# The Extraordinary Adventures of Karik and Valya

## By YAN LARRI



# Translated from the Russian by John A. Mandeville

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#### **CHAPTER I**

Granny is difficult — Mother is worried — Jack gets on a hot scent — A strange discovery is made in the Professor's study — The Professor disappears

#### MOTHER SPREAD A BIG WHITE CLOTH ON THE TABLE.

Granny went over towards the sideboard. In the dining-room knives and forks jingled cheerfully and plates clattered.

"Is it egg and onion pie?" asked Granny.

"Yes. The children have been begging and begging me for it," said Mother, as she put out the plates.

"And is the sweet strawberries, and cream?"

"No. To-day we are going to have ice cream pudding for a sweet! The children do love it so."

"All the same," mumbled Granny, "in the summer it is better for the children to have berries and fruit. . . . When I was a little girl. . . . "

But Mother, apparently, was quite convinced Granny never had been a little girl. Shrugging her shoulders she went over to the window and, looking out into the courtyard, shouted loudly:

"Ka-a-ari-ik! Va-alya-ya! Lu-unch!"

"When I was a little girl . . . " continued Granny, offended; but Mother, not listening to her, leaned out on the window-sill and shouted still louder:

"Karik! Valya! Where are you?"

In the courtyard all was silent.

"There you are," grumbled Granny. "I knew it would happen. . . . "

"Karik! Valya!" Mother shouted again, and not waiting for an answer sat down on the window-sill and asked, "Didn't they tell you where they were going to go?"

Granny bit her lip angrily. "When I was a little girl," she announced, "I always said where I was going, but nowadays . . . . " She straightened the cloth on the table, frowning. "Nowadays they just do as they like . . . if they take the fancy they'll go off to the North Pole; and sometimes even worse. . . Why, only yesterday they announced on the radio. . . ."

"What did they announce?" asked Mother, hastily.

"Oh, nothing! Just that some boy was drowned — at least that was what they said."

Mother shuddered. "That's all nonsense," she said, sliding off the window-sill. "Fiddlesticks! Rubbish! Karik and Valya would never go off and bathe."

"I don't know, I don't know!" Granny shook her head. "Only they should have been here ages ago and there is no sign of them. They ran off early and haven't had anything to eat this morning."

Mother put her hand up to her face, and not saying anything more went out of the dining-room quickly.

"When I was a little girl . . . ," sighed Granny.

But what Granny did when she was a little girl Mother just didn't hear, she was already out in the courtyard and screwing up her eyes in the bright sunlight was peering in all directions.

On a yellow mound of sand lay Valya's green spade with the bent handle, and beside it was flung Karik's faded beret.

No sign of the children.

Under the rusty gutter pipe, warming herself in the sun, was the big tortoise-shell cat — Anyuta. She lazily wrinkled her forehead and stretched out her paws as if she wanted to give them to Mother.

"Karik! Valya!" shouted Mother, and actually stamped her foot.

Anyuta, the cat, opened her green eyes widely, stared at Mother, and then, yawning luxuriously, turned over on the other side.



"What has become of them?" grumbled Mother.

She crossed the courtyard, glanced into the laundry room, peeped through the dark windows of the cellar where the firewood was kept. No sign of the children.

"Ka-ari-ik!" she shouted once again.

There was no reply. "Va-a-lya!" Mother cried out.

"Wough-ough, woof!" sounded quite close at hand. The door at a side entrance slammed violently. A big sheep-dog with a sharp pointed nose leaped out into the yard with his chain dragging behind him. With one rush he was on the mound, rolling in the sand, raising a great cloud of dust; then up he jumped, shook himself and with loud barking hurled himself at Mother.

Mother stepped back quickly.

"Back! No, you don't! Get away with you!" She shooed him off with her hands.

"Down, Jack! To heel!" a loud voice resounded in the doorway.

A fat man wearing sandals on his bare feet and with a lighted cigarette in his hand had come into the yard.

It was the tenant from the fourth floor, the photographer Schmidt.

"What are you up to, Jack, eh?" asked the fat man. Jack guiltily wagged his tail.

"Such a fool you are!" grinned the photographer. Pretending to yawn, Jack came up to his master, sat down and with a jingling chain set about scratching his neck with his hind leg.

"Grand weather to-day!" smiled the fat man. "Aren't you going to your country cottage?"

Mother stared first at the fat man, then at the dog and then said rather crossly:

"You have let that dog out again, Comrade Schmidt, without his muzzle. He behaves just like a wolf. He just looks around to see at whom he can snap. . . . "

"What, Jack?" said the fat man, apparently most surprised. "Why, he wouldn't harm a child! He is as peaceful as a dove. Would you like to stroke him?"

Mother waved him away with her hand.

"You think I have nothing else to do but to stroke dogs! At home, lunch is getting cold, none of the housework is done and here I am unable to get hold of the children. Ka-a-ri-ik! Val-a-alya!" she shouted once more.

"You just stroke Jack and ask him nicely. Say: 'Now then Jack, go find Karik and Valya.' He'll find them in a wink!" Schmidt bent down to his dog and rubbed his neck affectionately. "You'll find them, won't you Jack?"

Jack made a little whimpering noise and, quite unexpectedly, jumped up and licked the full lips of the photographer. The fat man staggered back, fussily spat out and wiped his lips with his sleeve.

Mother laughed.

"You need not laugh," Schmidt gravely assured her, "this is a sleuthhound. He follows the scent of a human being just like a train running on rails. Would you like me to show you?"

"I believe you!" said Mother.

"No, no!" the fat man was getting agitated. "Allow me to assure you that if I say it is true, it is true! Now then, just give me something belonging to Karik or Valya — a toy — coat — beret. It does not matter what. . . ."

Mother shrugged her shoulders, but all the same she stooped down, picked up the spade and beret and, smiling, handed them to Schmidt.

"Splendid! Excellent!" said the fat man, and gave the beret to the dog to smell. "Now, Jack," he continued loudly, "show them how you do it! Go find them, boy!"



Jack whimpered, put his nose to the ground and, sticking up his tail, started to run round the courtyard in large circles.

The photographer cheerfully puffed along behind him.

Having run up to the cat Anyuta, Jack stopped. The cat jumped up, bent herself into a bow and flashing her green eyes hissed like a snake. Jack tried to grab her by the tail.

The cat bristled up, gave Jack a box on the ear; the poor dog squealed with pain, but at once recovered himself and with a loud bark flung himself at Anyuta. The cat again hissed and raised one paw as if to say: "Sh-sh-sh-shove

off! I'll s-s-slap you s-s-such a one!"

"Now, now, Jack," said the photographer, "you mustn't get put off!" and he tugged so hard at the lead that the dog sat back on his hind legs. "Get on, now! Go find them!" he ordered.

With a parting bark at the cat, Jack ran on ahead. He ran around the whole yard and once more stopped by the gutter pipe and loudly sniffed the air, looking at his master.

"I understand, I understand!" said the photographer, nodding his head. "They sat here, of course, playing with the cat! But where did they go afterwards? Now, go find them, go find them, Jack!"

Jack started wagging his tail, twisted himself around like a top, scraped with his paws at the sand under the pipe and then, with a loud bark, dashed to the main entrance to the flats.

"Ha-ha! he's got on the scent!" shouted Schmidt, and with his sandals slithering he leaped after the dog.

"If you do find the children, send them home!" Mother called after him, and started walking back through the yard. "Of course they are in one of the neighbouring courtyards," she thought to herself.

Pulling hard on his lead, Jack hauled his master up a staircase.

"Not so fast! Not so fast!" puffed the fat man, barely able to keep up with the dog.

On the landing of the fifth floor, Jack stopped for a second, gazed at his master and with a short bark threw himself at a door which was covered with oilcloth and felt.

On the door there hung a white enamelled plate with the inscription:

### PROFESSOR IVAN HERMOGENEVITCH<sup>1</sup> ENOTOFF

Underneath was pinned a notice:

#### Bell does not work. Please knock.

Jack with a squeal jumped up, scratching at the oilcloth covering the door.

"Down, Jack!" shouted the fat man. "It says knock, and not squeal."

The photographer Schmidt smoothed his hair with the palm of his hand, carefully wiped the perspiration off his face with a handkerchief and then knocked cautiously at the door with his knuckles.

Behind the door shuffling steps were heard.

The lock clicked.

The door opened. A face with shaggy eyebrows and a yellowish white beard appeared in the widening gap.

"Do you want me?"

"Excuse me, Professor," said the photographer in some confusion, "I only wanted to ask you — "

The stout man had not succeeded in finishing his sentence before Jack tore the lead out of his hand and, almost knocking the Professor off his feet, dashed into the flat.

"Come back! Jack! To heel!" shouted Schmidt.

But Jack was already rattling his chain somewhere at the end of the corridor.

"I am so sorry, Professor, Jack is only young. . . . If you will let me come in, I'll soon get hold of him."

"Yes, yes . . . of course," replied the Professor, absent-mindedly, letting Schmidt into the flat. "Come in, please. I hope your dog does not bite!"

"Hardly ever," Schmidt assured the Professor.

The photographer crossed the threshold and having closed the door behind him, said quietly: "A thousand apologies! I won't be a minute. . . . The children must be with you — Karik and Valya, from the second floor. . . ."

"Allow me, allow me! Karik and Valya? Yes, of course, I know them well. Very fine children. Polite and eager to learn..."

"Are they here?"

"No, they haven't been here to-day; in fact I am waiting for them!"

"Very odd!" muttered the stout man. "Jack has so certainly followed their trail. . . . ."

"But may be it is yesterday's trail?" politely suggested the Professor.

But Schmidt did not succeed in replying. In the further room, Jack was barking resoundingly, then something rattled, crashed and jingled as if a cupboard or table had fallen with crockery on it.

The Professor started.

"He may break up everything!" he shouted as if he was going to cry, and seizing Schmidt by the sleeve pulled him along the dark corridor. "Here! through here!" he barked, pushing open a door.

No sooner had the Professor and the photographer crossed the threshold of the room than Jack threw himself at his master's chest with a whimper and then at once dashed back with a bark. All around the room he darted with his lead behind him, smelling the bookshelves, jumping on the leather armchair, twisting himself under the table, all the time throwing himself from side to side.

On the table, tubes and retorts jingled as they bounced up and down, tall glass vessels swayed and fine glass tubes shivered. From one violent jolt the microscope, with its brass sparkling in the sun, started to rock. The Professor only just succeeded in catching it. But in saving the microscope, he caught with his sleeve a gleaming nickel container full of some sort of complicated weights. The container fell and the weights jumped out and scattered with a jingle over the yellow parquet floor.

"What are you up to, Jack?" gruffly jerked out the photographer. "You are making an ass of yourself. You're barking, but what is the use? Where are the children?"

Jack put his head on one side. He pricked up his ears and looked most attentively at his master, trying to understand what it was that they were scolding him about.

The photographer shook his head disapprovingly.

"You should be ashamed of yourself, Jack! They said you were a sleuthhound! With a diploma! And all you can do is to chase cats instead of following a trail. Now, come home! Be generous enough to forgive us. Comrade Professor, for this disturbance!"

The photographer bowed awkwardly and made towards the door. But here Jack became possessed as of a devil. He seized his master by the breeches with his teeth, and planting his feet on the slippery parquet floor, tugged towards the table.

"What on earth is up with you?" complained the fat man in amazement.

Squealing, Jack once more darted around the table, but then leaped on the small divan which stood in front of the open window and putting his paws on the window-sill, barked with short, jerky barks.

Schmidt got angry.

"Come to heel!" he shouted, seizing the dog by the collar; but Jack stubbornly shook his head and again darted to the divan. "I can't understand it!" The photographer threw up his hands.

"Probably there is a mouse behind the divan!" the Professor guessed. "Or maybe a crust of bread or a bone. I often have my dinner there."

He went up to the divan and pulled it towards him. At the back of the divan, something rustled and softly padded to the ground.

"A crust!" said the Professor.

Jack at that moment tore himself forward and squeezed, with his tail sticking up, between the wall, and just managed to shift the divan. He seized something in his teeth.

"Come on, show us what it is!" shouted the photographer.

Jack backed out, shook his head, turned abruptly to his master, and laid at his feet a child's down-at-heel sandal. The photographer perplexedly turned the find over in his hand.

"Apparently some sort of a child's shoe. . . . "

"H'm . . . strange!" said the Professor, examining the sandal. "Very strange!"

Whilst they were turning the find over in their hands. Jack pulled out from behind the divan a further three sandals, one the same size and two smaller ones.

Unable to follow what had happened, the Professor and the stout man looked first at each other and then at the sandals. Schmidt knocked the hard sole of one sandal with his knuckle, and for no apparent reason said:

"Strong enough! They're good sandals!"

But Jack meanwhile had pulled out from under the divan a pair of blue shorts and, pressing them with his paws to the floor, barked softly.

"Something more?" said the Professor, quite perplexed.

He bent over, and would have stretched out his hand for the shorts, but Jack bared his teeth and growled so threateningly that the Professor very quickly withdrew his hand.

"What a very unfriendly nature he has, to be sure!" said the Professor in some confusion.

"Yes, he is not over-polite to me!" agreed the photographer.

He took the shorts, shook them, and, folding them neatly, laid them before the Professor.

"Please take them."

The Professor looked sideways at Jack.

"No, no, it is quite unnecessary," said he. "I can see everything. . . . Well, now . . . well, now . . . there are the markings V and K. Valya and Karik!" And he touched with his fingers big white letters sewn in the belts of the shorts.

The stout man wiped his face with the palm of his hand.

"Is there a bathroom in the flat?" he asked in a businesslike way.

"No," replied the Professor, "there is no bathroom. But if you want to wash your hands, there's. . . ."

"Oh, no," panted the stout man, "I can wash at home. But I thought they might have undressed and were bathing themselves. Do you see what I mean?"

"Certainly." The Professor nodded his head.

"But where have they hidden themselves? Naked . . . without shorts, without sandals? I don't understand it at all!" Schmidt made a gesture of hopelessness.

Then he put his hands behind his back, spread out his feet, lowered his head and gazed solidly at the yellow rectangles of the parquet; then he suddenly straightened himself up and said confidently:

"Don't worry! We'll find them any minute now. They are here, Professor. They are simply hiding! You can be sure of that! My Jack has never been mistaken yet."

The Professor and the photographer proceeded on a tour round all the rooms; they examined the kitchen and even looked into the dark larder.

Jack listlessly tailed along behind them.

In the dining-room, the stout man opened the doors of the sideboard, poked his head under the table, and in the bedroom searched with his hands underneath the bed. But there was no trace of the children in the flat.

"Wherever can they have hidden themselves?" muttered the photographer.

"In my opinion," said the Professor, "they have not been here to-day."

"That's what you think?" questioned Schmidt thoughtfully. "You think they have not been here? But what do you think, Jack? Are they here or aren't they?"

Jack barked.

"Here?"

Jack barked again.



"Well, go find them! Go find them, you dog!"

Jack at once cheered up. He threw himself round and once more led the Professor and Schmidt into the study. Here he again jumped on to the window-sill and started to bark loudly, and then to whimper as if he wanted to assure his master that the children had left the room through the window.

Schmidt got angry.

"You're nothing but a dunce! Just a puppy! You actually think that the children jumped out into the yard through a window on the fifth floor? Or perhaps you think they flew out of the window like flies or dragonflies?"

"What!" The Professor started. "They flew? What dragonfly?"

The photographer smiled.

"Well, that is what Jack thinks!"

The Professor seized his head in his hands.

"What an awful thing!" His voice was hoarse.

The photographer gazed at him in amazement and asked:

"What is the matter with you? Here, have a drink of water! You are not well."

He stepped towards the table on which stood a glass jug full of water; but here the Professor positively screamed as if he had trodden on red-hot iron with bare feet.

"Stop! stop!" he yelled.

The photographer, now frightened, froze in his tracks.

The Professor shot out his hand and grabbed a glass containing what appeared to be water, hastily raised it to the level of his eyes and looked through it towards the light. Then he hastily produced a huge magnifying glass with a horn handle from his pocket and shouted to Schmidt:

"Don't move! For goodness' sake, don't move! And hold the dog tight! Better take him in your arms. I beg you!"

The fat man, thoroughly frightened, was completely bewildered. Without further ado, he picked up the dog in his arms and pressed him tightly to his chest. "The old man has gone off his head!" he thought.

"Now, stay like that!" shouted the Professor.

Holding the magnifying glass in front of his eyes, crouching down, he started to examine the rectangles of the floor carefully one after the other.

"Shall I have to stand long like this, Professor?" timidly asked the photographer as he followed with alarm the strange movements of the Professor.

"Put one foot here!" the Professor yelled at him, pointing with his finger at the nearest rectangles of the parquet.

Schmidt awkwardly moved his foot and pressed Jack so tightly that he wriggled in his arms and started to whimper.

"Shut up!" whispered Schmidt, watching the Professor with growing fright.

"Now — the other foot! Put it here!"

The fat man followed without protest.

Thus, step by step, the Professor conducted the photographer, who was quite dumb with astonishment, to the doorway.

"And now," gruff-gruffed<sup>2</sup> the Professor, throwing the door wide open, "please go away!"

Schmidt had hardly got outside before the door banged in his face. He could hear the lock being turned.

The fat man dropped Jack, spluttered with fright and dashed down the stairway, losing his sandals, out of breath, looking over his shoulder every minute.

Jack, with a great bark, plunged after him.

And they did not stop running until they reached the nearest militia post.<sup>3</sup>

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A motor-car with blue stripes on its sides drove at high speed into the courtyard. Several militiamen sprang out, called out the caretaker and hastened to the fifth floor home of Professor Enotoff.

But the Professor did not appear to be at home. On the door of his flat there hung a note, pinned up with new drawing pins:

Don't look for me. It will be quite useless.

Professor J. H. Enotoff.

#### **CHAPTER II**

The wonder-working liquid — The bewildering behaviour of shorts and sandals — A very ordinary room is transformed in a very extraordinary way — Adventures on the window-sill — Karik and Valya set off on an amazing journey

#### WHAT HAD HAPPENED WAS JUST THIS.

On the evening of the day previous to that on which the children had vanished, Karik was sitting in the study of Professor Enotoff. The evening was a good time to have a chat with the old man.

The study was in semi-darkness and long dark shadows appeared to be climbing to the ceiling from the black corners of the room: it seemed as if someone was hiding up there and was gazing down at the circle of light on the big table. Blue flames of a spirit lamp leaped up, flickered and swayed underneath the curved bottom of a glass retort. In the retort something gurgled and bubbled. Transparent drops were falling slowly and musically from a filter into a bottle.



Karik climbed up on to the biggest leather armchair.

Pressing his chin on the edge of the table, he gazed attentively at the skilful hands of the Professor, trying hard not to breathe, and not to move.

The Professor worked away, whistling, or telling Karik amusing stories of his childhood, but more often talking about what he had seen in Africa, America or Australia — it was all very interesting, whatever he said.

Then, rolling up the white sleeves of his overall, he bent over the table and slowly, drop by drop, he poured out a thicky oily liquid into narrow little glasses. From time to time he threw into these glasses some sparkling crystals, and then little clouds would appear in the liquid, slowly circle round and drop to the bottom. After this, the old man poured something blue out of a measure and the liquid became, for some reason, rose coloured.

All this, naturally, was most interesting, and Karik was ready to stay there all night.

But suddenly, the Professor hastily dried his hands on a towel, grasped the large retort by the neck and rapidly covered it up with blue paper.

"Well, that's that!" he said. "At last I can congratulate myself on a success."

"It's ready?" asked Karik, cheerfully.

"Yes. All that remains now is to take the colour out of it, and . . ." The Professor snapped his fingers, and in a weird voice sang:

0 beauteous, miraculous fluid! They'll all ask: How did you do it?

Karik could not help frowning: the Professor sang so loudly, but unfortunately he had no ear for music and sang a melody which resembled the wailing of the wind in a chimney pipe.

"Suppose the rabbit won't drink it?" questioned Karik.

"Won't drink it!" The Professor just shrugged his shoulders. "We'll make it drink . . . but that must wait for to-morrow . . .but now. . . ." The old man looked at the clock and started to fuss: "Oh-oh-oh, Karik! We've stayed up far too late. Eleven o'clock. Yes. It's two minutes past eleven!"

Karik realised that it was time to go home. With a sigh, he climbed down reluctantly from the armchair and demanded:

"You won't begin without me to-morrow?"

"Not under any circumstances," assured the Professor, shaking his head. "That I promise you."

"And can Valya come?"

"Valya?" The Professor thought over this. "Well, why not . . . bring Valya. . . ."

"Nothing will happen very suddenly?"

"Everything will happen," said the Professor confidently, as he blew out the spirit lamp.

"And will the rabbit turn into a flea?"

"Oh, no," laughed the Professor. "The rabbit will remain a rabbit."

"But tell me, Professor. . . ."

"No, no, I will not tell you anything more. Quite enough. We can leave our conversation until to-morrow. Go home, my young friend. I am tired, and it is high time you were in bed."

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All night long, Karik tossed from side to side. He dreamt he saw a pink elephant, so tiny that you could put him in a thimble. The elephant was eating jam, then ran along the table, round a saucer, playing such pranks that he upset the salt and nearly got drowned in the mustard. Karik rescued him from the mustard pot and started to clean him up, standing him in a little dish, but the elephant wrenched himself away and gave Karik a blow

on the shoulder with his trunk. Then he suddenly jumped up on to Karik's head and said in a queer girlish voice, vaguely familiar: "What is the matter, Karik? Why are you shouting?"

Karik opened his eyes. Beside his bed, in a dressing-gown, stood Valya.

"Aha! you — awake already?" said Karik. "Grand! Dress yourself quickly."

"What for?"

"We must start. Going to the Professor's. Oo-oo, what will happen to-day . . .? Such wonders! . . . miracles!"

"But what?"

"Dress yourself quickly."

"I'll put on shorts and sandals," said Valya.

"And I'll do the same."

Looking under the bed for his sandals, Karik told her in a whisper:

"Understand: Professor John has invented a pink liquid."

"Does it taste nice?" asked Valya, buckling the strap of her sandals.

"I don't know . . . it's for rabbits . . . he is going to give it to them to-day . . make them drink it, and then. . . . Oo-oo, my word!"

Valya's eyes opened widely.

"And what will happen to them?" she asked in a whisper.

"He doesn't know yet. This is just an experiment. Come on quickly!"

The children quietly tiptoed through their mother's room. Mother shouted something after them, but Karik grabbed Valya by the hand and raced off with her.

"Keep quiet," he whispered, "or she'll make us clean our teeth, wash, and wait for breakfast. Then we shall most certainly be late."

Having dashed across the courtyard, they darted into the main entrance of the flats, up on to the fifth floor, stopping at last in front of the door, where the bell did not work and callers were instructed to knock.

Karik knocked — no one answered. He pushed the door — it opened.

The children went into the semi-darkness of a hall. On the wall a large mirror glittered. Immediately opposite the children, a bronze idol gazed out of a glass case. The Professor had brought it from China, where some of the Chinamen actually pray to these hideous dummies. In the Professor's household it served as a doorkeeper. And a most excellent doorkeeper it was and never grumbled "shut the door after you."

In all other respects, it was very like one of the living doorkeepers, and like them could watch the door silently all day.

On the hall-stand there hung the Professor's heavy winter fur coat, his overcoat and some sort of a raincoat with big checks like a chess board.

All was silent in the flat; except that the tick-tock of a clock sounded a measured beat in the dining room, and in the kitchen, water was dripping musically from the tap.

"We'll go in," said Karik. "The Professor is certain to be in his study."

But in the study there was no Professor. The children decided to wait.

The windows of the study were wide open. The sun lit up the white table, covered with curving jars, vessels and retorts. Fine glass tubing stood up like flowers in the glass vessels. Nickel-plated cups gave blinding reflections of the sun. The brass of the microscope sparkled cheerfully, and on the ceiling the sunbeams frolicked.

Along the wall, there was fixed a glass case full of books — thick books and thin books. The titles were hard to understand:

The Ecology of Animals, Hydrobiology, Chironomidae, Ascaridae. They were the sort of books children do not touch.

The children wandered round the study, twisted the screws of the microscope, sat in the leather armchair, on which, with its empty sleeves flung apart, lay the white overall of the Professor; and then they started to look at the jars.

Between two retorts, Valya noticed a tall, narrow glass. It was full to the brim with a silvery clear liquid. Little bubbles, which glittered, rose from the bottom and burst on the surface. It was very like soda water.

Valya carefully took the tall glass in her hand. It was as cold as ice. She raised it to her face and smelt it. The liquid had a scent like peaches and something else she could not recognise. It was very appetising.

"Oh, how good it smells!" cried out Valya.



"Put it back in its place," said Karik, crossly. "You mustn't touch anything. That may be a poison. Come away from the table. Do you hear?"

Valya put the glass back in its place, but she did not leave the table; the liquid smelt so delicious that she wanted to sniff it again.

"Valya, come away!" said Karik. "Or else I'll tell Mother. Honour bright, I will!"

Valya went round the table, sat in the armchair, but quickly returned and found herself once more opposite the delicious liquid.

"Do you know, Karik, it is soda water!" she said, and she suddenly wanted desperately to drink it, just as if she had been eating salted herrings all day long.

"Don't touch it!" shouted Karik.

"But if I want a drink?" asked Valya.

"Go home and drink tea."

Valya didn't answer a word. She went over to the window, looked out of it, down at the courtyard; but when Karik turned away, she quickly skipped over to the table, seized the tumbler and took a sip.

"I say, it's delicious!" she half-whispered.

"Valya, you are mad!" snapped Karik.

"Oh, Karik, it's so nice! Try it!" And she held out the tumbler to her brother.

"Cold and so nice . . . never tasted anything like it."

"And suppose it suddenly poisons you!" said Karik, looking doubtfully at the silvery fluid.

"Poison would be bitter," smiled Valya, "but this is so delicious."

Karik shifted from foot to foot.

"It is sure to be some sort of rubbish!" he said, stretching out his hand for the glass in an undecided way.

"It is certainly not rubbish. You try it. It smells like peaches but the taste is like lemonade. Only much nicer."

Karik looked round. If the Professor were to come in at this minute, a rather unpleasant conversation would ensue. But as there was nobody in the study except Valya, Karik hastily took a few gulps and put the glass back in its former place.

"But it certainly tastes nice!" said he. "Only we mustn't drink any more or the Professor will notice it. Let's sit in the window. He will surely be back soon and we shall begin the experiments.

"All right," sighed Valya, and looked sadly at the glass and its tasty contents.

The children climbed on to the divan and from thence on to the window-sill. With their heads hanging out they lay, their feet dangling behind them, and gazed down on the courtyard below.

"Oo, what a height!" said Valya, and actually spat so as to watch something fall. "Would you jump down?"

"Jump?" answered Karik. "I would with a parachute."

"But without a parachute?"

"Without a parachute? No, without a parachute you cannot jump from such heights."

Suddenly, against the window pane there banged a blue dragonfly which fell on to the window-sill.

"A dragonfly!" shouted Valya. "Look, look!"

"Mine!" shouted Karik.

"No, mine!" screamed Valya. "I saw it first."

The dragonfly lay on the window-sill between Karik and Valya, helplessly moving its tiny feet.

Karik stretched out his hand towards the dragonfly, and suddenly he felt that his shorts were dropping off. He stooped quickly but could not catch them: the shorts slid off and after them fell his sandals.

Karik then wanted to jump off the window-sill on to the divan standing by the window, but the divan suddenly started to drop away down, just like a lift leaving the top floor. Unable to grasp what was happening, Karik looked around in confusion, and then saw that the whole room was suddenly expanding both upwards and downwards.

"What's happened?" he screamed.

Walls, floor and ceiling were moving away from each other like the bellows of a huge concertina. The electric light was hurrying away up with the ceiling. The floor was falling precipitately down.

Hardly a minute had passed, but the room was already almost unrecognisable.

High above overhead, there swung a gigantic glass balloon hung around with huge transparent icicles which gleamed in the sunlight.

This was the chandelier.

Far below, there stretched a boundless yellow field divided into regular rectangles. On the rectangles were piled square wooden blocks with burnt ends. By them lay a long white tube on which there was printed in huge letters "Navy cut." One end of this was burnt and covered by a great cap of grey ash. Nearby, like immense leather mountains, stood the dark armchairs, on one of which lay the Professor's white overall looking like snow covering the mountain.

Where lately had been the bookcase there now stood a skyscraper of glass and brown beams. Through the glass could be seen books as big as five-storied houses.

"Karik, what is all this?" Valya asked quite calmly, looking with curiosity at the amazing transformation of the room.

It was only then that Karik noticed Valya. She was standing beside him without sandals and without shorts.

"Look, Karik, isn't it funny!" she giggled. "It must be the experiment beginning. Ooh!"

Before Karik succeeded in answering, something beside them started to make a noise and to thump. Thick clouds of dust rose from the window-sill. Valya clung on to Karik's shoulder. At that moment there was a puff of wind. Dust flew up and slowly started to settle.

"Ooh!" shouted Valya.

In the spot where just a moment or two ago there had lain a tiny dragonfly, there now moved a thick, long, log-like, jointed body with a huge hook at the end of it.

The brown body, covered with turquoise blue splashes, was contracting in spasms. The joints moved, sometimes sliding over each other, sometimes turning sideways. Four huge transparent wings, covered with a dense web of glittering threads, trembled in the air. A monstrous head hammered upon the window-sill.

"Kari-ik!" whispered Valya. "What is this?"

<sup>&</sup>quot;Sh-sh-sh!"

Treading carefully, Karik started to cross the window-sill which now was like a wooden motor road, but, having taken a few steps, he stopped aghast.

He was standing on the edge of a precipice. It seemed to him that he was looking down from the height of the St. Isaac's Cathedral. It was then that Karik realised what had happened. He returned to Valya, took her by the hand and, hiccupping with fright, said:

"It... it must have been the water for the rabbits... do you understand . . . the Professor's experiment has succeeded . . . only you and I have got small and not the rabbits."

Valya didn't understand anything.

"But what is this?" she asked, pointing at the monster which was now lying motionless on the window-sill.

"That? The dragonfly!

"So enormous?"

"Not at all enormous," gloomily replied Karik, "it is the same as it was. On the contrary it is we who have become tiny . . . like fleas. . . . "

"Isn't that interesting?" said Valya cheerfully.

"You fool!" Karik was really angry. "There is nothing at all interesting about it. They'll put us in a jar and start looking at us under a microscope."

"In my opinion," said Valya confidently, "they will not have a chance to look at us. The Professor will come and make us big again."

"Oh, yes, big again! He won't even notice us!"

"But we'll shout!"

"He won't hear us!"

"Won't hear us? Why? He is not deaf, is he?"

"No, he is not deaf, but our voices are just about as strong as a midge's voice."

"Is that so?" Valya smiled unconvinced, and then shouted at the top other voice: "Oho! Here we are!" She looked at Karik and asked: "What about it? Difficult to hear?"

"All right for us, but no good for the Professor."

"But what will happen to us?"

"Nothing particular. They'll whisk us off the window-sill with a duster and trample us underfoot, that's all. . . . "

"Who will whisk us off?"

"The Professor himself."

"Whisk us off with a duster?"

"Yes, certainly! He'll start to clear up the dust with his whisk! And off we'll go with the dust!"

"But we . . . but . . . we — Listen, Karik, I have already thought of something . . . . Do you know what — we can sit on the dragonfly. The Professor will notice the dead dragonfly and most certainly will take it over to his table, and then we can get on to his microscope and he will catch

sight of us — of course he will catch sight of us! And then he will make us big again. Let's climb on to the dragonfly quickly."

Valya clutched Karik by the hand and they ran to the dragonfly.

"Get up on to it!"

Helping one another, the children nimbly clambered up on to the dragonfly, but they had only just sat down when the dragonfly started to quiver, to beat its lumbering wings, to turn heavily and pant and puff like some machine. The children could feel a strong muscular body bending beneath them.

"Oy, it's still alive. Jump down quickly!" screamed Valya.

"Don't worry, don't worry. Hold on tighter."

The children clung with hands and legs to the body of the dragonfly, but it wriggled its whole body, endeavouring to free itself from the unpleasant burden. Karik and Valya rocked and bounced as if they were on springs.

"It will throw us off! Oh, it will throw us off any minute!" whimpered Valya.

"Just wait!" shouted Karik. "I'll throw it off. . . . There, stop it!"

He slid up to the head of the dragonfly, bent over and hit it with all his strength several times in its eye with his fist.

The dragonfly shuddered, twisted itself and sank down.

"It appears to be dead again," said Valya.

"We shall see."

Karik slid off the dragonfly, went all around it and then seized with both hands one of the clear, mice-like wings and tried to raise it. The dragonfly didn't stir.

"It's dead," said Karik, confidently clambering up on to the dragonfly.

For some time the children sat silently, looking every now and then at the door, but they soon became bored and began to examine the dragonfly. Karik perched himself on the wing and tried to tear it away from the body. But the wing was too strong. Then he jumped on the head of the dragonfly and knocked its eyes with his heels.

"0-ooch, what huge eyes! Look, Val! Aha!"

Valya timidly stretched out her hand and touched an eye which was as cold as if it had been moulded out of crystal glass.

"Dreadful things!"

The dragonfly certainly had wonderful eyes — huge and protruding like glass lanterns. Covered with thousands of even facets, they seemed to be lit with bluey-green light from within.

These strange eyes looked at both Karik and Valya at one and the same time, and indeed were looking also at the courtyard, at the sky, at the ceiling of the room and at the floor. It seemed that in each eye there shone a thousand separate greenish eyes, all of which were watching attentively like a hawk. In front of those enormous eyes, on the very edge of the head,

were three more small brown eyes, and these also attentively followed the children.

"Do you know," said Valya, "it is alive in spite of everything. It's watching, Karik, don't you see?"

"Well, what about it?"

"You must kill it again. It will suddenly come to life. Do you know what dragonflies feed on?"

"On grass or the sap of flowers, I should think," said Karik, rather uncertainly. "I don't really remember. Why?"

"I was afraid that if it came to life it might eat us. Who knows what it really does eat. It would be better for us to kill it once again."

Valya was getting down in order to get away from the dragonfly when there appeared to be the noise of some explosion in the room. Then there sounded regular heavy thuds.

"What is that?" Valya stood stock-still.

"That . . . hurrah! It's — the Professor. He is coming!" shouted Karik at the top of his voice.

Valya hastened to occupy her former place. The door banged. A wave of air from the window struck them. A man-mountain with a beard like a stack of white flax came into the study.

Then Karik and Valya screamed with all their strength.

"Professor!"

"Professor!"

The man-mountain stopped. The palm of a hand the size of a dining-room table shot upwards and stopped at a twisted, shell-like ear out of which there protruded tufts of grey hair as big as drawing pencils. He looked all around, listened carefully and shrugged his shoulders perplexedly.

"Professor! Pro-fess-ess-or!" Karik and Valya shouted together.

The man-mountain sighed noisily. In the rooms everything buzzed. The children were both very nearly thrown off the dragonfly into the stone courtyard below.

"He-ere we are! Over here!"

The man-mountain stepped towards the window.

"Hurrah!" shouted Karik. "He has heard us!"

The man-mountain stopped.

"Come here! Here we are! Here! We are here!" screamed the children.

The man-mountain came over to the window.

But suddenly the dragonfly started to move. It started beating its micalike wings, raised a cloud of dust on the window-sill and then — with Karik and Valya on its back — it swooped away down into the blue airy ocean.

"Hold tight!" screamed Karik, clutching Valya by the neck.





#### **CHAPTER III**

Adventures in the airy ocean — The gluttonous aeroplane — The unwilling parachutists — After the big splash — The submarine prison — In the clutches of an eight-eyed monster

THE DRAGONFLY FLEW ON, ITS TRANSPARENT RIGID WINGS beating as noisily as if they had been made of sheet iron.

The wind they met seemed like elastic, it plucked at their hair and whistled shrilly in their ears. It beat in their faces and blinded their eyes.

It became difficult to breathe.

Clinging desperately to the dragonfly, gripping it with their arms and legs, the children rode on in mortal fright.

"Karik!" shouted Valya amid the howling of the wind. "How can I hold on, it's pulling me off — pulling me down — the wind!"

"Shut up! We'll fall off!" screamed Karik, and nearly choked in the wind.

The wind was blowing so hard that it seemed that it would either tear the heads off the children or sweep them away. They bent down to the very back of the dragonfly but that did not help.

"Lie flat, Vally!" shouted Karik, stretching himself out full length.

Valya followed his example.

"How's that?" shouted Karik, "better now?"

"A little!"

And certainly the blast of the wind seemed to have lessened at that moment. It was even possible to open their eyes and look around.

Not raising her head, Valya shouted, "This if too awful!"

Amid the noise of the wind, Karik could only hear one word, "awful." He turned slightly back and said as loud and calmly as he could: "Its all right, hold on tighter!"

The dragonfly hurried on, smoothly swooping up the sides of aerial mountains and then rapidly plunging down again.

"Oy, Karik," screamed Valya, "it's like an American switchback." But Karik didn't hear.

He was watching attentively the way in which the dragonfly's mica-like wings worked.

The two front wings stood out in the air practically motionless. Their movement could barely be seen. From time to time they curved, now up and now down, and then the insect either flew lower or higher. By these wings it directed its flight. At the same time they supported it in the air.



The rear wings on the other hand flashed like propellers. They droned and roared as they quickly cut through the air and, flinging it behind them, drove the dragonfly ahead.

Then the rear wings started to lift upwards until they stood vertically on edge like a sail.

The wind now blew evenly along its back. The dragonfly was noiselessly floating in the air like an aerial yacht.

"Oh, how interesting!" whispered Valya, "they should build an aeroplane like this."

Karik looked sideways at his sister and sniffed with displeasure. Her lightheartedness was making him angry.

"Sit tighter and shut up!" he commanded. But Valya could not sit silently. How indeed could she be silent. Past them like trains coming to meet them huge winged beasts bore on their way swirling the children with gusts of air. They flew past so quickly that it was impossible to grasp what they were. Birds? Bees? Dragonflies?

Valya every now and then shouted.

"What's that one? What is it? You saw it, Karik?"

They as near as anything collided with something as big as an aerial-tank — a beetle. It was all adorned with gold and purple colouring and shone so blindingly in the sun that it was impossible to look at it.

The beetle flew straight at the dragonfly. A collision seemed inevitable. But suddenly the beetle without even turning around started to whirl backwards at the same speed.

"It is going backwards!" screamed Valya. "It can actually fly backwards. Do you see?"

Suddenly underneath the wings something buzzed and sang. From somewhere below there came plunging a round striped animal. With hairy feet drawn up against itself it was hurrying, droning in the opposite direction, changing direction, now this way, now that. The greenish wings of the animal shone in the sunlight, bursting into rich green and blue flames.

"Whatever is that?" asked Valya.

"A fly! Only very big! Like under a microscope!"

The distance between the fly and the dragonfly became less and less. Now even Valya could recognize the fly. It was as big as the fly on the poster "Beware of flies — they spread infection."

But Valya had not succeeded in remembering what infection it was that flies carried when the fly swerved aside and plunged down somewhere.

The dragonfly turned its great head just as if it had been on a spindle. To the right, to the left, upwards, downwards flashed its huge, bluey-green, glassy eyes and then it shot after the fly.

"Oh!" screamed Valya, seizing Karik by his foot.

"Hold on!" answered Karik.

Then started a series of steep turns, sudden plunges and rises. Following the fly, the dragonfly now fell like a stone, now described loops, now slid sideways, and at last flew up to the fly and stretched towards it huge pincer-like claws covered with spikes.

The fly turned over and whirled on to its back, feet upwards. It stretched its legs threateningly trying to push off the dragonfly's pincers.

However, this did not help the fly.

The dragonfly caught up with it. The pincers closed.

Zz Zz Zz beat the wings of the fly. The pincers clicked like scissors.

Clip!

Clop!

And down towards the ground slowly spinning in the air there dropped the wings and feet of the unfortunate fly.

Again the strong hard pincers closed. They crumpled, crushed and flattened the fly into a sort of cake and then thrust it into a broad dark mouth.

Karik and Valya silently gazed at one another and gently sighed.

So that was what dragonflies fed on. "You said, 'The sap of flowers'! " croaked Valya.

She was terrified. For if the dragonfly gorged on such big flies then Karik and Valya would be just swallowed as a joke and not noticed.

The children became very quiet.

Far ahead there appeared huge coloured wings. On the ends of the wings there were dark, velvet-like splashes. On the edges there stretched an even stripe just like a hem. The wings danced and jumped in the air supporting a flexible cigar-shaped body, like a striped airship. Long whiskers with knobs at the end trembled and reached now upwards and now downwards.

On flying closer the children saw on the wings beautiful scales covered with coloured powdery dust.

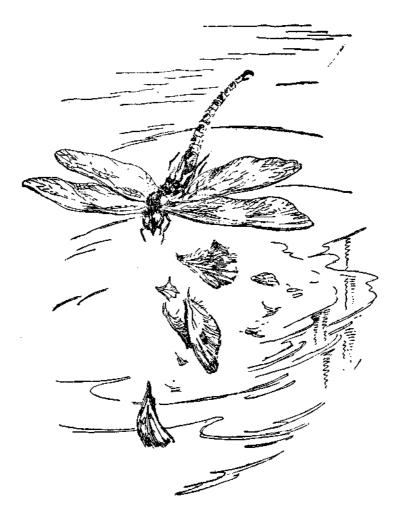
The wings whirled aimlessly in the air and fluttered like a sail in the breeze.

But then the rainbow-like creature saw the dragonfly. It began to get nervous, hesitated in the beat of its wings, then, closing them, started to drop headlong downwards.

However, it did not succeed in evading the dragonfly.

The latter darted after it, hit it in flight with its chest, flung it On one side and, when it turned over in the air, the dragonfly seized it, turned its own head and, having torn off the wings, devoured it in an instant.

And once again the dragonfly hurried on like an aeroplane:



its powerful wings hummed and overhead the wind sang incessantly.

"What was that?" asked Valya.

"A butterfly!" shouted Karik, above the noise of the wind. "It must have been a butterfly!"

The dragonfly was evidently very hungry that day.

It quickly overtook and swallowed another fly, yet another butterfly—this time white and blue splashes—and then a gnat.

"What a glutton," yelled Karik.

Valya only shrank into herself, feeling chilly. Clouds were passing across the sky.

From time to time they shut out the sun and then the ground was covered with cold blue shadows.

The children noticed with astonishment how strangely the dragonfly behaved when clouds crossed the sun.

No sooner was the sun shut out than the dragonfly became somehow limp and slowly, like a glider, swooped downwards.

But directly the sun peeped from behind the clouds, the dragonfly became lively. A light beat of the wings — and it soared upwards and once again started to hunt.

"Karik," shouted Valya. "Do you see what is happening to it?"

"Yes, yes!" Karik nodded his head. He also noticed something else.

On coming into the stream of the sun's rays the body of the dragonfly expanded and became hard and smooth. But as soon as there came the cold shade from the clouds it contracted and became wrinkled like a balloon which has been punctured with a pin.

What caused this effect the children did not know, and they were quite unable to understand the strange behaviour of the dragonfly.

The hunt continued.

The dragonfly devoured flies, butterflies and gnats without tiring. If the children had decided to give their living aeroplane any name, a better name than "Death to gnats and flies" would certainly be hard to think of.

In chasing after a white butterfly the dragonfly made a steep turn. Valya slid from the back of the winged glutton and would have undoubtedly fallen to the ground had not Karik seized her foot.

But Karik himself could barely hold on to the dragonfly.

"Help!" shouted Valya.

"I ca-can't," yelled Karik.

Valya hung down from him like a heavy weight. It was vain for him to clutch the smooth, springy sides of the dragonfly. His hands grew stiff. His fingers slipped. With the despair of one about to perish, he hooked his chin under the wing of the insect and put one arm around the springy body of the glutton.

But to pull back was quite beyond his strength.

"No! I can't do any more," screamed Karik.

He hastily peered downwards. Far below as if in a fathomless abyss there floated underneath the blue surface of an immense lake. Green rushes stuck out of the water crowding along the shore. The white cups of water lilies stood out as if they had been glued on to the blue background of the lake.

The dragonfly made a sharp, rolling turn.

A powerful blast of air hit Karik in the chest, his hands slipped for the last time along the smooth sides of the dragonfly.

He shut his eyes. His heart throbbed and then stood still. There was nothing under his legs! He was falling!

With the wind whistling in their ears the children plunged downwards.

"Ee-ee-ee," squealed Valya.

"Ah-ah-ah," screamed Karik.

As they fell they turned somersaults.

Several times sky and earth changed places.

Sky.

Earth.

Sky.

Earth.

Oo-ouch!

With great fountains of spray the children plunged into the water like shells and sank like stones to the bottom.

Having struck the bottom with their feet they bobbed back to the surface like corks. They struck out desperately with their hands and feet. Stunned by the fall, having swallowed a lot of water, they circled around in one place unable to imagine what had happened.

Karik came to, first.

"Must swim to the shore quickly." he shouted, spitting out water.

"Where is the shore?" choked Valya.

Karik turned his head to one side where, far away, could be seen a high green wall of forest.

"Do you think we can ever reach it?" asked Valya.

"Of course we shall be able to swim there!" said Karik, confidently, "but we must not hurry. Now directly you feel tired — tell me! We'll rest on our backs. Come on, swim after me!"

Thus they swam towards the shore, splashing, spitting and blowing.

Suddenly Valya yelled out:

"Look! What is that? It is coming right after us."

A strange sort of animal was sliding over the water on half-bent legs.

"What is it?"

"I don't know!" whispered Karik, with his head back between his shoulders.

"Will it bite?"

"I don't know."

The animal slid along like a skater on the ice getting nearer to the children every minute.

"But this — isn't like the dragonfly, is it?" questioned Valya, in a whisper.

"I don't know — but we must prepare for anything . . . if it attacks, dive as deep as you can."

With its long legs widely separated, the animal whisked along the mirror of water, cleverly manoeuvring in its course through the water weeds.

The skate-floats of its feet left a wave track which was hardly noticeable.

"Yes, it is . . . it's a water skater," shouted Karik. "That's what it is! An ordinary water skater, only much bigger."

The giant water skater was approaching with unbelievable swiftness. The brown body, covered on the underside with whitish hairs, rocked slightly as it moved. Great globe-like eyes fixedly gazed at the children. When turning sharply, the water skater flung its rear legs backwards and sideways, dragging them behind, pulling them first to the right and then to the left.

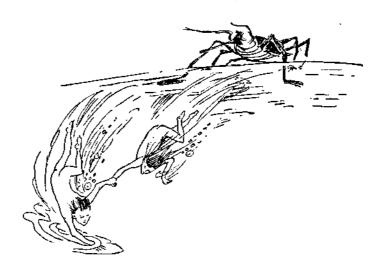
It was clearly using them as a rudder.

The water skater now came rushing straight at them.

"Ah ee!" screamed Valya.

The water skater bent its head back raising a long spear-like snout, sharp as a needle. It was covered with what appeared to be rust but was brown, dried, blood. Its tip quivered, just as if it was on a steel spring.

"That is what it kills with!" screamed Valya.



The water skater jerked nearer and raising its front legs aimed its spear straight at Valya. At that moment Karik seized his sister by the hand and dragged her under water.

The children dived down. Where a moment ago Karik and Valya had been swimming there now remained a few ripples and small bubbles.

The water skater perplexedly looked around with its globe-like eyes. It couldn't understand what had happened. One moment its prey was under its very nose and next. . . .

What did it mean?

The water skater once more looked around and then, pressing its snout against its white waistcoat, hurried on sliding along the watery film.

Blowing and spitting the children bobbed up to the surface again.

"Where is it?" Valya was breathing heavily.

"Oo-ouch! Don't know!" replied Karik, quietly, "apparently it has skated away."

"Where to?"

"Come on to the shore now!" Karik grew angry. "Swim and don't talk!" For some time the children swam silently looking cautiously from side to side.

"Oh! What is this?"

Valya had got caught in some tangled net under the water. She tugged once, but it held, she tugged harder but the net seemed to put out feelers and it wound them round her left leg up to her knees. Valya tried to help with her right leg, but numbers of fine, strong threads wound themselves round this leg too.

"Now what's up with you?" Karik turned towards his sister.

"Nets!" yelled Valya. "Something has caught me! There is a net under the water! . . . "

Karik snorting, turned back and stretched his hand out to Valya. "Here! Catch hold!"

But no sooner than he had caught Valya by the hand than he felt that his legs were in fetters.

The children were soon thrashing the water with every bit of strength they could muster.

The water bubbled round them like a boiling kettle.

"Oh! Oh!" whimpered Valya, "I can't do anything. I can't."

"Harder! harder! Don't give in!"

But it was all useless. The children could not move from the spot. Strong clinging nets entangled now not only their legs but their bodies and were dragging them down . . . under the water.

Next minute the water closed over their heads with a quiet splash.

Choking and bubbling, the children were dragged deeper and deeper.

Then suddenly from somewhere strong hands slid over their arms and legs, tore them out of the nets and squeezing them tightly dragged them down, down into the dark depths.

The children were swallowing filthy, warmish water.

Before their eyes there started to float yellow, spotted circles. In their ears a singing started.

Gently, gently, a ringing commenced:

"Te-ee-ee-eet!"

Another second and they would have been suffocated but, just then, something threw Karik and Valya violently upwards and their lungs were suddenly filled with air.

Having breathed deeply several times, Karik opened his eyes. He could see the wet frightened face of Valya. She had her mouth wide open, was struggling to say something, but nothing but water came out.

The children were dangling in the air. A huge hairy paw held them high above the water.

It was now possible to breathe, but above their heads instead of the friendly blue sky and jolly sun, there hung a dark vault covered with mould. Black sinister walls rose from the water.

Valya started to cry.

"Now, now! What's the use?" said Karik, mournfully. "Everyone has to die some time. Don't cry, Valya."

But he started to sob himself, and Valya cried all the louder.

The dark water started to bubble. It appeared to be raising itself into a lump. The lump split open and slowly there appeared a fat, dripping carcass. Streams of water ran off its huge rounded sides. Then beside the monster there appeared hairy legs and at last the children saw through their tears — a giant spider!

It was rocking in the water looking at the children with cold, wicked eyes.

Eight small, unwinking, snake-like eyes gazed at the children, noticing their every movement.

Karik and Valya tried to tear themselves away but the spider squeezed them so rightly in its claw that they could not even cry out.

The eight-eyed monster turned the children upside down and then quickly turned them back again and started to whirl them about.

Everything went dark about them, their ears sang.

Karik and Valya lost consciousness.

#### **CHAPTER IV**

Professor Enotoff goes into another world — The problem of a simple spider's web — The first hunt — The coat of armour and the spear — The trap — The Professor in danger

#### PROFESSOR ENOTOFF STOOD AT THE TOP OF A GREEN HILLOCK.

His white trousers were smeared with tar and clay. His tie stuck out sideways. A crumpled hat sat on the back of his head revealing a red and perspiring forehead. Dry twigs were sticking out of his beard.

In one hand he held a small plywood box. In the other, a long thin pole. At the end of this pole a red handkerchief was tied, which fluttered in the breeze like a flag.

"Oo-oof!" puffed the Professor, looking around. "This appears to be the place."

Below at the foot of the green hillock a quiet, sleepy pond was shining in the sun. The water-lilies on the blue motionless surface hardly stirred.



Beyond thick clumps of reeds fish were rising.

The Professor put the box on the ground and stuck the pole in beside it.

"Now we must begin," he sighed, and having thrown his hat on to the ground started to tear out grass with both hands.

Having torn out a whole armful he carefully covered the plywood box with grass then went up to the pole and thrust it in deeper, then pulled it from side to side.

The pole stood up firmly.

"Excellent," said the Professor to himself.

Thrusting a hand into his pocket, he pulled out a small round bottle. Silvery bubbles were rising from the bottom colliding and bursting.

He then undressed, throwing his clothes carelessly on the grass and opened the bottle with the silvery liquid.

"I think this should be quite sufficient," he said aloud, looking all around. Then he sighed sadly and, throwing his head back, drank the contents of the bottle in one gulp.

"Well, that's that," he muttered, and, with a swing of the arm, threw the empty bottle into the pond.

For a little while he stood thoughtfully gazing at the broad circles which were chasing each other on the surface of the water close by. Then he walked down towards the pond and . . . melted as it were into nothing.

There, where quite a large man had been standing a moment ago, was now just a pole sticking up with a small red flag on it. Around the foot of this pole were strewn a crumpled coat, waistcoat, trousers, shirt, boots and striped socks.

\* \* \* \* \*

What had become of the Professor?

Having swallowed the liquid he had stood for a while and then started to move step by step in his bare feet.

Soon everything around him had started to change in a miraculous fashion.

The grass had shot up with amazing swiftness. Each blade had grown up, ballooned out, becoming all the time thicker and taller.

Hardly had a minute passed before a thick forest was rustling around him. Shining green trunks surrounded him on all sides.

Each tree was like a gigantic bamboo.

High above the tops of the trees huge cups were swinging — red, yellow, blue in colour, scattering over the forest a golden powder from which there came a spicy, intoxicating smell.

"Well, well!" said the Professor, wiping his hands. "I knew it would be like this. This grass forest, of course, puts one in mind of the tropics."

In this extraordinary forest there was neither the shade nor quiet of a pinewood, nor was there as in a birch wood the murmur and rustle of leaves.

No, this was a peculiar forest.

It gleamed green and sunny. Bare glistening trunks rose from hillocks or disappeared into ravines.

A blue lake was shining and streams could be heard quietly gurgling.

The silence was now and then broken by strange rustles. It seemed as if somewhere quite close beside some beast was stalking the Professor.

The going was difficult. Sharp leaves scratched his body. Every few minutes he fell into some hole. The sun was baking and it seemed to the Professor that he was taking a walk in an oven. The surface of the earth in the forest was like a battlefield torn up by artillery shells.

In the thick undergrowth here and there hung sticky nets and he had to be very careful getting around these traps.

"Spiders' work," muttered the Professor, forcing his way through a thicket.

Now and again he stopped and stood for some time watching with curiosity the skilful work of this forest weaver. But in particular he examined attentively the countless blobs which were liberally scattered all over the web. He naturally was aware that it was not the net which caught the insects but these tiny, sticky blobs. The wings and legs of an insect stuck to them just as if the blobs had been carpenters' glue, after which the insect was an easy prey for the spider.

The Professor knew all this a long time ago, but it is one thing to know and another thing to see it all with ones' own eyes.

Thus a whole hour passed, but he had quite forgotten where he was and why he was there.

It seemed to him that he was back in his study bent over a microscope and in front of him his old acquaintances were passing, one after the other.

But what a microscope! You can hardly see a whole spider at once through the eye-piece of a microscope.

Certainly not.

A microscope just allows one to see the eye of the spider, or a tip of its legs, or its claw resembling a comb, or the blob in its web.

But here in front of the Professor was sitting the whole spider, big as an ox, and it was possible to see at one and the same time all its eight eyes, two jaws, eight legs with comb-claws, as well as its soft distended belly.

But what pleased the Professor most of all was that the spider was alive and was hunting.

Under a microscope, even the most perfect microscope, it was impossible to see how a spider hunted its prey, but now the Professor was able to watch this from arm's-length.

The spider was hunting.

It hid itself, huge and soft, near the spread-out web from which there stretched directly to it a sentry thread. The spider sat like a fisherman on the bank and waited.

There, there! the thread was shaking and the spider hurled itself on its prey, drove its poison-carrying beak into it, killed it, and sucked the blood out of it.

The Professor gazed at the spreading net and forgot everything else in the world.

Suddenly in the air above his head something buzzed like a shell from a gun and crashed into the net with a whine.

The net shook and danced up and down.

"Aha," snorted the Professor, "that's a fine one."

In the net a huge-winged animal struggled, twisting and floundering.



It was bigger than the spider, certainly longer; transparent wings covered with veins bent into an arch trying to tear away from the sticky blobs of the web; but tearing away from such a net was not so simple.

"A wasp! Ah, yes, the very thing," announced the Professor to a class which was not there, and walked right up to the net.

The spider resting on its comb-like feet quickly slid across the web, combing it with his feet as one does one's hair. He ran around the wasp once, and then again, and then cautiously started to creep up behind it.

The wasp lunged out with its sharp sting.

The spider leaped back and began to run around the wasp. It had only to start approaching the wasp when the latter would twist its striped body around and threateningly stab with its smooth sharp sting.

The spider tried to come upon the wasp from the back and from the sides, but each time the sharp sting flourishing like a spear met him.

"Curious, very curious!" muttered the Professor, watching the wasp and spider fighting.

At length after useless and fruitless endeavours the spider had to give up the battle with its dangerous prey.

Describing a wide circle, it fussily ran around its web shaking it and making the wasp jump about as if it were in a cradle.

The wasp struggled more furiously.

Running around the wasp the spider then hastily broke thread after thread. At length the wasp enveloped in web crashed down on to the ground on the edge of a ravine.

Helplessly floundering and becoming more and more entangled it rolled down to the bottom of the steep slope, and after it clattered stones and earth.

"Ha, ha! Now that is excellent," rejoiced the Professor. "That just suits me."

He ran to the edge of the ravine and looked down.

At the bottom of the ravine the huge wasp struggled and twisted, covered with web. It twisted its striped body rocking on the ground trying to get clear of the web, but the web clung to its wings, feet and head all the more closely.

The Professor hurried along the edge of the ravine carefully looking at his feet. He was after something.

At last he found a big rock with sharp corners. He could not possibly lift it. It was several times as big as himself. But as luck would have it, it was hanging over the edge of the ravine. It just needed a good rocking and a shove and it should fall down to the bottom of the ravine.

The Professor got a good foothold and started to try and shake the rock. It wasn't at all light work. The rock stirred and shifted like a rotten tooth, but for all that it held firmly.

The Professor puffed like a steam engine. "You're going. You're going," he muttered, shoving the rock with his shoulder. "You're moving, that means you will fall."

Only five minutes before he had expected to give this stone one shove and it would fall but now it appeared not so simple.

"We will rest a little," he said, breathing heavily and wiping his perspiring face with the back of his hand.

He sat down on the stone.

Almost immediately above his head the spider was scurrying backwards and forwards making a new web. On the underside of the spider he could see four mounds distended like wine skins.

"Spinnerets," the Professor remembered.

Each of them was considerably larger than the Professor's head.

He could see without any microscope hundreds of holes in the spinnerets, out of which were oozing drops of thick liquid. These stretched out like threads dragging behind the spider and came together in a thick rope with shining blobs on it.

In a few minutes the spider had finished the repair of the torn net and having immediately attached to it a sentry thread went off to the edge of the web in a comfortable corner.

"And what am I up to?" the Professor angrily jumped to his feet.

He summoned all his strength, pressed his shoulder to the rock and his feet to the ground.

"Now we'll get you!"

Push.

"Hah, hah! We'll give it to you! Ho, ho! There!"

The rock swayed, hung over the ravine as if thinking, and suddenly with a rumble and roar crashed downwards raising a thick cloud of dust.

When the dust settled, the Professor shouted loudly.

"Hurrah!"

The rock lay at the bottom of the ravine.

Under it the crushed wasp waggled, convulsively straightening its legs.

Its long striped body now compressed itself and now expanded like the bellows of a concertina.

"Good! very good!" said the Professor, wiping his hands.

After a little thought he lowered his feet over the edge of the ravine and, holding on with his hands to roots and protruding stones, he began cautiously to climb down to the bottom.

When he got to the wasp it no longer moved, the Professor kicked it with his foot and touched it with his hands — the wasp did not stir.

"There we are!" he said, and whistling something unrecognisable, calmly set about his work.

He had to work a whole hour before he succeeded in pulling its long spear-like sting out of the wasp's body.

"A capital weapon!" he said, wiping the sting-spear with his hands.

With such a spear it would not be so terrifying wandering in the grass jungle looking for Karik and Valya. In case of an attack the Professor could not only protect himself but actually set about anything that might think of eating him.

Now it became necessary to think about clothes. Whatever else might happen the Professor was quite unprepared to journey through the wood naked.

Skilfully wielding the sharp spear he cut the spider's web in which the wasp was entangled, carefully cleaned it from sticky blobs and wound it around himself until its soft silky rope fitted tightly around his body.

The suit was not very beautiful but it would be very hard-wearing.

"Just as if I was in armour!" said the Professor, looking at himself in his new apparel with great delight.

Throwing the spear on his shoulder he jauntily set off on his journey.

Tramping across the pitted earthen floor of the forest from time to time he stopped and as he was deciding on his path he listened. Sometimes having heard a noise he hid himself behind one of the huge green trunks looking anxiously from side to side.

Such precaution was not unnecessary.

The grass jungle teemed with monster animals.

Rattling like sheets of iron, dragonflies flew over more like aeroplanes than simple insects.

Jumping over the tops of the trees green grasshoppers zoomed past as big as motor buses. Between the trunks there slid striped caterpillars shaking the undergrowth with their bodies. They were so big that they gave the impression to the Professor of something like a goods train passing through the forest.

Now and then stamping their feet centipedes ran past. Any of them might squash the Professor into the ground with one foot.

He had neither the time nor the inclination to fight with these animals of the grass jungle.

He decided to go into battle only if one of these monsters attacked him.

He travelled on towards the lake which showed blue through the gaps in the trees.

As he went from tree to tree he looked with interest at the huge flowers, trying to guess their names. But now he found he could not say with any certainty which of the flowers was a daisy, which a buttercup or marigold.

All the flowers were so immense that many of them conveyed nothing at all to the Professor, which amused him.

"Now that, for example," he sighed, looking at a blue ball resembling a stork's nest. "What is that called in our world?"

But who was there now to answer the Professor's questions?

Above the top of the forest quietly rocked pink jars, gigantic yellow stars, red globes, blue baskets.

Out of the red globes tubes of beetroot red were sticking, like the prickles of a hedgehog.

"What on earth is that?" the Professor puzzled and, suddenly hitting his forehead with his hand, he shouted laughingly — "Clover! Ordinary red clover!"

Beside the clover flowers there swung in the wind, shaking and dancing, lilac bells. They were lit up by the sun, and the ground under them also seemed lilac.

"Now I do know you?" said the Professor, happily. "Some poetry has actually been written about you." And he sang at the top of his voice:

"My tender little Harebells, Who bathe the steppes in blue, Your gaze seems full of deep spells With its dark, mysterious hue."

"You can gaze at me as much as you like," grinned the Professor, "but if one of your "dark, mysterious" flowers gets torn off and falls on me, I'm a gonner."

Thus did the Professor observe with great interest a new and unfamiliar world as he picked his way through the grass jungle, stopping every so often to rest.

Soon there was revealed before his eyes the smooth surface of a lake stretching away without bounds.

The water sparkled in the sun like a gigantic mirror.

"This must be it," said the Professor, thoughtfully and holding his spear more firmly he quickened his steps.

He came out of the grassy forest.

Across his path there was running a long narrow ditch filled to the edges with brown water.

The Professor took a run, jumped and cleared the ditch quite easily, but as he landed he felt the ground sliding away under his feet and opening up.

He gave a cry and with his legs waving in the air vanished into a dark hole.



Having fallen to the bottom he quickly picked himself up and started to walk around.

Over his head far away was the blue sky. A weak light lit up the walls of the hole which appeared thickly matted with roots. Immediately in front of him the Professor could see the mouth of a dark tunnel.

He bent down.

The tunnel breathed at him dark and cold.

"That's that," said the Professor.

He turned away from the tunnel and started to climb the hanging wall of the hole, getting grips for his hands and feet in the roots.

He had practically reached the top and -it remained only for him to stretch out his arm and the sun would once again have been shining on his head, but at the very moment when his head was appearing out of the hole he spotted right in front of him the hideous snout of some sort of monster. "Excuse me," hiccupped the startled Professor, and hastily ducking his head disappeared back into the hole.

The monster, his great feet moving, approached the hole.

The Professor's eyes met the eyes of the monster.

"A beetle," he almost shouted, "a dung-beetle." Beside the beetle he saw an immense grey pear-shaped object. The beetle turned to the pear-shaped object and set about shoving it towards the hole.

The Professor had not succeeded in remembering the Latin name for the beetle, when the grey pear toppled over the edge of the hole and shut out the sky.

It was now pitch dark in the hole.

The Professor, frightened, quickly clambered up the side of the hole and tried to push the pear away with his shoulder and head, using every ounce of his strength. He tried to work his way out of the dungeon, but all in vain.

The pear would not budge.

He shoved harder, but at that moment the beetle was pressing on the top of the pear with such violence that the pear drove down into the hole like the cork in a bottle.

The shock flung the Professor downwards.

Earth came crumbling down on his head and a sharp stem hit him a painful blow in the chest.

"Ow!" he croaked and, rubbing his injured chest, he made to get up.

Suddenly he realised he was not alone in the darkness of the hole.

He hurriedly gazed around.

Behind his back something rustled as if it was slowly and cautiously stealing up to him.

He felt around with his hands. His fingers touched his spear. He grasped it tightly, and quickly jumping to his feet pressed his back to the wall.

"Ts-z-a-a-k" Something sounded right beside him.

The Professor heard breathing — hesitating breathing.

He started to wave his spear in front of himself and then hoarsely shouted. "Who is it? Who is there?"

## **CHAPTER V**

In the Spider's lair — The battle in the under-water prison — Valya finds it stuffy — A vagabond vegetable — Karik finds a way out

KARIK BECAME CONSCIOUS. HE OPENED HIS EYES AND THEN suddenly it all came back to him. He remembered how he had flown with Valya on a dragonfly. He remembered the ghastly snout of the water skater and then the strong hairy legs of the spider.

All around it was dark and there was a rank smell. Some way below beyond his feet water quietly lapped and just beside him someone breathed softly.

Karik lay stretched out at full length, but what he was lying on he could not make out. His head sang, his arms and legs were tingling with pins and needles, his eyelids seemed too heavy to open.

He groaned and then immediately recognised the frightened voice of Valya.

"Quiet! He is here!"...

Karik quickly turned his head and bumped his forehead on Valya's temple.

Valya made a choked shout.

Karik tried to move away from her but could not. Someone had wound a thick cord round them from their feet to their heads fastening them securely together.

Karik tried the harder to escape and suddenly as a result of a furious wriggle he and Valya started to sway from side to side as if they were in a swing.

"Quieter!" whispered Valya, hurriedly. "Please be quieter! It's — it's just below us."

"The spider?"

"A — ay — It has just carried us here — I heard — "

"Aren't you frightened?"

"Not half! Aren't you?"

"I am, but look here, don't cry. Let's try to escape first of all."

Karik moved apart the loops of the cord with his head and peered around. Below there lay the dark water out of which rose up black smooth walls and overhead was a sloping roof.

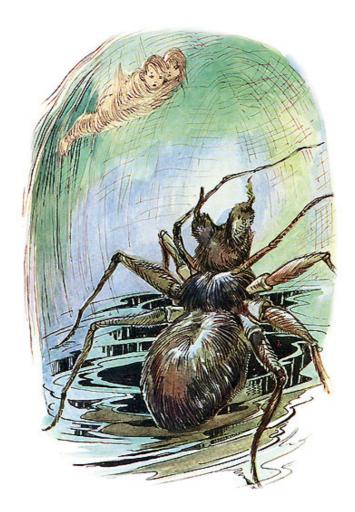
The children were hanging in mid-air in the den.

"What do you think!" whispered Karik. "It's hung us up — fastened us to the roof."

"M-m" nodded Valya, "it hung us up. I thought as much."

"But what for?"

"I've been trying to think. What for?"



"Well, haven't you thought of anything?"

"No "

Karik succeeded in pulling first one arm and then the other out of the spider's binding cords.

"What are you doing, Karik?"

"Be quieter! Shut up!"

Trying not to pant, Karik in the end freed his head and started to look below.

Just immediately below the children the spider was scurrying about. It ceaselessly moved about in the water along the walls of the den stopping from time to rime as if listening for something.

From the roof above huge drops of water formed and broke off to fall with a splash into the water throwing up showers of spray to the roof.

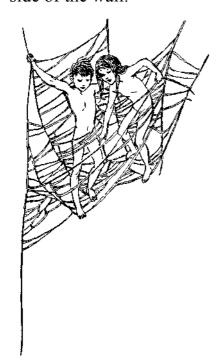
Karik was able to distinguish a dull noise coming from somewhere.

Somewhere right beside them — just behind the wall it seemed — something was not exactly knocking and not exactly scratching.

It was as if someone outside was moving around feeling the wall looking for a door.

This noise definitely was disturbing the spider. It would first of all start climbing the wall and then moving its long legs would back away from the wall.

"Do you hear?" said Valya, quietly. "Something is moving the other side of the wall."



"Yes, yes," whispered Karik. "I hear it." The noise started to get louder and louder. It seemed as if someone was beating on the wall with soft but heavy fists.

"Something is trying to get in here!" breathed Valya. At that moment the walls of the underwater house shook so vigorously that the children in their spider's cradle were shot upwards. The cradle struck the wall and started swinging like a pendulum. "Look! Look at the spider!" whispered Valya. The spider had pushed itself into the centre of the water and was ceaselessly moving its feet as if feeling something and gazing with all its eyes at the wall of its den.

And suddenly the wall split open, there was a shower of pieces of plaster-like earth

into the water. In the gaping wall there appeared huge hairy feet.

The feet once again tore at the wall. The under-water house shook and rocked. The cradle with the children was flung from side to side.



The wall crashed down. Amid the noise and splatter another spider as like the owner of the den as are two peas, burrowed its way into the den. It gathered its striped legs underneath its body as if preparing for a spring and slowly started to advance. The owner of the den waved its feelers. The spiders looked at each

other for a moment or so. Then the owner raised its feelers and violently hurled itself at the uninvited guest.

In the darkness there commenced a bitter struggle. Feelers whistled through the air and smacked the water. Spray flew up to the roof and soon the walls were covered with shaking drops of water.

The battle of the spiders shook the underwater den. The walls quivered and the roof rocked.

The children were flung up in the air, hurled first to the right and then to the left.

Before their eyes were glimpses of wall, roof, spiders, water and then again wall, roof, water.

The spiders fought silently. They hugged each other with long legs swaying like wrestlers from side to side, then jumping backwards away from each other would once again dart at one another. Then with a swish there whirled up to the roof a torn-off leg. It got caught in the spider's fastenings and hung swinging above the heads of the children.

Karik managed successfully to dislodge it. Rocking in the water the mutilated spiders separated for an instant and sat breathing heavily near the wall; but then once more they hurled themselves at each other.

Once more the water foamed noisily and the walls of the little house shook from the blows as if there had been an earthquake.

The children followed the battle of the spiders with fear, hardly daring to breathe.

The spider fastenings became slacker as a result of the violent jerking. Now it became possible for Karik and Valya to wriggle out of their rope cradle. First Karik climbed out and quickly grasped the rope which led from the roof to the cradle.

"Come on Valya," said Karik, "get out."

Valya stretched herself upright to her full height and stood by Karik.

"Do you know what," she said, "we must look for something."

"What for?"

"Some sort of stick to defend ourselves with."

But wherever the children looked they could see nothing in the den except the bare walls.

"What about the leg," said Valya, "we might use the leg over there, there is the torn-off leg floating." She pointed her finger down to the dark water on which mangled legs of the spiders floated.

"Oh! Valya," Karik whispered cheerfully. "Look, I believe they have killed each other!"

The children stretched their heads down.

On the dark surface of the water there floated, moving ever so slightly, the mutilated bodies of the spiders. Waves were pushing them towards the hole in the wall and they rocked side by side, no longer paying each other any attention. The spider-owner of the den made one more attempt to move but its head dropped helplessly into the water — dead.

It became quite quiet in the under-water house.

"They're dead!" cheerfully shouted Karik.

He bent over, stretched his head out and spat first on to one spider and then on to the other.

Neither spider budged.

The children looked at each other: were they dead or were they not dead?

Karik shouted.

"Ehey-hey-hey!"

The spiders floated like leather cushions blown out with air.

"They're dead!" said Karik, now quite certain and having measured with his eyes the distance to the water he let go the rope. Arms and legs gleamed in the air, and Karik hit the water like a stone.

"Karik! Lunatic!" screamed Valya, gazing at the fountain of spray shooting up at her.

Karik's head appeared above the water: having emerged he looked around and swam towards the spiders.

"Karik," screamed Valya, "come back! They are still breathing!"

But Karik, paying no attention to the cries of his sister, swam up to one of the spiders and lifting his arm out of the water struck it violently in the tummy.

The spider's tummy made a noise like a drum. Karik quickly swam away but, having looked at the spider, came back again and hit its head with the heel of his foot. The spider never budged. Then Karik climbed on to the carcass as if it was a raft. and stood upright.

"Jump!" he shouted, waving his hand at Valya.

"No!" Valya shook her head, "it's too far!"

"What are you going to do? Sit up there for ever? Whatever happens you will have to jump. Come on, jump!"

Valya sighed deeply.

"Jump quickly because maybe new spiders will come and we shall be even worse off."

Valya closed her eyes, flung up her arms and plumped downwards, letting out a sort of squeak.

A shower of spray hit Karik and waves rocked the spiders. Blowing and puffing, Valya came up out of the water.

"Climb up here!" shouted Karik, drumming with his feet on the distended tummy of the spider. "Don't be afraid! Give me your hand!"

Valya swam over to the fearsome carcass, touched the spider's huge, hairy body with her hand and immediately drew her hand back and screamed with fright.

"It's mo-ov-ing!"

"Don't tell lies! Nothing moved!" Karik grew angry. "Come on! quickly!"

At last after much persuasion, Valya took the hand stretched out by Karik and he pulled her up on to his floating island.

The spider never budged. There was nothing to fear. Valya squatted down and started to wring out her wet hair, but Karik stood upright and began to examine the gloomy lair of the spider attentively.

"We must get out of this," sighed Valya. "We must find a door."

"There's a door." Karik stretched out his arm towards the dark hole in the wall.

Throwing his arms up above his head he jumped into the water and quickly swam towards the hole in the wall.

Valya watched Karik with some agitation and when he vanished in the darkness she yelled.

"What's up? What's there?"

Karik did not answer.

Valya suddenly looked at her feet and grew pale. It seemed to her that the spider was beginning to move.

"Ka-ari-k!" — She shouted.

Her voice carried along the curve of the roof and died away.

"Ka-a-ri-k!" shouted Valya, still louder. She was just about to jump into the water and swim after her brother but at that moment Karik reappeared in the dark hole.

"What are you shouting about?" he asked angrily.

Seeing Karik alive and uninjured, Valya became calm. She gave her hands to her brother and, helping him up on to the spider, asked:

"Well, what did you find? Is there any sort of door?"

"No. It is the same sort of den as ours," answered Karik, shrugging his shoulders.

"Is there anything living in it?"

"Nothing."

Karik sat down with his knees up to his chin and clasped his legs with his arms.

"And there is no door?"

"No!"

"But suppose we dive under the wall, Karik?"

"Under the wall?"

Karik bent and, hanging his head, started to stare at the dark waters.

In the depths of the water he could dimly see the slimy bottom of the pond. Silvery spider threads stretched from the slime to the edges of the under-water den, making it impossible to dive out.

"We must dive under the wall," repeated Valya. "But do you see that?" And Karik pointed with his hand at the net stretched under the water, preventing either exit or entry to the prison. Certainly not! To dive into that would be terrible.

"There must be some door!" said Karik. "How did we get in here otherwise?"

Valya now began a sort of panting noise.

Karik peered at her and then quickly seized her hand.

"Valya! what's up?"

Valya sat there very pale with her mouth wide open, holding her throat with her hands.

"I can't breathe," she croaked, "there — there's not enough air."

"All right, all right!" Karik muttered in confusion. But he did not know how to help his sister, and in fact he himself felt a dragging in his chest which tugged at his ribs till they hurt. "I can't get enough air either," panted Karik. He breathed faster and faster, his ears began to sing, his heart beat as violently as if he was running up a steep high mountain. The damp, heavy air filled his lungs, making breathing more and more difficult. Something had to be done.

"Don't be frightened!" he panted, touching Valya with his hand.

"We'll get out somehow!" And once again for the hundredth time he started to examine the under-water prison.

Karik's head started to go round. He bent over, scooped up the stagnant water, splashed it on his face. Suddenly his arm stopped in mid-air.

He had spotted two enormous green eggs on the slimy bottom to which they were attached at one end. One of these eggs started to move and slowly came free of the mud and floated upwards striking the edge of the under-water den disappeared upwards somewhere. In the same way the second egg floated up and disappeared.

Karik stretched out a hand to Valya and said with a trembling voice.

"Frogbit buds? Do you see?"

He had made no mistake, they were the "winter buds" of frogbit — a water plant.

Karik had seen these many times when he was in the big world and now recognised them without special difficulty.

Frogbit — a creeping water plant — travels about lakes and ponds all the summer blown by the wind from bank to bank. Its roots like strawberries' runners obtain nourishment direct from the water. At the end of the summer young shoots appear with runners. They rise out of the surface of the water and break into leaves resembling a heart as one sees drawn in pictures.

In winter the frogbit plant is frozen in the ice and perishes. But before this it succeeds in strewing the bottom with its amazing winter buds.

All the winter the buds — looking like green eggs — remain on the bottom. But as soon as there comes a day sufficiently warm they become blown out with gas and one after the other float up to the surface of the water, and once again become water creeping-plants.

It was these seeds that Karik had spotted.

Seizing Valya by the hand, he spluttered.

"Listen! These things rise like corks. We must dive and hold on to one of them. They will then carry us up."

"But the web? Look at all its ropes under water."

"All the same we must try. Now dive. Quickly!"

Just at this moment a gigantic green egg was stirring on the bottom. There was no time to think. The seed came away from the black mud and started to float up.

"Dive!" shouted Karik.

Valya summoned all her strength. Having taken a deep breath she shot off the spider and disappeared beneath the water. Karik watched her dive under the wall, seize the huge frogbit bud with both hands, and disappear upwards with it.

Karik dived after his sister. Opening his eyes beneath the water, he made for another green torpedo. It started to move. He put his arms and legs round the broad slippery sides and at once began to spin round. After turning round several times the torpedo started suddenly to move upwards through the mass of water above.

To Karik holding his breath there seemed to follow an age of floating upwards, boring as it was through the water. Another moment and his heart would have burst from lack of air, but as luck would have it the green torpedo suddenly bobbed out of the surface of the water.

Blinded by the clear light, with the hot rays of the sun beating on his face, Karik floundered in the water and breathed — at last. At last he could breathe easily. Great lungfuls.

Beside him, Valya was floating gulping in the clean fresh air with the same greed.

"Ah, Valya," Karik shouted again, "you're alive and breathing."

"I am breathing!"

"The main thing is, don't be frightened of anything," said the happy Karik. "Don't get depressed, don't whimper and, above all, don't cry. If you and I can succeed in getting away from such a terrible spider — well, it means we should succeed in finding our way home."

The poor children had no suspicion of what they had still to survive in this unfamiliar world and what dangers they had still to face on their journey homewards.



## **CHAPTER VI**

Daring navigators — Strange passengers — Karik and Valya penetrate a watery jungle — The search for food — The children find berries — But then!



RAISING THEIR HEADS ABOVE WATER THE CHILDREN LOOKED all around them. Everywhere as far as eye could see there seemed to stretch the blue sheen of the water, and it was only in the west where now the sun was setting there appeared the serried top of a dark bank of forest.

Above the forest clouds were rolling.

"We must get ashore somehow," said Karik, "and then make for home."

"Can we ever get to the shore, do you think?" asked Valya, eyeing the distant bank.

"Certainly we can get to the shore," said Karik, perkily. "We must make use of these things. Climb on to your bud!"

The children clambered on to the green torpedoes.

Karik shouted:

"Row with your feet."

The children started to paddle with their feet trying to get into motion, but the buds just bobbed about and did not move.

"Stop!" shouted Karik. "Come over to me. We'll row together."

Valya swam to her brother. The frogbit bud was now loaded so that more than half of it was under water.

"Row!" commanded Karik.

The children keeping time together pulled their arms through the water like oars. The bud wobbled and then started to move slowly forward.

"We are going ahead!" shouted Valya.

"Full speed ahead!" ordered Karik.

At first the bud went from side to side, to the right and then to the left, but soon this matter was put right.

Cutting the water with its sharp nose, the green torpedo sped towards the shore like an ordinary boat. The children drove it forward energetically, labouring with their arms.

In the distance ahead something panted and struck the water not exactly like a plank of wood nor like oars of a boat. The nearer the children got to the shore the more distinctly could these noises be heard and then quite beside them something roared.

"Qua-a-a-ha-ha," came the sound across the water. Valya trembled and nearly fell off the bud.

"Whatever is that," she whispered, stopping rowing.

"A frog! It must be a frog. Just an ordinary frog. But bigger than a five storeyed house. Don't be frightened!"

"Yes," said Valya thoughtfully. "Just an ordinary one — but even a fly could eat us, let alone a five-storeyed frog."

"Don't fret," Karik comforted his sister. "A frog like that will never notice us."

Valya became silent.

The children were now rowing towards inlets which could be seen cutting the line of the shore.

Bright green glistening islands seemed to rise up out of the water. They rocked slightly as if they were rafts moored at buoys. It was necessary to keep a sharp look out to prevent running into one of them.

"What do you think that is?" asked Valya, pointing at one of the islands.

"I don't know," answered Karik, undecidedly, "must be some sort of leaves — surely water weeds."

Now to the right and now to the left of them round animals with smooth, polished backs like motor-car bodies rose suddenly out of the water. They were in fact as big as motor-cars.

Stretching out their wings the creatures flew upwards and then just as suddenly plunged back into the water, raising a fountain of spray.

On the surface of a broad channel between two islands the children saw a brown striped monster with long, bent legs. It hurried backwards and forwards sliding over the water on its round, podgy body.

On the back of this podgy-bodied brute there were sitting five little reproductions of the beast only much smaller.

The little ones sat there quite calmly.

From time to time the striped brute fished something up out of the water. Then the little ones in one wink slid off into the water, and in a trice climbed back again. In their paws they clasped pieces of some sort of food which they quickly devoured.

"Another sort of spider!" groaned Valya, stopping rowing. The seed stopped and lazily rocked in the waves.

"And on its back are its young," said Karik. "We had better wait a little. They have our permission to move on!"

But at that moment another similar spider shot out from behind one of the islands. It was the very same brown and also had stripes. There were young ones moving on its back too.

The spiders hurled themselves at each other.

They were wolf spiders, beasts preying on the surface of the water.

They jerked each other savagely. The little spiders were thrown like tops into the water. Whilst the big spiders were fighting the little ones skidded about the water in confusion, coming together into a cluster and then separating in all directions.

Then suddenly the battle finished.

One of the spiders started to sink in the water. The spreading ripples reached the young ones and rocked them up and down.

They bobbed on the waves just like ducklings without feathers.

"Now the young ones will fight each other," breathed Valya. But the young ones seemed hardly interested in the fight. They fussily charged about the surface of the water, one following the other, tumbled head over heels, and then suddenly they all made a rush for the victorious spider and, jostling each other, nimbly climbed up on its back.

Karik and Valya looked at each other.

"What do you think of that!" exclaimed Valya. "Will it throw the strange young spiders off its back or not?"

But the wolf spider did not even notice that it had twice the number of passengers aboard.

It rested calmly on the water with its long legs apart waiting whilst the youngsters settled themselves down. When they were all, to the last one, seated it moved off as if nothing had happened and quickly vanished amid the labyrinth of islands. The children rowed on further.

"Interesting," said Valya, thoughtfully.

"What's interesting?"

"It is interesting what those little spiders were eating."

Karik shrugged his shoulders.

"Some sort of rubbish!"

Valya sighed. She was remembering that she had not eaten anything since the day before — no breakfast, no lunch. So she said.

"Maybe it isn't quite rubbish. To begin with, maybe it would taste nasty, but then one would get used to it — and it would be all the same. Then one might get very fond of it."

It was time for the evening meal.

The children grew thoughtful.

What would be happening at home now? Granny would undoubtedly be laying the table. Mother had said yesterday:

"Dinner to-morrow will be a special one. You mustn't be late."

"What do you think there is for dinner at home to-day?" asked Valya.

"I believe it is cold soup and onion and egg pie."

Valya swallowed the water her mouth was making.

"Or maybe it's hot soup with pork or ham or sausages in it. Then for a second course beefsteak with onions and roast potatoes. What would you like most to eat?"

"1?"

Valya thought a little and said:

"I could eat a crust of bread and a little cheese."

"I would prefer a beefsteak," said Karik, "only a big one, like a plate. And masses of potatoes and a green salad and afterwards I believe I should have little difficulty with a whole pie and some strawberry tart. Then . . ."

Valya stopped rowing. She turned to Karik and asked:

"But what are we going to have for dinner to-day?"

"To-day it will not be convenient for us to have dinner."

"But then what for supper?"

"It is not really convenient for us to have supper to-day."

"Then breakfast?"

"We cannot have breakfast."

"What will be convenient?"

"Nothing," said Karik, grumpily. "The most convenient thing is not to think about it."

Valya sighed.

"Come on, row! Let's get to the shore as quickly as possible!" shouted Karik. "We'll find something ashore."

"It would be nice to find a strawberry. It would be ten times as big as us. Certainly would be as big as a haystack. Do you know we only need one berry and we could make a hole in it and live in it. Then we could just eat the walls and the ceiling."

"Don't chatter." Karik frowned. "Row up and we shall see when we get there."

Valya became silent.

With their arms and legs swinging in time, the bud spurted towards the shore with a bow wave in front and long widening tracks like whiskers in the water stretching away behind.

The shore grew nearer every minute.

Higher and higher rose the forest out of the water, and it seemed as if it was floating to meet the children.

"Row as hard as you can!" shouted Karik.

"I am going full speed ahead," panted Valya.

The bud flew forward like an arrow. Within an hour a huge reed forest had risen up before the young travellers shutting out the sun. A heavy cold shadow covered the water and the water itself in the shade by the forest was chilly unlike that in the sun beyond.

The bud sped on between huge bamboo-like trunks which rose straight out of the water and disappeared into the sky itself.

"Row gently!" commanded Karik.

"But why?"

"There is some animal here! Can you hear?"

The children stopped rowing.

Karik put his finger to his lips.

Looking at each other apprehensively the brother and sister silently listened to the unpleasant sound which was proceeding from within the forest.

The curving trunks swayed, rubbed one another and made loud scraping noises. In the dark recesses of the forest which breathed coldness and damp some animal noisily splashed about, something else jabbered and whined menacingly.

The forest stood like trees in a flooded field. Through the clearings glistened the blue background beyond which the wall of trees rose thick and solid.

On the surface of the water between the reed trunks strange, quickfooted animals moved hither and thither and in pursuit of these there hurried other animals bigger and more terrible. When they overtook their prey they pulled it to pieces and immediately devoured it.

"Ye-e-es!" Karik whistled softly.

Valya understood him without further words.

Looking at her brother, in fright she whispered:

"We must go back? Now."

"Back where?" muttered Karik, and thinking a little. "We must get to a shore where there are none of these brutes. Let's go and look for another."

They betook themselves back into open water and drove the bud along the edge of the reed forest now and then looking around and endeavouring all the time to get further away from it.

"Do you know what!" said Valya. "I propose that this bank be called 'Nightmare Jungle'."

"That's just stupid!" said Karik.

"Why stupid?" Valya was offended. "All travellers give names. I have been reading about this in Jules Verne."

Karik did not answer. Looking at the reed forest past which they were moving, he whistled some very melancholy tune.

"Or else," said Valya, "it could be called 'The Forest of Bloodsome Mystery'."

"All right, all right!" barked Karik, "watch your rowing!"

The reed forest gradually receded and soon had completely disappeared. To the right there now stretched a desert-like shore covered with yellow stones which glittered in the sun.

It was so hot that all living creatures seemed to have hidden and must have been sheltering under leaves and stones, and the children now rowed on without meeting any sign of life.

The way was clear.

Karik grew happier.

"Now that shore," he said, pointing with his hand at the stony waste, "I would call the 'Cape of Good Hope'."

"Why Gape? I don't see any Cape."

"That is unimportant," answered Karik, steering the bud towards the shore, "as we explore it we are sure to find a Cape sooner or later."

"But I. . . . "

"I am going to beach the bud!" yelled Karik, splashing water in Valya's face. "Re-eady!"

The children gave one final paddle with their arms and the green torpedo stranded on the stony shore.

With the violence of the bump the bud turned over. Karik and Valya found themselves suddenly in the water, but quickly jumped up and catching hold of the projecting yellow cliff scrambled ashore.

The rocks were hot from the sun. Valya sat down on one only to leap up again.

"What's the matter? Did it bite you?" grinned Karik. "What are you going to call that rock?"

He put up his hand to shield his eyes like the peak of a cap and gazed around himself.

"Do you know what . . . .?"

"What?" replied Valya, timidly.

"These rocks are just sand. When we were big it seemed minute, but now each grain of sand has become like a rock for us."

"What then?"

Karik sighed and said.

"They say that in Africa they cook eggs by burying them in the sand. I am afraid we may get cooked without being buried!"

He touched a rock with his hand and shook his head.

"No, we cannot sit down here. We must go on further."

The children returned to their green torpedo and the bud once again set out on its travels.

"I propose that this shore be called — " said Valya.

" 'Hot Bottom'," interrupted Karik, and laughed loudly.

Valya was cross.

Knitting her brow, she sat paddling furiously with her arms and legs.

Karik also became silent.

How long the children drove the torpedo along the bank they neither of them could tell, but their arms and legs became very tired.

"If only you knew how much I wanted something to eat," Valya said, breaking the long silence.

"I know," Karik sympathised. "The two sides of my tummy are sticking together."

"It would be grand," said Valya, "if we could catch something and cook it on those rocks."

"What in particular?"

"Oh, something — a butterfly — dragonfly."

"Do you think they would taste all right?"

"Of course! If you cooked them they'd taste all right."

"But I could eat something raw," confessed Karik. "A butterfly, only we could never kill it."

Talking thus they reached a shore covered with grass forest.

Up from the grass forest there was rising the sultry steam of a summer's day. Here and there stood gnarled trunks of trees resembling the monster trees of the tropics — the baobab tree — which Karik and Valya had seen at the pictures.

"There will be berries here!" shouted Valya. "I know there are always berries in a forest. Let's get ashore quickly."

The bud came to rest on the sloping shore. The children jumped ashore and, stumbling now and then, ran in to the forest.

In the forest it was stiflingly hot.

The trees smelt of swampy grass. There was no bark on their shiny trunks.

The rays of the sun penetrating through the thick vegetation made odd yellow patches on the ground.

The ground under foot was damp and sticky.

"Now!" cried Valya, pushing her way through the undergrowth of the forest. "Who will be the first to find our dinner!"

"All right!" said Karik, "look for it, but don't get too far away or we shall lose each other."

Shouting and hallooing to one another the children made their way through the forest keeping a sharp look-out on all sides.

On the way they stopped here and there and pushed great leaves on one side to see if there were berries underneath. They climbed up the grass trees to look for berries. But nowhere could they find a berry.

"What an awful forest!" Did it mean that they must die of hunger?

Suddenly the children heard a dull noise.

They stopped.

Karik raised his hand.

"Did you hear?"

"Aha," Valya nodded. "It's water. Apparently it's the noise of a river. Come on! There are sure to be berries by the river. That I know!"

Valya ran on.

Karik dashed after her.

"Not so much noise!" he shouted. "It may not be a river but some sort of frog breathing!"

He caught hold of Valya's hand.

The children made their way in the direction of the noise, listening at each suspicious rumble.

Piles of fallen trunks covered with a layer of dried mud barred their way. Dry leaves stood up like walls and when the children were trying to get round one leaf it fell on them, and they only just managed to wriggle out from underneath it.

At last Karik and Valya came out at the foot of a high hillock. They dashed up to the top of this and there suddenly felt cold air in their faces.

Right ahead water was flowing noisily.

Parting the undergrowth with their hands they saw in front of them a stream.

The stream was almost a river. Bubbling and foaming it ran amongst the stones twisting now to the right and now to the left, leaping downwards in noisy waterfalls.



"I see something," shouted Valya.

She wrenched her hand out of her brother's grasp and knocking him aside dashed off ahead.

"Vally! Stop! Come back!"

But Valya was already hidden amongst the trunks of the trees.

"Come on! Come on!" Karik could hear her calling. "Hurry up! Here are the berries. Such huge ones too. Do hurry, Karik!"

Karik ran towards his sister's voice.

"Vally!"

"Here! Here!"

Valya was standing under a tall tree and with her head flung back, she pointed upwards with her finger. Karik ran up beside her. "Berries? Eh?"

"Yes! there you are! Huge ones!"

High above the ground there hung pressed to the trunk of the tree dusky fruit as big as beer barrels. Full of juicy flesh, they hid in the shadow of long narrow leaves.

"Well!" Valya's eye flashed.

"What do you mean, 'Well'? Up you go!" shouted Karik, and dashed to the tree.

With their arms and legs around the trunk the children swarmed up the tree, not letting the dusky fruit out of their sight — first Karik and after him Valya.

The trunk swayed slightly and the leaves shook. Below at the bottom of a steep slope the river foamed noisily.

Valya looked down.

"Oh! suppose we fall — how awful!" she said.

"Keep climbing," ordered Karik from above, "we won't fall."

Nimbly shifting their hands and feet, they at length reached the tempting fruit.

Karik stretched out his hand, but suddenly all went dark before his eyes and his hands slipped.

"What are you up to?" Valya managed to ask, and at that moment she felt a deafening noise in her ears. Her head started to swim.

With their arms waving and turning head over heels the children plunged violently downwards straight into the swift and boisterous stream.

The strong current seized them and sweeping them round a rock carried them off towards the rumbling waterfall.

## **CHAPTER VII**

The battle in the cave — It had ears in its legs — The extraordinary trees — The Professor becomes a pilot — An unexpected meeting



THE PROFESSOR EDGED BACK TO THE SIDE OF THE HOLE. AS his eyes became used to the darkness he saw in the depth of a dark cavern a huge head with long whiskers.

"Good gracious, a regular hussar! What on earth is it?" he gruff-gruffed, quite perplexed.

A broad, bulging shield covered the head and the front part of the monster. From under the shield there poked out short but very broad legs with teeth on them. The Professor could at once see that it was quite beyond him to fight with this creature. It could kill him with a single blow of its foot. For all that he resolved that he would defend himself.

He pressed his back against the cold, damp side of the dungeon, keeping the wasp sting in front of him.

The creature began to stir. The great stiff body, which might have been made of bone rings, started to move forwards. Earth fell noisily from the sides of the cavern.

"Is it possible to attack it from behind?" flashed into the Professor's mind.

But the monster's back was well protected. Two webbed wings folded side by side covered the huge carcass with a strong armour.

"But whatever is it? What can it be?"

The Professor stood on tiptoes, stretched his head and suddenly spotted two spears with sharp edges which were dragging on the ground like two tails. He gasped with fright.

"An underground cricket! The mole-cricket!"

The mole-cricket noisily shifted itself in the cavern. Raking itself forward on the earth it moved nearer and nearer the Professor.

"Feeds on the larvae of insects and earth worms," recollected Professor; "no doubt it would not object to eating me!"

Looking around helplessly, he cautiously edged away from the dark corner of the cavern, trying to keep as far as possible from the mole-cricket.

"Must get round it!" mused the Professor, moving along the wall towards the rear of his enemy.

The mole-cricket turned. It raised its feelers as if smelling or listening.

The Professor held his breath.

The mole-cricket dropped its feelers and clumsily scraping its spadelike feet hurled itself at him.

The Professor shot back into his former place.

"No! it's not so easy to deceive a mole-cricket underground.

It feels just as much at home there as a fish does in water. No! No use running away! I must fight!"

He stopped and lifted up the bottom of the spear, let the point fall forward and then steadied it ready for battle. He edged along with one elbow pressed against the wall behind him.

Then suddenly he felt his elbow was in space.

He quickly turned around. Immediately behind him gaped the entrance of some sort of dark recess.

The Professor took a deep breath.

Where did this tunnel lead to? Who had dug it? Was any new danger lurking here? But there was no time at that moment to think it out. . . .

"To hide, to get away, to dig deeper into the earth," hammered in his mind, and without thinking it all out, he plunged into the hole.

Stumbling and hitting himself painfully against a rock, he threaded his way in pitch darkness, feeling with his hands.

The hole appeared a lengthy one, sometimes dropping downwards, then rising upwards, then turning to the right, then abruptly twisting to the left and all the time becoming narrower and narrower.

It was necessary for him to bend now and in places to crawl on all fours dragging his spear after him.

But all this was a trifle. The Professor was ready to put up with all these discomforts. He would readily have agreed to crawl all day long even on his stomach.

"If only I could get away from the cursed cricket. If I could only hide — anywhere!" he muttered, shivering with fright.

However, it appeared that it was impossible to get away from the molecricket.

It was relentlessly following in his tracks, and the Professor could clearly hear the rising noises of the chase in progress behind him.

When he had first dodged into the tunnel the mole-cricket stopped, felt the walls of the cave with his feelers and then became dead quiet as if thinking, "where has this strange and agile worm hidden itself?"

Those feelers had then again moved restlessly. They felt the floor, walls, ceiling, and quickly discovered the entrance to the hole.

The mole-cricket shoved its head into the hole, breathing heavily.

"Is it here or not?"

The creature stopped for a little, stamping its legs, and then thrust its enormous body with great decision into the hole and, rapidly burrowing through the earth, crawled along the tunnel.

The mole-cricket moved forward as rapidly as a hot knife cuts butter, pushing its body through the crumbling earth and boring its way with unbelievable rapidity.

The Professor could soon hear behind him by his very back jerky breathing, and suddenly the wiry feelers of the mole-cricket touched him on the shoulder. Then again they felt his arms and slid across his face.

The Professor yelled. Turning round as quickly as he could he jabbed the spear into the feelers and crawled away, twisting like a worm.

The rough walls of the narrow tunnel scraped his sides, shoulders and elbows.

The tunnel had now become so tight that it was with great difficulty he managed to move forward at all.



What with the mouldiness and dampness it was suffocating.

The Professor was bathed in perspiration. His heart thumped. His arms and legs shook.

The further he went the more difficult was it to make any headway along this tightening underground pipe. However, the Professor now noticed that the mole-cricket was dropping behind and thus allowed him a ray of hope that he might be safe.

More and more remote became the sound of the chase. The mole-cricket stopped somewhere far back.

"Saved! It has gone away!" the Professor breathed thickly.

Pressing himself forward on his elbows and knees he slid along exerting every effort and suddenly his head ran into the earth.

Further than this it was impossible to go. The tunnel had ended in a blind-alley!

The Professor started to shake bodily.

"A certain death? But who will then save Karik and Valya?"

With sweat dripping he felt here and there in the dark, but everywhere his hands met a solid earth wall.

What could he do? He was sitting in the hole just as if he was in a trap. Behind him the mole-cricket was coming up, and in front of him was a blank wall.

What could he do in such a hopeless situation?

The Professor felt as if ants were running over his body. His arms and legs grew cold. His mouth became dry.

"No! No!" he said, with decision, "we shall yet see who is who. You are a great strong animal but I am a man. I will fight you and I will be the conqueror."

An hour ago he could have crushed the mole-cricket with a finger, but now he would have to gather all his strength for the fray and he could not say with any certainty how this battle would end.

He turned back and pressing his back against the earth wall of the blind-alley held the spear in front of himself.

"I'll hit it right on the nerve point under the eyes," said the Professor to himself loudly.

At that moment a thought flashed into his head which made his flesh creep.

"How shall I get out if I kill the cricket? It will just cork up the hole with its great carcass. How could I move such a monster?"

There was no time to think this out.

Louder and louder grew the underground noise. The cricket was now quite close.

A minute passed and then another.

"Get back! get back!" roared the Professor, waving the spear.

The earth broke away with a rumble. Along the walls of the tunnel there came scraping noises. The sinuous feelers of the cricket were seeking for him. In the darkness they felt his head and shoulders. Twisting his body he threw these live, knotted cords off and started to rain blow after blow on the head of the monster with his spear.

"There! Take that! and that, and that!", he shouted hoarsely.

The cricket did not expect such an attack. Backing, it slid away.

"Aha! Aha!" yelled the Professor, courageously throwing himself on his enemy.

The cricket put out its feelers. The Professor struck at them with his naked fist, and scolding loudly hunted the creature back along the tunnel.

He did not cease to hit the cricket on the head with the spear, trying to stab the nerve centre with its sharp point. But suddenly the creature pulled its head back under its shield and the spear made no impression on this horny covering.

The monster stopped. Obviously the spear no longer worried it. The Professor knew then — the battle was lost.

Moving with its broad feet the cricket now advanced to attack. The Professor had to retreat.

Waving the spear he slowly backed to the end of the tunnel until he felt the solid wall behind him.

"Now we're done!" he thought.

He shut his eyes tiredly and ducking his head dropped in a heap on the floor.

Suddenly he heard a noise above his head. The ceiling of the hole cracked as if someone was drilling through from above. Earth fell on his head.

The ceiling fell down. A blinding light flashed for an instant into the hole and the Professor saw far away a fragment of blue sky, but almost at once something like a huge pod came down into the tunnel from above, shutting up the opening.

"What is this?" shouted the Professor, and seized the pod in his hands.

The pod trembled and commenced to go up again quickly.

The Professor realised just one thing:

This pod was going out — back up to where it was all sunny — and he must get out of the earth back to the sun with it.

He held tightly on to the pod with his arms and legs and suddenly like a cork he flew out of the earth.

The sun blinded him. He screwed up his eyes.

"Saved! Saved!" He was now laughing hysterically.

But he had not succeeded in letting go with his arms when some strange force flung him upwards and then dropped him down again, then upwards again, and once again down.

The Professor bounced up like a ball and fell again.

He simply must get free of this jumping pod. The Professor let go. Twisting in the air he dropped to the ground and rolled head over heels amongst the stones.

The shock was so great that he lost consciousness for an instant.

When he came to the first thing he saw was a great green animal. It was standing not far from him with long legs studded with sharp points — spurs. On the ground lay a thick pod-like tail considerably longer than the green animal itself.

"Aha!" The Professor raised himself on his elbows. "I see. It was that tail I was holding on to. A most kindly tail! A magnificent tail."

Hearing the voice of the Professor the creature turned a flattened head with a huge mouth towards him and moved feelers of immeasurable length.

"What family do you belong to, my saviour?" he now enquired politely.

The green animal, covered as it were with shining enamel, moved its feet.

"Of course it's you!" shouted the Professor. "You heard me with your feet? There you are! It's quite clear. You are a green grasshopper. Well, anyway, thank you my friend! Thanks for pulling me out of an awkward jam, a very awkward jam."



The grasshopper once again moved its feet. The narrow listening slits on its front legs turned towards the Professor. The grasshopper could clearly hear him.

Then the meaning of his recent experiences became clear to the Professor.

At this time of year the female grasshopper bores holes in the ground in order to hide its eggs. In spring the grubs of the grasshopper are hatched out of these eggs. They make their way up on to the surface of the earth and begin to feed on caterpillars, butterflies and flies.

It was the good fortune of the Professor that a female grasshopper had bored into the earth just above the very place to which the mole-cricket had driven him.

But the grasshopper had not succeeded in laying eggs. Having touched the egg-laying tail of the insect the Professor naturally gave the poor creature a great fright, and for that reason she had quickly pulled her tail out of the ground.

"Forgive me, please," he burbled cheerfully. "I am sorry I interrupted you."

The grasshopper jumped up, and spreading wings which glittered in the sun it vanished in the greenery of the grass forest.

"Goodbye! Safe journey!" the Professor shouted after it and waved his hand.

He was now alone. He stood there looking around and stroking his grey beard.

"But where have you got me to, my green steed?" he muttered. "Where is the pond now? How do I get to it? Should I go left or right?"

Around him rustled the forest. It was only now, however, that the Professor noticed that this was not like the grass jungle.

Here the trees were not bamboo-like but their long slightly-curving stems stretched upwards like gigantic candles.

The Professor looked up at their tops and blinked his eyes with amazement. There at a dizzy-making height enormous white hats rocked quietly. Each tree stood like a long flagstaff on the top of which a white hat had been stuck.

"What are these?" he wrinkled up his eyes. He went closer to the stems and then stopped suddenly as if rooted to the spot. Before his very eyes a white feathery cloud had been ripped off the top of one of the trees and had suddenly disappeared, It seemed to melt into the air.

The Professor shrugged his shoulders. He could not understand it.

The wind came up in a gust from behind him and immediately some more white tops became separated from their stems and slowly floated away in the air.

From somewhere above him there fell suddenly at his feet a heavy elongated kernel.

He bent over to look at it.

From one end of the kernel there projected a long thin whipcord at the end of which a feathery parachute was quivering.

"Ah that's what it is!" the Professor exploded. "But, of course, it is! . . . Why didn't I guess it at once?"

He nimbly ran to the very highest stem and throwing his head back examined it from top to roots.

"There you are! Excellent! You are just what I want to-day."

He then tightened his spider's web costume, scraped his feet on the ground and jumping upwards clasped the stem of the tree.

The stem was thick. He could only just get his arms and legs around it. Immediately he had done this he felt the palms of his hands and his knees sticking to the stem.

"Never mind. Never mind," he muttered. "Once I get half-way up things will be easier."

Moving his arms and legs in turn with difficulty, breathing heavily and bathed in perspiration, the Professor climbed the stem like a fly on sticky paper.

To begin with, the ascent was very difficult but the higher up he got the thinner became the stem and the easier it was to make progress. The wind swayed the tree and with the tree the Professor also swayed, not daring to look down at the ground.

But here at last was the top of the tree — the white feathery crown.

The Professor put out his hand preparing to make his way from the stem on to the crown of the tree, but suddenly something soft slid along his arm.

He pressed himself to the stem. Around him unexpectedly wings started to beat and the air hummed. Dancing winged creatures were moving just before the Professor's eyes.

He ducked his head with fright.

"They will eat me! I am sure they will eat me, the ruffians!" he thought mournfully, and then taking another quick look at the creatures he became calm at once.

"Oo, what a coward I am!" he sighed with relief.

Stretching their long thin legs in the air the creatures went round the tree. Their transparent wings ornamented with fine tracery were all a quiver.

Their long tails brushed against the Professor's face and slid over his body.

"Mayflies!" he grinned. "Nothing more than Mayflies!" and seizing the sappy leaves of the crown with his hands he calmly drew himself up on to the head of the amazing tree. The Mayflies only at first glance appeared giants. In actual fact they were but little bigger than the Professor. What made them appear giant size was that behind them there fluttered long, thread-like tails. On some of them these resembled a fork and on others the

two legs of a pair of compasses. These tails were about twice as long as their bodies.

"See how they dance!" observed the Professor. "Does it mean that it soon will be getting dark?"

And paying no further attention to the winged dancers he clambered up on to the very crown of the tree.

There was no reason to fear the Mayflies. These insects have not even got a mouth. Their life is so short that they don't have to worry about food. They come into the light in order to dance the one dance of their life-time.

In a happy dancing ring they, circle tirelessly, waving their little wings and then when the summer dusk commences they fly down to the surface of the water, lay their eggs and never themselves do they rise again from the water. At this time of year the bodies of Mayflies cover the surface of rivers with a reddish carpet.

The current carries away millions of these harmless beings, whirling them along between steep or sloping banks. But not a single Mayfly reaches the mouth of the river. They are all eaten on the way by fish or birds.

Who could envy a Mayfly? After two years' growth, it emerges and flies around dancing for one single day, and is then eaten up! Fancy coming into our world just for that!

Surrounded by a ring of Mayflies the Professor stood on the crown of the tree which was like a dome. The whole of its swaying surface was covered without exception with dark glistening kernels, a pliant stalk with a parachute at its tip rose upwards from each kernel. These rustled above his head like an orchard in spring.

From time to time one or another of the kernels trembling and swaying would break away from the dome and hang for a minute above the tree. A gust of wind would fill the parachute and the kernel would float away in the air following its feathery parachute and its stalk.

The Professor felt the stalks with his hands and set to work. He selected ten or so of the biggest parachutes and tore them off the kernels. His hands were then filled with clusters of umbrellas with feathery clouds at their tips. The parachutes were straining upwards lifting him off the crown of the tree, and he had to exert every effort to keep his position.

Then he quickly tore off another pair of parachutes and in high spirits he jumped up and hung suspended in the air. For some time he hung with his feet dangling, but as soon as the wind blew the parachutes rustled happily above his head. A current of air took hold of the Professor and bore him away over the forest.

"Magnificent! Simply magnificent!" He laughed as he swayed in the air like a pendulum. "I certainly never expected to fly on the down of a dandelion."

The strange trees with white hats now appeared from the immense height as ordinary dandelions. The forest seemed now like ordinary meadow grass.

The Professor looked around himself in all directions. Everywhere there stretched grass jungle or sandy wilderness.

Far away on a high mountain he suddenly spotted a very tall column at the top of which waved a huge red flag.

"Aha! my landmark!" the Professor smiled contentedly. Even further away and more to the right there stretched a wide blue expanse of water.

"And there is the pond! Excellent! Now I know the direction."



The wind shook the feathery parachutes. Plunging through the air the Professor flew over forests and fields watching keenly beneath him.

Then a gust of wind seized him and carried him straight towards the pond.

"Ee! I'll be drowned if I am not careful," he frowned. "I must get down before I am carried into the open sea."

At that moment the Professor was being carried over a sunny meadow. It looked a good place in which to alight. He decided to land.

Having let go several of the parachutes he moved in a wandering slow flight above the ground gently descending. The grass was already turning back into the nightmare forest and the narrow streamlet into a broad and noisy river.

"Hop — la!" yelled the Professor, letting two more parachutes go at once.

He was swinging in the air above the river looking downwards for a suitable place to land when he suddenly saw Karik and Valya floating in the river.

The waves dashed them against a rock and they spun around in the grip of the current just like logs.

"Hold on!" yelled the Professor from above; letting the last parachute go he plunged like a stone into the foaming water.

## **CHAPTER VIII**

The rescue — Some explanations — Living windows — The herd of grass cows — Sad recollections — An air tortoise attacks

THE STRONG CURRENT TOPPLED THE PROFESSOR OFF HIS feet. He fell first on one knee and then on the other. The water beat him down and swept over his head, but he got up and venturing cautiously from rock to rock managed to make his way forward.

Karik and Valya were lying just near him looking as if they were dead. Their eyes were closed, their arms dangled helplessly down and their legs trailed in the water.

"Wait a minute! Wait a minute!" muttered the Professor heavily. "Everything will be all right!" and he seized the children tightly.

Here at last was the bank. The Professor laid Karik and Valya on the ground, squatted down and started to rub them with the palms of his hands.

"Now then! Now then! What do we do next?" he muttered.

He bent their arms and legs and raised them up and down. But all was in vain. The children lay motionless with their eyes shut and their white lips clenched firmly.

"What am I to do with you next?" he frowned.

He wiped his forehead with his hand and suddenly his face lit up.

The Professor had remembered an old long forgotten device for restoring the drowning. Quickly jumping up he seized Valya by the legs, lifted her upside down and started to shake her violently. Water poured out of Valya's mouth and nose. She groaned.

"Groaning!" rejoiced the Professor. "Excellent! you will live."

Laying the girl on the ground, he set about Karik.

"One, two!"

A murky flood poured out of Karik's mouth.



"And now you lie down too."

Spitting and coughing the children opened their eyes.

They looked around, not understanding a thing. Immediately in front of them stood the Professor, the Professor real and alive. Huge and bearded, just as they were accustomed to see him every day.



They were so delighted that they never noticed how oddly he was dressed. They just gazed at his face and saw his kindly smiling eyes and his tousled grey beard.

"The Professor!" exclaimed Valya. She flung herself towards him, sobbing with joy.

"Now, now, now." coughed the Professor with embarrassment, stroking the girl's head. "There is nothing to cry about now."

Valya smeared the tears out of her eyes with her fists and started to smile.

"All that — all that water — came out of us. What a lot!"

"Plenty of it," agreed the Professor. "But now, my dears," he continued, "tell me who decided to make free with my study?"

The children hung their heads.

"Ah, you are silent! You have forgotten how to speak?" The children sighed.

Dripping wet and unhappy, they stood in front of the Professor not daring to look up at him. Karik lowered his head so much that his chin rested on his chest which was covered with sticky mud, Valya turned away.

"Well! Why are you silent?" the Professor gruff-gruffed. Karik started to sniff and Valya sighed deeply. The Professor became sorry for the children. He seized them in his arms, squeezed them to himself and started to laugh.

"Ruffians! just think what you have done. Ah, what goats you are! I nearly went out of my mind with you!"

"We had an accident!" said Valya, twisting her damp hair round her fingers.

Karik gazed at her in amazement. "What a liar I" he thought but he did not say anything.

"Now, now. Come on home, your mother will show you what she thinks of the accident and it won't be an accident if she whips you."

"Mother never whips us!" said Karik, raising his head.

The Professor pulled at his grey whiskers and said gloomily:

"They beat me all right when I was small — with a strap or a cane: they took the hide off me. Russia was a wild place then. Now everything is grand. Come on to the mother who never beats you. Such a mother must be seen to be believed! Isn't that so?"

"But where are we going?"

"Where are we going? Why, home, of course!"

"Home, Home!" Valya shouted cheerfully. Jumping up and down she clapped her hands.

"But is it a long way to our home, Professor?" asked Karik. "Shall we get there in an hour?"

"An hour? Dear, no!"

The Professor shook his head.

"We cannot get home even in ten hours. We are practically six miles from home."

"Oh, that's fine!" Valya was jumping up and down. "We can run that distance. We'll do it in an hour."

"How?" coughed the Professor in confusion. "Once — that is to say this morning — we, I think, might have covered six miles in two hours. That's true. But now it will take us several months."

"How's that?" marvelled Karik.

"Why?" Valya opened her eyes wide.

"Just because we cannot now do more than a yard or one and a half yards in the hour. You forget that formerly each of our steps was about half a yard and now it is a very small part of a centimetre."

"What? We are not as small as that?"

Karik glanced hastily around.

Strange trees with green angular trunks stood beside them. Along the bank of the river there was wandering some sort of winged being smaller than a calf but bigger than a sheep. Through the air, as if on purpose to impress them, an enormous monster came hurtling above their heads. It was about the size of a motor-bus with black wool on it.

The children gazed about in amazement. - What did it all mean? The Professor was real but all around, as before, were extraordinary unreal things.

"And what has happened?" Karik blinked his eyelids in confusion. "You seem to be real, big. What are you, real or unreal?"

The Professor smiled.

"Both real and unreal," he said. "But you think it out for yourself. Surely I was bigger than you formerly. I therefore have the right to remain the same in the small world. Understand?"

"I understand," replied Karik, undecidedly.

But the Professor realised from Karik's eyes that he understood precious little.

"Imagine," he continued, "that the liquid I invented had been drunk by you, I, an elephant, a horse, a mouse, and a dog. All the whole lot of us would be reduced in size to about one-thousandth part of what we formerly were, but to us human beings the elephant would still appear as big as we are accustomed to see him in the zoological gardens, and the mouse — well, naturally, the mouse will remain tiny, but it will be only a thousandth of the size of an ordinary mouse. But all of us humans, together with the elephant, horse, dog and mouse, could quite easily be put in the palm of an ordinary man's hand."

"I understand," Karik nodded his head.

"But I don't understand," said Valya.

"What don't you understand?"

"I don't understand how you knew where we had got to."

"I'll explain even that to you but not now," said the Professor, slapping Valya on the back. "We have a long way to go and we shall be a long time going there. We shall be able to talk about everything on the journey home. You will tell me what you saw and what you understood and I will tell you how I found you. Now, first of all, my dears, on the way we may lose each other, and therefore each one of us must know how to find the way home. Come with me, I have something to explain to you before we start our journey."

"But we don't want to lose each other!" said Valya, holding on to the Professor's hand.

"Very good. But all the same. . . . In any case . . . because anything might happen."

The Professor held both the children by the hand and with rapid steps climbed up a hillock.

The children scurried along beside the grand old man. "Do you see?" he suddenly asked, stretching out his hand. Far away over the thick growth of the grass jungle raising itself up in the sky like a huge chimney was an enormous post. At the top of it waving in the blue sky there hung an immense stretch of red cloth.

The post stood in the midst of the forest, but one could see it as clearly as a solitary pine tree on the steppe.

"There is my flagstaff!" said the Professor. "I stuck it up as a landmark."

"What for?"

"Now listen. . . . Wherever we may get to we can always take a look at our landmark. All we have to do is to climb up to the top of the grass and . . . .

"Of course, naturally," shouted the children.

"Well, the rest is quite simple. Below, just near the mast, I left a small plywood box. It is completely wrapped up in order to protect it from the rain and sun. But so that we could get into it I cut a small hole in one of its sides."

"Why should we want to get into it?"

"When we reach the box we shall climb into it and there we shall find a little case with white powder. That, my dears, is the enlarging powder. It would be sufficient for each of us to swallow a handful of this powder to turn us once again into big ordinary people, now do you understand?"

"Oo!" Valya suddenly interrupted, "but suppose someone takes the box away?"

The Professor was confused. He himself had not thought of such a possibility. But it was important not to let the children think this.

Stroking his beard he said confidently, "Rubbish! Who in the world would want an old plywood box. In any case very few people ever come to these parts. And . . . and whilst it is very pleasant chatting here we must not waste our breath. Let's start our journey, my dears! Forward! Come on! Heads up! Give me your hand, Karik! and yours, Valya."

"Where are we going now?"

"There!" the Professor waved his hand. "Set course to the plywood box!" he ordered.

Raising his head high, he started to march towards the forest. The children lagged behind him and started whispering excitedly about something.

The Professor heard.

"You tell!"

"Why me? Tell him yourself."

"What's all this?" he asked, stopping.

"Well, how are we going to sleep and what about dinner and breakfast?" asked Valya.

He shrugged his shoulders.

"What trifles! We shall sleep like our forebears slept — in trees, in huts, in caves, and certainly it will be much better than sleeping in a stuffy room. You must think we are going camping. Haven't you ever done that?"

"But what are we going to eat?"

"Well, there is no end of food here. You could have dinner, breakfast and supper ten times a day if you wanted it."

"But look what happened to us," said Valya. "We wanted to eat a berry to-day and someone hit us and threw us into the river."

"Hit you?" the Professor was astonished.

"Well, yes."

And Valya recounted how they had tried to get a berry off a tree and had not got it but had fallen off into the stormy river.

"You ate these berries?" asked the Professor with alarm.

"No! we didn't succeed!"

He sighed with relief.

"Just as well. Most probably these were the berries of the poisonous daphne or as most people call this plant, 'Wolf's Tongue.' "

"But we did not eat it."

"That does not matter. You breathed in the poisonous vapour of the daphne and for that reason lost consciousness."

"Do you know, Professor," interrupted Karik, "we are quite ready to spend the night on a branch or anywhere else you like, but. . . ."

"But what?"

Karik swallowed the water which was forming in his mouth and said:

"Well, we haven't had anything to eat since yesterday and . . . and we simply can't go on, we must. . . ."

"Good gracious me," fussed the Professor, "fancy my not thinking of that at once. Certainly, my dears, certainly! Before we set off on our journey we'll all have a jolly good meal. What about some milk?"

"Ordinary milk?"

"M-m, it's certainly not quite ordinary, but it's milk."

"Let's have it!" Karik stretched out his hand.

"Only let's have lots," said Valya.

"Quick march," ordered the Professor.

Sticking his beard out he started off ahead, examining the grass trees, looking for something. At last he stopped under the shade of a grassy oak tree which had such immense leaves that on anyone of them there would have been plenty of room for a football match. Yes and room over for the spectators.

"Here," the Professor pointed upwards, "here is a herd of cows grazing."

"Cows up a tree?"

"M-yes . . . it's something like an alpine dairy farm. Now who is going to be first up?"



"Bu — but don't these cows bite?"

"No, they don't bite nor do they butt. They have neither teeth nor horns, my dears."

Karik and Valya immediately flung themselves at the tree. The Professor followed them.

Clutching at the soft green branches they clambered up, helping each other and quickly reached the top of the mighty tree.

In front of them shining in the sun were broad glistening leaves as much like green meadows as anything else.

The travellers clambered out on to one of the leaves and started to walk about it, treading with their bare feet on the soft fleshy surface. But after taking a few steps the children stopped hesitatingly.

"What's up?" asked the Professor, and he also stopped.

Valya stretched out a trembling finger. "What is this?" she pointed to the surface of the leaf.

"Yes, whatever is it?" asked Karik, starting to retrace his steps.

The leaf was to all appearances alive.

Its glistening surface rustled, contracted and expanded. It was covered with thousands of mouths, and these were either chewing something or else waiting to seize Karik and Valya by their bare feet.

"Well! what's worrying you?" the Professor was surprised.

"This can't be a leaf?" said Valya. "Look what it's doing. It's trying to bite my feet. I don't like such leaves."

"What nonsense! You ought to be ashamed of yourself. They are just the very ordinary pores — the stomatac."

"Pores?"

"Of course! They are the windows of the leaf which ventilate the plant, they are its lungs with which it breathes."

"But can't they fasten on to our feet?"

"Obviously not. Don't worry! Just follow me!" and the Professor courageously started to walk over the leaf along the thick veins which were traversing the green meadow in all directions.

The children followed him.

\* \* \* \* \*

The first to see the cows was Valya.

"Oh, look!" she shouted. "Can these be the cows? They are not at all like cows. They are so green."

On the edge of the leaf-meadow green animals were wandering like giant pears perched on delicate long legs. Some of them were sitting down with their whiskers resting on the fleshy surface of the leaf and their snouts deeply thrust into it.

"Here we are," said the Professor, "let me introduce the grass cows. Don't be upset because they do not look like cows.

In spite of it you'll find their milk excellent. In no way inferior to real milk."

"But what are they called?" asked Valya.

"Do you mean to say you haven't guessed it? Why they're plant lice. Very familiar insects. If you have ever read about ants you must know about the plant lice — aphides — or green-fly as they are often called."

"Aha, I remember," said Karik, "the ants breed them."

"Yes, yes, quite right, Karik," answered the Professor. "The ants often collect the plant lice, feed them and tend them."

"Just like they do in the State dairy farms."

"Yes. Pretty well. The ants are very fond of plant lice and treat them just like people treat cows. They milk them and feed on this milk. . . . Be careful, please, don't step into the milk."

The Professor had stopped at the edge of a pool of some sort of thick liquid.

"I don't think it is worth milking the green cows," he continued. "The milk appears to be flowing in rivers here. Help yourselves, my friends."

He lay down on his stomach, buried his lips in the pool of green plant-lice-milk and with his beard splashing in it took several gulps.

"It tastes all right! Help yourselves!"

The children followed the Professor's example and quickly buried their mouths in the sweet thick milk.

"What about it?" said the Professor. "Do you like it? Nice, isn't it?"

"It's better than real milk," said Karik, wiping his mouth with his hand, obviously well satisfied.

Valya was lapping it down noisily and didn't raise her head but just grunted something no one could follow.

At last they were all of them fully satisfied.

The children rolled themselves away from the milk pool and stretched themselves out on the leaf, just as if it had been the beach at the seaside.

Valya lay stroking her tummy. Karik flung his legs and arms widely apart.

"Good enough," he said.

"If you are now no longer hungry we must get going!"

"Oh, no!" hastily interjected Valya, "we must rest a little to begin with."

"Just half an hour," Karik supported his sister.

Their legs were so tired that it seemed as if they didn't belong to their owners, and their arms lay on the fleshy surface of the leaf like lead. A great laziness had wrapped itself around them.

"All right!" agreed the Professor. "Take a proper rest."

He lay down beside the children.

After all the events of the day he was not at all loath to lie and rest himself for half an hour. Yawning lusciously, he put his hands behind his head, and his eyes which it was now difficult to keep open gently closed.

For some time the travellers lay silent with their eyes closed to avoid the glare of the sun, turning now on one side, now on the other.

Over their heads the wind blew noisily. The leaf swayed like a hammock.

"Isn't this grand?" mumbled the Professor. He started to mutter something as his head sank on to his chest. He began to snore gently as if he was whistling through his nose.

"Fast asleep," said Valya.

"Let him sleep. Then we can rest."

Valya was silent for a little and then sighing.

"Mother will be crying probably."

"Certainly she'll cry."

Valya sighed more deeply as if she herself were about to cry, but at this moment something buzzed through the air and hit the leaf with a thud.

The leaf shook.

"Whatever is that?" squeaked Valya.

The Professor opened his sleepy eyes slightly.



A huge tortoise nearly as big as a tank was moving across the leaf. The back of the tortoise glistened like scarlet lacquer.

Black patterns on this background made it seem like a Japanese plate.

The Professor yawned, closed his eyes and started snoring.

The children gazed at the red monster in alarm as, quite unlike a tortoise, it started to run lightly towards them.

They clung to each other.

The red tortoise ran up to the children, gazed down at them as if from the roof of a barn and angrily rustled its whiskers.

Karik and Valya jumped up and with a scream and shout took to their heels.

They dashed past the green cows which were peacefully grazing on the leaf meadow and ran up to the very edge of the leaf.

There was no further escape possible.

## **CHAPTER IX**

A thirsty journey — The cafe in the grass jungle — The assault on a forest stronghold — The battle with the ants — Under the mushroom — The flood

## KARIK AND VALYA STOOD ON THE VERY EDGE OF THE LEAF.

Below, under their feet, there swayed the tops of trees and through the

chinks between the leaves far below could be seen the ground.

Jump down? They could hardly jump from such a height.

Valya gripped Karik's hand firmly.

The red tortoise had crawled quite close. Another minute and it would hurl itself on the children, kill them, carry them off and eat them.

"Don't be frightened! Don't be frightened!" the children suddenly heard the voice of the Professor, "It is a lady-bird. It won't touch you. Come over here."

"It won't touch you!" whispered Valya, hiding behind Karik.

Not for a moment taking his eyes off the tortoise-monster, Karik moved sideways past it.

"Now, now! be brave!" encouraged the Professor.

The children turned abruptly and dashed away at full speed to the green cows.

Hardly drawing breath they then darted towards the Professor, stumbling now and then in their flight across the leaf. They finally managed to hide behind his broad back.

"It is quite harmless!" said the Professor. "No need to worry!"

"May be harmless but it's very alarming!" puffed Valya.

"Oy! Look what this harmless creature is up to!"

The lady-bird had reached the herd of green cows and stopping suddenly struck down one of the cows with its paws like a lion and trampling on it, squeezing it with the weight of its body, proceeded to suck it. In a few seconds nothing of the cow remained except its skin.

The lady-bird proceeded to knock down one after the other.

It trampled on them, sucked them like grapes and threw away the skins.

By the time the children had recovered their senses there was not a single one of the plant lice left on the leaf.

Having devoured the lice the ladybird wiped its whiskers with an enormous paw and kicking the skins out of its way moved over to the edge of the leaf.

Here it raised its armour and pushed out from under it a transparent flinty-like tail and two heavy trough-shaped wings, after which the armour fell back with a clacking noise. Then with a creaking rustle two more wings appeared this time, delicate and transparent. They started to beat violently up and down, disappearing from view with their speed, like propellers. A stream of air beat in the faces of the travellers. The lady-bird was off, away above the forest.

"So that's a lady-bird!" said Valya. "Sucks them all dry in a most lady-like manner and flies away!"

"Yes, most excellent," said the Professor. "Just what is needed. Couldn't be better."

"Excellent?"

"Of course. It is most important to get rid of these lice in every possible way. But probably the best method of fighting the lice is the lady-bird beetle. In America they collect these lady-birds in baskets and in spring-time release them wherever there are lice. The lady-bird hunters have special maps provided for them showing the places in which the lady-bird usually winters. They go to these places and collect them."

"But why is it necessary to get rid of the lice?" asked Valya. "They have such nice milk."

"The milk is all right," agreed the Professor, "but the lice themselves are very harmful creatures and what is more they have so many children and multiply so rapidly. But for the lady-birds the lice would be most difficult to combat."

"In what way are they harmful?"

"They attack the leaves of fruit trees, flowers and vegetables. In fact, there is hardly a plant on which you might not find lice."

"What do they actually do?"

"The lice suck the sap out of the plant, but this is only half the evil. The green milk which you found so nice to taste, gums up the pores of the leaf so that it cannot breathe and grow. The leaf naturally dies. But if the leaves perish it just means that you can't expect either fruit or vegetables. However, it is all very well to talk. We have had our rest, it's high time to step out. Come on, my dears!"

But before climbing down from the tree the Professor scanned the horizon for his beacon.

Away in the west above the foliage of the grassy jungle there fluttered in the wind an enormous red flag.

"Aha," he muttered, turning to climb down, "we must go westward. Keep going towards the sun."

He jumped down on to the ground.

"Forward!" he shouted, and stepping off through the glade began to sing like the wind in a chimney.

"Forward! the bugles blow, To battle most glorious. Forward! with eyes aglow, The children victorious."

Valya frowned and stuck her fingers in her ears. Karik waved his hand: let the old boy sing, after all every human being has some sort of a weakness.

The Professor was only human.

\* \* \* \* \*

The travellers were passing through a forest. Tall trees, without any branches or even knots, surrounded them like giant radio masts.

The sun's rays falling from above made golden streaks on the ground so that their path seemed across a blanket striped with yellow.

The travellers now clambered up steep, practically vertical mountain sides, now tobogganed downwards raising thick clouds of dust behind them. Deep valleys were succeeded by high peaks. The forest followed down to the bottom of the ravines and up to the ridges of the mountains.

The soil was all full of holes and terribly rough. The arms and legs of the Professor and the children became covered with scratches and weals.

Valya had a great blue bruise on her forehead. Karik's nose was all swollen and he had a great scratch right across his chest.

The children were puffing but the Professor would not slacken his pace.

The sun started to burn their shoulders and arms painfully. The Professor had to wipe his dripping face continually with the palm of his hand. Valya became as scarlet as if she had been plunged in boiling water.

"What ho for Africa!" Karik tried to joke. "Another day like this and we shall start to moult our skins. We shall be all striped like Zebras."

The Professor and Valya remained silent. They licked their cracked lips and looked from side to side hoping for the glitter of water in some pond or river.

There was no sign of water.

"You just can't imagine how I want a drink!" Valya at length could not contain herself any longer.

"And you just can't imagine," croaked Karik, "how my tongue feels. Just as if pepper had been shaken all over it."

"Don't be discouraged!" the Professor comforted the children. "There must be water somewhere fairly close."

Valya soon became quite exhausted.

"Let's rest!" Every ten minutes or so she had to rest again.

The travellers would stop and sit down. But sitting on the baking earth was even worse than walking over it. After a minute or so they would have to jump up and start off again.

"My goodness," gruff-gruffed the Professor, "it's just like travelling in the Sahara desert."

Valya staggered along.

"A drink! a drink!" she whimpered.

Karik moved as if in a dream, stumbling and bumping up against the trees.

And suddenly through a clearing in the forest there was a glimpse of blue.

"Water!" shouted Valya rushing ahead.

The Professor and Karik forgot their tiredness. One after the other they chased after Valya.

The clearing in the forest widened.

There amid the green vegetation hung a great blue flower but no sign of water.

Valya flung herself on the ground.

"I — I can't go any further," she groaned.

"Stick to it! stick to it!" grunted the Professor, "in a very little time we shall find water."

He put his arms around Valya and pulled her up.

"We must keep going! Come along, little Valya!"

Cold refreshing water now taunted them every step they took, for right and left where ever they looked they saw the blue of the water they needed.

But when the exhausted travellers stumbled towards it every time the blue turned into a flower.

"A drink! I must drink!" groaned Valya.

"Water," Karik whispered with dry lips.

The Professor stumbled and fell face downwards on the ground. The children threw themselves down beside him.

They could hear the monsters of the grass jungle rustling past them. Backwards and forwards the insects went so that it seemed that the travellers might have been resting at some busy crossroads. However, they were too tired to pay any attention to the passers-by. One caterpillar passed so close that it trod on Valya's hand but they none of them stirred.

"Water!"

"Wa-ater!" groaned the children.

Swaying from side to side the Professor stood up.

They must move on. But which way? In which direction would they find water.

He leant against a tree and with his head stuck forward upon his breast he stared gloomily at the ground.

Suddenly right beside him an earthy hillock started to move. Stones fell from its top to the ground around. Then suddenly the hillock split open.

Long feelers stuck up into the air and from within the hillock a huge head appeared and then a dark body with a yellow edge slid out of the ground.

"Saved!" shouted the Professor.

The children raised their heads from the ground.

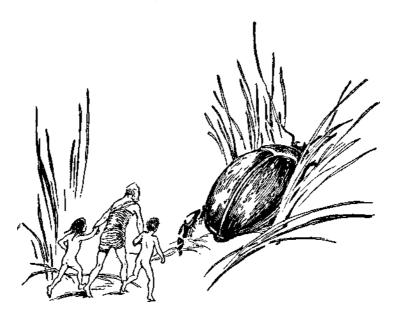
"Get up! Here's the water!" he continued.

Having grasped the last word, the children both struggled up.

"Give us a drink!"

"In a minute or two you'll have a whole river but now we must accompany a very good friend of mine who is going to the water."

The Professor waved his hand to where at one side there stood the monster with the yellow streak cleaning the dust and dirt from its body. It was like a beetle of some sort, only this beetle was the size of a motor-bus.



"What is this?" whispered Karik.

"Dytiscus, the water beetle! It will lead us to the water!" said the Professor.

The water beetle stretched out its whiskers, turned to the right and confidently went ahead crashing its way through the grassy trees.

The travellers ran behind it.

They had all become more cheerful. Karik's eyes were glistening.

"But how does the water beetle know where the water is?" he croaked.

"Very simple, considering it lives and hunts in water. It could hardly get on without knowing."

"Where did it come from?"

"Out of the earth."

"But why?" marvelled Valya.

"Well, it is such an amazing creature, is this water beetle."

As they followed in the wake of the beetle the Professor went on:

"They reproduce themselves by means of eggs which they stick to water plants.

"In a month or so the eggs hatch and larvae come out like caterpillars, but with the temperaments of tigers. These courageous and greedy larvas will attack pretty well any inhabitant of the water even fish, which are many times their size. When the larvae are full grown they creep out of the water and finding a peaceful, comfortable spot they bury themselves in the earth. Here they turn first of all into a chrysalis and then into a large ordinary beetle. The beetle comes out of the ground — you yourselves saw this happen — and sets out on a career of piracy in its proper realm — in water."

"But how does it know where the water is?"

"Well, how do birds know which is south when they fly away from us in the Autumn to winter in a warm climate?"

The Professor was talking without stopping. He knew well that a journey seems much shorter to those who travel talking.

"This beetle," he continued, "is perhaps one of the most remarkable creatures in the world. You can come across it in any water butt. When you next see one look at it closely. Think, my dears, it charges over the water like a speed boat, dives like a diving duck, is able to sit at the bottom of a pond longer than a human diver, travels under the water as well as any submarine, flies through the air like an aeroplane and walks on dry land like a human. You do not meet a creature like that everyday. Once I was — "

"Water!" screamed Valya.

Without waiting to hear what the Professor had to say both children rushed ahead.

Amid green foliage there was now mirrored a blue unruffled expanse of water.

The beetle made for the steep bank of the lake, hurled itself down into the water and vanished. Circles of waves spread across the mirror.

"Water!"

"Water!"

On the bank of the lake there stood a tree with huge blue flowers. Dark leaves cast a dense cool shadow on the ground beneath.

Karik, not waiting, ran down a slope, jumped down and stretching out his arms flung himself in the water like the beetle had done.

He splashed himself and, burying his face in the water, drank. Then he sat up spluttering and laughing.

There was no more tiredness.

"Quickly!" he shouted. "Come here quickly before I have drunk it all up."

Limping and stumbling, the Professor and Valya made their way to the bank. They too jumped into the water, raising a cloud of spray and at once started to drink: burying their poor lips, cracked from the heat, in the cool water.

"Oo! Good, isn't it." Valya raised her head. Her nose was wet and water dripped from her cheeks and chin.

"Let's bathe! Bathe!" the Professor ordered, as he squeezed his wet beard.

Having bathed to their hearts' content the travellers came up from the water's edge, dried themselves in the sun and then betaking themselves into the glade stretched out in the cool shadow of the tree with blue flowers.

Thus they lay motionless, silent, gazing through the openings in the trees above them at the distant blue sky, lazily listening to the noises of the grassy jungle.

Suddenly the Professor stood up and hitching up his clothes went over to the tree and grasped a green branch with both hands.

"Where are you off to?" the children shouted.

"Don't disturb yourselves. I'll be back in a minute."

The Professor started to climb the tree. The children looked at each other.

"We'll climb too!" said Valya.

"We'll climb!"

They jumped up and jostling each other darted to the tree, but they had not succeeded in getting hold of the lowest branch when something above them made a tearing noise as if someone was ripping a strong piece of cloth. "Catch it, children!" Karik and Valya stretched out their arms. Something blue was coming down through the air. Lazily it circled and swayed until it seemed about to cover the children in what appeared to be a huge blue bedcover.

The children skipped out of the way.

The bedcover fell quite gently at their feet.

"Whatever is it?" shouted Karik, bending over the blue bedcover.

"A forget-me-not petal!" shouted the Professor from above.

"What are we to do with it?" asked Valya.



"Do with it? We can make ourselves clothes and umbrellas. I don't know about you, but my back is already covered with blisters from sunburn."

The Professor threw down some more petals.

The children collected them and laid them in a heap.

Valya threw one of the petals up on to her head. The petal was big and broad. It drooped down over her shoulders and covered her hot back like a rubber cape.

"Well, how about it?" asked the Professor, jumping down from the tree.

"Thanks awfully!" replied Valya.

The Professor took the petal, bent it in his hands until it was in halves, then he bent it over the other way and bit the corner off with his teeth.

"Oo-ough! It's tough enough," he said, and carefully unfolded the petal.

In the middle of the petal there now appeared an uneven hole with ragged edges.

"Now put your head through here!" commanded the Professor.

The petal soon lay soft, cool and protecting, upon Valya's sunburnt shoulders.

It covered Valya from the shoulders to the knees.

"Grand!" approved Karik. "Something like a shroud."

"Not a shroud!" said the Professor. "A floral cape. You must have one now. These capes will save you from the sun by day and from the cold by night."

The little party soon looked as if they belonged to some travelling circus. The Professor and the children garbed in blue capes proceeded on their way in single file.

In their hands they carried long sticks, to the ends of which had been fastened pieces of petal. These blue umbrellas swayed above their heads, throwing a shadow on their faces. They were a splendid protection from the scorching rays of the sun.

The Professor tramped on whistling a march. Karik and Valya hummed the same tune where possible.

The forest became thinner. The travellers came out on to a sunny field. Overhead huge winged creatures as big as cows were droning. Flashing their transparent wings they darted past so near that Karik and Valya had either to duck or to stop in terror.

"You needn't worry about these insects," smiled the Professor. "Remember each one has its own regular habitual food. Dragon-flies, for example, feed on flies and butterflies, bees on the honey in flowers. Many of the flying insects actually never eat anything. They come into the world just to lay their eggs, after which they die. Quite a number of these do not even have a mouth. As you can see, it is just as safe here as in a town. I am quite certain that none of these insects would consider us as dainties to be eaten. . . ."

The Professor did not finish his sentence. He suddenly seized Karik and Valya by the arms and pulled them to himself. The children fell sprawling on the ground with the Professor stretched out beside them.

"Ts-s," hissed the Professor, pressing himself to the earth. At that moment something whistled over the heads of the travellers and crashed noisily into the undergrowth of the forest.

The travellers hastily covered themselves with their umbrellas.

"What is it?" "What's that?"

The Professor cautiously peeped out from under his umbrella. Not far away behind a dark hillock there could be seen the green back of some creature glistening in the sun above the tops of the trees. This back was now rising, now falling, then the creature slid sideways, jumped upwards and, having in one flash spread its wings, disappeared.

"A grasshopper!" said the Professor, standing up and dusting himself. Karik quickly nudged Valya in the side.

"Surely a grasshopper wouldn't find us a dainty morsel?" he asked slyly.

"Look here," gruff-gruffed the Professor in confusion. "A grasshopper is a treacherous beast. How am I to know what might enter its head. Caution never did anybody any harm, my dears."

The travellers moved on in no particular hurry.

They made their way forward, wading across rivers, swimming across small ponds and making their way through the thick growth of the jungle.

The Professor pointed out first this, then that particular grassy tree and told the children interesting stories about various plants. Apparently there was not such a thing as a grass or flower that simply grew without being of some use for mankind.

Suddenly Valya seized the Professor by the arm.

"Look! " she shouted. "Look! What's that?"

They all stopped in front of some thick undergrowth.

"Where? What are you looking at?"

"Over there! There they are! Lying in wait for us."

"I don't see anything!" frowned the Professor. Putting his hand to his eyes like a peak of a cap, he craned his neck, stood on tip-toe and gazed attentively at the undergrowth.

"I see! I can see!" said Karik. "They are round and they are moving."

"But where do you see them?" asked the Professor, in some alarm.

He stepped forward and then suddenly burst out laughing.

"Nothing to worry about there. You'll see yourselves when we get nearer to these forest monsters. Come on." And with big strides he moved towards the lair of these fearsome creatures.

The children followed behind him.

They could now distinguish quite clearly brown balls hanging from the grassy trees. At a distance they were like footballs, but as one approached they seemed to be balloons bigger than the Professor. The walls of these brown balloons were made of twigs and pieces of earth.

"Can you guess what these are?" asked the Professor, stopping.

"Oy!" shouted Valya. "Round houses! Look at all the tenants. This is a forest hotel. The 'Insects' Hotel Metropole'."

"Or it may be a forest restaurant — 'Insects' Help-yourselves Cafe'," grinned Karik.

Yellow six-legged animals were crawling over the broad bulging walls. They staggered out of dark entrances and lazily crawled in various directions then once again came together, felt each other with their whiskers and waddling in a ridiculous way, disappeared into the dark entrances of their round house.

"But these are plant lice!" interjected Karik. "How is it that they are yellow?"

"Very simple," answered the Professor, "this kind of lice takes the colour of their dwelling. In the far north all birds and beasts are white in colour to match the snow, but in the south animals have splashes of different colours to match the splashes of sun and shadow seen in the southern forests and plains. Surely you know that?"

"It is in order to enable them to hide more easily?" Karik said questioningly.

The Professor nodded his head.

"Both to enable them to hide more easily and also to creep up unobserved by their prey. The markings on the skin of a giraffe enables it to hide more easily but the markings on a tiger's skin help it to come up to its victims unobserved.

He went up to one of the round brown houses, examined it from all sides and even tapped it with the stick of his umbrella.

"Beautiful work! Excellent! Conscientious workers!" he said. "They are great boys are ants!"

"Ants? Surely they didn't build it?"

"Certainly."

"But why then are the plant lice living in it?"

"Just because it happens to be an ants' dairy farm." The Professor waved his blue umbrella and said:

"Just as mankind breeds cows, so ants herd plant lice. Not only do they breed them but they protect them from enemies.

And to prevent the rain washing their cows away they build them these house farms."

"And how do the ants carry the milk away?"

"Why carry it? The ants come here and drink the milk."

Karik grinned cheerfully.

"It's not so much a farm as a cafeteria."

"Some types of ants," continued the Professor, "chase the plant lice into their ant hills when winter starts and feed on fresh milk for the whole winter without ever coming out of their ant hill."

"Gunning!" whistled Karik. "But I read somewhere that ants slept through the winter and did not eat anything."

"That is perfectly true, but not of all the ants. In ant hills some of the ants are always on watch. These are the ones that feed on the plant lice milk."

"These must be the white ants who feed during the winter!" said Valya. "I also read about them. They live in Africa and they are called termites."

"Oh, Valya, you have muddled it up. There are no such things as white ants. And termites are not ants although they resemble ants in build. Termites are nearer dragonflies than ants."

"And are there no white ants?"

"No! There are black, chestnut, red, blood-red and yellow ants. There are ant sculptors, ant miners, stone quarriers, cowherds, agriculturists, honey ants, umbrella ants and solitary ants. Then you have by no means exhausted their occupations."

\* \* \* \* \*

Still talking about ants, the travellers came to a precipice which fell sharply away down to a green valley surrounded with low hills.

Light clouds floated above the hills.



The tops of the hills were flooded with the orange tints of the early evening sun.

"Look!" exclaimed Valya, suddenly. "Egyptian pyramids. Look! Do look!"

In the middle of the valley there rose a queer-shaped hill.

It was made of dark beams covered over with earth. Hanging galleries covered the sides of the pyramid and appeared to slope downwards in spirals.

"Ants!" said the Professor. "Black ants. These are evidently the owners of the farms we have just passed."

Long-bodied just like greyhounds, the ants were fussing around their ant hill. They thrust backwards and forwards, ran jostling each other along the hanging galleries. Knocking each other down, getting up again, and running, running, running. Apparently they had been frightened by something. They were carrying great white cocoons and dragging these in through the dark entrances of their ant hill. The long white eggs seemed to float above the heads of the black ants.



"Why are they dragging these eggs about?" asked Valya.

The Professor shrugged his shoulders.

"I suppose it is because it's going to rain," he answered. "They usually hide their cocoons or eggs as you call them and close all the entrances and exits to their nests before rain comes. But we mustn't waste time, whilst the ants are busy with their own affairs we must try and get across the valley. Also, my dears, we must seek some comfortable refuge where we can shelter from the rain."

The travellers started to climb down. But they had hardly taken a couple of steps when they heard a sort of confused but increasing noise.

The Professor stopped.

"Is that the rain?"

He looked at the sky.

It had grown dark and thundery clouds were covering it. The grassy jungle was still as if it had been hushed. But there was no sign of rain.

"What is it making the noise?"

The travellers looked about themselves cautiously. The children watched the Professor uneasily as he listened attentively to the rising noise, stroking his grey beard.

"Strange, very strange!" he gruff-gruffed. "I don't like this noise, my dears."

The Professor and the children hid themselves behind grass trees.

"It's as if someone were running!" said Karik, cautiously looking from behind a thick trunk.

The noise came nearer and nearer. They could now distinguish the trampling of rapidly moving feet. It seemed as if a herd of frightened cattle was stampeding towards the children.

The tops of the distant hills became wreathed in something like smoke.

It was a cloud of dust engulfing them.

"I see them!" shouted Valya. "There! There they are! Look! They're coming! Oy, however many are there?"

On the distant ridges of the hill there had now appeared a host of dark points.

To begin with they spread along the ridges and then suddenly started to spread down the sides of the hills.

The hills became darkened. Great hordes of some sort of animals were sweeping downwards like an avalanche and soon the whole valley was moving as if it were alive. All the time from behind the hills there emerged more and more new columns.

"Red ants!" shouted the Professor.

He had made no mistake.

These were huge red ants. Their strong bodies shone like copper. They were twice as big as the black ants. And what a vicious war-like appearance they had!

Without any pause the stranger ants flung themselves in assault upon the ant hill belonging to the back ants. They grappled hold of the beams with clutching feet and soon a living stream flowed along the galleries.

The owners of the ant hill rushed to meet this vicious attack. A bitter struggle ensued on the galleries.

The red ants, like a band of hungry dogs, fell upon the peaceful cowherd ants, killed them and threw them down from the galleries.

They attacked the ant hill from all sides. The cowherd ants defended themselves desperately.

They perished in hundreds bravely defending every entrance to their home. But the forces were too unequal.

The red ants clambered over the bodies of the mutilated black ants and pushed forward step by step until at last having swept aside their small opponents they hurled themselves noisily into the interior of the ant heap.

All along the galleries dead ants were being thrown down.

Below at the edge of the ant heap a small group of black ants was still bravely battling with their red foes.

But the battle was already won.

The red ants had destroyed the black ants and they now started to pillage the ant heap.

The victors dragged white cocoons out of the tunnels and hastily ran down the galleries to where beneath there jostled a disorderly noisy crowd. They were like bandits who after destroying a house were dragging the goods away in sacks.



"Whatever are they up to?" asked Karik, quite perplexed.

"Don't you see?" whispered the Professor in reply. "The red ants have captured the cocoons of the black ants, their children in other words. They'll carry off these cocoons to their own ant hill and when these ants come out they'll make them their slaves."

"What?"

Karik jumped up as if he had been stung.

"And why haven't you done something about it? These slave owners are busy robbing, and here we are sitting with our hands folded?"

He seized a stone from the ground and swinging it around flung it violently at a group of the bandits, who were dragging white cocoons out of the ant hill.

"Hit them! Valya, what are you looking at? Can't you pee? What awful parasites!"

Lumps of earth and stones now flew amongst the red ants. Without thinking of the danger the children darted from behind the trees.

"Fire!" ordered Karik. And two stones whistled into the crowd of bandits.

The Professor, becoming frightened, seized the children by the arms.

"Stop! You lunatics! What are you doing? Do you want them to attack us?"

"Well, let them!" frowned Valya. "Let them attack us! We'll soon show them what happens to people who make slaves."



"We can't fight them!" scolded the Professor.

"That remains to be seen," answered Karik, pugnaciously, still firing stones at the ants.

The children had worked themselves up to such a pitch that they could not be restrained.

"What about you?" Valya shouted at the Professor. "Aren't you ashamed to stand there with your hands folded? Come on, help us!" and she shoved a stone towards him.

But the Professor waved his hand and stepped on one side.

He sat down on the edge of the precipice and swinging his legs in the air started to count the ants which had been hit by the children.

At that moment one of the children deftly hit an ant plumb on the head. The ant staggered and slowly, just as if it was thinking hard, it started to fall forward. At that moment a second stone whistled at it, hitting it on the chest. The ant dropped and lay still. The cocoon fell out of its clutches and rolled down the hill. Another of the bandits ran up to it.

"See if you can hit one!" Valya shouted.

The Professor, quite unexpectedly to himself, bent his arm back and threw a stone at the ant.

Just then the bandit ant was making for the cocoon. It was on the point of seizing it with its claws when the stone thrown by the Professor hit it on the claw. The ant turned and fell on one side, spun around and made off" limping.

"Aha, you don't like that!" grinned the Professor, and bent over for more stones.

A third ant had already reached the cocoon. Having seized it the ant quickly made off towards his gang.

"Nonsense," roared the Professor. "I won't let you have it!" At that he fired a stone so precisely that it knocked this ant out also.

The cocoon now rolled away off to one side. "Mow them down!" yelled Karik. "It is no use just hitting odd ones like that. Oh, if only our

scout troop was here we'd soon show these slave-makers . . . what blackguards. Come on, all together. Give them a volley!"

Heavy stones crashed over amongst the ants.

"Hurrah, they are running away!" cried Valya cheerfully.

She bent over to pick up another stone and suddenly saw in front of her a fearsome ant face. It had got up the cliff unnoticed and was upon her.

She seized a lump of earth, swung it upwards and brought it down on the ant's head, screaming as she did it.

"Help, help! Come quickly!"

The ant staggered but made on towards the brave girl.

"They are here! Come on!" she screamed.

The Professor and Karik dashed over to her.

The Professor gave orders.

"You attack at the side, I'll be in front! Hit it with stones!"

"Ya-ya-yah!" shouted the children, and fearlessly hurled themselves at the ant.

The Professor hit it full force in the eye with a stone.

The ant shuddered, staggered and helplessly started kicking its feet about. Karik struck it in the back and Valya jumping in closer hit it with a stone on the head. The ant fell heavily to the ground.

"Hurrah!" yelled Valya.

With her stone raised high above her head she stood there red in the face with the exertion and beaming with pride at the Professor and Karik.

It was, however, too early to celebrate.

Down in the ravine a whole horde of fierce ants were streaming over to the help of the bandit. They were running along, agile and muscular and the sun glinted on their red shining sides which sparkled like some sort of copper armour.

The grassy jungle shook with the heavy beat of ants' feet.

"Valya, Valya! Lookout! Come back!" yelled Karik.

Valya turned.

"Oy! a hundred of them!" she cried out. "No! more than that and they are climbing up! They're coming up!"

The hordes of ants were swarming up the sides of the ravine.

"We must run for it!" barked the Professor.

He seized the children by the hands, they dashed off together not caring where they went, jumping over holes and stumbling against rocks.

The wind sang in their ears: fe-e-ew!

With thunderous tread the ants charged behind them, gaining all the time on the unfortunate travellers.

Now, now! another minute and they'll catch up, seize and tear the Professor and the children in pieces.

Panting from the pace at which he had run, the Professor looked over his shoulder at the ants, and then at the children. Would they be able to keep going? "We cannot get away!" the thought made the Professor cold with fear. "We cannot possibly escape them!"

What could be done? Must he and the children all perish?

No, it was unthinkable!

Suppose he were to stop and hold the ants. Maybe the children would be able to hide somewhere whilst he fought the beasts.

He pretended to stumble accidentally and stopped.

Seeing this the children also stopped.

"Run on! Run on!" he waved with his hands.

Karik and Valya ran on, but after a few steps they stopped again.

"For goodness sake why don't you run?" shouted the Professor angrily. "Run on. What's stopping you?"

"A river! Here is a river!"

"Where?"

The Professor bounded towards the children. In front of them was a line of low hillocks.

Behind the hillocks a river showed blue shimmering in the sun.

"Can you swim that?" the Professor panted at the children, breathing heavily.

Karik and Valya looked at each other and both together answered.

"Rather!"

"Of course we can swim it!"

"Come on! We're saved!"

The Professor ran up to the cliff edge of the river. "Dive in!" he shouted, "and swim across!" and throwing up his arms he plunged off the cliff into the river, yelling.

"Follow me."

Not hesitating a moment, Karik and Valya both dived after him.

The cold water took their breath away. Karik bobbed up like a cork and looked hastily around.

Ahead, blowing and snorting like a seal, swam the Professor.

His bald head shone in the sunshine like a polished billiard ball. With speedy strokes Karik and Valya swam after him. But apparently he could not see them. He twisted his head back and raised himself out of the water for a second looking around.

"Ahoy!" he shouted. "Where are you?"

"Here!"

"Here!"

"Don't stop!"

Karik and Valya threshed the water with their arms. Making every effort they tried to overtake him, but he was quite clearly a master swimmer. The distance between him and the children increased every minute. He reached the other bank whilst the children were still in the middle.

Valya cried out something. So he turned back and swam alongside the children.

"Well! how are things?" he asked with some anxiety. "You are not too tired! Can you make it?"

"We'll make it!" Valya just managed to bubble back.

Karik turned his head back; he was no longer afraid — the ants could not swim.

There on the bank they were crowding, running down the side to the very edge of the river, bending down to the water's edge, feeling it with their feet, just as if they had decided to try and swim — then immediately drawing back.

Not one of them could make up its mind to plunge into the water.

Worn and weary the travellers dragged themselves up the opposite bank and staggering with tiredness made their way to some flat rocks.

The children sank on to the rocks.

"There's war for you," said the Professor, bending his head down and wringing the water out of his beard.

Karik and Valya didn't reply.

They gazed at the opposite bank where the ants were running backwards and forwards.

"And ants don't swim?" asked Valya, wiping her face with her hands.

"No! These do not swim!" The Professor comforted the girl.

"But," said Karik, taking a deep breath, "but I read somewhere that they held on to each other, made a floating bridge and got across rivers like that."

"True enough!" nodded the Professor, "but there are not enough of them here to make such a bridge. Generally speaking. . . ."

He broke off to gaze anxiously at the heavy thundery clouds, and he turned abruptly from the bank.

"There is another danger threatening us, my dears. Very soon a pretty drop of rain will start to fall. Hoo-oo-. We must hide ourselves somewhere, the sooner the better."

Valya started grinning.

"Surely we are so wet already we have nothing much to fear?"

"You forget," barked the Professor, "that the first drop of rain would knock us off our feet and the next drops would beat us into the earth. We had jolly well better look around for some hidey hole where we can shelter during the rain."

The travellers had not got much further before the sky darkened, a cold wind rustled the tops of the grassy jungle and odd drops of rain could be heard drumming on the leaves.

These were just the first drops.

"Quicker!" ordered the Professor, "follow me, my dears!"

He rolled down a steep slope and jumping up ran on.

The children plunged after him.

Their blue dresses fluttered in the wind. Their umbrellas shook and their long handles bent like bows.

Suddenly the Professor turned abruptly to one side.

"Here we are, children!" he shouted, running towards a high grey cliff which stood out of the valley like a skyscraper.

On top of this cliff there lay an enormous dark brown mass, like a hat.

In the distance it looked just like a giant peaked cap.

The Professor ran up to the foot of this strange cliff and throwing his head back started to examine it.

"Well! well! this is marvellous, isn't it?" he said, wiping his face with his hand.

Karik and Valya ran up to him and both started:

"What is it?"

"Don't you recognise it?" smiled the Professor. "Take a good look at this marvel!"

The cliff stretched high into the sky and the higher it went the narrower it became.

Right on top at the height of a two-storied house there hung a circular spongy-looking roof. It projected like the brim of an immense hat protecting them from the rain. The dark shadow of this roof covered the top half of the pillar cliff.

"A mushroom!" yelled Valya.

"Of course it is — a mushroom!" laughed the Professor.

"Which sort is it?" asked Karik. "A White mushroom, a Shaggy cap, a Fly catcher or a Blewit?"

The Professor opened his mouth to reply but heavy rain started to beat down. His voice was drowned in the roar of the torrent.

Neither the Professor nor the children had ever seen such rain before.

Huge balls of water whistled and howled through the air, falling crashingly upon the earth. Pieces of earth were thrown up just as if a shell had exploded. Before the mud had time to settle hundreds more water shells howling and crashing buried themselves in the earth, throwing it up, scattering it, and splashing.

Streams of water spread over the earth. Soon a turbid watery curtain shut the travellers off from the rest of the world.

The air suddenly became much cooler.

Shivering and resting first on one leg and then on the other the Professor and the children were like geese standing on ice.

An icy blast of wind came from the side and drenched the travellers with cold spray.

"Go-oo-old!" Karik's teeth were chattering.

"Nasty, my dear, nasty!" gruff-gruffed the Professor, and wriggled his shoulders with the cold. "We shall get quite numb like this. We must find the sheltered side of the mushroom. Now come on. You, Karik, go round to

the right and you, Valya, to the left. Assembly point is here. Try and find whether there is not a better place than this. Now quick march!"

Their teeth chattering with the cold, the children ran around the base of the giant mushroom.

Valya rounded a thick projection of the cliff and the wind shifted to her back and then fell away.

Behind the projection all was calm.

Underfoot there were dry sticks and twigs. The earth was warm. Stamping her frozen feet, Valya felt them at once getting warmer.

It was the very driest and warmest place under the mushroom but was somewhat dark. A little way above the ground the thick skin of the mushroom had split and a piece of it hung down like a canopy roof overshadowing the ground.

Valya got under the canopy.

"Here we are! Come on here!" she shouted. "I have found a tent! Here's a tent! Come round to me!"

The Professor and Karik soon appeared from different sides of the mushroom.

They were at once delighted by the roomy nook with its canopy.

"Not at all bad!" said the Professor, looking round. In such a pavilion they could clearly wait until the rain was over in tolerable comfort.

He rolled some thick short stems of dried grass under the canopy and the travellers sat down and. made themselves comfortable.

"I propose," said Karik, brightening up, "that this refuge for travellers should be named 'Valya's Wonder Tent'!"

"I have no objection!" declared Valya, clearly most taken with Karik's notion.

"Well, well!" said the Professor. "All we need now is a nice cup of tea and — "

But he didn't have a chance to say what he would like with his tea. Something heavy fell on to the roof of the wonder tent and rolled rumbling over their heads. Then twisting and curling itself in loops a fat white snake with a black head swung downwards in the air. It fell heavily on the ground, started to turn around and wriggle towards the travellers' feet as if it were about to attack them.

The children darted to the Professor and hid behind his back.

But the Professor himself was also retreating in alarm. The snake was about twice as big as he was and much fatter. It bent its black head down to the ground and working it like a drill twisted and turned until at length it had disappeared under the ground.



"Ah, that's it!" muttered the Professor.

The travellers had not recovered from this shock when white snakes started to rain down from above and bury themselves in the earth.

The children began to run away.

"Where are you going? What's the matter?" shouted the Professor. "Stop!"

He grabbed them by the arms.

"The snakes!" whispered Valya.

"Snakes! Rubbish! Those are not snakes, my friend, they're just ordinary larvae, midge larvae."

"Midges?"

"Certainly! Fungus midges. Do you see?" the Professor pointed with his hand to the mushroom roof; "do you see how they have eaten away the mushroom? Oh you need not be afraid of them, my friends! They don't even notice you. They are much too full of their own worries. Whilst the soil is wet and soft they must hurry to work themselves as deep as possible into the ground so as to turn into chrysalises.

The children became calmer.

The party once again seated themselves in the wonder tent and huddled together.

The storm raged around the mushroom. The grass forest bent under the force of the water. The rain drummed with such force on the mushroom roof that it sounded like a continuous roll of thunder above their heads.

The Professor and the children every so often looked up with alarm and then involuntarily tried to bury their heads in their shoulders.

Suddenly Karik shouted:

"There's another one! Ooch, what a big one! Look then! It is coming down on us."



Above them along the fleshy underside of the mushroom hat there crawled lazily some sort of naked, fat animal. It was like a tightly stuffed, dirty-looking mattress. The back of this monster was glossy as if it had been smeared with grease.

"What's that?" demanded Valya who, taking no chances, was hiding behind the Professor's back.

"A slug!" replied the Professor very calmly. "A very ordinary snail without a shell."

"Will it also fall on us?"

"Oh, no!" The Professor started to laugh. "That one won't fall! Don't worry! He's stuck on tight."

"Is he another wrecker?"

"What, a slug? Shame on you!

The slug is the mushroom's best friend. He certainly destroys the mushrooms, but by that means he gives them a new life."

"How is it possible to be destructive and useful at the same time?"

The Professor stroked his beard and replied in a leisurely way:

"The slug swallows pieces of mushroom in which there are spores — mushroom seeds. These spores pass through the stomach of the slug and fall finally on the soil where they take root. You would not have many mushrooms but for the slugs."

"There you are, Valya," grinned Karik, "we called our shelter 'Valya's Wonder Tent': we must call the mushroom roof 'The Slug's Hat.' "

Valya was about to say something witty when the Professor raised his finger in warning and listening to something said with some agitation: "What's that? Do you hear?"

The travellers got up.

Through the noise and rumble of the gale they could hear a dull roar — somewhere quite close it seemed, as if the sea was breaking against cliffs.

The noise as if of breakers became closer every minute and grew louder and louder.

"Can it be thunder?" whispered Valya, listening.

Suddenly there was a roar and whistle. From somewhere unknown there swept a torrent of water and from all directions foaming streams broke in from this muddy sea.

The Professor and the children stood upon a small island pressed closely to the stem of the mushroom.

The water dashed past them sweeping everything out of its way, breaking the grassy trees or bending them to the very ground.

The mushroom stood like a tower on the island, but the water rose and rose, threatening to submerge not only the island but the towers-It was already splashing their feet.

"Somewhere near here there must be a river flowing," said the Professor, "and in all probability it has flooded over its banks and here you are..."

He waved his hand helplessly.

"Will the water wash us away?" asked Valya uneasily. The Professor didn't answer.

Knitting his brow he silently looked down at his feet and worked his blue, frozen fingers.

The water continued to rise — like dough. It threatened clearly to sweep the travellers away off the island and to carry them into the jungle, and there to drown them in some deep ravine.

Having looked at the Professor it dawned on Karik that their guide could see no way of saving them.

"Listen," said Karik with decision, touching the cold hand of the Professor. "I don't think our position is so terrible."

"What do you suggest?"

"We must climb up the mushroom!" answered Karik. "Yes, yes," gruff-gruffed the Professor absent-mindedly. "Let's try and climb up."

But having examined the round thick stem of the mushroom which rose vertically into the air he sighed and shook his head: it wasn't possible to climb up the mushroom.

"No, it won't work, my dears," he said, rapidly winking his eyes. "We cannot climb that."

"What about the roof of this wonder tent?" asked Valya, looking at the hanging strip of mushroom skin. "Would it hold us?"

The Professor looked upwards.

"Marvellous!" he rejoiced. "My goodness, that's a wonderful idea. Quickly, my dears! It's simply grand!"

He helped the children get up on his shoulders. From his shoulders they were able to scramble on to the roof of the wonder-tent — first Valya, then Karik.

Valya got down on her knees, hung her head over the edge of the canopy and stretched out her hand to the Professor.

"Give us your hand!"

The Professor just blinked his eyes good-humouredly.

"Well, what are you up to?" shouted Valya.

"Nothing, nothing! I'll stay here," said their guide. He knew that the children had not the strength to pull him up, and in any case the roof would probably not stand the extra weight.

The water, however, still continued to rise. It had already flooded the island on which the mushroom stood and was lapping over his feet.

The wind was blowing cold.

Grey-leaden waves were rising in the water. These waves, started to break against the stem of the mushroom spraying the Professor, already shaking with cold, from head to foot.

What could he do? Swim?

But where to? Would he ever reach dry land when he was already numbed and frozen. Yes, and how could he leave the children alone?

He stood, with his teeth chattering, gazing at the stormy lake surrounding him, in deep depression.

The water was up to his knees by now. The strong current was already clutching at his legs, but he pressed his back against the cold slippery, mushroom stem.

Logs came floating towards him. They jostled him and painfully hurt his knees.

His legs were soon covered with deep scratches.

The water now reached to his waist.

He stood, with his lips, frozen with cold, tightly clenched, trying just to think of nothing.

The water rose higher and higher.

"The children will have to find their own way home alone," drummed in the Professor's mind.

## **CHAPTER X**

After the flood — In search of a night's lodging — Valya finds the forest hotel — The Professor attacks the landlord — The first night in the new world



"CLIMB UP HERE!" SHOUTED THE children, anxiously looking down at their guide from above.

"Don't worry! Don't worry!" replied the Professor, who was now quite blue with the cold.

With her neck craning forward and her mouth open, Valya on the point of tears gazed at the Professor. Karik, knitting his brows, bit his lip and turned away. He could not in any way help his guide and could not

bear to watch the kind old man perish before his very eyes.

"My friends," said the Professor, "if anything happens to me do not forget the landmark. You must hurry to get to it. The only possible way for you to get home again I have already described to you. There is no other way for you."

Neither of them answered him but both children started to look wildly from side to side. It looked as if they hadn't even heard him. But their eyes were filled with tears. The Professor prepared to die. And undoubtedly he would have died before nightfall had not the rain suddenly ceased. So suddenly that a great silence descended upon them.

Ragged clouds were still sweeping across the heavens but clear sky had started to show. A huge red sun could be seen sinking behind the hills.

Odd drops of rain still fell noisily on the roof of the mushroom but a cheerful summer evening warmed by the sinking sun had now set in and a warm mist started to rise from the ground.

All around the Professor the waves sparkled. They were red like the disappearing sun and at the same time violet like the evening sky.

In the turbid flood logs were floating and turning this way and that way. Grass trees came past torn out by the roots.

The Professor stood with his legs wide apart and pushed the wet, slippery logs aside with his numbed hands. They kept on coming at him as if they were alive.

The water started to fall.

A huge tree floating past the mushroom seemed to shake itself in the waves and slowly came to rest aground. The Professor quickly clambered out of the water and stood with his frozen feet on the wet trunk.

"It's all over!" Shouted Karik with joy. "The water is going down. Going down!"

Valya was clapping her hands. "Look, there is dry land. Can we get down?"

Their guide worked his shoulders in a chilly way and stepping first on one foot then on the other he coughed hoarsely and replied:

"Yes, yes, climb down. We must be going."

The children nimbly made their way to the ground.

"Oy, you're absolutely frozen!" said Valya, turning to the Professor. "Let's run. We shall soon get warm running."

"Good idea," he nodded his head. "But let's see first which way we should run. Now then Karik, you, my dear, climb up a tree and have a look for our landmark."

"Right you are, Professor!"

Karik dashed to a tall trunk covered with short, sharp, pointed branches. Clinging to these giant prickles he rapidly made his way up the tree.

The tree rocked.

The leaves poured a floor of cold water on him just as if they were gutters.

Karik shivered and pressed himself to the trunk, but immediately afterwards shook himself like a dog and went on climbing.

At last he made the top of the grass tree.

It bent under his weight and he slowly rocked backwards and forwards turning his head now to the right and now to the left.

Below him as far as eye could see stretched forest, forest, forest. It was no longer, however, as it had appeared formerly. All the trees were sloping to one side as if they were half cut down.

Big leaves could be seen bending under the weight of great globes of water which looked as if they were made of crystal glass. The rays of the setting sun were reflected by them, which gave their surface a purple hue.

The whole forest flamed with a thousand such reflections.

Shaking with the cold, Karik twisted around the slippery, wet tree top and looked the other way.

Far in the west he could see a solitary mast. From its top there hung a limp flag.

"There it is!" he shouted, waving his arm towards the forest.

"We must go that way. Over that side!"

"O.K.! We can see!" Valya yelled from below.

Karik rapidly climbed down to the ground. The travellers started off on their journey and were soon deep in the heart of the grass jungle. \* \* \* \* \*

The forest was quiet. Every so often a water globe would fall to the earth with a rumble and slosh, then, once again, there would be complete silence.

There was not a single living creature to be seen or heard. A sleep of death seemed to have fallen on everything, just as it did in the story of Sleeping Beauty.

"What's happened to them all?" demanded Valya.

"Who do you mean?"

"Why, all — the wild animals."

"The insects? They're somewhere around!" answered the Professor shivering. "They've hidden themselves."

"Are they asleep?"

"They are drying themselves!"

Their guide rubbed his frozen hands vigorously and increased his pace of walking.

"All those who fly," he continued as they went along, "and all those who jump are now sitting waiting for the sun to dry them, when they will be able to start running and jumping and flying once again. In this way they wait patiently every morning for the rising sun, sitting in the grass covered with the heavy dew."

"That's fine!" grinned Karik. "They can dry themselves out for a whole year and I shouldn't be the least bit sorry."

"We certainly seem quite alone in the forest at present," said Valya. "But what does frighten me is that when we lie down to sleep they will attack us in the night. I am not frightened now."

\* \* \* \* \*

The children became cheerful.

They talked incessantly as they went along and then started to play some sort of game chasing each other through the forest, calling to each other and hiding behind the great trunks of the grass trees.

Karik ran on far ahead whilst Valya bravely poked her nose into every crevice and peered into every hole. She wanted to see what the monsters of the grassy forest looked like after the rain.

The Professor watched them with growing anxiety and at last said rather crossly: "You mustn't

think, my dears, that all the insects will now sit peacefully waiting for sunrise. It has only got to get really dark and all the ruffians of the night world will come creeping out of their holes and crevices. These night



ruffians are much more fearsome than the day-time ones. Generally speaking, I don't advise you to poke your nose into every crack."

The children looked at each other.

"We," hesitated a subdued Valya, "we didn't know about the night ones."

They now held hands and followed behind their guide, neither dropping back nor running ahead.

The sun sank.

In the forest it now became quite dark and in some way particularly silent.

The dark trees rose up around the travellers like a wall. Away up above their tops the wind now started to make a mournful sound. At odd intervals heavy drops of rain fell on the ground with the thud of a falling rock.

It became difficult to make their way in the dark.

The Professor and the children more and more frequently bumped against trees or stumbled and fell.

"Wait a minute," said the Professor, stopping. "Here we are wandering about when it is clearly time to look for a lodging place for the night. I think we had better spread out and sweep the wood like a chain, but naturally not losing each other."

"It's so dark," whispered Valya. "We may easily get lost."

"We'll call to each other."

"What have we got to do?"

"Well, we must carefully look for some sort of a comfortable cranny. Whoever finds a suitable place for a night's lodging must shout. Agreed?"

"Agreed!" answered Karik and Valya together.

The travellers dispersed in different directions. Valya went along a broad stream. Further on her left was Karik, and beyond him the Professor.

"Keep a careful look-out!" came the voice of the Professor.

"Coo-ee," shouted Valya.

"Coo-ee," replied Karik.

Suddenly it seemed to Valya that something quite close to her moved.

She started running, but at once heard hasty steps behind her.

She stopped and hid behind a tree. She was becoming scared.

"Coo-ee," she yelled.

"Ahey! ahey!" came back two voices from quite near her amid the trees.

The Professor and Karik were quite near. Valya became calmer and once again resumed her walk but once again she heard behind her cautious steps.

"Who is that? Who is there?" Valya jerked out, and not waiting for an answer dashed ahead into a dark thicket.

She ran on stumbling, fearing to stop and not daring to look around.

Suddenly in the darkness a high wall rose up. In her flight Valya all but collided with it, luckily she stretched out her arms in time.

Her hands met a cold mass of rock.

"Coo-ee," she shouted.

"Coo-ee," Karik at once replied.

Breathing heavily, Valya started to move along touching the rocky mass with her hands. The ground beneath her feet became muddy. Her feet stuck in the clay.

After going a few steps she stopped. In front of her lay a big broad puddle.

"I'll go around the other way," thought Valya, and turning sharply retraced her steps. She got to the dry ground and feeling the granite mass with her hands started to go round it the other way, but had only taken a few steps when she suddenly felt her hand go into space.

She stopped.

In the dark she could make out the black entrance to some cavern.

"Here we are!" shouted Valya. "Come quickly! I've found it!"

"Where are you?" yelled back Karik, running out of the trees.

"Here! Over here! I've found it!"

Karik looked at the rocky mass and then at Valya, and then said angrily:

"What are you shouting for? That is a rock. A big rock. Do you think we can shelter under a rock?"

"Inside it," replied Valya. "Just look here." She pushed her brother towards the wide, dark entrance which led into the interior of the rocky mass.

Karik stepped back a little from the rocky mass, stopped, put his arms akimbo and started to examine it with the eyes of one who might be about to purchase it as a residence.

"H'm, yes!" Karik gravely nodded his head. "That's not bad! Quite a hotel!"

It appeared to be a long block of granite rather like a cigar.

It lay amidst the trunks of huge bamboo-like trees. Some fairy story giant must have been carrying it and dropped it here. It was practically suspended in mid-air. You could put your hand between it and the ground.

Karik made a trumpet of his hands and yelled:

"Professor! Professor! We have found a place."

"Coo-ee, I am coming. Coming!"

Karik turned to Valya. Patting her on the back, he said:

"Excellent young woman! This is like an aeroplane hangar made of rock. . . . We should certainly be able to lodge in it for the night. . . . Let's try and get into it."

At the very entrance to the cavern there was a stump of a tree cast up against it by the flood. Karik clambered on to this and started to gaze into the darkness beyond.

"It's a pity we haven't got a match," he complained. "I can't see a thing."

He stretched out his hands and started to move forward into the cave.

"What's it like?" Valya was impatiently waiting behind him.

Suddenly Karik sprang backwards and came spinning like a top over the wet stump of the tree.

With one bound away from the cavern he grasped Valya by the hand and quickly sat them both down behind a tree.

"It's occupied! There's something in the hole," he whispered. "Huge! terrible!"

At that moment two enormous feelers poked out of the cavern followed by a round black head. It turned first to the right, then the left, and slowly withdrew again into the hole.

"Did you see that!"

"Oo hoo! What whiskers! They were its whiskers, weren't they?"

"Yes, feelers, of course. They all have feelers here."

"We must get hold of the Professor."

"Coo-ee," yelled Karik.

"Coo-ee," came back the voice of the Professor. "Where are you? How am I to get to you?"

"Here! here!"

"Over here!"

There was a noise of rustling leaves, heavy steps and a cough.

Their guide appeared from behind some trees.

"Well, what luck? You've found something."

"We've found something."

"We've practically found it."

Valya pointed to the cavern.

"I found that," she said proudly.

The Professor went nearer and poked the rocky wall with his stick.

"I recognise it. Very successful. Simply marvellous! Just the very thing we needed. An excellent hotel for travellers like ourselves."

The Professor got up on the stump and gazed into the cavern.

"Stop! Stop!" screamed Karik, and seized him by the arm.

"What's up? What's happened?"

"The hotel is occupied. Something is already in it. Got there before us."

"Enormous, it has . . . oh it's really terrifying!" whispered Valya.

"Don't worry! don't worry!" replied the Professor quite calmly. "I know this lodger quite well. . . . It's an old friend of mine. . . . It won't take us more than a minute to get it out of that."

The Professor went back around the puddle and came to a stop near the narrow end of the rocky mass. Squatting down on his heels he felt the rock with his hands.



"There we are! There we are!" The children heard him exclaim.

"Just as I thought." Muttering something under his breath the Professor jumped up and dashed off into the depths of the forest.

"Where has he gone?" asked Valya.

"I don't know."

"Where are you off to. Professor?" shouted Valya.

"Stay where you are. I'll be back in a minute," came his voice through the darkness.

The minute passed but the Professor didn't come back. The children could hear his steps and mutterings but what he was doing in the forest was difficult to guess.

At last he reappeared.

"Here I am!" he shouted, dragging behind him a long pole.

Having dragged the pole up to the rocky mass he once again felt the surface of the rock with his hands and having found a round hole pushed the sharp end of the pole into it.

Karik and Valya watched every movement he made, but neither of them could understand what he was up to.

"It looks as if there'll be a fight," said Valya.

The children bent down and searched on the ground with their hands. Karik got hold of a heavy club. Valya found a rock and firmly grasped it in her hand. Now they were ready to go at any moment to the help of the Professor.

"Now, my dears. Just move on one side!" said their guide, straightening himself up.

The children not hurrying moved away from the cavern and stood holding hands.

"And now," grinned the Professor. "Just watch how this huge and terrible creature will take to its heels."

He twisted the pole to the right and to the left, then thrust it deep into the narrow crack and then started to use it just like a poker in a fire.

The monster then began to get restless.

A black head covered with spines stuck up out of the main entrance to the cave and rocking dropped down again. "Come on now!" shouted the Professor, throwing his full weight against the thick end of the pole.

The giant shuddered as if stung, moved out of the entrance, producing three pairs of legs, then proceeded to drag out behind it a long jointed body and made off towards the stream.

The children had hardly been able to observe the details of the monster before it went over the edge of the bank and fell with a dull splash into the water. The rapid current at once seized it and it immediately disappeared in the darkness.

"That was very neat!" grinned Karik. "It won't creep into a strange hotel another time."

"That's fine!" gruffed the Professor good humouredly. "We won't go into details now as to who seized the territory — whether it took ours or we took its. In any case it didn't argue with us."

"What!" Karik guessed. "You mean we have taken its own personal house from this giant?"

"Something like it!" replied the Professor, "but it's too late now to repent. Yes, and it is not worth while in any case. Now, my dears, let's prepare our sleeping quarters. Collect twigs and leaves and little branches. Pile them by the entrance."

The work became fast and furious in the dark.

The Professor and the children dragged together leaves, roots and stumps of grass trees.

It wasn't at all an easy job.

It took two of them to drag a single leaf, and a blue petal from some flower proved almost beyond the capacity of the three of them.

The Professor started to shout.

"Now, now, make haste! Valya, don't walk in the water! Karik, give up that leaf! You can never lift it. . . . Now help me to drag these twigs!"

All the same he was contented now. He had feared that they would have to spend the night under the open sky and now they had had this unexpected luck.

"Ah, my dears," he said, with some solemnity, "how very fortunately this day has turned out for us. Really, we seem to have been born with silver spoons in our mouths, as they say in England. Just wait till we get into this refuge and you will yourselves see how lucky we are. . . ."

"What about the flood?" exclaimed Karik. "B-r-r-r! It is terrible even to think of it. There wasn't much silver spoon about that."

"The flood. That certainly was our darkest hour. However, we were not drowned and, my dears, it did us a useful turn. In fact, but for the flood, I do not know where we should have spent the night and what might have happened to us during the night — it was the flood that deposited the Caddis fly larva on the bank of the stream, together with its rocky home."

"And it did not even defend itself!" said Valya. "So huge and yet so peaceful."

"What! the Caddis fly larva peaceful?"

The Professor laughed.

"Well, it could hardly be described as peaceful," he continued, "under water there is nothing it fears. This greedy ruffian attacks small crabs, the larvae of insects and not infrequently devours its own children."

"A sort of brigand!"

"A very real brigand. Just think how it sets out to hunt. How marvellously equipped it is — the villain is clad like a knight in strong, impenetrable armour. But what a knight! Knights have helmets, breastplates and chain armour, but this gentleman drags around a regular fortress."

"You mean he is sitting in it like in a tank?" asked Valya.

"No, not quite," replied the Professor, "because the tank driver is carried by his tank. Whereas this creature drags its tank with it."

Valya gazed at the rocky mass and shook her head.

"My word, what a weight!"

"Not all of them have such heavy houses," said the Professor. "Where there are reeds growing, small pieces of dead reed fall to the bottom and these creatures make their houses inside these pieces of reed; but when the bottom is sandy or rocky they construct houses out of crab shells and sand. Besides these, you come across them using houses made of simple leaves which have fallen into the water."

"But why do they have two entrances to their house, one big and one small?"

"In order to allow the water to circulate freely through the house."

"But why let it in?"

"How do you mean, let it in?" puzzled the Professor. "Of course the house is always full of water, and if this was not frequently changed the walls would get covered with moulds and the fortress of this ruffian would be taken by the assault of millions of bacteria. Bacteria thrive in stagnant water, it is just as necessary to them as air is to us."

"But how cunningly you managed to get it out!" exclaimed Karik, admiringly.

"Oh, that wasn't my invention," replied the Professor, modestly. "I remembered how as children we used to deal with these creatures. You just poke a straw in at the back door and the creature would look out of his front door. You wriggled it about and the creature fell out into the palm of your hand."

"What did you do it for?" asked Karik, surprised.

"We used to fish with them. They are the most excellent bait."

"Fish?" questioned Karik, "but it would jump off; how could you attach it?"

The Professor smiled.

"You are not much of a fisherman, are you? Wait until you start the craze."

"Oho!" Karik waved his hands. "Why, I would sit fishing for a month if I could."

"Well! are you a successful fisherman?"

"No," acknowledged Karik, humorously. "Somehow I don't have any luck."

"There you are. Now I am telling you. You should try fishing with the larvae of a Caddis fly. I do not know any better bait for a hook than this particular larva."

"I must try it."

"But what happens to the Caddis fly larva now, without its case?" asked Valya. "Will it die?"

"It won't die," replied the Professor, heartlessly. "Whilst we have been talking, in all probability it has already built itself half a house. You needn't worry, it won't perish. It will grow up and then turn into a flying insect."

"It — into a flying insect?"

"Just so," said the Professor, dragging a rose-coloured petal along the ground. "It will turn into an insect very like a moth. By the way, the Caddis fly doesn't only fly. It can run about quite well, both on land and on the water. When it is time for it to lay eggs it goes down under the water and then fastens its spawn eggs to water plants."

The Professor took a look at the mountain of twigs, leaves and petals which they had dragged together during their conversation and said:

"That'll do. We have so filled up the entrance that we can hardly get into the cave ourselves. Let's climb in."

Karik and Valya did not need a second invitation. They clambered over the heap of twigs and made their way into the semi-darkness of a low passage.

At the very end of this it was just possible to see the light coming through a narrow chink.

The children went forward in the darkness feeling the walls with their hands. Their feet sank in what appeared to be a soft, delicate carpet.

The walls were of the same softness and silkiness. Karik raised his hand and felt the ceiling. "It is just as soft," he marvelled.

The children reached the end of the corridor and stopped in front of a round hole.

Cold wind whistled round their legs.

"We must stop up this window!" said Karik. "Mother never let us sit in a draught."

He turned and fetched a soft petal, crumpled it up and pushed it firmly into the hole.

"It won't blow now," said Valya, "but it makes it very dark. Let's go back."

The children returned to the mouth of the cave where the Professor was arranging the twigs, leaves and petals.

"Well! What do you think of it? Does the house please you?" asked the latter. "Do you think we can live in it?"

"It is carpeted all over, carpets everywhere," said Karik, cheerfully. "This creature did itself pretty well!"

"Not at all bad!" agreed the Professor. "By the way, these carpets are not quite so simple. If anyone tries to pull the creature out of its house it catches the carpets with its claws and then no effort can make it budge. However, we must attend to our business, my dears. Help me to close the entrance or else some unexpected, uninvited guest may wander in upon us in the middle of the night."

He succeeded with the help of the children in tumbling a heap of roots into the entrance, and on top of them laid twigs and on the twigs laid petals.

They had now got a real barricade. There was only a narrow chink at the top of it through which the blue light of a moonlit night filtered.

"Excellent," said the Professor. "Now nothing can get at us. Make yourselves comfortable, my dears. Have a good rest."

The children found a suitable spot in the angle of the wall, stretched themselves out on the downy carpet and huddled ever so close to each other.

The Professor lay beside them.

The gallant travellers now became still as they listened to the night wind moaning sadly outside their house and heard the dismal creaking of the grass trees.

From above, from the wet leaves, heavy drops of water fell on the roof as if someone was emptying a huge bath again and again.

It was warm and dry in the little house. The Professor and the children were stretched out full length. The carpet beneath them was soft as if made of down. But they could not sleep.

This was their first night in the new world, so completely strange to them, in which during the course of one day they had endured so much and encountered so many dangers.

Through the chink above the barricade the night sky could be seen and this sky was full of huge stars.

Valya lay there with open eyes. She gazed fixedly at a bluey star which hung above the entrance to the cavern.

This star was as big as a full moon, but now and then it twinkled.

It was just like lying in bed at home and seeing swaying outside your window some cheerful great moon-like street lamp.

Valya recalled the rumbling squeaks of the trams, the hoarse, angry hooting of the motor-cars, and the rapidly-moving beams of light which came through the window and chased each other on the bedroom walls.

She closed her eyes.

For a moment it seemed that she was in her own warm bed at home and could hear these familiar noises of the street.

The door to the neighbouring room was closed but a yellow streak of light shone under the door.

In the dining-room mother was washing up the dishes. Plates and cups chinked and teaspoons jingled.

Having washed up the dishes, mother brushed the crumbs off the table and covered the table with a clean white tablecloth.

Valya sighed.

She remembered the crumbs of cheese which remained on the table after lunch and she swallowed the water her mouth was making.

Ah! if only one of those crumbs of fresh tasty cheese was in the cave. The one crumb would be sufficient for Karik, the Professor and herself, and after they had breakfasted there would be some over.

And Valya again sighed.

But perhaps they would have to stop in this strange world for ever now? Would they ever get home? Would they ever see mother again?

"Mother will certainly cry," said Valya, quietly to herself.

"She will cry," agreed Karik. "She certainly will cry."

The children started to think. What would mother be doing now? Maybe she was lying fully dressed on the bed and would raise her head from the pillow at every rustle, listening, listening. Were the children coming?

On the table covered with a napkin would be the supper left out for them. The clock would be ticking quietly in the dining-room. In her dark corner the cat would be lying asleep.

Tears sprang to Valya's eyes. She quietly wiped them away with her fist and frowned deeply.

"No! I won't cry!"

Outside the little house the midnight wind moaned.

The travellers lay, each of them thinking of the big world in which they so lately lived.

"It's all nonsense!" sighed the Professor noisily. "It is not possible for us never to get back. We'll get back, my dears. Don't get downhearted!"

Karik and Valya did not reply. They already were deep in sound, healthy sleep.

Then the Professor yawned pleasantly, turned on his side, put his fist under his head as a pillow and started to snore deeply.

\* \* \* \* \*

The travellers slept so soundly that they never even heard the torrent of rain which beat down upon their house once again.

## **CHAPTER XI**

A cold awakening — The Professor entertains the children to omelette — He opens a dressmaking establishment — The Andrena bee — The Professor and Karik vanish

## A WHITE FOG WAS ROLLING OVER THE COLD EARTH IN DENSE waves.

It was almost as if milk was being poured over the silent forest filling the ravines and valleys.

The tops of the trees were now engulfed in the fog and now struggling above it.

The morning coldness and damp made its way into the cave through the chinks of the barricade, and it soon became as chilly within as it was already cold without.

The children turned in their sleep restlessly and drew their knees up to their chins, but despite all this they could get no warmer.

At last Karik could stand it no longer, jumped up, rubbed his sleepy eyes, shivered in a chilly fashion and then started to examine the sloping walls with amazement. They were silvery white exactly as if they were covered with hoar frost.

He touched them.

"No, it is not frost. It's — a carpet. A silvery carpet. Br-r-r! co-o-old!"

Valya was lying on the floor on the carpet rolled up in a ball. She had her knees up to her closed eyes and was clasping her head with her hands. In her sleep she quietly groaned and sobbed.

Karik started jumping up and down on the one spot trying to get warm, then he ran along to the end of the corridor.

He began to feel a little warmer. He turned back and did a somersault once, twice, thrice and came down on Valya's feet.

"What is it? What's up?" screamed Valya, jumping up. "Are they attacking us?"

Shaking and shivering, she stood there gazing at Karik with sleepy, frightened eyes.

"What's the matter?" Karik was surprised. "It's only me. Wake up. You are absolutely frozen — quite blue. Come on, let's wrestle. You'll soon get warm. Here we go!"

He jumped towards Valya and dancing around her tried to pull her about.

"Get away!" Valya pushed him hard. As he fell to the ground he held on to his sister, and they both rolled on the soft downy floor.

Valya sobbed.

"Go away! No one is fighting you and you mustn't fight."



"Oh, you touch-me-not snail! I only wanted to warm you up."

"And I only want to sleep!"

"All right, go to sleep," snapped Karik.

Outside someone was moving, knocking against things, coughing and then suddenly started singing:

> "Where did you dine, sparrow hen? In the zoo with the lion in his den — I found he left quite a bit — And I drank with a seal in her pit."

It was the Professor; very, very out of tune.

"There you see," said Karik. "Everyone is up and singing, but you are still wallowing in bed — "

He ran to the entrance and shouted.

"Professor, where are you?"

"Here! here! Get up, my dears, breakfast is ready."

"What is there for breakfast?"

"A magnificent omelette."

"An omelette?"

Oho! this was more interesting than being frozen, and Valya was soon on her legs. She seized Karik by the hand. "Let's go!"

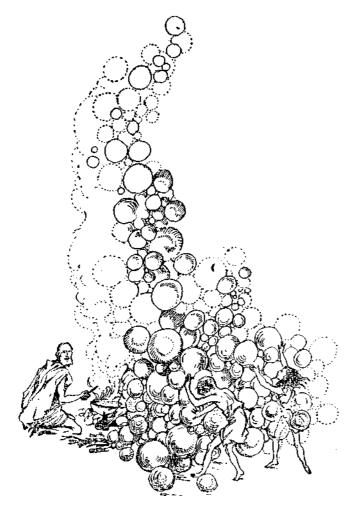
The children pushed aside the twigs and leaves which had blocked up the entrance to the cavern and burst out into the fresh air. But no sooner had Valya got out than she at once started to clamber back.

"Whatever is it, Karik? Where have we got to?" she whispered croakily, holding Karik's hand tightly.

There was no earth or sky or forest to be seen.

In the air there floated a cloud of glittering bubbles. The bubbles twisted around, collided with one another, slowly descended, and then once more were wafted upwards.

A snowstorm of chalky white bubbles was swirling around them.



"Professor," shouted Karik. "Whatever is all this? What is it that is swirling around?"

"Fog," replied the voice of the Professor.

He was quite near the children but they could not see him.

"You don't mean that an ordinary fog is like this?" said Valya.

"Yes, my little Valya. This is an ordinary fog but as we usually only see it like this under microscope."

The Professor's voice sounded muffled as if he was down in a deep hole.

The children stretched out their hands trying to catch the bubbles, but they only broke and trickled cold water along their fingers.

"Well, where have you got stuck now?" came the voice of the Professor through the turbid fog. "Hurry up, I have got something here more interesting than a fog."

Karik and Valya, proceeding cautiously, headed towards the voice of the Professor.

"Have you got lots of omelette?" shouted Valya.

"If you hurry there may be a little left for you to try — you'd better come quickly before I have eaten it all."

Through the fog a queer light flickered.

"A fire!" yelled Karik.

Could the Professor have lit a wood fire? But where did he get the matches from?

Valya dashed towards the fire in great spirits.

"A camp fire, a real fire! We have got a camp fire!" she shouted.

Before them, weaving through the clouds of fog bubbles, there danced the flames of a camp fire.

A tall column of greenish flame rose to the very tops of the dark, wet forest.

The Professor was squatting by the logs. He was tending the brushwood which was crackling in the fire, using a thick stick as a poker.

"Hurrah!" cheered the children in unison. They ran up to the fire and holding each other's hands started to dance some sort of a wild dance.

"Hop-la!" yelled Valya, jumping.

"Hop-la-la," bounced Karik, red in the face.

"Quieter, quieter!" The Professor tried to stop them. "You will break the dish in pieces. Far better sit down and eat!"

The ashes gave out such heat that it was quite impossible to stand near them. All the same there was not much wood burning. Valya seized an armful of brushwood and made to throw it on the fire, but the Professor stopped her.

"It is not necessary, the omelette is cooked."

"But the fire. It is going out."

"No it won't go out — sit down, my dears, and have breakfast." With that he placed before them just on the ground a huge white dish with irregular edges; it was full to the brim with a steaming omelette.

Without waiting further invitation the children greedily set to.

Having burnt themselves and blowing from time to time on their fingers they swallowed mouthful after mouthful.

Valya became bright red in the face. Karik's nose was glistening with perspiration. The Professor was the only one who did not hurry his eating but used a piece of folded petal as a spoon.

The children had not got half way through the omelette before they felt stuffed full.

"Well," said the Professor, wiping his beard with a tuft of petal. "I hope you are satisfied now!"

"I'm more than that," grinned Karik. "My tummy is over stretched."

"And mine is very tight, too," said Valya.

"Excellent! Splendid!" smiled the Professor. "I am jolly glad the omelette pleased you."

"But whatever did you concoct it out of?" questioned Valya.

"Obvious what one uses for an omelette — eggs," interrupted Karik.

"That's simple. But how did you get the fire alight. Where did you find the matches? And again why does the fire rise in such a column? Why is the flame green? And why does the fire burn without twigs?" The Professor threw some twigs on the fire and arranged them with his poker, cheerfully winking at the children.

"You thought I spent a lazy night. Not at all. All night long I ate fried ham with green peas, hot pies, beefsteaks, soup, fruit tarts. But unfortunately all these dishes were only dreams. I awoke as hungry as a wolf. Well, I jumped up and ran around looking for something to eat. I was afraid to go very far away from our palatial residence. You can see what the fog is like. I could not see more than two paces. I would get lost at the best or fall over some precipice or other. What could I do? Wait for the dawn or take a chance on it. I thought and thought and decided to build a fire. As luck would have it I found two flints in the forest last night. Those came to my rescue. I collected dry twigs, piled them in a heap and set to work."

"Like a pre-historic man!" whispered Valya.

"Exactly," smiled the Professor. "But I'm telling you that it's no light work. I had pretty well tortured myself before I succeeded in getting the sparks to start a fire. I now appreciate much better how very uncomfortable our forebears must have been."

"But all the same why is the flame green?" asked Valya.

"Why? Just because it is burning gas. Ordinary marsh gas-methane — which forces its way out of the earth in numerous places. I was lucky. I started the fire accidentally in a place where there was a quantity of the gas below the surface of the earth. Even the omelette came out of the fire!"

Valya exclaimed.

"Came by itself?"

The Professor looked at Valya, gravely stroked his beard and continued:

"Just as the fire started to burn up, something near me began to make a noise, and suddenly a strong blast of air blew me off my legs. All around me the air whistled as if I had accidentally uncorked a hurricane. It was a bird. The hurricane was caused by its wings. The fire must have frightened it off its nest."

"It was not burnt?"

"No, it flew away," answered the Professor. "I then started to look for its nest. And it turned out that it had not been sitting so quietly for nothing."

"You found it?"

"Of course — and it was out of this nest I got the egg."

"It wasn't a crow."

"No, by its markings it is the egg of a hedge sparrow — white with speckles. Have you ever seen the eggs of a hedge sparrow? They are not much bigger than a big pea. But I had a tolerable job moving it. I rolled it in front of me like a barrel but I had to rest at least ten times on the way. But it was even more difficult to break the shell. For a whole hour I hammered at it with stones. At last it broke suddenly and I was nearly

drowned in the white of the egg. . . . Fortunately, I just managed to jump aside."

The Professor looked at the children smiling. "Well, the rest was simple. The white poured itself out and the yolk I cooked on the shell, using the shell as a frying-pan."

Karik leant over to Valya and said something in her car. Valya nodded her head approvingly.

"Certainly say it."

Karik rose and gathered his forget-me-not shirt about himself and with his arms in suitable positions made a little speech, smiling in a superior way.

"On behalf of two pioneers of the Froonzensky detachment I beg to thank you for the delicious omelette and the fire!"

The Professor bowed.

"My dears, in actual practice it is possible even here in this lilliputian world to exist, and to exist in moderate comfort. Just wait until we have got a little more accustomed to things and see how cosy we can make ourselves."

"What?" asked Karik, with alarm in his voice. "You don't think that we shall never get home and shall have to stay like this?"

"No, I don't think that," replied the Professor, "but we must, however, be prepared for the very worst. Our landmark might be blown down by a storm; or, perhaps worse, some curious fellow might take the plywood box home to examine it more carefully. After all, anything might happen."

"And what then?"

"Nothing particular," the Professor shrugged his shoulders. 'We should live in the grass as Robinson Crusoes and, my dears, we should be much better off than the real Robinson Crusoe. He had to start up his own farm himself, but we have it all handy. Milk, eggs, honey, scented nectar, berries, meat, are all awaiting us. We can live with very little trouble in summer but we shall have to store things for the winter; we can dry bilberries, strawberries, mushrooms, and store honey, jam, bread. . . ."

"Bread?"

"Why, certainly. We have only to sow one grain of wheat and we shall have a harvest which will last us for a whole winter."

"But where can we get meat from?"

"Oh, we'll eat insects."

"Insects? You can't eat insects, can you?"

"Well, think! Even in our big world plenty of insects are eaten. Locusts, for instance. Locusts are eaten roasted, smoked, dried, salted and pickled."

The Professor recollected something, smiled and continued:

"When the Caliph Omar-ben-el-Kotal was asked what he thought of locusts, he answered, "I would like a whole basket of these good things to myself. In fact, my teeth are quite ready for them. . . ."

In olden days, whenever locusts descended in their clouds on Arab soil the price of meat fell in Baghdad. By the way, they make the most delicious cakes — locusts rolled in flour and cooked in butter."

"Phew! Horrible!" Valya made a face and spat out.

"May be horrible to you!" coughed the Professor. "It is just that you are unaccustomed to such food — nothing else. We eat lobsters, shrimps, crabs and even crayfish, which live on dead bodies. Not only do we eat them but think them luxuries. Now, Arabs look on those who eat crabs and crayfish with disgust."

"As well as locusts," he continued, "people eat other insects. In Mexico many natives collect the eggs of the striped water bug; they call them 'Hotle,' and consider them the very daintiest of dishes. Those who know think not badly of cicadas or crickets. The same cricket about which the poet of ancient Greece — Anakreon — sung."

The Professor cleared his throat and raising his arm above his head said:

"How blessed art thou, my tiny cricket, Hiding like God in every thicket."

He thoughtfully stroked his head.

"But the more simple-minded Greeks, prosaic no doubt, baked these god-like crickets in butter and ate them with relish. Even such insects as ants sometimes fall into the hands of the cook. They used to serve meat and fish in ant sauce in France. The Indians, by the way, very much like the umbrella ants. They cook them slightly salted in a frying-pan, or indeed they eat them raw."

"Does anybody eat beetles?" asked Valya. "They are the most disgusting things to me."

"In Egypt," the Professor replied, "they make a special dish out of beetles. Women eat it who wish to get fatter."

"I can see it will be all very jolly," said Karik. "Everything will go swimmingly. . . . We shall make sausages from butterflies, we shall have barrels of salted dragonflies. We must build a store house right away. We can hang the hams and the sausages from the ceiling and stand barrels of pickled plant lice along the walls."

"What about the ants?" asked Valya. "They are acid!"

"We'll make pickles from the ants. No, better still, we can make mustard from them."

"Splendid!" the Professor stroked his beard. "Simply splendid!" he nodded gravely. "As you can see, my dears, your future prospects are very good. And if by any chance we are not able to get home again we shall at any rate live here better than any Robinson Crusoe ever did."

"That is all very good," said Valya, "but if we freeze to death in the winter all these hams and pickles will be useless."

"Don't worry about that," the Professor assured her soothingly, "we shall find a cave with gas laid on, or in any case we can take the gas where we like with pipes made from rushes and reeds."

"Of course." said Karik. "Marsh gas will provide us with heat and light and . . . I say. Professor! Do you think we could build a whole lot of factories and workshops? . . . ."

"I am afraid not, my dear," smiled the Professor. "But we might be able to train some of the insects."

"Hurrah!" shouted Karik. "We shall be able to fly and take pleasure trips across the lake."

"We shall make them do all sorts of things," rejoiced Valya. "Dig tunnels, make canals and . . . in fact, generally work for us."

"Oh, yes," added Karik. "We can plough, using caterpillars, make the beetles prepare wood for us, and fly to our factories on dragonflies."

"It would be rather a good idea," sighed Valya, "if we could build the same sort of houses for ourselves as the Caddis fly which we could carry around with us."

"What a brain-wave!" Karik waved his hand. "I have already said you were a snail and a snail's house you should have, of course!"

"But how shall we cover ourselves?" asked Valya.

"The Professor will invent a powder," replied Karik, and turned to their guide, "You will invent a powder, won't you, Professor?"

"Oh dear no — I can't produce any powders," the Professor started laughing. "But in spite of that I hope we shall not come to a bad end. Even without a powder! You see, my dears, I am a biologist. I am pretty well acquainted with the ways of the world which now surrounds us and this knowledge is more useful than my chemicals. . . . And now, Karik, put a little brushwood on the embers. It's much nicer when there are some twigs crackling in the fire."

Karik brought an armful of firewood, threw it on the green flames, stretched himself full length and gazed thoughtfully at the fire.

They were all of them silent.

The twigs and leaves crackled merrily. Smoke rose in a column to the sky.

The travellers sat by the fire and each of them sank into daydreams.

There was no reason to hurry.

Until the fog had cleared, it was impossible to move on. For how should they know which way to go. Where was the landmark?

In front of them or behind them?

"Well," said the Professor, "as we have nothing to do I propose to sing a song."

The children looked at each other in alarm.

"Anything else you like but not this," was the expression on their faces. The only people who could possibly be at rest when the Professor was singing were the inhabitants of a cemetery. To anyone who could hear him his voice was about as pleasant as jabs of a sharp stick.

With his eyes screwed up from the smoke and his face covered with his hands, Karik rolled over on his side away from the smoking embers and hastily started to question the Professor, who was clearing his throat ready to sing.

"Tell us, Professor, how ever did you guess what had happened to us and how did you manage to find us?"

"Very simple," said the Professor, fortunately for the children rising to the bait. "You had drunk half a glass of the liquid. This I noticed at once."

"But. . . . "

"Yes, there was a but," grinned their guide. "You had drunk the liquid, that was certain, but where had you then disappeared to? Why, I crawled about the floor for a whole hour with a magnifying glass in my hand, but devil a trace. Do you understand? Not a single clue. This — "

"This meant we had flown away!" said Valya.

"That is too hasty a conclusion," the Professor stopped her.

"But we had flown away all the same," insisted Valya.

"Nevertheless, I had no foundation for thinking this until the photographer Schmidt's dog found your pants and threw himself at the window-sill. . . . Then suddenly I remembered that when I came into the study there had been a dragonfly on the window-sill. Also I could have sworn that I heard tiny voices shouting, "Here we are! Here!"

"Yes, yes. . . . That's what we shouted."

"At the time I thought I must have been mistaken, but afterwards thinking it all out I realised things: the dragonfly had carried off the ruffians, and if I was to save them I must hurry to Oakland, to this pond which is in the so-called "Rotton marsh."

"But why here?" asked Karik, "the dragonfly might have carried us to some wood or a field. . . . "

"Not very likely," smiled the Professor rather condescendingly. "Dragonflies live near water. They lay their eggs in the water. They are born in water, the larvae of dragonflies live in water, and the dragonflies themselves usually hunt near water. Occasionally in pursuit of some victim the dragonfly will fly away from its usual hunting-ground."

"But what a long way," said Valya. "Why, we are more than ten miles from Oakland."

"That's a mere trifle for a dragonfly. It can fly fifty to sixty miles an hour and ten miles is just a short stroll for it."

"Well, then you came to the Rotton marsh — "

"Yes," continued their guide, stroking his beard, "knowing that sooner or later the dragonfly would return to its usual hunting-ground, I decided to go to Rotton marsh. Lucky for us all this is the only pond near our town.

The next is a very long way off so I knew quite well where to look for you. Well, that's all. But now — " the Professor cleared his throat, "Let us sing a little, my dears."

"Stop!" shouted Valya.

"Why, what's the matter?" said the Professor, in some alarm.

"Don't you want to hear what happened to us?," pouted Valya.

"Oh, yes, indeed, of course I should be most interested to hear your story," muttered the Professor. "Come on, tell me, it will be most interesting."

He put an arm round the shoulders of each child and stretched his feet towards the fire. Karik and Valya started to vie with each other in telling him what had happened after they had drunk the magic liquid.

As he listened to the children the Professor understandingly nodded his head and untiringly chipped in with:

"Quite right. . . . I quite understand. . . . "

"And we quite understand everything now," Karik at last said. "At least there is one thing I don't understand."

"Yes! What is it?"

"How was it that in the den of the under-water spider we breathed quite easily at first and then suddenly nearly suffocated?"

"Very simple," replied their guide. "Judging by your story, my dear, I think you fell into the clutches of an Argyroneta spider. That is what the under-water spider is called. The name means 'Silver thread.' The spider is also called the 'Silver spider.' It builds its nest under water. This nest is like a diving bell — a bell in which divers sit and are lowered beneath the surface of the water. But this bell is no bigger than a nutshell. It is held and prevented from floating by being attached to the spider's web which is also fastened to under-water plants."

"Oho!" interjected Karik, "we only just got through that web."

"But the air?" questioned Valya. "How does the air get into it?"

"The spider brings the air into its bell from the surface of the pond. It rises to the surface and turns its belly, which is covered with fine hairs, upwards into the air. These tiny hairs are what holds the air. When the spaces between the hairs is filled with air the spider pulls its web on to its belly and carries its balloon of air just like a skirt down into its den. By the way, as well as the air a whole lot of water midges travel under water in this 'suitcase'."

"Does the air last it long?"

"No," replied the Professor. "Such a supply doesn't last long. The den gets stuffy — as you found out for yourselves. Usually this under-water silver beast of prey makes several journeys to the surface of the pond getting fresh air for itself. If you sit quietly and wait patiently on the bank of a pond you can very often see the Argyroneta or silver spider replenishing its store of air."

"How can you recognise them?" asked Valya.

"These silver spiders," replied their guide, "are like balls of quicksilver with black dots on them. . . . You see them most often around water plants. They bob up belly upwards and head down. They remain on the surface for a few seconds and then slowly sink below the surface. At first glance they seem the most harmless of beings, do these spiders. But in actual fact the Argyroneta is a vicious beast of prey which fears nothing either at the bottom or on the surface of the pond."

"Why did it hang us up to the ceiling and not eat us up?" questioned Valya.

"Yes, yes. That is interesting," said Karik.

"Lucky for you the spider was full," replied the Professor. "For this reason it hung you up, 'for a rainy day' . . . much the same as do foxes, squirrels, mankind, many birds. There is nothing very remarkable in this. It would have gobbled you Up the first day that the cold or heat had made all its usual prey hide themselves."

"Aha! I see," said Valya. "Our spider was full but the spider next door was not so well provided and that is why it broke in — in order to eat us."

"Oh, no!" said their guide. "The intruder was . . . . Do you know what?" "I know," shouted Karik. "It's enemy."

"No," smiled the Professor. "The one who came in was  $\dots$  was its bridegroom."

"Its bridegroom? How do you know that?" the children marvelled.

"These spiders," explained the Professor, "always build their underwater dens side by side; the spider fastens his den to that of the lady spider. Then he bites his way through the walls and pays a visit. . . ."

"Which," interjected Karik, "would ordinarily be called a brawl."

"Yes, sometimes the bride gets angered by something and she throws herself at the bridegroom and eats him up and sometimes the bridegroom, having overpowered his bride, eats her up, but most often the bride meets her bridegroom affectionately and they begin to live together very peaceably."

The Professor got up.

"It seems to me," he announced, "that it is high time for us to get out again. Come on, we must collect our goods and chattels."

He rummaged in the bushes and pulled out a splendid leather satchel.

"Oy!" Valya opened her eyes wide, "Where did you buy that?"

"I didn't buy it," smiled their guide. "I obtained it in the form of a gift from one of the Tardigrades — the Bear Animalcule. . . . While you were asleep I cut a bit off and, as you see, it makes an excellent satchel."

"Ha, ha!" Karik was nodding his head, "a Bear animal attacked us and you killed it and skinned it."

"Nothing of the sort," replied the Professor. "An animalcule couldn't attack us. This one is a very minute creature not more than a millimetre in size — and I did not attack it."

"But the satchel is made of skin?"

"The satchel. My dears, you see the Bear Animalcule has its family by means of eggs, and in order that no one should devour the eggs, it takes off its skin and puts the eggs in it just as if it was a suitcase."

"But doesn't it die?" questioned Valya.

"No."

"Like snakes!" said Karik. "They also change their skins."

"Yes," nodded the Professor. "Only snakes just throw away their old skins, but the Bear Animalcule has found this excellent use for it. . . ."

"What did you do with the eggs?"

"I threw them away; they, unfortunately, are not edible."

The Professor opened the satchel and put into it the dish made of egg shell and the remains of the omelette which he carefully wrapped in the pink petal of some sort of flower.

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The wind was now blowing freshly.

The fog began to get thinner. The wind carried it like smoke over the fields, flinging it down in the hollows and ravines.

The Professor covered the embers with earth.

"Well," he said, "we should be off. Get ready, my dears."

"But we are ready." Valya jumped up.

"Here!" their guide said gruffly, examining first Valya then Karik, and after thinking a little, added:

"You want to dress yourselves better."

"How can we dress ourselves better?" asked Valya, examining her forget-me-not frock, which had got crumpled during the night, was torn and hung down in tatters.

"Why, in the same sort of suit as I have," rejoined the Professor. He threw off his shoulders his crumpled cloak and underneath was a silvery suit made of spider's web.

It was only then the children remembered that he had this strange silvery suit on when he had first appeared to them, but they had not paid any attention to it then. Now they examined the costume as if it was the first time they had seen it.

"Oh! Isn't it lovely! What is it made of?" asked Valya.

"Out of spider's web."

"I'd like one of those," said Karik.

"Me too, please!" shouted Valya.

"Come on," said Karik. "Only yesterday I saw a spider's web near here."

"Oh, no," grinned the Professor. "I wouldn't stand for you taking a web off a spider and nor would the spider. We'll get your suits at another shop. Come on, follow me!"

And their guide quickly stepped over to the Caddis fly's house.

The children ran behind him.

The weak morning light barely lit up the interior of the Caddis fly's house, but nevertheless it was now possible to see that walls, floor and ceiling were lined with a thick dense layer of silken cord resembling a spider's web.

"There are your suits," said the Professor. He went up to one of the walls and took a grip with his hands.

"Heave ho!" he shouted, and pulled the lining towards himself. The walls started to split.

"Eh, we have got you!" he shouted still louder.

The lining came away in strips like damp wallpaper.

He threw some pieces to each of Karik and Valya.

"Undo these parcels of 'spider's web' and clean the clay off them."

The children started to knead the pieces with their hands. The dried clay crumbled and fell off in lumps. Karik found an end and started to disentangle it.

The silken cord of the lining curled down in even turns, and soon Karik and Valya found a silvery pile of unravelled webbing had grown up at their feet.

"Well, it is long enough!" said Karik, unwinding his apparently endless cord.

"There are even longer ones," laughed the Professor. "The thread of the silk worm, for instance, can be pulled out a couple of miles."

He bent down, picked up the end of the silvery cord and held it out to Valya.

"Dress yourself."

"In a cord. How can I put it on?"



"Like this. . . . "

Their guide made a loop in the cord, threw it over Valya like a lasso and then taking hold of her shoulders he twisted her round and round in one direction.

The cord in the heap shook and quickly ran up and wound itself round Valva as if she had been a reel.

"Grand! lovely!" rejoiced the Professor, looking at Valya. "Tough, warm and comfortable. Look! Now for you, Karik."

But Karik had himself already fastened the end of the webbing around his waist and started to spin round quickly — quickly like a top.

In five minutes the children were both dressed in long silver jackets.

"There we are! that's that!" said their guide. "Now you take a walk around our house and meanwhile I'll change my clothes too."

The children went out.

The fog had completely cleared.

Around them stood the damp forest. Huge drops of water were lying on the grass trees exactly like crystal balls.

Just as Karik and Valya came out of the entrance the first rays of the morning sun started across the tops of the trees. Then suddenly thousands of different coloured lights began to flash, sparkle and flame.

It was so surprising that the children shut their eyes and took a step back.

For a few minutes they just stood silently with their eyes screwed up gazing at the strange forest lit up with sparkling balls.

"If only we could show mother this!" said Valya at length.

Karik sighed.

"Mother is making coffee now!" he sniffed.

"The milk girl has already been," added Valya sadly.

"No," Karik shook his head. "It's too early, the milk doesn't come till seven."

"And what is it now?"

"I don't know."

"Oh, well, it doesn't matter. . . . Do you know what, Karik? Let's climb this tree and see whether there are some green cows there." , "We'll climb it."

The children ran up to a tree something like the famous baobab tree and started to scramble up it when their guide poked his head out of the cave and shouted: "Labour in vain, my dears."

"Why?"

"You will not find a single green cow to-day."

"Where are they?" Karik was mystified. "Didn't you say yesterday that plant lice feed on every tree?"

"That was yesterday," replied the Professor. "Yesterday in the daytime, but yesterday evening we had the rain and naturally it washed all the plant lice away. . . . Now I am ready. Let's be going!"

The children turned to the Professor and, having looked at him, suddenly started laughing in a friendly way.

"What's up?" he looked at himself in some confusion.

"Oy! You do. . . . "

"You haven't half dressed yourself!" laughed the children.

The Professor stood there completely wound up in silky cording from his neck down to his heels. The whole remains of the webbing which had been in Caddis fly's house he had wound about himself, around his stomach, on his shoulders and around his neck.

"You look like a cocoon!" said Valya, shaking with laughter.

Their guide grinned.

"Well, you yourself, you don't look like a butterfly? And you, Karik, are like a small caterpillar standing on its hind legs. . . . Come on, my dears."

"But where are we going?"

During the night water had flooded all around them. It was only possible to proceed in one direction. From the Caddis fly's house there stretched a narrow strip of land covered with thick green bushes.

Their guide threw his sack over his shoulders and announced:

"We must first of all, clearly, get out of this swamp and then we shall see what we can do. Forward!" and waving his hand he struck up:

"Forward! the bugles blow. Battle most glorious. Forward! with eyes aglow The children victorious."

\* \* \* \* \*

The dense growth of the grass forest was hushed. Heavy balls of water hung above the heads of the travellers — they had to proceed very cautiously to avoid being knocked down by falling drops.

In the deserted and echoing forest the fall of these balls of water made a noise like the explosion of a bomb. One drop fell right on them.

"Ay!" Valya gave a scream, as she tumbled over.

"Oo-ouch!" roared Karik, finding himself thrown sideways.

"Don't worry, that's nothing! A morning shower bath is very useful!" laughed the Professor, as he got up from the ground.

But the sun had now risen well above the forest. The hot rays were toasting the ground. It started to steam. Vapour wrapped the grass jungle. It became stifling like a steam bath.

About mid-day the travellers came to the edge of the forest.

Through the occasional gaps between the trees, yellow hills now appeared.

One of the hills reared itself above the ground in a sharp peak, looking like a sugar mountain which had been gilded at the summit.

"There you are!" announced their guide. "We should be able to see our landmark from the top of that height."

"Let's run," shouted Valya, and darted on ahead exclaiming, "I name this peak 'Golden View'."

The Professor and Karik ran after her.

However, "Golden View" peak was not as near as it appeared. The travellers were puffing hard and wiping their faces by the time they reached the foot of it.

"Now for the view!" Karik chirped up.

It was an ordinary hill of yellow rocks, for the strange rocks that had shone as if they were made of gold were just very ordinary sand.

Clutching on to the sand-rocks with their hands, the travellers started to make their way up to the top of "Golden View" peak.

The sun by now was high in the sky.

Hot waves of sultry air were flowing over the surface of the earth like transparent air-rivers.

Roastingly-hot rocks burnt their feet and kept slipping away from under them.

It was indeed difficult to climb.

The Professor stumbled at practically every step. The mountainside slid away under his feet, becoming a rumbling stream of hot rocks. To scramble in the tracks of their guide was a dangerous matter. Karik and Valya made an effort, overtook him and kept by his side.

The climb became steeper and steeper.

The young alpinists were forced to crawl on all fours, clinging to jutting-out rocks with their hands.

"Just like the ascent of Mount Everest!" puffed the Professor.



Neither Karik nor Valya had ever heard of Everest, but they could both at once guess that Everest was just such a mountain as the one which they were now climbing.

At last here was the top. Dripping with the exertion their guide and the children came to the crest of the mountain.

The professor straightened himself up and put his hand up to shield his eyes, turned his head and started to search the horizon.

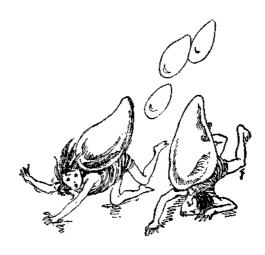
"Now then! Now then!" he started saying. "We'll see! We'll look for our landmark, then. . . ."



He did not finish his sentence. The ground beneath his feet started to slide away. He sank in up to his waist. The children rushed to help him. But the hill beneath them started to shake and suddenly open like a mouth.

The Professor, followed by the two children, hurtled down a narrow, sloping chimney, stones and earth roared down after them.

Valya screamed. Karik fell on the Professor and they landed with a fearful plunge in a wet, sticky floor.



The first to recover consciousness was the Professor. Grunting and groaning he extricated himself from the thick clinging mud and wiping himself, ruefully observed:

"A nasty jump without a parachute! Allow me to congratulate you on your successful landing. Get up, my dears!"

He wiped his hands on his tights, looked anxiously at the children who were still floundering in the mud, and asked:

"All right, I hope? How's Valya? You haven't hurt yourself, have you?"

"Nothing to speak of," replied Valya, getting up. "Only my elbow appears to be grazed."

"What about you, Karik?"

"I have bruised my knee."

The children, rubbing their injured spots, gazed around in fear at the dark walls of the narrow well.

"That's a mere nothing!" said their guide. "Why, I have lost the knapsack with the food and the plate. That's much worse."

"Where are we?" inquired Valya.

"We'll soon see," muttered their guide, sticking his beard in the air.

High above their heads glimmered the distant sky. The pale light of day fell on the higher slopes, but at the bottom of this deep, gloomy well it was practically dark.

"I suppose," said Karik, "that we have fallen into the den of an underground spider. They are terrible spiders. I have read about them."

"What?" Valya shuddered. "Spiders again? In the air, on the ground, under the water and now under the ground — spiders?"

"Calm yourself," said the Professor, "the underground spiders about which Karik is talking live in Italy and in the South of France. We haven't got any here."

"Well, then, whose hole is it?"

The Professor did not answer. Pulling at his beard, he made his way round the bottom of the well sounding the walls with his fist, then he said:

"Yes, yes. . . . That's what it is. Andrena!"

"What's an Andrena?" Valya started to whimper.

"Yes, yes. . . . It's just what I thought. Everything is all right, my dears. Nothing dangerous. This time we have had a very fortunate fall, we have fallen right into a confectioner's shop."

Valya's eyes became round with amazement.

"You mean to say we can find tarts and pies here?" she demanded.

"Yes!" smiled the Professor.

"But where are they? I can see nothing but mud."

"Patience is a virtue!"

The Professor sounded the wall with his fist. "Open Sesame!"

The wall resounded as if he had been hitting the bottom of an empty barrel.

"It hasn't opened!" said Valya, licking her lips.

"You needn't be surprised!" smiled their guide. "It is only in fairy stories that everything is accomplished by commands. We have to work a bit. Dig in to the earth! Just here."

He went up to the wall and started to root away like a bear, tearing out heavy sticky lumps of earth with his hands.

Karik and Valya hastened to help him. Karik was especially zealous. Lumps of earth and stones fairly flew under his hands.

"Steady, steady!" shouted the Professor. "You'll bury us all like that. Be more careful! Please don't hurry!"

Karik wanted to say something in reply, but at that moment the wall shook, stones fell away at the feet of the travellers and all could see a deep recess in the wall.

The air now smelt of fresh honey cakes.

"Whatever is it?" Valya licked her lips. "It smells like tea-time."

"It is the confectioner's shop itself!" replied the Professor, bending forward. "But now stand to one side. There! Splendid!"

He rummaged in the recess with both hands and having planted his legs widely apart tried to pull something out.

"Here we are! here we are!" he laughed, and straining himself handed out a big grey ball covered in what appeared to be a yellow powder — with fine sand.

"That's the lot!" he said, gently lowering the ball on to the ground.

With a sharp stone he cleared the sand off it and with some difficulty tore something white off the top of it.

It was just like a goose's egg, only much larger.

"Oho!" said Karik. "Omelette again!"

"You don't make omelettes out of this egg," grinned the Professor. "You do better this way," and he knocked off a bit of the ball with his hand and it looked like a huge loaf of milk bread.

"Flower tart!" he announced. He wiped his hands on his tights, broke off a bit of the loaf and put it in his mouth. The Professor's eyebrows shot upwards. A contented smile appeared on his face.

"Not bad," he said, munching away, "not at all bad! Help yourselves, my dears."

The scented, sticky dough smelt of honey and flowers. It simply melted in the mouth.

"That is delicious," said Valya. "Better than cream buns."

"You are simply famished," answered their guide, "and not to be wondered at. We had breakfast in the middle of the night almost, and now it is nearly mid-day."



"No, no, it's true this is delicious!" insisted Valya.

"But what is it?" asked Karik, tucking in both cheeks full of the scented dough.

"Flower pollen and honey!" replied the Professor.

"Why is it at the bottom of the well?"

The Professor picked up a white egg with a tough skin from the ground and he put it on the palm of his hand.

"That is why," he answered. "The tart was prepared for the larva which will come out of the egg, and both tart and egg were put here by the underground bee — the Andrena."

"If it is an underground bee," said Valya. "We must get out of here quickly."

The Professor smiled.

"Andrena is called an underground bee only because it builds its nest under ground, but the Andrena itself lives there up above us; where the dragonflies, flies and gnats live. Actually, you may often find its nest on the surface of the earth: in rotten stumps, in the trunks of fallen trees but most often in the earth. That is why the scientists call it the underground bee."

The Professor then told Karik and Valya how the larvae come out of the eggs, how they feed on the dainty cake which had been prepared for them and how finally they are transformed into winged Andrena bees.

"There are always several such cakes in each nest of an Andrena bee," said their guide. "If you wish I'll get you another one."

The children started to laugh.

"What do you think we are — elephants?" said Karik. "We could never eat it. It would be better to drag ourselves out of this before the Andrevna bee returns."

"In the first place it is an Andrena not an Andrevna," the Professor corrected Karik, "and in the second place I have already said that after this bee has dug out its nest, laid its eggs in it and prepared the food for its young it never looks at it again. There is nothing more for it to do here. . . . Yes, and there is nothing more to keep us here. We have had a good feed, so let's say good-bye to this place."

Their guide went over to the sloping wall and catching hold of some roots with his hands started to climb up. The children quickly clambered after him like monkeys.

Their movement upwards had soon to be made one step at a time, and they slowly crept up the side of the well towards the big round opening through which the blue sky was peeping. Every now and then they stopped to get their breath and then climbed on upwards. The rocks, dislodged by their feet, fell with a rumble to the very bottom of the Andrena nest.

The Professor was the first to reach the edge of the well. Here it was light and warm.

"Oof!" he sighed heavily. "My word! That was a climb. . . . What's up with you, children? I am an old man and I got up before you."

He bent over the dark well and stretched his arm down.

"Let me help you!"

But Karik did not succeed in catching hold of his hand. The Professor suddenly appeared to bounce up like a rubber ball. High above the well they saw his heels and — he vanished.

Karik clung to the side of the well in terror.

"Sh-sh-sh!"

"What is it?" asked Valya.

"A bird has pecked him off!" whispered Karik. "A huge, huge bird with enormous wings!"

Valya shuddered.

"You saw it?"

"Yes, I saw the wings — enormous. Like sails!"

The children looked at each other. Tears started to Valya's eyes.

Karik said:

"All the same he'll get away!"

Valya started to cry quietly.

"Now, don't cry, please! He'll get away!" Karik comforted his sister, and looking cautiously out of the well, shouted loudly:

"Professor! Professor!"

There was no answer.

Valya wiped away the tears with her fist and said resolutely:

"We must climb out!"

"We must!" agreed Karik. And the children helping each other climbed out of the well.

They stood once more on the summit of the "Golden View" peak. Not far from them strewn on the ground they saw the Professor's sack, the remains of the omelette and the dish. Before them there stretched a yellow wilderness of hills. Behind them like a green sea there rustled the grass jungle through which they had made their way that morning. To the right and left of them was the blue of lakes showing through tall reed forests which grew along their shores.

But the Professor was nowhere to be seen.

"Professor Enot — off! Where are you?" screamed Valya.

She listened.

Not a sound.

"Profess — or!"

The only answer was the wind's melancholy sigh on the top of the peak and a discordant echo which died away in the hills.

"Let's shout together!" Karik suggested.

The children held hands.

"Prof — ess — or!" they bawled as one.

"— ess — or!" answered the echo and was silent.

Tears started to stream from Valya's eyes. She covered her face with her hands and sobbed aloud. At that moment a whirlwind howled around her. She was thrown aside somewhere and fell on sharp rocks.

When she at last managed to get to her feet and look around there was no Karik! — but only a moment ago he had been standing here, at this round rock.

"Karik!" yelled Valya, cold with fear. "Karik where are you? Why are you frightening me?" High — high above the clouds someone seemed to cry in a feeble voice, "Valya!"

## **CHAPTER XII**

In the clutches of a winged monster — The travellers meet again — The Mont Blanc tree — About living "hams" — Karik and Valya are wafted away

VALYA DASHED ABOUT THE SLOPES OF THE PEAK IN PANIC. She ran down and then ran up to the top and looked into the dark well.

"Karik!" she screamed. "Professor!"

There was no answer.

"Oh, dear! Wherever can they be?" she muttered.

The poor girl was quite exhausted. She sat down on the hot rocks and pressing her hands to her face started to cry.

Through tears, as if she was looking through a window wet with rain, she saw now and then huge winged creatures flying. They swooped right past her. Their wings caused quite a whirlwind. She crouched down and ducked her head, watching these monsters in terror. They flew now upwards and now with a swish landed on the ground. They folded up their transparent, shining wings, and having uncurled their striped bodies they clambered in a clumsy fashion over the rocks; then having got hold of something on the ground once again shot up into the sky.

One of these creatures crawled right up to Valya. It actually hit her with its wing. The powerful blow sent Valya sprawling on the ground. The striped monster quickly turned towards her and started to gaze at her with shining, protruding eyes.



Valya felt she was going to faint.

The creature leisurely started to move away. But the girl stirred ever so slightly and in an instant the monster leaped towards her and stopped,

swaying its feelers above her head. Valya was cold with fear. Holding her breath she watched the long feelers with eyes wide with terror. She could not see the rest of the monster, but felt that it must be right beside her.

A silence ensued broken only by Valya's own breathing. Then she heard the monster moving away, dragging itself noisily over the ground, getting further and further away every minute.

She jumped up. She was shaking all over. Her body was covered with a cold perspiration. With her arms waving she dashed with a yell down the hill towards the foot. But suddenly strong, hairy paws wound around her body. A sharp point pierced her spiderweb jacket and tore the skin of her back. It hurt terribly, but Valya did not succeed in crying out. Above her head, huge wings drummed and shook, and the next instant Valya found herself in the air.

Strong arms clutched her to a hairy breast which now contracted, now expanded like the bellows of a concertina. Valya tried to turn her head and see what sort of monster it was that held her in its grip, but as soon as she stirred the arms squeezed her like iron pincers.

She groaned in pain.

"Help!" cried Valya.



The whistle of the wind drowned her voice. She screamed until she was hoarse, but she could hardly hear her own voice.

Below her, green fields and woods swayed, rivers and lakes glittered and endless yellow sand stretched out in ribbons. All the time, Valya flew further and further from the well where she felt she had left the Professor and Karik.

Where was the fearsome winged beast carrying her to now?

What would she do alone in the nightmare grassy jungle? How would she find her way home, and indeed would she ever get back to that big, comfortable world?

Valya wriggled, turned her head and ferociously fastened her teeth in the strong, rigid arm. The arm was hard and smooth like polished wood. Valya's teeth just slipped along it.

At that instant, the clutching pincers squeezed the poor girl even tighter. It was quite useless to fight the monster. It could squash her like a fly.

"I'll die," sobbed Valya. "I'll die and no one will even know that I am dead."

She started to feel ever so sorry for herself and sobbed aloud.

Then her tears dried up. Her eyes became dry as if every tear had been poured out, to the last one. Then she started to kick and scream:

"Let go! What's the matter? Did I touch you? Let go! Go away! Let me loose!"

But the winged monster just flew on, whirring its hard, resonant wings which made a noise like a sawmill at work.

At last, in a gliding flight it swooped down, started to flutter its wings in the air and suddenly the arms holding Valya were stretched out in front and pushed her, like a dish into the oven, into some sort of dark hole.

Valya hit her head against something hard and slid precipitously downwards as if she was on an ice mountain.

"Falling!" The terror of it gripped Valya's brain.

She shut her eyes. Then suddenly felt herself caught by other claws.

"Ooh!" Valya screamed, hitting out with her arms and legs.

She opened her eyes in alarm and saw that the claws which held her were really not claws at all but the hands of . . . the old Professor!

"Professor! Is it really you?" she shouted.

"It is I, little Valya, it is I!" replied the Professor affectionately, setting her down on the sloping floor.

"And I'm here too!" Valya heard Karik's voice.

"But wherever are we all?" she asked.

"All right, all right! We'll soon find out," said their guide. "The main thing is that we are all together."

Valya started to look round wildly. In the half-darkness she could see smooth walls: they sloped steeply upwards. There was no roof. Above, through a broad circular opening, the rays of the sun were striking in. In the beams of light dust was floating.

The prison in which Valya, Karik and the Professor now found themselves was like a deep basket. But this basket was not standing upright but was sloping as if it had got caught on something when falling and now hung at an angle in mid-air.

Valya looked at the dark walls, at Karik and at the Professor.

How had the Professor and Karik both got here? Who had imprisoned them in this giant basket? Was it really the same monster which had carried her, Valya, there?

She started to question them but the Professor interrupted her.

"Later, later," he said, frowning. "There is no time for gossip now. If we don't climb out of this, this very instant, we may lose our lives. . . . Come on, children, let's try."

Their guide got down on to all-fours and slowly made his way up the smooth, sloping wall. The children came after him.

The climb was difficult.

Arms and legs slipped as if on ice. The Professor had nearly reached the edge of the basket when suddenly his knees wobbled, his hands slipped and he rolled back to the bottom with a rumble, carrying the children with him.

"No luck!" he said, getting up on to his feet. "We must try again."

The travellers once again edged their way up the smooth wall. Once again they rolled all the way down again.

"We can't climb out of this," groaned Valya.

"Silence!" ordered the Professor, angrily.

He measured with his eyes the distance from the edge of the basket to the floor, surveyed Karik from head to foot, and said resolutely:

"Come on now! Climb on to my shoulders!"

Karik jumped up, like a bouncing ball, caught hold of the Professor's neck and hoisted himself on to his shoulders.

"Try and reach the top!" commanded their guide.

Karik cautiously started to straighten himself out. With his hands against the wall he straightened his bent knees and finally stood erect at his full height.

"Now climb on to the palms of my hands!" ordered their guide, putting his two hands up.

Karik placed first one foot and then the other on the palms of the Professor's hands.

"You won't fall?" asked the Professor. "I won't fall!"

The Professor made a great effort and, groaning, managed to lift Karik upwards like a heavy beam.

"Got it!" shouted Karik, grabbing the uneven edge of the basket.



"Splendid! Pull yourself higher, still higher!"

Karik started to stretch out his whole body with his toes firmly planted in the Professor's hands.

"Now, now!" encouraged their guide.

At last, Karik gave a jump and skilfully got astride of the edge of the basket.

"That's fine!" said the Professor. "Now get hold of Valya!"

He caught up Valya and handed her up to Karik. Then he quickly started to unwind the spider's cord in which he was clothed.

Having half stripped himself, he made a loop in the end of the cord.

"Catch!" he shouted, throwing the loop up at the children.

Karik caught the cord and put it over a projecting part of the basket.

"Ready!" he announced cheerfully.

The Professor pulled on the cord, testing to see whether it was firmly secured, and then grasping it with both hands slowly hoisted himself up, moving in short bursts. Puffing and blowing, he at length made his appearance on the edge of the basket.

The travellers looked below.

The basket on which they found themselves was fastened to a huge beam covered with red knobs. From this log, other smaller beams stretched out in all directions, and from these there stuck out like green feathers rows of huge lances.

Through the chinks between the beams they could see far, far below the ground.

"Wherever have we got to?" asked Valya, looking around herself in giddy terror.

The Professor grimaced.

"We are on a very ordinary pine tree branch."

"On a branch?" persisted Valya, shaking her head in an unbelieving way.

"Yes, on the branch of a pine tree which you, I am sure, have seen heaps of times in your life. The branch is just as usual but you yourself have got a lot smaller. That is why you are so puzzled."

"Well, all right! If it's a branch, it's a branch, but however do we get down to the ground?" interrupted Karik. "Surely without a parachute we can do nothing."

"We'll manage and without a parachute," their guide assured them. He patted his "tights" and cheerfully winked at the children. "You are still laughing at my rig-out. No, my dears! For poor travellers like us, every piece of cord is a treasure."

And their guide thereupon started to unwind more of the silvery cord in which he was wrapped.

"Should we also unroll ours?" demanded Valya.

"Of course! My suit will not be enough."

Karik and Valya set to work. They unwrapped the rings of their silver jackets and carefully coiled each cord down beside themselves.

"Hurry! hurry up, my dears!" the Professor urged them on. "The awful creature that brought us here will be back very soon and we shall be done."

"We are all ready now!" shouted Valya.

"Splendid! Try and twist up a thick rope."

"How do you do that?"

"Very simply. Like this!" And their guide showed them what was necessary to twist the cords together.

Helping each other, the travellers hastily twisted the cords together and out of the cords produced a thick rope.

At last all was ready for the descent.

The Professor coiled the rope down in a heap and wound one end round a sharp projection from the basket and then threw the rest of the coil off the basket with a kick of his foot.

The heavy coil slipped between the branches and plunged downwards, unwinding itself in flight into a long, knotted rope.

The end of the rope hung just above the lower branches of the pine tree. "First Valya must go!" ordered the Professor.

"Why me?"

"There is no time for argument!" The Professor was stern.

"Well, all right, all right!" said Valya hastily. "I'll go down first, but please don't be angry!"

She bravely clutched the rope and quickly slid down.

"Safe journey!" The Professor waved his hand. "When you get down, hold the end of the rope!"

The Professor and Karik leant over and silently watched how their small comrade was letting herself down.

"Don't be a coward!" shouted Karik.

"I wasn't even thinking!" came back a faint reply from Valya.

She was calmly slipping down the rope from knot to knot and had already reached the middle of it. Then suddenly a gust of wind came.

Valya started to swing like a pendulum. She clung convulsively to a knot in the rope and turned her head beseechingly upwards to the Professor.

"Let yourself down!" the Professor and Karik shouted together.

The wind set the rope swinging even more. Valya was describing wide circles above . . . empty space.

"Let yourself down!"

Valya closed her eyes tightly and once again started to slide down the rope from knot to knot. At last her foot touched something firm. This was the lower branch of the pine tree, which was yet broader and considerably thicker than the upper branches. Valya found she could walk about as freely on its surface as people strolling along a main street pavement.

"I'm down!" shouted Valya, looking upwards.

High above her head hung the clumsy basket. On its edge sat the Professor and Karik, and they were shouting something. Valya strained her ears.

"Hold the rope!" Karik was shouting from above. Valya got hold of the end of the rope. The rope shook and then became taut. Karik and after him the Professor now let themselves rapidly down it and were soon standing alongside her.

"It is not so far from here to the ground now!" said their guide, peering downwards. "Let's have a look for our landmark and see in which direction it lies."

He looked to right and to left, and then shouted:

"There it is!"

"Where?" demanded the children, turning their heads here and there.

Through the foliage of pine needles the travellers were able to see on the far horizon the pole with the red flag. But how far away it now seemed. It looked quite tiny — like a flag on a toy steamer.

Valya, screwing up her eyes, looked at the flag, at Karik, at the Professor, and then sighed heavily.

"We'll never get to it now!" she said. "We'll not reach it in a year! We are so small and it is so far away."

"Hm! well!" grunted the Professor. "It may take us two or three months' walking."

"Three months? But winter will have set in by that time . . . we'll have to build a house," said Valya.

"Hm . . . possibly . . . . But what are we waiting here for? Let's go along the branch to the trunk of the tree."

Their guide looked around him once more and then moved forward confidently. The children followed behind him. They clambered over the dark red hillocks of the pine bark and jumped across narrow deep clefts. In some places these clefts had a thick growth of some light grey bushes on them.

"Let's have a rest, my dears," said the Professor, sitting down. "Then we will go down the trunk like ants do."

The children looked down and stepped back involuntarily.

"That's terrible!" gasped Valya.

"All the same, we must get down," said their guide.

Valya clung to the red bark and shook her head.

"Don't worry, don't worry!" the Professor comforted her. "In the Caucasus and on the Pamir, our alpinists get themselves up even steeper mountains and naturally get themselves down again. But out there it is not so easy either. Every so often they have to cross ice fields and glaciers. The wind makes their eyes cry and the cold freezes the tears on their cheeks. Br-r-r-r. Even to think of it is terrible. Well, on our 'Mont Blanc' tree it is not nearly so dangerous to climb down."

"Dear, dear! I suppose we will get down somehow," sighed Valya sadly.

"Of course we'll get down," asserted Karik. "In any case there is no other way, we must climb down the trunk."

The Professor unwound the remains of his "tights," plaited a trustworthy rope from it and handed the end of it to Valya.

"You must go first again," he announced. "Tie the rope around your waist and hold on to it tightly. Karik will come next and I'll climb down last."

Their guide made a loop in the rope and threw it over Karik's shoulders.

"Get your arms through. That's right!" Karik raised his arms, slipped the loop down to his waist and pulled it tighter. "Well! that is all ready," said the Professor.

The travellers moved off down the trunk. First they let Valya down with the rope. She sought about below with her feet and feeling a projecting piece of bark, shouted:

"I'm standing! Let out some more rope!"

The rope slackened. Behind Valya came down Karik. The Professor waited at the top with his legs wide apart, holding the rope with both hands. He was following every movement of the children. As soon as Valya and Karik had got a good hold in the new place, their guide threw them the rope and, clinging to the projecting bark, let himself down cautiously.

In this manner they accomplished nearly half their dangerous journey.

\* \* \* \* \*

The ground came closer and closer with every step. They could already see the angular stems of the grass trees.

"All the same, it is a long way off still!" said their guide. "We shall not reach the ground for at least another three hours."

All three of them were very tired.

Their shoulders and knees were covered with scratches, bruises, and weals. Their hands shook so that they could hardly let themselves down. It was time to rest.

On one of the broader standing places, the Professor and the children stopped.

"Halt!" the Professor ordered, and fell wearily to the rough floor.

The children collapsed beside him. He lay breathing heavily and wiping the perspiration from his face. Karik and Valya sat up with their legs dangling over the precipice. All then was silent.

Suddenly Valya jumped up and waved her arms. "Eh! Look! What's that?"

"What? What do you want?" Their guide raised himself up to look.

And there he saw a huge head covered with a regular forest of bristles. Short, strong feet gripped the edge of their resting place. Then the creature hauled itself up on to the level and, bending its long, hairy body, crawled along the bark using what appeared to be countless feet. Behind it came another creature just as hairy, and just as long, and then another and another.

"Don't be frightened!" the Professor reassured them, getting up on to a projecting piece of bark. "These are only caterpillars of the pine moth - silkworms. They won't touch us."



"Oh, I'm frightened of them all the same," whispered Valya.

"Why are you such a coward?" said Karik. "If you are told they won't touch you, it means they won't touch you. . . . What do they feed on?" he asked the Professor.

"Green leaves and soft young pine shoots," answered their guide.

"There, you see! These are vegetarian-caterpillars. You can even stroke them with your hand."

But Valya, in spite of this, only moved farther and farther away. The Professor smiling, went up to her, patted her on the shoulder and said:

"Don't be frightened! don't be frightened, little one! They will all crawl on in a minute. We are quite useless to them. They are hunting for the young pine shoots. It is only some sort of greenery that'll do for these hairy vegetarians. I know them well! I wrote a book about them once."

"A book about caterpillars?" marvelled Valya.

"What is there surprising about that?" The Professor shrugged his shoulders. "These caterpillars actually are like locusts of the forest. They assemble in uncountable swarms and devour the green shoots of the trees in the same way as locusts eat up the crops. I once saw a forest which had been visited by a swarm of pine moth caterpillars like this. It was completely stripped by the greedy things. I rode for miles and miles but there wasn't a green shoot to be seen, just bare twigs everywhere."

At that moment the Professor looked upwards and smiled as if he had seen one of his best friends. "Why, there is a Microgasta nemorum!" he announced. "Welcome! welcome!"

"Where is it? What is it you have seen?"

"You don't mean to say you can't see it?"

The children started to scratch their heads. Like a squadron of gliders right above the silkworms, huge creatures with thin bodies and long transparent wings were noiselessly swooping.

"Midges!" shouted Valya.

"*Microgasta nemorum*!" announced the Professor. " Ichneumon flies or — as we Russians commonly call them — Horsemen-flies!

The friends of forest and field. Watch, children, what'll happen now! There are many scientists who would envy us now. Watch! Got it!" He started counting. "That's number one' Got it! Another! Excellent! Got it! That's the third! Brave boys! Watch! watch!"

The winged 'horsemen-flies' swooped down on the caterpillars like vultures on their prey and landed on their backs.

"They are riding on them, they are riding on them," exclaimed Valya. "They are proper horsemen!"

It was like one of those comic turns at a circus where dogs ride on the backs of horses or mice on the backs of cats. The children clapped their hands. But, suddenly, Valya dropped her hands, looked towards the Professor and asked with alarm:

"These . . . micro . . . whatever are they doing?"

She had seen that the 'horsemen-flies' lift their bodies up and stick the sharp sword they carried in their tails hard into the backs of the caterpillars. Having jabbed the caterpillars, they at once flew upwards.

"They are fighting," Valya announced, "fighting and not riding!"

"They are neither fighting nor riding," replied their guide. "The Ichneumon flies pierce the skin of the caterpillars with their sharp egg-layer and lay their eggs. After some time, their larvas come out of the eggs and proceed to devour the caterpillars. They eat the caterpillars before they change into butterflies. If it was not for the 'horsemen-flies' the pine moth caterpillar would eat the whole forest, but the microgasta does not allow it to multiply. That is why we can consider this fly our very best forest guard."

"But isn't it possible to rear these microjesters artificially?" demanded Karik.

"Microgastae? . . . it is possible," said the Professor.

"Then why are they not reared?"

"It has been tried but the attempts have not always been successful," the Professor replied. "Unfortunately, another 'horseman-fly' lays its eggs in the larvae of these 'horsemen-flies'. Naturally they are very tiny, but these eggs kill the microgasta."

"There are parasites for you! But isn't it possible to destroy these small fry?"

"Yes, it's possible. These tiny 'horsemen-flies' have in turn their enemies, also 'horsemen-flies'. These are quite teeny."

"Well! Those are the ones to rear," said Karik.

"Yes, indeed, that is, of course, the intelligent thing," agreed the Professor, "but there are even 'horsemen-flies' that lay their eggs in the larvae of these useful teenies."

Karik waved his hands in disgust. "Oh, this is just like the fable about the white ox. There is a beginning but there is simply no end."

"Exactly like it, exactly like it!" replied their guide. "There is a time when you think you have at last found the end and know absolutely everything about one or the other creature, but you have only to poke a little deeper and a little more earnestly into the essential points when you become convinced that it is not the end you have in your hands but only the beginning of a new and fascinating chapter of investigation."

The Professor forgot that he was standing on a small piece of bark. He jumped about and started to lecture on how scientists were like Christopher Columbus travelling every day in unknown lands and how they were always discovering new and yet newer continents.

Meanwhile, the pine moth caterpillars were crawling up the bark just as if it was a broad country lane, down which to meet them there were now coming some sort of beetle. Above the pine tree lane there fluttered winged creatures. The Professor, without the slightest ceremony, bumped into caterpillars who were making their way laboriously upwards. He also nearly knocked a large black beetle off its legs, but he simply went on talking, talking, talking. . . .

How long their learned guide would have stood on the piece of bark as if it was a classroom platform no one could say. It is quite possible he would have continued his lecture until nightfall.

But it was suddenly interrupted by some sort of winged beast.

The creature dropped right down beside the Professor like a stone and knocked him down with its wing. Then having raised its body, which had a long sharp sword at the end of it, the beast with a short powerful jab drove it into the bark just by the Professor's head. The sword buried itself deep in the bark.

The children had not had time to cry out before the creature had withdrawn its sword and had disappeared in the same lightning-like manner as it had arrived.

Karik and Valya clung to the red crag-like bark. They were pale with fright, and were breathing heavily.

"Well, that's that!" The Professor sat up. "I am afraid I was talking rather a lot. And we must get ourselves down to the ground before night comes." He looked at Karik, at Valya, and said: "It's nothing dangerous! It was a very ordinary *Thalessa* or, in simple language, another 'horsemanfly'."

"Did it lay its eggs in the bark?"

"Why in the bark?" replied the Professor. "It laid its eggs in the larva of one of the enemies of the pine tree."

"In the larva?" Karik looked around. "Where is it?"

"Under the bark!"



"How can you see it there?"

"I haven't seen it but I am prepared to bet anything you like that under us, under a layer of bark, there is wriggling the larva of some sort of 'Longhorned' beetle."

"This means that the 'horseman-fly' can see through bark?"

"No. It also is unable to see the larva but it can sense it. . . . We don't understand this. On the whole we know very little about the character and life of insects. Much concerning the lives of these amazing creations is completely unknown to us. We do not really know, for instance, what the insects need their feelers for," their guide continued, and then he stood up and wound the end of the rope around his hand. "Now get up, my dears! We must get on our way."

Thus, once again they started the dangerous and exhausting climb down the bark cliff. From time to time the Professor and the children, having found a suitable place for a rest, lay silently against the red cliff. Rubbing their stiffening arms and legs, they looked to see if the rope was damaged or the knots frayed, then they got up again and once again started on their way, jumping like goats from rock to rock.

At one of their halts the travellers stayed a fairly long time. It was quite near the ground. The Professor and the children, after a short rest, were preparing to climb down again when suddenly there was a sound of wings above their heads. Their guide looked upwards and turned pale. Quickly seizing the children by the arms he plunged with them into a narrow cleft.

"Sit quite quiet," he whispered.

A striped creature with a long narrow waist was flying past. Its protruding body was covered with yellow and black stripes like a tiger's skin. Cutting through the air with its transparent wings, the creature swooped, pressing something to its belly, something wriggling, very like a snake.

"Eumenina," whispered the Professor. "The 'Pottery' wasp."

The wasp flew up to the basket from which the Professor and the children had just escaped, threw its prey into it and climbed into the basket itself.

"Is that what carried us?" Valya asked.

"That's it," their guide nodded. "I expect, my dears, that the Pottery wasp took us for caterpillars. But watch what it is doing."

The wasp crawled out of the basket, swooped rapidly down to the ground and immediately flew up again. Fanning the travellers with a wind like a whirlwind, it flew past them and having described a circle landed on the basket. Restlessly crawling around the opening it picked at it deftly with its feet and energetically tapped the basket with its head. Then the wasp flew away.

The travellers could see that the entrance to the basket was now completely covered up with something grey in colour.

In the centre of this, like a cork, a sharp stone was protruding.

"You see," said the Professor, "how the wasp seals up its basket. Well, my dears, if we had not got out of it in time, we should have perished of hunger."

"But surely it is possible to break the wall down?"

"No! The wasp makes such a strong cement out of dust and its own saliva that even big people can hardly break it."

"All the same, I don't understand it," said Karik. "You see, it caught us, then it shoved us in its basket . . . but what for? Why didn't it eat us at once?"

"For the very reason that it did not capture us to eat us," replied the Professor. "The *Eumenina* wasp feeds on the juice of flowers, but catches caterpillars for its offspring, its future children. In that connection, notice that it does not kill its prey. The jab of its sting only paralyses the caterpillars, preserves them . . . makes a living 'ham' of the caterpillars."

"Why then didn't the wasp paralyse us?" asked Valya.

"I don't know," their guide shrugged his shoulders. "I don't understand it at all. It may have been that its sting could not penetrate the spider's webbing of our jackets properly, or maybe its poison doesn't affect us. I do not know. Yes, the whole business is very amazing. . . . I do not know why it could confuse us with caterpillars . . . usually wasps do not make any such mistakes. This is a complete mystery from a scientific point of view."

"But who makes the basket for it?" demanded Valya.

"The wasp makes it itself," replied the Professor, "out of dust and its own saliva. . . . Behind these protective walls the larva can grow up without the danger that something will gobble it up or squash it. There is food already prepared enough and plenty. When the larva comes out of the egg it drops down a little spiderlike thread and falls on to the caterpillars and begins to eat them. And what a feed! For weeks it gnaws away at its victim but to the very last day the caterpillar remains alive and its flesh remains fresh. To begin with, the larva feeds only on the blood of the caterpillar,

then it eats the fat and then the muscles. The caterpillar remains alive without blood, fat or muscles and still provides fresh meat for the larva. In the end, the larva eats it all up, becomes a cocoon and after a short time the cocoon bursts and out flies a male or female Eumenina wasp. A male wasp should fly out of ours, but now. . . ."

"You don't know it is definitely a male?"

"I do know!" asserted their guide. "The wasp caught us three and then brought one more victim — the caterpillar. Four caterpillars — that is the supply of food for a future male. For an egg from which a female will come out the wasp leaves an even ten caterpillars. Then this is quite to be understood. The future female Pottery wasp is bigger than the male and therefore it is necessary to leave more food for it."

"Does this mean that wasps can count up to ten?" asked Valya.

"I do not know whether they can actually count up to two," replied the Professor, smiling. "You will remember that the wasp crawled into the basket after we had got out of it. That's true, isn't it?"

"Certainly it climbed in."

"But it climbed in to lay the egg. It must therefore have seen that instead of four caterpillars in the basket there was only one. But all the same it never entered its head to fetch another three caterpillars, but it just sealed the basket as it was and now, of course, the larva will perish."

The Professor went out of the cleft, looked to right and to left, and said: "It has flown away. We can now proceed in peace." The ground was not far off and the travellers soon got safely down.

To the left, a grass forest appeared blue in the distance. Above the forest, like a straw, the pole landmark was sticking out with a tiny red flag, ever so far off. The travellers started on their way. The whole day they travelled over sand, through forest and over mountains. They made their

Towards evening, tired and hungry, they stopped at the bank of a rushing river. To get across the river was beyond the present strength of the children.

Valya stretched herself on the bank and said:

"I can't go any farther."

way across ravines, they forded rivers.

The dusk was falling. The sky had grown dark. Purple clouds were heaped up over the forest. Above, over their heads, a flock of birds stretched out in noisy flight.

Their guide said, "Well, there is nothing for it but to spend the night here."

"On the bank?"

"We'll try and find a crevice or some sort of den."

After a short search, Karik came upon an egg as big as a haystack and brown. At the side in the solid wall of the giant egg a round hole showed darkly.

Karik started to look inside and shouted:

"Do come here! I think I have found some sort of house."

The Professor went up to the egg, inspected it from all sides and having thought a bit, said:

"An empty nutshell. The discarded home of a larva of the nut weevil. Climb in, children. It's a tolerable hotel all right."

It had already become dark. The children could not keep their eyes open with tiredness. Their legs were aching. Quickly clambering through the hole in the nutshell, Karik and Valya threw themselves on the rough floor and at once fell dead asleep.

Meanwhile, the Professor wandered, sighing, around the nut. The entrance hole was so small that he could only get his head into it. His shoulders would not pass.

"What a nuisance!" he muttered.

Grunting angrily, he once more peered into the nut, heard how evenly the children were breathing in their sleep, and wandered off then to find a night's lodging for himself.

Not far away from the nut, he found in a little hollow the shell of a snail. He examined it. The shell was empty. The Professor, grunting and sighing, clambered into it. The sloping floor of the shell was hard and cold but the Professor, wearied by the journeyings, didn't even notice this. Putting his fist under his head, he stretched out full length and at once fell asleep.

About midnight, something started humming in the air. The Professor in a confused way heard this in his sleep. It was probably the wind getting up.

Waking from the cold, he opened his eyes. The sky was cloudy and the moon was swimming amongst the clouds. The Professor shrunk into himself, tucked his legs up under him and departed into dreamland again, turning restlessly in his sleep.

Outside the walls of the shell a cold tearing wind was rising to a frenzy. Dust, grass, petals were being carried along spinning.

The nut shook with the gusts of wind and at last rocked violently, rolled over and in the grip of the gale started to slide down slowly towards the river. A fresh gust of wind drove the nut into the water. It started dancing on the waves and floated away on the stream.

In their dreams, the children felt that they were being rocked as if in a cradle. Pressing close to each other, they slept on, smiling in their sleep. But the river was hurrying the nut away, carrying the children ever farther and farther from the Professor.

The moon shone down. It covered the river with sparkling silver scales, lit up the quiet, deserted bank and the curled top of the snail shell from which were resounding the snores of the professor, mighty though miniature. Had he awoken and looked out, he would have seen, away along the river, as if on some silver road, a black shape moving farther and

farther away until it vanished round a dark bend in the distance. The nut was out of sight.

## **CHAPTER XIII**

The landing at an unknown harbour — In captivity again — The Professor "sees" things — A "lion" which breathes with its tail — An unexpected discovery

## BEFORE THE DAWN A STRONG WIND AROSE.

The nut plunging in the waves was now scudding along on their high crests and now lost in the white boiling foam. The waves broke over it noisily, tossing and heaving on all sides. Cold spray came sprinkling from above through the hole which fortunately was on top like a hatchway, and fell on to Karik and Valya. But the children at first only turned over restlessly in their sleep, covered their faces and necks with their hands and arms and moved further from the hatch. They were so tired out and exhausted that even this icy shower bath could not wake them.



However, the strong current then started to turn the nut as if it was in a whirlpool. The nut rocked sharply and listed over on one side. Karik rolled right over his sister and hit his head painfully against the wall.

"Oh! What's happened?" he jerked out as he awoke.

He tried to get up but the nut again rocked and Karik again fell on the floor.

Clutching on to the rough wall of the nut he somehow managed to get up again and yelled out:

"Valya, something's happened! Get up! Something is dragging our nut away!"

Rubbing her sleepy eyes with her hands, Valya gazed confusedly at Karik.

"Maybe some sort of wild animal has pounced on us. We must wake the Professor quickly. Professor!" shouted Valya, struggling to get up. But no sooner than she had straightened herself up than the floor beneath her feet lurched and she was hurled against the wall. She collided with Karik and with him fell in a heap on the rough floor.

It was quite dark all around them and it was only from above through the round hatchway that the blue light of the night penetrated.

Clutching the wall of the nut, Karik crawled up to the hole and poked his head out of it. A wave lashed his face.

The wind was sweeping across the water raising steep foaming rollers.

Waves raged around them and the water bubbled as if it were boiling.

Karik shouted:

"Valya! Quickly! See what's happened! Look, we are afloat!"

Valya made her way up to the hatch with some difficulty and held on to the edge with her hands.

"We are sailing!" said Valya, with fear in her voice.

"Sailing — but where to?"

The nut was rolling just as if the children were on the ocean itself.

Valya looked around herself then gazed at Karik, then looked around again and grew pale:

"But where is the Professor?"

"I don't know. . . . It may be he is somewhere quite near," replied Karik, uncertainly.

"What do you mean quite near?" cried out Valya. "We are in the nut. Do you realise, in a nut? All around us is water."

A powerful blow dislodged the children from the hatchway. The floor twisted and lurched beneath them.

Karik and Valya fell down again.

The wind was blowing in angry gusts over the river. All around them it howled and whistled. Waves broke into the hatch and the children were drenched from head to foot with cold water. Soaking and shivering they sat on the floor tightly holding each other and gazing frightenedly at the hatch.

Above the hatch across the troubled sky black clouds were chasing each other.

The nut heeled over and then foaming rollers seemed to be leaping at the hole, but it heeled again and once again clouds appeared — being swept across the hatchway and in and out of the clouds there plunged the pale moon. With each fresh lurch the children were flung apart, but Valya at once crawled hastily back to her brother and clutched hold of him firmly. The poor children could not understand what had happened: Where had the Professor got to, how the nut got into the river, where the river was taking them to? . . .

But the nut whirled on and on, now riding on the crests of the waves, now burying itself in the trough.

Then at length it seemed as if the storm had started to abate. The nut no longer was thrown about and no longer lurched but just rocked like a cradle.

The children got up.

"It looks as if the worst is over," said Karik. He climbed up to the hatchway and looked out.

Quite close the banks of the river clad in forest seemed to be floating past. The waves were now quietly lapping below him.

Then the nut suddenly stopped. Black masses of earth rose up before the very hatchway like walls. The shore was so close that it was possible to stretch out and touch it.

The nut had come alongside some unknown jetty. "Well, we have got to somewhere," said Valya, quietly. "Climb up quickly!" ordered Karik, gripping the edge of the hatch with his hands.

Helping each other, Karik and Valya made their way out of the nut and jumped ashore.

\* \* \* \* \*

It was early morning.

In the grey twilight before the dawn a hill stood gaunt and silent. On the far horizon a pink edge was barely noticeable.

The nut floated black and wet in a silent bay right beside the bank.

Beyond, the river swirled noisily past, the current carrying in its waves poles, branches and petals. Some of these were carried into the bay and forced against the bank. They spun around and floating past the nut jostled it as if they were trying to move it on.

The whole bay was covered as it were with a husk in the form of dried fin. The children climbed up a hillock and stopped undecidedly there. Shivering with cold they stood looking at each other, half dazed.

In which direction should they go?

What should they do?

Oh! if only the Professor was there; just there beside them!

"Can he have got lost?" sighed Valya.

"We'll find him!" said Karik, with decision. "He is here. He must be somewhere here. . . . "

He put the palms of his hands together as a trumpet, stood on tip-toes and shouted as loud as ever he could.

"Pro-fess-ess-or!"

Somewhere behind, away behind the dark hills, leaves rustled.

The children listened.

Steps?

No. It was the wind. That was what stirred the trees.

Valya again sighed deeply.

"Don't worry, don't worry! We'll find him. You just see. He won't desert us."

Karik took his sister by the hand along the bank of the river.

Every five or six steps they stopped and yelled loudly:

"Pro-fess-ess-or."

But there was no answering shout from the Professor.

"Do you know what?" said Karik. "I'll go along the bank and you go a little further inland. Over there — you see? — there is some sort of a wood beyond the hills. There it is! You go to this wood and shout, only louder. First I'll shout, then you, then I again, and then you. O.K.?"

"O.K."

"Only don't go far away, and look around you carefully. Be careful now. Go on!"

Karik went along the shore and Valya set out for the dark wood. From time to time the children stopped, shouted and once again moved on.

Valya got to the wood.

In the wood it was dark and very forbidding. Black angular trunks of trees lifted up bent, crooked branches, broad leaves hung down to the very ground.

"Eh, Va-ly-ya!" came floating from somewhere near the river.

"Aha!" replied Valya, "I am here. Got to the wood!"

She went up to a dark tree with lots of branches. A pleasant appetising smell came from the tree.

Very odd — the smell was just like fresh almond slices, just as it was before a holiday at home when mother took the trays out of the oven and delicious smells of vanilla, of almonds and of hot dough filled the whole flat.

Valya at once remembered that she had had nothing to eat since the day before.

"I must see what it is that smells so delicious," she thought, and went resolutely up to the tree. "I'll climb up and look."

"Hey! Karik!" she shouted. "I am going to climb a tree. I'll shout from the tree. Do you hear?"

"Climb away and shout! Only more loudly! I'll come over to you directly," called back Karik.

Valya grasped the wet slippery branches and quickly climbed up like a monkey.

Pushing aside the broad leaves which hung from the stem and blocked her way, she climbed higher and higher. Every now and then she looked upwards.

Soon she saw quite close above her head something like a huge cup. She got up to it, clung on to the damp, stringy, rubbery side and started to look inside.

In front of her very nose there were swaying feathery balls. They were suspended on thick long stems attached to the bottom of a cup.

It was from these falls that the strong and delicious smell came.

Valya felt that if she did not that very minute eat the ball right in front of her nose she would simply die of hunger.

She pulled herself up with her arms and sat astride of the lip of the cup.

The delicious ball was-close beside her. Valya clutched it with her hands and pulled it hard towards her. She was not able, however, to wrench it off. The ball held firmly.

Valya tugged harder.

The side on which she was sitting swayed so that she nearly lost her balance. In order not to fall the girl let go the ball and clung to the edge of the cup.

The ball flew away from her, hit the other side of the cup and immediately bobbed back in front of Valya's eyes.

Then Valya tore at the ball so violently that the whole cup started to shake. The ball ripped away from the pole and next instant Valya and her booty fell with a crash to the bottom of the cup.



Not letting go the ball she jumped up, looked upwards and around herself. She was in the centre of an enormous flower. The damp petals rose up around her like the smooth inside of a round tower. Through chinks between the dark petals the pink light of dawn now showed.

Somewhere far, far away the birds had started to sing. Below, rustling the leaves, something ran about quickly turning them over with light feet.

"I must climb down to the ground," thought Valya.

Clutching the delicious ball closely to her bosom she moved around the flower cup until she stopped in front of a narrow chink between petals. She tried to squeeze through the chink but it was too narrow.

Then Valya tried to climb up one of the poles, but she had only just gripped it with her hands when the walls of the cup started to move as if they were alive and slowly came nearer.

The huge flower in which Valya had climbed closed its petals over her head. It suddenly became pitch dark.

In vain did she struggle to move the petals and escape from the flower. The petals had contracted rigidly and would not let her out of her scented prison.

"Karik! Karik!" the poor girl started to scream. "Hurry up! Here! Here I am."

She yelled with all her might but her voice could not penetrate the soft, thick walls. It was just as if she was shouting with her face stuck into a feather pillow.

This strangled, almost inaudible cry reached Karik like the sound of a distant echo. He stopped and listened. It seemed to him as if somewhere far, far beyond the hills the Professor was shouting.

"Ah!" Karik cheered up. "He's coming. He is sure to find us."

He quickly ran up to the top of a high hillock and once again making a trumpet of his hands started to shout.

"He-ere! Over here! We're here!"

The only answer was the hoot of an owl.

At the foot of the hillock the river ran on noisily. The waves were splashing the shore. Sand falling from the steep bank was rustling softly.

"Now in which direction was it that he called?" thought Karik. "To the right or to the left?"

He stood a little and then shouted again. But no one replied. He shouted again and again in different directions.

It was all in vain. There was simply no reply.

Karik frowned.

"No. Something must have happened." He looked towards the dark wood where Valya was and said loudly:

"Valya, did you hear? Wasn't it just as if the Professor had shouted? Did you hear it or not?"

But this time even Valya did not reply to Karik.

"Gracious! Hasn't enough happened without' her disappearing," thought Karik, and shouted again louder:

"Va-alya!"

A rock rumbled down the steep bank into the water. Karik started, looked around, stood still a little and shouted again still louder.

"Va-al-ya-ya!"

There was no reply from Valya.

"There you are! I told her to sit in the tree and wait, and now she has gone off somewhere. . . . Get muddled up with girls and you are never happy, never!"

Then he slowly made his way across the field to the wood.

Now here was the wood.

Karik went up to the trees.

Throwing his head back he stared up into their thick foliage.

The morning breeze was quietly rocking the broad leaves out of the middle of which were peeping huge yellow balls. Valya was not to be seen up the trees. "Wherever is she?" Karik was quite perplexed. He shouted again and yet again, but only the wind murmured in reply.

Valya gave no answering call. Karik bit his lip, stopped and started to think:

"Valya cannot have run far. What does it mean? . . . It means that something has caught her, dragged her off and maybe . . . eaten her!"

Karik shuddered.

"Oh, if only the Professor was here! He would certainly think out something and certainly find Valya."

Karik gazed around helplessly.

Around him lay the hills, quietly indifferent. A cold, lowering sky hung over the dull sandy shore. Dead trees, bare and dry, creaked dismally on a neighbouring hill.

A giant beetle whizzed above his head and grazed the dead trees with its wings.

Something strange, unusual and sinister seemed to be in the air. Karik shuddered. Then with a piercing cry he dashed off, not worrying in which direction he went.

\* \* \* \* \*

The Professor was awakened before dawn by the terrible cold. He moved towards the wall but immediately jumped back from it as if he had been stung. The curved wall of the shell was as cold as ice. It was quite impossible to sleep in such an ice house. The Professor betook himself out of the shell and started to run around it, trying to warm himself up a bit.

The moon was still shining.

The cold wind blew now on his face and now on his back, sweeping with it a cloud of small stones which lashed his arms and legs.

"There's a night for you!" grunted the Professor. "It's lucky the children are so snug."

He decided to look and see how they were sleeping in the nut. Were they comfortable? Were they peaceful? Then, shivering in the cold, he went towards the river.

The pale moon lit up the bare promontory with a single dead tree standing on its crest. The Professor ran up the hillside and gazed around perplexedly.

There was nothing on the promontory. Just the dry, crooked tree creaking in the wind, rustling its parched leaves sadly. The dark shadows of the leaves moved dismally over the cold ground.

"Strange! . . . very strange! . . . " he muttered.

He could quite clearly remember that the nut had been lying here in this very spot. There was the slight hollow pressed down by its round side. Yes, most certainly, this was the place. There could be no doubt of that.

He bent over and started to examine the ground carefully.

From the hollow a black broad mark stretched down to the river just as if something heavy had been dragged over it quite recently.

The Professor straightened himself and followed this track, bending down to examine it from time to time.

The track led to the river.

He stopped at the very top of the steep bank and thoughtfully looked below at the black river whose waters were flowing noisily past.

There was nowhere now to go.

Twisting his beard and lowering his eyebrows, the Professor stood on the top of the bank and talked aloud to himself:

"If anything had fallen upon them they would have cried out, would have called to me. I always sleep so lightly I should certainly have heard them. What then can have happened.? Something dragged the nut away, is that it? Well, no! What use would an old spoilt nutshell be to anything? Nonsense. The whole business is much simpler: the nut was blown into the water."

He quickly made his way down to the water's edge.

"Which way has the nut been carried? To right or to left?"

He picked up a piece of dry leaf and threw it into the water.

The current caught the leaf twisted it around and whirled it away in the foam of its waves.

The Professor ran along the bank in the direction in which the leaf had been carried.

The forest came right down to the river.

He now wormed his way through the trees and now went through water which was warm, like new milk. It was a light, moonlit night. It was only on the banks where the tall grass trees grew that the broad shadows were lying in black stripes.

In the middle of the river it was bright moonlight and petals, gigantic leaves and logs were being swept along faster than the Professor could move.

They plunged along now disappearing, now bobbing up again — in the distance it looked as if someone was swimming, battling with the waves.

Each time that the Professor saw a log come plunging past in the middle of the river he would stop and watch it in alarm:

"Is it the children swimming?"

He climbed down to the river and went into the water up to his waist ready to dash to their help. But then the log would float closer until its naked branches could be seen.

"Phew!" the Professor would exclaim in relief, and continue on his journey.

The river for a long time twisted amongst dark woods and mountains and then at last widened before the Professor's eyes into a broad, shining reach.

Pushing the wet twigs aside with his arms, he strode out of the forest and suddenly stopped involuntarily.

"The children!"

Along the river in moonlight Karik and Valya were swimming.

"Yes, yes, it is they!" whispered the Professor.

There, right in the middle of the river, Karik was swimming and a little to the right of him nearer to the bank — Valya. Their heads now disappeared under the water now reappeared just like fishing floats. It was quite clear that the children must a long time ago have been exhausted by the struggle and at any moment they might disappear for good.

Oh, if only there was time!

The Professor flung himself into the water. The current caught him and swept him along downstream.

"Stick to it!" he yelled at the top of his voice.

Cutting through the water with a fast stroke he quickly swam towards the children.

With each stroke of his arms the distance between him and the children decreased.



Now he was right upon them and stretched out his hand. But what was this?

He saw under the water a ribbed body bending like a letter S. "Ah, bad luck to you!" he burst out with vexation as he turned back towards the shore. What he had taken for the children by the uncertain light of the moon was only the very ordinary larvae of a Hover fly which Russians call "Lion" flies. These larvae cling to the surface film of the river with their wonderful tails which are like tousled wigs thus float head downwards, and in this manner prey on unsuspecting inhabitants of the river. They breathe through their tails.

At one time in his youth the Professor had collected these larvae for his aquarium. Later on, flies had come out of the larvae, with black and yellow stripes resembling a wasp and had, indeed, laid their eggs on the flowering water weeds of the aquarium.

The Professor had actually written a book about grasshoppers which hear with their feet and about Hover fly larvae which breathe through their tails.

At any other time you would not have been able even forcibly to tear the Professor away from these amazing creatures but now he had no time for them.

Having felt the bottom with his feet, he waded rapidly ashore and, shivering with cold, started to run to try and get warm.

From time to time he stopped and listened. But he could only hear his own heart beating and the wind noising above his head.

Having noticed a little way off a hillock, he ran over to it, climbed up and, making a trumpet of his hands, shouted loudly:

"Ka-a-ari-ik! Va-alya!"

Then once again he ran to the river.

"If I could — only get out into the river on a raft?" he thought, "I might get two or three logs to collide with each other in the water, secure them together and the raft would be made. I could overtake the children much more quickly floating down the river."

But the Professor did not have to knock up a raft for himself.

The raft, just as if in a fairy story it had heard his desire, presented itself — floated up to the very bank. It stopped by a dark sandy, shoal and started turning round and round in the one spot.

"Well, that is marvellous!" shouted the Professor. With a run he jumped on to the raft and began to rock it in order to help it off the sandy shoal.

The raft shook, started to lift in the waves and slowly floated away in the current. At this moment another raft floated past the Professor and then following that more and more of them.

"Odd! Where can all these rafts be coming from?" he puzzled.

Out on the moonlit waterway the Professor started to examine his miracle craft very carefully. He found that it was formed of thick logs sharpened at each end. These logs were like gigantic cigars and lay so firmly together that they might have been glued to each other. The Professor bent over, touched one with his hand and muttered perplexedly:

"You don't say! Can this raft? . . . "

Now by the light of the moon he had recognised these fearsome cigars.

The vessel on which the Professor was floating was loaded with a strange cargo: its holds were stuffed with fever. Each cigar-log held within it the larva of the malarial mosquito — the anophelesa mosquito.

"Well, I never thought that I should ever have to be the captain of a malaria ship!" he laughed.

Right and left of the raft were floating other similar malaria ships. Evidently somewhere up the river the anophelesa mosquitos had been laying their eggs.

From time to time the eggs of the simple, very ordinary mosquito could be seen. They floated fastened together like a saucer which bobbed in the water like a fishing-float and looked in the distance very like a small boat.

At every bend and every turn of the river the Professor craned his neck and stared intently at any patches of darkness. Had the nut run ashore or was it floating in some quiet creek?

The wooded bank had long ago been left behind.

The river turned abruptly this way and that. An endless chain of bare hills was floating past.

It became lighter.

The moon paled. The stars went out one after the other just as if someone was extinguishing them and there only remained one greenish star hanging low above the hill.

The raft was carried by the strong current towards the bank. The Professor stood at the very edge rubbing his cold hands,

chest and sides.

The river turned to the right. Then suddenly the Professor heard far away beyond the hills some sort of weak voice.

He shook with excitement, his heart throbbed and hammered.

"Ah-ha!" shouted someone from the shore.

The Professor started to run along his rocking craft and shouted as loud as ever he could:

"Karik! Valya!"

"Pro-fess-ess-or!" came from amongst the hills.

"Here! Here! Over here!" he exerted himself even more.

Then Karik's head appeared above the hill, then his shoulders and then he ran along the skyline looking wildly in all directions.

"Here! Karik! Over here!" yelled the Professor.

Having seen the Professor, Karik gurgled something in an odd way and with his head down ran towards the river.

"Come ashore! Quickly! Come ashore!" he shouted, waving his arms madly.

The Professor lay down on the raft and started hastily to paddle with his hands, but the raft as if on purpose turned the Other way down the river, spun around in a whirlpool and bumped against a rock.

It then whirled past Karik and rapidly drew away from him.

"Stop! For heaven's sake, stop!" shouted Karik, running after the raft.

"In a minute, in a minute, my boy!" and the Professor started to paddle even more furiously with his hands.

But the raft simply would not pay any attention to him. So the Professor ran up to the end of the raft and dived into the water.

Karik started crying, and rushed into the river.

"Where are you going? What's up?" shouted the Professor, raising his head out of the water.

But Karik, unable to think at all, waded to meet the Professor and did not stop until he was waist deep. He was breathing heavily, had his mouth wide open and his knees were shaking. The Professor swam up to the boy and stood up beside him. "You're alone? Where's Valya? Has anything happened?" he asked in growing alarm, as he looked at Rank's tear-stained face.

"It has happened! Valya is lost!"

"What are you talking about?" the Professor seized Karik by the hand. "What has happened? When did it happen? Where did you lose her? Why are you silent?"

"Well! we floated to begin with in the nut, then we got to the bank and went to look for you, and then. . . ." Karik waved his hands and became silent.

"Well! What followed? What happened?" demanded the Professor, hastily. "Tell me where did you leave her?"

"There," Karik waved his arm uncertainly, "behind those hills."

"You remember the place?"

"Yes. I could not find it from here, but I could find it from the nut!"

"Where is the nut?"

"Over there in a bay."

"Right you are!" said the Professor, decidedly. "We'll go to the bay where the nut stopped first of all, and then we shall soon see what to do. Come on!"

The Professor and Karik climbed out on to the bank and silently marched along the cold wet ground.

"Show me the way!" commanded the old man.

"I'll show you," sighed Karik, and again started to sob. "Here, this is the way!"

"Now, please don't cry! We'll find her. She is not a needle but a living being . . . and she must be able to shout and we shall hear her. . . . We'll find her. Most certainly we'll find her."

In the distance the bay appeared.

On its calm blue waters, the nut was rocking like a barge, black and huge.

"There it is," Karik said quietly.

"I see."

The Professor stopped.

"Can you remember where you went from here?" he asked.

"I can remember," replied Karik. "I went along the bank and Valya went to the right. Over there."

"Good! Take me where you think Valya went!"

The travellers set out. When they reached the wood Karik said:

"It was from here that she shouted to me for the last time. And then she vanished."

"What she shouted, you cannot remember, I suppose?"

"I think it was 'Aoo'! " Karik replied, without conviction.

The Professor thought for a bit.

"You looked for her here this morning?"

"I looked for her, searched the whole wood."

"Well, now! You go to the right and I'll go to the left," said the old man. "Don't lose sight of the wood. We'll meet here in the wood. Full speed!"

The Professor and Karik set out in different directions. They proceeded to examine every hole, to look under rocks, lift giant leaves off the ground and see whether by any chance Valya had hidden there and gone to sleep.

Karik shouted until he was hoarse but all in vain.

Valya wasn't anywhere to be found.

After a long search they returned to the wood. They were both so tired that they could hardly move their feet. They neither of them wanted to talk.

Above the Professor's head hung the stems with yellow balls on them.

The balls swayed, moving their round shadows over the surface of the ground. One ball was just as if it was alive. Its walls shook and it moved most oddly on the stem just as if it wanted to break off and jump down to the ground.

The other balls were quite at rest.

"Well, now then," sighed the Professor. "We must set out and have another look. You go this way and I'll go to the bank of the river. Then we'll meet again in the wood. You understand?"

"I see," said Karik, sadly.

The Professor got up and set off for the river in a quick walk.

Karik moved off in the opposite direction. As he was going off he seemed to hear a weak, suffocated cry. He quickly turned.

"Go on. Go on!" shouted the Professor. "Don't lose any time unnecessarily."

So once again they set off upon a search, running over hills and sand every so often calling out to each other.

Suddenly the Professor stopped. On one side of the wood he spotted some sort of strange tracks. The soil was torn up and flung about. Marks of some sort of feet were visible on the soft heaps of earth. Clearly there had been a sharp scuffle in this spot quite recently.

The Professor bent down to the ground.

A fresh broad track stretched away towards a sandy hillock.

"This is her," he straightened himself up. "We must hurry. Karik. Come quickly here!" he waved his arm.

"Have you found her?"

"Come here!"

When Karik arrived out of breath the Professor silently pointed out the traces of a conflict on the ground.

"What is it?" Karik turned pale.

"It looks as if she had been attacked here. As you can see, she resisted but . . . ."

The Professor was silent.

"They have torn her to pieces?" screamed Karik.

"I do not think so," said the old man, without any assurance, "but they have dragged her off to some den."

"Why have they dragged her off?"

"We can talk about that later; but now let's run quickly along the trail. I think I know already what it is that has seized her. Let's run, we may yet be in time."

The Professor and Karik dashed along the trail.

They ran on, getting further and further away from the wood where Valya was caught in the yellow flower.

The wind raised tall columns of dust on the hills, turned and twisted around the Professor and Karik, wiping away all traces on the ground of their light steps.

## **CHAPTER XIV**

The meeting with a hunting wasp — Treacherous plants — Interesting conversations in the Oenothera wood — The marvellous baskets — The rain of corpses

THE WOOD HAD BEEN HIDDEN FOR A LONG TIME BEHIND THE hills. The travellers were now running along a wide bare valley. To right and left of them steep sand mountains rose up like yellow walls.

Here and there by the wayside they came across grass trees. Their branches were broken. The leaves were sprinkled with sand.

"She is alive!" shouted the Professor, as he ran on. "Do you see? She has been clutching the bushes. She has been struggling. We must run as fast as ever we can. We shall yet succeed. Come on, Karik! Come on, my boy!"

And they dashed on still faster.

"I can see them! I can see them!" shouted Karik. "Look! Over there beyond the trees. There they are fighting."

The grass trees rocked about as if someone was shaking them hard.

"It's little Valya! She is fighting!" Karik croaked hoarsely. "Make haste, Professor, make haste!"

The Professor and Karik became immensely cheered. But when they came up to the sparse trees there was nothing there.

The trees were crushed to the ground. A wide track led off Somewhere farther into a thicket of the grassy jungle.

"Come on! She is not far off!" shouted the Professor, and dashed along the trail.

The trees came to an end and they were once more running on dead, dry sand. Suddenly the Professor stopped. Karik nearly ran into him.

"Stop!" growled the old man.

"What is it?" asked Karik, softly.

The Professor gently nudged Karik and pointed with his hand.

Away over the yellow sand the boy could see a winged, long-legged creature very like a wasp. It was dragging a huge grub along the ground. The grub was big and several times as large as the wasp. It was resisting desperately, but it was clear to see it could not get out of the clutching grasp of the wasp. The wasp was dragging it, leaving a broad trail on the ground.

It was along this trail that the travellers had been running.

"It's a sand ammophilia or hunting wasp," the Professor grunted gloomily. "It has got hold of a grub called a 'leather jacket' — the most terrible ravager of wheat and beet fields. 'Leather jackets' become 'Daddy Longlegs' flies. . . . "

Karik interrupted. Gazing perplexedly at the old man, he asked:

"But where is Valya then?"

"We must turn back," said the Professor. "She cannot have gone far. We must look for her near the bay. If we haven't found her by nightfall we'll set fire to some marsh gas. Valya will see the fire and will naturally guess that it must be us. Even if she does not guess she will certainly come to the fire.

By now Karik could hardly believe that they would ever find Valya again.

"She is lost! We shan't find her! We cannot possibly find her!" he thought, as he strode after the old man. And everything began to seem quite hopeless. He wanted to cry but his eyes were dry. He sighed deeply and suddenly he began to realise he was very, very tired.

His legs trembled. He stumbled continually. His mouth was quite dry. His tongue had swollen and was burning as if it was in a fire. Karik felt that at that moment he could have drunk a whole pail of iced water at one gulp, but around him was nothing but dead, dry sand. There was no water to be found in such a wilderness.

"If only there was some sort of stream or even a puddle," he thought longingly, looking around in every direction.

Then suddenly at the foot of a yellow hill he spotted a tall, bare stem.

The stem was rocking gently in the breeze.

Karik went over towards it. Below the stem there spread out fleshy grey-green leaves.

Out of the leaves there protruded like the eyelashes of an enormous eye slender curving whips.

At the top of each eyelash there hung a huge silvery drop.

"Dew!" shouted Karik, rushing towards the strange leaves. "Come on! I'll get there first. I must have a drink of dew."

Karik jumped over a ditch.

"Stop!" commanded the Professor. "Do you hear? Stop! Come back at once!"

"But I want a drink," said Karik.

The old man jumped over the ditch and quickly barred the way to Karik.

"It's not dew. You mustn't drink it."

He took Karik by the shoulder and led him up to the strange plant.

"Look!" he said.

He got a rock from the ground and swinging it with his arms hurled it into the centre of one of the drops.

No sooner had the rock touched the leaf than the whips bent over and covered it up tightly.

The rock disappeared.

"What is it?" marvelled Karik.

"The sun dew plant," replied the old man calmly, "an insect-eating, treacherous sort of plant."

"How is that?" Karik was more amazed. "Surely we haven't any such plants. They only grow in hot countries. I read about them in some book."

"It is true," said the Professor, "that there are many more such plants in hot countries than we have here, but all the same they do occur here. They are most frequently met with where the soil is very poor. In such soil the ordinary plants cannot survive. But these treacherous plants do not do so badly, even on poor soil. The soil does not feed them — they exist by hunting. They catch insects and suck the nourishing juices out of them. In this way they live and indeed multiply. Neither animal nor vegetable, they are both one and the other together. Remember now: as well as the sun dew plant various kinds of primroses and pitcher plants trap insects; and in ponds sometimes you come across the treacherous bladderwort which even traps small fish. There are quite a number of these carnivorous plants, my dear. I could name more than five hundred for you, but. . . . "

"Stop!" screamed Karik. "It is all quite clear now. Valya has perished in one of these plants."

"Wha-a-t?" The Professor stopped and gazed at Karik uneasily.

"Yes, yes. I remember. She shouted out to me 'I am going to climb the tree.' This means she climbed the tree but it would not let her get down. That's why I didn't find her in the wood."

The old man seized Karik by the hand. "Follow me, Karik!"

And they dashed, jumping over the yellow hillocks.

"And how do they eat?" shouted Karik, as he ran. "All at once or slowly?"

"These plants," replied the Professor, panting, "begin by pouring juice over their victim and keep it until it gets softened, then they suck the juices out of it."

"But will Valya not get soft?" asked Karik.

"Don't talk nonsense!"

The Professor grasped Karik's hand more firmly and dragged him along after him.

They dashed on and on until they finally reached the bay where the nut was still floating dark and wet.

"Here we are," shouted Karik. "Stop, it's here!"

Breathing heavily they stopped on a high hill. Below them lay the yellow waste. To the right of the travellers a small wood showed green.

"But where are these trees?" asked the Professor. "I cannot see a single insect-eating plant at this moment."

"All the same it was there," asserted Karik hastily. "I remember it quite well. Little Valya vanished there in that wood"; and Karik waved towards the side of the wood where the branching trees stood with their yellow balls.

"In that wood?" queried the Professor. "There where we have already been? You are sure she climbed one of these particular trees?"

"Well, yes. There are no others there."

The Professor went over and looked at the yellow balls closely and suddenly clapped his hand to his forehead, laughing.

"My goodness! Why on earth didn't I think of it before? Why didn't I spot it at once. Yes, of course, it's that. . . . Oy. . . . "

He turned to Karik and quickly asked:

"When did this happen? In the morning or the night?"

"In the morning. The sun had not risen."

The old man rubbed his hands excitedly. "Then it is now quite clear," he said. "Yes, indeed, I understand it all . . . very well. . . . It is absolutely grand."

He sighed noisily with relief, and, smiling, seized Karik's hand and shook it heartily.

"Valya is alive. She is there. Sitting in the flower."

"In the flower?"

"Yes, certainly. This is an *Oenothera* plant. Valya is sitting in an *Oenothera* flower, in other words in an 'Evening Primrose'."

"But isn't it dangerous?" demanded Karik.

"No, no," replied the Professor. "We shall soon see her alive and well."

"Then let's hurry!" shouted Karik, and seized the old man by the hand. "Let's climb up the Primrose quickly and help Valya to get out,"

The Professor shook his head.

"You see," he replied, clearing his voice rather specially, "at the moment this would be useless. You and I do not know which *Oenothera* Valya climbed. That's the first thing. Let us suppose we could find the flower she is sitting in. How should we get her out? Unfortunately we could not free her. We haven't got the strength to move the petals of an Oenothera flower. That is the second point."

"But thirdly, won't Valya get suffocated in there?" demanded Karik.

"She won't be suffocated. The flower is large and roomy. We'll wait until the evening and the flower will open itself."

"What an odd flower," said Karik, displeased. "Other flowers open in the morning, and why does this open in the evening?"

"An overseas visitor. A foreigner. Came here from America and it still follows its old American habits."

Karik smiled rather unbelievingly.

"I am not joking," continued the Professor, seriously. "The *Oenothera* plant was brought from America. Three hundred years ago its seeds were sent to the botanist, Caspar Bogen, in Europe. During these three hundred

years the Oenothera plant has spread all over Italy, France, Germany, Poland, and at last appeared in our country, Russia. At the present time along the sandy banks of many of our rivers you will actually find more Evening Primroses — foreigners — than you will local plants or indigenous, as they are called."

"And it is certain to open in the evening?"

"Quite certain. Every evening the flowers of this plant open up and early every morning they close again. It is not for nothing that the plant has been christened 'The Night Light.' But, my dear, what are we going to do? We have some hours at our disposal."

"I," said Karik, "propose that we eat something and then lie down and sleep."

"A reasonable proposal." The Professor nodded his head. "Agreed unanimously."

Stretching himself and yawning, he stood up and set off towards the bank of the river.

"Let's go straight to the flowers, my dear. We are certain to find something to eat there."

Karik cocked his head from side to side. "But where did you see any flowers open?"

"I haven't seen the flowers yet," said the old man, "but all the same I can hear quite plainly that over there on that little headland bees are buzzing. That means there must be flowers."

The Professor was not mistaken.

Hardly had they scrambled over the hilltop than they saw below them in a valley huge trees thrusting themselves up here and there. The tops of these trees bent down under the weight of mauve flowers.

The Professor hastened to one of the trees loaded with flowers, climbed up it and shouted from on top:

"Stay where you are!"

He got into one of the flowers and set to work rather laboriously.

Karik stood below.

He could see through the green leaves glimpses of the Professor's red, sunburnt back, moving up and down, as with elbows well apart the old man now tugged and now pushed at something, like the piston of an engine.

Karik remembered mother. This was just like the way she worked the dough.

"Eh, hey," shouted the Professor. "Catch some fresh rolls." He looked out of the flower, bent down and threw something to the ground.

Round little loaves fell drumming on the leaves and bouncing off, rolled on to the ground.

Karik picked up one of the 'rolls' and bit a piece out of it.

"Well, how's that?" asked the old man from above.

The 'roll' was scented and just as delicious as the Andrena bee's pastry.

"Is it made of flower pollen and honey?" asked Karik.

"Yes! Pollen and nectar. Do you like it?"

"It's lovely. What are you doing with them up there?"



"I am sprinkling the pollen into the nectar and kneading them like dough."

The 'rolls' fell around Karik like autumn apples from an apple tree. Karik collected them and stacked them in a pile.

At length the Professor climbed down the tree, sat on the ground and choosing a 'roll' rather bigger than the rest at once bit off half of it.

"Life is not so bad actually!" The Professor winked in a friendly way at Karik.

"No," agreed Karik, "it is possible to live here, but all the same . . ." he sighed and became silent.

"Well, well," grunted the old man, "don't worry. We'll get home and everything will be grand."

He stood up.

"Although it is still a long time before evening comes, we mustn't go away from the Oenothera wood. Let's go there, sit down and wait for Valya. Bring the 'rolls.' I think Valya will like them."

"I am certain of it," nodded Karik.
"She, poor girl, has had nothing to eat all

day. Everything will please her."

"That's good," said the old man, "but how are we to carry all these rolls? Without a basket we certainly cannot carry more than a few. Look here, my boy, you sit here a little while whilst I go and look for a basket."

He looked to the right and to the left and then went over to one of the big brown heaps which rose like hillocks on the river bank and, bending over it, picked at it with his fingers.

"Excellent," he announced, "it seems to be just what we need."

He started to dig out a lump.

"Here you are, my dear, wash this thing!" handing Karik a big muddy lump.

Karik took it and trying to hold it as far away from himself as possible so as not to get dirty ran down to the river.

He went into the water up to his knees and lowered the Professor's find into the river. The water became cloudy.

The clay melted away like a piece of butter on a frying-pan. Soon something white appeared from beneath a layer of dirt. Karik started to

scrape off the clay with his hand and suddenly felt some sort of slender handle.

"Apparently it is actually a basket," he marvelled.

Soon the strong current of water had completely washed away the clay, and Karik found in his hands a basket of unusual beauty.

He lifted it by the handle, right up to his eyes and stood for a minute gazing in admiration at its ornamental lattice work which looked as if it had been wove out of ivory.

"How's that? Good enough for a basket?" Karik heard the old man's voice behind him.

"It's exactly as if it had been made of lace," replied Karik, admiring it. "Who ever made it?"

"I'll tell you that later," said the Professor, "but now wash these as well."

He threw two heavy balls of clay on the ground and went back to his excavations. Karik started work.

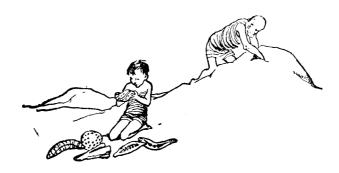
He carefully washed the clay off the extraordinary baskets and stood them side by side on the bank; but the Professor brought more and more.

One basket was even more amazing than the others.

Fine silvery stems were platted together in ornamented squares. On the squares there were screens pierced by the stems and decorated with stars, leaves and garlands. One would have thought that such delicate baskets must have been made by the hands of a master craftsman. One basket reminded them of some sort of tiny palace with openwork towers and fine Gothic windows. Silver lattice work stood up around the palace-like walls. These walls were decorated with flowers, stags' antlers and stars. Some of them were not like baskets at all, but Karik did not throw them away but stood them beside the baskets.

It was as though dishes, vases, helmets, spheres, stars, cubes and crowns had been woven out of ivory.

"And they are all different!" marvelled Karik.



"Yes," said the Professor, "they are every sort of shape. You could study them for a lifetime and yet every day you would always discover new forms of the plant."

"What?" Karik turned quickly to the Professor. "Did you say it's a plant?"

"Yes, it is a single-celled water weed. Diatoms, more exactly — membranous plants. In these beautiful basket-like membranes live the simple water plants — the diatoms. Thus, in this one," the old man pointed to a round basket, "there lived the heliopelta diatom; in these triangles — a tritserata; in this rhomboid — a navicula. That which you hold in your hand is only the skeleton of the diatom. The water plants die, but their strong membranes remain. In tens or even hundreds of years the amazing baskets will not have been destroyed by age."

"Oho!" said Karik. "They are certainly very strong. Look, you can't break them."

The Professor laughed.

"That is because the membrane is made of silica. That's a 'very strong material."

"You said that this was a water plant. That means they live in water. How is it that they —?"

"You want to ask how they got on to the land? Apparently they must have been deposited on the bank by a flood or a storm. Or maybe very long ago there was a lake here which was filled with diatoms from the surface to the bottom."

"Such little things! How could they fill a lake?"

"Yes, they are small, but against that there are so many of them. Like dust in a broad sunbeam they exist throughout the whole mass of the water. Millions and millions. Their life is short. They are born and having lived a few hours they die. Day and night in seas, lake and rivers there falls without ceasing a rain of their corpses.

"Their bodies lie on the bottom. On their bodies new bodies fall. Layer after layer the pile of millions of diatom bodies rises up and thousands of years pass. The diatoms rise from the bottom of the rivers in islands and shoals. The river divided course around them into branches, they make the river deltas. By this means, they change the course of the rivers. By this means they change geography. Huge lakes slowly die under the layers of diatoms. They turn into swamps. They vanish from the map.

"Not far from Leningrad there is the fortress of Kronstadt. You have to go 30 kilometres of a water journey to reach it. But in two and a half thousand years it will be possible to go from Leningrad to Kronstadt on foot. The bodies of the diatoms will have covered the gap between with a dense, firm causeway.

"So you see these teeny creatures, unnoticed by man, change the face of the earth.

"Well! the membrane of the diatom has new significance now. Choose for yourself baskets for the 'rolls.'

Karik thoughtfully filled two little baskets with 'rolls' and went after the Professor.

They returned to the Oenothera wood, laid their baskets under a tree and stretched themselves out in the cool shadow. With their arms under their heads, they lay there talking quietly, but both started very soon to yawn.

"Let's sleep," proposed the old man.

"You sleep and I'll keep guard," said Karik.

The Professor went to sleep.

Karik lay beside him and listened to the measured breathing of the old man. He started to think how pleased mother would be when he and Valya arrived home and how she would exclaim when he started to tell her about this wonderful journey.

Karik's eyes felt full of sand.

He turned on his side and was soon just as fast asleep as the Professor.

In their sleep they heard some indistinct noise and soft steps as if a wild beast was creeping up to them. All was silent. Then suddenly a very ordinary human voice shouted.

"Ah, here you are! Whatever has happened?"

The Professor and Karik opened their eyes.

## **CHAPTER XV**

Karik makes the acquaintance of a lion ant — A caw hospital — The bumble bee's larder — Mysterious lights — An extraordinary horse — Besieged by flies

IN THE ROSY GLOW OF THE EVENING SUNSET, THERE IN front of the Professor and Karik stood Valya: the real live Valya.

She held in her hands one of the diatom baskets and she was attentively examining its silvery pattern. She first put the little basket up close to her eyes, then lifted it high above her head and peered at it with one eye screwed up.

"Take a look, citizens!" grinned Karik. "The next instalment of the film 'The girl from Kamchatka' has commenced. The missing damsel mysteriously appears on the west coast."

The Professor didn't say anything. He just clasped Valya to him and silently stroked her hair.

Valya wriggled out of his arms and stretching out the diatom basket towards him, demanded:

"Did you really make this yourself? What is it made of? And why does it smell so delicious? Can we eat it?"

"You cannot eat the basket but you may certainly cat the 'rolls' in the basket," answered the old man.

"How many do you want? Two? Three?" asked Karik, taking the rolls out of a basket.

"Five! I want five!" Valya answered quickly.

The Professor and Karik laughed.

"That is what they call famished!" said Karik.

"It doesn't matter, it doesn't matter! Let her eat what she wants. Indeed, we might all have a bite with you. Would you like something?"

"I could manage it!" agreed Karik.

The Professor arranged the baskets of 'rolls' opposite Karik and Valya, and with a wide hospitable sweep of the arm invited the children to supper.

Valya took a bite of 'roll,' munched it, and announced:

"Most delicious!" and proceeded to stuff her two cheeks with 'roll'.

The other two watched her smilingly. Karik winked at the Professor and asked in a very innocent way:

"Is it true that there was a man in Moscow who had the appetite of an elephant?"

"I never heard that," said the Professor.

"But I heard it. They say he ate ten plates of soup."

"And I could eat them!" said Valya, shoving a huge piece of 'roll' into her mouth.

Karik nudged the old man with his elbow. "And for a second course he ate fifteen tender chops."

"And I could eat fifteen!" rejoiced Valya.

"Lastly, he ate twenty dishes of fruit salad," continued Karik.

"But I would like thirty!"

Karik moved the basket away from himself and wiped his fingers on a petal.

"Then this chap tied a napkin across his chest and said:

"Well, I think I must have swallowed a worm. So now, if you please, I'd like to start my proper dinner!"

"And I. . . . "

Valya stretched out her hand to the eighth 'roll\ but after touching it, thought a little and then sighing heavily declared: "No, I don't want anything now."

"Perhaps you will now tell us how you contrived, to get into the Oenothera flower," said the Professor, clapping her on the shoulder.

"Karik and I were looking for you. . . . That's right, Karik?"

Karik nodded his head.

"I went on and on and suddenly I got hungry. In the wood there was something which smelt just like a confectioner's shop. 'I'll climb up a tree,' I thought. I climbed up. But then all of a sudden it shut and wouldn't let me out. I shouted and shouted, until even my own ears ached."

"And you cried, surely?"

"A little. . . . But then I slept so soundly that I didn't even dream. Afterwards I heard someone shouting 'Valya, Valya!' I wanted to wake up but I simply couldn't."

"Well, all's well that ends well!" said the old man. "Now in order that we shall not lose each other again, give me your word that you will not wander off, not even one step, from me!"

"On my honour as a Pioneer!" said Karik.

"On my honour saluting!" Valya saluted.

"Then — on we go!" ordered the Professor, cheerfully, "on the march, my dears, on the march!"

The travellers collected the baskets with 'rolls' and moved off beside the river.

By nightfall they reached a big hill. Here in some sort of hole they spent the night, and then next morning, having eaten some scented 'rolls', they continued their journey.

Thus they proceeded for several days, spending the night in flowers, in shells, in empty wasps' nests, under stones, and in mucky damp dens.

They fed on nectar, bees' honey, butterflies' eggs and green milk.

In the valley of Three Rivers the Professor succeeded in killing a hedge sparrow. The travellers had roast and smoked fowl for three days and indeed would have had sufficient meat for a further fortnight had not 'skin' beetles attacked them on their journey, carried off all their provisions and very nearly disabled the Professor.

\* \* \* \* \*

Every day they got nearer and nearer to the lake on the opposite side of which stood the pole landmark.

According to the Professor's calculations they were due to get to the lake the following day in the evening. They had then only to get across the lake, when they should be able to land quite near to the landmark.

"In a few days we should be home!" the Professor assured the children.

But their guide's calculations were not to prove correct.

When the travellers were near the lake an unfortunate event occurred.

It happened in the early morning.

The Professor and the children had just emerged from the cavern in which they had passed the night and they were beginning their march in the cold morning dew.

"I declare there's a frost!" shivered the old man.

Shaking with cold and with their teeth chattering the travellers marched up hill and down dale. It seemed to them as if their bare feet were moving over ice sprinkled here and there with earth. They wanted to stop and tuck their feet up under themselves like a goose standing on the ice does.

At last the children could stand it no longer and in order to get warm they started to run ahead.

"Don't run too far!" the old man shouted after them.

But the children were already dashing towards a chain of high hills, overtaking each other, jumping in their chase over wide holes and little rivers.

"Come back!" shouted the old man. "Come back, Karik! Come here, Valya?"

But Karik only waved his hand and quickly running up on to the crest of a hill disappeared behind it.

Valya stopped as if undecided whether to turn back or to follow Karik, but, after hesitating a little, went off after her brother and was also disappearing behind the hill.

The Professor, alarmed, quickened his steps.

Then suddenly from behind the hill came a desperate cry. A few moments later Valya reappeared on the top of the hill. She waved her hands and called to the Professor for help.

"Quickly, quickly! . . . They are attacking!" she shouted.

The old man ran as fast as ever he could. He simply flew up the hill.

"Where is he? Where?" he panted at Valya.

"There! There he is!" Valya replied.

At the bottom of a sort of funnel up to its neck in sand a terrible monster was twisting and digging. A large black head with long curving pincers was rapidly throwing up sand and rocks in a regular spray.



On the slope of the funnel stood Karik, quite dazed. He was helplessly covering his head with his hands and turning this way and that way. Sand and rocks hurtled straight at him. He fell down, got up and fell down again. The monster did not stop showering him. The sandy wall of the funnel fell away under his feet and Karik started to slide down, down, down, right into the monster's lair.

"Turn on your back," shouted the Professor. But Karik couldn't understand anything and couldn't hear. Then the old man rushed down, seized Karik by the arms and clambered out of the funnel, up the crumbling side.

A regular hail of rocks followed the fugitives. But the Professor set his teeth and, not letting go of Karik, quickly climbed upwards, with his head well down in his shoulders and bending down to the very ground.

At last he got out of the funnel, carefully laid Karik on the ground and grunted:

"Goodness gracious! are we really out of it?"

Karik lay there pale with a thin stream of blood creeping down his cheek. His head and the whole of his spider's web suit were powdered with sand.

Valya ran up to her brother.

"Is he alive?" she demanded of the Professor in alarm, as she dropped on her knees beside her brother.

"He's alive all right," said the old man, frowning. "He'll soon recover consciousness!"

"The sooner the better! We must get away from here as soon as possible. That frightful thing will climb out and start throwing stuff at us again."

"It won't climb out!" replied the Professor curtly, and, looking angrily at Valya, continued, "Didn't I tell you, didn't I shout at you? Oh, no . . . must have it your own way!"

He put his ear to Karik's chest, then felt for his pulse and looking skywards started to move his lips, making no sounds.

Karik sighed.

"Can you hear me?" asked the Professor, loudly.

Karik raised himself up, gazing at the Professor with dull eyes. His lips moved ever so slightly.

"It's ... gone?" he asked in a weak voice.

"It's gone away, it's gone away!" said the Professor. "Now how about you? Can you get up?"

"I think I can!" said Karik.

Swaying, he stood up, said "Come on!" and clenched his teeth.

For some time the travellers moved on in silence, but the old man could not remain angry for long. When presently they sat down to rest he looked at Karik and laughed:

"What a hero. . . . Eh? Look at him! Fell into a lion's den!"

"I was unlucky," said Karik. "I was running and running — and suddenly the funnel appeared and — well! I rolled down it."

"You would do much better if you watched your step instead of chasing wild geese. A little longer — and you would have made a nice dinner for a 'lion-ant'."

"What did you say it was called, a 'lion-ant'?" demanded Valya.

"Yes, that's what it is called," nodded the old man.

"However, this was not actually a 'lion-ant' itself but its larva. It doesn't live in a hole itself, it flies about, but most often climbs about trees. I think you must have actually seen one at one time or other. . . ."

"What is it? What's it like?"

"It is rather like a dragonfly. But it is an idler, a terrible lazybones. It sits on a tree letting its four wings flop. Yes, and it'll sit there all day long, just as if it had been stuck there on a pin. But this bully which sits in a hole and hurls stones — this is its larva. That is how it hunts. You saw what a cunning trap it had set for ants who don't look where they are going!"

"For ants?"

"Not only for ants. It doesn't let other insects get out. But what is most insulting," smiled the Professor, "this creature who wanted to eat you hasn't even got a mouth."

"Well, then. . . . How was it going to eat me? With its feet?"

"Yes, in a way — with its pincers!" replied the Professor. "You see, my dears, the 'lion-ant' has no mouth opening, but on the contrary has two huge pincers on its head with which it attaches itself to its prey, and through which it sucks their blood. Another two or three minutes and you would have made the acquaintance of these pincers."

The Professor got up from the ground and said:

"Well, ready? Let's go on!"

Valya trotted behind the old man and Karik dragged himself along behind them both, trying not to get separated from Valya.

At times a sharp pain made him jump and stop. It seemed to him as if he had trodden on a long, sharp needle.

For all that he kept going. Frowning, making faces, biting his lips, he nevertheless kept moving and did not drop behind a single step.

The old man looked around every so often and stole a glance at Karik. When Karik stumbled the Professor asked him with alarm in his voice:

"Well, what's the matter with you? Perhaps you would like to lean on me, wouldn't you?"

"No, no, it's nothing!" replied Karik, hastily, "it's just. . . . I trod on a sharp stone!"

At last Karik began to lag. He now no longer walked but hopped, trailing one leg behind the other one after him along the ground.

The Professor stopped and said:

"Well, I can see you are quite exhausted."

"No, no!" protested Karik. "I could do another fifty miles still." He straightened himself up and started to walk quickly forward but, having made a few steps, fell, and clutching his bad leg groaned. Then the Professor without saying a word lifted Karik up on to his back.

"No, I can stick it. Let me go! I can manage it myself!" resisted Karik.

"Sit there!" scolded the Professor. " 'I can stick it,' indeed! You think you're a champion."

Holding Karik tightly, he walked on frowning and looking down at his feet. Beside him came Valya, with a guilty look on her face.

Karik laid his head on the Professor's shoulder, his eyes were soon shut and he was sound asleep.

When next he opened his eyes he saw that he was lying on the bank of a big lake. The Professor was standing on a rock and using his hand to shade his eyes was gazing at the opposite bank where the landmark stood up solitary in the distance.

Karik heard Valya ask something but what it was he could not make out.

He raised his head from the ground and listened. At that moment the old man was speaking:

"We'll build a boat and sail or row across. But to begin with let's look for a suitable lodging-place. We may probably have to spend a week on the bank."

"But why ever?"

"What do you mean why ever? You must have seen how ill our Karik is?"

"You don't need to!" said Karik, raising himself on his elbows.

"Don't need what?"

"You don't need to spend a week on the shore. I can crawl into the boat, and I am sure I could row!"

"Stuff and nonsense!" the Professor waved his hands. "What will happen if a storm suddenly springs up. You'll go to the bottom like a stone."

The old man bent over Karik and carefully touched his swollen knee with his hand.

"Look how blue it has become! And it hurts, no doubt?"

"It is painful," Karik wrinkled up his eyes. "It burns all the time as if someone was ironing the knee with a hot iron."

The Professor started to think and then suddenly clapping his hand to his head ran to the lake.

"0-oh, isn't it swollen!" Valya touched Karik's sore leg with the top of her finger.

"Yes. If you had been bombarded like that you would be swollen too!" rejoined Karik, rubbing his bad knee.

"If you don't put your weight on that leg it will soon go! Would you like me to find you a crutch?"

At this moment the Professor arrived back. He held in front of himself on outstretched hands a tiny leaf from which water was trickling down on to the sand.

"Well, now, turn a little!" said the old man, "and give me your leg."

Then having laid the wet, cold leaf on the hot, swollen knee he skilfully bound up Karik's bad leg.

"How's that?"

"Very good," said Karik, "a sort of compress. It started to get better at once."

"Excellent! Lie quiet, and Valya and I will go and look for a place to spend the night."

As luck would have it the travellers did not have to look long for their refuge. The whole bank of the lake was pierced with deep caverns. The old man and Valya started inspecting first one and then another, and at last chose a dry sandy cave with a low roof and narrow entrance.

"Let's stay in this one!" suggested Valya.

The Professor agreed.

He returned to the bank, lifted Karik and carried him to the cave in his arms.

"Lie there!" he said, putting Karik down beside the wall. "Is that comfortable for you?"

Karik did not answer. He was already sleeping the heavy sleep of the sick.

The old man and Valya sat at the entrance and, by the fading light of evening, ate a supper of the remains of the honey dough.

"Now we must go to sleep!" said the Professor.

Blocking up the entrance to the cave with rocks the travellers stretched themselves out on the dry sand and were soon asleep.

\* \* \* \* \*

Towards morning the Professor dreamt he saw a lion-ant. The lion was firmly holding Karik in its curved pincers and was staring at him with huge protruding eyes.

Karik was hitting the monster on the head with his arms and legs and quietly groaning.

The old man opened his eyes.

"Good gracious, I was dreaming!" he thought.

However, the groans continued. It wasn't a dream after all!

"Karik, are you all right?" the Professor hailed him.

Karik did not answer.

It was dark in the cave.

The old man got up and feeling the wall with his hand made his way to the mouth of the cave. In the darkness, touching the barricade of rocks which blocked up the entrance, he took off two big rocks from the top and gently, so as not to wake the children, lowered them down to the ground.

It now became light in the cave.

The grey light which comes before the dawn filtered in and touched the floor where the children were sleeping.

In the centre of the cave Valya could be seen curled up like a cat,

Karik was sleeping near the wall with his arms flung widely apart. He was all red in the face. Sweat stood on his forehead. He was shivering and groaning in his sleep.

The Professor went over to him, bent down and quietly touched the swollen knee wrapped in the leaf.

Without waking Karik drew up the leg and groaned loudly.

"Do you want something to drink, Karik?" he asked.

Karik opened his eyes. Unable to grasp anything, he gazed at the Professor for a long time and then turned away from him towards the wall.

"Would you like me to get you some water?"

"No-o!" said Karik, through his teeth.

"But would you like me to change the compress?" asked the old man.

"Yes . . . compress, please!"

The Professor brought a fresh damp petal and fastened it around the swollen knee.

"How's that? Better?"

"Better!" sighed Karik.

"That's fine! Sleep away! Meanwhile I'll go and look for something to eat. If Valya wakes up, don't let her go out of the cave. I'll be back soon."

Karik silently nodded his head. '

The Professor filled up the entrance to the cave with rocks and, looking around himself in order to remember quite clearly where the children were, went off to find something for breakfast.

Not far from the cave a hill rose up covered with thick bushes.

The old man went to the foot of the hill, examined it carefully, touched the soft feathery foliage of the green bushes.

"Evidently it is moss! Yes, indeed, just ordinary moss. Now let's see if there is anything eatable here."

He climbed daringly through the thick growth of moss. But he had only gone a few steps when he disappeared up to the waist.

Falling, he managed to clutch hold of some of the foliage.

With his legs swinging above a dark hole he peered downwards and in the half darkness descried earthy arches and a smooth, trampled floor. The weak light filtered in from above through the thick foliage and lit the dark cellar fitfully.

In the depths of the cellar along the wall white barrels stood in even rows.

"Apparently it's a bumble bee's store!" muttered the Professor.

He measured with his eye the distance to the earthern floor and letting go the foliage with his hands dropped down. The earth beneath his feet was dry and warm.

Examining the cellar with curiosity the old man went over to the barrels. They were each of them closed with a white cover. He lifted the cover off one of the barrels, bent over it and sniffed.

"That's just what it is!"

The barrel was full to the very brim with scented honey. Alongside stood other barrels, and they too were filled with honey.

It was very much like a storeroom in which supplies were kept "for a rainy day."

In actual fact this was what it was — a bumble bee's storeroom.

The female bumble bee lays its eggs in a nest and leaves alongside them little balls of honey and pollen. The larvae come out of the eggs, eat the balls of honey and pollen and turn into cocoons, which are barrel-shaped. After a little while the young bumble bees open the top of the barrels and fly out. But the cocoons are not wasted. In the summer the bumble bees fill them with honey and in cold, rainy weather, when it is not possible to fly out of the nest, they feed on this.

The Professor, in no hurry, breakfasted and then chose one of the stronger barrels and started to drag it out of the storeroom.

This was no easy task.

The barrel, as if it had been alive, jerked itself out of the old man's hands, bumped him and knocked him off his feet. But for all this the Professor managed to get it up out of the cellar.

His knees shook. His hands were numb. His heart beat so furiously that he could feel it clearly even in his temples.

"And now how can I roll it to the cave," he puzzled.

He was afraid to turn the barrel on its side and roll it along the ground as one normally rolls the ordinary barrel. The lid might open and all the honey would pour out on to the ground.

"There's nothing for it but to try some other way." He gripped the edge of the barrel with his hands and shook it fiercely.

The barrel rocked.

"Aha! It'll soon come!" he rejoiced.

He tipped the barrel over on one side and proceeded to push, at the same time rolling the barrel from side to side as if he wanted to bore a hole in the earth.

Slowly, step by step, pushing the barrel with his hands and leaning his full weight against if, the old man drove it to the cave.

When the Professor got to the bank of the lake Valya came to meet him,

"Up already?" he asked, stopping and taking breath. "How is Karik getting on?"

"He is asleep! Let me help you!"

"Certainly, help if you can!"

"But what is this? What is the barrel?"

"Honey!"

"A whole barrel! That's really grand!"

Valya took hold of the barrel and began to push it, helping the Professor.

With their combined efforts they rolled the barrel into the cave and stood it in a corner.

"You have breakfast, little Valya," said the Professor, wiping his hot neck with his hands, "I must go and look for a bed for Karik. It's not very comfortable for him, poor chap, to sleep on the bare ground."

He went out.

Valya successfully threw off the lid and at once dug her hands into the honey. Her fingers became covered with the scented liquid. She ate so enthusiastically that soon her face, neck and arms, up to the very elbows, were coated as if with glue, in amber-yellow honey.

"Now what shall I do?" Valya spread her sticky fingers apart. "There isn't even anything to wipe them on. I'll go to the lake and wash."

She went out of the cave and ran to the lake.

On the sandy beach Valya stopped to make sure that there were no monsters in the neighbourhood and only after this did she get into the water and start to wash.

After bathing she ran back. On her way back she collected a piece of petal and dragged it into the cave.

"It will be useful," she considered. "It is certain to be useful to us now!"

At the cave itself she saw the Professor, who was dragging a mass of feathery hair.

"Now where have you been running to?" he asked, stopping.

"To wash myself!"

The Professor shook his head.

"Now, that doesn't please me at all. I warned you most seriously. I warned you not to go out without me."

"But I was all covered with honey!"

"All the more likely," gruff-gruffed the old man, "that a fly, wasp or a bee would carry you off with the honey — in fact, there are few of our neighbours here who could resist a girl covered in honey."

He went into the cave and threw the pile of tangled hair on the floor.

"Well, there you are, there's a bed for Karik! Yes, and there is enough hair for you and me as well."

"It's just like a real mattress!" Valya touched the hair. "Where did you get it?"

"I took it from a gipsy moth!"

"Does a gipsy moth sleep on a mattress?"

"No," smiled the Professor, "it doesn't sleep itself. It flies. But its next generation are covered carefully by it with this down. Neither rain nor cold are harmful to the eggs of gipsy moths, which lie under such dense feathery eiderdowns."

"What is this feathery stuff? It's surely ordinary horsehair!"

"You forget that you and I are not ordinary ourselves and that is why this down appears to us as horsehair. However, let us make up a bed for Karik now."

"I'll make the bed!" said Valya.

She laid hair near the sandy wall, beat it up with her hands as one puffs up a pillow, then threw a big bunch of hair at the head of the bed and went a little way away.

"It looks quite nice," she said admiringly.

"Excellent," approved the Professor. He took the sleeping Karik up in his arms and transferred him to the bed. Valya opened the petal up and laid it over Karik like a quilt.

"He seems pretty comfortable now. Look after him while I go out for half an hour or so," said the old man. "I have some things to do outside. If Karik wakens feed him!"

"Right you are," said Valya. "You go on, I have some things to do too."

When the Professor had gone, Valya made up two more beds, dragged in two new blue quilts made from harebell petals, swept the floor with a piece of petal, then rolled into the cave four big stones, put a flat rock on top of them and on top of that laid as a tablecloth the white petal of an oxeyed daisy.

This provided a splendid table.

Around the table Valya arranged smaller stones, put the remainder of the hair on these and covered it with yellow petals.

"There are our comfy chairs!" said Valya.

Having finished work she inspected the cave and was very pleased — it was now really cosy.

"Now we could stay here even a whole month while Karik gets well."

She went over on tiptoe to her brother's bed, bent over him and carefully rearranged the quilt.

"He is asleep," she said in a whisper.

Soon the Professor arrived back. Breathing heavily, he rolled a second barrel of honey into the cave and stood it up by the wall.

"Look what I have done here," boasted Valya.

"What's happened?" asked the old man in alarm, but on looking around the cave nodded his head approvingly. "Bravo, bravo! You're a champion! Yes, you're a regular housewife!" He praised Valya. "By the way, I too may be able to add something to the comfort of our dwelling. Just here by the cave I found an interesting little thing."

He went out and in ten minutes returned with a little leaf in his hands. Using the leaf as if it was a tray he carried in a mound of oblong little eggs.

"What are those?" asked Valya, "Can we eat them?"

"No," replied the Professor, "they cannot be eaten but they will be useful to us, very useful!"

"But what use can they be?"

"Live and learn!"

The Professor put the tray of eggs on a barrel and said:

"I have been thinking things over: Our patient will evidently have to stay in bed for some days. In order not to waste time you and I will roll all the barrels of honey into the cave and then we can set about building our battleship."

"What battleship?"

"Well, something is sure to turn up that we can make into a ship! Then as soon as Karik gets well, we can set out on our voyage. Since our landmark is on the opposite side of the lake, it means we must go across in a vessel."

Having fed themselves on honey, Valya and the old man set about rolling the barrels of honey from the bumble bees' store to the cave. Each time they came back the Professor went over to Karik, listened to his uneven breathing and felt his pulse.

Karik slept as if he was dead.

When the whole corner of the cave was stocked with barrels of honey the Professor announced:

"That's that. Now, little Valya, let's go and build a ship."

"That will be interesting!" rejoiced the girl.

"I don't know if it will be interesting," said her companion, "but I am ready to wager that we'll have a spot of work to do!"

Having closed up the entrance to the cave with rocks in order that no wild beasts should get in to Karik, the old man and the girl set out to the lake.

"What can we make the ship out of?" demanded Valya, marching along beside the Professor.

"We'll find something. There are quite a few dry tree leaves on the bank. We can build it out of these. This morning I saw behind the hills some ordinary trees."

"It is very likely that the wind carries their leaves here. At any rate, we shall soon see."

The Professor and Valya went along the bank and no sooner had the old man got a little way away from Valya than she suddenly cried out:

"I have found it! Found it! Found it already!"

"Where?" the old man turned to her.

"Here we are!"

By the lake itself lay a huge yellow leaf with deeply indented edges. Thick veins spread fan-like in all directions.

The Professor walked around the leaf, looked at it from every direction, lifted its edge and looking underneath said:

"Yes, this is an oak leaf, but unfortunately we cannot make a ship out of it."

"Why not?"

"There are galls on the leaf. Do you see? The whole leaf is covered with galls!"

"Galls. What are they?"

The Professor lifted the edge of the oak leaf still higher.

Valya squatted down and looked under the leaf. The whole of its lower surface was covered with dark balls. These balls appeared just as if they had been glued on to the leaf. Valya touched them with her hands. They were as hard as stones.

"We could never move such a leaf!" the old man announced.

"Whatever are these things?" demanded Valya.

"They are insects' nests!" said the Professor. "Numerous insects lay their eggs directly on leaves. But the leaves don't like this and they protect themselves with all their resources against unwelcome guests. The cells of the leaf collect around the egg, trying to push it away, just as the white corpuscles of the blood push away a thorn which has got into your finger.

"It is for this reason that an inflammation appears on your finger around the thorn whilst on the leaves swellings appear — these very galls. They are usually called 'ink nuts' or 'oak apples,' although by no means all of these galls are inky nor are they very inviting apples."

"But what insects do this?" asked Valya.

The Professor shrugged his shoulders. "One or two!" he said. "Let me see! The following lay their eggs on leaves: 60 sorts of butterflies, 113 sorts of beetles, 486 sorts of flies and, well, 290 sorts of other insects."

"Can we ever find a leaf without galls?"

"We shall have to find one!" answered the Professor.

It was already dusk by the time they at length found a dry oak leaf suitable for launching. But it lay a good distance from the bank, so far that it was quite beyond the Professor and Valya to push it into the water.

"We'll never get it there!" Valya shook her head.

The Professor started to think. Stroking his beard he stood on the leaf, silently gazing at its thick veins, which stretched in every direction.

"What if? . . . Yes, of course!" gruff-gruffed the old man, and then suddenly started laughing.

"What are you up to?" Valya looked surprised.

"I am up to just this," replied the Professor. "We'll go home now. Tomorrow we'll harness a horse to do the job."

"A horse?" Valya was still more surprised.

The Professor did not say anything in reply. Muttering something under his breath he quickly set out in the direction of the cave. Valya ran skipping along behind him.

"Now, Professor dear, do tell me what are these horses? Where will you get them from?"

"I will not tell you!"

"Tell me!" insisted Valya.

"Don't be curious! You'll see for yourself to-morrow."

"Oh, Professor," whimpered Valya again, and suddenly became silent.

In front of them a light twinkled. Valya seized the old man by the hand and stopped.

"It's on fire! Look! There is a fire in our cave!"

The light was coming between the rocks which blocked the entrance to the cave.

"A fire! A fire in our cave!" Valya screamed in fright. "Hurry — Karik is burning!"

"It is nothing! Nothing terrible! Your brother is not burning."

But Valya, not listening to the Professor, had already dashed headlong to the cave.

"Karik!" she shouted, as she ran. "Are you burning? Are you burning, Karik?"

"No, it is not I," Valya heard Karik's calm voice.

She quickly pulled the rocks aside. Jumping into the cave she stopped as if she was rooted to the spot.

"Whatever is it?"

The corner where the mound of little eggs had been laid on their tray was glowing with a dazzling blue light just as the lamps on a New Year's tree, only brighter. One could have read a book by the light.



"Well, how do you like it?" Valya heard the old man's voice behind her.

"Isn't it lovely!" said Valya, in ecstasy.

"It's those . . . those eggs are glowing."

"Yes," smiled the Professor, "the eggs of a glow-worm."

"Ah, I know!" Valya nodded her head. "It's that worm. The glowworm! The 'St. John's day' worm, as the peasants call it!"

"Yes, that's what it is called, although it actually is not a worm but a beetle. That you can easily understand when you consider what it eats. The ordinary worm lives underground and eats earth but the beetle lives in damp grass and feeds on snails."

"Yes, yes! I remember. These beetles shine in the grass."

"Perfectly correct. They glow themselves, their larvae glow and their eggs glow. . . . Pretty, isn't it?"

"Very pretty," said Karik from his corner. "How lucky it was that you found them."

"Well, now how do you feel. Better or worse?" The old man went over to the patient. "Would you like something to eat?"

"Had it!" said Karik. "I have already had it! When you were away I had a look all round, found the honey and had a jolly good feed."

"You shouldn't have got up." frowned the Professor. "It is too soon for you to get up! Too soon, my dear! If you don't look out you'll make yourself worse!"

"Do you know what?" said Karik. "When I woke up and looked around — the table, then the chairs, and the light burning. Why, I thought I was at home again, it was morning, and I must get up."

"But do you like our new flat?" asked Valya.

"Very much!" replied Karik. "Particularly the little glow-worm lamps. Haven't they got a strong light?"

"You could have more than that," said the Professor. "Now if you brought a couple of *Pyropheri* in here . . . there you would see some light!"

"And what are these things . . . py . . . your pyrough."

"They are beetles, too! They live in Guiana, Brazil and Mexico. And then if some Brazilian or Mexican wants to go out in the forest at night he catches one of these beetles and fastens it to his hat. The light given off by these beetle-lanterns is so strong that you can go through the very darkest of tropical undergrowth and not lose your way — some people call them 'Ford bugs' because they are like motor-car headlamps. Mexican women adorn themselves with these *Pyropheri*. They hide them in their hair, beside diamonds or make themselves jewels of fire or fasten them round their waists to make a girdle of fire. After a ball the local belles bathe the tired insects in a bath and put them in a glass vase and there the *Pyropheri* light the bedrooms of these Mexican women all night with a gentle, pleasant light."

"But is the glow-worm the only one we have which glows?"

"It's not the only thing," replied the Professor. "I could arrange the same sort of lighting using glowing bacteria. . . . When I was a student I once made a real lamp out of such bacteria. By the light of this lamp I could read and write."

"Bacteria? These are so small that you cannot see them with the naked eye. How can they light up anything? You couldn't see them."

"When you have lots of them," replied the old man, "then you can see the light, although the individual bacteria, naturally, cannot be seen. Often in the forest you can see Rotton stumps glowing with a blue or green light. It looks as if the stump itself was glowing, but it is really the light of the bacteria. In the same way rotten fish thrown away on the shore glow. Often you can see the same light in the carcases of animals."

Here the Professor hesitated, ran over to a barrel and throwing the lid off it noisily shouted cheerfully:

"Supper, supper, my dears! Supper and then bed!"

\* \* \* \* \*

In the morning the Professor set out on a scouting expedition. He returned only at nightfall and brought a coil of spider's web cord. He then sat at the entrance of the cave late into the night twisting thick ropes out of the spider's cord. When they were all about to go to sleep he announced, turning to Valya:

"To-morrow you and I will go to our ship! It's time to launch her in the water. . . . Karik is getting better and we should very soon be able to continue our journey."

Next day the old man woke Valya before dawn. They breakfasted on honey.

Then he slung the rope over his shoulder and set out with Valya to start work.

The oak leaf lay in the old place.

The Professor threw the rope down near the leaf.

"But now," said he, "let's go to the stable for our cart horse."

Then he led along the bank, bending down to the ground, looking under the rocks.

Beside a big grey rock he went down on all fours, looked for a long time into a dark hole under it and then sat back and threw a handful of sand into the hole.

Something stirred beneath the rock.

"A famous steed!" announced the Professor, getting up. "If only he doesn't kick we'll soon launch our ship."

"What is there? Is it under the rock?" asked Valya, in a whisper.

"A wild horse!" joked the Professor. "A horse with six legs. Now come on, little Valya, you must help me!"

He dragged the spider's web rope to the stalk of the leaf, wound it around the stalk and with an effort dragging the rope over his shoulder he pulled the knot tight.

"Excellent!" he muttered.

Dragging the other end of the rope over the ground he walked with it away from the leaf. When the rope was stretched full length he tied another loop in the other end of it. Then he dragged four short logs of wood and stood them on end like ninepins stand when you are playing skittles.

Lightly hammering the logs with a stone the old man drove them a little way into the earth. He knocked one of them with his foot.

The log fell down.

"Fine!" announced the Professor.

He picked up the fallen log and stuck it in its former position.

Valya was watching him with curiosity but could not make head or tails of what he was doing.

"Can I help you?" she asked at length.

"Not at all, not at all! I can manage!"

He lifted the loop of the rope, dragged it to the logs and carefully laid it on top of them.

The loop now hung above the ground resting on the carefully balanced logs.

"Well, there's the horse's collar ready," said the old man. "Now let's go and find the horse! Have you ever harnessed horses?" he asked, jokingly.

"No," Valya acknowledged frankly. "I have never harnessed a horse!"

"Marvellous! Nor have I. However, that's no great misfortune."

The Professor picked up a long stick from the ground and held it out to Valva.

"Come! Take hold of this!"

Then he found an even longer stick for himself and putting it over his shoulder, commanded:

"Follow me!"

With long strides he led Valya to the big grey rock.

Near to the rock he stopped, drove the end of his stick into the ground, and putting one foot forward, said:

"Now listen attentively. Just here under the rock there is the Carrabus larva hiding itself from the light of day. Now the Carrabus is a vicious beetle which lives on insects. This larva, like its parents, also lives on insects. By day it sits quietly under a rock, but at night time it goes on the hunt. It is extraordinarily strong! A regular tigress — nothing less!"

"I am frightened," whispered Valya, looking at the Professor with eyes wide with fear.

"Quite unnecessary!" replied the old man. "Just listen. Now then, we must drive the Carrabus larva from under the rock and chase it into our horse collar. Once it is there it will pull our ship to the lake. I think we can manage the insect quite easily, only we must not be frightened."

"But will it suddenly bite?"

"Of course it will bite, if we get careless!"

"Then how are we going to drive it?"

"Just this way: to begin with we'll chase it out from under the rock and then you will stay on that side of it and I on this. As soon as it starts to come out you prevent it from crawling to the right whilst I prevent it crawling to the left. We can drive it straight into the loop. Now are you ready? Get a bit further away."

Valya ran a little way away. The Professor shoved his stick under the rock and started to twist it about like a poker in the fire.

"Aha! it's coming! it's coming!"

A huge monster with a long body started to crawl out from under the stone straight towards Valya. She hit it with her stick on its back. The Carrabus quivered and turned towards the Professor. He tapped it on the head with his stick.

Then the monster, moving on all six legs, crawled straight towards the oak leaf but on the way there suddenly stopped.

The old man ran up to the insect and gave it such a whack on its back that it shuddered and started to turn around where it was.

"Valya, drive it, drive it!"

Valya struck the Carrabus a stroke on its side.

"Now, now! Get on! Get on!"

Thus, step by step, they moved towards the oak leaf, driving the larva ahead of them.

At last the monster's head was level with the loop. The Professor hit the logs with his stick. The loop fell over the head of the Carrabus. The old man threw his stick down, seized the rope with his hands and pulled with all his strength. The loop tightened. Then he picked his stick up again and ran up to the head of the insect.

"We're off!" the old man shouted.

The leaf tumbled. Raising a cloud of dust it then slowly moved towards the bank.



The Carrabus turned from side to side, but each time bumped up against a sharp stick. The travellers would not allow it to turn away either to the right or to the left.

At last it became more peaceful and dragged the heavy leaf to the lake.

It crawled along, glancing at the Professor and Valya with huge eyes quite unable to follow what these terrible two-legged insects armed with long sticks wanted.

"The chestnut grey horse! A champion," shouted Valya, with delight.

"Not a chestnut grey horse but a *Carrabus Cancellatus*," said the Professor, sternly. "Carrabus is a genus of beetle of the family *Carabide*; *Cancellatus* is its name!"

The *Carrabus* larva dragged the oak leaf to the water's edge, but here it became quite crazy. It made a dash suddenly along the edge in one direction and then abruptly turned around and dashed off towards the bank.

The Professor and Valya ran, shouting, after it and hit it with their sticks on the head, sides and back.

How long this struggle would have continued it is difficult to say. However, it finished quite unexpectedly: running past a huge cliff, the *Carrabus* stopped and then disappeared under the cliff.

"Phew!" puffed the old man. "Well, that's the *Carrabus*! I am afraid it didn't like us."

"But how are we to unharness the Carrabus?"

"Very simple!" replied the Professor, untying the rope from the stalk of the leaf. "Although it's a pity to throw away such a fine rope, there is nothing else to do! Come on. We have done enough to-day, don't you think? We must go and have a bit of a rest."

Leaving the leaf on the shore, the travellers returned home. After dinner Valya recounted to Karik how skilfully they had dragged the oak leaf to the shore with the help of the *Carrabus* larva. Karik listened to her with envy,

"Eh! What a pity I wasn't there," he sighed. "I would have got it to go straight into the water. You should have tugged at the loop."

"It is easy to advise," said the old man, "but you should have been working on the job as Valya and I were."

He put his hand to his whiskers, wiped the honey off his beard and got up.

"To-morrow we must set out quickly on the expedition. But to-day until evening comes we must drag the barrels of honey on to the shore, find clothes for ourselves, get the mast, sails and ropes ready. In other words, there's plenty to do."

He took an armful of silkworm hair from the ground.

"Come on, little Valya!" he said, turning to the mouth of the cave.

All day long the Professor and Valya worked on the shore of the lake. Valya platted cords out of the hair, and the old man wandered about looking for a mast.

At last he returned. On his shoulders there lay a long, dry grass mast.

That evening the leaf was launched in the water.

The Professor hammered a hole in the centre of the leaf with a sharp stone, drove the mast into the hole and afterwards smeared a thick layer of clay on the floor around the mast and announced:

"To-morrow the sun will dry up the clay and our mast will be fixed to the ship as firm as you like."

The Professor gazed at the ship, thought for a bit then took a long cord from Valya's hands and went up to the end of the leaf. Here he threw a loop over the stalk and pulled it with all his strength.

The leaf quivered, its end lashed in the water and then lifted a little.

Then the oak leaf became quite like a ship.

It rocked with its nose high above the water.

"It's like a goose sticking its neck up."

Valya started laughing. "Now if only there was a sail to put up!"

"There will be a sail too," retorted the Professor. "We'll make it out of some sort of petal! Only it is surely not worth putting it up now! It's already too late in the day. And what's more it would dry out in the sun and become like leather."

The old man drove a sharp stake into the ground and fastened the hair rope to it.

"There we are, everything is fine!"

Valya went along the rope to the bow of the ship and with a piece of shell started to draw something on it.

"What are you up to?" demanded the Professor.

"I want to give our ship a name!" said Valya.

"What have you decided to call it?"

"Take a look at it!"

Valya jumped down. The Professor went up closer and wrinkling his eyes made out in big letters on the bow: *CARRABUS*.

"Not bad!" he said, approvingly.

\* \* \* \* \*

Next day the travellers sewed clothes from petals, and then in the evening Valya and the Professor rolled the barrels of honey on to the ship.

Karik was already up. He walked about holding on to the side of the cave with his hands and wanted all the time to try and help the Professor and Valya, but the old man stopped him.

"Lie down, take it easy," the Professor grunted at him. "You should rest for another two or three days. We can manage without you."

This annoyed Karik greatly, but he didn't start to dispute it. He lay down on his bed, turned his face to the wall and made it appear that he was asleep, although he himself was stealthily watching the other two.

"All right," he thought. "You'll go off and I'll do half the work here without you. Afterwards you'll jolly well have to thank me."

As soon as ever the Professor and Valya had gone out of the cave lie jumped up, seized one of the barrels and started to push it towards the mouth.

He had already rolled it out of the cave when an accident happened. A round stone turned over under his foot. Karik flung up his arms and fell forward with his body on the barrel. The barrel tilted over as a result of this violent impact. He quickly clutched the edge of the barrel, but losing his balance fell to the ground.

The barrel rumbled down beside him. The lid flew off. The thick gruel-like honey spread out over the ground.

Karik got up. Shaking the dust off himself he gazed perplexedly at the overthrown barrel.

"That's a fine way to help!"

The honey puddle crept in all directions like liquid dough. Karik moved out of the way, looked around and, finally waving his hands hopelessly, hopped back on one leg into the cave.

\* \* \* \* \*

It was already dark by the time the Professor and Valya returned. Karik heard their voices in the distance. He quickly buried his head in the hair pillow and pretended to be asleep.

"Oy, whatever is this?" shouted Valya, stopping at the entrance to the cave.

Karik stuck his fingers in his ears and screwed his eyes tight shut.

"Oh, I can't move!" shouted Valya. "My feet are stuck in the ground."

The old man dashed to her aid, but he had no sooner reached her than his own feet got stuck in the sticky honey.

"What can it be?" he wondered.

Sinking in up to the ankles he managed to reach Valya with difficulty and stretched out his hand to her.

"Give me your hand!"

Valya gave a hand. He stepped back and pulled her towards himself. Valya swayed and almost fell: her feet were fast stuck in the thick honey.

"Stop," she yelled, "I am quite stuck! Like a fly in the jam."

"Don't worry, don't worry," muttered the Professor, and took a breath.

He dragged Valya out of the honey with a great effort, took her in his arms and moving his feet with difficulty started to stagger towards the cave.

Under his feet the honey sucked, champed and sighed as if it was alive. The mess clung to the feet like very heavy sticky clay.

At last the old man got clear of the puddle. Setting Valya down on the ground in front of the entrance to the cave, he started to take the honey off his feet with a thick stick and then he helped Valya to clear herself.

"Eh, Karik!" shouted the Professor, looking into the cave. "What happened here?"

Karik buried himself still deeper in his mattress.

The old man and Valya looked at each other silently.

"Well, it's clear," said the Professor, going into the cave, "that this is certainly something that Karik contrived! And what's more he is not asleep! He is listening to everything! But he is ashamed to look us in the face. Eh, Karik!"

Karik cautiously turned his head and opened one eye. Then he saw, right by his side, Valya was looking at him. He hastily screwed up his eye and snored very loudly.

"He's asleep!" Valya started to laugh.

The Professor put his head from side to side but said nothing.

The travellers went to bed.

A little while after dawn Karik heard, through his sleep, some sort of noise. He got up from his crumpled mattress and went to the entrance. Through the chinks between the rocks he saw the terrace in front of the cave in the pale light of the morning.

On this terrace huge winged monsters were crawling about just in front of the cave.

Karik recognised them. They were flies. Bustling around the puddle of honey they jostled each other, flew upwards with buzzing noises and then swooped down to the honey once more. Every minute more and more flies arrived.

The loud noise awakened the Professor and Valya. The old man said something, but the children could not hear a single word. The flies were buzzing so loudly that their ears rang just as if powerful aeroplane engines were running right beside them.

It was quite impossible to drag the remaining barrels of honey over to the ship. The flies might knock the travellers off their legs and even kill them. They were crowding at the entrance, had started to peer into the cave and were thrusting their long snouts through the chinks between the rocks. They crawled over the rocks which were blocking the entrance and under the weight of the flies the rocks started to shake.



The travellers gazed in fear at their barricade. It had only to fall down and the hordes of flies would burst in — then they would be — goners. However, towards evening the flies crawled away to their night quarters.

"They've gone away!" Valya announced joyfully. "They haven't gone away," said Karik, listlessly. "To-morrow they'll be back and once more they'll try and get into the cave. I know them! They can scent the barrels of honey!"

"Let's block up the entrance better!" proposed Valya.

"Nonsense!" said the Professor. "Sit another whole day trembling — I should thank you!"

"But what can we do?"

"Attack!" announced the old man, "attack and not defend."

He seized one of the diatom baskets, took a firefly egg from the tray and holding it high above his head as a torch, ran out of the cave.

"Where are you off to, Professor?" the children shouted.

"I'll be back directly. In a minute I'll give them a treat, the blackguards!"

The blue light twinkled in the darkness and disappeared.

"Where is he off to?"

"I don't know! He must have thought up something."

Late that night the Professor returned to the cave very contented and cheerful. He put the basket down on the floor and, panting a little still, said: "There! I've brought the mines! To-morrow the flies will find a minefield."

The children rushed to the basket.

"Mines?"

"That's better!"

Karik put his hand into the basket cautiously and drew out a grey lump. His face fell.

"Some mines! Nothing but Rotton old clods. Simply dried mud. These can hardly be mines?"

The Professor started to laugh.

"You don't like them?" he asked. "Don't worry! You just see what they'll do to-morrow. A charge of gun cotton wouldn't do better."

He extracted the lumps from the basket, divided them into two heaps. Having pushed the smaller lumps to Valya, he said:

"Pick them up, Valya, and come with me!"

Ladened with mines, the Professor and Valya went out of the cave.

"Lay your mines aft around the entrance!" Karik heard the Professor saying.

## **CHAPTER XVI**

The battle with the flies — Extraordinary sails — It sees with its feet — A bug plays the fiddle — On board the bumble bee

## "CLOP! CLOP!"

The children jumped out of their crumpled, scattered beds. Rubbing their eyes they looked around in alarm.

"Karik, what was that?".

"I don't know."

"May be someone in our minefield?"

The usual blue light glimmered in the cave. The dark roof hung low above the head. In the corner along the wall white stout barrels stood in rows.

"Clop! Clop!" Explosions sounded beyond the wall.

The Professor got up from his hair mattress, yawned widely and rubbing his sleepy eyes with his fists said:

"Aha! . . . they are working. . . . My mines are working. . . . "

The old man with the children following him went up to the barricade blocking the entrance to the cave.

Through the chinks between the rocks the morning light was peeping in. The yellow sand of the terrace in front of the cave was ablaze with sunlight. The puddles of upset honey shone like liquid gold. The white barrel still lay there on its side.

The travellers had to screw up their eyes, the light was so intense.

"It's going to be a wonderful day!" said the Professor, looking at the clear, almost polished blue of the sky.

"But what a lot of flies there will be!" sighed Valya. "Even more than yesterday."

"That's nothing to worry about!" The Professor calmed her and rubbing his hands announced: "Very soon there will be fewer! Decidedly fewer!"

"Why fewer?"

"Well, didn't you hear my mines exploding?" asked the old man, looking surprised.

"I heard them," said Valya, "but the flies apparently don't worry about your mines at all. Over there the mines exploded right amongst the flies but they had no effect."

"Wait a little!" the Professor calmly stroked his beard. "There is no hurry! The flies are not killed at once by my mines. After a piece has stuck into the fly, it will crawl around for five or six hours and then it begins to die in a very interesting way. Oh, this is well worth seeing!"

"And these flies are already wounded?"

"Certainly!" replied the old man confidently. "Because the explosions started, if I mistake not, at earliest dawn."

Valya pulled a rock out of the barricade and sticking herself into the observation post so formed started to watch the terrace.

Huge, hairy flies wandered past the rocks. They went up to the honey pool, thrust their snouts into the honey and jostled one another.

One of them — large with white body — sat on the overturned barrel. The barrel rocked. The fly flew up alarmed and circled around, gazing at the barrel from above with huge protruding eyes. Then it cautiously came down and alighted beside the barrel.



And then suddenly it reared up and staggered as if drunk. Its legs bent under it. It fell to the ground, flopped its heavy head on the sand and started to die. Only its wings spread widely out still quivered slightly.

"That's number one!" shouted Valya.

"And that's not the whole business either!" said the Professor. "Wait and see what will still happen to it."

After a little while the Professor and the children went up to the barricade again.

On the terrace in front of the cave several flies had now fallen. Some of them were still alive — they moved; others lay with their wings spread out and their heads drooping to the ground. They were covered with something white just like hoar-frost. But from the body of the fly lying by the barrel there rose up a long, thin stem with a round little hat on the top of it.

"What ever is that?" asked Valya. "It looks like a mushroom."

"That's just what it is — the *Empusa fungus*."

Suddenly the little hat of the fungus broke off and fell to the ground.

"A new *Empusa* has ripened!" said the Professor.

"What a comic word — *Empusa*!" snorted Valya.

"Hardly comic, is it? At any rate, it has never seemed comic to me. I have kept the company of the *Empusa* for a long time now. It's an old acquaintance of mine. A parasitic fungus. . . . One of the most useful fungi to mankind. . . . It kills flies.

Now that new *Empusa* which has just fallen on the ground will explode as soon as ever a fly gets near to it and it will sprinkle the fly with splinter seeds; the seeds grow up, kill the fly and throw off new mine fungi destined to destroy more flies."

"But if the flies do not make an appearance?"

"Then the *Empusa* will not explode!"

"Well, suppose it is a bee and not a fly which comes near it, will the *Empusa* go off or not?"

"It will not go off."

"You mean the *Empusa* won't explode when a bee comes near?"

"These ones won't. But bees also have their own parasite-fungus. It gets into the hives and ruins them. Now naturally such fungi are not useful but actually extremely harmful."

"Clop!" sounded again on the terrace.

The Professor stuck his head out and said:

"There are another five flies ready! They'll soon stretch out their legs."

And in fact the whole terrace was soon strewn with flies' corpses.

The pathway to the lake was free.

\* \* \* \* \*

After dinner the Professor decided to go off along the shore to see his famous Carrabus. Was it still there? Had the wind torn it adrift? Had it capsized?

He collected a coil of spiders' cords, threw it over his shoulder and sticking a sharp stone in his girdle went to the entrance.

"Now Valya, come on! I hope you will help me?"

"Certainly I'll help, if only. . . . "

"If only what?"

"If there are no more flies on the terrace."

"There are none and there won't be any," answered the old man.

"But new ones? Won't they fly up."

"Very unlikely. Even if they did fly up they would be done for right away. You see our whole terrace is now mined with *Empusae*."

Valya comforted, moved off to the entrance.

"But what about me?" Karik leaped up from his bed.

"Why shouldn't you lie there? Get yourself right! We can manage without you to-day."

"Without me!" Karik was offended. "Now, do you even know what a main sheet is? or what the mizzen is? or the jib? or a topgallant sail?"

"Well, well," laughed the Professor. "We have got a sea dog here."

"Neither a dog nor a sea dog but I do understand something about ships?" replied Karik, with pride. He had learnt these nautical terms from a sailor friend of his.

The old man waved his hand. "If it's like that, you had better come. You won't be able to do anything. Only be careful — don't injure your bad leg."

The travellers went out of the cave.

"A real massacre!" said the Professor, picking his way between the dead flies.

Valya carefully made a wide arc round the flies, looking sideways at the corpses. Although the flies were dead, yet . . . all the same it was better to keep well away from them.

"Stop!" shouted Karik suddenly.

The Professor and Valya quickly looked towards him.

Karik stood near a huge fly which lay with its wings spread wide apart.

"What is it, Karik?"

"Look," answered Karik, lifting a transparent wing of the fly with both hands. "A sail! Do you see?"

"I see! Of course, I see!" rejoiced the old man.

He went over to the fly and having moved its taut, stretched wing, said:

"It will make an excellent sail! We'll use it!"

Taking the sharp stone out of his girdle, the Professor got up on the fly and with a strong blow cut off the wing.

The wing fell at Karik's feet.

"One is too small," said Karik, lifting up the wing and examining it.
"This would only do for a jib. But we shall need a sail for the mainmast."

"Why not for the mainmast too?" said the Professor.

And he started deftly cutting off wings with his sharp stone and throwing them down. The children collected the wings in a heap. At last Karik said:

"That should surely be enough!"

They quickly made a stack of wings one on top of the other:

the wings rumbling just like drums.

The Professor attached his cord to the bottom wing and threw it over his shoulder and hauled the heavy load after him to the beach.

"There, you see," said Karik, cheerfully, steadying the wings with his hands. "I, of course, knew beforehand what sails would be necessary. I had only to look at these and I saw what could be done with them."

"Good enough!" laughed the Professor. "Pat yourself on the back! But you had far better hold on to those wings and see that we don't lose half of them on the way."

The travellers dragged the heavy load to the beach.

In the quiet inlet the famous *Carrabus* was lying at her moorings. Her curved bow was reflected in the still, calm, blue water. Her sides at their lowest point were practically level with the surface of the lake. Around the tall mast stood the white barrels of honey.

"A real ship," said Karik, "it only wants sails now."

"And sails she will have very soon," responded the old man.

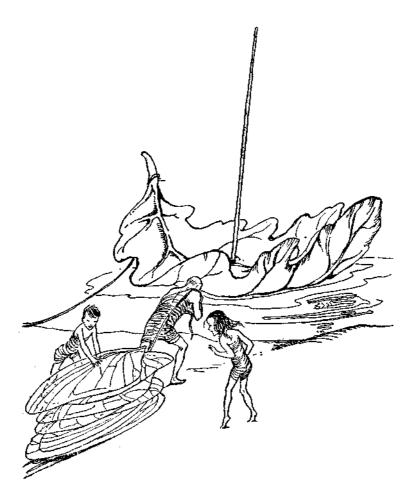
Having pulled the flies' wings on board the ship the party proceeded to rig her.

Karik clambered up the mast.

"Come on now! Give me one of the wings and the cord!" he shouted from aloft.

The work went ahead furiously.

The Professor handed up the wings. Karik lashed them to the mast, one above the other, and soon the whole mainmast was hung with transparent sail-wings.



The wind started to play on the wings.

The sails of the *Carrabus* started to flap.

Then suddenly the stake to which the mooring rope was fastened started to crack and broke off.

"Oh, dear!" shouted Valya.

The Professor without saying a word jumped into the water.

"What's happened?" asked Karik, from aloft.

No one answered him. Then he, having stuck his head between two wings, saw that the old man was standing up to his waist in water and purple in the face with exertion was towing the ship towards the shore.

"Did the rope come adrift?" he shouted down.

"Yes and no! A wasp bit through the stake!"

"A wasp?" he asked. "Why is it such a fool as to eat a reed cane?"

"It certainly is no fool," said the Professor, winding the mooring rope round a thick stump. "The wasp does not eat reeds, it makes paper out of them for the construction of its nest."

Valya opened her eyes wide.

"Wasps know how to make paper?"

"Yes. They and mankind have both learnt how to make paper from wood pulp," replied the Professor, and gave the children a whole lecture on wasps, wood pulp and on the ancient, long-forgotten discoveries.

"There was a time," he continued, "when paper was prepared only from rags. The scientist, Jacob Christian Sheffer, who lived a hundred years ago, when investigating the lives of insects learnt from them how to make paper from wood pulp. It was when he was examining a wasp's nest on one occasion that he noticed that it was made of a material which resembled cardboard. He observed the work of the wasp. It was then that Christian Sheffer discovered that the wasps chew pieces of wood into pulp and from this pulp prepare excellent paper.

"But at the time of Shelter's discovery no one paid any attention to it.

"Fifty years passed. Another scientist, Keller, reminded people of the discoveries of Sheffer and reminded them just at the right time. Paper was in great demand and the supply of rags was insufficient. . . . So they tried to make paper like the wasps out of wood pulp. . . . To begin with, nothing came of it but afterwards the methods were improved and success followed. Since that time the bulk of the paper we use is prepared from wood pulp.'

"Oh," said Valya, having endured the lecture. "This means that there must be wasps about. Let's be quick in going home."

"It certainly is high time to go home," agreed the old man.

The travellers returned to the cave.

\* \* \* \* \*

In the morning whilst it was yet hardly light they rolled the last barrels of honey on board, transferred their mattresses and brought their firefly eggs with them.

One egg Karik lashed to the top of the mast like a steaming light.

He now hustled about more than the others.

Running along the ship he shouted in a real sea captain's voice.

"Heh. You on the poop! Haul in the sheets!"

"But what is the poop?" asked Valya, timidly.

"Why, where you are standing — that's the poop. It's the same as the stern. Heh! Haul in the sheets. Ship's boy!"

"But what are the sheets?"

"Sheets — those ropes."

"And is there any reason," asked the Professor, "why the stern should not be called the stern and the sheets should not be called — ropes?"

Karik only laughed.

"Well, call them what you like. But I shall in future call ants' cocoons ants' eggs."

The Professor clenched his hand.

"No, no, not eggs, cocoons! I'll somehow master your nautical gibberish, only please don't call cocoons eggs."

Karik again started to throw his weight about.

"Let go the falls," he shouted in a thunderous voice. "Topmen to their stations. Up ensign!"

The Professor cast off the mooring rope and coiled it neatly in the stern. Valya hauled in the sheets.

The Carrabus was now ready for setting sail.

"It would be the proper thing," thought Karik, "to fire a salute from our guns before leaving harbour."

Unfortunately there were no guns.

Karik went from one end of the ship to the other, moved the barrels to correct the list of the ship, inspected his crew and spat overboard.

It was a moment of triumph.

Karik raised his hand.

"Attention!"

The crew returned their captain's gaze.

"Course south-west! Full speed ahead. Shiver my timbers and splice the mainbrace!"

"Aye, aye, sir!" barked the Professor at the top of his voice, cheerfully winking at Valya.

Valya slackened the sheets. The wind started to fill the sail.

The *Carrabus* pitched slightly, rolled her mast from side to side a few times as if considering whether she would set out or stay in harbour and then slowly started to move away from the shore.

"Full speed ahead!" shouted the brave Captain.

. . . The wind blew.

White horses now started to top the waves with foam. The ship rolled and swept along on the waves. Warm spray beat in the faces of the sea voyagers. The fine ship heeled over and cut through the water.

Around the *Carrabus* strange living things kept popping up everywhere. They overtook the ship, leaped out of the water and frisked about like dolphins.

One creature resembled a rabbit but with stag's antlers, and quite transparent swam for a long time beside them and would not leave the travellers' ship.

It was possible to examine this devoted attendant of the good ship *Carrabus* in some detail as its insides could be clearly seen through the transparent envelope of its body.

"What is it?" asked Valya.

"It is a very ordinary *Sida crystallina*," answered the Professor, "one of hundreds of water fleas."

Valya hit the water flea on the head with a stick. It disappeared.

Abeam crossing the track of the ship something very like a submarine was surging along. The creature was swimming under water, but its tracks could be seen on the surface. This creature very nearly collided with the *Carrabus*, but at the very last minute turned suddenly to starboard and quickly disappeared deep down in the water.

"What was that?" whispered Valya, frightened.

"That, now," replied the old man calmly, "was a very common snail. The pond snail!"

"A water snail?"

"Ay, ay!"

"How does it get through the water?"

"Well, that question," said the Professor, smiling, "was one of the most difficult to solve; however, it has been answered brilliantly. The pond water snail travels, strange as it may seem, head downwards, stretching out its solitary leg it exudes through it a mucous or slime on the surface of the water. This trail attaches itself to the foam on the water and is carried along with it as if attached to a raft."

"But in this case it can't see."

"It sees splendidly. Because its eyes are in its foot!"

"Pretty hot stuff that!" Karik was excited.

"Mm — yes!" gruff-gruffed the old man. "Is there anything to be surprised at? We have already met queer animals which have no mouths and animals which hear with their legs, but now you are surprised by a creature which sees with its foot. But all these are dull trifles compared with what I could tell you about strange creatures. These animals, all of them, live beside us. This is no fairy story by Andersen or Grimm. These creatures are found in the best, the most marvellous story of all which is . . . Life. However, I am so often giving you lectures that I am afraid you will begin to think that I didn't come to fetch you home but to teach you biology. Let's sing something for a change, my dears!"

Now this proposal really did upset the children. The Professor's stories, although at times somewhat boring, it was, quite possible to listen to, but the old man's singing . . . the only person who wouldn't voice a protest against this would be a deaf mute. Therefore, Karik and Valya, frightened that he might actually start singing, started to question him about anything and everything they could see. But the Professor kept on trying to break off and start singing.

"Now, then," he said, coughing to clear his voice, "let's strike up. Ha hur! Ha hur! Something like the Forward March. . . . Thus."

"Oh, look, look!" shouted Valya, hastily. "Whatever is that under the water? So big, isn't it?"

The Carrabus was sailing over some sort of striped object which lay on its side like a sunken ship.

The Professor glanced over the side and said good humouredly:

"Well, that, my dears, is the former food of mankind — Mussels. There was a time a very great while ago when these mussels were for mankind what bread is for us to-day. But to-day we look upon this former bread with disdain."

"I don't think," replied Karik, "that mussels would be nicer than bread."

"You are right there," agreed the old man, "but all the same it is a great pity that such a huge source of food should be wasted. Why, it would be possible to collect hundreds of thousands of tons of these mussels."

"But whatever for if no one will eat them?"

"In Germany, for example, they collect them, boil them in huge cauldrons and . . ."

"Do they really eat them?"

"No. They feed the pigs on them. The pigs are said to get fat quickly and their flesh becomes exceptionally tender and is of delicious flavour."

For a short time the conversation then lapsed but as soon as the children heard the ominous coughing — this meant the Professor had decided to start singing — they quickly started to ask him any sort of question.

Several hours passed in this way.

The *Carrabus* hurried on under full sail. But as the sun rose so the wind dropped.

The ship then moved lazily through the oily swell, barely rolling. The sails hung down. The Captain grew melancholy.

The voyagers sat on the gunwale of the ship and dangled their feet in the cool water.

Water insects were cutting here and there across the waves.

They wove their way in and out of the water weed forest which rose from the dark bottom of the lake.

Valya stretched herself on the deck. With her head hanging over the side she gazed at the swirling foliage rising from the bottom.

At last the under water forest came to an end. The bottom was now grey and hilly. On the slopes of the underwater hills there wriggled and moved about gigantic red snakes. There were so many of them that the bottom appeared red.

"I say! What a lot of them! And what are they?" asked Valya.

The Professor bent over.

"Culicidae Derguna . . . or in simple language the larvae of the Derguna gnat. . . . Excellent food for fish. The favourite food of all small fry."

"Why are they called *Dergunas*?"

"Just because they are always pulling with their feet twisting about."

"That means that all gnats are *Dergunas* because they all pull things about with their feet. I never knew this before."

"No," said the old man, "only one sort of gnat is called *Derguna*. The other gnats have different names."

"What?" Karik was surprised. "Surely there are not a whole lot of different gnats. I thought gnats were all one sort."

"Oh, no, there are hundreds of different sorts! Why, just in one district alone there are gnats that pull themselves along, gnats that push themselves along, bearded gnats, long-nosed gnats, malaria gnats or mosquitoes, feather-whiskered gnats, amphibian gnats, ordinary midges. Then we also have snow midges."

"White?"

"No! They are called snow mosquitoes because they live on the snow."

"Surely mosquitoes can't live in winter?"

"Life does not come to a halt either in summer or winter," replied the Professor. "In summer one lot of insects crawl, jump and fly, in winter another lot. For example, just around here you come across snow fleas, snow worms, snow spiders, ice flies, wingless gnats, and many, many other living creatures."

"Do all the gnats bite?" asked Valya, looking at the larvae of the *Derguna* in some apprehension.

"The larvae do not bite. Yes, and the full-grown *Derguna* does not bite human beings or living creatures. Anyway, what do the bites of our gnats actually amount to?"

"Nothing! twiddle twaddle! A mere trifle!" he gruff-gruffed.

Then he stroked his beard and said smiling:

"Now on the Island of Barbadoes gnats do bite; that is to say, I am telling you they really do bite!"

"What happens? Does it hurt terribly?" whispered Valya.

"It's painful all right. . . . For instance, this happened. In the town of Vera Cruz a young woman became unconscious. It was thought that she was dead. Her face was like wax and she herself was as cold as ice. Well, naturally, they put her in a coffin, but they stood the coffin out on the verandah."

"Well, what happened then?"

No sooner than night had fallen gnats started to fly about the verandah. They swarmed thickly on the corpse and proceeded to bite her so savagely that she awoke, pushed the lid of the coffin off; yes! and ran out into the street in her shroud with the coffin lid in her hands."

"And she didn't die any more?" asked Karik.

"No, she lived right up to the very day other death," replied the old man with a grin.

Suddenly Valya leaped up and shouted:

"Oh, look, there is something from Barbadoes swimming along here. Oo, ooee!"

Beneath the water on one side of the ship a long, grey-coloured animal with a huge head was jerking itself along. Having blown itself out until it could contain no more the creature contracted itself and shot out a stream of water behind it. As a result of this stream it moved forward just like a rocket.

"The larva of a dragonfly!" said the Professor.

"That's what we should use instead of a motor," said Karik, thoughtfully.

The Professor started to smile.

"The larva of the dragonfly has been using it long enough but we have only just been able to make a jet-propelled aeroplane and the jet-propelled submarine has yet to prove itself practical. This dragonfly submarine is a most dangerous craft. It will attack a small fish and devour it. And any fish, however small, is by comparison with us a regular whale."

"There is a mother dragonfly!" announced Valya. "Look! Where is she crawling to?"

With her wings pressed to her back the goggle-eyed dragonfly, clutching the stem of a water weed, had started to crawl down under water with her huge head pointed towards the bottom.

"What is she up to?" demanded Karik in amazement. "Does she want to drown herself?"

Valya gazed after the dragonfly, thought a little and said undecidedly:

"Evidently she wants to pay a visit to her larva. She is lonely, so she goes to pay a visit. Very simple, actually!"

The old man started to laugh.

"But there is an explanation still more simple and actually more correct," he said. "The dragonfly is going beneath the water in order to lay her eggs."

"But what an awful creature she is!" said Valya.

"What's up with you? She is very beautiful!" retorted the Professor. "It is not without reason that the Germans give her a poetic name — *Wasser Jungfer*, or water nymph; whilst the French call her Mademoiselle, or literally translated, my young Lady or Miss."

Waves now started to roll across the lake. The sails started to hum. Astern the wake of the ship had started to gleam.

"All hands to their stations!" bawled Karik.

"Aye, aye, sir!" sang out the old man.

Once again the ship was making way rapidly.

Karik climbed up the mast.

The *Carrabus* sailed along, tacking between flat green islands which in fact were the fleshy leaves of kingcups or water lilies.

At last the *Carrabus* sailed out into open water.

Karik shielded his eyes with his hand. Far away across the blue lake which was sparkling in the sun he could see the misty outline of the shore.

The shore had almost disappeared below the horizon. Clouds lay like mountains of cotton wool above the blue flat stretched ahead.

When Karik had looked for some time he spotted on the horizon a minute, slender, pin-like excrescence. At the top of this something was waving very much like a red feather.

"There it is! There's our landmark! Alter course to starboard! Good, good! Another point to starboard. Haul in your port sheets, you landlubbers! And again! Helm amidships! Steady on your course!"

"Helm amid-ships! steady on the course," bawled the Professor, in reply.

The *Carrabus* now surged on her straight course for the shore.

Suddenly all around things started to sing, to sing, and sing.

The water sang, the sky sang.

Karik looked around in consternation and hastily clambered down the mast on to the deck.

The old man, screwing up his eyes thoughtfully and cocking his head on one side, listened to the amazing music.

It sounded as if thousands of violins and flutes were playing one and the same song, a simple melody but quite attractive.

The Professor sighed.

"That must have been how the sirens sang around the ship! when the Odyssey of legend was sailing the seas."

"Are they sirens singing now?" demanded Karik.

"No," said the old man, "sirens are the mermaids or the beautiful women sailors have seen in their fancy amongst the foam of the billows. They betray the voyager by their songs or their charms. But the creatures which are now singing arc very real indeed, they are called *Corixae minutissimae*. It's very touching music, isn't it?"

"Very!" replied Valya.

"Yes, indeed, they know how to sing, do these savage ruffians!" mused the Professor.

"Ruffians?"

"I think it's a fair name for these water bugs. Gluttons and brigands they are, but as talented as the legendary sirens."

"But how do they sing? A bug surely has no voice?"

"They sing with their feet," replied the old man. "At least they produce music. On one of the front claws of the female bug there are bristles like the teeth in a musical box. . . . The bug uses its second front leg like the bow of a fiddle and produces music from these bristles."

Karik and Valya very much wanted to see the bug-violinists, but however much they looked about they could not spot a single one of them.

The bugs were sitting somewhere in the water weed forest.

Meanwhile the *Carrabus* surged along under full sail towards the shore which now could be seen coming nearer and nearer every minute.

Already rocks stuck up out of the water, and every now and then yellow shoals appeared beneath them.

The grass forest edging the shore was now becoming plainer and plainer.

"Where shall we land?" asked Karik.

"Anywhere you like," replied the Professor, gazing at the shore. "A little nearer or a little further is not very important — we shall have to do a good bit of foot-slogging in any case."

Valya groaned.

"Have we really got to go on foot? Oh, how tired I am!"

"Don't worry, Valya, have patience," comforted the old man. "Our journey, I hope, will finish at any time now. I too wish to get home as soon as possible. I have students waiting for me in the university. The examinations will soon be on!"

The Professor suddenly started laughing.

"If only my students could see me in this ship made of an oak leaf sailing under sails made of flies' wings, whatever would they say? When you think of it — any of them could put me in a waistcoat pocket. Ha, ha, ha!"

It was now midday.

Grating her bottom on the stones, the Carrabus gently came up towards the beach and stopped, rocking in the light swell.

The voyagers got out on the beach.

Beyond the near line of forest there was sticking out the dark mast-like landmark.

It looked as if they were standing right by it; as if they had just to go through this one little wood and then it would be over.

Karik looked around and, having gazed sadly at the famous Carrabus, waved his hand in farewell.

"Fare — ye — well, good ship Carrabus. Don't forget your Captain!"

"But I thought we were going to sail right up to the very landmark!" said Valya.

"You thought wrong!" the Professor shrugged his shoulders.

"But why ever did we load the Carrabus with so much food?"

"Why ever?" Karik was offended. "If a gale had started to blow! or suppose we had been cast away on some uninhabited water leaf island! What would have we had to eat then?"

"True enough," said the Professor. "One must be far-sighted when setting out on a voyage. It's far better to throw away what one does not need than to die of hunger."

\* \* \* \* \*

For two to three hours the old man and the children sat at the edge of the forest, rested and partook of a heavy meal.

The Professor got up and wiping his beard with a petal he ran as nimbly as a small boy up the nearest hillock.

"There you are," he shouted, looking upwards. "Very good! Excellent! Simply marvellous!"

The children also looked up.

Above the forest some sort of heavy, hairy animals were flying on broad, seemingly-glass wings.

Was the Professor looking at these?

"Wasps!" yelled Karik.

"Not wasps, bumble bees!" corrected the Professor.

The dark and golden bumble bees circled over the thick foliage of the grass forest, circled and alighted on some sort of strange tree which had huge lilac-red hats on its summit. The bumble bees sat on these hats, bustled into them and then soaring upwards flew off in the direction of the landmark and there disappeared — apparently alighting on the ground.

The Professor came, took the children by the hand and, gazing at them fixedly, said:

"Now I'll tell you, my dears! A very daring plan has flashed into my mind. We can fly the rest of our journey on a bumble bee."

The children started in alarm.

"On a bumble bee? . . . I . . . I don't want to go on a bumble bee," said Valya. "I am afraid of them."

The Professor flung his arm around Valya's shoulder.

"Don't be frightened, my darling! This is quite safe. The larvae of the May bug beetles always fly on honey bees, and the honey bees don't touch them."

"But then it may be better to fly on a honey bee?" said Karik.

The Professor shook his head.

"No, we cannot do it on honey bees! These bees would carry us into their hives and that would be the end of us. But the bumble bees will carry us straight to the landmark. They have evidently got a nest there. You see the way they are all flying. These bumble bees will be much better for us than any honey bee."

"No, all the same, I am frightened." Valya shook her head. "I..."

"Now, you shut up!" the Professor scolded her. "I'll tell you in detail how the larvae of the Blister beetles travel on bees, and I hope that after this you will stop being frightened."



The old man sat down on the hillock and, seating the children beside him, began:

"I do beg of you, my dears, not to confuse the Blister beetle with the May bug, just because these beetles are called May beetles. They are by no means the same. This Blister beetle is an amazing creature. Insects as a rule have three stages of life: the larva comes out of the egg, becomes a cocoon and finally from the cocoon emerges the complete insect. Well, now, the Blister beetle has four transformations: the egg, the *Triungulina* or six-legged larva, the ordinary larva, the cocoon and the grown-up Blister beetle. Remember *Triungulina*. Fabre calls this simply 'the louse.' Now these lice or *Triungulinae* feed on bees' honey. . . . But how does it find the combs? Who shows it the way to the bees? Who carries it into the hive?"

"Its mother!" suggested Valya.

"Well, it couldn't possibly depend on its mother," laughed the Professor. "By the time the louse comes out of its egg its mother is no longer in the land of the living. In order to get into the bees' nest the *Triungulina* must get up into a flower and, hiding itself there, await a bee. As soon as ever a bee comes into the flower the louse seizes its hairy coat with its claws arid sticks on until the bee has carried it back home. Do you understand, Valya? And what do you think now: the stupid *Triungulina* is not frightened of making the trip, surely you wouldn't be frightened?"

"It's because the *Triungulina* is so stupid!" sighed Valya.

"Yes, you must chuck being such a coward, Valya," insisted Karik. "If we don't fly on the bumble bee we shall have to go on foot, and it may take us another three weeks and maybe a month. Yes, and goodness knows what may happen to us. We may meet a thousand new dangers on that long journey. Some beetle or other will bury us, or a caterpillar will crush us or a butterfly will whisk us over a precipice. Surely it's much better on a bumble bee! . . . And . . . and in any case pioneers mustn't be cowards."

"Well, all right, we'll go by bumble bee!" said Valya, in a shaky voice. "What flower have we to climb up?"

"There you are, this one! Up to the red round ball which is swinging up there. It's red clover. The favourite flower of bumble bees."

The Professor and the children scrambled up the thick stem on to the lilac-reddish hat of the clover and hid between its tube-like flowers, which were hiding drops of clean, clear honey.

"Will the bumble bee come soon?" asked Valya.

"How am I to know?" answered Karik, in a whisper.

"Be quiet!" hissed the Professor.

They sat like that for more than an hour.

At last wings droned above their heads. A broad shadow came between them and the sky just as if a cloud had covered up the sun.

Valya clung to her brother. Her heart hammered, arms and legs shook. She wanted to say something but her lips would not move.

"Be ready!" said the Professor, in a scarcely audible voice.

Valya secretly squeezed Karik's hand.

The hum of the wings became louder and louder. A hairy bumble bee, with its hair bristling out, circling down landed on the flower. It put out its feet and at once started to eat.

What happened then neither Valya nor Karik could follow. The huge, furry body came down around them like a heavy fur hat.

The children heard the stifled voice of the Professor:

"Hold on as tight as you can!"

They buried their hands in the fur and in another minute were flying upwards in a whirlwind.

## **CHAPTER XVII**

Queer soil — The Professor 'collects' a moth — Karik and Valya in the plywood box — An expensive Oecophora — The Professor is packed up — Back to the old world

THE WIND QUITE TOOK THE TRAVELLERS' BREATH AWAY. THE ground swayed beneath them and fell away.

"Hold tighter!" yelled the Professor.

The children could hardly hear his voice. The even, heavy drumming of the bumble bee's wings and the piercing whistle of the wind drowned everything.

To begin with, the bumble bee flew high above the ground. But then it seemed as if it was finding itself too heavy and was not happy. Small wonder — three pairs of hands were gripping its hairy coat, three pairs of legs were striking it in the body every time it made a sharp turn.

The bumble bee started to fling itself from side to side — evidently in order to try and dislodge its uninvited passengers.

It flew on all the time getting lower and lower, every now and then shaking itself; but it could not get rid of the heavy load.

Valya's head was swimming and her heart seemed gripped in iron bands.

The Professor took an anxious look at her. "If only the poor girl can manage to hold on! If only her hands don't slip!"

Then suddenly the bumble bee beat its wings more furiously.

The wind whistled in the ears of the travellers.

It was plunging like an arrow towards the ground.

"Ah, what a pity if it lands before time," flashed through Karik's brain.
"We can only have got halfway there by now."





The earth came nearer every second. The old man and the children curled up their legs tightly in order not to hit anything hard when they landed. The tops of the grassy jungle came closer and closer.

And then — violent jolts — one, two, three. . . .

One more jolt and the travellers were thrown out of their fur cabin and hurled along the ground.

Turning head over heels the children and the Professor rolled over and over on some queer soil. It was blue in colour and very soft and spungy.

At last having rolled over for the last time the Professor caught hold of the edge of a large smooth rock and managed to get on to his feet. Holding on to the edge of the rock he moved around it, limping slightly.

"Odd," the old man muttered, feeling the flat smooth rock which seemed as round as a millstone. "Whatever is this? And there's another similar round rock . . . there's a third and yet a fourth. . . ."

The Professor managed with difficulty to clamber on to one of the rocks and here gazed around himself. In front of him was a wide plain of the strangest soil. It looked like a chess board. Even blue-coloured roads ran across it from edge to edge. He leant over the edge of the rock and carefully scrutinised its smooth, black, shining surface. Then suddenly a wild guess flashed into his head.

"A button!" he clapped his hand to his forehead. "I am standing on a button! Then the chess board soil and blue roads are . . . the very thing . . . . Children!" he shouted to Karik and Valya, who were sitting on a slope rubbing their bruised sides and knees. "Children, what do you think, we're nearly home. This is my waistcoat!"

The children leaped up overjoyed.

"But the box? Where is the box with the enlarging powder?" demanded Valya, impatiently.

The Professor, standing on the button, was attentively surveying the neighbourhood surrounding the waistcoat. "Odd! Very odd," he shrugged his shoulders. He looked around once again. Then he suddenly saw a gigantic column lying on the ground. The further end of this lay far away towards the west. The forest jungle was parted and a straight vista stretched along the column to disappear in the blue distance as it joined the horizon.

"It's fallen down! fallen down, the rascal! and not more than ten minutes ago."

"What has fallen?"

"Our landmark. However, this is no misfortune. We are already there. The box must be just here . . . on the same side as the landmark is lying. Follow me, my dears!"

Then the Professor boldly dashed along the edging of the waistcoat, jumping over buttonholes and stumbling over threads. Following him hastened Karik and Valya, jumping and skipping.

At the edge of the waistcoat they all stopped. In front of them the grassy jungle was rustling.

"There it is!" yelled the Professor, stretching out his hand towards a thick clump.

Through gaps in the jungle they could see a tall yellow building.

"Hurrah!" shouted the children cheerfully. Then holding hands they dashed towards the box.

Panting and puffing, the Professor also ran up to the box.

"Well, there we are! There we are!" the Professor rubbed his hands with excitement. "Our trials are over. And wasn't it a good thing we weren't frightened of the bumble bee. This is simply incredible! We should never have found the box on foot. Our landmark fell down a few minutes before our arrival. Yes, indeed! To be fearless is the same as to be lucky!"

The Professor passed his hand over his bald head and continued, quite moved by the events:

"So, my dears, in a few minutes we shall once again become big, ordinary people. Here at the wall of this box ends our difficult and dangerous journey. We are standing on the threshold of the big world. But before we throw off this little world I would like to say a few words to you. You have seen a lot in the past days but to tell you the truth you have only started to look into one of the tiny corners of the little world. You have just read a few pages out of the thick book entitled Nature. And these pages, I might say, are by no means the most interesting. In the book of nature there are other pages from which it is almost impossible to tear oneself away.

"You have seen just a tiny part of the world we live in. It is small, it is unnoticed, this part; we often pay it no attention at all. Yet it is a very important part of the big world in which you and I will soon be living again.

"Its life is closely knit with our lives, much, much closer than many people are aware of.

"In this little world there are our friends and there are also our enemies.

"We need to know them both.

"We must come back again here sometime. We must come back with a big expedition equipped from head to foot, and we must conquer this too-little-known world.

"For this expedition we shall not have recourse to a lilliput liquid. We shall come with microscopes, with the great knowledge and the experience of numbers of scientists.

"Our equipment will be patience.

"But we must talk about this in detail at home when we have got back there. But now let us proceed with something we must not any longer postpone.

"To make ourselves big again!"

The Professor then stepped to the wall of the plywood box. Looking through the solitary window he announced cheerfully, rubbing his hands:

"Everything is there. Climb in, my friends, one at a time. The box with the enlarging powder is in the right-hand corner. Carry on!" Karik and Valya after him climbed through the little window.

The Professor helped them through and was just about to climb through himself when suddenly a moth with shining wings of a metallic hue alighted on the wall of the box.

It was a very small moth; in all only a few times the size of the Professor.

The old man took a look at it and froze in his tracks.

"An *Olive Oecophora*," he whispered, taking a deep breath with excitement.

He pressed close to the plywood wall and was all on tenterhooks, like a hunter who has spotted nearby some rare wild beast.

The *Oecophora*, paying no attention to the Professor, crawled past him along the wall.

The old man's heart beat and hammered. "Stop!" he cried, and jumping up high he seized the *Oecophora* by the wing.



The moth tried to escape and they fell heavily together to the ground.

The moth started hitting out, waved its free wing up and down, and pressed the Professor's chest with its feet; but the old man would not let go.

Lying on the ground under the butterfly he made every effort to hold on to his valuable prey.

He forgot about everything else in the world.

Yes, and it was not to be wondered at.

In his hands there was struggling an Olive Oecophora — a moth rare in our climate, the very smallest specimen of the *Lepidopterae*, or scalewinged insects.

How it came to appear by the side of the plywood box — a moth native of warm climates, the Professor never at this moment questioned. He remembered only one thing: in his ample collection in the moth cabinets where under glass sitting on pins with their wings spread out were carpet moths, fur moths, hair, grain, cherry, hawthorn, burdock and field moths, in this collection there had never been an *Olive Oecophora*.

And now there would be one.

"Yes, you just wait. Ah, what a beauty!" the old man scolded the stubborn moth which dragged him along the ground, trying in every way to get free.

"Yes, now then . . . now then . . . that's enough . . . Now then, stop!"

\* \* \* \* \*

Whilst the Professor was wrestling with the *Olive Oecophora*, Karik and Valya had reached the right-hand corner of the chest where the little box with the enlarging powder was standing. Gradually their eyes became used to the semi-darkness. They looked round the empty room with the bare walls. Through the round little window there fell on the floor a narrow, slanting beam of sunlight. Golden dust swam in the sunlight and the beam appeared full of life.

"It is jolly here. Isn't it, Karik?" said Valya, looking around.

Karik not replying walked over to the corner in which there was standing a huge trunk-like white box covered with a thick sheet of parchment.

"There it is!" said Karik. He clambered up to the edge of the box, drummed with his bare heels on its sides and stretched out his hand to Valya.

"Climb up here! Come on!"

Valya scrambled up and sat beside Karik.

Karik bent down and tore the parchment lid off the box.

"Eat! And become big again!" he announced in a loud voice, bending over the box.

"Oughtn't we to wait for the Professor?" asked Valya.

"No — and do you know what. Let's get big before the Professor. Think how interesting that will be. We shall already be big whilst he is still tiny."

"All right! I agree," said Valya, and quickly plunged her hand beneath the parchment and fetched out a whole handful of glistening powder.

She put her hand up to her mouth, opened it and then suddenly taking her hand away turned to Karik:

"How much of it should one eat to get big again?"

"Eat plenty of it."

"But supposing we grow very big. . . . it would not be very pleasant to be a girl of giant size."

"Don't worry, eat it up!" replied Karik calmly, "if you do grow too much — you can drink some reducing liquid and get yourself right again. That's all. Look how I am eating. Like this!"

Then Karik poured a whole fistful of powder into his mouth.

"Ready!"

Valya swallowed the powder and said with a frown:

"The reducing liquid was much nicer."

"No, there is nothing wrong with the powder. It is a little acid."

Karik jumped down to the floor and pulled Valya after him.

"Now we must clear out of here quickly."

"Why?"

"Why, because it will soon become tight."

"Why tight?"

"Why, why, why?" Karik got angry. "For the simple reason that we are going to turn into big people . . . you see . . . Ow!" he shouted, having bitten his tongue. His head had hit the ceiling.

With a loud crack the chest split open. The bright daylight blinded Karik. He screwed his eyes up, rubbed them and once more opened them.

Before him stood Valya. She had not changed in the slightest. However, everything around had become quite different: the green jungle had turned back into ordinary grass. On the grass lay a thick pole with a red rag faded in the sun and the gnats had once again become gnats.

"Isn't it grand!" said Valya. "Just think, we need no longer be frightened of a gnat. Just one clap of the hand and it's a goner."

"Wait!" Karik interrupted her in a worried voice. "Where is the box with the powder?"

They looked down at their feet.

In the grass were the broken pieces of the chest. Amid these pieces lay the box turned over and alongside it a tiny parchment sheet. The wind was blowing a white dust over the grass.

"That's our enlarging powder!" shouted Karik in alarm, and dashed to catch the dust.

But it was already too late.

"Now what will happen?" asked Valya, anxiously. "Does it mean that our Professor will have to stay small for ever? Good gracious, maybe we have squashed him already."

"Don't you get fussed!" Karik yelled at her. "What's the use of it and you may in fact squash him."

Valya froze in her place, but Karik squatting on his haunches started to rake the cool grass with his fingers spaced out like the teeth of a comb.

But it was all in vain.

"Karik," said Valya, "he must be here somewhere and he would surely hear us. Let him come out himself."

"Yes, yes," agreed Karik.

He found amongst the pieces of the chest a small smooth board, wiped the dust off it and laying it on a flat place said gently but plainly:

"Professor. Can you hear us? Come out on to the board. On to this" — Karik knocked the board with his knuckle. "Don't be afraid. We won't move."

Several minutes passed.

The children sat perfectly still on their haunches and bending their heads watched the board.

Then suddenly on the yellow surface a sort of midge appeared.

"There he is!" panted Valya.

"Wait a minute!" whispered Karik. "Don't puff like a steam engine. You will blow him off the board."

Holding his breath, Karik bent lower over the board, screwing up one eye he started to gaze fixedly at the tiny object which ran backwards and forwards on the board.

"It is our Professor!" said Karik, holding his hand in front of his mouth.

"Look, look," whispered Valya. "Can you see his hands moving? What a teeny person. Were we really like that?"

"Even smaller," answered Karik. "Don't talk, sit and hold your tongue!" Valya even stopped breathing.

Then suddenly in the complete silence they caught the sound of a tiny, tiny squeak — weaker than a mosquito.

"He is saying something!" whispered Karik, bending his car to the board.

"What is he saying?"

"I can't understand!"

Meanwhile the Professor jumped off the board to the ground and vanished in the grass.

"He has gone away!"

"Where to?"

"We must just sit and wait."

After several minutes the old man appeared again. This time he was not alone.

"Look, look," said Valya. "Something is attacking him."

The children bent over the board, but the longer they looked the less they could understand: whether it was the Professor himself that was dragging a dark moth after him or whether it was the moth that held the Professor and would not let him get up on to the board.

The moth was struggling, napping its wings, and it knocked the Professor off his feet.

"Let's help him," suggested Valya, "or this rotten thing will eat him up."

The Professor floundering on the edge of the board squeaked something.

"Do you hear, Karik? He is shouting, 'Help, help'."

Valya stretched out her hand to the moth.

"Wait a bit!" Karik stopped his sister. "He is saying something else."

But Valya seized the moth and with a whisk threw it aside, then raised the board with the old man on it to her very eyes.

"He is evidently very upset about something!" announced Valya.

"The butterfly evidently hurt him badly."

The Professor raised his hands to the heavens and ran up and down the board squeaking. He shook his fists and stamped his tiny feet.

"Don't be frightened," comforted Valya, "it won't hurt you. I've killed it."

But this did not calm the old man. He waved his arms more furiously and even appeared to spit several times. By all appearance it was no trifling matter he was raging over.

"Well, all right," Valya soothed him. "I'll find it in a minute and squash it. I'll teach it not to hurt little things."

The Professor no sooner had heard these words than he clasped his hands behind his head, staggered about and then started to jump up and down, so impatiently squeaking all the time that Karik at once understood the great man wished to say something very important.

"I'll squash it in a minute," shouted Valya.

"Now, don't go shouting," said Karik in a whisper. "You'll deafen him. After all, he is tiny. Give him to me now!"

Karik carefully shook the old man from the board into the palm of his hand and lifted him up to his ear.

"Oecophora" he heard the weak voice of the Professor. "A solitary Oecophora. Such a specimen! Such a specimen!"

"He is saying something about Ecofor," whispered Karik.



"I expect that's what the powder is called," replied Valya quietly, "but there is no more powder."

Karik looked at the palm of his hand and said slowly and clearly:

"Professor, what are we to do? The wind has scattered all the powder. It wasn't our fault."

He again put his hand to his ear.

"That doesn't matter," squeaked the scarcely audible voice. "I have got another gramme of the powder in my laboratory. Carry me home. But first find the *Oecophora* . . . it is here . .'. in the grass."

"But what is this *Oecophora*?" asked Karik.

"The *Oecophora*," squeaked the old man, "is a moth. They live only in the south. In our climate such moths are extremely rare — and Valya took it away from me. You must most certainly find it."

"There you are, Valya," said Karik. "Look for the moth. You threw it away and it is very rare. You must find it again."

Valya bent down, searched in the grass and picked up a tiny half-dead moth by its wing.

"Is this it?" asked Karik, showing the moth to the Professor. "That's it! that's it!" rejoiced the old man. "Take it home, only please be more careful. Don't crush the wing!"

"But which direction should we take to go home?" asked Karik.

"First of all go straight to the pond, not turning in any way, and beyond the pond you yourselves will see the road to the town."

Karik plucked the broad leaf of a plantain, deftly rolled up a twisted funnel of this leaf and carefully placed in the bottom of this funnel the great scholar — Professor Ivan Hermogenovitch Enotoff.

"And now let's run home," he said to Valya. "Only don't whatever you do lose the valuable *Oecophora* moth."

"Wait. We cannot go through the town naked!"

"Good gracious!" shouted Karik in contempt.

"No, no," said Valya. "I won't go. It would be unpleasant."

"What do you mean unpleasant?" Karik was surprised.

"Well, all my bones are sticking out. Look how thin I am. Everybody would laugh at me."

"That's nothing, we'll run there."

"No, no," insisted Valya, shaking her head. "We must dress."

Valya picked up the Professor's crumpled shirt from the ground and put it over her head. Looking at his sister, Karik started laughing.

"What a scarecrow! Whatever do you think you look like?"

The old man's shirt reached down to Valya's very heels. The sleeves hung down to her knees. All the same it was some sort of dress.

Valya started to roll up the sleeves, and she gathered up the shirt tails like a train.

"What about you?" she demanded of Karik, not paying any attention to his laughter. You put on something of the Professor's."

Karik decided to get into the old man's trousers.

He drew them on up to his very neck.

"Very becoming!" Valya approved.

Swamped in the trousers, Karik made several steps, stumbled and fell. Fortunately he was able to hold up the hand in which the Professor was in or else he would certainly have lost or squashed the poor chap.

"Turn up the legs!" advised Valya, helping her brother to get up and wrestle with the trousers.

Karik did this.

At last the dressing was finished.

Karik took his sister by the hand and they both, as if in a concert, sang cheerfully:

Forward! the bugles blow From battle most glorious. Forward! and home will go, The children victorious."

Beyond the pond, like an arrow, lay an asphalt road. It led to the town.

## **CHAPTER XVIII**

An unexpected attack — Biology has its uses — Home again — Excitement and pleasure — Elephants and fleas

IT WAS ALREADY EVENING BY THE TIME KARIK AND VALYA entered the dark streets of the town.

In the windows of the houses yellow lights were twinkling.

The streets were empty.

Somewhere far ahead children were shouting. They were evidently playing at Cossacks and brigands.

Over the dark green public gardens called "The second five-year plan" there rose up like a sort of blue rainbow the reflection of electric lights. Music was to be heard there, swings creaked; people in the garden were making noises and laughing: bells were ringing cheerfully and a trumpet welcomed noisily.

"Amusements in the gardens!" said Karik, listening. "That means it is a holiday today."

But when did we disappear?" asked Valya.

"Ages ago."

"A fortnight ago!" sighed Valya. "But somehow it seems years."

The gardens were not far from home.

"Let's run!" suggested Valya.

"Right you are!"

The children cheerfully dashed towards their home. But they had hardly run more than a few steps when out of the gate of a big grey house jumped a hairy, crooked-legged cur with a torn ear. Panting and barking, he threw himself at Karik and Valya, trying to seize their legs.

Karik threw a stone at it. The cur whimpered and with its tail between its legs vanished under the gate.

"Heh!" shouted someone behind the gate. "Who's hurting our Tusick?"

The gate creaked.

A crowd of rough children ran out into the street.

Karik and Valya stopped.

Holding his slipping trousers up with one hand and raising high above his head the other hand in which was clutched the plantain leaf with the Professor, Karik said:

"Your Tusick shouldn't attack people."

The children came closer and packed tightly round Karik and Valya. One youngster in a waistcoat stuck his hands in his pockets up to the very elbows, spat wickedly and looked them over from head to foot.

"Who are these people?" he demanded jeeringly. "What are they doing in our street?"

"We — we are travellers!" said Valya, timidly.

The gang laughed.

"She is travelling with mother to market!" shouted one.

"What do you mean? This is the daughter of the actual seal which was on Papanin's icefloe."

"Nothing of the sort! She is travelling to a circus!"

Karik frowned.

"Now look here," he said, putting one leg forward. "You let us go or else. . . . "

"What'll happen?"

"You'll see soon enough!"

The urchins started to pull Valya by her long shirt, and Karik by the Professor's wide trousers.

"Stop, please!" whimpered Valya. "We must get home. We have been away for a long time."

"But where have you come from?"



"What's that got to do with you?" said Karik.

"Everything to do with us. In our orchard two scarecrows have disappeared, one in a shirt and the other in trousers."

The gang laughed.

"Eh, chaps!" shouted one of them, "drag them into the orchard and let them frighten the birds."

"Now push off!" said Karik, bravely.

He raised the hand with the Professor in it high above his head, rolled his eyes and roared out in the queerest of voices:

Microga-a-aster nemo-o-o ru-umi"

The urchins looked at each other.

"Triungu-uli-i-na," wailed Valya.

"Car-r-rabus!" Karik ground his teeth.

Valya raised her arms above her head spreading out her fingers and stamping her feet.

"Cor-r-rixa! Bewa-a-are of Corr-r-rixa!"

The urchins broke away suddenly.

"Oy, they're lunatics!" shouted one of the children in alarm.

In the darkness white patches of shirts flashed and right and left door latches clicked.

The street was suddenly deserted.

"There you are," said Karik, breathing heavily, "biology has its uses. But now let's run as quickly as possible so as to meet no more people. We are evidently very like scarecrows."

With the wind whistling in their ears, Karik and Valya dashed along at full speed. Houses, side streets, streets, blocks, gardens — all flashed by exactly as in a cinema.

Here at last were the familiar green gates. The children flew into the courtyard.

"You haven't lost the Professor?" demanded Valya, panting for breath.

Karik carefully unwrapped a corner of the leaf.

"He's there. He's sitting down."

The courtyard was empty.

The children raised their heads. The windows on the second floor were alight. Through the curtains someone could be seen moving — granny or mother — going from the table to the sideboard.

"They are laying supper!" whispered Valya.

"Oh! we mustn't be late for supper!" said Karik, "Come on!"

"Oy, Karik, this is terrible! Mother is sure to scold us, isn't she?"

"What next? Surely mother cannot be worse than a Pottery wasp?"

The children dashed on: jostling each other and racing each other, they ran up the staircase and stopped at Flat 39.

Karik hastily pressed the white knob. Behind the door a bell rang.

After half a minute's silence, which seemed an age to the children, hasty footsteps were heard. The door chain rattled. The door flung wide open.

On the threshold was mother.

"You!" she shouted, and started to cry. "My little sparrows! Let me kiss you!"

She started to squeeze the children to herself.

"Mother, stop! Wait!" shouted Valya, breaking away. "You will crush the Professor."

"Little Valya, whatever is wrong with you?" lamented mother, and started to cry even more.

"Stop, mother, don't cry!" said Karik seriously. "Better give us a small, clean wine glass."

"A wine glass?"

"Well, yes!" Karik nodded his head. "We can put the Professor in a wine glass, I am so afraid of losing him."

Mother threw up her hands.

"Both of them! Both mad! Whatever has happened?"

Bumping against chairs and knocking them over, mother dashed to the telephone, tore off the receiver and shouted with a tearful voice:

"Ambulance! Immediately! Hurry up! What? What address? Ach, our address?"

"Do stop, mother," said Karik, taking the telephone receiver away from his mother. "He only needs a wine glass, and you are trying to get a whole ambulance. He would get lost in the saloon of the ambulance and will wander around it for years. Much better give us the glass."

Mother hesitated, frightened. She remembered that it is always better to agree with lunatics than to argue with them. For this reason, not saying another word, she got a clean wine glass out of the sideboard and wiping away her tears gave it to Karik.

Holding her breath she waited to see what Karik would do. He unwrapped the bruised plantain leaf and laying the wine glass on its side, said:

"Gross over into your crystal palace, Professor."

Then suddenly mother saw a tiny insect move with very small step along the green leaf and then briskly run into the wine glass. Karik carefully turned the wine glass upright and stood it on the table.

"Are you comfortable there?" he asked, and bent his ear to the very edge of the glass.

In the glass something squeaked.



"All right," replied Karik, "I'll cover the palace with a clean handkerchief and for a mattress I'll throw you a piece of cotton wool. Have a good rest meanwhile!"

"Now I understand." Mother smiled through her tears. "This is some new game. But whatever is the beetle you put in the glass?"

"Beetle?" Karik was most offended. "That's a nice business! . . . It is very rude to call a Professor that."

"I understand!" Mother started to smile. "You call it a scholar."

"Not us, the whole world and not it but him."

"Very well then, show me! Let me see what you have got there."

Mother bent over the wine glass. She expected to see some sort of trained insect.

"A ma-a-an!" she suddenly screamed with all her force.

"Well, no, mother, it isn't just a man," said Karik. "It's our Professor Ivan Hermogenovitch. He invented a liquid which has made him tiny. We were also like that, even smaller. Then we ate some enlarging powder and became big again. There wasn't sufficient powder for the Professor. But he has some more in his study. We'll get some immediately and make him big again."

Mother listened to the children with amazement and at last realised that they were not mad.

"But, children," she said, "the Professor's flat has been sealed up by the militia. We shall have to wait till morning. Tell the Professor this!"

Karik distinctly and quietly repeated it all to the Professor.

"It doesn't matter, Karik," squeaked the old man cheerfully. "I've made myself very comfortable here . . . wait till morning!"

Karik raised his head and said to mother, "Let's wait till morning."

In the wine glass something was again squeaking.

Karik listened and said:

"Sit down, mother. Ivan Hermogenovitch would like me to tell you something."

Mother sat listening.

Karik coughed and then without hurrying started to tell about the strange adventures of the three important travellers, on the ground and under the ground, on the water and under the water, between sky and earth, in the air, in the forests, on the mountains, in the caves and in the crevices. And once again all three lived through their exploits in this story: they once again battled bravely, floated in ships, flew through the air and fell down deep, dark holes.

Listening to Karik, mother nodded her head, sometimes sobbing, sometimes laughing, but most often listening with wide, open-frightened eyes, not daring to breathe or to stir.

"My poor darlings!" mother exclaimed, wiping the tears away with a handkerchief. "What a lot you have had to endure! How granny will take on when she comes home and hears about your adventures."

"Do you know what, mother?" said Karik. "We had better not tell granny."

Mother thought a little and smiled.

"Oh, Mother!" said Valya. "We shall cat everything you've got."

Mother hustled around. Dishes started to clatter in the dining-room. The gas burners started to hiss in the kitchen.

By the time the children had washed and dressed themselves, mother had laid the table and there had appeared hot from the frying-pan bacon and eggs followed by cold chicken, salad, cheese, mountains of soft delicious rolls and all sorts of sardiny things.

Standing in front of the sideboard, as if in thought, mother opened a glass door and took out a black bottle with a gold title on a white label — "Port wine."

"It would be a good idea," said mother, "in such an event as this if we drank a little wine with hot water."

When it was all ready everybody sat down.

"May I invite you to our table, Professor?" said Karik, and triumphantly placed the wine glass between his plate and that of Valya.

Karik threw a crumb of cheese into the glass.

"Help yourself, Professor!" he said.

There was a squeaking in the glass.

"He wants some bread," said Valya, and dropped a crumb, of bread into the wine glass.

"What about wine?" asked Mother. "How can we entertain the Professor to wine?"

"I know!" Karik jumped up out of his chair. "We'll pour a drop into the shell of a sunflower seed."

He ran out, got a sunflower seed and shelled it. Mother poured one drop of port wine into the shell, and Karik cautiously slipped it down the side of the tilted glass.

Soon the party became very jolly.

"Your health, Ivan Hermogenovitch!" shouted Karik, raising a tumbler of hot water coloured with port wine.

"To our travels!" shouted Valya.

Everyone touched glasses, drank and ate.

The Professor did not waste his time either. He ate bread and cheese and drank port wine.

Karik bent over to see how he was getting on and exclaimed:

"He's singing! What a good thing he is still small!"

\* \* \* \* \*

Soon the household was fast asleep.

Karik and Valya were quietly and evenly breathing in their clean beds, whilst the Professor snored, comfortably curled up on his piece of cotton wool in the wine glass.

For the first time for many days their sleep was calm and untroubled. No dangers lurked around them any more.

\* \* \* \* \*

Next day the Professor was sitting in his study as if nothing had happened to him.

Ten newspaper correspondents took his photograph and wrote about his adventures in notebooks.

Shortly after there appeared in one of the papers a marvellous article about everything, with a big portrait of Professor Ivan Hermogenovitch Enotoff.

Someone spread the rumour that Professor Enotoff had discovered how to change elephants into fleas, and then this was muddled up and it was said "He makes elephants out of fleas."

Mind you, there may be a Professor who can make elephants out of fleas, but I don't know him and I am not going to say anything about him, because I never like to write about anything I have not seen with my own eyes.

## THE END



## NOTES:

## About the author:

The wonderful children's writer Yan Leopoldovich Larri (February 15, 1900 – March 18, 1977) – was born, according to some encyclopedias, in Riga, but he himself mentions the Moscow region. He started his career as a children's author in 1926.

After publication in 1931of his book "The Country of the Happy" in which he dared to show his vision of Socialism without class struggle, his name became blacklisted. He was arrested in 1941 as politically subversive. He spent 15 years in the Gulag and was released only in 1956.



<sup>&</sup>lt;sup>1</sup> In Russia it is usual to give a child the Christian name of its father — the patronymic — after his or her own Christian name. This is nowadays shown by the addition of *-evitch* or *-ovich* to the father's Christian name for a boy, or *-evna* or *-ovna* for a girl. Thus Professor Enotoff is John Son-of-Hennogenes Enotoff or Ivan Hermogenevitch Enotoff. When the children talk to him they address him as "Ivan Hermogenevitch."

<sup>&</sup>lt;sup>2</sup> Russians make use of words which show what they mean by their sound. "Gruff-gruff" has been made up and is used in various places to illustrate this. — Translator.

<sup>&</sup>lt;sup>3</sup> In the Soviet Union "policemen" no longer exist; in their place are "Militiamen" who occupy "Militia posts," not "police stations."