

# The Vanishing Diamonds

By Charles R. Tanner

*A fortune in jewels awaits Professor Stillwell, discoverer of flawless artificial diamonds. Then the gangsters decide to muscle in - and the diamonds begin to disappear.*

Among the various activities which serve to stimulate and in-terest the vagrant hodge-podge which I call my mind is that of stamp collecting, and it was this hobby that first brought me to the attention, and later caused me to be listed among the friends of that ponderous intellect, Professor Isaac N. Stillwell.

When I say ponderous, I mean it in more ways than one, for it is not only intellectually that Stillwell is ponderous. Physically, he is six feet tall, bald-headed, with heavy black brows and keen eyes, and he weighs—or did, the last time he confided in me—two hundred and ninety-four pounds.

Mentally, the man is just as big. I sometimes think that he is not just exactly human; he must be a sport or mutant, for surely an ordinary human being could not cover the enormous range of knowledge that Stillwell does. But sport, mutant or normal human being, Professor Stillwell is a genius of the first water, and as such, he has my respect.

As I say, it was through stamp col-lecting that I met him. The Pest and I had been shopping and while in town I thought I had better visit the stamp dealer's and see if any new items had arrived that might add to my collec-tion. The Pest, I suppose I should tell you, is my ward, Marjorie Barrett. She is nineteen, and because I am thirty-two, she treats me as though I were in my second childhood. Around the house, she seems to think I am part of the furniture. I think quite differently of her, but I would die before I'd let her know it.

Anyway, the Pest and I had been shopping, and so we stopped in at the stamp dealer's. Arriving there, I opened the door and stepping aside for the Pest, she swept past me in her usual breezy, confident way, and collided forcefully with the back end of a man-mountain that was walking back-ward toward the door and chattering away to the dealer as he walked.

The Pest went down to the floor in a heap. I let out a cry of alarm and jumped toward her, and the mountain spun around, all apologies. He stooped over, offering her his hand.

And again that mountainous back of his brought catastrophe. He bumped into a table, a small table at one side of the counter. It went over with a crash, and a watermark detector full of benzene which was on it splashed to the floor and the contents fell squarely on a little gas burner which provided heat to a stack of blotters between which the stamp dealer was drying some stamps. There was a flash—and the skimpy, dusty little curtains which hung in the windows were a mass of flames.

For a moment all was confusion. Stillwell forgot the Pest even before she got to her feet; he turned and began batting at the blazing curtains with an enormous paw, but fortunately he was wise enough to desist when the first windowpane broke and so no more damage was done.

Presently the dealer and I succeeded in quenching the flames that were consuming the curtains, and some measure of calm was restored. I turned to see Stillwell clumsily trying to apologize to Marjorie. That young lady was unhurt and apparently quite amused by it all.

"It was quite unavoidable, I am sure," she was saying. "Pray think nothing of it, sir. Remember the words of the immortal Shakespeare? 'There's a divinity that shapes our ends, rough-hew them how we will.' Don't you think that fits the point?"

She said this so solemnly and sincerely that I am sure Stillwell missed the atrocious sarcasm, indeed he became quite cordial. He waited until I had completed my business and then, still apologizing, tagged along to the street and even followed us to our machine. He wound up by asking me to visit him sometime to look over his stamp collection.

So it was that I first became acquainted with him, and never until this day have I regretted our friendship. Of course, it is a rather hazardous friend-ship in a way, as you will see, but between Stillwell and the Pest, my life is not in danger of ending from ennui, anyhow.

At first we were merely acquaintances, brought together by our mutual liking for stamps, but presently I found that we had many more things in common. I am by way of being a sort of scientific dilettante, and have dabbled superficially with a half dozen sciences; I have collected minerals and fossils, played a bit with chemistry and astronomy, and even read a few books on biology. And in all of these sciences and a dozen beside, Stillwell is an authority.

I found in him, one who could answer my questions on any subject; and he found in me, one who at least knew enough to understand him, whatever the subject he chose. So it was natural that our friendship grew, in spite of his peculiarities—and my own.

## ***CHAPTER II - A Startling Discovery***

The particular adventure which I here intend to tell about began about three months ago. I had not seen Stillwell for over a week and I was sort of halfway expecting a call from him when the phone rang one evening just after supper.

“Clement, my boy,” it was Professor Stillwell calling. “I want you to come over here right away. I’ve designed a new kind of watermark detector for our stamps. A light that shows up the watermark without even wetting the stamp. Hurry over.”

I congratulated him, hung up and apologized to the Pest for leaving her alone. Half an hour later, I was ringing Stillwell’s door-bell, eagerly wondering if he actually had invented the long-needed dry detector.

He admitted me, boomed out a welcome in his pompous bass voice and led me to the basement. Stillwell’s laboratory was in the basement and I had never been there before, for heretofore my visits had consisted mainly of conversations in the living room. But he had talked so much of experiments in the lab that I had looked forward eagerly to this day when he would in-vite me to visit it.

We entered the basement and I looked around, striving to keep from smiling. For the big room was certainly characteristic of the man. Thirty feet long and half as wide, one whole side was taken up by a massive work-bench composed of twelve inch boards and two-by-fours. It held a bewildering maze of chemical and electrical appliances, and beneath it a half-dozen trash cans and a litter of broken flasks, test tubes and burettes testified to the fact that Professor Stillwell’s amazing clumsiness was not left behind when he entered his workshop. A number of large cabinets on the side of the room opposite the workbench held mysteries that, for this time at least, were to remain unrevealed.

“Now, here’s my little trick, Clement,” began the Professor, leading me to the far end of the bench. “The system I use is based in the relative lengths of red and blue light waves, see?”

He began an explanation, but for once I was inattentive. My eyes were roving the laboratory, trying to puzzle out the meaning of this thing and that, staring at one complicated piece of apparatus after another, only vaguely aware that Stillwell was talking to me. But one cannot remain in the presence of that adipose genius long without being definitely aware of him. He raised a pudgy hand to take me by the shoulder to emphasize some remark he was making, and his cuff swept a beaker from the bench. It fell to the floor with a clatter and splash, spattering liquor and scattering across the cement floor a dozen or so small crystals that had evidently formed in the liquid. Stillwell was annoyed. This surprised me for ordinarily he ignored his clumsiness, his pompous dignity being too great to allow him to notice it. But this time:

“Drat the infernal luck!” he exploded. “That was my solvent, Clement. I wasn’t through working with that. Now I’ll have to make up an-other batch.”

“Solvent?” I queried. “What kind of a solvent?”

“It’s a solvent for carbon,” he answered. “I discovered it myself. A complicated organic acid, it is, and rather volatile. I hoped to be able to add something to it to make it less volatile.”

“But—those crystals!” A vague thought was stirring in my mind, a vague incredible thought based on a long-remembered fact that I had learned back in the days when my hobby was inorganic chemistry. “What are those crystals, Professor?”

"Carbon, probably. Carbon crystallized out of solution as the solvent evaporated."

"Carbon! Good Lord, Stillwell, do you realize what you're saying? Carbon only crystallizes in two forms, and you know well enough that those transparent crystals aren't graphite."

"Eh? Oh, no, they're the *other* form of crystal carbon—diamonds."

I stooped and snatched up one of crystals. It was an octahedron in shape, like two four-sided pyramids set base to base, and it was glassy in appearance, with a sort of cloudy crust over it. It was an unprepossessing sort of thing, and looked about as much like a diamond as it did like a gold piece, but I had read, somewhere, of the appearance of rough diamonds and I was not deceived.

"Professor Stillwell," I barked. "Do you realize what you've got here? You've discovered a way to make diamonds! It could have been done long ago if somebody had known of a way to dissolve carbon. Why, man, there's millions in this. You can make these and sell them— Why there's no limit to it."

"Nonsense." The Professor chortled. "Two weeks after I publish the formula for my solvent, diamonds won't be worth a penny a peck. Everybody will be making them."

"After you publish your formula! Now, look here, Professor, that's carrying philanthropy a little bit too far. What good will publishing that formula do? A few chemists will be able to simplify their work and that's all. And a million jewelers will be ruined.

"On the other hand, if you keep this a secret, and make a few diamonds each month, and sell them; the jewelers will be in no danger, you'll get rich, and the added facilities with which you can equip your laboratory will enable you to produce a dozen new processes which you can offer the world in place of the one you have withheld. You simply mustn't publish this."

Now, frankly, it was not entirely the milk of human kindness and love of my fellow man that led me to this philanthropic speech. I was seeing visions of myself and Stillwell engaged in a business of turning out synthetic diamonds for the trade. And I was not to be the least member of that business by any means. But, whatever my intentions, my arguments convinced the scientist. He admitted my wisdom and, taking the crystal from me, waddled down to the other end of the bench. For a moment, he was busy examining the stone.

"Hm-m. Let's see. Hardness?" He reached into a box, brought out a huge handful of crystals and minerals, selected one and carefully put the others back—into a beaker full of red liquor that stood by the box. Ignoring his mistake, he went on:

"Hardness—scratches corundum, all right. Crystal form, octahedral, correct. Index of refraction? Hm-m—hm— Yes, I guess it's diamond, all right. Well, Clement, my friend, now what do we do? Know any jewelers we can peddle this batch to?"

Ah, there was a place for me in the business, already. Agent for the Stillwell Diamond Co. I could see, in my mind's eye, the coming business.

"I think I know just where I can dispose of them," I hastened to say. "I'll have them, Professor, and I'll let you know all about them by tomorrow night."

He helped me gather up such of the scattered diamonds as we could find, and with them carefully wrapped and in my pocket, I hurried home.

### ***CHAPTER III - Disappearing Diamonds***

The next ten days were a bustling maze of good fortune. I found out at once that I would have to disassemble a little if I wished to dispose of my gems to a reputable jeweler, for rough diamonds have a duty, and not many are brought into the country without the revenue department knowing about it. So I prepared an elaborate story of a diamond field recently discovered and kept a secret by Professor Stillwell.

I assured the jewelers that as soon as we had disposed of a certain amount, the location of the field would be made public, and so—well, the diamonds were so fine that I suppose the jewelers over-looked the possibility that they might have been smuggled.

So, at the end of ten days, we found ourselves richer by some \$30,000. That day was the first since the night of the discovery that I had found it possible to remain at home, and by great good fortune, the Pest was home, too. She was reading the paper (the Pest reads everything from Homer to Dorothy Dix), and presently she looked up, holding her finger to the place where she had left off reading.

“Didn’t you sell some of those diamonds of Professor Stillwell’s to Parrot & Small, Clem?”

“Why, yes, I did. Why do you ask?”

“And didn’t you sell some to the Endicott company?”

“I believe so.”

“Hmm, strikes me those diamonds of yours are rather flighty things. Look!”

She handed me the paper. One item, on the first page, read:

There was more to this, but I turned to read the other article which the Pest pointed out. It was a smaller item, on an inner page, and read as follows:

I lifted my eyes from the paper to encounter a dubious look from the Pest.

“Well?” I asked.

“Well, don’t it seem sort of funny, all those diamonds you sold disappearing like that?”

“It is a rather strange coincidence,” I began, but she interrupted with a most unladylike snort.

“Coincidence, hah! Call it that if you want to. I think there’s some-thing funny about those diamonds. They always did seem too good to be true, to me.”

I attempted to scoff at her ideas, but the more I scoffed, the more I felt convinced that something was wrong. At last, I clapped on my hat and dashed off to Stillwell’s.

The Professor met me at the door with a beaming smile that vanished when he saw my face.

“Why, what’s the matter, Clement, my boy? You look as if you had just lost a fortune instead of having just made one.”

“Maybe we have,” I began brusquely. “Look at these items in the paper.” He took the paper from my hand and was just about to close the door when he noticed a tall, brisk-looking man striding up the walk. The man bounded up the steps and:

“You Professor Stillwell?” he chattered, rapidly. “I’m from the Revenue Department. Like to ask a few questions about some diamonds you’ve been selling recently. Have to watch out for smuggled gems, you know. We’d like a little more knowledge of where those jewels you’ve been selling are coming from.”

Stillwell, looking a little bit discomfited, waved the T-man inside and I followed. We entered the living room and took seats.

“Now, about those diamonds,” boomed the professor in hesitant tones. “I don’t suppose you’ll believe me, but - I make them myself.”

“What!” The detective was certainly not expecting such a statement as that. He looked at me as though to find some one to support him in his doubt.

"He's right," I announced. "I've seen him make them. Down in the basement. It's very simple, but we're trying to keep the process secret, in order to keep the market from collapsing."

The government man scratched his head dubiously.

"Never heard of anything like that in my life," he stated. "Tell you what. Let me watch you make some, and I'll report it to the department. And if they think it's O.K., why, it's O.K. with me."

So Stillwell led the way to the basement, and presently he was busily making up some of the solvent. We already had several beakers with diamonds forming in them, but the detective intimated very politely that he must see the process from the beginning, so the professor had to mix up more of the solvent.

Presently he began searching for one of the ingredients but without success.

"I hope you don't mind this delay," he sputtered. "I seem to have mislaid a solution of nitrogen iodide. It's quite essential. I'll find it in a moment."

His search, however, was interrupted by the doorbell. He pardoned himself and lumbered upstairs, but minute after minute passed and he failed to return. At last the T-man [Familiar title given investigators associated with the Federal Department of Treasury—Ed.] grew impatient.

"Look here, Mr. Jordan," he said (I had already introduced myself), "maybe he's took a run-out powder. Better go up and see—"

His words were interrupted by the sound of voices raised in altercation coming from upstairs. There were several of them and the professor's was not the only one which sounded angry and threatening. I gave the detective a significant look and dashed up the stairs, the T--man closely following. By the time we reached the top of the stairs, Stillwell had dropped his angry tone and had become conciliating.

"I assure you - I assure you, gentle-men, that if there is a mystery about these diamonds it is not a mystery about their structure," he was saying. "Didn't you all examine them and certify their genuineness?"

"Never mind about that," snapped the biggest of the four men who faced him. "What we want to know is, where did those diamonds come from? By the Lord Harry, when six different jewelers buy diamonds from a man, and then the diamonds disappear from all six of them, there's something wrong with those diamonds!" I gasped in dismay as I looked at the speaker, for I recognized him, and the others as well. The big man was none other than Jeremiah Small, the junior partner of Parrott & Small, and the others were also jewelers, all of whom had bought diamonds from me within the last week. They saw me at the moment that I saw them, and Small immediately seized me by the collar.

"Here's his accomplice, men," he snapped. "Now we'll get at the truth of the matter."

Stillwell was looking most uncomfortable, and I have no doubt that I was, too, but fortunately the government man intervened. He explained who he was and sort of took charge of things. He explained, quite unconcernedly, that Stillwell was making the diamonds and suggested that the *angry* jewelers come down and prove it for themselves. But Small, who seemed to be acting as spokesman for the jewelers, was further incensed by this statement.

"Making 'em," he howled. "Now I know it's a game. I knew there was something phony about this, but—making 'em!"

He shook his head dazedly, but nevertheless, he started for the basement, and the other jewelers followed. Once there, Stillwell began again his search for the nitrogen iodide solution. The patience of the jewelers was reaching another breaking point when the doorbell rang for a second time. Professor Stillwell looked annoyed and started for the door.

"No, you don't," snapped Ben Small. "Don't let him get away, boys. Hold him."

He dashed toward the professor, and I was about to make a dash toward him when the government man

again in-terfered.

"Come on, calm down now," he barked. "We don't need any rough stuff. Jordan, you go see who it is. Professor, you stay here. Looks like there's going to be a regular convention before the night is over."

I left with Small and Stillwell glaring at each other, and went up stairs. I opened *the* door and a dapper little man with a tiny red moustache brushed by me and entered the living room.

## **CHAPTER IV - A New Arrival**

"You Professor Stillwell?" he asked in a crackly, clipped tone. And then, before I could answer and deny it: "Look here, Proff, you been peddling a lot of diamonds lately, haven't ya? Diamonds which nobody knows how they got into this country? Sure. Well, me and a couple of pals has got inter-ested in them diamonds of yours.

"We ain't no fools, and we been fig-uring, see? We know you ain't smug-gling 'em. And where could you mine 'em at? That's out, too. But—you're a brainy guy, Proff. So me and my pals put two and two together and doped out that you're making 'em. See? Are we right?"

"Well, in the first place, I'm not Professor Stillwell," I snapped, angrily. I didn't like this fellow's ways, he was too much like the gangsters I had seen in the movies. And I was beginning to fear that he was *entirely* too much like them. "I'm not the professor," I went on, "and I'm not at liberty to divulge anything concerning his processes."

"Is *that* so?" The little man's hand went into his pocket and came out flash-ing a snub-nosed automatic. "Now, you ain't going to be silly, brother. You just tell me where the professor is, and lead me to him. And—keep your trap shut, so he don't get wise to anything, see?"

This last was uttered so emphatically that I realized the utter seriousness of the man. I turned without a word and led the way to the basement. The hoodlum pocketed his gun but I noticed that he kept it trained on me and so I said nothing when I entered the laboratory, allowing him to do all the talking.

He was disconcerted slightly at seeing the crowd, but recovered himself at once and asked to see Professor Stillwell alone for a moment. I tried to catch Stillwell's eye, but he was uncertainly looking toward the T-man, trying to get his permission to leave the lab oratory with the crook. And the T-man wasn't looking at Stillwell, for he had his eye on the dapper gangster.

And then suddenly things began to happen. The T-man burst out: "Tony the Slip!" and tugged at his hip pocket, the gangster whipped out his gun and covered the entire group, and Professor Stillwell, overcome by the quick succession of untoward circumstances, lost his patience at last, and burst out with a string of oaths that would have done credit to a sailor's parrot.

But the Tony person was the one who controlled the situation. He remained calm, and a command from him calmed the rest of us. Then he turned to Stillwell.

"What's all this about, anyhow?" he demanded. "What kind of a pow-wow are you holding here, huh?"

I was about to demonstrate to these gentlemen, my system of making dia-monds," answered the professor stiffly. As was always his way when at a loss, he had retired into a shell of dignity, and seemed likely to remain there in-definitely.

"Well, what do you think of that!" cooed Tony, seemingly greatly pleased. "Ain't that just splendid. Really, Proff, that is just exactly what I came here to see. Go on with the job." Stillwell looked hesitantly at the rest of the group, but: "*Go on with the job!*") barked the gangster, as he motioned to the work bench.

Again he took up his search for the nitrogen iodide solution. He peered into cabinets, looked on shelves and un-der them, but the missing chemical failed to materialize. All the while, the detective kept an eagle eye on the gangster, and presently he gave a lunge toward him but Tony leaped back and sent a shot winging over the T-man's head. The bullet struck a test-tube on the top-most shelf above the work-bench, and a

shower of broken glass clattered down into a big beaker standing on the bench. And then –

There was a blinding flash from the beaker and a roar that was deafening. Amid the clatter and crash of breaking glassware and crockery, I saw the jewelers hurled backward; saw the Government man hurled through the air to land bodily on “Tony the Slip.” Then I, too, was dashed to the floor by the force of the explosion.

For a moment, I was dazed, then I felt hands lifting me to my feet and saw that my aid came from Professor Stillwell.

“Quick, Clement,” he sputtered, “Get me out of here while there’s a chance. Those men will kill me if they get hold of me. I’ve got to get away.”

I turned as he hustled me out of the lab, and looked at the chaos we were leaving behind. The gangster was struggling in the grip of the detective, and Jeremiah Small and another jeweler were helping the T-man hold him. The other jewelers were sitting on the floor in a daze, but apparently they were unhurt, for one of them cried wildly and pointed to us as we hurried up the stairs. I did not hesitate, for I knew they would soon follow.

We dashed through the house and out on the Street and then hesitated, uncertain just where to go next.

“Taxi, sirs,” called a feminine voice, and I looked around and there was the Pest, seated calmly in my machine, and holding the door open for us. We darted in, I with a question on my lips, but it remained unspoken, for even as she closed the door and sent the machine speeding down the street, the Pest answered it.

“A couple of those jewelers phoned and asked for you, and before I thought, I told them you were at the Professor’s,” she said. “After I got to thinking, it looked a little funny, so I thought I had better come over and sort of look after you.”

“And a mighty good thing you did, young lady,” puffed Stillwell. “You probably saved our lives. If ever I saw murder in a man’s eyes—” he stopped and puffed some more. “Drive to the depot, Miss Marjorie. I— I really think I had better get out of town for a while.”

We drove on in silence for a way, and then I thought of something.

“Those diamonds, Professor. It seems they all disappeared. How do you account for it?”

“It must have been allotropy,” \* the professor answered, speculatively. “The crystals we formed from solution seemed to be diamond—but I suspect now that they were a new allotropic form that resembled diamond only superficially.”

“But—why did they disappear?”

“Well, of course, I can’t be certain but I suspect they were unstable at ordinary temperatures. Diamond will combine with the oxygen of the air at high enough temperatures and form carbon dioxide. This stuff evidently holds up for a while and then forms the gas, and poof goes your diamond. Confined in a safe, enough of the gas was generated to blow the door off. But when not confined, the gas escaped and the diamonds disappeared.”

“It seems to explain everything,” I said—and scowled at the Pest’s comment:

“Everything except how you’re going to get out of this jam.”

“The money we received for the jewels, my dear young lady, will all be returned, of course,” stated Stillwell, loftily. “Nevertheless, I think it the greater part of valor to remain out of sight for a few weeks.”

We reached the depot and the professor hastily stepped out of the machine and started for the ticket window.

“Just a moment, Professor Stillwell,” I called. “Do you know what caused that explosion?”

“Why—ah—it must have been the nitrogen iodide,” he called back, wearily. “I had it in solution, but I must have carelessly let it evaporate. You know, when perfectly dry, nitrogen iodide will explode if so much as touched with a feather. That broken test-tube, falling on it—” His voice trailed off as he hurried into the building.

**The End**