

Disappointment

You just can't stop Horton Perry, the salted nut king, from complaining about that ultra-scientific son-in-law of his!

THE day was to mark the beginning of the great disappointment of his life, but Horton Perry had no suspicion of that. He knew only that the man who had just been presented to him as the husband-elect of his only daughter, was precisely one of those men he had always despised. Even Stewart Payne's appearance was against him. He was tall, lanky, and dressed in very imperfectly fitting clothes that seemed to have been slept in. Perry wouldn't have hired him as a nut salesman in fifty years.

Perry himself was of medium height, plump, nattily dressed, and possessed of an air of great friendliness. He smiled easily, even when he prepared to cut your throat, and he could look you in the eye, even when preparing to stab you in the back.

Payne, however, couldn't perform either of these feats. He never stared at the person to whom he was talking—he always stared through him. The older man noted the strange quality of his gaze, as if Payne's eyes had the faculty of focusing X-ray images on a peculiar retina that no other human being could match.

The eyes were a giveaway. Payne poked at the man who was about to become his father-in-law. He even listened to him, yet all the time he paid him no genuine attention whatever. The secret recesses of his mind seemed occupied with mysterious problems he shared with no one. It was clear that he was one of those impractical, absent-minded men with no future prospects that any sensible man would have paid a cent for. And Horton Perry, who had salted away in his business more than most people would have guessed, suspected that he *was* going to be asked to pay much more than a cent. "What are you going to do for money?" Perry demanded.

Payne looked surprised. "Why, Mr. Perry, I have my salary."

"How much *is* that?"

"Three thousand dollars a year," said Payne proudly. "I'm an assistant professor, you know."

Perry winced, and his second chin shook with emotion. Three thousand wouldn't keep his daughter in peanuts, which were the least expensive nut he sold. But Angela herself, a curly-headed blonde with frivolous features that most people had the habit of associating with an empty head, smiled fondly into Payne's face, her own expression reflecting his pride. "Stewart won't be an assistant for very long, Father."

Angela's head was not at all empty, her will could be iron, and on the whole, Perry had long ago decided that it was more dangerous to argue with her than with his most implacable business enemy. He did what lawyers called stipulating the point. "How much does a full professor get?" he demanded.

"Well, er—" Payne's face had that faraway look again. "I'm not sure."

"Six thousand dollars a year," said the more practical Angela. "That is, after ten years."

NORTON PERRY tried not to grit his teeth. He knew his daughter, and he could see that she was as much determined to make this man his son-in-law as he had been determined to make himself the nut king.

"Look here, Payne," he began, "if you marry Angela, you live on your salary, and not a penny will you receive for housekeeping. However, I have no objection to putting you in the way of making a decent income by your own efforts. Assuming, that is, that you are capable of making a decent income at all."

He seized a bowl of cashews and spoke unexpectedly: "Here, taste these."

Payne took a handful from the top, and chewed as if he were performing an experiment. "Rather flat," he said.

"Angela, you try these pecans."

Angela ate daintily. "Too salty," she answered.

"You're both right," declared Horton Perry. "And right there is my problem. In this day of television, walkie-talkies, and atomic power, it ought to be an easy one. I'll give you five hundred dollars to solve it. I regard the money as practically a gift. All the same, do a good job, and there'll be more such gifts coming."

"I don't understand, Father. What problem did you say?"

"The nut-salting problem. We have found it impossible to salt nuts and have the salt remain properly distributed. Those cashews have been shaken in a box, so that most of the crystals have fallen to the bottom, and the top nuts taste flat. Of course, the salt sticks better on some nuts than on others. Some are more oily, others are dry.

"We find, in many cases, the problem is an annoying one, and I'm anxious to have it solved. I want you, Payne, to devise a method of keeping the salt evenly distributed over every kind of nut, so that a train or truck ride doesn't shake it down. If you're as good a scientist as Angela thinks you are—"

"Better," interrupted Angela.

"Then the job shouldn't take you more than a week. And five hundred dollars isn't bad for a week's work. Is it a deal?"

Payne didn't answer directly. He was talking absently to himself, and Perry could catch only a few phrases. "Sodium ion," "chloride ion," "adsorption in monomolecular layers," "orientation of unsaturated paraffin chain in triglycerides," and "possibly of utilizing electric dipoles" struck his ear.

It was Angela who spoke up briskly, "It's a deal, Father. Stewart will do the job in a week."

"Good. Bring me your formula for the process, and you can get married."

"Oh, no, Father, we're getting married anyway."

"I refuse to give you my permission until Payne has solved this problem."

"Then we'll get married without it."

Perry glowered at her as she led the still thinking scientist from the room. That gentleman was talking to himself of van der Waals forces and potential barriers as he passed through the doorway. Perry muttered an oath to the empty room. Trust his daughter to pick a nincompoop like that, who would condemn her to live out her days in poverty—and probably enjoy herself in the process.

Then, with the efficiency for which he was famed in the nut business, he put his daughter and her fiancée out of his mind, and turned his full attention first to the mysterious spotting of a cargo of worrisome walnuts, and after that to the more congenial problem of how to do "Norton Nuts," his hated rival out of an important order.

It was two weeks later, on the very eve of his wedding, that Stewart Payne called his father-in-law-to-be. "I think I've solved your problem for you, Mr. Perry," he began modestly.

Perry clutched the phone tighter. "Fine. How did you do it?"

"Well, if we coat the nut with a solution of sodium chloride in a suspension of a certain chrysanthrene derivative—"

"How much does this stuff cost?"

"Oh, a dollar or two a pound," replied the scientist vaguely. "Or possibly five dollars a pound. It doesn't matter greatly. We wouldn't use much of it."

"How much would it cost to dry the nuts after coating them?"

"A fraction of a cent per pound. Of course, expensive machinery could be required—" Suddenly Payne's voice died away to a mumble.

"What was that?"

"It has just struck me that—yes, I think that would be an objection."

"What has struck you? What's the objection?"

"Merely that some of the fused ring anthracene derivatives are carcinogenic."

"What does that mean in English?"

"That they are cancer-producing."

"You mean that people who ate the nuts you treated would get cancer?"

Payne said absently, and as if he had lost interest, "Yes, there is that possibility." He added, as if to himself, "Perhaps I'd better think of something else."

"Perhaps you'd better," snarled Perry, and slammed the receiver down with a curse. His worst forebodings had been realized.

A month after the honeymoon, Horton Perry visited his son-in-law's laboratory. "So you think that this time you have it?" he asked in surly tones.

"Absolutely, Father," answered Payne respectfully. "This is it."

"We've conducted tests," said Angela proudly. "The materials used are inexpensive and harmless. They coat the nuts evenly. Stewart has measured the amount of sodium chloride—"

Perry snorted. "Since when have you known what sodium chloride means, Angela? Don't put on airs for me."

Angela smiled without resentment "Stewart has measured the amount of salt abraded in a shaking machine, and found it trifling," she remarked.

"In fact," Payne insisted, "the insignificant quantities removed can be detected only spectroscopically."

Horton Perry took a handful of the cashews offered him, and examined them carefully. They sparkled like tasty diamonds, and none of the salt came off onto his hands. He popped them into his mouth.

The next moment he exploded. It was a question of what shot out of his mouth first, the nuts, a tremendous curse, or two teeth which had been broken out of his plate. Nuts and teeth hit the floor simultaneously with ominous crackles, while the thunder of his voice filled the room.

Angela shrieked in dismay, "Father, what happened?" But Payne, ever the scientist, was wasting no time over his father-in-law's misfortune. He had picked up a couple of nuts, and was examining them with his usual thoughtful air, looking past the surface into the space between the atoms. "Very interesting and unexpected. "Slow secondary reaction — intensification of surface forces. May have some relation to the case hardening of steel."

He placed a cashew on the soapstone laboratory table and pounded it with a hammer. The nut sank into the soapstone and cut the hammer at the same time. Its own surface showed not a scratch. Horton Perry, still cursing, didn't even notice.

A YEAR later, shortly after the birth of his first grandchild, Horton Perry visited the laboratory again. He had heard nothing from his son-in-law that indicated a solution of the nut-salting problem, and in view of the fact that the arrival of his grandson had cost him five thousand dollars, which Angela had extorted from him in addition to the promised five hundred, he was feeling rather bitter.

His son-in-law, outside of having fathered a child, was a conspicuous failure. He had, it was true, published two short scientific papers on the nature of surface forces, but they were written in incomprehensible scientific jargon, and Perry had tossed them aside in disgust. What he wanted was the answer to his problem.

Payne was working in a high-pressure room at the end of the building, and Perry sat down at his son-in-law's desk to wait, his eyes wandering idly over notes which were meaningless to him, while with his right thumb and forefinger he felt the new set of false teeth which had replaced the one damaged by the impenetrable cashews.

At the end of five minutes he was boiling at the idea of having wasted so much of his valuable time. Five minutes more, and he had stood up and was about to stalk out of the room, when a man stopped him.

The man carried a revolver in his hand, and Perry was too excited to notice his height, age, or any of the facial details which might have been useful later to the police. He spoke tersely. "I'll have that formula now, Doctor Payne."

"Put that gun down," said Perry excitedly.

"Don't be a fool, Doc. I can shoot and be out of here before anybody knows what's up. I want that formula."

"Don't call me Doc. That isn't my name. And don't talk nonsense about a formula I've never heard about."

"The one you mention in your articles, Doc. The one that produced those surface changes you wrote about. Hand it over."

"I am trying to tell you that I am not Doctor Payne. And furthermore—"

At this point, Payne entered, his eyes seeming to look through the revolver, the bullets with which it was loaded, and the wall behind it. "I thought I heard someone mention my name."

"So you're Doctor Payne. Okay, you hand over that formula."

"I'm afraid I can't do that," said Payne apologetically. "It wouldn't do to have my methods become general knowledge. Not at this stage. And I think that you'd better let *me* hold that revolver for you. It's a dangerous weapon, you know."

He reached for the weapon, and the man drew back, a little baffled at the casualness of his behavior. "Hold it, Doc. I'm serious in wanting that formula. And don't crowd me, or I'll shoot."

"That's absurd," said Payne, and snatched at the gun.

The revolver exploded in what seemed like a continuous roar, and Horton Perry dived behind the desk. The bullets struck his son-in-law in the chest, but Payne did not fall. He merely staggered slightly under their impact, as they ricocheted from his body and fell to the floor.

It was the kind of thing Horton had never seen except in his secret reading of comic books, and he refused to believe it even though it was taking place before his eyes. The would-be burglar seemed to feel the same way about it. His eyes were wide and glassy, and he was swallowing nervously, his mouth open, and his breath coming through it as if he were a child seeing a stage magician for the first time.

SUDDENLY the miscreant snapped out of his stupor. Reversing the revolver, he struck Payne over the head with it. Payne staggered again, and seemed annoyed. The revolver butt shattered, and fell to the floor.

The man was running for his life, when Payne threw a handful of cashews at him. Three of them caught him on the head, and he gave a howl of pain. Then he was gone, and Payne turned to face his father-in-law.

"You—you aren't hurt?" Perry asked doubtfully.

"Of course not. Those bullets couldn't penetrate my skin."

"It wasn't a trick? I mean, you didn't hypnotize me, and make me think I saw all this?"

"I can't hypnotize any one. I had simply treated my own skin by the same method I had developed for use on those cashews. It is now impenetrable by ordinary means."

"The same as the cashews?"

"Well, yes."

"You haven't advanced an inch in solving that problem we talked about last year?"

"The theoretical questions involved are much more complicated than I had thought," Payne said absently. "I think that if you read my papers—"

"I've tried to. I can't."

"Yes, that's the trouble with our educational system. Imagine an adult—"

"Don't make any dirty cracks about my education!" cried Perry.

"I had no intention of being insulting. What troubles me is, that I don't know how I can explain. Fundamentally, it's a matter of surface forces. If we can align the atoms or groups of atoms, eliminate tiny cracks, and do away with a certain anisotropy—"

"What?"

"Do away with directional weakness. In many substances, certain directions are weaker than others. It's easier to split wood or cut steak with the grain than against it, to split crystals along certain planes than along others. and so on. That's why part of the task is to realign the atoms in such a way as to do away with directional weakness, or anisotropy."

"You can do that?"

"You've seen the results."

"How does that help salt stick to nuts?"

"As I've said, that requires further theoretical study."

Perry turned on his heel, and talking to himself in the manner of his own son-in-law, left the room.

Stewart Payne was an excellent family man. Three years later, while dandling his youngest grandson on his knee and watching Angela prepare the others for bed, Horton Perry was forced to admit that. And Angela had every right to be proud of her children, although she seemed to be most especially proud of her husband, who had become a full professor long before the end of the expected ten-year period, and was now earning \$5600 a year.

"He'll probably get the Physical Society Prize, the Chemical Society Prize, and the Prize of the Technological Society. His surface-hardening method has so many possible applications that it's incredible."

"We still salt nuts the same way," said Perry stubbornly.

"Did you see what the *Herald-Tribune* wrote about him? And the *St. Louis Post-Dispatch*? and the *London Times*? And the *Moscow Pravda*?"

"He took that five hundred dollars of mine under false pretenses."

"Nonsense, Father, he's been working on your problem all the time. Somewhat indirectly, I'll admit. But he hasn't forgotten you."

"Hasn't he? He looks at me as if he'd never seen me in his life."

"It isn't that, Father. He's ashamed to look you straight in the eye because he pities you."

"Pities me?" stammered the astounded salted-nut king.

"Yes, he thinks you're so impractical."

Perry exploded, his new teeth shooting out of his mouth and bouncing off the wall. His grandson almost fell off his lap and began to wail, Angela shrieked, the other children joined their brother, and in the excitement, Perry managed to get a few repressed thoughts off his chest, somewhat mangled as he tried to articulate them with toothless gums, but to the point nevertheless.

PERRY had to admit later, however, their expression did him no real good. For the situation that had aroused his fury continued to exist, and even to grow worse. It was not until many years later, when he spoke to his great-great-great grandson, Alan, a sensible young man who after many generations had inherited the Perry business sense, that he felt he was talking to some one who understood him.

Alan at this time was a lad of twelve, alert, sharp-eyed, and with a mind that to the still vigorous Horton Perry seemed as sharp as a razor.

"I don't see great-great-grandfather Payne very often," he said. "But when I do, he always seems to have his head in the clouds."

"Right, my lad," agreed Horton Perry. "He never sees the trees for the woods." He thought that over, and said, "Or maybe it's the other way around. But at any rate, he doesn't."

"Great scientist, though, Ancestor."

"That's what they say. But they can't convince me."

"You're prejudiced, Ancestor."

"Not at all. I'm merely a practical man, and I judge by results. We've gone forward a great deal in the past few generations. We mature earlier—"

"At twelve," observed Alan. "I'm mature now."

"Almost," admitted old Perry. "We live longer—two hundred years or more, on the average, thanks to halting the onset of tissue and organ degeneration. We stay healthier during those two hundred years. We produce houses and buildings that are practically everlasting, we travel to Mars and Venus, we have weapons and tools that will shatter any known material, as well as materials that will resist any tools but those processed by the same method. We can build structures that will resist an atomic explosion that takes place inside them. We've turned the miracle into the commonplace so often that it's the commonplace that is now a miracle."

"That sounds good, Ancestor," said Alan respectfully. "What does it mean?"

"You'll learn," replied the old man airily. "What I'm getting at is this—that all these results were

practical. But Stewart Payne didn't think them up."

"You'll have to admit, though, that he contributed. Without his surface-hardening process, our tissues and organs would degenerate as before. We wouldn't mature at twelve and live to two hundred. We wouldn't stay as healthy as we are. Without hardened surfaces, our houses and buildings would weather and wear out in the same old way. We wouldn't have superpenetrating tools and atomic-resisting surfaces. We wouldn't have meteor-proof rocket ships, and even the Moon might still be out of our reach."

"Don't tell me that you admire the old man," said Perry in alarm.

"I think I do. Ancestor. He could be more practical, but for the theoretical type, he didn't do so badly."

"Maybe he didn't but I did. The day I met him was the most disappointing day of my life. Threw five hundred dollars out of the window just because that fellow promised—"

Perry interrupted himself. "Have some of these delicious Martian trek-nuts, Alan."

"Thanks. Ancestor. Kind of salty, aren't they? Must have come out of the bottom of the box."

Perry smiled sourly. "Promised results in a week—and it's over a hundred and thirty years, and he still hasn't solved it. He just isn't the practical type, lad. After all this time, that should be clear enough."