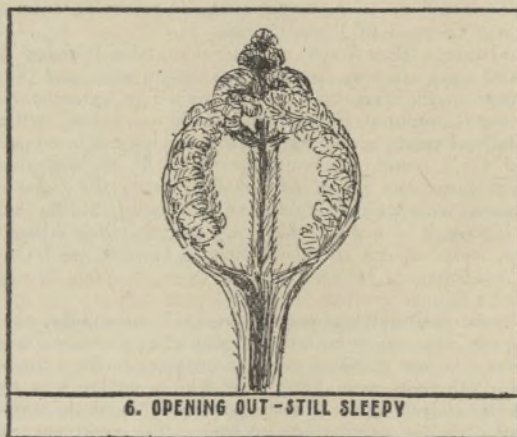
A further visit found them as seen in fig. 4, just opening out a little. Later, again, I found them as in fig. 5—standing up and, as it seemed to me, yawning



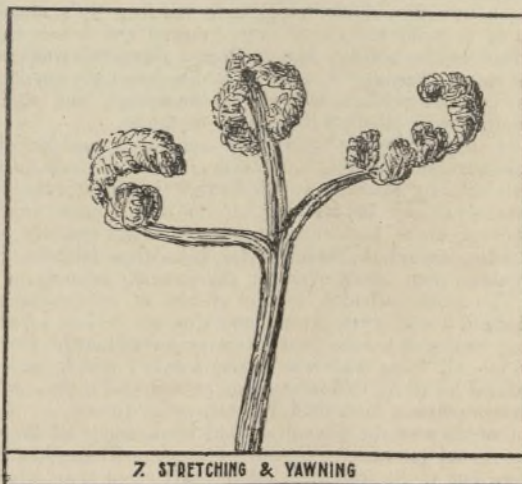
and putting their hands before their mouths. Then, as the yawn finished, they began to stretch themselves (fig. 6).

As time passed, the main stalks and also the stalks of the lower pinnas grew longer, and, although still looking tired and stretching as if not quite awake, they opened out (fig. 7) and showed other pinnas still cuddled up asleep!

Now, the weather having turned warmer, my friends rapidly grew, and in a few further days the lower



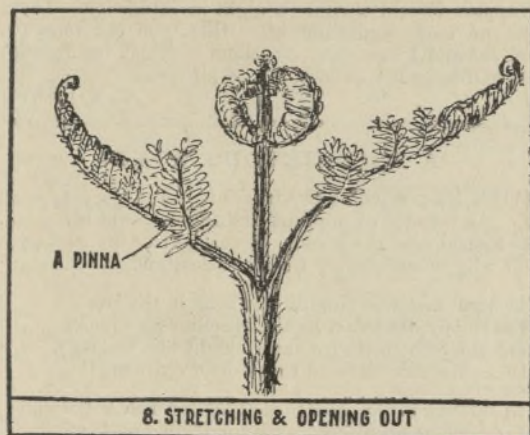
pinnas had started to open out and show their delicate secondary pinnas (fig. 8). These first pinnas to develop are always the largest, but they start life small and keep growing so as always to be larger than their next-door



neighbours, which, in turn, always grow to be larger than their next-door neighbours further up the frond. You must understand that all the time these changes were going on at the top of the stalk, that main stalk was still growing taller.

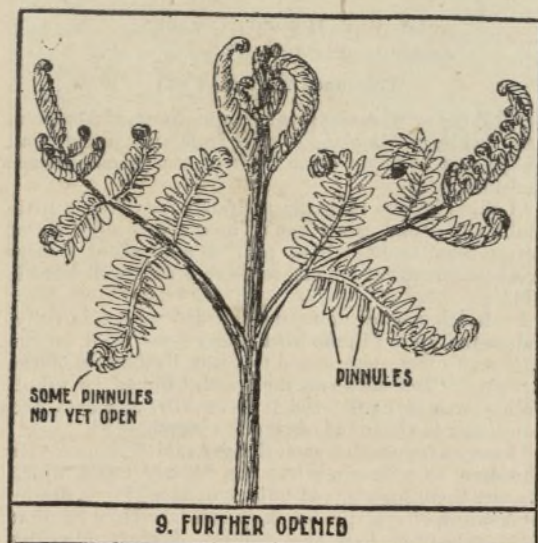
By the time my holiday came to an end, my particular friends among the Brackens were somewhat as you see

in fig. 9, where you have the two first pinnas rapidly developing; in the one on the right of my sketch you can count seven pairs of pinnas curled up, waiting their turns to open out and take their places in the life of the



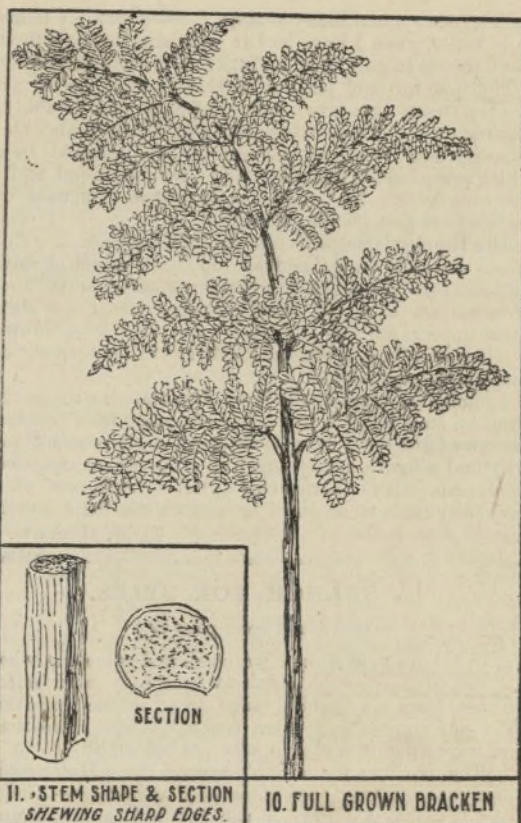
plant. That top curl very likely contains several more pairs of pinnas, but they are too tightly curled to count.

Fig. 10 shows you a fully-grown frond of Bracken, and I am sure you will every one of you recognise him as an old friend! When I left Wales at the end of that visit, the mountain-sides were beginning to have a greenish colour; and when you were fairly close to them they had a most peculiar appearance: they looked as though some one had painted their sides with thousands of green upright streaks! These were the



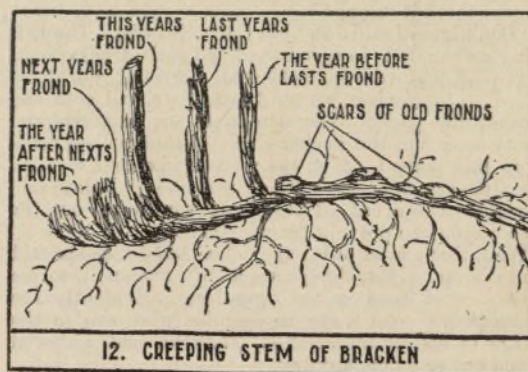
stalks of the Bracken, which were by then from eight to twelve inches high, and still without much frond showing, and always small.

The final height of Bracken is always a question of



soil and position. In open, exposed places, where the wind sweeps mercilessly, and there is perhaps very little soil over the rocks, I have found tiny little fronds, quite perfect, but perhaps only six inches long. Then, again, when climbing among the higher mountains, I have often passed across tiny dells where the Bracken has been five or six feet high. Its colouring in autumn is glorious, making a delightful background to a nosegay of heather.

One always has to be careful when gathering Bracken without a knife, for the stem has two angles on it which



are very sharp, and many a time I have cut my hands quite badly when I have let the stem slip through them when trying to pull them. Fig. 11 shows you the angles.

The underground portion of this plant is queer. If you try to dig up a plant, you will find a long, 'nubbly,' black stem with roots extending down at intervals; this is really not a root proper, but an underground stem which creeps along and throws up just one frond at its end each year. Its 'nubbly' appearance is caused by the scars of past fronds (fig. 12).

The Bracken's proper name is *Pteris Aquilina*. This means 'eagle's wing,' and an old book which I have tells me this comes about from the curious appearance of a surface of a cut stem. When you cut a stem there appears on the surface a cluster of dark brown patches, and the early botanists thought they formed the shape of a spread-eagle.

I remember years ago being shown the oak-tree in the Bracken stem! This you can see by cutting a *slanting* section of the stem near the root. On the surface you will find a figure something like a spreading oak-tree. Of course, it is not always good, but I have seen some very jolly little trees, and I have often cut them myself.

E. M. BARLOW.

A SEARCH FOR SPIES.

(Concluded from page 83.)

I SAID no more, but I watched, and presently when the stranger—who hadn't twigged us, you know, for we were some way behind still—drew out her handkerchief and gave a jolly loud sneeze, I was more than ever sure that everything was not all right.

'Why, if that's not a *man's* sneeze, I'm a Dutchman,' I said to Joe.

As I spoke, Joe gave a run forward, and, keeping his eye on one spot, he followed the stranger. I watched him, wondering what on earth he was going to do, and I saw him pick up a piece of paper that was lying on the turf. Then he came back to me again.

'Look here,' he said, 'she dropped this. Shall I run after her and give it back?'

'Perhaps it's worth nothing,' I said, and we both gave a squint at the paper he held. What we saw we couldn't understand, but it interested us frightfully for all that, for as sure as I'm telling you, it was cypher-writing, and ran like this: (RQNKEG) — (TCKF) — (VQPKIJV) . (ENGCT) — (QWV) — (QH) — (ECKG).

'Say!' I said: 'this looks like a discovery. What do you think it means?'

'Don't know,' said Joe, 'but the police will. The best thing we can do is to turn round and make tracks back.'

We did, and we were welcomed, I can tell you, at the police station when we told what we had seen and showed the paper. The detectives set to work, and pretty soon had the cypher clear. Whoever had made it up had taken C for A and worked like that through the alphabet, and the message ran like: 'Police raid to-night. Clear out of cave.' If you work out the cypher, you can prove it for yourselves.

Well, that's most of it; the police *had* decided to raid the cave that night, though we hadn't known it, to see if they could discover the signallers. Evidently the 'lady visitor' was a spy in disguise who was in the village to collect information, and she had managed to find out so much, anyway.

But she wasn't so clever as she thought. After a little consideration, the police made their raid a little earlier in the day than they had intended, and found to their great satisfaction the signallers, and their apparatus and all the whole bag of tricks, packing up in readiness to disappear should there be a night investigation. There was no more signalling after that, you can imagine, and Joe and I went back to school next day feeling that our half-holiday had been jolly well spent.

E. TALBOT.

A MISCHIEVOUS WIND.

THE East Wind awoke from his bed in the sea,
As brimful of mischief and fun as could be.
He rushed o'er the waters, he rushed o'er the land,
But why in such hurry I can't understand.

The bird that was singing her song in the trees
Was rudely disturbed by the mischievous breeze.
Said she to herself (for she thought him unkind),
'He ruffles my feathers, that horrid old wind!'

The flowers in the garden that smiled 'neath the sun
Were not at all pleased with his frolic and fun.
They lost their sweet tempers, their smiles vanished quite,
As he scattered their petals to left and to right.

The acorns fell down in a shower from the tree,
And piggy *loved* acorns for dinner and tea.
Cried he, with a grunt, as he roamed thro' the wood,
'Tis an ill wind, they say, that blows *nobody* good!'

MARIAN ISABEL HURRELL.

CHINNA.

BY MRS. HOBART-HAMPDEN,

Author of 'The Secret Valley,' etc., etc.

(Continued from page 82.)

'DID the spirit really speak to him, Nancy?' Frederick whispered, looking eagerly from side to side, and hoping that he might catch sight of some strange shape vanishing.

'I think he was in a trance,' Nancy answered, a little doubtfully; 'and when you're in a trance all sorts of things seem to happen to you. I read about trances in a book once, but I don't remember very well what it said.'

Frederick was by no means satisfied with this reply, and he ran up to Chinna with eager eyes fixed on the little man's face, determined to get to the bottom of the mystery. 'Tell me about the spirit, Chinna,' he asked. 'What was it like? Did it have hair, and eyes, and hands, and teeth, and clothes, and everything?'

'I may not speak of such things,' said Chinna. 'He who does so will surely see the loathly worm which inhabits these forests, and to look upon which is death.'

'A worm?' said Frederick, puzzled. 'How could it hurt anybody to look at a worm? I pick up worms often.'

'This worm is not as other worms,' Chinna answered. 'One yard and a half is it in thickness, and it is grey in colour and its head is scarlet, and who sees it dies instantly.'

'Then how can people know what it's like?' Brian objected. He and Nancy were listening, as much absorbed as Frederick. 'If they die directly, they can't describe the worm to any one.'

'Once there were two men,' said Chinna, quite unmoved by this criticism. 'A great man and his servant, and together they passed through the forest. And, on a moment, the servant called, 'Look, lord, look! After us comes a great worm with a grey body and a scarlet head.' And, at that, fell dead. And the great man wrapped his turban round his eyes, and fled very swiftly from that place. Thus was the colour of the worm known.'

Chinna was fairly started now on story-telling, and he began to talk of many strange things. Sometimes, he said, the whole forest was empty of game, because the deer and all other creatures had betaken themselves to a spot named Dowtea by the little wild people.

'And if the hunter follows to Dowtea,' Chinna went on, 'not an animal can he see, though the tracks of animals are everywhere. They say, the oldest amongst us, that Dowtea makes all creatures invisible.'

'Then I should live there always if I were the game in the forest,' said Brian.

Whereupon Chinna shook his head, and answered, 'That may not be.' But he refused to give any reasons in support of this opinion, though invited freely to do so. And he went on to talk next of man-eating tigers, and their weird and fearful habits.

'On the head of such striped ones is always a great white moon,' Chinna affirmed. 'And, at will, can they take any shape that they please that they may deceive those they would devour. And the spirits of the men, of the women, of the children they have slain must ever go with them, and warn them of approaching danger.'

He spoke with such conviction that he made the most improbable tales seem true. Frederick was glancing fearfully at the shadows long before the stories were finished. And he woke in the middle of the night, and caught hold of Nancy and Brian, and declared that he *knew* a man-eating tiger was coming, or the loathly worm at least. And Nancy and Brian had to pretend to shoo these terrors away, more than half convinced themselves that they heard the rustle of some stealthy approach.

CHAPTER VIII.

BUT Chinna's terrifying stories in no way affected Brian's determination to be present at the killing of the tiger, and he spent next morning concocting a plan by which he might attain this object. Since the little hunter would not start until the evening, there was plenty of time to spare.

As the villager had met Chinna on the island, and had disappeared towards the further shore, it would clearly be necessary to cross the lake to reach the village. Brian thought he could find his way to the spot where the raft was hidden, and wait there for Chinna if he could persuade the monkeys to allow him to leave the clearing without drawing undue attention to his movements by their chatter. But, even thus, there still remained the greatest difficulty of all to face. When Chinna found him waiting by the raft, he would almost certainly order him to return at once to the clearing.

'If only I could disguise myself,' Brian thought, 'and

make my skin brown somehow, then perhaps Chinna wouldn't mind.'

He took up a little earth and rubbed it over his hands, but, even though he damped them first so that the earth turned to mud, he only succeeded in making his skin dirty—not really brown. And then he remembered the fluid that Mrs. Chinna had brewed. It had been dark brown in colour, Brian thought. And he crept to the hut when no one was looking, and got hold of the gourd, and poured a little of the liquid on the palm of his hand, and, as it trickled away, to his delight a dark brown stain remained.

And he caught sight of another object in the hut which might prove most useful—a length of cloth, such as Chinna wore twisted round his hips. And now, it seemed to Brian, he had all that he needed.

'I'll wait till after the midday meal, when every one's sleepy,' he decided; 'and then I'll try and creep away. Perhaps the monkeys will be sleepy too.'

He ran off to join Nancy and Frederick, who were playing with the goat, and trying to teach her tricks. She was a most intelligent beast, and stood listening to their instructions with her head on one side, and when Frederick tapped her forelegs she lifted each in turn, and allowed him to pretend to shake hands with her.

Brian stood watching, and with great difficulty managed to keep his secret to himself. It was best to do so, he thought. Nancy might perhaps be so alarmed, or Frederick so excited, they might betray everything in the hurry of the moment. Brian was thankful when the midday meal was over, and every one began to grow sleepy, as he had foreseen would happen.

But, though all were drowsy, it was long before any one slept. Chinna was the first to drop off, and next, Mrs. Chinna; and at last Nancy's voice—she had been telling a long story to Frederick about the goat and the monkeys—trailed into silence; and, finally, Frederick slept too. And then Brian, who had kept his own eyes open with some difficulty, became very wide awake, and crept cautiously towards the hut. He took down the bottle gourd from its place, and looked round anxiously to see what the monkeys were doing.

They were watching him; there was no doubt they were watching him. They sat in rows upon the branches, their eyes keen with impish interest and malicious triumph. It seemed as if they knew that he wanted to escape quietly, and were determined to have full revenge for the stones that had been thrown at them; and they were so silent for the moment that their chatter would be all the more deafening when it broke forth.

Brian started back in angry dismay. He was sorely tempted to throw more stones, but this would have meant the certain ruin of his plan. With some difficulty he refrained, and looked round for something with which to propitiate the monkeys, and almost at once caught sight of the grain mill which Mrs. Chinna had filled before she lay down to sleep.

Very deliberately, so that the monkeys could watch his every movement, Brian took a handful of the grain, and, with the cloth beneath his arm, and the gourd in his other hand, walked out of the hut and across the clearing, and all the time he held the grain so that the monkeys could see it clearly, and with their eyes and all their attention now fixed on the food of which they were so fond, they jumped from branch to branch, following Brian by the tree-road step for step.

(Continued on page 98.)



"The great man wrapped his turban round his eyes and fled away very swiftly from the place."