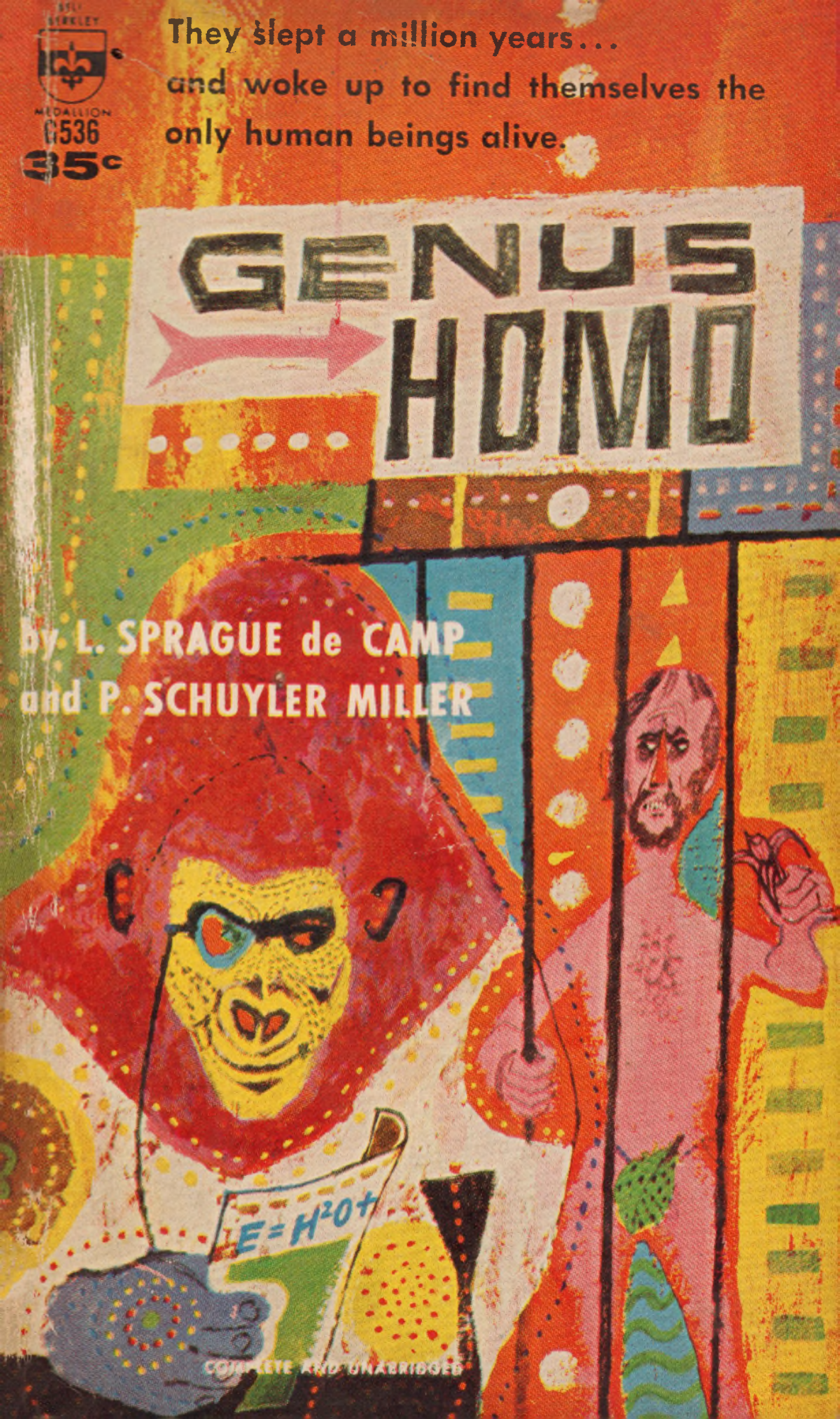
MEDALLION
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They slept a million years...
and woke up to find themselves the
only human beings alive.

GENUS HOMO

by L. SPRAGUE de CAMP
and P. SCHUYLER MILLER



COMPLETE AND UNABRIDGED

MAN AGAINST . . . WHAT?

Woodchuckoids and parrotoids and herds of rabbitoids were only some of the strange creatures inhabiting the world. And what a world it was! In some ways it bore a resemblance to the earth as it had been a million years before, but the ravages of time had created amazing new flora and fauna. Against this startling background twenty-five people —ordinary men and women of today — had to battle strange forces and fight with all their power in a fierce struggle for survival.

GENUS HOMO

L. Sprague deCamp
and
P. Schuyler Miller



A BERKLEY MEDALLION BOOK
published by
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1 COLD AWAKENING

HENLEY BRIDGER WOKE UP.

Stone was crashing on a sheet-metal drum, six inches from his ear. After a while it subsided to a crackling rivulet of gravel, and finally to silence.

The lean chemist lay with his eyes closed. His brain felt muzzy and clogged, and there was a musty odor in his nostrils that shouldn't be there. He was on his back, with his right arm buckled under him. Something soft and heavy was sprawled across his thighs. Bridger opened his eyes.

It was dark, but not so dark as he remembered. He was lying in the groove between a curving metal wall and a steel grating whose pattern was deeply imprinted in his back. He dragged at the arm under him, but it refused to move. Then he tried to sit up.

A stab of pain made him grunt, and a wave of dizziness dropped him back hard against the wall. As it died away he lifted himself carefully on his good elbow and pulled his right arm out. He bent it experimentally and tried to twiddle its numb fingers, but they were as unresponsive as so many blobs of clay. In a moment, however, he felt the fiery ache of returning circulation. Hitching himself higher against the steel wall, Bridger poked at the thing across his legs.

It squealed, and dropped with a thump into the darkness below. It lay there whimpering, its sniffles broken by the renewed rattle of gravel overhead. Bridger hauled his legs up and hugged his shins. His feet were asleep too. He felt light-headed as the devil, but little bits of memory were beginning to arrange themselves in some kind of order in his mind. He had been in a bus with a lot of other people, and the bus was in a tunnel. There had been an earthquake, or a landslide, or something. The bus had gone wild and climbed the tunnel wall. And then there had been a smell—a

damned queer smell—like nothing he knew about. And he thought he knew smells.

One thing more: "it"—the thing that had squealed—must be the fat, pink blonde from the seat ahead.

By now Bridger's body was feeling more or less normal, but his face itched abominably. He reached up to scratch, and involuntarily jerked his hand away. He had a beard—a vast, muzhik-style beard that rippled down his vest for a good six inches. He wagged his head, and his hair swung down over his eyes in a long, ragged fringe like the mane of some Magyar poet. He felt the back of his neck, and visions of Buffalo Bill popped into his mind. Whatever had happened hadn't added to his social appeal. All that hair meant that a lot of time had passed. How fast does hair grow, he wondered? The rate of growth probably wouldn't remain constant, of course. Maybe you could integrate . . . He gave it up and tried to peer through the surrounding darkness. Those grey patches should be the windows of the bus.

"Hey!" he called.

The blond's voice quavered, "Wha—who's there?"

"Are you all right?"

"I—guess so." Then, "My hair's long!"

"Um. Anybody with you?"

"Oh!" Silence again, then another squeal and a tragic stage-whisper: "There's a leg! A m-man!"

Bridger grunted. "Look out, I'm coming down." He swung his legs over the edge of the steeply-canted luggage rack, felt for a foothold on the back of a seat, and lowered himself stiffly to the floor. He came down on the blonde's plump leg and she jerked it from under him. He grabbed at the darkness and brushed a soft, bare cheek. Another woman! He found her wrist and felt a feeble, fluttering pulse.

"Come here," he commanded. "Look after this woman. Wait—where's this leg you found?"

Bridger didn't like the way the blonde giggled when they had to crawl over each other to exchange places. He turned his back on her and found the man, slumped down in his seat with a suitcase on top of him. Both hands were clasped over the valve of a small compressed-gas cylinder. The fingers were cold and rigid. The man was dead.

Something stirred toward the front of the bus. "Hello!" Bridger called. "Who's there?"

A high-pitched man's voice answered: Pilly—the ichthyologist. "Is that you, Bridger? What's happened?"

"I don't know; some kind of accident." The chemist began to work his way forward along the slanting floor of the bus, hanging to the luggage rack. Twice he stumbled over bodies; one moved. Bridger didn't stop. One thing at a time was all he could manage now.

Pilly was crouched in his seat, too terrified to move. Scherer, the big mammalogist, was huddled against him. Scherer was alive; at least, his heart was beating as strongly as it ever had. Bridger climbed around them and tried the front door of the bus.

"Jammed," he said over his shoulder. "Here, help me get some of these windows open."

The air in the bus had an unpleasant metallic tang that he couldn't place and didn't like. The first window opened with a protesting groan, but the rest wouldn't budge. Bridger started back along the aisle. The man he had stumbled over was sitting up, holding his head in his hands. He had been sick. The two women were huddled together on the floor, holding each other's hands and tittering hysterically. Bridger heaved hard and got up another window. "Pilly!" he called. "Slide outside and give me a hand with these people. We've got to get 'em out of here."

It was all very awkward and not at all chivalrous. The damned women were all legs and arms and loose garments, that slipped and ripped when he tried to get hold of them. The blonde stuck fast in the window, and Bridger had to haul her back and peel off her fur coat before he could squeeze her through. Aroused by her indignant yells, the second man came stumbling through the darkness, and with Bridger's aid began to explore the bus.

There were people everywhere, mostly women of all conceivable shapes and sizes. They had to be untangled from themselves and from each other, rubbed, slapped, and shaken into some semblance of consciousness, and shoved outside. At last they were done: Bridger dragged the last limp form down the aisle and hoisted it through

the nearest open window. He followed, head first, his helper behind him.

Light filtered through a ragged hole in the roof of the tunnel, ten feet above. Bridger counted noses. Twenty-four—twenty-five with himself. Pilly he knew, and Scherer, and one or two of the others. Like him, they had been bound for the AAAS meeting in Columbus. All the men were bearded like Biblical patriarchs, and the women had tangled hair down to their waists. What a sweet-looking crew, he thought. Dirty faces—fingernails like claws—

The scrawny Ichabod with the orange halo was Abner Barnes, the Smithsonian archeologist. He had been sitting with the corpse. Bridger beckoned.

"Barnes," he said, "who was the man with you? He's dead. Do you know what was in that cylinder he had?"

The archeologist shook his head. His voice had a sharp Yankee twang. "That's Blodgett—the British biologist, you know. Came over to Johns Hopkins this fall. I met him last summer at Ann Arbor—he was up there consulting Bloomquist—but he was close-mouthed as sin—wouldn't say yes or no to anything—and he hung on to that cylinder like the Nobel Prize. Something he was going to spring on us at Columbus." He stared reflectively through the bus window at the body, scratching his hairy cheeks. "He had a brief-case with him. Did you get it? Well—time enough for that later."

"What do you remember?" asked Bridger. "About what happened, I mean."

"Nothing at all. I was asleep. The bus jumped like a skittish mare and there was that deuced queer smell. D'you suppose that was Blodgett's gas? Some kind of anesthetic?"

"I don't know. Professor McCandless was on the committee that scheduled the papers, and he showed me an advance program. Blodgett was down for something like 'A Revised Theory of the Vital Processes', but that's all I know." He turned back to the crowd. "Our first job is to get out of this hole. Who drove the bus?"

"I'm him." A bulky man in uniform edged forward. "Toomey's the name."

The chemist put out his hand. "I'm Henley Bridger.

This is Professor Barnes. What can you tell us about what happened?"

The driver scratched his head. "We'el—it's pretty hard to say. This tunnel we're in is on the new road between Pittsburgh and Wheeling. There's never been no one could figure why it was dug except to keep the WPA off people's lawns. Anyway, all I remember is a kind of swingin' feeling, like rockin' in a hammock. It yanked the wheel out of my hands, and we sideswiped that old Chevy and smacked into the wall. Then there was a funny smell, and that's about all I can remember."

"What Chevy?" demanded Bridger.

"I dunno," growled Toomey. "He was way over on my side. We socked his rear end."

Followed by the others, Bridger strode to the rear of the bus. The Chevrolet was half buried in the rubble that closed the end of the tunnel, its top crushed under a huge arched slab of concrete shaken from the roof. Bridger squeezed into the space between the car and the wall and tugged at the door handle. It stuck. "You try," he said to Toomey.

The driver grunted and heaved, and the door scraped open with a tinkle of broken glass. Bridger reached in and pulled out a small, fat man who was slumped down behind the wheel. The man stirred and groaned.

"Ai!" he moaned. "Ai! Mama!"

There was an answering wail from the back seat. Bridger swore under his breath. He crawled out of the hole, pulling the man after him. The crowd gave way a little and stood gaping at them. Bridger spotted a brawny youth with a scallop of yellow fuzz under his chin. "You!" he barked. "Get this man out of here and see if he's hurt."

The youngster picked up the fat man as if he were a bag of meal and shambled off toward the light. Bridger beckoned to Barnes and Scherer. "There's a woman in there," he explained. "Barnes, you're long and thin—see if you can get at her."

The archeologist disappeared feet first into the blackness. They heard him moving about; then there was a sudden scramble of feet, a thud, and Barnes yelled in fury. Something small and savage burst screaming from the hole and rammed Bridger amidships. Scherer grabbed

it and hung on with both hands, despite an onslaught of fists and teeth. Its cries became intelliigible.

"Mama! Pappa! Mam-*ma!*"

Barnes' muffled voice sounded out of the darkness. "Strangle that kid and give me a hand with this woman. She weighs enough to sink a battleship. Consarn the consarned . . ."

Bridger crawled into the hole. Getting the blonde through the window had been a picnic compared with this. Hauling at a fat ankle, Bridger wondered if Toomey hadn't a jack in the bus that they could use.

When at last they got the woman out of the car and had stretched her out on a pile of coats, Scherer took charge. "I know the rudiments," he said. "You have to on collecting trips. Damn the light—stand back, everybody—please!" His big fingers explored her body skillfully. "She's got a bad bruise on her head, but she seems all right otherwise. If that slab from the roof hadn't been curved the way it is, they'd all have been mashed flat. She'll come around before long; it's the shock, and that same sleep we all had. Where's the husband?"

The little fat man came forward, leaning on the blond youth's arm. The child stalked truculently behind them. The man peered eagerly into their faces.

"Which is the doctor? You? You are sure she isn't hurt bad? She is so delicate, my Rachael! Ai—what have I done that this should happen to me?" He began to rock from side to side. Bridger took his arm. "Listen," he said gently, "your wife isn't badly hurt. Dr. Scherer is only a Doctor of Science, but he can tell that much. We must get her out of this tunnel, so we can get a real doctor for her. Now then, what's your name?"

The little man looked up at him pleadingly. "You are sure it isn't bad? You will get a real doctor soon?" He fumbled in his vest pocket, bringing out a crumpled card. "Take it, please. Julius Aaronson, ladies' and gents' fine clothing. The address is on the card." His arm went lovingly around the child's shoulders. "This is my son, Irving. He will be like his papa, a couturier of distinction!"

Bridger looked doubtfully at the boy, who seemed

to have inherited his parents' imposing girth as well as their cast of features. Irving glared back with pop-eyed insolence and, as Bridger turned away, thrust out his tongue and gave the chemist a well-basted bird.

Bridger ignored him and spoke to the crowd. "We'll have to concentrate on getting out of here and locating the nearest town. Where were we when we cracked up?"

"We oughta be a couple miles from West Alexander," Toomey volunteered. "There's a gas station down the road a ways where you can phone."

"Good. If you ladies will collect whatever you want to take with you, the men will try to find a way of getting out. Toomey, will you get whatever ropes or chains you have?" He clambered to the roof of the bus. There was still a good six feet between him and the edge of the hole. He beckoned to the blond youth. "You look husky. Can you give me a leg up?"

"Maybe we oughta make a pyramid." The young man pointed to Pilly, whose white hair showed up in the gloom like a patch of fox-fire. "He's not very big—he could be on top."

"This is no gym show!" Bridger snapped. He was growing impatient with the trivial delays. "If you won't do it, let someone else get up here."

He came, grumbling, but the rest was not as easy as Bridger had expected. The youngster was strong enough, with shoulders like a bull, but the chemist's athletic days were long past. Twice he lost his footing and came down with a crash. On the third try he went up with a rush and caught a gnarled root that stretched across the hole. Sand and gravel showered in his face. When the landslide stopped, he opened his eyes and chinned himself on the root, wriggled slowly up until he could heave his body across, got one knee up, and shoved hard. He felt his coat tear, and then he was lying half in and half out of the pit, in the open air.

Someone shouted at him from below, but Bridger wasn't bothering himself with people at the moment. Clean, fresh air was tingling in his nostrils and golden sunshine slanted down through the branches of a great tree. Lush green grass waved above him. He rolled over and lay for a time staring at the long streamers

of cirrus which stretched across the sky before he got wearily to his knees and peered down into the hole. Hiis eyes had become adapted to the dayligh, and he could see only a vague blur of upturned faces.

"Throw me a rope!" he shouted. "And send up something to dig with. That hole is too damn narrow for comfort!"

He caught the rope on the twentieth try, and hauled up thirty feet of oily hemp. A short-handled shovel and a Boy-Scout hatchet were tied to the other end: somebody was using his head down there. Bridger set to work to enlarge the hole to dimensions which might conceivably accomodate the blonde or Mama and Pappa Aaranson. Finally the way seemed reasonably clear. "Toomey!" he yelled.

"Huh? Me?" answered the darkness.

"Yes. Got any chains? If you can fasten the ends together, we can use 'em for a ladder."

Silence. Then: "Nope, we ain't got no chains."

"Okay, then—they'll have to shinny. I'll tie this end of the rope around the tree, here. How many of you can climb?"

Silence again, then the voice of the young Atlas: "Got her tied? I'm coming up." And up he came, hand over hand, the rope creaking alarmingly under his weight. Bridger grabbed his hand as it came poking out of the hole, and heaved him out.

"Good stuff!" he approved. "I'm putting you in charge of getting the others out. What's your name?"

"Zbradovski—Mike Zbradovski. Senior at Chicago U. Look—aren't you the Stanford Bridger, the enzyme guy?"

"Yep. D'you play football?"

"Sure, but you don't read about me in the papers. Us poor linemen don't get the publicity like we should. Hey, look—here comes another one!"

A ham-like hand appeared at the edge of the hole, followed by the head and shoulders of a man. They dragged him out, no easy task, for his body was as big as Zbradovski's. He sat down with his back against the tree, puffing and red-faced.

"Name's Macdonald," he panted. "Pittsburgh cop. Next guy coming up is Ronnie Franchot. He's a hoof-

er—night-club stuff—seen him just last week. Half them dames down there is his—girls in his act, I mean. He stinks. He—say, where the hell are we, anyway?"

"I don't know," Bridger told him. "I'm going up on the hill to see what I can see. Suppose you help Zbradovski here get the others out."

The rope creaked again, and a slightly built man of medium height swarmed out without assistance. Lank, dark hair grew thinly around a bald-spot. He might have been handsome without his sparse beard.

Bridger bent over the hole again, Scherer's face stared up at him. "Everything all right down there?" The face bobbed affirmation. "Get the women out first, and then see if anyone knows this country we're supposed to be in. From here it looks like a howling wilderness."

2 WILDERNESS

NOR DID IT LOOK ANY BETTER FROM THE HILLTOP ABOVE the tunnel. Rolling, wooded hills stretched as far as Bridger could see. Evergreens predominated, mostly pine with here and there a dark patch of spruce or hemlock. There was no sign of the road they had been on—nowhere the open farmland along the highway, with its gas stations and hot-dog stands—nowhere the smoke of a train or the smudge of a city. As far as he could tell, they might have been scooped up by some djinn out of the *Arabian Nights* and dropped in the middle of a virgin forest like that which the first settlers of Pennsylvania had found—"Penn's Woods", and with a vengence!"

He turned back. A dozen or more women were standing around the role or sitting in the long grass. Tomey was hauling up bundles from below. Apparently most of the men were still in the tunnel.

"Where do you think we are?" asked Zbradovski.

"I don't know. Do any of you know this country at all?"

Toomey straightened up, "I ought to," he complained. "I been on this run for three years. But I don't. Never seen it and never heard of it. Ask Mac there—" He jerked his thumb toward the policeman. "Ask Morelli.

Ask any of 'em. We're nowhere—that's where we are—and damned if I know how we got there!"

Bridger surveyed the circle of drawn, dirty faces. He wondered if he looked like that. "Is that right?" he demanded.

The man called Morelli answered. He was dark, with a business man's paunch. The pouches under his eyes gave him a slightly sinister look. Bridger wondered how he happened to be wearing o.d. breeches and high laced boots. "I sold insurance through these parts ten, twelve years ago," he said. "This isn't Washington County or anything within fifty miles of it. You gotta be a damn sight smarter'n I think you are if you're gonna get these dames to town for dinner."

Bridger's spinning brain quit trying to make sense out of this nightmare. He looked around him. There were women everywhere. A tall, prim-looking woman with hair just beginning to turn gray was holding smelling-salts under the fat blonde's nose with one hand and slapping her plump red face with the other. Three younger women stood by—none over thirty. From the way they talked, Bridger decided that they belonged together.

The three Aaronsons were sitting by themselves, rummaging through a pile of clothing and miscellaneous hardware that overflowed from two bursting suitcases and a dufflebag. Watching them, Bridger felt a bit envious. Say what you would, they were a family and from all appearances a happy one.

The remaining nine womem were more flashily dressed than their sisters in misery, and their charms were by no means inevident despite the dirt. Bridger felt a blush creeping through his beard as he looked up from an expanse of naked thigh to meet the eye of a Junoesque blonde. It had a predatory gleam that warned him, but before he could drop his glance she had taken his intentions at her own valuation.

"Oh, Mr. Bridger—you are Mr. Bridger, aren't you? —the girls do *so* want to thank you for everything you've done for us all! I'm sure I can't *imagine* what would have become of us without you! I was just saying to Sneeze—that's Mr. Zbradovski, you know; don't you think he has the craziest name; we decided to call

him Sneeze—that it doesn't matter *how* big and strong a man is unless he has real *initiative,* and *leadership,* and the way you simply *dominated* the whole situation from the very beginning was simply *thrilling* to a girl like me who has seen so *many* men who were just stuffed shirts . . ."

Bridger detached her hands from his lapels. He didn't enjoy looking up at a woman, ever, and he certainly didn't feel dominant in the clutches of this blonde man-eater. Just then a stately brunette stepped past the other girl and held out her hand.

"I'm Mildred Henry, Dr. Bridger," she murmured huskily. "I'm sure you'll forgive Miss Tremblay for being so impulsive, won't you? She and the other girls have been with Ronnie and me for almost a year now, and we've grown to be just like one big family. We all appreciate everything you and the other men have done for us, and we'll do anything we can to help if you'll only ask us. Won't we, girls?"

The shrill response made Bridger wince. "Thank you all!" he blurted. He turned desperately to the hole, where little Pilly was hauling manfully on the rope. A suitcase rose spinning out of the depths. "Who's down there now?" he asked.

The ichthyologist blinked up at him. "Barnes and Scherer; and another man, a Mr. Packard. I believe he is a friend of Mr. Morelli."

"Hey!" came Barnes' voice from the tunnel. "Lower away! We're coming up. Oh, consarn it, I forgot Blodgett's briefcase. You two go ahead; I'll be right with you."

One by one the men were hauled out of the hole. First came Scherer's big frame, then a greying fellow with even more paunch than Morelli. Like the insurance peddler he was wearing outdoor clothes. He wrung Bridger's hand. "I'm Packard—Nelson Packard, the attorney," he announced in a sonorous courtroom voice. "Morelli and I were bound for the Ozarks. We know a place down there where the season's alway's open. Finest trout you ever saw." (Fishing in December? thought Bridger. They must love the rough life, for all their stomachs. Still, the Ozarks might not be so bad.) "You certainly know how to get things done, Dr. Bridger," Packard boomed on. "Count

on me for any help you need—any time at all. Say—where are we?"

"That's the first question everybody's asked," Bridger told him, "but no one's answered it yet. What do you think?"

Barnes, brushing dirt off his clothes, broke in. "Better move this stuff away from the hole, hadn't we? Another cave-in and we'd be right back where we started. You need a rest, Bridger. You look all in."

"Oh, I'm all right," the harassed chemist assured him. "No, Miss—what's your name? Smythe? There isn't any water around here. I'm thirsty too—I guess we all are. Try chewing on a blade of grass. Hey, Scherer, what's wrong with that fellow under the tree?"

"He's drunk!" the zoologist grunted. "Boiled as an owl—more power to him, with this hullaballoo going on!"

"Pipe down a minute!" Bridger shouted. Then as the babble of voices quieted: "Everybody lend a hand with this baggage, and then we'll decide what to do. Some of you men give Professor Scherer a hand with that drunk, will you?"

Within a few minutes the baggage dump had been moved what Bridger considered a safe distance away from the hole. As the crowd gathered round him again, he faced them thoughtfully. "There's no point in trying to fool anybody," he began. "You can all feel and see the same things I can. We've been asleep a long time—a very long time. Probably we have Professor Blodgett's gas to thank that we're alive at all. Things have changed, or we've been moved somehow, and it may take some time to find a settlement. If we stick together and use our heads, we can manage it, but if we don't we'll be in one hell of a mess in no time.

"Now, first of all, there's Professor Blodgett. He's dead; his body is down there in the bus. We can get it out and lug it along on a stretcher until we find an undertaker, or we can dig a grave out here, but you can guess what a job that will be. So, unless someone objects pretty strongly. I'm for leaving it where it is.

"We seem to have several hours before dark, but before we start off blindly I'd suggest that we let one or two of the men scout around for a road or trail of some

kind. There'll be plenty for the rest of us to do while they're gone. For one thing, you women in high heels will have to have some other kind of footwear. You won't get a quarter of a mile in those things without spraining an ankle or rubbing blisters the size of quarters on your feet. See if you can borrow a pair of low-heeled shoes from someone who has extras, and if no one has, get one of the men to cut your heels down until you can at least stand up in what you have. Another thing, has anyone anything to eat?"

"Please?" It was Aaronson. "Mamma and me and Irving was on a picnic when the bus hit us. We got sandwiches in the box, and some coffee, and maybe some other things. Mamma can tell. Only," —he hesitated— "It ain't so much for such a lot of people like we got here."

Bridger slapped the little man on the shoulder. "Mr. Aaronson, we all appreciate your generosity. It may be quite a long time before we get another meal, so we'll divide it up as best we can. Anything else, now? Chocolate bars? Fine! Who'll volunteer to find us a road? Zbradovski? Good; hunt for streams that may run into the Ohio. If you don't find anything in say half an hour, come on back—and for God's sake don't get lost!"

The blond youth bristled at the suggestion. Lost? Bridger thought his chest would burst through his shirt as he stalked off into the woods.

The statuesque Henry girl was talking to him again. "Maybe you'll think it's a funny request, Dr. Bridger, but we girls were wondering if maybe we couldn't borrow some extra pants from some of the men." She stretched out a shapely nylon-covered leg. "This isn't such a good costume for hiking through the woods, you know."

"Good idea," Bridger agreed. "Pilly—you're in charge of baggage—see if you can fix them up, will you?" He left the suitcases to the tender mercies of the little ichthyologist, who was beaming at the attention he was getting, and the women. His eyes widened when he saw what the Aaronsons were setting out. A picnic! There was enough food for six picnics! Damn lucky for us they're not light eaters, he thought. That camp gear that Packard and Morelli have is going to come in handy, too.

The professors were seated on a boulder, staring gloomily at the heap of luggage. "How far do you think this gang can carry that stuff?" Scherer demanded. "It's heavy, and this isn't going to be any fifteen-minute jaunt to the bus stop."

"Tell you what," Barnes offered, "I'll cut the rope up into short lengths and make some slings. But that can wait until we know what we have to do. Here come the women back, and I'm starved."

"Soup's on!" shouted Franchot. Watching the women straggle back in twos and threes, Bridger thought you can't beat the female of the species—set 'em down in a primeval forest and they can still fix up their hair and clothes and get their lipstick on straight. Only I still can't get used to pants on some of 'em. As the mob descended on the Aaronsons' picnic he hurried to get his share. "Hey?" he cried. "Save some for Zbradovski!"

Fifteen minutes later Bridger swallowed the last mouthful of lettuce and tomato and gazed vacantly around the munching crowd. He had the men pretty well straightened out by now, but he couldn't remember the women. The five who looked like schoolteachers were in the Pittsburgh public schools. The graying one was a Miss Hansen, a principal. The blonde who had landed in his lap was Elizabeth Friedman. The other three were named Pierne, Kelleigh, and Slemp, in which order he didn't know. Mrs. Aaronson was easy enough to remember, and the remaining nine were Franchot's chorines. The tall, well-made brunette was Ruby Stern. That's easy. The one with the pneumatic contours, who said "Pahss the peppah", was Marie Smythe. They might have a problem on their hands with her. . . .

His glance strayed to where Mildred Henry, the boss of the outfit, had set up an impromptu barber-shop and was operating on Scherer with a pair of nail-scissors. He's going to be a big help, Bridger decided; strong as an ox, with no nerves, and he knows what it's all about. Bridger had met the mammalogist at previous scientific conventions, but had never had a chance to know him well. He recalled the famous story of Scherer's last expedition to Malaya with the unfortunate Professor Burdett, who had gone mad in the jungle. The first that the outside world knew of the trouble was when Scherer

showed up at a back-woods rubber plantation with the raving Burdett slung like a prize pig from a pole carried by two of the six scared and indignant Malays who were marching in front of him at the point of a pistol.

The drunk was still asleep. The man wasn't more than twenty-three or four, and nothing to look at twice. Speaking of faces, Bridger thought, maybe I'd better get my own zareba trimmed. He took Scherer's place; the Henry woman looked about as safe as any. The Tremblay girl was working on Packard nearby.

"I can't figure it out," the lawyer complained as the little scissors snipped through his grizzled whiskers. "No Wheeling—no West Alexander—no telephone wires—nothing. And where did all these mountains come from?"

"Maybe we're in the Alleghany national forest," suggested one of the younger schoolteachers. "That isn't much over a hundred miles from here. Or rather, from where we thought we were."

"No, it can't be," Packard objected. "I know that country—born and brought up in Clarion, as a matter of fact. I've hunted and fished there ever since I can remember. The woods up there are hardwoods—maples and beech and oak—and these are mostly evergreens. Besides, these hills are too big."

"I think we're in the Canadian Rockies, myself," put in Morelli.

"No, that isn't it either," Packard insisted. "They're too small for the Rockies."

"You're too damn' fussy about your mountains!" exclaimed his friend. "If you get any better ideas, let's have em!"

The principal, Miss Hansen, spoke up: "It's obvious by now that we've been asleep a long, long time. From the looks of the vegetation, I'd say that it is midsummer. The accident happened in December; that's at least six months ago. Perhaps, while we were asleep, the Government established a new national park here in the southwestern part of Pennsylvania—as a public works project, you know—and we're in the middle of it."

"It's the kind of crackpot scheme you'd expect of this crazy administration," Packard snorted, "but it won't work. I suppose the C.C.C. built all these mountains and planted that forest in six months?"

"Where's Wheeling?" broke in a voice from the background.

"Maybe they're plowing the cities under now," another contributed.

The crackling of underbrush put an end to the argument. "Here comes the Spirit of Youth," the lawyer announced. "Looks like he's seen something." Zbradovski was stumbling up the hillside, his overcoat flapping behind him. There was a slit in one leg of his gray flannels, and the trouser leg was dark with blood.

Bridger sprang to his feet and eased the youth down on the stone on which he had been sitting. He turned to the bus-driver. "Mr. Toomey, haven't you a first-aid kit in that bus of yours?"

Toomey grunted and lowered himself into the hole. Within a minute or two Zbradovski got his breath and began to tell his story.

"I went through the woods to a place where there was a little stream," he reported, "only the stream was down in a gully with ten-foot banks. I was poking along the top of the bank when I slipped and down I went. I landed alongside of an animal of some kind, and it sat up and looked at me."

"What kind of animal?" broke in Scherer.

"A sort of bearish kind of animal. It wasn't a bear, though. I don't know what it was."

"Come now," the zoologist snorted, "there aren't many big animals around here. Could it have been a wildcat?"

"I tell you it wasn't any kind of animal you ever saw," the youth insisted. "It was pretty near as big as I am, all covered with silvery gray fur, and it had a sort of bushy tail."

"Maybe you bumped into a squirrel," Packard said, grinning. "I hear they come pretty big down this way."

"I know a squirrel when I see one! This thing had long paws, sort of like hands, with curved claws on the fingers. And it had a half a fish in one hand. Squirrels don't eat fish!"

Alice Lloyd, the smallish dancer, giggled. "Where was the other half, Sneezy?"

Zbradovski made a choking noise. "There's an intelligent question for you!" he complained loudly. "A man

sees a carnivorous animal with half a fish and she wants to know what's become of the other half!"

"Piscivorous, don't you mean?" put in Barnes.

The badgered youth glared wrathily at his tormentors. "Wise guys!" he snarled. "This isn't anything to laugh about!" He held up his injured leg. Bridger had rolled up the trouser-leg, and was dabbing at a two-inch gash in the calf with his handkerchief. Scherer squatted down beside him, to examine the wound with interest.

"This looks to me as if it might well have been made by a claw," he announced. "Did the thing attack you?"

Zbradovski nodded. "I sort of looked at it, and it sort of looked at me, and then it reached out with one hand and sort of grabbed at me. I jumped, but it wasn't quick enough or far enough. That's when it got me in the leg."

The chemist got to his feet. "Where's Toomey? We'll want to wash that cut out and get it tied up. You're lucky that you jumped when you did. Here's a sandwich we saved for you; maybe you'll feel better with some food in you. Now—what did you do next?"

"Hopped up the bank and ran! That was the sensible thing to do, wasn't it?"

"Eminently, son—eminently." Bridger wiped his bloody hands on a wisp of grass. "Now that the food's all gone, folks, I suggest we build a little fire with the papers and put some grass on it. Then, if this is a national forest or a park, the smoke will have a ranger down on us in a hurry."

"What are we going to eat next? asked the blond Miss Friedman.

"I don't know yet," the lean scientist admitted. "There seem to be lots of grasshoppers around." He grinned at the expressions his comment produced. "You'd be surprised how good they'll taste if we get hungry enough. Ask Barnes here—chances are he's fond of 'em."

"What about wild animals?" Ruby Stern demanded. "If there are things in the woods like Sneeze said, I'm going to stay right here!"

Bridger frowned. In the United States the problem was ordinarily to protect the wild life from the people, and not vice versa. However, unless Zbradovski was spinning a yarn to get attention—and the gash in his

calf belied that—the problem was going to be a real one.

"Has anybody got a gun?" he inquired. "You, Mac? Packard? Too bad. Could get some wrenches and things out of the bus?" he asked Toomey. "A jack handle isn't much of a weapon against the kind of super-coon Zbradovski has been describing, but it's better than nothing."

"Geez, mister," the driver complained, "how many more times do you want me to climb that rope?" Nevertheless, he disappeared down the hole for the second time.

Edging around to find a more comfortable position on the boulder where he was sitting, Bridger dumped another fistful of grass on the fire and watched a column of grey smoke climb up into the cloudless sky. If anyone had spotted their signal, they should have had a plane over long ago, he decided. "How did you happen to be in the bus, Sneeze," he asked Zbradovski, who was stretching out under the tree beside him.

"Oh, I was acting as herd-boy for Professor Delamater's white rats. He was going to use 'em to prove something at Columbia. I'm his lab assistant. Don't like it much, but the old man's business hasn't been so hot lately. Maybe I should have gone to a college where they take football seriously. I don't know what happened to the rats—I guess they woke up before we did and chewed their way out. Look—we've had that fire going for an hour now, and nothing's happened. How long do we have to stay here?"

"We'll have to see about the—oh, he's awake." The drunk was sitting up. "Where—wup!—am I, please?" he inquired owlishly. "In hell, or what? Whass this all about?"

Things were explained to him, and in turn he informed them that he was Mortimer Wilson, assistant publicity director for a canned food company in St. Louis. He had been on his way back home after checking on a billboard campaign in Pennsylvania. The dearth of billboards in the surrounding landscape seemed to fill him with profound despair.

Meanwhile the others were arguing over their next step. Macdonald, in his deep bass, was trying to shout

down any proposal that they do anything but stay where they were. "Dammit," he insisted, "it stands to reason somebody'll come along and find us if we wait long enough."

"Find our withering bones, you mean!" snapped Miss Hansen.

The policeman reddenned. "Listen here, Miss, if you wasn't a lady—!" he began, but the clamor drowned him out: "Pipe down!" "Who the hell do you think you are?" 'She's right—let's get going."

Bridger checked them. "We'll vote on it," he shouted. "All in favor? Carried!"

Macdonald threatened to stay where he was, regardless, but Aaronson's "Sure—go ahead. Myself, I should worry what happens to you," subdued him.

"How would this be?" the chemist suggested. "We'll find Zbradovski's brook and follow it downstream. If we follow it long enough, it'll empty into a river, and the river will eventually empty into a lake or the ocean. Long before that we'll have come to a town or a road or something. And that way we won't have to worry about wandering around in circles or steering by the sun. What say?"

No other suggestion was forthcoming from the crowd, so within half an hour the group, laden with crudely lashed bundles, was straggling off down the hillside. The afternoon was hot and muggy, the sky was cloudless, and some of the women were already having trouble with their feet and worrying about their complexions. Let 'em gripe, Bridger thought; maybe it will take their minds off the mess we're in.

As they neared the heavy timber, four shaggy forms about the size of bears rose silently out of a patch of tall grass and sat on their haunches, staring at the people with black, beady eyes. The women in front screamed and ran back, and those behind ran ahead to see what was up. Franchot swung into the branches of a maple with monkeylike agility. While the rest wondered whether to run, climb, or stand their ground, the beasts dropped to all fours and lumbered off, with no great haste, into the woods.

Scherer was besieged with questions. "I don't know!" he told them. "I never saw anything like that before,

and I don't think any other zoologist ever did either. From the shape of their skull I'd classify them as rodents, but nobody ever heard of a rodent the size of a man."

Whatever they were, the creatures had succeeded in stopping the expedition in its tracks. Most of the women wanted to go back to the open hilltop rather than venture into the unknown perils of the forest. Macdonald oddly enough, took the thing as a personal challenge to his courage and insisted on going ahead. With a firehatchet Toomey had brought from the bus he hacked off stout hardwood clubs for the men and a double heavy one for himself. His bravado brought on a new torment of protests, until at last Packard threw up his hands in despair.

"Ladies and gentlemen," he cried, "please. We'll never get anywhere if we stop every five minutes to argue like this. The trouble seems to be that we haven't anyone to make decisions. We ought to elect someone capable to run the show, and then abide by what he says."

"I nominate Mr. R. Nelson Packard as boss," Morelli piped up. "Second!" came from Toomey. Scherer growled, "Teamwork, huh! Well, I nominate Dr. Henley D. Bridger."

Bridger looked astonished. "Huh? What? Me? Just wait till I get you alone, Emil!" But he did not decline.

"How about speeches?" asked the Henley girl.

"Naw!" said Zbradovski. "You get that lawyer going and we'll be here all night. Let the fellows that nominated 'em have five minutes and then let's vote."

And so it was done. Morelli gave a eulogy of Packard's practical experience (he had once been a state senator in Ohio), his knowledge of public affairs, his standing as a Rotarian, and his general fitness for any and all public offices. When Scherer's turn came he dwelt on Bridger's brilliant scientific record, the fact that he had never been involved in any political scandals—with a hard look at Packard who returned his stare imperturbably—and the natural talent for leadership that he had already displayed. Listening, Bridger thought how irrelevant it all was. He didn't know any more than Packard what conditions they would have to face, what problems they would have to solve, or what resources they might

find among themselves for the solution. Nobody's mind was ever changed by a campaign speech, he decided.

It was soon evident that the educational bridge was going to plump solidly for Bridger, together with Wilson and Zbradovski, and that most of the others would vote for the lawyer. When the vote was taken, the last-minute defection of some of the chorines tipped the scales 16 to 9 in favor of Bridger. The loser came over, smiling blandly, and shook Bridger's hand. He'd have made a speech if the chemist hadn't stopped him. Since the election seemed to have diverted the objectors' mind from their fear of the forest, without further ado the party soon got under way again.

3 BLODGETT'S GAS

FORTUNATELY THE WOODS WERE OPEN, WITH LITTLE or no underbrush to obstruct their march. Bridger thought that he had never seen such trees. Giant white pines raised their limbless columns above an underwood of beech and yellow birch, maple, ash, and oak. The forest floor was carpeted with moss and fallen leaves and needles so that they often sank ankle-deep in the rich humus. Hot as the day was, here in the cool aisles of the forest the air was fresh and moist from the transpiration of millions on millions of leaves.

What little hope of rescue had lingered in Bridger's mind drained away as he saw the forest giants rising two hundred feet and more above him. This was nothing that a hundred years could produce, nor yet five hundred. It was a virgin forest, untouched by axe or fire for centuries.

Zbradovski had undertaken to guide them to the stream where he had met the super-coon, if that was what it was. He walked with Bridger at the head of the silent column. The stillness of the forest seemed to have thrown a cloak of silence over them, and even little Irving trotted quietly after his mother without speaking. Bridger deliberately held down his own pace and checked the young man's eager stride. They were going to have a long way to go unless he was seriously mistaken, and it wouldn't do to wear the weaker mem-

bers of the party out at the very beginning. A slow, even pace would take them farther and in the long run would get them to their destination faster than rushing.

After half an hour Bridger called a halt. His watch seemed to be in running order, and he had set it arbitrarily at noon when the sun seemed highest in the sky. The rope slings of their improvised packs were cutting into the women's shoulders, and he felt none too comfortable himself. After a brief consultation with Barnes and Scherer, he directed those of the men who had knives to cut squares of bark from one of the huge birches and make shoulder pads of it to better distribute the load. Feet were inspected for blisters, and Toomey's first-aid kit put to use where they were found. Napoleon to the contrary, the chemist reflected, an army—even a disorganized crew like this—marches on its feet.

As the afternoon wore on, a worried look grew on the blond youth's face. They had stopped to rest in a little glade left by a fallen pine whose trunk rose almost shoulder-high as it lay half buried in the duff of the forest floor. He came over to where Bridger was adjusting his shoulder pads. "We ought to have come to that stream long ago," he said. "I—I'm afraid I got us off on the wrong watershed or something. I don't know where we are."

Bridger sighed. "That's too bad, but there's no use getting worked up over it and scaring the women. We haven't died of thirst yet, and I guess we'll last until morning if we have to. We'll keep to the down-slope as best we can. Watch for a good camping spot, with some kind of shelter if you can find it—a ledge, or a blow-down that will give us some protection. If any of those things that made a pass at you are wandering around, I want them out where I can see them."

The sun was low and the woods were growing dark when they came out into a little clearing in the pines. Zbradovski, who was leading, stopped short. In the open lay the carcass of some small animal, and crouching over it was what looked like a large English bulldog with a black awning draped over it.

The beast raised its head, and those in front saw a fearsome countenance with huge ears and long, bloody

fangs grinning at them. The thing shrieked horribly and sprang straight at them. Marie Smythe, behind Zbradovski, shrieked even more loudly and jumped back, upsetting Ruby Stern who in turn bowled over Aaronson. The creature as it leaped unfurled its awning-effect into a pair of huge, leathery wings on which it beat its way round the clearing, swooping low over their heads, rising a little higher with each round until it disappeared over the treetops.

Scherer pulled the two frightened women off the breathless Aaronson. "Anybody'd think you'd never seen a bat before!" he growled. "Haven't you any self-control at all?" To which the Smythe girl retorted that she had seen plenty of bats, but none with a twenty-foot wingspread. "And neither have you!" she added pointedly.

This new scare had completely disorganized their march. It was late; it would soon be too dark to see where they were going; and everyone was tired. For most of them it would be the first night they had spent in the open, and not even those old woodsmen, Packard and Morelli, had ever slept out under conditions such as confronted them now, Bridger reflected grimly. The place wasn't bad; there was an angle between two ledges which would give them some protection, and plenty of wood from the fallen tree which, with the rocky outcrop, had made the clearing in the forest.

"All right, folks," he called, "we're going to camp here. Mac, suppose you and Sneeze get us some dry wood for a fire. Mr. Packard, you and Morelli are old hands at this sort of thing. Will you see that people find a comfortable place to sleep? I want to have a look at that carcass the bat was mauling—it looks as if it might be good to eat."

"Oh, no you don't!" broke in Scherer. "I want to examine that whatsit by daylight before anyone cuts it up, and see whether it'll tell us anything about where we are. You can have him for breakfast when I'm finished with him."

"I guess you're right, Emil," he admitted. "We may be hungry, but we're a long way from starving. Science can have its turn first—but save me a steak."

Later, sprawled with his back against a tree, his eyes

wandered around the clearing. Scherer was crouched by the fire, poring over the manuscript of Blodgett's famous paper. Franchot was telling the schoolteachers about the time he almost got a contract with MGM. The years were beginning to tell on the hoofer, Bridger thought, though he still retained a dry, nervous sembalance of youth that his makeup would recreate before the footlights. It must be harder to get by in the intimate quarters of a nightclub than on a vaudeville stage. The chemist felt a little sorry for him. Thank the Lord wrinkles and white hair weren't a handicap in science—if anything, they were an asset. How old am I? Thirty-six? No gray hairs yet, unfortunately.

Macdonald and Toomey were sitting by themselves. Bridger caught a snatch of the bus-driver's talk: "Yeah, my wife makes me eat 'em too. Say, Mac, you got any more cigarettes? I smoked all mine up; didn't think to save 'em . ." Packard was talking to some of the dancers with his insinuating friendliness. Bridger thought, he'd have a fit if I told him how much he looks like Trotsky since he had his hair and whiskers trimmed . . .

He was awakened by a yelp from Franchot, and sat up. Everyone else had gone to bed, if you could call it that; the hoofer, squatting by the embers of the fire, was acting as first sentry.

"There!" he quavered, pointing. "Eyes! They went away when I yelled."

Beyond the flickering firelight the darkness remained impenetrable. One by one the raised heads fell back. Then Barnes' harsh whisper broke the silence: "Jeepers —you're right! Look at 'em!"

Two balls of yellow-green fire glowed among the trees. As he watched another pair appeared, and then another. Franchot sprang to his feet and hurled a stick of wood into the darkness. The eyes blinked out, but a moment later they were back again, resuming their silent watch. Listening intently, Bridger thought he could catch the soft snap of twigs under prowling feet and the faint rustle of dry leaves. A shiver ran down his spine, and he pulled his overcoat closer about his shoulders. For a long time he sat watching the eyes

come and go in the blackness. However, they did not seem hostile, so after a while he dozed off again.

When Bridger awakened, he lay for a few minutes with his eyes closed. He'd had the damnedest dream—something about being lost in a primeval forest with a busload of all kinds of people. Nobody knew how they got there, and they'd elected him chairman. Uh. The bed did seem rather hard this morning. He slowly opened his eyes.

It had been no dream. The feathery branches of great pines arched over a clearing where scattered forms, huddled together for warmth or contorted into what passed for comfortable positions, were still sleeping. Scherer squatted by the ashes of the fire, thoughtfully dissecting the carcass of the bat's prey with his penknife and making occasional notes on the back of an envelope. He looked up as the chemist got stiffly to his feet.

"Oh, hello, Henley. It looks as if we had an overgrown member of the *Geomydae*—gophers to you—with modifications indicating probably bark-eating, non-burrowing habits. If you'll wait a minute while I get the stomach open—ah, bark sure enough! Don't ask me why a gopher should be the size of a bobcat and living in the woods, because I don't know, but it should make pretty good eating. Just as soon as I get the skin off you can go to work on him—or her, I should say."

The smell of roasting meat soon brought the rest of the party out of retirement, rubbing sore muscles, hauling at displaced garments, and combing dead leaves and pine needles out of hair and beards. There was very little hesitancy in the way they went at the dripping chunks of meat which Bridger and Scherer hacked off the spitted carcass. The Aaronson child rebelled at the unaccustomed food, and when his mother tried to reason with him, he set up such a screaming that Morelli said, "Aw, for Chrissake, brat, shut up!" Little Irving promptly walked over and kicked him in the shin.

"I'll fix you, you little—" the victim yelled, but before he could do more than raise his arm Mrs. Aaronson came down on him like a tigress defending her

cub. Bridger, trying to eat, inventory the party's belongings, listen to Scherer's theories about the local fauna, and answer foolish questions from half a dozen of the younger women, all at once, had to come over to pacify the disputants.

He called for attention, and got it with surprising readiness. "I think we need some more people to handle things," he told the crowd. "There are too many of us for rugged individualism to work very well. Suppose I make some temporary appointments, and then tonight we can confirm them with a regular vote and draw up a few rules to govern ourselves. Emil, you be vice-chairman. Mr. Aaronson, you're a businessman—you can be our Commissar of the Commissariat. You finish the inventory and keep track of all the junk we have or get. Mr. Packard, you're our magistrate. Mac, you're the cop. I suggest you start by arresting Miss Smythe for wasting a match on that cigarette, and bring her to trial before Judge Packard at once."

Marie Smythe's pseudo-British voice rose in indignation and alarm: "But you cahn't—I never heard of such—!" Macdonald was on her before she could run, and dragged her before Packard.

A slightly satanic smile appeared on the lawyer's face, and he spoke two words: "Twenty spanks!" The sentence was carried out with gusto, and the lady retired into the timber to weep with rage and mortification.

Preparations for the day's march progressed more smoothly now that the group was better organized. Toomey undertook to adjust the packs so that only the essentials were carried, and the men took heavier loads while the women had proportionally lighter ones. Everyone realized by now that their trek was not going to be over soon.

"Looks like we're ready to move, Emil," Bridger said at last to his new lieutenant. "Better bring along the larger bones of your what-is-it—they look like handy shillelaghs."

"Let's call it a gopheroid," Scherer suggested. " 'Gopher' for 'gopher' and 'oid' for 'something like'; in other words, something like a gopher."

"Which," added the chairman with a grin, "would

make that nightmare we saw last night a batoid, and you, my dear Emil, a manoid. Ouch! Damn it—those ribs are sharp!"

The morning was sultry, and the party was soon drenched with sweat. On they plodded, always hoping for sight of a stream. Twice they came on dry brook beds and rolled rocks hopefully in search of the least trace of moisture, but without success. Either it's a mighty dry summer or everything I've ever been told about forests regulating stream flow is hogwash, Bridger reflected. The air is moist, though; I suppose all these leaves breathe out water about as fast as the roots can drain it out of the soil.

By noon some of the group were really suffering from lack of water. Scherer and some of the women had developed muscular cramps which liberal doses of salt from the Aaronson's picnic kit did very little to allay. The rest stops grew longer and at more frequent intervals. At this rate, Bridger reflected, they were going to have to set up some kind of permanent camp and send out scouting parties before people began to break down completely.

About two in the afternoon the sky became overcast; by three a distant mutter of thunder was heard, and by four the rain was coming down in bucketsful. They huddled under the trees and shouted at each other between crashes of thunder. Nearby a giant hemlock came loose from its moorings and fell with a resounding smash, carrying several smaller trees with it. They kept fairly dry for about fifteen minutes; then the water began to trickle off the ends of the branches. But nobody really minded; the whole party was running around with cupped hands, looking for the fattest trickle to furnish them with a drink. By spreading out the red plastic raincoat belonging to Alice Lloyd in a fairly open place, they were able to accumulate a pool of rain water which filled the Aaronsons' thermos bottles and left a little for everyone to drink besides.

As the setting sun began to cast long shafts of light through the trees. Bridger led his waterlogged crew to the top of a slight rise. "This place may drain off a little quicker than the rest," he told them. "No, I'm sorry, Miss Friedman, I haven't any idea when we're

going to eat again. Bananas don't grow on pine trees, you know. Maybe we'll meet another batoid. Now, if anybody has any dry matches we'll start a fire."

Matches appeared from pockets and handbags. All more or less wet. Even the fishermen were no help. When several matches had been ruined by trying to strike them on damp books, Bridger said, "Here, we can't afford to waste any more."

"You can make a fire by rubbing sticks together," Zbradovski pointed out.

Although Bridger doubted it, considering the dampness, he had no intention of discouraging the young man. Barnes whittled out a bow, spindle, and bearing from a fallen branch, shyly admitting that he had practiced wood-carving as a hobby in his youth in Vermont. One of Morelli's rawhide boot-laces was commandeered as a bowstring.

Zbradovski went about his twirling with grim determination. He twiddled and twiddled; the sun went down; the stars come out, and still there was no result. A cool wind added to no one's comfort.

"This Boy Scout business is a lot of hooey!" Alice Lloyd complained. "We need a full-blooded Indian along with us to do it."

"You said it!" the Hooper girl agreed. "These big he-men—ah-choo!—are getting on my nerves."

Zbradovski grunted as he straightened up. "I quit! Somebody else want to try?"

Scherer said, "Abner, you take it—you've been in the field." "Yeah," replied Barnes, "but I always had sense enough to bring a match-safe along."

He twirled for a while with no better success. Scherer followed with equal futility. Then a voice wheezed, "May I please—ic!—try next?"

"Aren't you sober yet?" cried three voices at once. Wilson, with a trace of wobble in his walk, marched over to the apparatus, fumbled with it, got the bowstring looped around his thumb instead of the spindle, but finally had the device buzzing merrily. He sawed away; then Toomey exclaimed with awe in his voice, "Mother of God, if he hasn't got a fire there after all!"

Wilson twirled harder than ever. "Tinder, you guys!" he demanded.

"What's tinder?" asked a feminine voice. But Bridger was carefully poking shredded birchbark at the drill hole. Wilson twirled and blew and twirled some more. With his hair and whiskers still uncut he looked in the faint red glow like a gnome out of the *Niebelungenlied*. The first little yellow flames appeared and grew. Nobody said a word. Soon a real fire was crackling under the trees. It sputtered dismally and sent off clouds of black smoke, but who cared?

Bridger and Scherer, comfortably warmed, walked up the granite ridge that rose behind the camp. "If we don't get these folks some food there's going to be trouble," said the chemist "The men aren't so bad, but some of the women are beginning to kick already."

"I could do with a couple of steaks and a quart of good old Milwaukee beer myself," Scherer replied.

"That where you're from?" Scherer nodded. "I'm a native of St. Louis, myself," Bridger told him. "I could give you an argument as to which place produces the better beer. Learn anything from the paper?"

"Paper? Oh, you mean Blodgett's. I've been meaning to tell you. It clicks all right.

"It seems he'd been working on the aestivation process in *Protopterus* and *Lepidosiren*. As you may or may not know, the whole lungfish family has a screwy metabolism. For instance, during aestivation they get a urea concentration one per cent of which would kill most vertabrates. Also, while they're asleep in their holes in the mud, the katabolic process drops off asymptotically. There doesn't seem to be any limit to the time they can aestivate, or if there is it hasn't been found experimentally.

"Well, Blodgett was hunting for the regulating agent that controls the rate of katabolism, and he found it. He wasn't able to get the stuff pure, but he did learn something about it. It seems to be related to a family of obscure organic compounds, the hexyl-amino—amino—hell, I give up. My chemistry's not so good any more. Anyway, they're those things that fellow Kanzaki found back in '35."

"Yes, I know them," Bridger said. "Just another of the nine million groups of useless organics that chemists amuse themselves by inventing every year. Go on."

"Well, Blodgett fiddled around with these gunks, and he found that with certain ones he could inhibit the katabolism of almost any vertebrate to a greater or lesser extent. One in particular which he calls Number 34, seemed to induce indefinite aestivation with asymptotically decelerating katabolism in *Rattus* and *Cavia*. Not only that, but it had a lot of unlooked-for effects on the rate of a lot of inorganic reactions. Which is probably why our clothes and stuff haven't fallen apart.

"Number 34 is the stuff he had in that flask. At normal temperatures it's not a gas, but a liquid with a high vapor-pressure. I don't know whether he opened the valve on purpose when he saw the crash coming, or whether the crackup did it, but he certainly did us a good turn. The stuff naturally evaporated like nobody's business and saturated the bus, and eventually the tunnel too—that's why we smelled it. Anyway, here we are!"

"I see," said Bridger. "Then, for one thing, all bets are off as to how long we were asleep. The rate of growth of hair and nails would drop off asymptotically like everything else. But why didn't they dig us out? You'd think—no, I have an idea coming. Everything points to an earthquake and a severe one."

"I didn't know there were any active faults within hundreds of miles of here," objected Scherer.

"Neither did I; an inactive one must have suddenly decided to do its stuff. Those things have happened—there was a tremendous 'quake in the lower Mississippi valley in 1811. If our 'quake was sufficiently catastrophic, people would be so busy digging themselves out that they wouldn't have time to worry about one bus lost somewhere in the hills. And when they did get around to such things, they wouldn't take the trouble." He stopped short. "Say, Emil—do you see anything funny about those stars?"

The ridge was fairly bare of trees, giving a good view of the sky. Scherer stared up. "I see what you mean; I'm no astronomer, but I've slept out enough to have a pretty good idea of what they ought to look like. Let's see—where's the Dipper and the North Star?" He turned slowly through a full three hundred

and sixty degrees. "I can't see it—or anything that looks like it," he agreed. "That constellation looks something like Libra, but it's too long, and a couple of the bright stars are missing. Say—let's see if any of the gang know about stars."

Some of the group were still awake. Ruth Pierne said that she knew a little, "Because heaven knows I've spent enough time trying to explain them to my sixth graders."

Julius Aaronson, surprisingly, turned out to be an amateur astronomer of some standing. "I was the third man to report a new comet last year," he stated proudly. When he had climbed to the top of the ridge he announced at once that he had never seen an array of stars, either in charts or through the home-made telescope in his back yard, that looked anything like those above them. The teacher confirmed his opinion.

Scherer smacked his fist into his palm. "That clinches it!" he exclaimed. "It all fits. In just a few hundred or thousand years the constellations might be somewhat distorted, but they'd still be recognizable. But after a million years or more the stars would have shifted around so that you couldn't recognize a thing. And it would take at least that long for our familiar gophers, bats, and what-not to evolve into the animals we've been seeing. Probably the larger mammals of our day are mostly extinct. Same old story—a phylum gets too big and over-specializes, a change of climate or something wipes 'em out, and an order of smaller, less specialized animals grows up to take its place. Folks, we're an awfully long way from home!"

It took a little time for the news to penetrate. Aaronson was the first to speak. "You mean the world—our world—is gone?" he said timidly. "We can't get back again, never? And all our friends and relations should be dead?"

"Looks that way," Bridger told him gently. "I didn't have any family of my own, but my brother-in-law was a good egg, and—hell, I'd sort of like to have seen him again before—before this happened."

"I'd like to have seen my kids again," said Scherer. "My wife's dead—that's a dumb thing to say; they're all dead; have been for ages. Funny, when you come

to think of it—those kids must have grown up and had kids of their own—and they had kids too. I probably have descendants running around the earth now who are removed from me by a hundred thousand generations. Come to think of it, everyone on earth ought to be my direct descendant—and, for that matter, a descendant of everyone else in the crowd who left kids behind. We'll be a *grosser Spektakel,* like a lot of Java ape-men come to life."

"Speaking of people," Ruth Pierne said, "where are they all? I should think the air would be full of people's private autogyros. This doesn't look much like an H. G. Wells utopia to me!"

"Can't tell yet," Bridger replied. "Might be a wildlife preserve or something. Besides, with synthetic foods and hydroponics and such they'd be able to let marginal land go back to woods. Still I admit we ought to have seen some sign of human activity by this time. That is, if there are any people left."

"What a horrible idea!" the girl exclaimed. "What can we do if we're the only people in the world? Just think of crawling around in this endless forest the rest of our lives!"

"It's not a pleasant prospect," Bridger admitted. "However, we'll know more after we've been traveling a little longer. I doubt that we've come more than fifteen miles in the two days, if we've done that. Don't say anything to the others until tomorrow—and let me break the news gently. We don't want any nervous breakdowns."

4 AFTER A MILLION YEARS

NEXT MORNING THE FOUR TOOK THE OTHERS ASIDE, one at a time, and explained their discoveries. Reactions varied. Ronald Franchot said, "Hell—if I pulled a gag like that in the club, the manager'd tear up my contract!"

Morelli said, "You scientific guys give me a pain. I think you're making all this up just to cover up that you're lost."

Marjorie Tremblay said, "Oh, isn't it divine? Just

think of being off in these wilds and creating new lives for ourselves!" Scherer, who was not a sweet-tempered person, suppressed his urge to strangle the woman.

Toomey, after Ruth Pierne had explained the thing three times, walked off scowling in an effort to understand. Elizabeth Friedman threw a fit of hysterics and had to be sat on. Miss Hansen merely said, "Well, Mr. Aaronson, I'm glad to see that you're not making a fool of yourself about this the way some of us seem to be doing. You'd better help me get some more wood for the fire."

There was a little gopheroid left, but they made a cold and gloomy breakfast. This world of giant trees and strange beasts had grown very empty. It was a silent group that picked up its duffel and straggled away through the trees.

Wilson, sober at last, volunteered to carry the "sacred fire". They had gone about half a mile when he yelled, dropped his precious bundle, and did a war dance around it with his thumb in his mouth.

"I told you it would burn through," Barnes told him dryly. "If you'll all wait while I whittle a holder, I think we won't have any more trouble."

Bridger, slogging along at the head of the straggling column, thought, I never did so many pound-miles of baggage-toting in my life; I ought to be able to get a job as a porter come the next depression. And I'd like to choke the next one who says: "Aren't we ever going to find a stream?" It must be one hell of a dry summer; every ravine we've found has been bone dry. Wish Emil would quit whistling that Victor Herbert thing: doesn't he know anything else? Wait a minute—wai-it a minute! Do I hear water ahead, or am I getting delirious?

He quickened his pace, but said nothing; then behind him someone whooped: "Water!" The crowd stampeded, Bridger with the rest. Packard and Morelli were rummaging furiously among their belongings for their fishing tackle. They raced ahead, and by the time the Aaronsons—in the rear as usual—reached the bank, they were whipping the stream with their lines.

The brook was a good twelve feet across, shallow rifts alternating with long quiet stillwaters, and the fish fairly fought for the flies. Most of them were troutlike, though

Pilly pronounced them "rather more like landlocked salmon." The unfortunate little man had become pretty well unstrung and limped along at the tail of the procession with the Aaronsons, chattering uselessly to himself or weeping silently, but he still knew his fish. He scrambled happily along the bank from one to the other of the fishermen, examining each new catch. It was with difficulty that Bridger dissuaded him from floundering into the stream to fish with his bare hands, but he was able to identify a catfishoid and some smaller fry related to the minnows and sticklebacks of his own day. While the fish seemed not to have developed the gigantism of the mammals they had seen, they had changed in other ways which puzzled and delighted the little man. When Packard, trying his luck farther downstream, caught a hellbender which bit his fingers savagely when he tried to dehook it, Pilly and Scherer dissected the ugly creature with ghoulish glee.

Dry wood was gathered, the coals Wilson carried were gingerly uncovered and blown into flame, and soon the fish were roasting over the fire. The smell of charring skin was wafted down the breeze, but nobody seemed to mind. Presently, with stomachs full, everybody became more genial. Franchot appointed himself master of ceremonies; he tap-danced, hugged an imaginary microphone, pretended to croon, told stories of all ages and degrees of propriety, and led the party in song. A passing beast the size of a grizzly bear, attracted by the smell of fish, sat up in wonderment at the sound of "Danny Deever" wafting, not improved by distance, through the forest.

Little Irving, who had been rather subdued, began to take an interest in life again. The first manifestation was his stealing one of Morelli's precious trout flies, sneaking up behind Toomey, hooking a large ear and giving a sharp yank. The resulting riot ended with Irving, a handkerchief stuffed in his mouth, held by Zbradovski while Macdonald spanked him and Scherer and Toomey warded off Mrs. Aaronson.

Bridger had been consulting with Barnes and Scherer. It was obvious that the time had come to set up some kind of camp where they could get rested, put a few solid meals under their belts, and plan their future cam-

paign. Wandering on as they had been, from day to day, was getting them nowhere—if there was anywhere to get. They had water, there seemed to be plenty of fish in the stream, and there was an open glade among the trees where they would get the sun. He announced that the time had come to cut stakes and build a fence around the camp.

At once there were protests. Franchot, lying on his back beside the fire, said, "Aw, have a heart, guy. I'm so tired I can hardly move. Nothing's going to eat us—these animals run if you throw a stick at them."

Ascherer bristled. "You'll cut those stakes and like—," he began, but Bridger cut in: "Let me handle this, Emil. I admit I should have thought of it before, but I've been too worried about food and water. Maybe Ronnie's right about these animals being harmless, but this would be the first fauna I've ever heard of without carnivores. Sneeze's coon would be pretty nasty company in the middle of the night, if he was hungry and not too choosy about his supper. Anyway, I don't intend to let anybody be eaten in his sleep if I can help it."

It took a little more argument and persuasion, but by assigning turns with Toomey's axe and the few pocket knives they had, the chemist got a kind of brush-fence of fair-sized saplings cut and placed around the clearing. The barrier didn't look very strong, but Scherer reassured them.

"Most animals haven't sense enough to push through even a weak fence," he said. "They snuffle up and down looking for an opening, and if they don't find one they get discouraged and go away."

Bridger saw to it that the fire was kept up and the regular watch stationed. During the night there was a certain amount of stealthy coming and going in the forest and along the stream, and eyes stared at them out of the darkness beyond the fence, but nothing big enough to be dangerous came near them. Next day they loafed and nursed sore feet, while the fishermen explored the stream for more pools and Barnes whetted down one of the Aaronson's six table knives on a stone. By noon he had a fair point. With this, a cut sapling, and a strip of gopheroid hide he put together a very effective looking

spear. Others admiringly tried to imitate him, but made little progress before darkness fell.

The archeologist smiled his shy Yankee smile and said, "Too bad the rest of you didn't have the advantage of being brought up on a fa'am." With his help, the next day saw the addition of six useful weapons to the armory.

That night the men were taking it easy beside the stream while the women busied themselves with makeshift repairs to their garments. "I'm sorry, Ronnie," Bridger said, "but we need all the utensils right now for supper. If you have to shave, you can wait till later or use the creek. You look all right with a beard anyway."

Packard and Morelli reported that the terrain seemed much the same and the woods more open farther downstream, so the next morning they struck camp, marched, and camped again. Watching the strange constellations wheel through the sky around an invisible pole, Bridger confided to his lieutenant: "I'm worried, Emil—they're beginning to kick again. This time it's the food—they're tired of fish."

"Mac caught a beautiful big bullfrog this morning," Scherer replied wistfully, "but froggy didn't stay caught. You know how they ooze out between your fingers. Some of our friends don't seem to appreciate the necessity of getting system into your arrangements."

"That's another thing. You ought to be more tactful, Emil; or we'll have a revolt on our hands."

"Ummm, I suppose you're right. But how in the name of all that's holy can you be tactful with a lot of greenhorns and nincompoops like these? This afternoon I caught the Wilkins girl with a mess of toadstools she was going to put into the stew. I asked her whether they were poisonous, and she bleated 'Whah, Ah nevah thought of tha-at.' She might have killed us all!"

"All right, but you don't gain anything by getting their backs up. And Macdonald's bellowing 'Hey, fathead—what the hell you think you're doin'?' doesn't set so well, either."

"Oh, Mac's okay. He just thinks he's still a cop bawling out jaywalkers. But I'll speak to him about it."

"If we do get deposed, I know who'll be at the bottom of it," Bridger said thoughtfully. "Have you noticed

R. Nelson Packard going the rounds telling them all what great guys they are? There's your politician, stumping every minute. He's even made friends with little Irving!"

"When that brat is found with his neck wrung," growled Scherer, "you can put me at the top of your list of suspects."

"I've got him on the list—I've got him on the list,
"For he never would be missed; he *nev*-er would be *missed!*" he paraphrased.

The days passed with little excitement except for an occasional shaggy form half-seen through the timber, and a few roars and snarls as prowlers met near the camp at night. The creatures seemed wary, and a gang the size of theirs could not travel quietly enough to surprise any but the most preoccupied of animals. Bridger, for his part, was just as glad; he would have enjoyed a juicy roast as a change from their diet of fish, but he was just as happy not to have to kill any mammaloid big enough to feed them.

In the middle of their third day on the stream they found themselves on the inside of a fork where their creek entered a small river. To continue they had to wade. While the women retired into the bushes to dry their clothes, the fishermen wandered down the river bank. Soon Morelli's sharp New Yorkese floated back: "Hey, somebody, come on down here. We got an idear."

Packard explained: "You see these shallows? Well, suppose six of us take spears and go downstream, while the rest of you wade down from above, splashing a lot. We can stick the fish as they go past."

The idea was carried out forthwith, with much feminine shrieking. Pilly made a wild lunge at a big sucker and scored on Zbradovski's toe, and Wilson managed to bend the point of his spear double on a rock, but otherwise the plan was a huge success.

They rested and hiked again, and found a beautiful waterfall with a deep pool below it and rapids below that. Toomey asked Morelli to be allowed to try his luck with a fly-rod. The principles of fly-casting were demonstrated to him, and after hooking his clothes and the overhanging branches the requisite number of times, the bus-driver seemed to get the knack. For half an

hour he whipped the pool, while the others set up camp and the shadows lengthened.

Then he had a strike. For a few seconds he played the fish; then came a jerk that almost snapped the rod. He started to yell for instructions, but the shout stopped in his throat. He hurled the rod from him and ran like a deer. The waters parted, and up the bank sprang six feet of sleek brown fur, a short-legged, small-eared carnivore with its mouth, from one corner of which Toomey's line trailed, open in a spitting snarl. The camp was vacated in a matter of seconds.

The minkoid, if such it was, reared its angry length against the tree in which Barnes and Ann McIlwraith, the quiet chorine with the Scottish burr, had taken prompt refuge. "Looks so't of wistful, doesn't he?" observed the lanky archeologist, carefully drawing up his legs out of reach of the stretching beast. "Wistful foosh!" the girl retorted. "He's hungry!"

The creature sat down, tore the hook out of its lips, and began to examine the camp with the humping lope of the weasel family. He found the results of their fish-spearing adventure, which the Aaronsons and Miss Hansen had been preparing to smoke over the campfire, and proceeded to wolf them down.

"What'd I say?" the McIlwraith girl said smugly. The fish gone, the beast padded off downstream. People drifted back, among them the angler, still slightly green around the gills.

Bridger, who had been gathering firewood some distance from the camp, came running when he heard the cries. He arrived on the scene just in time to see the minkoid disappear into the undergrowth. Morelli tried in vain to reach the sunken rod with a pole, but the pool was too deep and current too strong.

"Tough luck, Dave," the chemist said. "I guess you'll have to dive for it."

"What?" Toomey demanded. "Me dive in there, with God knows what waiting to grab me? Not on your life!"

Bridger tried to reason. "If there ever was anything else in there, it's been scared out by this commotion," he pointed out. "And we've got to have that rod."

Toomey, standing on the edge of the pool, whirled belligerently to face the chemist. "Listen, shrimp," he

rumbled, "I ain't divin' in no pool for no fishin'-rod, an' no peewee professor is gonna make me. Get it?"

Bridger glanced around. Aaronson, Pilly, and Wilson, the only men within reach, would be of doubtful help in applying sanctions. Without further words he reached up and hit Toomey on the nose with all his strength. The big man's arms flailed the air; his foot slipped, and he toppled backward and vanished with a tremendous splash. When he came up, Bridger had armed himself with a stout club. Toomey paddled up to the steep bank; Bridger raised his club, and the ex-driver slipped hastily back into the water. He swam up and down, but Bridger was waiting each time he tried to land. Upstream was the waterfall; downstream were the rapids. The opposite bank of the pool was a sheer cliff.

Treading water, Toomey expressed fluently his opinion of Bridger and Bridger's ancestors for several generations. But the water was cold, and when he tried to shake his fist at the chemist, his head went under. Finally, aided by helpful comments from a grinning gallery, he retrieved the rod, returned it to its owner, and stalked off into the woods, muttering as he went. Packard followed him.

Bridger stared thoughtfully after the disappearing men. He had no illusions about his ability to handle the burly driver on equal terms. He hoped he wouldn't have to try . . .

The morning after the brush with Toomey, Bridger wandered down to the stream where Barnes was industriously shaving down a length of ash sapling.

"What's that, Abner?" he asked. "Another frog-spear?"

"Nope," replied the archeologist, "this'll be a bow I hope. It was Mildred Henry's idea. There's enough hide left to make some bowstrings. I don't say it'll work, but the girls want to try. Seems the Slemp girl did some archery in normal school, and she thinks she can teach the rest."

It didn't work; the arrows turned end-over-end in the air and came nowhere near the target. When Eleanor Hooper's efforts proved to be no more successful than the teacher's, the dancer tried to break the bow over her

knee. Scherer, who had been watching with amusement, exploded.

"What in hell's wrong with you women?" he shouted. "Never saw such a bunch of psychopaths—blowing up the minute anything goes wrong! Too damn bad we didn't leave you in the tunnel."

"Who do you think you are, you big lump?" the girl retorted. "You professors are just a bunch of dirty snobs. We do our best and all we get is a bub-bawling out!" She dissolved in tears.

Three more days of experimenting by Barnes saw the production of arrows that wouldn't turn somersaults in flight. They had wooden vanes in place of feathers, for no one had been able to kill a bird although they had seen a few heron-like species since reaching the river. Eventually Mildred Henry announced proudly that she could hit a two-foot lichen at twenty feet once out of ten tries, and some of the others were nearly as good.

Then a hot spell fell on them, and with the heat came a hatch of mosquitos. Bridger, watching them glower and snap at each other, thought: all we need now is one little incident to split us wide open. Good Lord—what can you do with an unpredictable gang like this? It would be bad enough without all these prima donnas of both sexes . . .

During the midday rest he heard voices raised in argument, then angry shouts. He arrived to see Franchot lying among the ferns, blood trickling from his mouth. Macdonald stood in the clear, slugging savagely at Morelli, Wilson and Zbradovski. Barnes and Packard were rolling on the ground, pummeling each other. Just then the college boy brought down the beefy cop with a flying tackle, and all three piled on top of him.

Bridger yelled "Hey, Emil!" and started forward. Somebody seized him from behind in a bearlike hug; a sweaty arm clamped over his face and forced his head back. He wriggled and kicked, but presently he was flat on his face in the bushes with both arms twisted behind him. He heard footfalls, more shouts and crashings and felt his wrists being tied. Then silence fell except for labored breathing.

From above came Toomey's familiar growl, "All right, Shrimp, get up." The agonizing pressure of two large

knees was removed from his kidneys. He rolled over on his side and struggled to a sitting position.

Pappa Aaronson was crawling by on all fours, blood dripping from his swollen nose. Scherer and Barnes had been trussed up with bowstrings, like himself. Macdonald lay where he had fallen. Franchot was getting up. Pilly hopped about on the fringes of the battleground, squeaking something about "outrageous behavior." The women stood in two groups, talking in low voices.

Toomey squatted in front of the chemist, grinning broadly through his thick black beard. "I ought to beat the bejasus out of you, after what you done to me, but I never did like picking on little guys." He reached down and tweaked Bridger's nose. "How do you like that, Mr. God Almighty?"

Bridger spat out an alder twig. "Will somebody please tell me what this is all about?" he asked. "What have you done with poor old Mac? Killed him?"

Wilson appeared at that moment with a hatful of water, which he sloshed in Macdonald's face. The cop groaned and tried to sit up, but was promptly hog-tied.

Morelli answered Bridger. "He's all right; just hit his head on a root. Ronnie here and I were throwing my knife at a tree. Mac came along and ordered us to stop for fear it would spoil the point. Well, one thing led to another and Mac used some four-letter words on Ronnie, and Ronnie took a poke at him, and then Mac socked him. That made us all kind of mad, on account of Mac's been pretty free with his lip lately, so we jumped him. Then the rest of you started to mix in, so we had to tie you up to keep you from massacring us."

Now we are in the soup, thought Bridger. He looked across to where little Irving was trying to poke a long grass-stem into Scherer's ear. Packard, straightening his clothes, was assuming his best Senatorial manner. "Ah-ump—I'm afraid this is going to make some difference in our arrangements . . ."

Bridger interrupted: "Before we talk about arrangements. I suggest that you untie us. This is a lot of damn nonsense, you know. I'll promise that none of us will start anything."

It was done. Eleanor Hooper's voice rang out: "We want Mr. Packard for chairman!"

"Yes," said the Lloyd girl, "we've had enough of the professors."

Packard's manner became positively buttery. "That's very nice of you girls, but of course we want to do everything in proper legal form. Let's see, now—I believe that the constitution we drew up provides for impeachment . ."

Bridger knew that his face was red. "Don't bother!" he snapped. "I resign!"

"So do I!" roared Scherer.

"Oh, come now," wheeled the lawyer. "Don't get angry. I'm sure we all want to do what the majority wishes. Suppose we hold another election right now and settle things."

"I nominate Nelson Packard." It was Morelli, of course. "Second!" Toomey responded.

"Ahump." Packard looked around. "Are there—ah—any more nominations?"

"I nominate Dr. Henley Bridger!"

Bridger started. It was the Pierne girl—the one who knew about stars. Funny—he hadn't noticed her much since that night. Come to think of it, she always seemed to be working on some job or other. Well—it's nice to know you have some friends.

"Seconded." The prim Miss Hansen spoke up.

The result, of course, was a foregone conclusion. The new chairman announced his appointments—Morelli as vice-chairman, Toomey for policeman, Wilson in charge of the commissariat. He kept the magistracy himself.

The deposed professors were left pretty well to themselves at dinner that night, although some of the teachers went out of their way to make conversation. As Bridger rolled up in his overcoat and tried to find a soft place on the ground, he thought, it took a million years to make an executive of me and a little more than a week to get me out of office. Stick to your test-tubes, Bridger . . .

5 . . . OF MEN AND BEASTS

THE MORNING FOLLOWING THE REVOLUTION FOUND the camp in embarrassed silence. Even Toomey's bluster and Packard's pomposity were somewhat subdued as

they set about breaking up camp. Gradually the professors dropped back to the end of the procession, where nobody would have to make a point of speaking—or not speaking—to them.

"Henley," Scherer said gloomily, "maybe we weren't so smart to resign in such a hurry. We played right into that old windbag's hands. If we'd put up half a fight, I'll bet he'd have backed down. Now God knows what will happen to the gang!"

"I've been thinking the same thing. We should have stalled until they had time to cool off. But when he said 'impeachment' all I could think of was how damn sick I was of trying to run this outfit."

"I've been thinking," the mammalogist continued. "We don't seem to be getting anywhere just following the river. How would it be if you and I took a little sidetrip to scout around? Let the angry passions cool off, as it were. Maybe they'll appreciate us when we return."

"Hmmm. Dunno—might be a good idea, but I'm nervous about leaving the crowd to R.N.P.'s tender mercies. Let me think it over."

That evening Morelli caught a twenty-pound fish. Everyone dropped what he was doing to watch the battle. Morelli's forehead was dripping as he watched the slender rod bend and twist. It took half an hour of the most skillful play to bring the brute into shallow water, where Zbradovski promptly speared it. The big salmon—as Pilly pronounced it to be—was only the first of a series of catches that had the fishermen busy for hours. The haul that was spread out on the bank after dinner was so rich that Bridger and Scherer decided to spring their plan.

Bridger explained it to Parker and the rest. "Every good general keeps scouts out," he pointed out, with a glance at "General" Packard. "If we find anything, we're all better off. If we don't, we can always get back to the river and pick up your trail. I am afraid that we'll need to take along all the fish you can spare. Yes?"

Pilly was snapping his fingers for attention like a goat-whiskered schoolboy. "I'd like to go too."

"What on earth for, Jim? We'll be moving just as fast as we can, to cover as much ground as possible while the grub lasts. You may have trouble keeping up."

"But," squeaked the little ichthyologist, "I've exam-

ined and classified everything that swims in this river, and I'd like to try another watershed. I'm only in the way here, anyhow. I do wish you'd let me go."

Packard, sensing the scientists' reluctance to burden themselves with a possible drag, saw a chance to exert his newly gained authority. "I see no reason why Dr. Pilly should not be a member of this scouting party," he asserted. "His special knowledge should be of great assistance to you. I am glad to appoint him a member of the committee." And get him off your hands, Bridger thought. Oh, well—maybe we can get him out of his jittery mental condition. I suppose it's worth trying anyway.

Barnes approached Bridger privately that night with a request to be included in the exploring party, but the chemist vetoed it. "We'd like to have you, Abner," he said, "but we've got to leave somebody here who knows something, and who can improvise things like those fish-spears when they're needed. Sorry, but you're elected. We'll be back in a day or two, anyway."

They set out just as the birds were tuning up for their four A.M. concert. The sound was about the same as Bridger remembered from his few trips into the woods; evidently the avifauna had not changed as radically as the mammalia seemed to have done. Bridger carried a spear and some odds and ends tied up in the remnants of a shirt; Scherer had a spear and a suitcase stinking powerfully of its contents of hurriedly smoked fish; Pilly had his bow and arrow.

All that day they marched toward the higher ground to the east, checking their course by Scherer's wrist-watch. He had set it at an approximation to noon on their first day out, and had managed to keep it running ever since.

An occasional rustling in the brush reminded them that they were not alone. Wary as the animal life of this era seemed to be, they could not afford to take chances with its temper. When something moved, they froze with spears ready and prayed.

Shortly after noon they surprised a large, rotund beast in the act of tearing open a rotten stump for ants. It rose on its hind legs, taller than any of them. "Everything seems to sit up and stare at you," Bridger mut-

tered. "Here! It's coming; stand together and back up slowly."

The beast advanced a few steps, baring huge incisors and making a noise like a deepvoiced sheep. It halted and repeated its strange bleat; two smaller editions bounced out of the ferns and got behind it, peering beadily around its legs. The men retreated step by step. When they were fifty yards from the giant rodent, it too began to back, kicking its young along with its hind legs. Then it wheeled and lumbered off.

"Whew!" said Bridger, "I hope we don't meet any more of those. It reminded me of Mrs. Aaronson and Irving. We—hey, what's wrong with you, Jim?"

Pilly was sitting with his back against a tree, his face white and glistening with sweat. "I—I'll be all—right in a minute," he quavered. "Just—my nerves aren't as good as they used to be."

"Oh, for Christ's sake!" Scherer blurted. Then—"Sorry, Jim, it isn't your fault. Buck up; it'll be time enough to worry when one of the things really does take after us." Between them he and Bridger managed to get Pilly back on his still wobbly legs and started on his way.

The ichthyologist was not a cheering supper companion. He blubbered about how he would never again see his snug home in New Rochelle—never again sail his beloved sloop on Long Island Sound—never again visit the Aquarium . . .

That night Scherer proved that, in addition to his other accomplishments, he could sleep soundly in the crotch of a tree, but the other two had a miserable time. Bridger, squirming on his perch, called over to Pilly, "By God, Jim, if you let out one more complaint about the mosquitos, I'll break every bone in your body!" But he couldn't blame the poor devil. They must be eating him alive.

Late in the second day they panted up a rocky hill, and found themselves looking from the summit of a cliff. Before them the forest thinned away to patches dotting the farthest rises. In the middle distance shimmered the blue arms of a great lake.

Bridger happened to glance down. Instantly he hissed, "Back, both of you! No noise!"

"Now," he murmered, "let's pull up some weeds for

camouflage and crawl up to the edge. I don't know what those things down on the ledge were, but they looked entirely too big and active to fool with."

A series of ledges ran along the base of the cliff, below which the hillside sloped away steeply into the forest. The creatures Bridger had seen weighed two or three hundred pounds apiece, with long legs, hairless tails, sharp noses, and big round ears. Scherer whispered, "Anyone got a piece of cheese? They're just overgrown rats, or I miss my guess."

About a score of the things were in sight, two thirds of them full-grown. Two of the younger ones were playing catch with a ball or lump of something on the lowest ledge. They showed remarkable form, until a fast throw caught one in the pit of the stomach.

The injured creature caught up a dead branch and rushed shrieking upon the other. As they rolled about, scratching and biting, a larger ratoid dropped on them from above, hoisted the attacker by the scruff of its neck, and soundly cuffed its backside. In a few seconds the infants were back at their game as if nothing had happened.

A ratoid trotted out of the woods on three legs, carrying something wrapped in hide, climbed to a ledge, and disappeared. Others slept in the sun or ate. One was giving itself a sponge-bath with a piece of moss which it dipped in a crude wooden basin.

Then a big grey beast trotted out of the woods. It had a bearish head, a curiously wide, flat body, and phenomenally long claws. "Family *Mustelidae,* subfamily *Melinae,*" Scherer muttered. "That's badgers, if you've forgotten your taxonomy."

One of the ratoids spotted the intruder and gave a sharp squeal. It picked up a club and pounded a short section of log that lay on the topmost ledge. Ratoids boiled out of the lower caves and dragged their squalling infants to the upper levels. Others ran about brandishing crude wooden implements.

The boulders strewn so thickly along the ledges evidently were not there by accident. As the badgeroid scrambled to the lower ledge, two ratoids thrust stout poles under a huge block of granite and levered it off

the edge. Others hurled smaller stones—mere fifty-pounders—with both paws.

The biggest boulder missed, but several smaller ones struck their target with resounding thumps, and their impact rolled the badgeroid off the ledge. Bawling with fury he tried again; another shower of rocks hurled him back. He got to his feet, blood dripping from his muzzle, and limped off into the woods.

"Evidently Alonzo doesn't have young ratoid for lunch today," Bridger murmered. "Wonder what they'd have done if he'd come down on them from above?"

"We could find out," Scherer told him, "but I wouldn't advise it. They ought to have a sentry up here. Maybe they have, and he went for a drink of water."

"I wish we'd go someplace else," complained Pilly.

"Maybe you've got something there, though I'd like to watch these critters at closer range for a while. Rats were smart where I was brought up, but never that smart. Let's go."

"Where are we going?" asked Pilly as they hurried back down the hill. "Maybe we could circle around and get to that big lake. I'd like to see what sort of fish it has—I think we crossed a divide back there, and perhaps—"

"Sorry, Jim, but that's out," Bridger interrupted. "The grub won't last much longer, and I want to see how the gang has been making out. Anyway, it's likely that the river we were on empties into the lake, so you'll have plenty of time to see it later."

Pilly seemed slightly crushed, but he submitted. After consultation, it was agreed that they would try to reach the river some distance south of the point where they had left it. "The gang doesn't travel very fast," Scherer pointed out, "but they'll have had four days start on us if we go back the way we came. Besides, the land looks flatter to the southwest, and I'm tired of climbing hills."

Flatter it was. The next day was hot and dank, with an overcast sky which made it wellnigh impossible to get a bearing with the watch. They used the woodsman's trick of taking a long sight on a prominent landmark and progressing to it, then lining up a new mark with their back-sight, but the flat terrain and deep woods made it difficult to see far ahead. Presently they blun-

dered into a swamp, and spent hours pulling their weary legs out of mudhole after gurgling mudhole. Once Bridger went in up to his waist and had to be hauled out with a length of vine. Insects of all sizes tormented them, some big enough to draw blood when they bit.

A tree-crowned island drew them; they floundered toward it with the intention of eating their meager lunch, eked out with a hatful of raspberries which Pilly had found. Scherer, in the lead, whooped joyously as he reached dry ground. "Hey, you guys! See what I found!"

The others scrambled after him. Among the trees were scattered fifteen huge nests, each containing a pair of eggs the size of ostrich eggs. Without further ado each man pounced on an egg, jabbed a hole in it, and was soon noisily sucking the contents.

Presently Scherer threw away the shell of his third egg and wrung the goo out of his beard. He sighed happily. "Never thought I'd find a raw egg better than dinner at the Waldorf," he observed. "That's the first thing I'd call real food that I've had since we started. Wonder what kind of bird—oh Jesus, look what's coming!"

They jumped to their feet. A lithe, fox-colored rodent the size of a tiger was trotting through the swamp toward them. It saw them, rose on its haunches, flipped a long bushy tail over its back, and charged with a thunderous snarl.

Bridger shouted, "Take to the timber, boys!" and swarmed up the nearest maple. Scherer in another tree, was hardly slower. But little Pilly, after staring foolishly for three precious seconds, tried vainly to climb a towering beech that had no branches within fifty feet of the ground.

Bridger felt his heart turn over as the red beast reared and hid from view all but Pilly's skinny arms, hugging the tree-trunk in desperation. He heard the old man's shriek; heard his own voice, oddly shrill, crying, "Jim! For God's sake"; and Scherer's anguished bellow. For a fleeting instant thoughts of attacking the animal raced through his mind, but before he could move he saw with horror that the squirreloid had Pilly down and had cracked his skull like a nut with its huge incisors.

The beast proceeded to devour its prey, while the two scientists, perched in their tree-tops too high for the

oversized rodent to reach them, watched and listened in grim fascination, too sick to speak. There was nothing they could do. Bridger heard the mammalogist noisily losing his three eggs, and wished miserably he had never been born.

The creature had finished its meal and was sitting up, polishing its whiskers, when another noise attracted its attention. Something was coming plop-plop through the swamp. The men saw a flash of color through the branches. The thing stopped, squawked, and came hurrying on. In a moment they saw a huge green and yellow bird with a body the size of an ostrich's, but shorter legs, a short neck, and an oversize head with an enormous hooked beak. It held out stubby wings as it ran.

The squirreloid dropped to all fours and stood its ground, chickering defiance. The bird gave a scream that hurt the men's eardrums and sprang to the attack. Several green feathers flew into the air and gyrated slowly earthward, but the bird had avoided the beast's slashing teeth as quickly as the other had dodged its beak. They circled, and the big bird screamed again. Answering screams and a splashing and crackling in the swamp told of the approach of reinforcements.

The squirreloid leaped aside; then rose and tried to hug its foe's thick neck. The bird whirled on one leg, and the two men heard its foot thump against fur-covered ribs. The beast was bowled into a nest and arose smeared with egg, its grinning mouth full of green feathers.

Then a score of the birds—parrotoids, Bridger thought—arrived with an appalling racket and fell upon their enemy. Red fur and yellow and green feathers flew before the squirreloid rolled free of the melee and fled. Several parrotoids pounded off in pursuit, but the rest remained, screaming and cackling their fury.

Presently one, cocking its head to one side, spotted Scherer on his branch. Its shrieks brought the others around the tree on the double.

For a while they simply yelled and stared, first with one beady eye, then the other. Then one began to hunt around purposefully. Finding a stout limb at the right height, it hooked its beak over and began to hoist itself, inch by inch. Up it came, with slow, cautious, mechanical

movements, testing each branch before putting its weight on it.

Bridger, scarcely daring to breathe, had inched his way into the thickest foliage he could find. He moved his head gingerly until he found a gap in the leaves that enabled him to keep Scherer's tree in sight.

The bird continued its slow-motion progress, stopping every few minutes to consider how to negotiate the next branch. Each time it stopped, its fellows on the ground broke into a chatter of comment and seeming advice. However, the trunk ended in a jagged stub twenty feet above his head. When he reached it, there was nothing for him to do but select the largest of the branches that radiated out below the stump, crawl out along it as far as he dared, and wait.

An hour dragged by as the parrotoid worked its way up the trunk. Arriving at the final crotch, it stared at Scherer for a while, first with one eye and then with the other, squawking angrily to its mates below. Then, taking Scherer's branch in its beak and two lower branches in its talons, it began edging out from the trunk.

Keeping about ten feet between himself and his pursuer, Scherer backed out along the limb, which bent more and more under the combined weight of man and bird. As the branches thinned the bird moved more cautiously, and when they ceased to afford a good grip for its claws it halted. By this time Scherer was dangling like an oriole's nest from the end of his branch, sweating harder than ever he had in the Malay jungles.

For a while things remained as they were; the parrotoid was apparently content to stay where it was all afternoon. Then Scherer heard more squawking below, and unhappily observed that another of the big birds was climbing an oak whose branches came close to his precarious refuge. The second parrotoid arrived at his level and started out along two thick boughs that passed a scant four feet below him.

The bird moved with infinite slowness, bracing itself with half-spread wings. As it approached, the branches on which the parrotoid was teetering were slowly bending with its weight, every foot it advanced causing a drop of a few inches. By the time it was directly below him, hunter and hunted were a good twelve feet apart,

and the bird was nervously clinging with beak and claws to its none-too-secure perch.

It tried to reach him with its beak, but each time instantly grabbed one of its own branches as they swayed under it. It screeched, but the sound merely hurt the man's ears. Finally it commenced its slow return trip.

When it reached the trunk, Scherer had a moment of apprehension lest it climb higher and try coming out on another branch. But it started down without hesitation.

The sunless sky had begun to darken when a quivering of Scherer's branch told him that parrotoid number one was also taking its departure. When it reached the ground he started back to the trunk. At first he could not unclasp his hands from the bough, so long and so tightly had they been clenched. He found a satisfactory fork, strapped himself in it with his belt, and prepared to spend the night. The birds had settled down on their nests, all but those whose eggs had been destroyed, who wandered about squawking disconsolately.

By the time the morning sun had dispelled the mist, the parrotoids were up and carrying on the discordant conversation. By seven o'clock by Scherer's watch, they were wandering off across the swamp. Some cocked their eyes up at the trees, as if vaguely remembering the to-do of the night before, but hostilities were confined to a few meaningful squawks.

When the last bird had disappeared, Scherer called softly, "Hi, Henley! You still alive?"

There was an answering rustle of leaves, and the chemist's worried visage peered out through the branches of a nearby tree. "Yes, damn it," he replied. "What surprises me is that you are. I thought the pretty polly had you for sure. What say we pull foot?"

"Can't be too soon for me; I'm coming down now. Hope I wake up and find myself in good old Milwaukee! Uh!" A branch cracked under his weight and he grabbed the trunk.

Grimly the two scouts gathered up their scattered belongings which the parrotoids had picked over thoroughly, and examined what little was left of James Oglethorpe Pilly. They salvaged his shoes, pocket-knife, pencil stubs,

and thick old fashioned gold watch. There was nothing more they could do . . .

6 MANDATE OF THE PEOPLE

MARJORIE TREMBLAY LOOKED UP FROM THE BLACKBERRY patch which she was industriously cleaning of fruit and saw two dirty, bedraggled-looking men limping toward her. She shrieked! "The professors are back! The professors are back!" and spilled her berries all over the ground. Shouts answered her, and the sound of people running.

Well, Bridger thought, I never expected such an enthusiastic reception after only five days. I suppose the girls mean well, but I do wish they wouldn't all try to kiss me at once. Makes me feel like such a fool . . . What's the matter with them? They look as if they'd been through the wringer. Dave Toomey's more morose than ever, and where did he get that black eye? He realized that he was being asked a question, and saw in their faces that they knew the answer.

"He's—dead. An animal got him."

Now Packard appeared. Good Lord, thought Bridger, he looks old enough for the Supreme Court. Something's gone wrong.

"*Please* go away, everybody," begged the lawyer. "I want to talk with Professor Bridger." He seemed to have lost a good deal of his usual assurance. "Well, Henley . . ," he hesitated, "we're all very sorry to hear about Dr. Pilly. But we've—we too—well, the Aaronson child isn't with us any more."

"Dead?"

"Yes." Packard stared at the ground. "You know that barricade you always insisted on our building? Well, we thought we could get along without it. Some of the crowd did, anyway, and they saved the trouble of cutting firewood by burning what the rest brought in for the fence. After that nobody took the trouble.

"Then, night before last, we heard a shriek, and before we could do anything a big animal shaped like a racoon—like the one Zbradovski told us about—was making off with the boy. We chased it through the

woods until we lost it. I tell you, we hunted all over. Charley got lost and didn't get in until morning.

"Finally, this morning, we found the place, up-river a way, where the brute had made his meal. He'd evidently peeled the clothes off the little fellow's body and dipped it in the water, the way coons do, before eating him.

"It certainly knocked the stuff—I should say, the spirit, out of the Aaronsons. We all felt bad about it, of course, but that kid was their pride. I know that nobody else liked him much, but he wouldn't have been such a bad kid with the right kind of discipline."

He paused to mop his forehead with a ragged piece of shirttail. "I tell you, gentlemen, this is the longest five days I ever spent! That afternoon, after you went, Dave Toomey and Alice Lloyd—you know, the fresh one—wandered off in the woods. Dave was our new cop, you know. Well, accounts differ as to what happened. Alice claimed that Dave attempted what the papers call criminal assault, and Dave says she led him on, and he was just—ah—striving to please, as it were. Anyway, she yelled for help, and we all came running, and there was another beautiful battle before we got him down. I took one in the solar plexus that knocked all the wind out of me.

"Of course, we had to give Mac back his old job. He may be tough, but he's not stupid, thank God!

"Then Mabel Slemp ran something into her foot, and it got infected. Mrs. Aaronson and the teachers seem to have fixed it up all right, but I was scared stiff for a while. You know there isn't anyone in the crowd who really knows anything about medicine. And Zbradovski's been complaining about a toothache. And the Hooper girl caught cold, I think from too much swimming, and she's been running a slight fever. I don't have to tell you gentlemen—" Packard's tired eyes twinkled slightly—"that you get blamed for anything that goes wrong in your administration, whether it's your fault or not.

"But it hasn't all been disaster. We finally made some arrows that wouldn't actually fly in a circle and hit the archer. And it turned out that nearly every man has been carrying a bunch of useless keys around

in his pockets, so we've been grinding them down for arrow-points. Most of the women have nail-files, too, but they insist that they need them. Anyway, we've made about a dozen good points.

"One thing that went wrong was when the girls were practicing shooting about sundown, and another of those big bats flew down the river. They'd fired off nine good arrows at it before I could stop them. None of them came anywhere near the bat, of course, and I doubt that they'd have eaten the thing if they had killed it. Anyway, Charley and I waded and swam half a mile downstream to fish out five. We never did find the rest.

"Well, gentlemen, that's the story. If you want to go back to the way we were before, you won't find me hard to persuade. You might even call it a mandate of the people. After this you stick to the jobs that you're good at, and I'll tend to those I'm fitted for."

Not much of an apology, Bridger thought, but I suppose that for a lawyer to admit he's wrong is harder than faking experimental data would be for me. I'm glad he made the first move, before someone organized an indignation committee; it ought to keep things smoother.

There was no difficulty about the change in government. No opposing nominations were made. Mortimer Wilson said, "If friend Julius wants to spend his time worrying about what happened to Miss Hansen's hairbrush, I won't object. I wouldn't have the commissariat job back as a gift. I wonder where I ever got the idea that a mess sergeant has things easy? I'll stick to brainwork after this. How about a speech, Henley?"

There were echoing cries of "Speech! Speech!" from the women's circle. Bridger stood up and cleared his throat. "Thanks a lot, folks. I think we'll get along better this time. At least, I'm willing to try, and I hope you are too. We can't afford any more accidents. That means discipline, and everyone keeping his pet foibles in line for the good of the rest of us. That goes for me too. I'm not talking this way because I think I'm Jehovah, but because we can't survive any other way.

"There's still a chance that we may come on some kind of civilization, but I'm afraid it's growing slimmer

every day. That means that one of these days we're going to have to put an end to this glorified camping trip and settle down for good—for the rest of our lives, in fact. If you folks won't discipline yourselves and each other, no amount of my talking is going to do any good. We'll simply die of starvation and disease or be eaten by wild animals.

"One more thing. It's come to my attention that Sex has raised its ugly head among us at last. Now, I've nothing against Sex under the proper circumstances. But please remember that none of us is an obstetrician, unless Abner had some experience with livestock when he was a boy on the farm. I'm not preaching morals; I'm just pointing out one practical little fact. A word to the wise ought to be sufficient."

Packard and the professors talked late that night. "So you think we ought to cut cross-country to this lake of yours, eh?" the lawyer said doubtfully. "Ummm—I see your point, all right, though the gang isn't going to like having to pack fish for two or three days. Still, a little variety might do them good."

"There's more grass there and fewer trees, so the fauna ought to be richer," Scherer pointed out. "We could do some real hunting in that kind of country. There's no real nourishment in these damn fish—with all apologies to your specialty, Nelson, which I admit has probably kept us alive so far. You can see for yourself that the gang are looking pretty scraggly and peaked. They need meat."

"Yes," added Bridger, "and another thing we want is to learn all the local geography we can. I've been making notes, and I have the beginnings of a map."

"What?" Barnes came out of his silence. "Let me see it—shucks, Henley, that'll have to be done over. Don't want to hurt your feelings, but I've been making maps for years."

"Well, anyway," said Packard, "we can't start for a few days, until the sick ones get well and we've accumulated enough surplus food to last us. This trip won't be any picnic."

The days passed and all worked doggedly to keep the food coming in. So far had their civilized inhibitions been dissipated that, when Mary Wilkins, egged

on by Barnes, produced a cicada stew one evening, nobody even gagged, though there were remarks about, "The American Association of Bug Eaters."

At last the cross-country trek began. They were ready none too soon, for that section of the river had been largely depleted of fish and the birds and small mammals had begun to disappear from the vicinity of the camp as a result of being persistently, if not very effectively, hunted. Lord, thought Bridger, how am I ever going to get them through a winter if we can't get a bigger margin of food ahead than we've been doing? That means big game, and plenty of it. I hope Emil is right about the open country around the lake . . .

It was slow going with the crowd to herd along, though they were making better time than they had at first. Bridger, warned by what had happened on their trip of exploration, kept scouts well ahead of the main party. He didn't expect trouble from anything that saw them first, but he didn't want to blunder on anything that might decide it was being attacked and proceed to work off the chip on its shoulder.

On the third day Wilson, who was in the lead, suddenly came upon a great feline beast somewhere between a leopard and a tiger in size, with the familiar grey-and-black striping of an ordinary alley cat.

He yelled, "Hey, c'mere quick, help, murder!" and stood his ground, dropping his bundle and gripping his inadequate spear in shaking fists.

Kitty was as surprised as Wilson for a moment, but hunger soon made up its mind—or rather, its instincts—for it. Its upper lip twitched, showing a formidable array of tusks, and it lowered its body almost to the ground and slid snakelike toward its intended luncheon.

Wilson had done publicity once for a lecture by a man—a Lithuanian or something—who hunted jaguars with a spear in South America. The idea was to get them to spring at you, then impale themselves on your spear. The idea seemed silly, but he could think of nothing else to do, so he drove the butt of his weapon into the soft ground at his feet and aimed the point in the general direction of the approaching cat.

Sure enough, kitty sprang—but not on the spear-

point. It landed short, and with one sweep of a large paw sent the spear gyrating into the treetops.

As it did so there were shouts from behind. An arrow swished harmlessly through the foliage, and something sharp and heavy drove into the seat of Wilson's pants. He jumped three feet straight up with a screech that sent the startled catoid back on its haunches.

By now the rescue party was within range. Spears zipped through the branches. One struck in a tree-trunk a scant six inches from Wilson's head; two more went wide of the mark and slithered off into the brush; but the fourth caught the crouching animal where its neck joined its body and stuck there.

Kitty gave a yowl even louder than Wilson's, and danced round and round on three legs, clawing frantically at the thrashing shaft of the spear. It finally came out, and the beast, dismayed by the arrival of such overwhelming reinforcements, trotted off into the forest, stopping every few steps to roar back defiance.

Wilson had meanwhile extracted the spear from his own person and was waving the bloody weapon over his head, demanding at the top of his voice to know what unprintable God-damned canine-descended imbecile had tried to murder him. Macdonald finally cleared his throat apologetically. "Geez, Mort," he said, "I'm real sorry, but I couldn't see only a little of that damn beast between you and that there tree, and I figured unless I did something quick it'd all be over. Anyway, if you hadn't let out such a swell yell the brute might have jumped you."

Wilson sputtered a little, but the unusual spectacle of the ex-policeman being conciliatory was so surprising that he soon calmed down enough to accept Macdonald's apology. The spear he kept, since his own had disappeared into the trees.

"I've got a sort of personal interest in it, anyway," he pointed out with a grin.

"Well, Emil," said Packard, "I suppose you've got this latest animal all classified and catalogued. What are you going to christen it?"

Scherer was standing with a bunch of leaves in his hand, rubbing them thoughtfully between fingers and thumb. He had long since run out of pipe tobacco, and

had been experimenting with assorted weeds. Barnes had tried unsuccessfully, to get him to try various kinds of bark, claiming that most Indians used it under the high-sounding name of kinnikinick. The principal result of his experiments had been a brew which Miss Hansen pronounced an excellent substitute for tea.

"Think I'll call it a Mehitabeloid," he decided finally. "We can stand a few references to the classics in our new taxonomy, and I don't suppose it will ever get into the literature anyway."

Bridger had swung far to the south of their previous route to avoid the ratoids and parrotoids. The going was a bit harder than the professors had encountered, for the country seemed to have been burned over in the not too far distant past, leaving a zone of dead stubs and blow-downs, effectively interwoven with blackberry bushes, which made the most effective barrier they had yet seen.

Barnes eyed the tangle thoughtfully. "Could be lightning, of course," he said as Bridger came up. Much the same ideas had been passing through the chemist's mind, but he did not want to arouse any false hopes. Forest fires back in the world he knew were nine times out of ten started by careless people.

Beyond the blow-down the woods grew thinner and the party soon came to the edge of the promised open country, with tall grass growing to their shoulders among scattered clumps of trees. Bridger chose the largest hill he could see and led the march to its top. From the summit they could see the prairies stretching away for miles between the projecting tongues of forest. In the distance were slowly moving specks that were animals of some kind—undoubtedly herbivores which, if they could kill one, would make good eating.

"Look down there—to the left," Barnes told them. "Looks to me like something lying in the grass, and something smaller moving around it. Might be a young one whose mother just died. If it is, it can't do us any harm."

Bridger squinted in the direction indicated. "Maybe you're right," he said. "We might wander down a little closer and see."

The moving animal, when they were close enough to

see, was even larger than a wolf, which it vaguely resembled. It looked more like a huge yellow mongrel dog, with a strong strain of German shepherd. And it was not mourning the death of a parent; it was tearing at the haunch of a carcass . . .

It halted its meal abruptly and gave a deep warning bark.

Bridger turned to his party. "Maybe we can drive the thing off," he said, "but there's a good chance that it'll show fight. I wouldn't risk it, except that we need the hide and meat. Who thinks we ought to try?"

"I dunno about the rest," asserted Macdonald, "but for a real steak I'd fight Rin-tin-tin bare handed." There was a chorus of agreement, so Bridger organized the crowd into a phalanx, spears in the front rank, and advanced upon the foe.

The dog stood over its kill and growled and snarled and barked, first menacingly, then furiously, then frantically. The spears came nearer and the people howled and screeched. When they were barely twenty feet away the dogoid began to give ground, foaming and snapping its great jaws in rage. But it's courage was not up to attacking twenty-odd strange upright creatures that did not seem in the least afraid of it. Finally it withdrew to the edge of a patch of woods, sat down, and whined pitifully as it watched them swarm over its dinner.

Scherer was scratching his head. "Well," he growled, "this beats anything I've seen yet. Size of a husky mule, with ears twice as long; rodent teeth; no sign of a tail; and one big nail that's neither a claw nor a hoof on each foot. I don't know where to put it."

"Why not the *Leporidae?*" asked Enid Hansen.

Scherer looked at her in admiration. "I used to think I was a pretty good mammalogist, little one, but maybe you've got me beat. A rabbitoid, of course—or maybe a hareoid, if you want to be technical. I'll be able to tell you more after I get a look at the skull."

The grey-haired principal smiled. "When you've seen as many rabbits as I have in my kindergartens every Easter, you'll be able to tell them blindfolded. It's odd, though, that it should be so much bigger than the dog.

Evidently the various species haven't changed in proportion."

"Our biggest animals have always been herbivores," Scherer told her. "There's more for them to eat. Carnivores have to be reasonably fast on their feet to eat at all. In our own time the biggest carnivores were the Alaskan bears, which were about as omnivorous as we are. I suppose the tiger was about the biggest strict meat-eater we had."

Two hours later the blood-red sun was dropping below the treetops. Bridger, with Zbradovski's help, was dissecting the flayed carcass of the super-rabbit with Morelli's hunting knife while Scherer stood over them and made entries in his painfully crowded notebook. Aaronson squatted in the grass and worked a patch of green hide into the semblance of a pair of moccasins. As he skillfully measured and pared and punched with a pocket-knife he seemed happy for the first time since the death of his child.

"They won't be so good like they was made by an Indian," he explained, "but if you stuff grass in them they will be better than nothing. No, Mamma, you can't have them. We draw lots for them like Professor Bridger says. Later maybe we get enough for all to have."

Mrs. Aaronson subsided. Her loss had taken much of the fight out of her. Moreover, the life they had been leading had reduced her bulk and hardened her husband's muscles until they stood more on an equal plane physically. There was no reason to suppose that blows had ever been exchanged between them, but Rachel Aaronson's physical preponderance might have had something to do with her mental domination of her husband. Gradually, as his skill and patience made a place for him in the little community, the balance was shifting.

No Neanderthal hunter squatting on the banks of the Dordogne ever devoured his prey with the enthusiasm with which the people gorged themselves on rabbitoid. "Eat it up, folks," Bridger told them. "It'll spoil if we try to keep it very long, anyway."

Scherer divided his attention between the roast and his notes, to which he was adding assiduously. The dis-

tribution of fat on the creature's back and flanks was far more characteristic of the hoofed animals of his own time than of the rabbit family, he pointed out.

"Maybe it's a cross between a jackass and jackrabbit," Wilson suggested, but the mammalogist refused to reply to such an absurdity.

7 RECEPTION COMMITTEE

THEY REACHED THE LAKE ON THE EVENING OF THE FOLlowing day. Bridger leaned against a convenient tree and listened without pleasure to Marie Smythe's gushing about the beautiful scenery. The vermilion sunset and the setting of blue hills were beautiful, undoubtedly, but Henley Bridger's scientific mind could see no reason for jawing away about something that anyone could see for himself. If you had information to impart, or a theory to expound, or a joke to tell, there might be some excuse for talking. Otherwise it was a waste of good time which might be put to better use in constructive thought.

Constructive thought was something they needed. In all probability they were going to have to live out the rest of their lives somewhere on the shores of this lake; certainly they must winter here—this aimless wandering was getting them nowhere. It was up to him to find the place where they would camp—to get cabins or shelters of some kind built with the crude and inadequate tools they had or could improvise—and to start a plan for storing food for the months when they could not hunt or fish. He had no idea how much time he would have, but this was apparently still the temperate zone and they would have two or three times as long a period of cold weather ahead as could possibly remain of the summer. Well, introspection would get them nowhere; he needed facts before any decisions could be made.

"All right, folks," he said, "turn to." More than by the view across the lake, he was thrilled by the prompt and orderly way in which the people went about their duties: Packard and Morelli to cast for fish, others to gather firewood and build a barricade, still others to perform the miscellaneous chores of making camp and get-

ting supper ready. Guess I'm not such a flop as a leader after all, he thought; I've sweat blood over this gang, and at last, by God, they do the right things without being told, they don't complain as much as you'd expect, and some of 'em even like me!

They camped by the lake for a day while the fishermen tried their skill and a hunting party explored the nearby prairie. The fishing was poor; the water was deep, and the tackle Packard and Morelli had was not suited for trolling even if they had or could have improvised a boat. If they could find shallower water, both men agreed, they should have better luck.

The hunters did better, returning proudly with three marmot-like animals which had sat stupidly on their haunches until the stalkers were within spear-cast. One of the three had been brought down by an arrow shot by the Pierne girl—a good shot rather than a lucky one, Barnes told him in confidence. Bridger resolved to assign more time to practice with the bow for anyone who showed the least ability; it wasn't going to take long for even the most stupid gopheroid or woodchuckoid to get the idea that they were dangerous and dive for its hole the moment a man appeared on the skyline.

In the morning they broke camp and took up their march along the lake shore in search of the outlet, which Barnes and Scherer, from their experience with topography, agreed should be somewhere to the southwest. As the terrain grew lower and flatter they found that they had to detour around the heads of long narrow bays full of the wreckage of drowned timber. Packard and Morelli eyed the shallow water wistfully but dared not risk their precious lines in the maze of stumps and sunken logs.

At the campfire conference which Bridger was making more or less a matter of habit, Barnes agreed with his conclusion that the best place for a permanent camp would be near the outlet of the lake.

"That's where you find the big Indian village sites," he pointed out. "In country like this there's usually a long run of shallows just below the lake where you can build fish traps or spear suckers like we did that time in the crick. Water's likelier to keep open in the winter, too, and you'll find that minks and the like make a habit of

following the streams. A fur coat's going to come in mighty handy before the winter's over," he added wryly.

Three days after they had reached the lake the camp was aroused before breakfast by wild yells from the fishermen, who had risen early to try the waters of a small tributary creek at whose mouth they had camped. Tumbling down to the water's edge with spears and clubs, they found Packard and Morelli pointing their rods across the lake and dancing excitedly.

"You're too late!" cried the insurance man. "They just went out of sight around that point."

"What did?" the chorus demanded.

"People. A boat or raft or something with people in it!"

Bedlam broke loose: "What did they look like?" "How many?" "Were they Indians?" "Did they see you?" "Why didn't you stop them?" "Are they coming back"

Nelson Packard finally made his campaigning voice heard above the babble. "Listen, folks—we don't know who they are or anything about them. We're not even sure they are people, because they were too far away. All we saw was a line in the water that might have been a raft, and on it were some little things that looked like people moving around or rowing. It was moving right along, much too fast for a drifting log, and anyway there isn't any wind this morning. They went out of sight just before you came."

Ronnie Franchot, the nimblest of the crowd, raced for the nearest tree and was halfway up before Zbradovski had reached an even taller one. However, strain as they would, they could see nothing from the top but woods, plains, and mile after mile of empty lake.

"It could have been something swimming," Scherer said. "You can't judge distances over water in light like this, and almost any large animal with a long neck might look like a raft. Look at the sea-serpent stories in our own day."

Nevertheless, for the rest of the day the alleged raft and its occupants monopolized conversation. Even the discovery, in the course of the afternoon's trek, of a herd of huge water-animals disporting and feeding in a shallow bay did not drive the other topic from their minds for long. The creatures were rather like hairy hippopotami. Scherer, from a respectful distance, classified

them tentatively as capybaroids and pointed out that *if* a means could be devised of killing them, they should provide good and plentiful food.

"The climate must be warmer, if they're this far north," he pointed out. "Maybe we'll have a California winter."

"Mr. Aaronson," the prim Miss Hansen commented, "maybe you'd better be designing raincoats instead of fur coats."

That evening, wandering from group to group around the campfire, Bridger came upon the sixth grade teacher deftly at work with a pile of rushes.

"What's that you're doing, Ruth?" he asked. "Making a hat?"

"That's right," the girl answered. "Stick your head down here so I can try it on you."

Bridger obeyed. "Little large," she mused, "but I can fix that. I never thought that course in crafts that Hansen made us all take last summer would be of any use to me."

"Huh? You mean this is for me?" There was something faintly like alarm in the chemist's voice.

"Yes, your serene highness, and you needn't look at it as if it were going to poison you! I know it isn't a high-grade Panama, but all I have to work with is this grass. Nearly everyone has a hat except you; even Julius has that Daniel Boone effect that he made for himself. Remember, we can't afford to have the chairman getting sunstroke."

Bridger got hurriedly to his feet. "Well, ah, uh, thanks a lot. I appreciate it, but, uh, really Aaronson needs a hat much more than I do, with that bald head of his. Still—well, uh, thanks anyway. Excuse me; I've got to see Mort Wilson."

Preparations for departure in the morning were delayed and somewhat enlivened when Elizabeth Friedman discovered a nest of hornets, and vice versa. While they were crowded at the water's edge, watching the chairman and vice-chairman apply blobs of mud to the victim's face and arms, Zbradovsky let out a bellow. Another of the water-craft was moving up the lake. It was exactly as Packard described the thing and he and Morelli had seen—a line in the water, and on it figures moving busi-

ly about. It was travelling in the opposite direction to the first craft, and like it was soon out of sight.

Hearts beat higher and faster in the crowd. Evidently there were thinking beings in the vicinity—but what sort of beings? A raft suggested savages and savages might not be so glad to see strange human faces.

There was no further delay. Every minute's march was bringing them closer to the place to which the mysterious boatmen had gone, and from which they were returning. Then, rounding a wooded point, they saw it, and every heart was filled with a mixture of hope and fear.

They were looking at the spillway of an enormous dam, from the upstream side. A walk ran across it, connecting two massive square towers nearly a mile apart that marked the ends of the dam. As they watched, two hunched figures moved slowly along the walk and disappeared into the farther tower.

Well, thought Bridger, there they are—now what to we do about it? Nobody looks very anxious to make any advances.

"Nelson," he said, "you're our diplomat; you can be our ambassador. Abner, I've seen you demonstrating Indian sign-talk; you come along too. We'll go to the tower on this end and try to make friends. The rest of you stay out of sight here in the trees, and if anything happens to us, or we don't come back, get out of here as fast as you can. Emiil—I'm leaving you in charge."

The three men set out at once on a detour that took them well out of sight of the dam until they reached the edge of an expanse of waist-high brake-ferns which stretched up to the base of the nearer tower. It was built of neatly fitted logs, with a thatched roof. A wooden apparatus vaguely like a small crane was mounted on the parapet of the dam near its base, and moving about it were the same hunched figures they had seen on the dam.

"They seem infernally busy about something," Barnes remarked in a low voice. "And who in tarnation would be wearing fur coats in July?"

"Russians, I'll bet!" said Packard. "Do you suppose those God-damned Reds have—hey! What's that?"

Above the subdued roar of the water over the spill-

way they heard a short, sharp whistle followed by a sound as of a stick dragged along a picket fence.

"Sounds like a ratchet mechanism," Bridger observed. "Maybe it's something to do with that gadget . . ."

He was interrupted by a loud whang, and a stone the size of his head soared from the tower and plumped into the ferns in front of them. Barnes and Parker dived out of sight among the brakes. Bridger took out his handkerchief and waved it frantically over his head.

"Hi!" he yelled. "We're friends!"

There was the rattle of the ratchet, another whang, and a second stone came whizzing after the first. Bridger ducked barely in time. The missile grazed his new straw hat and sent it spinning into the ferns. The envoys needed no further hints. Burrowing as deep into the ferns as they could, they beat a hasty retreat toward the nearest patch of woods. Several more stones landed near them before they were out of range or the unknown marksmen decided to stop searching the brakes for their callers.

Back in the shelter of the woods they found the party both curious as to what they had found and ribald at the haste of their retreat. The past and present dictators of their little nation had not come off too well on their first diplomatic mission.

". . . and then they started throwing rocks at us with a catapult, so we stayed not on the order of our going," Bridger explained with a strained attempt at levity. "We'd better make a detour and strike the river below the dam. Then we can send someone back to scout around the dam from below and find out what our hostile friends are up to. I don't think they are coming after us; if they were, they'd have shown up before this."

They struck the outlet of the lake about half a mile downstream from the towers, and put another mile behind them before Bridger felt safe in stopping. When everybody was busy with his or her appointed task, under Scherer's watchful eye, Bridger summoned Zbradovski and slipped away into the underbrush. Reaching the field of brakes, they followed the trail which the three scouts had beaten down that morning, traveling on hands and knees to keep out of sight of the creatures on the dam. It was slow and painful going, and both men were

soon driven nearly wild by the clouds of flies and mosquitoes which hovered around their heads and settled on their exposed skin. As they neared the tower they plastered themselves still closer to the ground, raising their heads cautiously from time to time to reconnoiter.

Forcing his way through the thick vegetation, Bridger thought suddenly: We must be making a rumpus like a herd of elephants! I'll bet they spotted the ferns waving half an hour ago. Oh Lord—why can't we all have brains when we need 'em?

"Sneeze!" he called.

"Yeah?" The collegian was somewhere ahead.

"Take it easy. They can see our trail in the ferns." He rose cautiously to his knees, only to flop back with his heart pounding madly. One of the fur-clad whatsits was moving along the battlements of the tower, staring intently in their direction.

"Pssst, Chief—here's your lid," came Zbradovski's whisper.

"Okay, Sneeze, I'll be right over." Bridger inched along on his belly to where the young man lay, his fuzzy pink face peering through the ferns in the direction of the dam. He was wearing the Pierne girl's hat, Bridger noted with a twinge of annoyance.

"There he goes again," Zbradovski murmured. Bridger rose until he could see through the waving ferns. "He has a tail," he said, "and that fur is part of him, and he's carrying a sharpened wooden pole for a spear. Civilized animals, by all that's holy!"

The sentry on the tower disappeared again. He must be near-sighted like most wild animals, Bridger thought, or he'd certainly have seen the ferns moving. I can't get over the idea—civilized animals! Lord, we've come a long way from 1939!

"No use trying to get any closer from this side," he told Zbradovski. "He'll be hidden by the loom of the tower. Let's sneak around to the downstream side and try to spot one going across the dam."

The two men found a convenient clump of alders close to the end of the vast timber-and-masonry structure. At this distance the huge logs appeared to have been hacked off to a roughly conical point. Finally activity appeared among the dam-dwellers. A small group

came out of the tower onto the walk, and presently the heads of others, evidently on a raft or boat, appeared beyond them on the lake side. The boatmen tied up their craft and filed into the tower, carrying bundles of something that looked like slabs of bark.

"Beavers!" Bridger muttered. "And they must weigh two or three hundred pounds. We've seen some screwy things so far, but a race of civilized, man-sized beavers beats—uff!" A large biting fly had driven its beak into his ankle, and he dared not move quickly for fear of attracting the beaveroids' attention. By the time the beavers had disappeared the fly had had its fill and departed. Bridger expressed some shocking opinions of the whole order of *Diptera.*

It was past sundown when they started back to camp. Halfway there they met a search party which, Scherer informed him, the women had insisted on sending out. Bridger accepted the information in silence.

At the council that evening the problem of the beaveroids was discussed actively but with little promise of practical results.

"They just a'n't friendly," Barnes insisted. "Back home when a neighbor gets like that best you can do is leave him be."

"I'll tell you what," Macdonald offered. "We ought to kidnap one of the things and hold it prisoner for a while until the professors learn to talk to it and tell it we're friendly."

"Yeah," agreed Morelli, "and I nominate Mr. Ronald Franchot as kidnapper-in-chief." The picture of the slender Franchot trying to abduct one of the burly rodents broke the session up in guffaws of laughter.

Zbradovski expressed the thought for the night as they prepared for bed. "What's to prevent them from sending a posse after us?" he demanded. "I tell you, I've seen the things up close, and I wouldn't want to tackle one with anything less than a Springfield!" Although Bridger doubled the watch that night, nothing untoward happened.

Early the next morning a raft with four of the beaveroids was seen going downstream past the camp, its occupants rowing from a standing position. The people watched it out of sight from the shelter of the undergrowth.

"That settles it," Bridger decided. "If they navigate below the dam, they must have a city or something farther down. Our chances of establishing communication may not be any better than here, but they couldn't be much worse. Here we know we're not welcome. We'd better move on."

The river ahead of them swept out of sight in a broad curve around a low hill to the east. Bridger decided that time and effort would be saved by cutting across the saddle in back of this knoll and striking the stream again further down. Almost at once, however, they ran into another old burn thickly overgrown with blackberry canes and witch-hopples which made progress slow and tedious. By the time they won through into a forest of virgin hardwoods, where they could see for hundreds of yards between the huge, lichen-spotted trees, it was nearly noon. The woods grew steadily more open, and finally they came out into a clearing where a few scattered trees rose from the long grass.

Wilson scouting ahead in his usual place, let out a piercing yell: "Eeyow! Hold everything!" In the middle of the clearing an armadillo the size of a young rhinoceros was fighting a sharp-nosed carnivore the size of a lion. The creature was not cat, from the shape of its feet, which were more like those of a raccoon. It had a rather bushy tail and small ears, and moved with amazing agility for a beast of its size, leaping in to slash with knife-edged canines and out again before the armadillo could rake it with its claws.

For all its ponderous armor the latter animal was remarkably quick also. It wheeled to keep its head and shoulders toward its attacker and countered every lunge with a round-arm swing of its long fore-claws. The carnivore was already bleeding from a scalp-wound, but apart from a slashed leg the armadillo did not seem at all inconvenienced.

As the people scrambled into their phalanx formation to ward off any possible attack, the combatants sprang apart, quite as surprised as the human beings. The carnivore studied them with bright, intelligent eyes for a few seconds, then bounded off into the forest. The armadillo pivoted and trotted off in the opposite direction, the joints of its armor rattling at every step.

"Whew!" cried Barnes. "That was a little too warm for me. I can remember when North America was a nice safe continent to go gallivantin' around in, except for a few rattlesnakes and grizzly bears and such that got peeved if you bothered them."

" 'Sall right Abner, we haven't been eaten yet," boomed Scherer. He suddenly recalled that two of their number *had* been eaten, and turned red. "Wonder what that thing with the bushy tail was," he mumbled. "Looked like a mongoose. Those teeth—hey!" His eyes bulged as he grabbed at Bridger's arm. "Look!"

Apes—huge, black, hairy apes—were dropping out of the trees on all sides of them. They carried coils of rope and a variety of strange-looking implements whose purpose nobody had time to figure out. One hairy giant leveled something at them that looked vaguely like a machine-gun and whirred busily; whatever it was, it was no death-ray, for nothing happened.

Eleanor Hooper and two of the other dancers had strung their bows at sight of the mongoosoid; they drew arrows to their chins and let fly.

"Hey!" Bridger yelled. "Wait till we find out if they're hostile!"

But the damage was done. One of the arrows struck a particularly villainous anthropoid in the thigh and the others whizzed close enough to make the apes duck. The wounded creature shrieked a command and two others ran forward dragging a huge net with weighted edges, which they flung deftly over the entire crowd.

Bunched in their phalanx they made a perfect target; before they knew what had happened they were entangled in the heavy net, and a dozen of the apes dove after it, crushing the people to the ground in a struggling, yelling heap. Then the anthropoids proceeded methodically to extract their prisoners from under the net, one by one, disarm them, tie their wrists behind them, and slip nooses around their necks. Those who tried to kick or scratch were gently slapped until they subsided.

When at last the people were all secured, they were towed a quarter of a mile through the woods to where a huge wagon stood among the trees. The vehicle contained a number of wooden chests and boxes; these the

apes pushed about until they had made two rows with narrow spaces between. The captives were wedged in on these improvised benches, a long rope passed through their bound wrists and fastened at both ends, and their ankles lashed securely to rings on the boxes.

One of the apes appeared leading a huge animal whose appearance made the people's spines bristle. The thing vaguely resembled a wild boar, with its disc-shaped snout, cloven hoofs, and thick coat of stiff black hair, but it stood seven or eight feet high at the shoulder and its hair rose in an erect mane over its humped shoulders, making it look even huger than it was. Two great white curling tusks protruded from its mouth.

Evidently their captors had no intention of feeding them to this monstrous pig, for they jockeyed it into position at the front of the wagon, slipped a leather harness over its back, and let it stand, docilely snoofing at the ground. The rest of the gear was piled into the wagon on top of the prisoners, one ape climbed into the front seat, and the rest hoisted themselves to precarious seats along its sides. The driver tapped the pig-animal's back with a long pole and gibbered at it, and the wagon started with a lurch. The remaining apes trotted alongside.

8 "GENUS HOMO"

AFTER A FEW MINUTES, WHEN THE IMMEDIATE FEAR of extinction had subsided, the calmer members of the party began to notice things. The apes talked among themselves in high, penetrating voices which sounded odd coming from those immense black chests. It was obviously an intelligent language, full of throaty consonants rather like coughing and retching sounds. They took turns riding and walking, studying the people with bright little eyes and jabbering away all the while.

Ruby Stern leaned over and whispered to Scherer: "What are these things, Emil? Gorillas?"

"I think so," answered the zoologist. "At least, I can't think of anything else they can be. They have longer thumbs and higher skulls than the apes of our time, and of course twentieth century gorillas didn't ordinarily walk erect the way these do, but a hell of a lot can happen in a million years. That's about the

length of time it took to evolve us from something a lot more primitive than these boys. What's that, Dave —speak up? They don't mind our talking. How in hell should I know what they're going to do with us? Hey, Henley—you're the boss—how do we get away from our little playmates?"

"Sorry," replied the chemist from the tail of the wagon, "Peggy here"—indicating Margaret Kelleigh who had gone into a fit of hysterical tears—"has been keeping me occupied. Your guess is as good as mine. We might be able to outrun 'em in a straightaway, but I'd hate to try to outlast one of them. Hey, Abner—what do you make of those gun-things they're carrying?"

"Missile weapons of some kind," the archeologist replied. "Maybe they work with springs or compressed air—they're sort of like crossbows, only without the bow part. Emil—what would a bunch of African apes be doing in Pennsylvania, anyway?"

"Search me—what are any of the creatures we've seen doing here? Maybe they're descended from apes that escaped from zoos. Maybe there's a land-bridge to Africa now. We'll probably find out in time. They seem like a pretty intelligent lot of monks."

"Henley," said Ruth Pierne, "do you know any really good swear-words a girl could learn? I mean something like the ones in *Ulysses,* only more so. I've picked up some fair ones from my kids in school, but it's a part of a teacher's education that's sadly neglected. I thought maybe we could take the opportunity to tell these big brutes what we think of them before they know what we're talking about."

"An excellent idea!" snapped the old-maid principal. "Mac, you'll have to teach me. I've heard policemen swear before."

Macdonald, sitting beside her, flushed and squirmed.

The wagon did not seem to be following any road. They dodged around tree-trunks and splashed through stream-beds along a route that no sane road-builder would ever have chosen. Several times the vehicle was canted at an angle that seemed certain to send it toppling over on its helpless freight, but each time a gorilla or two would throw his weight against the lower side and prop it up. Twice in the first hour the wheels

sank hub-deep in the ooze of a swamp which the pig and its driver seemed to have preferred to dry ground, but each time the apes seized the wheel-spokes, grunted and heaved, and out they came.

The captives were kept busy bobbing and ducking to escape the branches that lashed at their faces; the apes seemed to pay no more attention to them than to so much swishing grass. While the wagon had springs of some sort, it bobbed and tossed so that those in it began to wish it had not. But for the lashings which fastened their legs to the seats, they would probably have been thrown clear out of the cart on more than one occasion.

Late in the afternoon they came suddenly upon a bona fide road, rough and stony and overgrown with grass, but nevertheless a road. Then for a time their travel was rapid and reasonably smooth.

At sunset they halted. The apes unhitched the pigoid and tethered it to a tree. The wagon was pulled off the road, and the people were lifted out and set on the ground under close guard. Out of the boxes which they had been using as benches the gorillas produced a variety of utensils and a sack of meal. One of them lit a fire with what looked like either a small fire-extinguisher or a large cigarette-lighter. Smudges were started to keep off the mosquitoes. A large pot was hung from a branch over the fire, and into it were poured a bucket of water and the contents of the bag. One gorilla stood over it and stirred while the others pulled up bushes and did miscellaneous chores around the camp. Bridger noted that there was no barricade; evidently these forest giants had nothing to fear from the ordinary predators of the countryside.

Finally the pot was removed from the fire, and the apes squatted around it, eating with long-handled wooden spoons. Presently one of them brought the pot over to the people, who were squatting miserably in a row by the side of the road, and thrust a dripping spoonful of something in front of Morelli's face.

The salesman sniffed, took a mouthful, swallowed, and made a face. "I'll be damned," he cried. "When I was a kid my folks always made me eat oatmeal for breakfast, and I hated the stuff like poison. I remem-

ber promising myself that when I grew up, one thing I was never going to do was eat oatmeal. And here I am being fed it by a big baboon, without any cream or sugar, and full of lumps the size of golf balls!"

Packard grunted. "Quit beefing and finish your spoonful, 'Charley. After that damn fish diet I'd eat raw porcupine, quills and all. Anyway, oatmeal's good for you."

The crowning indignity was still to be visited on them. When the oatmeal was gone, and they had been watered from a barrel slung under the rear of the wagon, one of the apes produced four massive collars, each attached to a rope of braided rawhide. "Oh, oh!" said Wilson. "Now we'll know how a Peke feels being taken for its evening walk."

It was as he had said. While the captives were promenaded beside the road, four at a time, the remaining apes produced huge clay pipes and lit up. The smoke seemed to be that of tobacco, but it was far stronger than any tobacco the people had ever known. By this time they had ceased to be astonished at anything.

As Parker remarked, "You know, I wouldn't be surprised if one of 'em was to break into a mammy song."

Hardly had he spoken when a gorilla who was sitting with his back against a tree knocked out his pipe, began slapping his chest rhythmically, and throwing back his head commenced a weird yodelling that sounded as much like a Scottish pibroch as anything Bridger could remember. The other apes lay quietly around the fire, grunting appreciatively at infrequent intervals, and once joining their voices in a drawn-out chorus.

By the time the concert was over it was dark, and the last of the captives had had their stroll. The gorillas spread pads on the ground and sat on them. They draped thick blankets over their shoulders, bent their heads forward on their chests, and went to sleep sitting up. Two of them carefully threaded a rope through the bonds of all the human beings and made the ends fast to a stout tree. They tossed several blankets over the woebegone crew and left them to wriggle as best they could into positions where sleep was possible. One

gorilla sat cross-legged on the wagon, his shooting-device handy, the occasional glow of his pipe lighting his wrinkled black face.

Zbradovski was lying near Bridger. "Pssst—chief," he hissed in the chemist's ear. "You suppose anyone has anything that'll cut this rope?"

"Doubt it," Bridger replied. "They went through my pockets like a baby cyclone when they tied us up. Still—it won't do any harm to ask."

He inched about on his stomach, whispering to those nearest him, with no result except that the sentry climbed down from his perch and came over to examine the rope. He repeated this precaution at intervals during the night. Barnes made one attempt to saw through his bonds with a small, sharp stone he had found in the middle of his back, but the guard discovered the abraded spot on his next inspection and took the stone away from him.

Scherer was soon snoring lustily, and dog-tired, the others gradually dozed off. Once the entire party, apes and people, were awakened by the roaring of a catoid close at hand. Two of the apes got up and put more wood on the fire, but seemed otherwise unconcerned. The pig, however, was greatly excited. It made grumbling noises in its throat and emitted a series of snorts like a freight locomotive going up-grade.

The gorillas were up before sunrise. "It's awful," Franchot moaned as a black paw hauled him unceremoniously to his feet. "Before we were caught you guys wouldn't let me sleep, and now these monks are just the same. Where is there any justice in this world?"

The apes wasted no time. They gave the people hunks of a kind of nut bread to munch, bundled them into the wagon, hitched up the pigoid, and were on their way just as the sun began to peep through the trees. After several hours the road leveled out and became smoother. By noon they were rolling through gently undulating country, dotted with small clumps of trees. The wild life was far commoner than it had been in the deeper forest. Herds of hundreds of small and medium-sized animals could be seen in the distance. A large bear-like creature, eating the tops off flowers by the roadside, left off as the expedition passed and

sat up in a characteristic pose. "Woodchuckoid," was Scherer's verdict.

There were herds of rabbitoids like the one whose carcass the people had appropriated. From a distance they looked like exceptionally shaggy mules. In the late afternoon the party saw a number of large flightless birds—not parrotoids, but something like long-necked, long-legged barnyard fowls the size of ostriches. Then Mrs. Aaronson let out a squeal: "Horses! Look, ev'ybody, real horses!"

"Aw—they're chipmunks or something," retorted Morelli bitterly. "That's the hell of this damned world we're in. Nothing's what it looks like." But the animals spied the party, and drawn by curiosity galloped up and stood in a row a little distance off the road, snorting, pawing, and tossing their heads. They were horses, sure enough—smallish shaggy beasts with large heads, ugly but competent-looking. Bridger wondered why the apes had not domesticated them in place of the less tractable pigs. Suddenly something frightened one of them, he snorted, and the whole herd swung around and galloped off, squealing and kicking.

That night was no improvement on their first. There was more oatmeal, and the same difficulty in finding comfortable sleeping positions. The apes had loosened the ropes on their wrists and replaced them with a series of slip-nooses around their necks which tightened at the slightest tension. After the first tentative tug the hardier members of the party gave up thoughts of escape, and lay wide-eyed, listening to the chorus of roars and howls that made the world seem a most unfriendly place.

Late the next morning Alice Lloyd, who was seated at the front of the wagon and had the best view, cried, "Look there, Emil—aren't those more pigs?"

"Looks like it," Scherer agreed. "Maybe they run wild. It might explain why the gorillas use them for draft animals, if they found the brutes here when they came over from Africa."

"You always have a theory for everything!" the girl retorted. "Gee—I don't like the way that big one is looking at us!"

Neither, it appeared, did the pig that was pulling them. The wagon stopped with a lurch. The pigoid swung

around in his traces and began a faint rumbling sound deep in his chest, which grew deeper and louder with every moment. The wild pig, now about thirty yards from the wagon, stopped and rumbled in reply. The gorillas were making frantic attempts to get their own animal in motion again, but the two huge beasts were intent on each other's insults.

The prospect of being charged by the mountain of black bristle that confronted them was nothing to be relished, tied as they were to the cart. The creature was larger than a bull bison. His tusks were nearly a yard long, chipped and scarred from previous battles, and froth dribbled from his mouth as he pawed the ground and rumbled like an approaching thunderstorm.

The rest of the apes put the wagon between themselves and the advancing boar and began to load their shooting-irons with heavy darts about a foot long, with large glass heads and thin wooden vanes. The breeches of the things were opened, the darts slipped inside, the breeches closed, and the things cocked by pulling back a knob that protruded from a long slot on the top of each barrel. Barnes watched the procedure with interest.

Then their own hog gave a bellow that could have been heard for miles and tried to charge. The wagon rocked like a rowboat in a heavy sea and slewed around until it was angling across the road, with a line of gorillas hanging on to it for dear life. One of the biggest of the apes had the pig by its negligible tail and was trying desperately to get a solid foothold in the road. The other brute bellowed even more loudly, put down its head, and broke into a gallop. The gorillas swung their weapons to their shoulders; the things klunked and jerked like large-caliber rifles, and the charging boar halted in his stride, staggered sideways, and fell. He struggled to his feet again, almost immediately, but the fight had been taken out of him. As he limped away, shaking his head as if trying to dislodge the darts, the people could see the butt-ends of half a dozen of the missiles sticking out of his neck and shoulders.

Barnes' eyes glistened. "I'd like to see inside one of those guns of theirs," he exclaimed. "I'll bet with a little whittlin' I could make 'em into six-shooters."

Finally the tame hog, who seemed to think that he had driven off his challenger by sheer force of personality, was calmed down and persuaded to return to the road. The sun wheeled slowly through the sky as the party rumbled on. It sank behind the hills, but this time they stopped only long enough for the gorillas to light half a dozen lanterns which were hanging on the back of the wagon, and to dole out a liberal ration of nut-bread to themselves and their captives.

The draft-beast trotted steadily on, the wagon lurched and rattled over ruts and cobbles, and the lanterns jiggled and smoked. About eleven o'clock the half-moon showed the people that they were passing a succession of flat, cleared areas darker colored than the surrounding grass-lands.

"Those are plowed fields or I'm a son of a dogoid!" said Barnes. "I guess these apes are just a bunch of farmers after all."

"What do you think they were—cops?" asked Morelli, ducking a jab from Macdonald. Then: "Say—what are those things on the skyline? They look like buildings."

"Why, they're windmills!" cried Miss Hansen. "They're just like the Dutch ones the children draw. See the big sails?"

"Windmills!" scoffed Wilson. "They can't be so civilized if that's all they've got for power. Cripes—those beavers could do better with a water-wheel in their overflow."

"Look up ahead," Alice Lloyd put in from her perch at the front of the wagon. "Aren't we coming to a wall?"

A wall it was, or rather a stockade made of massive logs driven closely together. As they approached, a massive gate creaked open and they rumbled through and on down a muddy street. They could make out the shapes of one-story huts on either side, but nothing more. Other lanterns appeared out of the dark, gorilla voices were raised in questions, and their own gorillas replied at length. Lanterns were lifted, and curious black faces crowded around to see the captives.

The wagon made several turns and finally halted. By now the moon, low in the sky, was blotted out by clouds, and the people could see nothing but a swirl of

black fur in the darkness around the wagon, dimly lit by the guttering lanterns.

"Guess this is the end of the line," Bridger said. "Now we find out what they're going to do to us. At least—hey, for God's sake Peggy, don't go and break down again. That goes for you too, Elizabeth. Take care of 'em, will you, Sneeze?"

The gorillas gathered around the back of the wagon, and there was a sudden scream from Marjorie Tremblay as the tall, long-legged blonde was lifted off her seat. Presently there came sounds of a scuffle and the girl's voice raised in wrath and indignation. Evidently they're not hurting her, Bridger thought; just taking a few liberties. Too bad she can't use her great-big-wonderful-man routine on 'em.

One by one the people disappeared into the darkness, out of which came shouts, curses, and wails of astonishment and anger. For those who remained the suspense was unbearable, and Macdonald's familiar bellow, "I'll fix you, you son of a . . ." brought a slightly hysterical giggle from the women.

Bridger was nearly the last. In his turn he was lifted out, untied, and led off into the darkness. He did not resist, but kept alert for any chance to make a break. Then an ape took each of his extremities and laid him on his back on the ground with the delicate firmness of Dr. Ditmars handling a cobra. Two others began to examine his clothes in the flickering lantern-light; then deftly they began to strip him.

He held his tongue, but when they began to fiddle with his ragged underwear Bridger could not help squirming, with as little effect as if he had been cast in bronze. Powerful hands held him plastered to the ground and other hands completed the stripping. Presently they hoisted him to his feet, peering at him thoughtfully from all angles. As if, he thought, I were a new-born baby and they were a bunch of doctors. A two-headed baby, at that.

Their examination seemed to satisfy the apes that he was not greatly different from the rest of his kind, so he was led away. A gate of some kind opened, his wrists were freed, and the lanterns moved away. He groped around in the darkness and touched a warm,

smooth patch of human hide. A woman's voice gasped, and he snatched his hand away and stepped quickly back.

"Who-all's here?" he called into the darkness. "Anyone hurt? They took every stitch I had on."

Voices answered plaintively and indignantly from the dark: "Me too."

"I'm here, Henley."

"They must want us to die of pneumonia!"

"I never heard of such a thing!"

"They looked me over like some God-damned bug!": that was Scherer.

And Aaronson: "Rachel! Where is my Rachel?"

Lanterns approached again and the gate opened; Mrs. Aaronson and the Hooper girl were led in, and the lights bobbed away again.

Barnes' voice came at Bridger's elbow: "We're in some kind of pen, Henley—I've been all the way 'round the walls." There was a brisk slap. "Damn those mosquitoes, anyway!"

Toomey's sullen voice rose some distance away: "All right, Professor—you're the boss. Get us out of this."

A clamor answered: "Pipe down, Dave—nobody could help this!"

"Okay—that's his job, ain't it?"

"I want my clothes!"

"What for, sister—can't you stand inspection?"

"You shut up, Emil Scherer—you've got nothing to brag about!"

It's bad enough when you can see them, Bridger thought, but this is like voices in a dream. And what a nightmare! Packard's soothing baritone broke into the clamor: "Now, now—let's not quarrel. Dr. Bridger is no better off than the rest of us; I'm sure he's done everything he can. Must cooperate, you know. We can settle our difficulties in the morning."

The babble broke out anew: "Dammit, it's *cold!* They gave us blankets before, didn't they? Henley—where are our blankets?" "How can I sleep with these mosquitoes eating me alive?" "You can talk, Packard—you've got blubber enough to keep you warm, but I haven't."

Eventually, however, the party quieted down and the silent, miserable hours began to drag by. Bridger

propped himself up with his back against the fence, feeling the cold and damp of the earth strike into his buttocks. From the noises that came to him, nobody but Scherer was sleeping very well. Outside, several of the apes appeared to have been left on guard; they crouched around a small fire, smoking, talking, and making an occasional round of the stockade to see that their charges were safe.

When at last the sky began to turn gray, Bridger saw that they were in a fair-sized enclosure fenced with heavy poles, placed about three inches apart and lashed securely together above and below. Through them he could see trees, what looked like small houses, and beyond them the wall and the arms of the windmills they had seen the previous night.

Although the sky grew brighter, there was no sun, and soon a light rain began to fall. Bridger looked about him at his fellow captives—twenty-five naked, dirty, thoroughly bedraggled and dejected human beings trying to find a mean between comfort and modesty. The rain trickled slowly down their bodies, leaving long, winding streaks in the dirt.

A sneeze was the signal for a chorus of sneezes, including Bridger's own. He got stiffly to his feet. "We'll pass out if we don't get our circulation going," he said. "Come on—Emil's it for tag."

The game started slowly, but presently the whole crew was dodging about the enclosure. As the exercise warmed them, their spirits rose and the play became boisterous, with much yelling and slapping of bare buttocks. After fifteen minutes Packard dropped out and stood in a corner puffing. Barnes joined him.

"This life may be tough on the sensibilities," the lawyer said, "but it's sure great for the figure. My belly's nearly gone—and look at Mrs. Aaronson run!"

"Good way of shedding your inhibitions, too," the archeologist observed. "How're you at wrestling?"

"Thirty-three years ago I was champion of the Sophomore class," Packard boasted. "I don't suppose the other members of Callahan, Packard, and Wing would consider it consistent with the dignity of the legal profession, but they aren't here. Watch yourself!"

The two men sprang at each other and in a moment

were entangled in a grunting knot. Then a piercing cry from one of the women brought them to their feet.

The game had stopped. A large head with a muzzle bristling with white whiskers and two very bright eyes was staring at them over the top of the stockade, supported by an apparently endless neck covered with a glossy brown fur. As they watched the apparition yawned, displaying four canine teeth; then it began to bark in such a completely doggish voice that there was a laugh of relief.

"What is it, Henley?" asked Janet Rodriguez.

"That's Emil's department," he replied. "Maybe it's a flesh-eating giraffe—we've seen stranger things."

"Is it coming in here?"

"I don't think so. I wonder what the rest of it looks like."

As he started for the fence the head slid out of sight. There was a shuffling, slapping noise and it popped up in another place. The chemist changed his direction, and the creature disappeared again. For half an hour it continued to pop up, bark, and pop down again to reappear somewhere else. Bridger gave up trying to chase it, and found that by standing well back he could make out the outlines of a bulky, low-slung body through the poles. Eventually it tired of "arfing" at them and floundered away through the mud. Rushing to the fence, they peered through the bars and saw that the neck sprouted from a sleek, tapering body supported on four enormous flippers. From the size of the beast, it must have been standing up against the fence to bark at them.

"What do you make of it, Emil?" Bridger demanded. "Is it a fur-bearing plesiosaurus?"

"Not quite. I should say it's a specialized kind of sea-lion."

"Fido seems to have a private swimming pool," one of the girls remarked. "I wish they'd put us in his cage and let him come in here. We need it worse than he does."

"My God!" Franchot clapped his hand dramatically to his forehead. "I got it. We're in the zoo!"

It took a moment for the idea to sink in, then

something like relief swept over the entire crowd. At least they'll feed us regularly, Bridger thought.

"I wish they'd start throwing us peanuts, then," Zbradovski cracked.

"I don't like peanuts," the Hooper girl complained. "They make me thirsty."

"Hey!" someone shouted. "Here comes the monks again."

A big black ape had placed a massive ladder against the fence at the front of their pen and clambered up it with something flat under his arm. He hung the sign—for it was obviously that—on the top of the fence.

"I know what it says on the other side," said Macdonald. "It says 'MAN', an' then some Latin words. What's Latin for us, Doc? Yeah—*Homo sapiens.* An' then it probably tells about how we was captured in a terrific hand-to-hand struggle, like in the zoo in Pitt."

"He's got it, Henley," the zoologist observed with a grin. "We're labelled now, and I'll bet they spent most of the night deciding what we are—if they've made up their minds yet. It's been a long, long time since anyone saw animals like us around these parts.

"*Genus Homo*—that's us. All there is left of the human race."

The rain had stopped, and an occasional gorilla appeared in the street that ran in front of the row of cages. One of the passers-by soon spotted the captives and hurried up to stare at them through the bars. Another joined him, and another, until there was a solid wall of shaggy black hair in front of the enclosure. The apes chattered to one another and pointed at the people and at the sign, and the people stared self-consciously back.

"Makes me remember I ain't got nothing on," Toomey muttered to Macdonald.

"Whadda you care?" the cop retorted. "They ain't wearin' anything either, and they don't mind."

"On you two it don't look so bad," Julius Aaronson said plaintively, "but Mamma and me—we got all bulges where it ain't good."

"I allus thought them nudists was nuts, and here I'm one myself," Toomey said disgustedly. "Besides, them monkeys got fur and I ain't—leastways, not enough to

do any good." He sadly smoothed down the mat of black curls on his chest.

A number of infant apes had appeared in the crowd outside the cage, poking their heads between the bars and reaching inside with abnormally long arms. Wilson, squatting in front of a solemn midget which had been staring at him unwinkingly for several minutes, screwed up his face in a horrible grimace and stuck out his tongue "Yaaaah!" The ape-child broke into frightened squalls and its nurse or mother into a rage. There was no mistaking what she had in mind, though the language was fortunately strange.

The ape who had put up the sign, or another like him, now returned pulling a small cart. He opened the outer gate of the pen, entered the little vestibule, closed and carefully locked the outer door, then opened the inner gate and hauled the cart into the cage.

Zbradovski gave a great shout. "Whoopee! Do you see what I see? Apples!"

As one the human beings charged the cart. The ape retreated hastily into the vestibule and slammed the door, but the people ignored him. The apples were small and hard, but eminently edible. There was a wooden bucket of water in one corner of the cart which was also welcome. They were less pleased, upon removing the apples, to find a heap of fish.

"Geez," Toomey complained, "are we gonna hafta eat fish the rest of our natural lives?"

"There's a mighty smart ape out there," Scherer retorted. "They're feeding us just what they found us eating in the wild state, like any sensible zoo keeper. My suitcase was full of smoked bass, and so was everybody else's. As for the apples, I'll bet they decided from looking at our teeth that we could handle just about the same food they eat themselves."

Bridger asked: "What about these apples, Abner? You're the farmer here."

"I dunno, Henley—hothouses, maybe, or maybe we're all wrong about the time of year. Hey—look at Fido!"

They had dragged the cart into the back of the cage, within a few feet of the dividing fence. The super-sea-lion had thrust one long flipper between the bars,

spooned a fish out of the cart, and was carefully scraping it along the ground toward its own pen.

Bridger was nearest to the cart. He kicked the fish out from under the flipper, which flew up and smacked him under the chin. Rubbing his beard and cursing luridly he sloshed the salvaged fish in the bucket and slapped it down on the pile. Fido's head appeared and he set up his mournful "Arf! Arf! Arf!" For the next hour he gallumphed up and down, heaving his bulk against the fence at intervals and lamenting his loss. When the people had finished the apples and started on the raw fish, his bark changed to a piteous whine.

Wilson's heart melted. Fish was fish, but raw fish was something else again. Only Barnes and Scherer seemed to be making much headway with the stuff.

"Aw, come on—let's give him some," Wilson urged. "After all, he's our social equal."

However, before his idea could be put to a democratic vote, the keeper returned and dragged away the cart.

The morning dragged on, and the people could think of nothing better to do than to play tit-tat-toe in the sand of the enclosure. Zbradovski and Wilson were busily organizing a tournament when an unusual buzz of conversation from the watching "public" attracted their attention, and a group of six gorillas, carrying a variety of baggage, appeared outside. The watchers made way for them and stood in a circle at a respectful distance, commenting on what they did.

"There's that tommy-gun again," said Morelli.

"It can't be a gun," Barnes objected, "or they'd have used it on that pig. The way he's using it I'll bet it's a movie camera. Look at the little gadgets all over the outside."

"Two of them have notebooks," Ruth Pierne pointed out.

"Well I'll be a such-and-such!" exclaimed Franchot. "Will you look at what that big brute is screwing into his face? A monkey with a monocle! I s'y ol' deah—reminds you of bally ol' London, downcha know!"

For the rest of that day the six gorillas sat and watched, talking to one another and making marks in their notebooks. As the afternoon wore on, Mildred Henry grew bored.

"Come on, girls," she said. "If they want a show, let's give 'em something worth looking at. Ronnie—how about that last routine we were rehearsing for the new show? Think we can still do it?"

While the non-dancers kept time by clapping, the troupe went into their act. The gorillas seemed entranced at the spectacle: the note-takers put their faces close to the bars and watched every moment, while the cameraman ground away and the general public crowded closer, forgetting their awe of the big-wigs.

"Hey, Henley," Morelli whispered. "Wouldn't that act pack 'em in back home, dressed like they are?"

"You've got a dirty mind, Charley," the chemist retorted, but he had to admit the truth of what was said. The girls had what it took—abundantly—and they weren't bad dancers. Franchot was no Astaire, but he'd seen worse in Hollywood nightclubs on the rare occasions when he'd gone out on a mild binge.

That evening the familiar ration of oatmeal and nut-bread was slid into the cage, with a fresh bucket of water. It was very welcome after the morning's raw fish, but some of the crowd seemed a bit uncertain of the spirit in which it was offered.

"Gee," blurted Mabel Slemp, "I hope they're not just fattening us up to sacrifice to the great god What-his name, like in Tarzan!"

"For a nice wholesome girl, Mabel," Packard said, "you get some of the gloomiest ideas I ever heard of. Did you ever hear of anyone eating the monkeys in the zoo? Well—that's us, so why don't you settle down and scratch for fleas with the rest of us?"

The suggestion, however, did nothing to add to their comfort in the long, cold night that followed.

9 T'KLUGGL'S MEN

NEXT MORNING THE SIX GORILLAS WERE BACK. THIS TIME the cart of apples remained outside the fence. The gorilla with the monocle took an apple and let himself into the enclosure. The others remained outside, holding long poles and watching the people closely for any signs of an attack.

Lord Percy, as Wilson had christened him of the eyeglass, advanced slowly, the apple resting on his upturned palm.

"Watch out, Henley," warned Enid Hansen. "He may be trying to get close enough to grab you."

"There's just one way to find out," replied the chemist, walking slowly toward the ape. "He acts more as though he were trying to get our confidence. Anyhow, they can grab us all easily enough if they want to." He took the apple from Lord Percy, said "Catch!" and tossed it to the crowd.

The gorilla ambled back to the gate. He took another apple, placed it on the ground outside the fence, about six feet from the pen, and tossed a short pole into the enclosure.

"Why'd he do that?" demanded Alice Lloyd.

Margaret Kelleigh picked up the pole and raked in the apple, which she proceeded to munch with relish.

"I think I see what he's doing," she said. "They're giving us mental tests to find out whether we can reason, the way Koehler did with his chimpanzees. The teachers' colleges give you another psychology course every time you turn around, and I've heard about Koehler's apes from every professor between here and Philadelphia."

"What?" bellowed Macdonald. "They want to see if we can think when we got three heavyweight professors with us? Haw, haw, haw!"

Next an apple was placed out of reach of the short pole, but a longer pole was placed within reach of it. The teacher had no difficulty in retrieving the longer pole, with which she hooked in the apple.

"I say!" complained Marie Smythe. "Peggy's getting all the apples. Let me try."

But when the next test was arranged she found that the apple was out of reach of the longer pole. She turned to the crowd in helpless consternation.

"Push the end of the short pole into that socket in the end of the long one," Scherer directed. When this was done, the apple was within easy reach of the combination. "Even Koehler's chimps could do that one without being told," the zoologist muttered under his breath.

There was a brief conference among the gorilla psy-

chologists, then Lord Percy reentered the cage with a bag of apples and three small boxes painted respectively red, green, and blue. He beckoned to Bridger. With the chemist standing before him, he ostentatiously placed an apple in the red box. Then he turned all three boxes upside down on the sand, and shuffled them about rapidly.

The people by now were taking as lively an interest in the game of testing as their inquisitors. They crowded around the scientist while Franchot chanted in a loud singsong: "Step right up ladies and gentlemen—step right up and view this marvelous demonstration of legerdemain! The hand is quicker than the eye, folks—the hand is quicker than the eye! Watch carefully folks; which shell is the little pea under? One guess, ladies and gents! Ah—right the first time, Doctor Bridger! You win this beautiful kewpie doll of gen-u-ine unborn plush. Who else will try his skill? Mr. Toomey, you have a quick eye for the ladies—how about you? Watch the little pea, folks! Congratulations, Mr. Toomey—you're a wonder. Under the green box, sure enough. C'mon folks, only ten cents a chance—ten cents, one dime, the tenth part of a dollar!"

Lord Percy continued his shell game until his apples were exhausted.

"Well, now he knows we can tell red from green," Margaret Kelleigh commented. "Wonder what stunt they'll think up for us to try next?"

They soon learned. The ladder was placed against the fence, and a gorilla climbed up and fastened a long pole to the top of the palisade, from which hung a cord with an apple on the end. The fruit dangled about thirteen feet from the ground, and well away from the fence.

"How's your high jump, Sneeze?'" Morelli asked. "Think you can reach it?"

But that was not the method they were expected to use, for a second ape lugged three large wooden boxes into the enclosure.

"Who hasn't won an apple yet?" asked Bridger.

"You haven't," retorted Mildred Henry. "Let's see what a college education does for you."

As Bridger piled the boxes under the apple, climbed up, and stood on top triumphantly munching his prize, Wil-

son yelled "Ray for Doc Bridger! Savant Solves Simian Secret!"

The gorillas now went into a huddle, chattering and scratching their heads. "Looks as if they've run out of puzzles," said Zbradovski. "Why don't they give us something hard, like a calculus problem or a code message?"

The apes finally agreed on their next test, which consisted simply of removing the boxes and poles from the cage and suspending another apple in mid-air.

"Let's see," said Franchot. "We could climb the fence and untie the pole, but whatta you say we give 'em a show? Dave, you and Sneeze are the heaviest—suppose you stand together here. Now Charley, you and Nelson get behind to brace them. Emil, you stand here and boost Henley up on their shoulders when I give the word. All ready, Alley—*oop!*"

But at that precise moment Zbradovski squirmed and the human pyramid collapsed into a writhing mass of limbs. "Damn you, Charley," the youth yelled, spitting out sand, "you tickled me!"

"Honest I didn't," Morelli protested, retreating. "It was a pure accident."

The dispute was finally quieted, and a second attempt brought down the apple.

As Bridger jumped to the ground Franchot cried, "I got a swell idea! Line up, everybody, and face the monkeys!"

Somewhat mystified, they obeyed. "Now watch me, and when I give the word do just what I do. Got it? Okay—one, two, three—go!"

In unison twenty-six thumbs were placed to twenty-six noses, one hundred and four fingers twiddled defiantly, and from twenty-six mouths came a long, rich, liquid Bronx cheer.

"That'll give the old boys something to think about!"

"Gee, it looks like we've scared 'em or something," Janet Rodriguez observed. "They're going away."

"That's a committee meeting if I ever saw one," Scherer reassured her. "They're just going to wrangle over what they've found out and decide what to do next."

Next morning the investigators were back. Lord Percy was accompanied by a smallish female gorilla, who was

carrying a notebook. They entered the cage and squatted side by side against one wall. Lord Percy beckoned to Bridger. When the chemist approached, he fumbled in a bag he was carrying slung over one shoulder and produced an egg slightly larger than a hen's. He held it up and made a sound like "Glk".

Bridger, hunkering down opposite him, gravely answered, "Glk".

The gorilla frowned, pointed at his own mouth and then at the egg, and repeated: "Glk". Then he pointed at Bridger's mouth.

"Maybe he wants you to eat it, Henley," Wilson called.

Bridger waved Wilson to silence. He thought a minute, then pointed to his own mouth and at the egg, and said: "Egg."

Lord Percy showed all his teeth in the gorilla equivalent of a grin. "Igg?" he said.

"Not igg—egg."

"Ugg?"

"Nope. Egg, egg, egg!"

"Ih—uh—egg?"

"Good—that's pretty nearly right. What else have you got there?" The female gorilla was making marks in her notebook with a massive kind of pencil. "Oh—that's a *fish.*"

"Fith?"

"No, fish!"

"Fiss?"

"Not fiss—*fish!* Fish!

"Fissss?"

Bridger shook his head and repeated the word, opening his mouth and pointing at his tongue. Lord Percy tried to imitate him, but merely produced a sound like a leaky soda-fountain.

The next item from the bag was an apple. After a few tries the gorilla was able to say something approximating "epple".

Then, adjusting his monocle, Lord Percy held up one hand, pointing to it with the other. When he had learned the world "hand" he proceeded with other parts of his anatomy.

"That's a *thumb. Fingers.* An *arm. Head. Eyes.*

Nose. Mouth. Ear. Neck. Chest. That's—oop!" Bridger lowered his voice, and his definition was lost to the crowd if its nature was not.

The anatomy lesson finished, the big gorilla pointed to his assistant and said something like "Blungblungth".

So? thought Bridger; pleased to meet you, Miss Blungblungth. I'd be glad to recommend you for a secretarial position any day. He pointed to himself and said slowly, "Henley Davenport Bridger."

"En-lee Dev-un—Dev-un—". Lord Percy became hopelessly bogged down.

"Oh, just call me Bridger. *Bridger!*"

"Blidza?"

"All right—Blidza, if you insist. One handle's as good as another."

The gorilla pointed at Ruth Pierne, who was the nearest of the others. "Blidza?" he said.

My God no, you hairy dimwit, thought the chemist. Why did you have to pick her, of all people? He shook his head and and said patiently, "Pierne."

"Pen-nee? Pee-en-nee?" Lord Percy quickly pointed at Ruth and at several of the other women and repeated, "Pee-en-nee?"

"Wrong again. Oh—I see what's the matter." Bridger pointed at himself and swept his hand across the group of watchers in an all-inclusive gesture. "Men," he said. Then he pointed at Lord Percy, his assistant, and the apes outside the bars. "Gorillas."

With that misunderstanding cleared up, Bridger again indicated himself and said "Bridger", then pointed at Lord Percy. The gorilla beamed and replied, "T'kluggl!"

I suppose introductions are in order, Bridger thought. One by one he called the people over: "Richard Nelson Packard—John Joseph Macdonald—Enid Bennett Hansen—". The secretary scribbled furiously, chewing on the end of her tongue as she struggled to convert the unfamiliar sounds into gorilla shorthand.

T'kluggl, as their examiner-in-chief was evidently named, grew tired of this rollcall and made impatient sounds to fix Bridger's attention. He went through the motions of putting something into his mouth, chewing it vigorously, and swallowing it. Then he stared expectantly.

"Eat," said Bridger.

The gorilla got another apple out of his bag and ate it. Then he said slowly, "Opple—epple—eat—T'Kluggl," and assumed the expression of a cat that has just consumed a canary.

Bridger grinned back at him. "T'kluggl eats apple," he corrected. "Keep it up, old ape, we're doing fine!" And he clapped T'Kluggl on the shoulder. The brute's a much decenter sort than a lot of people I've known, he thought; we're going to get along just fine.

The language lesson continued all day. Bridger gave the name of every object in sight, and demonstrated the meanings of as many of the common verbs, such as stand, sit, lie, walk, run and jump, as could be acted out. For some of the more complex concepts he called upon other members of the party to stage little acts in illustration. This pantomime brought on another of Wilson's little inspirations.

"Look here," he broke in, "T'kluggl ought to get this. Dave, put your arm around Miss Hansen. That's it—closer. Now look at each other." The bus driver and the principal complied, the former with a notable lack of enthusiasm, the latter with a hint of alarm.

"Now that, T'kluggl," said Wilson, "is *love.*"

"Love," repeated the ape gravely. Bridger's poker face stood him in good stead, but the others whooped and the victims of the prank drew apart as though they had found each other red hot.

"Say, Henley," put in Franchot. "Since you're getting so thick with the old monk, why don't you hint that we'd like a more civilized diet?"

"Yeah," chimed in another voice, "and what about beds?" "Tell him I want my clothes." "And what about some modern plumbing?"

"One thing at a time, folks," Bridger pleaded. "It'll be a while yet before we can get ideas like those across. I'll do the best I can, but we've survived this arrangement so far and a couple of days more won't kill us."

With the aid of gestures, Bridger indicated that he wanted a notebook and pencil like the ones the secretary was using. When these had been supplied, he proceeded with the lesson by drawing pictures and pronouncing the appropriate words. The gorilla finally departed,

scowling at the notebook and mumbling under his breath.

Next morning, when T'kluggl appeared, Bridger greeted him with, "Good morning, T'kluggl."

"Good munning, Blidza," replied the ape. "T'kluggl talk men talk—ess?" He seemed very pleased with his effort.

And so the language lesson was taken up where it had been left. Bridger found that whereas the names of common objects and the verbs denoting simple actions were easy to put across, other parts of speech presented more difficulties and abstractions left them floundering. The word "yesterday" had them knotting their foreheads for half an hour before T'kluggl seemed to catch on.

The next day T'kluggl stopped short in the middle of conjugating the verb "make" and cried: "Blidza—g'llillas come flom Fonmlith. Men come flom?" He paused expectantly.

"You mean, where—do—men—come—from? How'll I explain that? Here, gimme that notebook." And as the hours passed he gave T'kluggl a sketchy account of their adventures since awakening, using a mixture of words pictures, and gestures.

T'kluggl was delighted when he saw that he had been understood. He called the other members of his committee into the cage, and translated the story to them as Bridger proceeded. So absorbed were both apes and humans in what they were doing that nobody noticed that the sun had set until the chemist's sketches were made illegible by the growing darkness.

When T'kluggl appeared with his greeting the following morning, Bridger took him to task about their living conditions. Speaking slowly and distinctly, he said "T'kluggl, when can we men go out of the cage? We do not like the cage? We want our clothes, and a good place to sleep."

The ape scratched his head. "Men go out of cadze, men lun fass," he observed. "Men lun 'way fah. G'llillas not like. G'llillas like men to see, len men talk, len wat men do."

"The men will not run away. Gorillas have food. Men have no food. If gorillas give men food, men will not run."

"Blidza flens to g'llillas. Men not Blidza flens to g'llillas? Men go out, fight g'llillas? Not—not—"

"Sure?"

"Yes, sool. G'llillas not sool. Blidza"—he thumbed through his notebook—"Blidza 'tellizent men. Men not Blidza 'tellizent?"

Ruth Pierne spoke up unexpectedly: "K'thoolah blong thig ah fun?"

T'kluggl jumped in astonishment, then burst into the anthropoid equivalent of a laugh: "Kee—kee—kee! Velly 'tellizent woo-man, Pee-en-nee! Len g'llilla talk by heah talk. S'e say: 'Wat faw, not tly len.' Not light, but neah light. Light talk: 'Blong-uh k'thoolah thiggl fun?' Ass kwesson, put 'uh' with fest wed."

"Yes, yes—but how about our clothes, and some beds?"

"Men can have clothes. Wat is 'bid'?"

"Place to sleep; here—I'll draw you a picture."

Morelli spoke up. "What's all this argument about? I can only get what he says one tenth of the time, and if you two are going to start talking gorilla—"

"Simple enough, Charley. T'kluggl said he thought I was intelligent, but what about the rest of the crowd? And then Ruth, in gorilla, said 'Why not try to find out?'—only she didn't get the grammar just right, and he corrected her. How'd you do it, Ruth?"

"Oh, I just listened and memorized a few words that happened to fit in. I was pretty good in German at college."

"My hat's off to you—only I haven't a hat. You're appointed to teach the rest of us gorilla as fast as you learn it. Now, T'kluggl, this is a bed."

T'kluggl studied the sketch, which showed a man of about Packard's build sprawled on a shaky replica of an old-fashioned four-poster. "No have bed. G'llillas sleep sit, not sleep lie. But tly make beds. Men len g'llilla talk, g'llillas sool men flens; men not flens, men not go out."

Bridger translated. "He says we can have our clothes, and he'll try to rustle up something we can use for beds, although they don't use any themselves. Meanwhile, if we'll learn their lingo they'll decide whether we're to be trusted to be turned loose."

"What are they scared of?" Macdonald demanded. "Afraid we'll tear 'em apart with our bare hands?"

"No use getting sore, Mac. It's as if we'd captured a bunch of talking grizzly bears, and they were trying to assure us that they were strict vegetarians and we needn't worry about what would happen if we let them out and invited them in for supper. They'd never seen anything like us before, and they don't know how far to trust us."

The gorillas departed, and at sundown returned with a huge bundle of clothes and a number of large sponge-rubber pads, which made passably good surfaces for sleeping. "After sleeping on the ground, this feels like a feather bed," Marjorie Tremblay said.

10 ORIENTATION

RUTH PIERNE MADE THE MOST RAPID PROGRESS IN THE study of gorillaese; besides her natural linguistic ability, she was spurred by the responsibility of teaching the others. Bridger, though no linguist, wrestled mightily with the ape tongue in an effort to cut down the girl's lead. He had a vague feeling that she was the one person whom he did not want to have any advantage over him.

Between bites of breakfast one morning, Mildred Henry complained: "This life may be all right for you, Henley, but I'm getting fed up with it. Nothing to do all day but watch those damned monkeys go by and study their frightful language! We're not all professors and schoolteachers, you know."

"Yeah," Zbradovski put in. "If something doesn't happen soon, I think we ought to try to escape. I've been figuring on something the last few days—I'll tell you later when we're alone. Here's the committee of alienists."

T'kluggl had none of his teaching paraphernalia with him that morning. "Blidza," he greeted them in slow, careful gorillaese, "it is time that we began giving your people their freedom—a little at first, so that they will not abuse it. To begin, would you and Pyen-nay like to view our town?"

Bridger's halting reply got stuck after three words,

but the girl stepped into the breach and rattled off the equivalent of "I'm sure we should be delighted" without hestiation. As they trailed down the street after the gorillas, she spoke to the chemist in English: "Henley, we've got another problem. Two of them, in fact. We have a couple of little strangers on the way."

"Strangers? Oh—I get it. Damn! I was afraid of that. Who and—ah—how?"

"Elizabeth and Eleanor. You see, the girls have been coming to me with their troubles."

"Who are the pappas?"

"Elizabeth's is Dave Toomey. Dave wants to do the right thing, as the saying is, but he's a Catholic and he doesn't think it would be right without a priest. I tried to convince him that there just aren't any more priests, and we'll have to get along the best we can without them, but it still bothers him a lot. I left him trying to think the whole business out."

"Dave Toomey trying to think anything through is something worth seeing! What about Eleanor?"

"She's not so certain, but Ronnie Franchot seems to be the favorite. And now Ruby Stern is furious—it seems she had her eye on Ronnie, and she accuses Eleanor of unfair competition."

"Well, we'll have to get 'em paired off somehow. Nelson's our magistrate—he probably knows the marriage service. After all, any laws that exist now we'll have to make for ourselves, unless we want to adopt the gorillas' code. Dammit—why can't they control themselves like civilized people?"

Bridger missed the appraising look the girl gave him.

T'kluggl ushered them into one of the wooden houses that lined the street. "This," he said, "is my house. This is my wife, P'plookhl. And these, darling, are the two intelligent human beings I was telling you about."

Bridger and Ruth acknowledged the introduction with the formula they had been taught. There were no chairs in the room, but there were heaps of cushions around the walls, and several short-legged tables standing about eighteen inches from the floor. In one corner stood a wide, squat desk surmounted by a huge pile of papers.

"T'kluggl," asked Bridger, "what are those papers?

They remind me of papers that often covered a similar piece of furniture which I used in my former life. In my language they were called 'examination papers', and no sooner would one lot be cleared away than another would take its place."

"It is the same with these," the gorilla admitted. "I am a teacher of the young here in Dlldah—that is why I was appointed to investigate you people—and on these papers they have written out what they are supposed to have learned. Now, in your second sentence the proper word is 'glung', not 'glong', and . . . " T'kluggl methodically plodded through the rest of Bridger's grammatical sins.

The chemist waited till he had finished, and then burst out: "But I was also a teacher of the young! So was Pierne here. And in my spare time I studied the workings of living things, to learn what they were made of. Those papers of yours are the same as the 'examinations' of which I spoke."

It was T'kluggl's turn to be amazed. "This is a most remarkable event! I pursue the same study, and others related to it. I see that we shall have much to discuss about that former life of yours. But, my friend, do not become so excited, because when you do your grammar becomes so bad that I can scarcely understand you."

Examining the topmost papers, Bridger discovered that the gorilla writing consisted of a lot of wiggly lines running from top to bottom of the sheets. More like a seismograph record than anything, he thought.

"Whom do you teach?" he asked.

"From the sixth to the twelfth year," T'kluggl explained, "but only certain subjects. These are my assistants—Kha Khahng, who teaches from birth to the sixth year, and Gzigg'lilth, who also teaches from the sixth to the twelfth. After the twelfth year, those who show the most promise go to the central school at Mm Uth, where our government is located."

"Then this is not your main center?"

"No, Dlldah is the farthest east of all our settlements. This is Tsugg Oof, our foremost physician and an outstanding historian. He was sent from Mm Uth to investigate you as soon as we sent word of your discovery. He arrived but yesterday."

"Then we haven't seen him before? To us you look too much alike to tell."

T'kluggl found the idea amusing. "Kee-kee-kee!" he giggled. "Is that a fact? How strange—we experience the same difficulty with your people. For many days the only way I could distinguish you from the other males in your party was by your smaller size, and at first I could only tell that when several of you stood close together."

Nice to be picked out by an ape as the runt of the litter, Bridger reflected. I wonder how much of this conversation Ruth is going to carry back to the other women. "It might be easier without this growth of hair on my face," he observed.

"Perhaps. I am curious about this strange hair of yours, Blidza. Our archeologists have insisted that among your species it was the custom to pluck out all hair except that on the scalp. We knew of no reason for such behavior, except possibly to get rid of parasites. Now we find that the natural growth of hair seems to be confined to four limited areas. Is this a general characteristic of your species?"

"Yes—some races have more and some less hair, but the one to which we belong was almost the hairiest of all. At the time when I lived, it was the custom to cut the hair on the lower part of the face close to the skin, and to cut the hair on the scalp to about the length of a finger. Among the men, that is—the women have no hair on their faces, and some of them allowed their scalp-hair to grow uncut. How much do you know about us, aside from what you have learned by studying our party?"

"Very little," T'kluggl admitted, "except that your species was once very widespread and disappeared quite suddenly, shortly before our own kind began to develop greater cranial capacity. We have found a few skeletons, and many implements of stone and fired clay, as well as a few small objects of rare inactive metals which our archeologists and historians have conucluded were ornaments. We supposed it possible that you had a knowledge of other metals, but such perishable substances would long since have disappeared."

"Is Tsugg Oof the only physician hereabouts?"

"No—our resident physician, Bubblah Th'kong would be with us, but he is occupied at the moment with his professional duties. It was he who invited Tsugg Oof to come from Mm Uth to observe you. Now, would you and Pyen-nay like to see our factory? It is just outside the town."

As they ambled down the street, T'kluggl continued: "The things that interested us most among your possessions were those little round things with glass on one side, and rotating slivers of metal under the glass, with a lot of tiny metal wheels inside. I fear that Kha Khahng and I ruined one of them taking it apart, before we discovered how they work. Am I correct in inferring that they are for measuring time?"

"Yes. We call them 'watches'—and I hope it wasn't mine that you investigated. How do gorillas tell time?"

T'kluggl pulled out of one of the leather cases that dangled from his belt an object that looked like a household thermometer with an unusually fat stem. He held it under Bridger's nose. "You see," he said. "A string of combustible material is placed in the tube every night, after having been lit at the correct point from the previous string. Then one can tell the time by observing, from these markings on the glass tube, how far the string has burnt. Very simple. It was really those instruments of yours that convinced us that we were wasting our time in giving you such elementary tests of intelligence. We can produce such mechanisms in the laboratory, but to equip every inhabitant with such an instrument, made of rare metals like iron and copper, is not to be thought of."

Ruth Pierne had been chafing under the long silence as the two chemists, ape and human, chattered on. "Iron rare?" she interrupted. "Why, in our time it was the commonest of our metals. We used immense quantities of it for houses, vehicles, and all sorts of everyday implements."

"Indeed, Pyen-nay? Then iron must have been commoner in your time than it is now. We have some deposits of the minerals from which iron can be made, but it is much too rare to be used in making houses or any common thing. There was one very large deposit in

central Fon-mlith, but the mountains where it was found are now in territory controlled by the Pfenmll."

"Controlled by what?" Bridger demanded.

"The Pfenmll? Naturally you would not know about them. They are animals of a different species, yet of the same general group to which you and we belong. They have a primitive kind of civilization, and are very fierce and love fighting. It was they who drove us from Fon-mlith to this land in a war lasting for centuries. But that is a long story, and must wait for another time."

There were no loiterers in the streets, Bridger observed, and no swarms of gorilla infants such as had pestered them in the cage. He remembered what T'kluggl had said about his colleague, Kha Khahng—a teacher from birth to the sixth year. Education from the cradle to the grave seemed to be the gorilla formula—and no unemployed. They passed through a gate in the town wall and climbed the ridge on which the windmills stood. The heat was intense. Bridger had started out in his shoes and trousers, feeling vaguely that the leader of the party ought to make some concessions to dignity and conventionality. The trousers, comfortable in December, were now clammy with sweat and chafing him at every stride.

"Why don't you take your pants off, Henley?" asked Ruth, swinging along nonchalantly in a pair of moccasins. "My girlish illusions are gone beyond recall, you know."

"All right, damn it, I will!" retorted the chemist, suiting the action to the word. If I didn't, she'd make me feel sillier than if I did, he thought, so what the hell? Then he thought, hell's fire, is the woman beginning to run me already? Wish I'd left my pants on and shown her I've a mind of my own—but if I put 'em back on now I'll look like a complete idiot.

The factory was a long, narrow, one-story building on top of which were mounted the windmills. T'kluggl opened a door to admit them, and the other gorillas filed in after.

"I regret," their teacher said, "that as there is no wind today the large machines are not working. The workmen are at home or working the fields. We shall have to come again when conditions are more favorable."

As Bridger's eyes became accustomed to the half-light, he found that he was in a room that at first glance might have been any machine-shop in the world he had known. There was the same forest of shafting overhead, the same belts and gears. As he looked more closely, however, he began to observe differences. The shafts and gears were of wood, beautifully made but still wooden. Some of the smaller gears were of glass. The bases of the machines might easily have been mistaken for iron castings, but close scrutiny showed Bridger the grain of the wood. He was struck by the extraordinarily fine carpentry of these civilized apes.

At the other end of the room, two gorillas were working on two of the smaller machines, which gave out the intermittent buzzing and rasping of all wood-working tools.

T'kluggl said, "Blidza, you were speaking of iron. This is how we use it here." He pointed to the lathe, and Bridger observed that the cutting tool was of real steel, though no other part of the machine was metal. A drill-press close by had a steel bit, but the rest of the machine was a strange agglomeration of wood, porcelain, glass, and polished stone. Bridger climbed up on the lathe for a closer look at one of the shafts, and saw that the bearings were rings of porcelain.

"T'kluggl," Ruth Pierne asked, "are these machines not very fragile, being constructed of such weak materials?"

"Fragile? You could smash one with a heavy stone, no doubt, but they are strong enough for our purposes. Of course, special training is required to use them properly. I suppose you are thinking of the all-iron machines of your former life. But we have not done badly. Here, try to break this—or let Blidza try, since he is stronger."

The gorilla removed a glass set-screw from one side of the idle machines and handed it to Bridger, who had clambered down from his perch on the lathe. The chemist laid it on the floor, picked up a wooden handle from a pile of odds and ends, and brought it down on the screw with all his might. The blow merely drove the screw into the planking so that he had to pry it out with a glass-bladed knife borrowed from one of the grinning machinists.

"You may be short of iron," he said, handing back the screw, "but your glass surpasses anything have ever seen. Our glass was hard but very brittle and easily shattered. Tell me—how do you avoid trouble from wear of moving parts?"

T'kluggl picked up a short section of discarded shafting. "'Try to cut that with the knife."

The glass blade, which was razor-sharp and apparently as tough as the screw, would barely scratch the wooden rod. "What is this?" the chemist demanded. "In my time the only woods with such properties were from uncommon trees found in a few hot countries. Have you learned to grow them here?"

T'kluggl's black face bore a smirk of smug satisfaction. "That is ordinary pine, made hard by proper treatment."

The two gorilla workmen, while pretending to be oblivious to the antics going on around them, were obviously as interested in the human beings as the latter were in them. T'kluggl explained that they were making parts for a reaping machine.

"Where do you get the power for these machines," Ruth asked, "now that the windmills are not turning?"

T'kluggl pointed to the ceiling, from which was hung a granite block the size of an automobile. "That stone is connected to the machines by gearing," he explained. "On windy days we use the excess power of the windmills to haul it up, and on calm days we allow it to descend and drive small machines like these. We have a few cutting and boring machines which are turned by hand or by foot pedals, but we need them only in a very long calm."

They pottered about for a while longer; then T'kluggl said, "Although her questions have been most intelligent, I fear that Pyen-nay is not mechanically inclined. Suppose we return to my home for some food."

Ruth, who had been trying unsuccessfully not to look bored, started to apologize, but T'kluggl waved her protestations away: "It does not matter, Pyen-nay—we cannot all like the same things. I am certain that you will find interesting many things that fail to attract our friend Blidza. And I am sure that some food will be attractive to all of us. Kee-kee-kee!" He unscrewed the

monocle from his eye and polished it carefully with a bit of chamois from his belt, then replaced it, beaming good-naturedly at his charges. He's a good-natured old baboon, Ruth thought; lucky we didn't fall into the hands of the counterpart of some professors I've known! She walked along at the end of the procession, chatting amiably with the gorilla doctor, who admitted to being an expert in obstetrics. I'm glad we have him around, the girl thought. Mrs. Aaronson's nice, but I don't want to entrust any baby of mine to an amateur midwife!

11 QUIZ SESSION

BACK AT THE TEACHER'S HOME, THEY SAT IN A CIRCLE on the floor of the main room. Presently another gorilla entered with a pole over his shoulder. From the ends of the pole hung two steaming pots. One contained the usual lumpy oatmeal, and the other a strange purplish goo that looked like dyed rubber cement, and tasted hardly better. Meanwhile their host and hostess wandered about distributing other edibles, some harmless-looking and some distinctly queer to the human beings. T'kluggl made a circuit of the room with a huge armful of celery, handing a large bunch to each guest. Bridger and Ruth hesitated before starting to eat. Like watching the hostess to see which fork she uses, the girl thought.

The human beings were somewhat handicapped in imitating gorilla etiquette by having only two hands, but they followed as best they could. The first step was to grasp a longhandled wooden spoon in one's left hand and a fistful of celery in the right. Then one scooped out a spoonful of oatmeal, dipped the butt-ends of the celery in the purple goo, and took alternate mouthfuls of oatmeal and celery. The crunching of the celery gave the meal a sound like a burning spruce forest.

P'plookhl went around at the start of the meal and tied a large bib around each guest's neck. Her pelt was noticeably dirty; she made some remarks about it in rapid colloquial gorilla which Bridger could only partially follow, but he gathered that she had spent the morning plowing.

T'kluggl, between mouthfuls, began, "Now Blidza and Pyen-nay, you know us all . . ."

Bridger interrupted: "I beg pardon, T'kluggl, but we do not know this gorilla here."

"G'smuth! I forgot. We teachers are said to be a forgetful lot. This is T'kong T'kung, who headed the expedition that brought you to Dlldah. His work is to capture wild animals for study, and from his many exploits he has become known as 'he who always brings them back alive'. His capture of your party will be known as his greatest accomplishment."

T'kong T'kung, who sat on Bridger's left, grinned amiably and said something too rapidly for the chemist to understand. T'kluggl translated: "He says that he will write a book about his exploit, and if it is approved in Mm Uth he will be everlastingly grateful to you."

There was suddenly a faint "Eeek!" from Ruth, and Bridger felt her grip his arm. Something damp touched the small of his bare back, and over the munching of celery he heard heavy breathing behind him.

"Don't look now," the girl whispered, "but I think there's a grizzly bear behind you!"

Bridger felt the hair on his neck rise. He turned his head slowly, and out of the corner of his eye discovered that a huge bear was sniffing at his back.

"T'kluggl!" he quavered, his voice jumping half an octave, "Is this another friend of yours?"

T'kluggl clapped his hands sharply. "Here, Iggl!" The beast padded around to him and nuzzled his shoulder. He scratched it behind the ear. "Now, fthoo gong! Mmp!" The bear walked out of the room, its claws clicking on the floor. "She will not harm you, Blidza. We keep them to guard our houses at night, and for work in the fields. They are very useful and intelligent animals."

"We had similar animals in our time, T'kluggl, but they were not especially docile."

"Neither were these when we first came to this land, but we have improved them somewhat by careful breeding. They still run away occasionally, but in time we shall cure them of that tendency."

"I wish you would tell us more about your civiliza-

tion," the chemist told him. "How your government is organized—what progress you have made in my study of the structure and composition of things—and your history, especially the story of how you come to this land."

"I shall be glad to, Blidza; but you must excuse me this afternoon. Tsugg Oof here has come from Mm Uth especially to ask you questions, and we must not waste his time by discussing matters with which he is already acquainted."

That celebrity was lighting his pipe. He looked very directly at Bridger, and said: "First, will you give me a brief summary of the history of your species? Then I should like a short account of your own life up to the time you emerged from your hole in the ground, of which I have already been informed." Following T'kluggl's example, the historian spoke slowly and distinctly, avoiding contractions and colloquialisms that might prove confusing to the human beings.

Bridger frowned. "Come," said Tsugg Oof, "did you not understand me? I was told that you had a fair command of our language."

Bridger was annoyed at the other's tone, but he replied pleasantly, "I am sorry, but I was thinking where to begin. The history of my species extends over thousands of years and includes many distinct civilizations, some of them very important. To compress such a history into an afternoon's talk is a sizable task."

P'plookhl joined the circle. "Darling," she said, "I am out of m'gunth'gugg. May I have some of yours?"

T'kluggl passed his tobacco pouch to her, and she filled her pipe and lit up like the rest of the gorillas. The odor made Bridger wish he had a cigarette, but the practical difficulties of getting one were more than he cared to tackle.

"As you no doubt know," he began slowly, "your race and ours belong to a group of animals having certain peculiar characteristics, among them that of having nails on the fingers and toes instead of claws or hoofs. In our time there were many other species belonging to the group, most of them of small size and having tails. I do not know whether any such have survived to the present.

"Our kind—'men'—are believed to have branched off

from the rest of the group, which we called 'primates', about—what is your word for a thousand thousands?—right, about twenty-five million years ago. I should not say 'ago': I mean before our time. No very close estimates of the time were possible to us.

"Between half a million and a million years before our time, there occurred a great spread of ice over the northern lands. About this time we learned to use fire and to make implements of stone and bone. The age of ice lasted until twenty-five or fifty thousand years before our time. During this time occurred changes which resulted in some of our present physical differences from your kind, including the loss of our body hair and the reduction of our canine teeth."

Tsugg Oof interrupted: "What was the cause of these changes? They would seem more of a handicap than an advantage to such feeble creatures as you appear to be."

"The former may have resulted from our having evolved in a tropical country," Bridger told him. "The latter may have come from eating soft foods."

"But why should soft foods account for such feeble teeth? That is a mere negative factor; there should be some positive advantage to produce such a change."

"Well—I'm not sure that I can give you a definite answer."

"You do not know? I was told that you are the most learned member of your party."

Supercilious old bastard! thought Bridger; but he mastered the impulse to defend himself hotly, and continued his outline of history. When T'kluggl made one of his routine attempts to correct the chemist's grammar, Tsugg Oof snapped, "Not now, T'kluggl! The lessons can wait."

Some of Tsugg Oof's questions suggested downright incredulity rather than a scientific skepticism, but Bridger grimly declined to be heckled and timed his story so that he finished just as the evening meal was due.

"Very interesting," the historian commented dryly, "and I shall want more details later. Perhaps this man Bonz of whom you speak can enlighten me, if his profession is the study of ancient things. The impression that you give of your species is not altogether favorable. Apparent-

ly they have spent most of their time killing each other because of differences in their beliefs about what you call supernatural beings, whose existence none of them was ever able to prove, or else to further the interests of a few who dominated the rest, and whose orders the rest obeyed for no reason that I can see. I find it hard to reconcile such statements with the degree of civilization which you claim to have reached."

When Bridger and Ruth returned to the stockade, they were greeted with a chant of "Teacher's pets! Teacher's pets!" Bridger smiled wearily. "Bet either Charley or Ronnie organized that yell," he said to Ruth. "I'd like to see what they'd do with that old wind-bag Tsugg Oof grilling them!"

Next morning T'kluggl was on hand almost with the sunrise. He took Bridger aside, and said, "I should like you and Pyen-nay to come to my house again today for another interview. At the same time, Kha Khahng and Gzigg'lilth can interview two of the others. Which would you suggest?"

"If you want information, I should recommend Barnes there," he pointed, "and Scherer. No—it would be better to leave Scherer here to keep an eye on the others, and take Hansen instead."

And so it was done. As they approached a long, low building on the main street, T'kluggl said, "Why not stop at the museum for a while? It is not far to my house."

"Why not?" echoed Bridger, trying to keep his composure. Two bears even bigger than T'kluggl's pet were sniffing at his heels. When these had satisfied their curiosity, three small gorillas appeared and ran around the group in circles, staring at the people from all angles. "Hey, little one," Bridger barked in gorilla, "why are you not doing your lessons?"

The infant nearly fell over in astonishment, and all three retreated to a safe distance, while T'kluggl burst into a fit of "kee-keeing".

As they entered the museum, T'kluggl apologized for its smallness. "We are but a small settlement of a few hundred individuals. In time perhaps we shall have as fine a museum as any town in the land."

"Do all your towns have museums?" Ruth inquired.

"Of course; did not all yours? How is it possible to teach the young properly without museums?"

T'kluggl pointed out the various exhibits. There were geological specimens, models of machines, wall charts whose meaning the people could only speculate on, and a number of mounted animals including some of the larger mammals. Some of these Bridger recognized.

"Over here," continued the gorilla, "are relics that we have found of former civilizations, and from which we have drawn our inferences about your species."

Bridger saw a case with a neat array of Indian arrowheads. Next to it were the relics of the America he had known. They consisted, all told, of a piece of plate-glass the size of a man's hand; a battered gold watch-case with a few links of gold chain attached; a platinum wedding ring; a silver dollar on which, although it was worn quite smooth, Bridger made out the date 1887; a gold coin without a date which he guessed to be of colonial times; a piece of porcelain from an automobile spark-plug; a cameo with the head of a pretty girl in profile; and the greater part of a massive coffee-cup of 20th century road-side-diner type.

Bridger felt a wave of melancholy sweep over him as he reflected on the mutability of the products of his civilization. How come none of the corrosion-proof alloys we were so proud of have survived? he wondered; I suppose in a few million years even they have oxidized. All our splendid achievements—all our scientific discoveries—gone with hardly a trace. His eyes smarted curiously.

In his thoughts, the names of the great of science passed—Lavoisier—Darwin—Lobatchevski. Had all their work gone for nothing? Must it all be started over again, with these apes Not quite—there were still three fair-to-middling scientists alive: Emil Scherer, Abner Barnes, and Henley Bridger. He regretted little Pilly's death more keenly than ever. Then the thought struck him of the appalling responsibility that rested on these three—to pass on to the gorillas, and to their own kind if they should have children, all they could remember of the science of their day. His knees felt weak.

A detail of the program of the Triple-A S meeting they were to have attended came back to him. Mather,

the Harvard geologist, was to have spoken—something about "the future of man as an inhabitant of the Earth". Scherer had remarked on the title, in the bus, before they crashed. The future hadn't looked so good back there in the closing weeks of 1939: war in Europe, brought to the threshold of America by the scuttling of the *Graf Spee* of Montevideo—Russia and Germany allied against the world, while the American people howled with glee at the premier of "Gone With the Wind". What had happened, he wondered? Had Roosevelt allowed the United States to be drawn in? Or was he actually inviting war, as the anti-New-Dealers claimed? And what was behind that off-hand note in the article about the Carnegie Institute, in the issue of *Time* he had had in his coat pocket—confirmation of a German discovery that the uranium atom could be split, releasing nearly a quarter of a billion electron-volts of energy? His mind went back to certain hints he had picked up in conversation with men in physics—Bohr in the country since January, conferring with Fermi at Columbia, with Einstein at Princeton. It wasn't his field; he hadn't paid much attention; but something was stirring under the surface—something big! Had it been that something—atomic energy—unleashed and in the hands of uncontrollable men, which brought mankind smashing down in self-destruction and gave the world to these apes?

He turned away from the pitiful little cluster of relics, feeling cold.

Bridger and Ruth explained the things to T'kluggl, who was in a rapture of glee.

"Being persons of learning, you can appreciate the great importance of your arrival here to us," he told them. "As soon as possible, all of you must write down everything that you can remember of your former lives and of the world in which you lived. That includes not only the history and technics of your species, but your own histories, even to the most trivial matters. As soon as you learn our system of writing—no, it will be better if you write in your own language; we can translate it later."

"I'm sure we'll be willing enough," Ruth said, "but remember that you promised to give us some information

about your own people. We are curious about you as you are about us, you know." The girl had reached the point where the colloquial idioms of the gorilla language held no terrors for her.

Back in T'kluggl's house, they were soon settled comfortably among the cushions. "What customs would interest you?" inquired their hairy host.

"Oh, how you are governed, how you regulate the relations between the sexes, and how you rear your young, for instance."

"As for government,"—T'kluggl paused and polished his monocle thoughtfully—"the topmost administrative body, if that is what you mean, consists of twenty-eight individuals at Mm Uth. They are elected from a group of 144, who are selected every six years by competitive examination. Our scientists have found that, in these latitudes and with the volume of work required of such a group, twenty-eight is the best number."

"What does latitude have to do with it?" asked Bridger.

"The best number varies slightly with the mean annual temperature and humidity," the gorilla explained gravely. "In a tropical country the best number would be larger. If we have too many, they spend too much time arguing, and if two few they cannot handle the work that devolves upon them.

"The council of twenty-eight elects its own administrative officers, and replaces them if they are not efficient. Each town like this has a group of officers selected by the council at Mm Uth, from a number nominated by those who live in the town, and these in turn are chosen from a larger number selected by examination. The size of these groups is determined from the population of the town by a mathematical formula.

"You will be interested to know that there is now a proposal before the council to replace the formula that we have been using by another which the experts tell us will give a better distribution of responsibility and authority. You know, we have a class of scientists whose principal duty is to study the machinery of our government and devise ways of improving it. It is they who prepare the tests given to those who seem fitted to assist in the government of the town."

"That sounds sensible," Ruth commented. "We could

have used men like that back on earth—in our time, I mean."

"With us it is a necessity," T'kluggl assured her. "We learned after many cycles that, left to ourselves, we would never make any change in the system of our society until the reason for it had become pressing, and then a change would be made hastily and without proper thought. The delay, followed by sudden changes which often were of the nature of revolutions, caused many disastrous lapses in our social order. So, when our government was last reorganized, about four cycles ago, provision was made for a special group to insure that changes are introduced when they are needed." Four cycles in the gorilla time scheme, Bridger learned later, meant 576 calendar years. The cycle of 144 years seemed to correspond to the number from whom the central officials were elected. He wondered what significance it had. Were there traces of religious beliefs among these apes, as among the most primitive men, or had some gorilla mathematician worked out a duodecimal system of notation?

"It is probable that the new formula I spoke of will be given a trial of thirty-six years or thereabouts," T'kluggl continued. Three twelves—there it is again, Bridger thought. "Our chief officer in Dlldah is Ll Fthung-ee. He visited your enclosure several times during the early days of your—but here he is now."

A stout gorilla whose grizzled fur indicated advanced years had entered the room. When introductions had been made, he sat down beside Bridger and lighted a foul-smelling black pipe.

"I heard your last remark, T'kluggl," he said grinning. "The reason I have not given these people more attention is that the papers which I must keep in order were piled mountain-high on my desk. There have been many inquiries about you and your companions, which I hope to answer more intelligently now that I have time to see more of you. Go ahead with your instruction and pay no attention to me."

T'kluggl continued his explanation of the gorilla government, the mayor interrupting frequently to pour out masses of detail about elections, examinations, spheres of authority, and points of simian law which left Bridger's

head in a whirl. Finally their host switched the conversation to other planes of gorilla culture. Ruth and Bridger suspected that he did it in the hope of shutting off the gabby old gentleman.

When they got onto the inevitable subject of sex, T'kluggl tried diligently to pump them about human marriage relations, and Bridger felt his ears glowing red at the frankness of some of Ruth Pierne's replies. These school teachers certainly get to know about the facts of life, he thought. I suppose some of the kids they teach must be brought up under pretty seamy circumstances. He managed, by diligent verbal dodging, to get the gorilla back on the subject of his own people.

As P'plookhl appeared in the doorway, he broke off. "Suppose we adjourn the lecture; it is time to eat again. This terrible habit of yours of eating in the middle of the day will make me fat. Our normal routine, you know, is one meal on rising, one in the middle of the afternoon, and one before retiring."

"Don't you do any cooking at home?" Ruth asked.

"My dear, cooking in the home is all very well under primitive conditions, but I hope that this is a civilized community!" P'plookhl retorted.

12 THE GORILLAS' WORLD

AFTER LUNCH BRIDGER SUGGESTED SOME GORILLA HISTORY. "First," he said, "I think it would be clearer if you had a—I don't know how you would say it—a picture of the world, with the boundaries of the different lands marked."

"Oh, I understand you; that is easy enough." T'kluggl opened a cabinet which stood against the wall and got out some large maps.

The two people studied them in puzzlement. "Perhaps you could indicate where we are now," Bridger suggested. "The shapes of the lands seem to have changed since our time. I do not recognize them."

T'kluggl spread one of the maps on the floor and indicated a spot with a blunt forefinger. "I see," mused Bridger. "The eastern coast of the continent has sunk somewhat, and the western coast seems to have risen. I suppose that continent over there on the other map is

Fonmlith? Its outline has changed also. We called it Africa. Is that where your civilization arose?"

The gorilla adjusted his monocle for another session of exposition, and settled himself comfortably among his cushions. "Yes," he said, "that is where our species lived until 176 years ago, at the time of our great migration. But first I must tell you—" and T'kluggl launched into the history of his people, which in many respects paralleled the rise of any human civilization. He told of their emergence from savagery, their discovery of tools and fire, and their periods of being split up into small states. As far back as their written records went, they had been peaceful agriculturalists, without much urge toward either exploration or conquest.

"We had one period of trouble with the G'thong-smith. They are a species somewhat like us, but smaller, and with very large ears."

"He must mean chimpanzees," Bridger said to Ruth.

"These G'thong-smith inhabited southern Fonmlith," T'kluggl continued. "They are a very clever lot, but nervous and quite irresponsible. Their history is full of strange stories of civil war, conspiracy, and murder. But they built some magnificent cities, with huge stone buildings. They look down on us because they say that we cannot make pictures and music, and cannot recite long pieces of writing as beautiful as theirs. Of course we have pointed out that a camera makes a more accurate picture than anyone can draw, so that there is no need to draw except for special scientific purposes. Somehow this argument merely makes them more conceited than ever!

"As for their music, while no doubt it sounds beautiful to them, it is very similar to the noise of a lot of wildcats fighting. It is made on an odd sort of instrument with a cloth or leather bag. This is inflated by blowing through a hollow stick, while one twiddles one's fingers over many little holes in another stick, and this weird noise comes out of a series of other sticks. Most confusing, although I am a lover of good music." Bridger remembered the campfire serenade their captors had put on, and wondered what a chimpanzee would have to say about gorilla harmony.

"But we were discussing history. For a time the

G'thong-smith sent agents among us to stir up dissension, and to try to gain power over us. They never succeeded, except for a few short intervals, because when any dispute arose the gorillas on whom the G'thong-smith were counting always sided with the rest of us. Finally we became tired of these troublesome fellows, and many of them were killed. For half a cycle we had a law that any G'thong-smith who entered our territory should be slain on sight.

"They sent an army against us once, but it lost its way—a very easy thing in the great forests of central Fonmlith. Many of them became sick, and when we learned of their approach we hunted them back to the borders of their own land. They never tried that again! That was 2793 years ago, and our relations with the G'thong-smith have been amicable since, although we do not greatly like them, nor they us.

"But the part of our history which will interest you most is the story of our relations with the Pfenmll. I think I have a picture of one somewhere—" T'kluggl rummaged in the cabinet and presently produced a thin book with limp leather covers, apparently a children's primer. "Let me see—yes, here we are. This is a picture of an individual of the most numerous species of the Pfenmll."

"It looks like a baboon to me," said Ruth.

"Sure enough," agreed Bridger. "How big are these things, T'kluggl?"

"An adult male would weigh about as much as a gorilla, or a little less. Of course, I have never seen one in the flesh, as I was born in this country. There are several species of these beasts, and at one time small groups of them appear to have been scattered all over Fonmlith. As far back as our written history goes, which is about 26,000 years, there are records of raids by small bands of Pfenmll, sometimes coming from the west but usually from the north and east. They would pass through our country at great speed, killing and robbing as they went, and disappearing before any effective resistance could be organized.

"In time our governmental organization became sufficiently developed so that we had a standing army. After that the raids were less frequent, but the Pfenmll came

in larger numbers when they did come. About 12,000 years ago there was a terrible invasion and more of our land was laid waste, but we recovered in time.

"Meanwhile these Pfenmll were either copying some of the practices of civilization from us, or developing them independently. They had a speech of their own, and they learned the use of fire and tools. They became particularly skillful in metal-working, although as I have told you, metals are not as common as they seem to have been in your day. The Pfenmll used what they had almost entirely for weapons.

"About 600 years ago we learned that they, too, were experimenting with large governmental units. They have a fantastic system of government. When one of them, by use of force and fraud, has attained the supreme power, he rules until he dies, when his eldest male offspring becomes his successor automatically. That is, if he is not murdered before he can succeed. This strange way of selecting their rulers is one reason why we question that the Pfenmll will ever become really civilized. We gorillas have done many unwise things in the course of our history, but we have never left the choice of our officers to the caprices of heredity!"

"The Pfenmll were not entirely original in their idea," Bridger continued drily. "It was the custom among some groups of our own people, but I can say that it was being abandoned when we—ah—left our world."

"I beg pardon—I had no intention of offending you," T'kluggl assured him hastily. "But such a system of government has never occurred to us, and we find it difficult to understand. Perhaps the difference is biological—our system seems natural to us, and that of the Pfenmll to them. Possibly human beings are between the two.

"Anyway, all the Pfenmll of the species having red and black faces, who are the fiercest of all, became united under one individual. As time passed we heard that this individual was extending his power over the other races. We ought perhaps to have sent expeditions against the Pfenmll and tried to exterminate them, before they grew too powerful—but we did nothing, and hoped for the best. When they came, at last, their numbers were far greater than ours. We had one or two respites when

the Pfenmll fought among themselves, but step by step we were driven to the western shores of Fonmlith.

"We should probably have been wiped out, except that there is another species of primates—"

"What?" exclaimed Bridger and Ruth. "How many more are there?"

"No more with well-developed cultures. These of which I speak come from the southern part of the eastern continent, and early in their history they learned to build great ships. They have a tradition that they originally lived on islands which slowly sank, so that they became seafaring to save themselves. Now they have small settlements in widely separated parts of the world, and travel the oceans in their ships. They are about our size, but have little body hair, and what they have is bright red."

"Holy Moses!" Bridger whispered. "Orang-utans!"

"These Toof K'thll, as we call them, agreed to carry the remnants of our people over the sea to this continent, which they had found to be without intelligent life. We had to pay them most of our commodities for this service —but here we are.

"I forgot to say that we tried to get help from the G'thong-smith, but they had built themselves a great wall across the southern part of the continent, and sat safely behind it, declining to have anything to do with us. Shortly before our great migration they offered to set aside a restricted area in their country for our use, but we preferred to take our chances here, and, as our history has shown, we were probably right."

They discussed the history of the gorillas for a little longer, then Ruth said. "It will be very nice to have our freedom again, T'kluggl, but where are we to live? You know, we were accustomed to houses in our former life, and this sleeping in the open has been a most uncomfortable experience."

"Mmm—that will require thought," the ape replied. "We in Dlldah are somewhat crowded, as you have seen. There have been several new arrivals recently, and all our dwellings are occupied. We might arrange to have you share the quarters of some of our families, but I suppose it will eventually be necessary to build new houses for you. Your people will have to assist with the

work however—we have little labor to spare now, for there are several projects which must be finished before winter—a new hothouse, an addition to the factory, and other things."

"Oh, I'm sure we can work out some satisfactory arrangement." Bridger hastened to say. "But how about your hothouses? I should like to see them; in my former life I knew something about those used by my people."

"And," put in Ruth, "I should like to see one of your schools."

"You shall have the opportunity tomorrow," T'kluggl assured her.

"And I want to begin studying your written language," the girl went on.

"You will need assistance for that—but here is a book of instruction, telling the simple facts about the larger animals of this country. It is written for beginners in reading, so it might amuse you to see what you can make of it without help."

Bridger felt of the paper. "What is this made of, T'kluggl?" he asked. "It looks like paper such as we formerly used, but it feels different."

"The main constituent is rubber," the ape explained, "but it also contains wood fibers and—" a string of chemical terms.

"Is it strong?"

T'kluggl picked a scrap out of his wastebasket, which was suspended from a hook on the wall. "Judge for yourself."

Bridger tried to tear it. His face turned red through the tan, and the veins on the backs of his hands stood out, but the paper, instead of tearing, slowly stretched.

"It's strong enough to suit me!" he said, handing it back. T'kluggl crumpled it in both hands, grunted, and pulled it out to three times its original length, when it snapped. He grinned slyly at his human guest.

Back at the stockade, the rest of the party did not seem displeased at Bridger's news of the gorillas' plans for housing them. "It still don't seem right, a bunch of apes ordering us around," Macdonald objected, "but as long as they got all the chow, there ain't much we can do about it."

Next morning the entire band was led forth, and shown to their temporary lodgings, which consisted mostly of odd corners in assorted gorillas' houses. Toomey objected violently when he found he would have to share his quarters with a huge cinnamon bear, and was found another place in a house where there were no pets.

True to his word, T'kluggl took Ruth around to the school building in the morning. His assistants were putting the infants through their paces. Gzigg'lilth was working on a small group of ten-year-olds: one of the imps was standing beside the teacher's desk—which was, as might have been expected, a bare two feet high—engaging the rest of the class in a furious argument. Ruth's appearance stopped the debate cold, as the half-grown apes began to fire questions at their instructor and at the embarrassed girl.

Gzigg'lilth finally got his class going again, but only half-heartedly.

Kha Khang's class was of younger apes. As he got up to greet his callers, there was a sharp *wop!* as one of his charges brought a leather-bound book down on another's head. The resultant uproar failed to disconcert the teacher; he quietly ordered two of his larger pupils to separate the combatants, and went on talking to Ruth and T'kluggl.

Meanwhile Elizabeth Friedman, Dave Toomey, and Mortimer Wilson, accompanied by Bridger, were being shown through the factory by a female gorilla named Ksidd Ma-ukh. At the sight of the machinery, Toomey suddenly came to life; his sullenness vanished, and he tried to ask their guide questions about the works in his sadly inadequate gorilla. After groping helplessly for the words, he turned to Bridger.

"Listen, Doc," he begged, "can't you tell her what I mean? You know this lingo." Bridger, secretly delighted at seeing the bus-driver show signs of adjusting to their situation, spent the rest of the morning acting as interpreter.

Early the next morning they met at T'kluggl's home to consider sites for their permanent homes. "What sort of night did you spend, John?" Enid Hanson asked Macdonald, "I had the best sleep in ages."

"The bed was okay, after what we've been having,

but my landlord has a brat about two years old. First it sneaked up behind me and pulled my hair. Then it swiped my shoes, and threw 'em at me when I wasn't looking. Then when it got tired of playing, it wanted to curl up in my lap and go to sleep."

"You should have been at my place, Mac," put in Margaret Kelleigh. "My folks had a half-grown one who just dropped in for the evening and spent three hours cross-examining me. I don't know their language any too well, but from what I gathered some of its questions were on the embarrassing side. These apes certainly learn the facts of life early!"

"The kid or pup or whatever you'd call them at my house didn't ask many questions," said Zbradovski, "but she spent a couple of hours doing stunts on a horizontal bar, and after each one she'd look at me and say 'Bet you can't do that', or words to that effect. And dammit, I couldn't. I used to think I was pretty good at that stuff, but these monkeys have me stopped."

"Don't let 'em hear you calling 'em monkeys, Sneeze," Scherer warned. "They may not like it."

"All right—apes. What's the difference—no tails?"

"That, and the shape of their skulls, and things like that—it's pretty technical," the zoologist replied. "By the way, I was hoping for a good bath after the muck we've been bedding down in, but our friends don't seem to have bathtubs."

"There's a pool over the other side of town," Alice Lloyd explained. "They go over there once in a while and splash around, but mostly they go in for brushing and combing themselves on a large scale. You should have seen the pair I stayed with—the male was called Ga-blung Ga-blung, or something like that. He and his wife went over each other with stiff brushes like curry-combs. They asked me if I wanted to be brushed, but I said no, thanks, as politely as I could. They'd have skinned me alive!"

T'kluggl showed the people the site that had been selected for their houses, outside the palisade. "We shall soon have to extend the wall out around this area anyway," he explained. "This foundation that you see is for a new storehouse; it merely means taking in a larger

space. We think that four houses should do for the present."

"All your houses seem to be built of wood," said Morelli. "What about the danger of fire?"

"There will be no risk of fire," T'kluggl answered. "We shall use the same treated wood as for our own buildings. It can be charred, but it will not burn."

"Well, there goes the fire insurance business," Morelli lamented, "but I'll bet I could sell 'em policies against being eaten by wild animals."

"What would you use for money?" asked Wilson.

"Yeah—just what do they have, I wonder? Hey, T'kluggl,"—he dropped back into gorilla—"how do you —well, what I mean is, what does one of you give somebody, when the other one gives something to him?"

"You mean when I want something from the stores? Well, each of us has an account at the stores of a certain number of pith-flah. In our language, pith-flah means a kind of nut of which we were very fond back in Fonmlith. They did not grow in our part of that land, and had to be brought in from the outside. Many cycles ago, the custom grew of passing these nuts from hand to hand in exchange for all sorts of goods. Only those who had accumulated more goods than they could use at the moment would think of eating their pith-flah.

"Finally our scientists bred a variety that would grow in our country, so that the nuts became much commoner. This caused great confusion, because we had been accustomed to thinking of a house as worth so many pith-flah, an axe as worth so many, and so forth. Those who had accumulated hoards of pith-flah found that others could now amass equal numbers quite easily by simply planting one of the new nuts and waiting for a tree to grow.

"At first our government tried forbidding the growing of these new nuts, but that didn't work. Finally it was decided that, inasmuch as by that time we were getting all supplies from the common storehouse anyway, it would do no harm to continue giving each thing an imaginary value in pith-flah, regardless of how many were in actual existence. Now, when one does a certain amount of work or turns certain commodities in to the store, he is credited on the books of the community with

a certain number of these imaginary nuts, and when he takes something out of the stores, the proper number is deducted from his account.

"Of course, this is just a bare outline of the story. If I tried to tell you everything that happened about those miserable nuts, it would take days! But, briefly, that is how we came to exchange goods for pith-flah which do not really exist. The only specimens of these nuts that anyone now living has seen are a few in our larger museums."

13 INVASION

THAT AFTERNOON NELSON PACKARD TOOK BRIDGER aside. "I've been meaning to speak to you, Henley," the lawyer said, "but I haven't had the chance. I have the marriage ceremony all worked out, if you want to announce it before we go home tonight."

"Good idea, Nelson. Hey, folks! I have a little announcement to make. Nelson Packard here, as our magistrate, is all set to perform marriage ceremonies at the drop of a hat—and if you can't find a hat, I'm sure he'll be willing to dicker. Dave—may I speak to you a minute?"

There was a whispered consultation, and Bridger turned to the crowd again: "The first pair to be united in the bonds of matrimony will be our old friends Elizabeth Friedman and Dave Toomey. Step up, Elizabeth—I'm sure we all wish you all the happiness in the world. Now, if the rest of you will form a circle—"

"I'll say one thing for you, Henley," Packard Murmured. "When you once get an idea you don't waste any time putting it into effect." He assumed his best pontifical manner, somewhat hampered by the shrinkage of his waistline under the effects of simple food and abundant exercise. "Harrumph! Do you David, take this woman to be your lawful—". He went on through a fair rendition of the customary ceremony, closing with "—in the presence of these witnesses, and under the laws of the human race, I now pronounce you man and wife!"

"We are the human race, you know," he added seriously.

Leaving the rest chattering congratulations and sentiment, Packard and Bridger strolled down the street toward their lodgings. "Hey!" came a voice behind them. "Could you do another one tomorrow?"

"Why, Mac!" said Bridger. "Do you mean that you want to get married too? Who's the lucky girl?"

"Enid and I," Macdonald said simply.

"Enid? You mean Miss Hansen?"

"Yeah, Miss Hansen, and you don't have to look at me like that. We fixed it up quite a while back. She's only four years older than I am, and she don't look it. For some reason she seems to think I'm pretty hot stuff. So what about it?"

The two men assured him that nothing would make them happier. "Wonder who'll be next," Packard mused as the former cop turned away. His eyes travelled to Ruth Pierne, deep in conversation with one of the gorillas, then back to Bridger. The glance was not lost on the chemist, who felt unreasoning anger rising within him. If they'd mind their own business! He was thankful for his beard; it was a great help in maintaining some outward appearance of composure.

"Well," he said, "I guess we all know about the Stern Hooper-Franchot situation, and it looks as if Eleanor has the lead. And your friend Charley seems to be pretty thick with Mary Wilkins."

"That's a possibility," Packard admitted with due legal caution. "But have you realized that we're going to have a surplus of—let's see—four women? When a few more pairs get eliminated, the competition for the men who are left is going to be something fierce."

"I suppose we'll have to face it—especially when the older ones like Miss Hansen seem to be setting the example. We might try some form of polygamy—just for this generation, of course."

"But that wouldn't be—no, I'm thinking of the laws of the sovereign state of Ohio again. I suppose we'll have to make our own laws to suit the circumstances."

Work on their new houses began next day. Bridger drove his crew, realizing that they would show plenty of energy for a while after the boredom of their captivity. Barnes, Toomey, and Papa Aaronson soon shaped up as the straw-bosses of the outfit. The rest were willing

enough, but they fumbled with the unfamiliar tools, got in the way of the workers, and gave each other copious advice. Little by little the raw edges began to wear off as the buildings took shape.

The Hooper-Franchot wedding came off in due course. Bridger, watching Packard perform the ceremony, thought: Ronnie looks like a man doing a high dive into a wet sponge! He'd like to get out of it, but he hasn't the nerve to balk. Too bad—Ronnie's a pretty good egg even if he is a lightweight.

Scherer sought out the chemist afterward. They talked for a while about biology and house-building; then Scherer said, "Well—poor Ronnie's cotched at last. But you might say that he asked for it. I didn't think Ruby Stern would come to the wedding, but she never batted an eyelash. She's got guts, that girl! By the way, Mildred Henry and I are going to try it too."

"What? Well! Congratulations and all that. You would pick the best looker of the bunch!"

"When are you going to do your duty by the race, Henley?" the zoologist demanded bluntly. "Take Ruth Pierne, now—"

"Now look here, Emil—you're a good friend of mine, but that's one thing I'd just as lief not be kidded about."

"I'm not kidding. She may not be a dazzling beauty, but I've noticed that most of the men look up when she comes around, and she has a swell figure and plenty of brains. She doesn't exactly hate your guts, either, you know."

Bridger felt the blood rising in his face; it made his beard itch. "Dammit, Emil," he insisted, "I just plain don't want to marry anyone! Running this show is a fulltime job, and I can't afford to get tied up."

Scherer had a twinkle in his eye and a broad grin was growing in his beard. "Henley," he said, "that's bunk, and you know it. Now that we're getting places to live, and work to do, the *fuehrer* business is going to get easier every day. Personally, I think we're going to have to wind up by accepting the gorillas' culture or cutting loose from them entirely: otherwise we'll be a thorn in their side, and they'll seem more and more like brutes to us. I don't have to tell you the kind of trouble

we had in our own time with minorities who insisted on staying minor and different."

"Still planning the destiny of the race?" Wilson cut in. "Say—do you guys know what these monks have got? Hard cider! I tried it, and it's got the old stuff! Oh—I was supposed to tell you there'll be a concert in the square tonight, and you're invited."

The concert started shortly after sunset. The people sat in little groups on the ground among the motionless rows of black apes.

The first performer was a soloist who played an instrument resembling an overgrown semicircular xylophone. He sat inside the circle and walloped the plates of the instrument with a pair of clubs the size of baseball bats. Bridger thought successively of stoves falling downstairs, automobile crashes, and a convention of the blacksmiths' union, but he noted that Sneeze Zbradovski and a couple of the girls seemed to be enjoying the stuff. At that, it didn't sound too unlike some of the things he'd heard on the radio back there in 1939.

Next came the local glee-club of sixteen gorillas. Their performance was hardly easier on the nerves. The apes pounded their chests rhythmically and shrieked in unison. T'kluggl, whispering in Bridger's ear, tried to point out to him the fine points of the alleged harmony, and to explain the extremely complex rules on which he said it was based. But Bridger remembered a trip he had made by boat from Los Angeles to San Francisco, with thick fog all the way, when he had had a stateroom directly under the whistle.

Afterwards food was served, buffet style, in the square, with wooden noggins of cider all round. Bridger tried for a while to keep up with T'kluggl's consumption of drinks, but after his second mug he saw that he was hopelessly outclassed. He explained to the ape the unfortunate consequences which would ensue if he continued.

Later, as he was getting ready for bed, the sound of voices approached. He went to the window opening on the street. In the moonlight he saw four figures weaving slowly toward him, arms draped over each other's shoulders. Something about the fearful racket was familiar. Then he saw that the figure on the right was that of a

man, and that the other three were gorillas. Mort Wilson, his hat on the back of his head, marched arm in arm with a black giant who might have been the imperturbable Kha Khahng.

The four happened to hit a line of their ballad at about the same time. "Soo-et Ad-aw-lah-een—mah-ee Ad-aw-lah-een!" Bridger heard, in an indescribable mixture of human and gorilla English. If only I could go back a few million years and tell people about this, the chemist thought.

As he stretched himself out on the pile of cushions which T'kluggl had supplied for a bed, the quartet had changed to a tender number in equally unintelligible gorillaese.

T'kluggl and Bridger stood on the roof of the tallest house in Dlldah. Two other gorillas were there; one peered through a telescope at a distant hilltop, and spoke to the other, who made notes. Overhead a great semaphore spread its arms. Presently the gorilla at the telescope left it and began working the arms of the semaphore. The second gorilla handed T'kluggl his notebook: "Here," he said, "this concerns you. You might like to read it before I set it up."

T'kluggl ran his eye over the wiggles. "More visitors," he remarked to Bridger. "Tsugg Oof is coming back and bringing some friends with him. One of them is Kik-Kee-Whee, the ambassador from the G'thong-smith."

Downstairs they watched the gorilla cut stencils for the local newspaper, which came out every six days. T'kluggl handed the chemist a copy of the previous issue; it was a long strip of paper folded together zig-zag like a map. Bridger, although he had been studying the gorillas' written language, could make next to nothing out of it.

The savants from Mm Uth arrived in force the next morning, and the grilling they gave Bridger made his previous inquisitions seem mild. He felt as if were back in college being quizzed for his Ph.D.

The chimpanzee ambassador acknowledged introductions with elaborate politeness. He was a few inches shorter than Bridger, but heavier, and he wore a monocle and a scarlet sash around his middle. When the

questioning started, he perched himself on a pile of cushions, leaned back against the wall of T'kluggl's living room, took out of his pouch a telescope cigarette-holder which pulled out to the length of a yard, inserted a cigarette, lit it, and holding the affair lightly in his right foot puffed contentedly. He asked an occasional question. When Bridger commented that the party had been debating the question of polygamy, which was to be brought to a vote that evening, the gorillas looked solemnly interested but Kik-Kee-Whee almost exploded with mirth. He even dropped his monocle and had to fumble for it among the cushions.

"May I have one of your honorable smoking-things?" Bridger asked him, using the polite form of address. "We smoked things like that in my former life, and I have wished for one for a long time."

The chimpanzee obligingly passed him a cylindrical case of inlaid strips of bamboo. Bridger lit one of the longish cigarettes and found that it had an unpleasantly sweetish taste, but felt bound to finish it to avoid hurt feelings. "Would it be possible for us to get some pipes like yours, but only about half as large?" he asked T'kluggl. "Barnes whittled a few for us, but he hasn't had time to make any more."

"Why yes," T'kluggl started, "I'll speak to . . .", but Tsugg Oof cut in impatiently. "Please, T'kluggl, you can settle these trivial details later. Now, Blidza, will you tell us more about those payments you call tac-siss?"

The chemist finally broke up the session on the plea that he had to attend to his duties as chairman of the human race. "Very well, if you insist," Tsugg Oof agreed, "but we will go along with you to see how you conduct your meeting."

As the meeting opened, Packard took the floor. "Sorry I can't agree with you, Henley," he said, "but I've been giving a lot of thought to this polygamy proposal, and I'm sure it would set a bad precedent."

He went on to explain his reasons in detail. The lawyer was an adroit and forceful debater, and Bridger began to see his proposal doomed. Oh well, he thought, what of it? It's not the sort of thing you can ram down people's throats; if they don't want it, they don't want it. He was very much surprised, when, after two hours

of heated discussion, polygamy carried the day. Bridger observed with a spark of amusement that all the married women—there were now five, including Mrs. Aaronson—voted solidly against it. Ruth Pierne, too, registered an emphatic "No!" Strange, Bridger thought; she's pretty broad-minded about most things, but you can never tell with a woman!

As the meeting was breaking up, there was a disturbance down the street. The gorillas hurried off into the dark, and Bridger and some of the men followed. Through the chatter the chemist could make out the word "Pfenmll" repeated over and over. Wriggling through the crowd, he saw that it surrounded two gorillas, a male and a female, gasping and evidently exhausted from running. The female was smeared with drying blood.

Most of the adult population of the town was soon packed into the street, and Bridger strove valiantly to discover what was happening, but could get no answer but the ominous "Pfenmll." Finally he sighted Kik-Kee-Whee bobbing about in the crowd. He wormed his way through to where the chimpanzee was perched on a barrel, observing the melee with interest.

"From what I can gather," Kik-Kee-Whee told him in his fluent but oddly accented gorilla, "these two are the survivors of a party of six that started for the coast a few days ago. It seems that one of the ships of the Loof K'thll, bringing goods to trade, is overdue, and the gorillas thought they would go to meet the traders, and incidentally study the birds and flowers and what-not and amuse themselves along the way.

"Well, the Loof K'thll arrived all right, but they didn't bring goods to trade; they brought an army of Pfenmll. The gorillas were promptly attacked, and four were either killed or captured; the two you see escaped into the forest and made their way back with the warning. These Loof K'thll are conscienceless rascals; as long as they are paid well, they'll carry anything or anybody. They don't care if it means the destruction of a civilization."

Bridger remembered T'kluggl's story of the unheroic part the chimpanzees had played in the war in Africa,

but thought it wise not to mention it. "How many are there?" he asked.

"They don't know yet; certainly hundreds, from what the fugitives say: perhaps thousands. Probably they came in more than one boat."

"How many gorillas are there?"

"Altogether? I don't know—somewhere between twenty and thirty thousand, I believe. Of course, that includes infants, so the effective fighting strength will be much less. In an emergency such as this the females will fight beside the males."

That exhausted the chimpanzee's information, though not his thoughts on gorilla and human culture. Bridger, impatient at the small-talk, tried to get more from the gorillas that hurried past, but they muttered excuses and dashed on. Finally he assembled as many of his crew as he could find, gave them what news he had, and sent them home. He returned to T'kluggl's house, hoping that his host would come in later, but neither T'kluggl nor P'plookhl was there; he waited for hours and finally fell asleep.

He was awakened next morning by T'kluggl's hurried entrance. "I can't talk to you now, Blidza," said the ape. "I must help to get the army off. Perhaps I can give you a few minutes later."

All that day the human beings found themselves at loose ends. The gorillas were far too busy to pay them any attention. As the hours passed the undercurrent of excitement began to affect them too.

"They haven't asked us to help, Henry," Janet Rodriguez observed, "but I think we should offer to do what we can. They've been pretty decent to us, really."

"Good idea," the chemist agreed. "I was going to suggest it myself. Suppose we meet here in the square again at sunset, and I'll try to drag the big shot down for a consultation. There must be something we can do."

He spent the rest of the day observing the gorillas' preparations and keeping out from underfoot. The army, it seemed, comprised practically the entire adult male population. Besides their shooting devices, which the new Mrs. Macdonald insisted should be called arbalests, they had quite an assortment of armament—broad-brimmed rubber helmets that looked like firemen's hats,

small bucklers, wooden maces with glass spikes, knuckle-dusters with spikes of formidable length, quarterstaves with a twenty-pound stone at each end, and glass-bladed knives. Late in the afternoon the column set out briskly along the road to the east.

Bridger finally cornered T'kluggl, who had remained behind. "Please listen," he said. "My people want to make themselves useful, and I'm sure we can if you'll let us. In a way it's our war, too, you know."

"Oh, there will be plenty for you to do," the ape replied. "We must put Dlldah in condition for defense. That means laying in a supply of food and water, surrounding the wall with covered pits, and a lot of other things. Also, the factory must be kept going continuously, making arms and ammunition. It may be wise to make a set of small arbalests for your people; ours are too heavy."

Bridger persuaded him to come down to the square, and to bring the mayor and the keeper of stores, the latter a female named Gliff Thoo. After some discussion of the tasks that the people could be expected to carry out, Zbradovski said, "I think we ought to have an observer with the army. If we have to fight later, it will be a big help to know something about these Pfenmll. I don't think any of us know much about military science, and that would be the quickest way to teach us."

Ll Fthung-ee, the mayor, objected at once. "That wouldn't do at all! Not one of you would have a chance in a fight with the Pfenmll. You would merely get yourselves killed for no good purpose."

"He's right, your honor," Wilson chimed in. "You don't get quite our point of view. We ought to have two observers, really, in case something should happen to one . . ."

The stout gorilla finally gave in. "Very well," he agreed, "but who should it be? Your females cannot possibly get around fast enough, nor are they strong enough to stand the exertion of military life. Blidza, of course, will have to stay here to manage the rest of you. Bonnz and Toomee are needed at the factory for their skill with machinery. If things look serious, I

shall have you all sent back to Mm Uth. Perhaps it would be better to do so immediately . . ."

Zbradovski broke in: "You could send Wilson and me; we don't seem to be good for anything special here." After more argument the gorillas finally agreed to this arrangement.

Macdonald had been hovering around the fringes of the crowd, trying from time to time to inject a word in his halting gorilla. Seeing the conference on the verge of breaking up, he turned anxiously to Bridger.

"What I'm tryin' to say," he told the chemist in English, "is that with all these pigs the size of buffaloes, we ought to be able to get up a good mounted force. I was a mounted cop once, before I got hurt and had to quit, and I could organize a squad and train 'em if they'd let me."

Bridger translated. "It's an ambitious idea," T'kluggl said. "It might be good if it could be done, but these draft-pigs of ours are not that easy to train. However, our friend here can try his scheme, if he likes, with one or two pigs first."

That night, as they wandered back to their quarters, Wilson caught up with Zbradovski.

"Look here, Sneeze," the publicity man said, "when I backed you up on your scheme I didn't know you were going to elect me to do the dirty work! It's all right for you—you're just a young squirt who likes that kind of excitement—but I don't know . . ."

"You don't have to go if you don't want to."

"No—I'll go, I suppose. I just wish you'd sprung the idea on me first, sort of gradually. I don't like to be pushed into these things. Still, maybe it won't be so bad—I always did like the idea of being a war correspondent."

14 THE PFENMLL

THIRTY HOURS LATER, WILSON AND ZBRADOVSKI WERE awakened by a large hand shaking them by the shoulder. It was light enough to make out shapes, but it would be at least an hour before the sun was up.

"If you two want to see any fighting," growled T'kluggl in their ears, "you'll have to hurry. The army

will be moving out in a few minutes, and I have to go back to town. Come on; I want to introduce you to the commander."

The two men stumbled after the professor through the gorilla camp. There was a quiet bustle around them; apes cleaning their teeth, rolling up their blankets, looking over their weapons, and pulling on their absurd rubber helmets. There was more to the camp than they had thought when they arrived the previous night. "'Bout two hundred of 'em," muttered Wilson. They passed a line of eight pig-wagons, and a cleared space in which gorillas were inflating a hot-air balloon.

"Good morning, Commander," said T'kluggl suddenly, stopping in front of a gorilla who, in the dim light, seemed no different from the others. "These are Human Being Wil-son and Human Being Spla-doff-skee, who are to accompany you. My friends, this is Mmpl Fethi, Commander of the Dlldah Company." The Commander clapped his hands in greeting, and the men did likewise. "I must leave you now," continued T'kluggl. "Try not to get killed. We have become very fond of you people."

"Just a minute, Professor," said the gorilla named Mmpl. "To be quite honest—" he turned to the men—"I wasn't very well pleased when I heard that you were to come with us. You could easily get in our way at a critical moment, and if you are killed, which is quite likely, I shall be held responsible. If you come, I want it understood that you will obey my orders implicitly. If that doesn't suit you, you can go back to Dlldah now with the Professor."

"We understand," Wilson assured him. "You're the boss."

"Very well. Stay close to me, but don't get in my way. Look and listen all you wish, but don't ask questions unless I give you permission. I can't stop in the middle of a battle to think up answers. Talk to each other, if you like, but don't raise your voices. If a fight starts, get behind something and try to look inconspicuous. Can you remember that? Good. Goodbye, T'kluggl—I hope the Pfenmll don't catch you on your way back. Get your belongings, human beings; we're ready to move." With that he strode off, barking orders right and left.

By the time the men had found their bedding,

crammed it into their packs, and woven their way back to the Commander, the two hundred apes had finished striking camp and were lining up. As the men hurried up, Mmpl blew a shrill whistle. An ape beside him raised one of a bunch of little colored flags. A score of gorillas broke ranks and disappeared into the woods on both sides of the road. "Scouts and flankers," whispered Wilson. A few minutes later a second blast of the whistle sent a larger group swinging up the road out of sight. With a third blast, most of the remaining gorillas stepped out smartly into the road and set off in a double file at their rolling walk.

"Follow those," barked Mmpl. "I have to get the wagons started—I'll be with you presently." The men obediently trudged off after the long black column of apes. Behind them came a squeaking and grunting, and seven of the pig-wagons lurched into motion, the huge animals heavily muzzled to prevent their bellowing. Two wagons were loaded with axes, shovels, rope, stakes, and various odds and ends of impedimenta. The other five carried what looked like catapults covered with tarpaulin, and crates that might contain ammunition.

Presently Mmpl hurried up and fell into a walk just ahead of the two men. He paid them no attention. Instead, he drew a map from one of the numerous pockets in his harness and swung along silently, studying it from time to time. A subordinate ran back to mumble something in his ears; he nodded briefly and kept on, looking now at the map and now at the road and the woods. His brusque and gloomy mien contrasted with the phlegmatic amiability of the others of his species whom the men had met.

The road wound now through evergreens, now through hardwoods, and now through huge brake-ferns that almost met over the men's heads. The only sounds were the swish of the gorillas' huge, hand-like feet through the short grass of the road-bed, the heavy breathing of the pigs, the occasional squeaking of a wagon, and the rarer sound of some small animal fleeing into the underbrush.

The sun rose, and the air grew warmer. An occasional bird sang, and there was a faint buzzing of flies. Still the stony, overgrown road led on, over one hill after

another, and still the column of apes maintained its slogging pace. The men began to sweat, and the straps of their packs began to cut into their shoulders.

For hour after hour they trudged along. The air had become oppressively hot, and a thin cloud of dust hung over the marching column. The flies, seeming to find the gorillas' thick skins and dense hair too much of a challenge, descended on the men with glee. Red-faced, swatting at the buzzing swarm, Wilson muttered, "I've got the first real appetite I've had in months."

The woods grew thinner and finally ended, and they came out into an area overgrown with long grass. The column halted suddenly. There was the sound of arbalests being cocked, and the men could see gorillas deploying up ahead. Mmpl turned: "Do you see the big oak on that little rise to our right? Crouch down and get over there—fast. Don't show your heads above the rise."

The oak stood by itself in the open. When the men arrived they found three gorillas hoisting themselves and their arbalests into its branches. Wilson and Zbradovski slid off their packs and sat down with their backs to the trunk.

"Look," Sneeze said, "there's the balloon!" Sure enough, the big bag could be seen over the first ridge, a faint plume of smoke streaming from the vent in its top. "Oh my God!" cried Wilson. "Is that all the farther we've come? I thought we must be halfway to the seashore by now."

"That's a fair distance," Zbradovski assured him. "Six or eight miles, I'd say. Remember, it isn't noon yet."

Shortly Mmpl trotted up and focussed a telescope on the distant balloon. The men could make out a faint point of light below the bag, winking on and off.

"Heliograph," muttered Zbradovski.

"I know, stupid!" answered Wilson.

Then two officers came up, and Mmpl conferred with them in growls while all three pored over their maps. Mmpl lined up his telescope on a hilltop opposite the balloon, and again there was a winking gleam—much plainer now, because the distance was less by half. The three officers trotted off.

The gorilla army spread out around the oak. A quarter

of them trailed over the rise, carrying strange-looking things that seemed to be square wicker shields with poles protruding from the centers. When the shields were set on the ground in a row, the poles kept them nearly vertical, and the whole thing made an effective-looking four-foot breastwork. Two more rows of shields were laid at right angles to the first, making three sides of a square with the tree in the center, and the rest were piled where they would be handy.

Now four of the wagons were pulled into position behind the shields; a fifth was placed at the left end of the front row. It bore an elaborate wooden apparatus. "Looks like a cross between a spinning-wheel and a handcar," Wilson commented. The officers set up a tripod on the crest of the hillock, and blinked off heliograph messages alternately to the balloon and to the operator on the distant hill-top. The men ate their lunch and wondered when the excitement would begin.

Presently a slightly more cheerful Mmpl came over and sat down heavily beside them. "I suppose you'd like to know what this is all about," he began. "That's Ah Glugg over in the trees. He's our best scout. A party of Pfenmll passed under him just before he started signalling, so you see he doesn't mind taking chances. He estimates their total number at two or three thousand. They could slaughter us in no time if they were together, but they're not. As they came inland, they spread out fanwise, and now they're strung out over a twenty-mile front. It would take them at least two days to get back together, since they don't know the country and aren't following the roads.

"The lot we're expecting number about a hundred, and they ought to come out of the trees over there"—he pointed—" in an hour or two. At least, that's where we hope they'll be. Now you can see why I chose this place to meet them. In front of us, a down-slope for a hundred of your yards, then a brook, then an upward slope for three hundred yards and the forest. On our right, a patch of alders. On our left, a downward slope, not steep but long enough to slow down a charge, and laurel bushes at the bottom to make the going hard.

"They might sneak around us, of course, but if they do we'll have to depend on the balloon's seeing them,

which oughtn't to be difficult in this clear weather. They've been sniped at by our scouts until they're good and angry. I've ordered three-quarters of my company to keep out of sight on the west side of the hill, and when the Pfenmll get here they'll think they have only about fifty of us to deal with, and will probably come a-running.

"Ah Glugg tells me that we've had one casualty. A branch cracked under one of his scouts, and the Pfenmll saw him and brought him down with javelins. But Ah Glugg got even. He made some clear footprints where he knew one of their sentries would find them. The sentry started sniffing along those tracks alone, and presently one of our gorillas dropped on him from a tree and cracked his skull before he could squeak. They hung him up by the tail for the other Pfenmll to find.

"If we lick this lot soon, the Mm Hyah company is playing tag with another bunch north of here, and we may be able to catch them in the rear. If we can keep that up, we may be able to hold up their advance quite a little, although eventually they'll annihilate us of course."

Wilson turned slightly green at that "of course". "But I thought we semaphored the Central Council for reinforcements, yesterday," he said.

"So we did, but I can see that you never tried to hurry a gorilla. The Council will meet and order somebody to get out the general mobilization plan, and somebody else to inspect the arsenal and draw up a report, and so forth. Then a few days will pass, and the first gorilla will come in and say 'Sorry, sir, but the termites got into the filing cabinets and ate the general mobilization plan, and I can't find a copy anywhere.' The Council will say 'Dear, dear, how awkward! Now we shall have to draw up another plan, and we obviously can't undertake any offensive action until it is ready.'

"Well, the months will pass, and they'll get their reports all drawn up, and the reservists called out, equipped, and drilled. They'll decide after much argument who shall be Chief of Staff, and eventually they'll be ready to drive the Pfenmll back into the ocean. Unfortunately, my dear human beings, we shan't be here to see it."

"Don't you think the pig cavalry might help a little?" asked Wilson unhappily.

"I doubt it. It's the wrong kind of country for cavalry, and the pigs have been domesticated only a few generations. Besides, the Pfenmll still outnumber us ten to one, whether we go afoot or pig-back. They can run faster than pigs, too."

"Why should they want to kill us?" demanded Zbradovski. "We're not their hereditary enemies or anything —in fact, they've probably never heard of us."

"How should I know why Pfenmll act the way they do? Because they're Pfenmll, I suppose. Your friend, Professor T'kluggl, ought to—listen!"

The men heard a faint, rhythmic thumping, somewhere in the hills to the east. "It's they," said Mmpl. "They use drums for signalling." The thumping became a little plainer, and was answered from the north and south. "Any more questions? Be quick; I have work to do now."

"Yes," said Wilson. "What's that thing on the farthest wagon, and what are the gorillas in the tree over our heads supposed to do?"

"That thing is a rapid-fire arbalest, and the squad in the tree are supposed to pick off hostile officers if they get close enough. Remember my orders: keep back of the tree out of the way, and watch out for javelins." With that Mmpl strode off to direct his forces.

The men began to feel a certain looseness of the stomach muscles, and a dryness of the throat. "I wonder just how good those rubber-band guns are?" Wilson worried.

"Not as good as rifles," replied his companions, "but they're pretty good. They weigh about thirty pounds and kick like mules. A bunch of the apes were holding target-practice the other day, and they let me try one. I couldn't even pull the knob back to cock the thing. After they'd had a good laugh at me, one of 'em cocked it for me, but I couldn't hold it steady enough to aim properly, and the kick just about knocked me over. Those guys were doing some mean execution on targets at three hundred yards."

"Wish these baboons would do their fighting without those infernal drums!" complained Wilson. "They give

me the willies. Look—isn't that something moving up in the trees?"

It was. A half-mile away, beyond the little brook, a group of greyish creatures had emerged from the forest and were picking their way down the slope. At that distance they looked rather like lions. They were carrying things, and the sun flashed on metal here and there. As the men watched, more and more came out of the woods until the whole hundred baboons were in sight.

The gorillas had been winding up all the catapults except the queer one on the left, and were putting what looked like earthen jugs into the breeches. "Stinkbombs," Wilson explained. "T'kluggl told me they're the nearest they've been able to come to a real lethal gas. This stuff has the properties of both tear-gas and vomiting-gas, and it has the most horrible smell you ever imagined."

"I bet the Chief could have made 'em the real stuff, if there'd been time," Zbradovski said. "Hold everything —they're going to shoot!"

The catapults went off with four resounding thumps. The jugs soared against the sky, and smashed on the far side of the brook. Where each landed a sluggish cloud of yellow vapor arose. "About the size of a two-car garage," Zbradovski described it later. The drumming, now loud and near, changed its beat and the baboons broke into a run. The apes had started to rewind the catapults before the first missiles struck; four more jugs followed the first, then four more. When the baboons reached the stream, there was an almost continuous wall of gas from the alders on the right to the laurel beds on the left. One gap was still open, and through this three baboons leaped and galloped at their foes. There was a sharp command, and the men saw the gorillas crouching and aiming their arbalests. As the Pfenmll approached, the men saw that they were demoniac-looking beasts with bright-colored snouts, little deep-set eyes, and bushy grey manes. Each gripped a lance with one forepaw and ran on the other three legs.

The arbalests went off with a rapid klunk-klunk-klunk, and two of the attackers tumbled head-over-heels. The third galloped back to the brook. He raced up and down, looking for an opening in the wall of

gas, and finally plunged into the alders and disappeared, splashing and crashing.

"Don't think they'll try to get at us from that side," said Wilson. "At least, not if I know alders. We could pick 'em off as fast as they could wriggle through."

He was right; the baboon troop set off downstream. Presently a swarm of grey manes were seen bobbing through the laurel bushes.

"Oh—oh!" cried Wilson. "They're going to use the machine-gun, or whatever it is." One ape had swung himself into the saddle at the rear of the machine. Two others tugged at the handles of the walking-beam, rocking it rhythmically up and down. The flywheel began to revolve, slowly at first, then with a shriller whirr. A yard-long clip of darts was set upright in the breech.

"I get the idea," said Zbradovski eagerly. "Ape in the saddle lets in the clutch; inertia of the flywheel cocks and fires the thing—blam-blam-blam. When the clip's empty, the apes on the handcar dingus pump hard and speed the flywheel up again—and so it goes."

The drumming changed again, and a wave of baboons swept up the slope with shrill barking cries. The men noticed one baboon who stayed behind, his head raised above the laurels; they guessed that he was the drummer. A gorilla shouted something about allowing for windage. The arbalests klunked; the darts streaked toward the enemy, sunlight flashing on their glass heads. One or two baboons seemed to have fallen. "Watch out for javelins, you two!" Mmpl roared. The gorillas were crouching behind their wicker breastwork.

"They surely can't throw javelins that far!" Wilson protested. A moment later the baboons rose on their hind legs, made throwing motions, and a shower of six-foot spears rained down on the gorilla position. Zbradovski yanked the journalist behind the tree just as two of the missiles struck on the other side and stuck quivering in the bark.

When the men cautiously peered around the trunk the baboons were coming on again, but there were gaps in the front line. The arbalests had become more effective as the range lessened. An agonized shriek arose from one of the gray heaps that dotted the slope.

Then the ape on the rapid-fire arbalest moved, and

the machine chattered like a vast and ancient lawnmower. "Lower!" yelled Mmpl. The gorilla in the saddle made an adjustment and the thing clattered again, swinging clumsily back and forth, a stream of darts flashing from its muzzle.

The whole front rank of attacking baboons crumpled. The clattering ceased while the arbalest crew changed clips. Most of the fallen baboons were on their feet immediately, but the charge had stalled in a babel of confused yelling. The gorilla infantry kept up a steady fire, and the machine recommenced its infernal racket.

Again the drum-beat changed, and the baboons began picking up their wounded, slinging them over their shoulders, and moving off down the slope. Some dragged themselves along with difficulty, others limped on three legs, their tails drooping; every few steps a dart would find a vital spot and bring one down. A stink-bomb catapulted into their midst turned the retreat into a rout.

When they were out of range the tumult diminished. One wounded baboon who had been left behind waved a paw feebly. Two of his fellows bounded up the slope toward him. The machine-gunner coolly laid his sights on the prostrate form, and when the rescuers reached him, shot them down with a short volley of darts.

Mmpl came swaggering up to the oak, his black face split in a huge grin. "No bad, eh? My grandfather was a famous soldier and student of military—".

He broke off, staring past the men, then yelled an order in a voice that made their ears sing. About twenty-five baboons had popped out of the bushes and were coming full tilt toward their unprotected rear. At Mmpl's shout, the nearest squad of gorillas snatched up their wicker shields and flung them down in the path of the attack. They had time for one scattered volley of darts, then dropped their arbalests and picked up their bucklers and maces.

As the first rank of baboons reached the line of shields, they crouched. The rear rank leaped on their comrades' backs and took off in soaring leaps that carried them over the shields into the midst of the gorillas, lancepoints first. There was a scrambling, shrieking moment of close fighting, then the hopelessly outnumbered baboons were streaming back into the

shelter of the bushes, carrying their wounded with them. Presently the whole troop could be seen moving swiftly down the stream out of sight.

Mmpl returned, winding a bandage around one forearm. "If we had that pig cavalry of yours now," he remarked, "we might be able to make an effective pursuit. As it is, it's a waste of time to chase baboons on foot. Come along and take a look at them."

Three gorillas were dead, one with a javelin through his head, one with a lance driven into his chest, and the third with his throat bitten out. There were a number of wounds, most of them not serious. One of the apes had been knocked out by a blow from a baboon's throwing stick.

"So that's how they get that ungodly range with their javelins," Wilson exclaimed.

Four baboons, beaten into a furry red pulp, lay within the breastwork. Others were scattered over the slope up which their main attack had come. A gorilla was systematically bashing in their heads with his mace.

Mmpl was counting up corpses on his stubby black fingers.

"Twenty-one to three isn't doing badly," he remarked. "I don't believe my grandfather ever did better. But don't you two human beings start promising yourselves long lives."

15 THE CHARGE OF THE PIG BRIGADE

THE SUN WAS LOW WHEN THEY SWARMED OVER THE LAST ridge between them and their rendezvous. Mmpl took one look through his telescope, shut it with a snap, blew the whistle, and barked orders furiously. Within five minutes the company was streaming down the hillside through the long grass; as they ran, the mass of gorillas shook itself out into a long crescent, its horns bent forward.

At the foot of the slope the Mm Hyah company was locked in battle with three hundred baboons. The invading monkeys had hidden in a gully, ambushing the gorillas before the startled apes could use their arbalests.

The baboon commander had had his scalp laid open by a mace. Dazed, and blinded by his own blood, his military judgment was shaken for the moment. When a subordinate called his attention to Mmpl's company pounding down on his rear, his action was to pull a score of his own fighters out of the melee by their tails and send them in an uphill charge against ten times their number.

Mmpl waited until this detachment was almost upon him, then greeted them with such a blast of darts that only three were left on their feet. These showed no desire to continue their imitation of the Light Brigade. Thus when the baboon commander finally realized the seriousness of his position, the trap was closed. Surrounded, the baboons milled around and fell over each other trying to break out of the menacing wall of bucklers and grim black faces. A few escaped by jumping over the gorillas' heads; their chief was one of these, but a quick witted ape sent a dart after him and broke his spine. He kept on at a crawl, chattering and dragging his hind legs, until two gorillas beat his already gory head into a red pulp.

The rest of the invaders hurled themselves fiercely against the ring, but within half an hour the last survivor was sitting on a pile of corpses at its center, gibbering defiance. Mmpl finished him with a careful shot from his arbalest-pistol.

Wilson and Zbradovski had been left behind in the downhill charge. When they reached the battlefield, the gorillas were preparing to move on. Mmpl took the two men aside long enough to warn them again against undue optimism. "We slaughtered two-thirds of them with very little loss of our own, I know, but that was because of some unlikely accidents, like that commander's getting whanged over the head."

There followed two weeks of quick marching and countermarching, of ambush and raid, as the combined Dlldah and Mm-Hyah forces strove to whittle down the overwhelming numbers of their foes, while conserving their own as much as possible. The gorillas knew that their only chance of survival lay in keeping the baboons in heavily wooded country, to which their tactics were ill-adapted. Wilson and Zbradovski admitted later that

they must have slept some of the time, but all they could remember of the campaign was a continuous round of exhaustion, blood, and terror.

On the third day after the battle by the stream, a pigwagon containing several wounded halted near them and a weak voice called to the two men. It was T'kluggl. He spoke with difficulty, spitting a little bloody froth now and then. The professor explained that a patrol of which he was a member had clashed with a baboon patrol in the forest several miles to the south. T'kluggl had broken his mace over the head of one baboon, and then, weaponless, had strangled two more of the enemy simultaneously, one with each pair of hands. While he was finishing this feat, another baboon had run a lance between his ribs. He seemed cheerful, and not a little elated at his unprofessional prowess on the field. "What's a punctured lung?" he demanded, coughing. "An inch more to the right and he'd have cut the aorta—then I should have really had something to worry about. I'll be back in harness before the war is over."

Day after day and night after night the baboons' war-drums thudded among the hills, drawing the invaders' scattered forces together and maneuvering to surround the gorillas. Scouts had found a gap in the ring, and the gorilla army pushed through it during a heavy thunderstorm. But the baboons saw them; within an hour the drums were echoing through the forest, and the invaders were in full pursuit.

The gorillas lashed their draft-pigs furiously and raced westward. Presently they debouched on an open grassy area. Mmpl and the other officers consulted briefly and decided to risk a break straight across. They had reached a clump of trees near the middle when a force of baboons appeared out of the woods in front of them. Still other baboons broke through the trees behind them. More appeared to the north. Mmpl gave the command to turn south, and blew his whistle; fifteen seconds he blew again to stop them. The baboons were swarming south of them as well.

The gorillas set diligently to work, digging themselves in with picks and shovels. They went at the work with such prodigious energy that by the time the baboons

were within shooting range a shallow trench had been run completely around the clump of trees; this was reinforced with shields, and outside these a line of rope entanglements had been set up. To further strengthen the defenses, some of the gorillas went around with shovels sprinkling broken glass in the grass outside the ropes.

The baboons closed in—north, east, south, and west. About a hundred of them galloped up close, and galloped off again when they received a flurry of darts. The rest sat down in the long grass out of range. It was learned later that the king of the baboons, who had given orders not to begin the attack until he arrived to direct it in person, had gotten lost in a swamp with his Imperial Guard, and did not arrive until after dark.

The apes worked frantically all night to strengthen their defenses, reinforcing the rope entanglement with "antlers" made by trimming the branches of trees down to points. Morning showed the baboons camped all around the copse at a respectful distance.

"They don't seem to care for fighting before breakfast," Zbradovski remarked.

"Neither do our bunch," said Wilson, his mouth full of a very dry sandwich. "Personally I'm not sorry."

The sun climbed higher in the sky, and a drum began to beat, answered by another. The baboons were moving about. Soon their battle-standards—poles with bunches of leather strips fastened to the end—were set up, and the horde began to get into formation. The gorillas hunched lower in their trench, while their officers went the rounds giving last-minute instructions.

The drum beat changed from tum-a-tum, tum-a-tum to something like ta-ta-tum-tum-tum, ta-ta-tum-tum-tum. More drums took up the rhythm until the ground seemed to have with their dull thunder. The baboons were moving—first lines of javelin-throwers with bundles of missiles slung over their backs; then great squares of lancers. The sun flashed on their accoutrements. "God, I wish they'd do something!" muttered Wilson. "Watching 'em close in at a slow walk this way gets my nanny."

Tata-tum, tata-tum went the drums, and with a football-crowd roar the baboon horde charged. Like the first drops of a rainstorm a few javelins fell; then came

a shower; then came the baboons. As the gorillas opened fire, the first baboons piled up on the ground in squirming heaps; those behind bounded over the bodies and swarmed into the ropes, where they in turn were shot down, so that their bodies festooned the entanglement in grotesque attitudes.

The first two ranks of those who charged the machine-arbalest went down like rows of children's blocks; those behind broke and scattered right and left. Then the crew of the machine pushed it to the other end of the camp and repeated their performance. Stink-bombs, dropped wherever the attack was hottest, sent hundreds of the monkeys reeling away, sneezing and retching. A few baboons got through the ropes and rushed the trench, but before they could be supported they were either lying dead or galloping off out of range.

In a few minutes it was over—the baboons had withdrawn, leaving nearly two hundred dead or wounded lying around the gorilla camp, and the big apes were tying up javelin-wounds and lighting their pipes as if it was all in the day's work.

Three days later nothing had changed, except that the corpses had begun to stink. The gorillas worked on their fortifications; the baboons went about their baboonish tasks at a safe distance. On the morning of the fourth day the sky, whose overcast condition had made the gorillas' heliographs useless, cleared, and there was a brisk north wind. Daylight showed the baboons clustered around a line of newly-erected haystacks north of the grove. Mmpl sought out the men.

"They're planning a smoke-screen," he said, "so they can get close before we can see to shoot. Here are a couple of arbalest-pistols; I think you're strong enough to work them. Get in under the trees with the wounded, and try to pick off any Pfenmll that get through our line. Don't, whatever you do, get excited and shoot one of us in the back by mistake."

Wilson accepted his weapon glumly. "You know, Sneeze," he said, "sometimes I wish I believed in a future life. The outlook for this one isn't so hot."

As he spoke the haystacks began to smoke, and presently the thick white clouds that burning green grass gives off rolled down and blotted out the landscape.

Wilson and Zbradovski rubbed their eyes and tried to breathe through their handkerchiefs. The drums told them what was happening behind the wall of smoke; they knew when the charge was signalled.

The defenders could see nothing until the first baboons floundered into the ropes and impaled themselves on the sharpened stakes around the position. Some were filled with arbalest-darts, but where one fell two scrambled over his body.

Above the general uproar the men heard the machine-arbalest clatter, then stop. They ran through the trees to that side of the camp. The wind had shifted, and the smoke pall was beginning to lift. When the men arrived they found that the gorillas had already been driven back from their entrenchments. The baboons were packed in front of the line; as the men got there, some of the monkeys in the rear climbed over the heads of those in front and launched themselves across the trench.

Wilson shot the first one that scrambled over the grunting mass of primates in his direction; the baboon slid down the back of a gorilla and landed in a heap. His mouth opened and closed, but his yells were lost in the general racket. Zbradovski got another, but before either man could reload a third came at them with a lance. The shaft ripped through the young man's jacket; he hit the beast on the head with his pistol.

The monkey blinked, reared, and sank his fangs in Zbradovski's shoulder. Another swung a short bludgeon at Wilson's head; the man ducked, and a gorilla brought the baboon down with a flying tackle. Wilson finally got a fresh load into his pistol and blew out the baboon's brains as it struggled with its tackler. His next shot was a clean miss; the intended target knocked the pistol out of his hand with its lance-butt and came at him with its yellow teeth bared. The baboons were breaking in; they were everywhere among the trees, in a minute it would be all over . . .

Macdonald's cavalry was lined up outside the village, each trooper standing beside her pig. Macdonald yelled "Mount!" and the apes climbed smartly into their saddles. "By the right flank!" he shouted, and was about to

add "March!" when a yell from the observation tower made him look up. The she-gorilla was calling through a megaphone: "Baboons in the west, coming along the Dlldah road! I think they're a small party."

Macdonald's brain buzzed furiously. Should he leave the village to take care of itself? Then he thought, better try this gang out on a small party before we tackle anything big, even if it does mean a delay. So he shouted, "By the left flank—march! Trot!" and the line of pigs rumbled off.

Two miles from the village a lone baboon popped into view around a bend in the road. He turned tail and scampered out of sight, but was back immediately. Behind him came others. Those in front advanced more and more slowly, so that those behind crowded up on them, chattering furiously. They seemed never to have seen draft-pigs before, or at least pigs with gorillas riding them, and they seemed not to like the looks of what they saw.

The pigs, on their part, found the baboons' looks no more to their liking. Macdonald's mount slowed up and zigzagged, and presently turned broadside, blocking the road and squealing with alarm. At the sight the baboons came on with a whoop. They paused halfway to let fly their usual volley of javelins; the spears swished through the foliage and thudded into the pigs' hides. One gorilla thumped to the ground; another yelled in pain. Then all other sounds were drowned in a roar as of all Nebuchadnezzar's lions.

Macdonald's pig bucked like a steer, almost sending the cop flying, then hurled himself at the enemy, his snout almost touching the ground and his little eyes red with hate. The other pigs thundered behind him. The leading baboon tried to run, but Macdonald's mount caught him neatly with an upward snap of his great head. The baboon commander sailed high in the air and came down in the rear of his troop. Another landed in the crotch of a tree and stayed there. Those which the pigs did not have time to toss into the trees were trampled into shapeless puddles of blood and hair.

Suddenly the remnant of the baboons was fleeing like leaves before a storm. Macdonald's pig, twelve feet of baboon intestine trailing from his left tusk, led the

pursuit. The pigs, completely out of control, spread out to hunt baboons and for half an hour barged about the forest, rooting monkeys out of the holes in which they tried to hide and butting trees that they had climbed to shake them loose. Hours passed before all the pigs had been collected again and calmed sufficiently to be manageable.

Shortly after sunrise the next morning, a red-eyed ex-cop halted his column at the top of a rise, dismounted, stretched, and peered off to the eastward. Those guys who talk about sleeping in the saddle never tried riding one of these porkers all night, he thought. Then he saw a plume of smoke rising above the trees, and to his ears came a sound like a world-series game heard at a distance.

He scrambled back into the saddle. "Fight's on!" he shouted. "Mount! By threes—trot!" And off they went.

They reached the edge of the forest just as the baboons closed in on the gorilla camp. A few minutes more and they had pounded through the baboon encampment and were upon the rear of the monkey army. Macdonald tried to deploy his company, but the first whiff of baboon had driven the pigs mad again, and the column plowed through the foe like a needle through butter.

The first the besieged gorillas knew of what was happening was when the baboons, locked in death-struggle with them, suddenly fell back. It looked as though the baboons had lost their wits, for they had not only given up their attack at the moment of victory, but were rushing about the plain in utter disorder, yelling their heads off. Then, over the baboons' heads, appeared a long line of black shapes topped by equally black gorillas. As the line plowed forward through the smoke, baboons flew into the air like popping popcorn.

They passed the grove and emerged on the far side of the baboon horde without casualties. It's no use trying to steer these things, Macdonald decided; you get 'em into formation first and hope to God they all run the same way. He got his company turned around and formed into a strung-out line which should cut a real swath on their next charge.

As they rolled forward the baboon army opened and

spewed out the Imperial Guard, trotting in smart formation with the king himself at their head. A pig thundered at the king, who braced his lance and tried to catch it in the eye. The lance-point struck the pig's forehead and the shaft snapped like a toothpick; the next moment the king's body, ripped nearly in two, was cartwheeling over his Guard's heads. In five minutes the entire baboon force, including what was left of the Guard, was galloping off the field in a huge cloud of dust with the pigs slashing and trampling in their rear. The pursuit continued over plain and hills, until the company, mounts and riders alike, were too exhausted to continue. Splashed with blood from top to toe they straggled back to the camp at a weary, plodding walk.

16 THE STHOG-MITH

THE LINE OF BURDENED WAGONS CREAKED SLOWLY TOward the familiar windmills of Dlldah. Wilson, sitting beside the driver of the second wagon, leaned back when they came in sight and told Zbradovski, who, his arm in a sling, was sitting on the floor of the wagon with the other wounded.

"When I get there, Mort, I'm going to do nothing but sleep for a week. Ouch! Damn it, I wish that driver would learn to dodge rocks in the road!"

"What're you kicking about? Look at what's his-name —Dzong Goo—back there. He has six bad wounds and you never hear a peep out of him. All you've got is one little monkey-bite."

As they rolled through the village gate, the two men were immediately surrounded by those who had stayed behind.

"One at a time—please!" Wilson begged, waving his arms. "I can't answer sixty questions at once. Yeah, we licked the pants off 'em. Sure, Enid, your husband's all right—I saw him just before we left. He'll go down in history as a great hero or something. Boy—the way those pigs of his plowed into those monks was something to watch! Yep, a lot of our side got killed; my old drinking-companion Kha Khang was one of them. No —I mean yes—there are plenty of baboons left, so the war isn't over by a long shot. The last word we had

from our scouts was that they'd forded the river and were camping on a hill where Mac's pigs probably couldn't get at 'em. No—I don't know what they're going to do next, but you can bet it'll be nasty! The less I ever see again of those Goddamned monkeys . . ."

Bridger sat in the convalescent T'kluggl's living room, poring over a map. "We'll have to do something soon," the gorilla said. "They're camped over here, and they've constructed some very respectable fortifications. I'd hate to have to try to get through with ten times the forces we have, and as Mmpl would say, the council at Mm Uth is still trying to get its committees to report.

"It's only a matter of time before they come at us again. Some of our fighters raided the camp a few nights ago. They shot a few darts into the Pfenmll, but our enemies appear to have gotten their courage back; they came swarming out through the palisades like hornets, and of course our apes had to run for it.

"One of them brought back a long pole with a big wad of cotton at the end, which he found in the camp. We also learned that they have a lot of alcohol with them—why, I don't know, but it suggests that they intend to soak the cotton in alcohol and use the poles as torches to scare our pigs. It's a simple plan, but it might work.

"According to our scouts, the Pfenmll are getting hard-up for food. They caught a couple of the Sthog-mith, whose dam is only a mile or two from their camp, and ate them."

Bridger frowned. The beaveroids wouldn't be feeling very friendly toward the baboons after having two of their number eaten.

"I have an idea, T'kluggl," he said thoughtfully. "Maybe it won't work, but it might be worth trying. There's no point in getting into another pitched battle until we have to, even with those three hundred reinforcements the council sent along to keep us quiet. Listen . . ."

T'kluggl listened, his wrinkled black face dubious. "If you can do that, Blidza," he said when the chemist had finished, "you will have succeeded where we have failed for a very long time. The Sthog-mith are unapproach-

able. Yes, I believe they like mountain ash bark best; I'll find out if any grows near here."

Two days later, Bridger, a bundle of bark over his shoulder, walked slowly toward one end of the great dam. A hundred yards away he shouted to attract attention, put down his bundle, and retreated slowly to the edge of the woods, where a small party of Mmpl's scouts was on the watch for possible baboon foragers. Somewhat to his surprise no stones were catapulted at him.

The chemist watched from a distance while a group of armed beaveroids came out of the tower to examine the bark. As they started back with his offerings, he advanced again, holding his hands over his head. They faced about and pointed their wooden pikes at him menacingly.

When the pikes were almost touching his chest, Bridger began to talk in what he intended to be a reassuring tone, explaining with gestures that he wanted to go inside the tower, and that his intentions were friendly. At last the beaveroids surrounded him, still holding their pikes ready, and marched him off to their stronghold. Once he stumbled, and immediately four pike-points jabbed him in the ribs. Suspicious devils! he thought. Lord help me if they turn hostile once we're inside.

Inside the log tower they climbed up and down ladders in semi-darkness until Bridger was completely lost. The place reeked with beaver-musk, making his head swim. He was finally pushed into a completely unfurnished room with one small window. Other beavers were there besides his hosts or captors; they talked in a whistling cry that reminded Bridger of coloratura sopranos doing their stuff. He got out a pad and pencil and went to work.

Hours passed before the beavers finally seemed to catch on to what he was doing, and to understand that a certain arrangement of lines on the paper represented one of their kind. And I used to think I was a pretty good sketch-artist, Bridger thought ruefully. But once they caught the idea progress was rapid. When he drew a recognizable picture of a baboon, there was a hostile movement; when he crumpled the paper and threw it

on the floor they relaxed somewhat and withdrew their pikes a few inches. By dark he had finished his task, and the beavers seemed to know what was expected of them.

John Macdonald sat on his pig by the river-bank. The beast nosed among the plants and occasionally looked up with little nervous squeals.

"Keep calm, son; keep calm," murmured the big policeman.

He looked down at the expanse of shallows in front of him, and at the vast dam forming from his right. Seems like they ought to be along pretty soon, he thought; the drums have been getting louder. Hope my girls can keep control of their mounts. If this doesn't work we'll be in the soup for sure! Like the time back in Pitt when we caught Weepy Martin. That was a scrap . . . Hope the baboons ain't strung out in too long a line. If—ain't those the girls?

Across the river a dozen tiny black things had popped out of the woods and were splashing across the ford. Macdonald gripped his flag—a pole with one of Franchot's shirts tied to it—and watched the objects grow into draft-pigs ridden by female gorillas. When they were halfway across, the first baboons appeared on the far bank. They held long poles, the ends of which flamed brightly. Hah, thought Macdonald, we were right about those torches. Here they come, and the whole damned army right behind them! Wish I knew just how long it takes those beavers to turn on their faucets. Wish I could give the signal before they get too close, but Doc says I got to wait till they're all in the river. Geez, ain't they ever going to stop coming out of the woods? The first ones are two-thirds across already. I'll wait till they get to that big rock. If I guess wrong on the time it'll be just too bad . . . Okay—here goes!

He swung the flag in an arc over his head, back and forth, jabbed the pole into the ground to keep it flying, and charged down through the woods to rejoin his troops. The cavalry detachment had halted on the bank and were facing the oncoming baboons. At Mmpl's suggestion, the riders had been armed with arbalest-pistols, and those who had not exhausted their ammunition in the attack on the baboon camp were sending an oc-

casional flurry of darts out over the water. The foremost baboons hesitated, waiting for more of their army to catch up. Then, over the barking of the baboons and the swish of the spillway, came a groaning sound. A jet of water appeared at the bottom of the dam and swiftly grew to the diameter of a locomotive; then another; and then the whole bottom of the dam seemed to open. Macdonald knew that inside the towers hundreds of beavers were straining on the ropes that controlled the flood-gates.

He yelled a warning to his forces and kicked his own mount into motion. Looking over his shoulder he saw the baboon army vanish in one vast, foaming wave; their shrieks of terror sounded like the chirping of birds through the roar of rushing water. We done it! he thought, and yelled for sheer delight.

Far down the hugely swollen river a number of little dots, like a swarm of gnats, moved about on the surface. These were the heads of swimming baboons. Gorillas appeared out of the trees on both banks, taking careful potshots at their undrowned enemies.

"Come on, little ones!" shouted Macdonald. "Let's give 'em a hand!" And away they cantered.

Bridger shouted, "Hi, Mmpl—wait a minute!" and ran toward the gorilla commander.

"Hello, Blidza; I'm glad to see you. We were afraid the Sthog-mith wouldn't let you leave their tower. Everything's going fine—not a casualty reported, and enough Pfenmll corpses washed up to account for most of their army. A few managed to swim ashore, but they didn't give us any serious trouble. Some of them may be carried clear to the ocean. I see your friends are closing their gates; trust them not to let their precious lakes drain away . . ."

Mary Wilkins Morelli said, "Henley, Charley arranged today to borrow a couple of bears from the gorilla next door. The big wop thinks he's going to learn farming at his age! I never did think I'd have a plantation all my own . . ."

Bridger said, "Well congratulations, Sneeze; first its Charley and now you. Janet's a fine girl."

"Thanks, Chief. When are you going to—ah—settle down? You ought to try it! Look at Emil—married life

agrees with him fine. And Ruth—oops, sorry I mentioned it."

"That's all right. I just have some other plans right now—those beaveroids, for instance. They ought to be investigated, and I think I'm the guy to do the investigating. They let me into their place once, and they shouldn't mind doing it again. Nelson Packard was pointing out that with a water-wheel on that dam of theirs . . ."

A wiry, bearded bio-chemist, dressed in clothing from which the sun and rain had long since banished most of the color and all of the press, walked toward the tower of the beaveroid's great dam. He held his hands over his head, and shouted to attract attention. There was a sudden loud whang, and a stone the size of his head soared from the tower and thumped into the ferns a few yards to his left.

Bridger paused, and there came the sound as of a stick dragged along a picket fence. He turned and ran until he was safely out of range, then slowed to a walk. Well, he thought, that's that; I guess they just don't like visitors. I suppose they sent that shot wild as a sort of friendly warning. Maybe if I brought some more bark next time . . .

Hullo, there's a tree whose leaves are turning. Getting on towards autumn already. In a few weeks the foliage will be worth looking at; then, before we know it, it'll be winter.

Looks as if there's only one thing for me to do now. I suppose the boys'll kid me about how iron-man Bridger has fallen at last, but maybe it won't be so bad. As Emil says, she's passably good-looking, and has a swell figure and lots of brains . . .

THE END

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