

The Three Eyed Man

by Ray Cummings

Ray Cummings, one of the pioneers of modern science-fiction, made his first hits with two series of stories: tales of "The Scientific Club" whose best-known productions were the novels of the Golden Atom, and stories of the scientific adventures of a plump young man named Tubby. The "Tubby" stories were quite excellent little lessons in basic science, told with a sugar-coating that endeared them to early readers. "The Three Eyed Man" is a Tubby story dealing with the mysteries of sight and dimensional perception—and manages to bring in a tantalizing glimpse of the Fourth Dimension as well.

TUBBY raised himself up in the neat little hospital cot. The bandage covered his left eye completely, but his right one was unimpaired, and with it he stared at his friend aggressively. "That ain't so," he declared. "That ain't so nohow."

"I ain't sayin' it is—I'm tellin' you what *he* said. With one eye you can only see things in two dimensions. That's what he said."

"You're right, Jake," agreed the second man. "That's what he said."

Tubby relaxed hopelessly. "Well, it ain't so. Bunk. *Abso-lute-ly* bunk!"

The first man was unabashed. "Well, that's what he said. A one eyed man sees everything flat. Length an' breadth, but no thickness. A world of only two dimensions." He rolled this statement off his tongue impressively.

"Bunk!" muttered Tubby. Then abruptly he sat up again—so abruptly that a red hot pain darted through his injured eye under the bandage and made his head swim. His twisted ankle and his shoulder also hurt him badly, but he ignored them all.

"Ain't I got only one eye now?" he demanded.

The first man nodded reluctantly.

Tubby persisted: "An' if *you* put your hand over your left eye, then ain't you a one eyed man?"

The second man essayed this experiment. "He's right, Jake. That makes us one eyed."

"What you gettin' at?" the first man demanded.

Tubby's single eye gleamed with anticipatory triumph. "Keep that left eye covered." His two friends followed the command. "Now listen here. You see that table?"

Even with only one eye working, the thing was perfectly visible.

Tubby's two friends nodded.

"How long is that table, Jake?"

"'Bout four feet," the first man estimated promptly.

"An' how wide?"

"'Bout three feet."

"An' how high?"

"'Bout three—maybe three an' a half."

"Take a look with two eyes, Jake. How big does it look now?"

Quite evidently the first man saw no remarkable change. He shrugged.

"I ain't sayin' it's exactly that big," he stated cautiously, obviously fearing trap. "What you gettin' at?"

Tubby's fat little forefinger shot out suddenly, pointing accusingly directly to his friend's face.

"You was only lookin' with one eye, but you give me *three* dimensions! Ain't that proof what you said was bunk? Ain't it, or is it? That's all I ask."

He leaned back on his pillows, exhausted but victorious.

"He's right, Jake," agreed the second man. "You give three dimensions. It must be bunk."

A white robed nurse glided noiselessly into the room.

"Are you ready, Mr. McGuire?"

Tubby sat up with alarm. "Yeh, I guess so. Where'm I goin'?"

A dapper little interne was pulling forward an invalid's wheel chair.

"The operation takes place up-stairs—in the operating room," said the nurse sweetly. "Dr. Blake, will you take him up? They're ready for him now." She left the room.

Tubby, thoroughly frightened, was bundled into the wheel chair with a blanket wrapped about him. The chair started to roll away.

"Come on, Jake," he said weakly. "Come on, Pete. Stick around—we're goin' upstairs."

The young doctor laughed; and in the hall outside he waved Tubby's friends away.

"You can see him back in the ward in about an hour. It's not a serious operation. We've only kept him in bed because of his other injuries. You wait downstairs—I'll send for you."

An elevator door opened smoothly.

"But them's my pals," Tubby protested faintly. There was a little bump as his chair rolled into the elevator—a bump like a coffin hitting the bottom of a grave. "Listen here, doctor—them's my pals—"

The elevator door slid closed. It was all inexorable—as death. The elevator shot noiselessly upward.

"S'long, Tubby." The first man's voice floated faintly upward from far below. "S'long, Tubby. You ain't goin' to die. See you later."

II.

The little cone over Tubby's face was horribly sinister. They told him to draw a deep breath, and he did. He had decided now that this operation was

all bunk. He'd tell them so in a minute. He guessed he wouldn't bother about having the operation to-day anyway. Some other time—to-morrow, maybe.

He drew a second breath. Somebody had an arm across his knees. He kicked tentatively, and the arm tightened. His head was ringing. Funny how loud it was getting! *Was* the ringing in his head? It sounded more like a great, clanging gong away off in the distance and coming nearer and ringing clearer.

There were fingers on his wrists. He tried to raise his arm, but somebody was holding him too tightly. The operation would be starting soon. No, it wouldn't. To-morrow, not to-day. It was all bunk anyway. The doctor had said he'd lose his eye without an operation. What difference? One eye—or two eyes—or three eyes.

With a great effort Tubby squirmed loose from the restraining clutches on his arms and legs and sat bolt upright on the operating table.

"I ain't goin' to have no operation," he said vehemently.

The hands that had been holding him dropped away. His head was ringing tearfully, but not so loud as a moment before. The handage over his left eye was still there. He jerked it off and opened both his eyes upon a most astounding tableau.

The surgeon and his assistant were cowering over against the wall. Facing them threateningly was a very tall, very thin man. He had on a black frock coat and under one arm a somewhat battered plug hat was jammed. The other arm was outstretched, a finger pointing angrily at the trembling surgeon.

"You let him alone," commanded the stranger. His voice was deep, as though it came up from the depths of his insides. "You can't operate on *him*. He's a friend of mine."

The surgeon and his assistant were edging toward the door. The stranger waved his hand scornfully; and like frightened rabbits they slid through the doorway and down the hall. Tubby could hear their footsteps dying away in the distance.

"Much obliged," he said to the stranger. His head felt better now, and he could see out of both eyes quite as well as before the accident. He turned to his new friend. The stranger's face was very kindly, now that the anger had gone from it. But nevertheless it was the most extraordinary face Tubby had ever seen—so extraordinary, in fact, that Tubby nearly fell off the operating table in surprise as he regarded it.

The face was very thin and wrinkled, with a sharp beaklike nose turning down, and a very long, sharp chin turning up. But the most extraordinary part was that the man had three eyes—two where human eyes belonged, and another directly in the middle, over the nose. The two outside eyes were smiling in friendly fashion as they stared at Tubby; the middle eye was closed, as though that much of its owner were asleep.

"You—I'm much obliged for what you done," Tubby gasped. The stranger had been kind in scaring away that surgeon—it wouldn't be fair to notice he was deformed. Tubby decided to be wholly gentlemanly and ignore the third eye.

"I didn't want no operation, anyway," he added. "My eye's all right. See?" He blinked it rapidly to confirm the fact.

"Of course," said the stranger. He laid his tall hat carefully on a chair and helped Tubby down to the floor. Tubby, in his bare feet and long white nightgown, stood slightly embarrassed. He raised one foot and hooked it under his other knee.

"Let's get acquainted," he suggested. "You're a friend of mine, ain't you?"

"I am, indeed," rejoined the stranger warmly. "And soon I shall be more than that—your business partner. You and I are going to make millions of dollars."

Tubby blinked both eyes. "Right," he said. "We're goin' to get rich. What's your name? We got to get acquainted first."

"My name is Professor Seer," said the stranger with dignity.

"Mine's Tubby. Pleased to meet you, professor."

They shook hands.

"What are you professor of?" Tubby asked, after a short but awkward silence. The professor had been regarding Tubby thoughtfully with his two opened eyes. He pulled himself out of his reverie at the question.

"I'm a professor of optics," he said impressively. "The science of human sight. I know all about it—all there is to know."

Tubby shook hands again. "That's fine, professor. We're goin' to get rich? Tell me how."

"Not here," the professor objected. "My laboratory is right down the street. Get dressed and come along." He was poking about the room. Tubby saw his own clothes lying on a chair.

Tubby took only a moment to dress. The professor put on his high plug hat—he was more than two feet taller than Tubby with it on—and led the way down the corridor with huge strides that made Tubby almost run to keep up. The hospital was very silent—there seemed to be nobody in it.

They walked down nine flights of stairs and came into the lower hall. As they passed the reception room Tubby looked for Jake and Pete; but there was not a single person in sight.

Half a block down the street the professor turned into a dingy hallway, unlocked a door, and ushered Tubby into his laboratory. It was a long, dim room without windows, and lighted by two narrow beams of white light—like small searchlights. Each of these horizontal beams struck the farther wall about six feet from the floor; and in the brilliant circles of illumination two cards were hanging on the wall—cards printed with letters of the alphabet in rows of different size type.

A large table occupied the center of the room. It was littered with a mass of scientific apparatus, none of which Tubby had ever seen before. But scattered in a heap at the nearer end of the table he saw many little magnifying glasses, and a tremendous variety of eyeglasses. Even with his first hasty glance he noticed monocles, ordinary two-eyed glasses and many spectacles which obviously were made for three eyes.

Over against the wall was a large glass cabinet, filled with what looked like surgical instruments. There was an operating table there also, and other

paraphernalia such as Tubby had noticed in the operating room of the hospital. He shuddered and looked away. The professor closed the door behind them and lighted a small electric bulb. It was red; it threw a weird reddish glare over the lower part of the room beneath the horizontal beams of the white searchlights. Simultaneously, two little violet beams of light darted out from the wall and slanted upward to the ceiling.

"This is my workshop," explained the professor, casting an appreciative glance about the room. "There is only one absolutely complete and modern optical laboratory in the world. This is it. Sit down, Tubby."

Tubby sat down in a chair near at hand. He wanted to ask about those three-eyed glasses, but decided it would not be gentlemanly. And didn't the professor ever open that third eye?

"You said we're goin' to get rich, professor," he ventured. "Tell me how."

The professor stood before him with folded arms, regarding him thoughtfully with his two opened eyes.

"I have selected you," he began slowly, "because of your wonderfully clever scientific mind. You have a scientific mind, haven't you?"

"No—yes," answered Tubby.

"So have I," said the professor. "But I have been studying optics so many years I have neglected everything else. It is *your* knowledge in the other departments of science that I need now. Together we will become rich, marvelously, fabulously rich."

"Right," assented Tubby. "Tell me how."

The professor sat down. "I have made a wonderful discovery," he went on after a moment. His voice was deeper than ever; he seemed awe-struck by what he was about to say. "I have made the most wonderful optical discovery since the beginning of the world."

"Right," said Tubby. "It's a big discovery. Ain't I right? Tell me what it is."

The professor drew a long breath. "I have located more than a hundred tons of twenty-dollar gold pieces! I can see them. I'm going to let *you* see them in a moment."

Tubby's heart leaped into his throat; he swallowed it hastily.

"Fine," he declared. "Let's see 'em."

The professor sighed. "First I shall have to tell you how I found them, so that you will understand our problem." He sighed again, more heavily. "It is a terrible, scientific problem. I hope you can solve it."

Tubby stood up. "You give me a look at them twenty-dollar gold pieces. That's all I ask—just give me a look."

The professor smiled sorrowfully. "I will. I'll show them to you right here. I'll let you stand right among them. But sit down now. I have much to tell you first."

Tubby sat down reluctantly.

"You do not understand the theory of stereoscopic vision, I assume?" the professor asked.

"Yes—no," said Tubby.

"Stereoscopic vision means what you see by using two eyes simultaneously. Now—"

"Oh," said Tubby. "Jake says—"

The professor paid no attention to the interruption. "I must explain about dimensions first. We are living, you understand, in a world of three dimensions."

"Length, breadth, an' thickness," Tubby elaborated promptly.

The professor beamed. "Precisely. You *have* a scientific mind. I knew you had. Now to proceed. What is it has *location*, but no dimensions?"

"Search me," said Tubby.

"A point. And what has one dimension?"

Tubby wrinkled his forehead, struggling to think. "I give it up," he declared finally. "You tell."

"A line," said the professor. "A line has only one dimension—length."

"So has time," suggested Tubby.

The professor smiled. "You will have your little joke, I see. You're a clever man. I like clever men."

"Right," said Tubby. "Go on to two dimensions."

"A square has two dimensions—or any plane figure. Also a shadow. And you and I have three dimensions—also almost everything else in the world about us."

Tubby nodded. "A table, for instance."

"Yes—a table. Now that brings us to the theory of stereoscopic vision. You understand that with one eye we can see only two dimensions—length and breadth, but no thickness. To put it more technically, with one eye there is no depth to the field of vision. The scene might just as well be painted on a piece of canvas. It is a little difficult to distinguish the difference at first, because if you painted a scene in perfect perspective, life size and in full natural colors, even on a flat canvas it would look very realistic. There *is* a very great difference, however. Would you like a demonstration?"

"Sure," said Tubby. "Give me a demonstration."

The professor rose to his feet. "I have here two lead pencils. I am going to hang them in that beam of white light a few feet from you. Don't look now."

Tubby covered his face. At the professor's command he looked up with one eye, his hand holding the other closed. Hanging in the white light by invisible wires, were two lead pencils.

"How far away are they?" the professor asked.

"'Bout ten feet," Tubby estimated.

"And which one is nearer to you?"

Tubby indicated the right hand one, which was apparently about a foot in front of the other.

The professor laughed. "Look with two eyes."

Tubby opened his other eye, and was amazed. He had assumed the lead pencils were of usual size. They weren't. They were very much larger, and they were hanging at least twenty feet away from him. He had also assumed they were equal in size. But in that he was also mistaken. The right hand one was larger than its mate, and instead of being in front was exactly beside it.

"You see," said the professor, "everything looks flat. There is no depth to

your field of vision with one eye. You were instinctively trying to guess the depth by judging the apparent size of things. If you had known how big those pencils were you could have guessed their position."

Tubby was looking with one eye again. "I can give you three dimensions of that table," he declared.

"Of course, you can," laughed the professor. "Because you are judging by how much smaller the back of the table looks than the front. The mind acts subconsciously on that, of course. But you don't *see* any depth—any thickness—to that table—you only guess at it. The laws of perspective make you think you see the third dimension, but you don't see it."

So Jake was right! "Tell me how it works," urged Tubby with interest.

"It is very simple," said the professor. "And yet, in a way, it is very complicated."

He held a little cube of sugar a few inches from Tubby's eyes. "When you look at that with only your right eye, you see the front face and part of the right side. Is that so?"

Tubby tried it, and nodded.

"And with the left eye alone, you also see the front face, but instead of the right side you now see part of the *left* side. Do you?"

"No—yes," said Tubby. "Sure I do."

"Very well. Now, with *two* eyes you combine both of those images. Your eyes see the object from different view points. Look now with both eyes. Now you see the front face of the cube and partially around *both* its sides. *That* is what gives you the third dimension—it is what makes that cube look solid. With one eye it merely looks like a picture of a lump of sugar—a flat picture, printed on a flat page. Do you follow me?"

"Yes—no," said Tubby. "Tell me more. Tell me about them tons of twenty-dollar gold pieces."

The professor nodded. "In a few moments I'll show them to you."

Tubby resigned himself to wait. The professor continued:

"It is the *combination in your brain* of the different images your left and right eyes see that gives you a perception of our world of three dimensions. Is that clear?"

"*Abso-lute-ly*," declared Tubby.

"Very well. Now listen carefully. One eye gives two dimensions. Two eyes give three dimensions. And then *three* eyes—" The professor paused expectantly.

"Three eyes—" prompted Tubby breathlessly.

"Why, three eyes give four dimensions," said the professor triumphantly. "With three eyes rightly equipped you can see that other world lying all about us—that other world science has been trying for so long to discover—the world of the Fourth Dimension! *That* is the world that holds our tons of twenty-dollar gold pieces!"

Tubby gasped. So that was why the professor had three eyes. He could see into another world, where there were a hundred tons of twenty-dollar gold pieces lying all about!

"That is my discovery," the professor reiterated. "The most remarkable

optical discovery since the beginning of the world. *I* made it. You observe my third eye?"

"Yes—no," replied Tubby. "It ain't so very noticeable," he added deprecatingly.

"I am an expert surgeon also," continued the professor. "I have to be. I gave myself that third eye. It's a very delicate operation, but I can perform it easily. I'm going to give you one in a moment."

Tubby was frightened. "You needn't bother," he declared. "I ain't interested. I—"

"Oh, it won't hurt you," laughed the professor. "I am a modern surgeon—I never hurt anybody." He unrolled his long length from the chair and stood up briskly. "Come over here and pick out the kind of eye you'd like."

Tubby remembered the tons of gold pieces; he stilled his fear and followed the professor across the room. A long, narrow shelf ran along the wall. On it stood a row of little glass bottles all filled with a colorless liquid. And in each bottle floated a single eyeball.

Tubby walked down the length of shelf. The eyeballs stared at him unwaveringly.

"You'd better take a blue one," said the professor. "Your other eyes are blue. Medium size—light blue. Here, this one is a good match." He selected a bottle.

Tubby lay back in what looked like a dentist's chair. The professor opened the surgical cabinet and selected several wicked looking instruments. He touched a switch, and a narrow little beam of rich yellow light sprang from the cabinet and focused itself on the bridge of Tubby's nose.

"You—ain't goin' to hurt me?" Tubby quavered.

The professor answered reassuringly: "No. This yellow light will deaden all pain. It's a wonderful light. *I* discovered it. Close your eyes now. I won't take long."

Tubby gripped the arm of his chair and closed his eyes. For five minutes the professor hammered, chiseled and sawed—cutting a hole in his forehead. It felt extremely unpleasant, but it did not hurt. When the hole was ready, the professor fitted in the eyeball.

"Just a moment now," he murmured. "Very delicate—this joining the optic nerve. Just a moment—hold still."

Five minutes more and the eyelid, with its lashes all complete, was in place. The professor tied a bandage over the new eye—a wet, hot bandage.

"All right," he exclaimed cheerfully. "Now you can sit up."

Tubby sat up, opening his two original eyes and feeling the bandage dubiously. He had three eyes! Now he could see tons of twenty-dollar gold pieces!

"Right," he said. "That wasn't hard. What do we do next?"

The professor replaced his instruments, and then led Tubby back across the room to their former chairs.

"It is now only a question of lights," he said. "You understand that this Fourth Dimension is a different kind of matter. It occupies the same space as our world, because it is matter in a totally different state—a state where the molecules are very widely separated, and are in very rapid vibration. In order

to make it visible to us—in addition to needing the view points of three eyes simultaneously, we must use lights of a much faster vibration than the range of the solar spectrum. These are my own lights—I invented them.”

He turned off the red light and the two white searchlights. At once many other tiny beams sprang from hidden orifices—deep violet beams—several of very pale indigo—and others that seemed to be almost phosphorescent. These beams of light were all oscillating rapidly back and forth. The room was a confused riot of weird color—like the darkened stage of a comic opera with a score of whirling, colored spotlights upon it. Tubby grew dizzy staring at it.

“There,” said the professor. “I think I have everything adjusted correctly. Now we need colored eyeglasses.”

From the table he carefully selected two spectacles each with three different colored lenses. “Take the bandage off, Tubby—but be careful to keep your new eye closed.”

Tubby followed directions, and fitted a pair of the three-eyed spectacles to his nose.

“Now,” said the professor. His voice trembled with emotion, though he seemed trying to speak calmly. “Sit down again—you may feel dizzy at first. Now—open all three eyes.”

Tubby opened his three eyes. All he saw at first was a dim grayness, as though he were in the midst of a heavy fog. The room with its myriad colors had evaporated.

The professor’s voice came from behind him. “Hold steady for a moment—your eyes will be adjusted to it soon.”

Tubby sat staring into the fog. It seemed shifting and crawling upon itself. Then, in the distance, gray shapes began forming. Were they in the distance? He couldn’t seem to tell how far away they were. Perhaps they were close at hand? Of course they were. There was no doubt about it now. He made out an angle of wall—a shadowy, white wall, with a ceiling above and a floor below.

The professor’s voice said: “We are looking now at a room in the world of the Fourth Dimension. We are in it—it occupies almost the same space as my laboratory. Now—do you see the gold?”

Tubby saw it, indeed. The fog was lifting rapidly. He was sitting in a huge, bare, windowless room whose outlines were all blurred and quivering, but now plainly discernible. There was no way of guessing the size of the room. It might have been half a mile long—or twenty feet. And curiously enough, the back part of it looked larger than the front! Things got larger farther away, instead of smaller. Tubby was not concerned with this anomaly, however; he was feasting all three of his eyes on the gold. It was heaped in profusion all over the room—great piles of shining yellow gold pieces!

“For ten years I have searched for this spot,” said the professor, triumphantly. “I found it, and that’s why I built my laboratory right here. We are inside the mint of the world of the Fourth Dimension!”

Tubby stood up, trembling with excitement. He felt very dizzy and nauseated, but he forgot it in the excitement. The mint of the Fourth Dimension!

A hundred tons of gleaming yellow gold pieces—and he was standing right among them!

He looked down at his feet. The coins were piled all around him. The floor was strewn thick with them everywhere. He kicked one foot into them. Nothing happened! There was no sound; his foot seemed to touch nothing but empty air. Where *was* his foot? He couldn't see it. Or his leg. Or his hand, which he held before him!

Panic seized Tubby. Was he a ghost? Couldn't he even see his own feet?

The professor answered his thoughts. "Your body is still in your own world, Tubby—the world of three dimensions. Only your vision has penetrated into the Fourth Dimension. You can see that gold, but—" A sob choked the professor's voice at the pathos of it—"but Tubby, you—we cannot touch that gold—we can do nothing with it except look at it!"

Tubby stooped down frantically to gather up a handful of the coins. He felt his fingers scraping along the bare boards of the professor's laboratory. He touched his foot. But he could not see his hands. Or his feet. He could only see the heaps of glistening coins that lay there undisturbed!

The professor's voice wailed dismally: "The gold is right there, Tubby. Your fingers are going right through it. But you cannot feel it—you cannot touch it. You can only look at it—only look at it—"

The words trailed away into silence. Tubby climbed to his feet, and then sat down in his chair, nonplused. What a horrible thing! You could see the gold, but you couldn't touch it! That was all wrong. The professor would have to figure some way of getting that gold out of the Fourth Dimension. They'd figure it together. The professor would—

Where *was* the professor? The room was quite silent. Tubby felt suddenly very weak and sick. He lay back at full length in the chair and closed his eyes. His new eye hurt him. Or was it his new eye? Wasn't that pain shooting through his left eye? It must be his left eye—there seemed to be a bandage over it.

There was a dim murmur of voices in the room—familiar voices. They seemed to have been there a long time, but Tubby just noticed them. He opened one eye—his right eye—and saw a swaying expanse of white sheet, with the white enameled foot of a hospital cot just beyond his toes. The scene stopped swaying and grew clearer. A hand touched his forearm. He turned his head weakly, and stared with his one eye into the anxious faces of his two friends who were sitting beside the bed.

"Hello, Tubby!" exclaimed the first man with relief. "You didn't die, did you? I knew you wouldn't."

"You're right, Jake," agreed the second man. "He didn't die, did he?"