MC 2035 POOR DOCUMENT

A MATTER of MATHEMATICS

An Adventure of Peter Crewe—"The Man with the Camera Eyes."

By Harold Carter.

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Of the many problems which were solved through the aid of Peter Crewe, I think that which involved the capture of Rowell, the defaulting bank cashier, was the most remarkable. Crewe's skill rested in the main upon a certain optical gift by virtue of which he was enabled at any time to call up before his mental vision the picture of any person or thing that he had once inspected, and that complete and in every detail perfect. But while this faculty was largely instrumental in Rowell's capture, this case involved besides so clear and close a piece of mathematical reasoning that it deserves to be set down as one of the masterpieces of detective induction.

Crewe and I were in England upon some business at the time when the robbery of the Penny and Shilling bank startled the country. Rowell, the cashier, had somehow managed to obtain possession of no less a sum than a hundred and sixty thousand pounds, or $800,000 in American money. He had quietly secreted this in his suit-case, walked out of the bank on Saturday at noon, and completely disappeared by the time the discovery of the theft was made on Monday.

Rowell had no relatives and no close friends. He had no ties, no acquaintances among the criminal class. He looked like many another young Englishman of the middle classes: Of medium height, stalwart, alert, aggressive, clean. He left no photograph behind. There seemed to be no way in which he could be traced.

The superintendent of Scotland Yard made a happy suggestion to the bank manager. I had been called into consultation as the bank's attorney, and I had brought Crewe to the conference with me. We both strongly approved the plan.

"Every Englishman who has committed a felony makes the United States his ultimate objective," the superintendent said. "Why this should be so I do not pretend to know. I do not mean to cast a slur upon your country. Still, the fact remains that, when he thinks the hue and cry has died away, he takes ship for America.

Now, the proposition is to herd him into what I will call a rat trap. So long as he lies low in England he is never likely to be discovered. But if we make the chase hot at every point except the western ports, if we publish items in the newspapers stating that no guard is being kept at Liverpool or Southampton, because the fugitive is believed to be in France if we do this, he will be tempted, he will investigate to discover whether this is true; finally, emboldened, he will take ship for New York."

"And then?" asked Crewe.

"We arrest him as he disembarks."

This plan was carried out and worked to perfection. Although Rowell could not be positively identified, there was every reason to believe in a cabled statement from the captain of the Pentannic to the effect that the fugitive had taken passage on his ship. The information was cabled back to New York and a couple of detectives were detailed to arrest Rowell the moment that he landed.

Unfortunately the plan miscarried. As we learned afterward, Rowell had somehow possessed himself of the uniform of a ship's officer, and attired in this guise, had stepped boldly ashore under the noses of the detectives and disappeared among the four million inhabitants of the city.

The bank urged me to hasten to American in order to assist in the work of recapture. I had, however, interested the manager in Crewe by recounting some of my companion's former successes, and, at his invitation, I brought my friend to the scene of the robbery.

"You say you have no protograph of the thief?" asked Crewe, when he heard the details of the story.

"None whatever. And I fancy," said the manager, "that you will not obtain much of a clue by examining his stool and counter."

"I hope you are mistaken," answered Crewe, laughing. "May I ask you a few questions?"

"With pleasure."

"What was Rowell's salary?"

"Two hundred pounds," answered the manager with some hesitancy. "We had intended to increase it on the first of the year."

"Still, a single man could live well on that," said Crewe. "Did he dress well?"

"Not extravagantly, but neatly. He usually wore a suit of blue serge, a collar of moderate height, and a gray tie."

"That is very important," said Crewe. "But here is a more important matter still. Has the height of this stool been changed since Rowell vacated it?"

"No. It is an immovable seat, as you will see, and nicely apportioned to the height of the counter."

"In that case," said Crewe, "I think that we shall catch your man. By the way, did he ever wear anything but blue serge?"

"Rarely. That was his office coat and he also wore it upon the streets. As you know, Mr. Crewe, the habit of the silk hat and morning coat is not insisted upon now by many places of business."

"And—one more question—you have had an unusually sunshiny summer, I believe?"

"They say so," answered the manager suavely, but looking at me as though to ask, "Is the fellow a dangerous lunatic?"

Without further remark Crewe seated himself upon the stool and leaned over the desk. The sunlight streamed through the grille in front of the desk and in upon Crewe. He adjusted his position until he was seated exactly in the center of the stool; then, after an instant's silence, as though he were lost in meditation, he slipped down to the ground.

"Good morning, Mr. Simpson," he said, extending his hand to the bank manager. "If we get to New York before the police capture him, I hope to have the pleasure of presenting Mr. Rowell to you. And that," he added, "is probable enough, since the police are dealing with an extremely astute gentleman."

We made our way to New York and had an interview with the head of the police department. He informed me of the situation in regard to the missing man.

That he was in the city was a certainty. Had any authentic portrait of him existed, he would undoubtedly have been captured long before. At present it seemed almost impossible to take him. But if Rowell was immune from arrest, he, in turn, could not leave New York. Detectives were watching every road, every railroad station, every ferry house from which boats left for the New Jersey shore. Rowell's only possible point of escape was Long Island. He could doubtless evade the detectives and cross the Brooklyn bridge during the rush hour. But that would be a risky proceeding, for, though Brooklyn lay open to him, he could not cross from any point of Long Island to the Connecticut shore, while his return to New York itself would be fraught with dangers. It was highly probable, therefore, that Rowell was still within the limits of the borough of Manhattan.

"Where are you searching?" Crewe asked the police chief.

"We have two dozen men looking through the whole city," said the latter. "We're raking it as fine as though we used a toothcomb. Sooner or later he must be found."

"The only drawback to that scheme is that while you are raking one district Rowell is likely to be in another."

"Well, how would you do better?" asked the police chief, nettled.

"Why," said Crewe, "search all districts simultaneously."

"Let me tell you," said the chief of police, "that the number of detectives at my disposal for this case is twenty-four, not twenty-four thousand."

"Nevertheless, if you will place four of your two dozen at my disposal for a week I will guarantee to find Rowell if he is within the limits of Manhattan borbugh," said Crewe. "And the glory's yours," he added.

The police chief looked at me. He knew Crewe and his work, but his pride was hurt. He would have liked to see him for once unsuccessful. I nodded.

"I say nothing for the newspaper," I announced. "You stand to win either way. Either you score off Crewe or you get the credit for the capture."

The police chief pressed a bell. "Send Cohen, O'Rourke, Murphy and Kelly here at once," he said to the messenger. Almost at once the four policemen came in and saluted.

"You will place yourselves under the orders of this gentleman," said the chief, indicating Crewe. "It's the Rowell case, and he thinks he can work on it better than I can."

"Report to me here tomorrow morning at nine," said Crewe. "You may take the day off. I want to think. I suppose you're all proficient in simple arithmetic?" he added. "I'm glad to hear it. You may have a little adding to do."

I did not see Crewe again until the second afternoon, when me met by appointment and lunched together. After the meal I asked him how he was progressing with his case.

"I've got the town staked out," Crewe answered, "and I think that the fourth day will witness Mr. Rowell's arrest. Of course, I could take him earlier by haphazard means, but I prefer to utilize the scientific method."

"Will you inform me how, with four detectives, you can possibly have 'staked out' the town, as you phrase it?" I asked, a little exasperated.

"It is a matter of pure mathematics, Langton," Crewe answered, a slight amusement disclosing itself in his voice. "But come with me and you shall see for yourself."

We took the elevated to Forty-second street and walked over to Broadway. On the southwest corner one of the detectives, in plain clothes, whom I recognized as Murphy, was lazily scanning the passers by.

"How many, Murphy?" Crewe asked him.

"Two hundred and seventy-three, sir," Murphy responded. "Seventy-four," he added, as a man hurried by, almost brushing into us.

"You are keeping the three parts of the day separate, Murphy?" asked Crewe. "Good. Keep up your count and report to me tomorrow morning at five. At the stroke of midnight you vacate your post."

"Five o'clock till midnight seems long hours, Crewe," I said.

"It is. But it is only for three days, and the men are trained to such periods of work. Besides, they understand that they share in the reward and, somehow or other, I have been able to persuade them that they can trust in me. I happened to know something of the past history of each," he added, smiling.

"You remember them all?"

"Assuredly. I told Murphy that in 1909 he was on duty at the intersection of Eighty-first street and Broadway when the explosion occurred in the subway and that he helped to carry up the victims. I reminded him of an unpleasant little incident connected with a fruit peddler's license last year. Langton, it is a fine thing to remember faces. I have convinced all four men, I believe, that I have some supernatural knowledge about them—and merely because, in my strolls about the city, I have encountered almost all the police force at some time or another, and remembered them. But let us hurry southward. Our next objective is the Brooklyn bridge."

We emerged at the bridge subway station, in front of which, leaning against the railings of the City Hall park, I recognized O'Rourke. He straightened himself and came up to us.

"Eighty-seven this morning and thirty-nine up to this moment," he said.

"I see you know your business," Crewe responded. "Don't let any one pass, O'Rourke. Remember your share of the reward will pay the mortgage on that house of yours."

O'Rourke leaped back in astonishment. His mouth opened and he looked at Crewe in amazement.

"Don't jump like that," said Crewe. "You frighten me. I mean the house in Jamaica." Then, as we turned away, he added: "I saw him talking to his wife one afternoon two years ago when he was off duty. It was a long shot, though—the house might have been paid for. Now for our other two."

We took the elevated to Sixth avenue and Twenty-third street, where we found Kelly looking ostentatiously into a shop window.

"Very good," said Crewe, slapping him upon the back. "You saw us coming? Some men are too dense to know that one can see the passers-by just as well when they are reflected in a plate-glass window. Happily the precaution is unnecessary, but I am glad to see so much intelligent zeal in your work, Kelly. You are keeping the numbers separate?"

"Seventy and thirty—thirty-one this instant, sir," said Kelly, and we moved away.

A cross-town car and a brisk walk soon landed us at the Fourteenth street subway entrance, where Cohen was seated in a shoeblack's chair getting a polish.

"Sixty-eight and twenty-seven, sir," he whispered as we passed by. Crewe nodded almost imperceptibly and we turned back into Union park. At Crewe's invitation we took our seats upon a bench.

"And now, Langton," he said, "you want to know what this apparently unintelligible process means and I will let you into the secret. You may have observed that I chose four points in New York at which to station my detectives. The selection of those points was influenced by two causes. In the first place, they are the four chief places where men walk, by preference, on one side of the street alone, and consequently it is easier to count the passers-by than if my men had to watch both sides of the street. At the juncture of Broadway and Forty-second street everybody who is not bent upon business—and Rowell is distinctly a pleasure-seeker in these days—walks on the west side of the street, because extensive building operations are in process upon the east side. At our southern point, the subway entrance to the Brooklyn bridge, almost every one enters and emerges on the city hall side. At Sixth avenue and Twenty-third street our populace walk on the south side, because that side of the thoroughfare is devoted to large stores whose windows hold a tempting array of goods. And on Fourteenth street everybody walks on the south side in order to pass the numerous moving picture shows, which afford a spectacle of some interest, externally, even to the man who affects to despise them.

"So much for the minor reason of my selection. Now for the major reason. These four points embrace practically the entire amusement and shopping district of the city. Where would a stranger go, an Englishman without a friend in town, but in this region? Would he seek his amusement in the dreary wastes of Harlem? Would he moon all day in Central park, a prey to his thoughts? No, Langton, it is the surest prophecy in the world that Rowell, a victim of a bad conscience and an overfull purse, spends all his waking life within this region. And it is safe to say that he alternates between the Fourteenth street region and Broadway, with the preference for Broadway. Now I have told you enough for the present. Dine with me on Friday evening at seven. I will be in the lobby of the Hotel Memphis, and I think I shall be able to afford you an evening's entertainment."

I knew better than to attempt to question my companion further, but I was in a fever of anxiety during the three ensuing days to understand Crewe's purpose. His reasoning was excellent upon an abstract plane. But how did this counting of faces go toward the capture of Rowell?

It was not until after dinner that my curiosity was gratified. Crewe rinsed his fingers in the silver dinner bowl, folded his napkin leisurely, and took from his pocket a pad of paper upon which were jotted several series of figures.

"Do you believe in statistics, Langton?" he asked abruptly.

"I have heard it said that they can prove anything."

"They can; but not in the derogatory sense you mean. Are you aware that, while small numbers are apt to fluctuate, in the aggregate they are practically unvarying?

"For instance, in the gambling palace at Monte Carlo, red may turn up fifty times more than black during a single day. But in a week the relative numbers will be almost equal. In a month they will be practically equal; at the end of a year there is usually hardly a sensible difference between the number of times that each has to its credit.

"Take life insurance. Individually a human life is a most uncertain thing. But when you take ten thousand lives you can state with mathematical precision that a definite number of these ten thousand persons will die at thirty, a certain number at forty, increasing number at fifty, and so on, until, at the age of ninety-six, the last survivor perishes.

"Langton, I have simply applied this fact to the search for Rowell.

"What do we know of him? That he is an average-appearing Englishman and wears a blue serge suit. Undoubtedly he possesses other suits; but equally surely he will be astute enough to wear blue as differentiating him less than a suit with a check, stripe, or patterns. Thus his own cleverness assists in his undoing.

"We want you, Mr. Rowell."

"My orders to those detectives were to count all the men in blue serge suits who passed them, excluding those whose age obviously excluded the possibility of their being Rowell. I ordered each man to make three lists—one for the morning hours, one for the afternoon, and one for the evening, up to twelve o'clock, after which the number of men in blue serge suits abroad is too limited for us to draw deductions from it. Here are the results:

"Passing Forty-second street: Morning, 156; afternoon, 112; evening, 177. Total, 445.

"Passing the Brooklyn bridge subway entrance: Morning, 84; afternoon, 46; evening, 88. Total, 218.

"Passing Twenty-third street and Sixth avenue: Morning, 72; afternoon, 28; evening, 70. Total, 170.

"Passing the subway entrance on Fourteenth street: Morning, 80; afternoon, 29; evening, 85. Total, 194.

"What do you deduce from these figures, Langton?"

"That a surprisingly small number of men blue serge suits emerge from the entrance to the Brooklyn bridge during the rush hours," I answered.

"My dear Langton, you are flying off at a tangent. That is not relative to the matter at all. Many take surface cars from Brooklyn and never pass the subway entrance. And Brooklyn is barred from our consideration. No, do you not see that at three points the morning and evening traffic is astonishingly even? At Twenty-third street 72 men pass in the morning and 70 in the evening. At the Fourteenth street subway 80 pass in the morning and 85 in the evening. At the Brooklyn bridge subway entrance 84 pass in the morning and 88 in the evening.

"Therefore we can proceed by striking out like figures on either side of our equation. These men in blue serge suits are office workers; they go and return by the same routes morning and evening. Emphatically Rowell is not to be found among this lot.

"At our northern point, Forty-second street, the conditions are not quite so even. The men who pass in the morning number 156; in the evening 177—a difference of twenty-one. Now we begin to see daylight at last after working out these figures. We have to postulate the average man, the average unemployed man. Let us discover him from among the figures that we have left.

"Passing Twenty-third street in the afternoon, 28. Passing Fourteenth street in the afternoon, 29. Passing the Brooklyn bridge subway entrance in the afternoon, 46. But these latter we must disregard, for that is in the office district and these 46 are probably all workers.

"Our final statement, therefore, is that 28 men stroll of an afternoon from Twenty-third street to Fourteenth street, where their numbers are augmented to 29. During the same period of the day 112 men stroll up Broadway to Forty-second street, where, by nightfall, their numbers have increased to 177.

"Therefore our average man will most assuredly be found somewhere in the theater district after the lights are lit. Rowell will be there tonight. I have demonstrated this infallibly. Come, Langton, we are going to arrest him."

I rose in bewilderment. Crewe's figures were falling over one another in my brain, and only one clear impression remained to me: That Rowell was obligingly waiting to tumble into our arms at the juncture of Forty-second street and Broadway. But surely this was a case in which one could not predicate the individual from the universal. Suppose he had decided to vary his itinerary for that evening, suppose he had gone home. Suppose he were sick, or at a theater, or in a taxicab, or restaurant. Suppose he had taken a fancy to sit in Central park until the hour of midnight. Suppose he had escaped from the city and were at that moment speeding westward. I glanced at Crewe. His face was resolute, set into its usual decisive lines. I had known him to solve greater mysteries—but always by his optical gift, never by pure induction. And I could not help feeling that there was a sad disillusionment in store for him.

At Forty-second street and Broadway we found Murphy on duty. Crewe drew him aside. I saw him whisper and saw Murphy touch the pocket of his coat. I heard the clink of steel. Then we three posted ourselves immediately beneath a bright electric light and engaged in trivial conversation, as of three pleasure-seekers.

Half an hour must have gone by. At least fifty men in blue suits had passed us, a good half of whom might have been the missing cashier. All at once I saw Crewe touch Murphy's arm, and the two swung round and walked leisurely after a good-looking young fellow who was passing briskly up the thoroughfare. At the Forty-second street crossing he hesitated a moment, pulled out his cigarette case, and began to smoke. An electric light beat down full upon his face and shoulders.

Crewe went up to him, fixed his eyes on his collar, signalled Murphy, and touched his captive on the shoulder. The man started violently and let his cigarette fall.

"We want you, Mr. Rowell," said Crewe. At the same instant Murphy snapped the handcuffs upon the cashier's wrists.

"I can understand that your mathematical reasoning would, as you said, enable you to postulate the average man," I remarked to Crewe subsequently. "But how could you positively identify Rowell among your 117 men in blue serge? And how could you know for sure that he was strolling up Broadway?"

"I didn't. It was not until I got him under the electric light that I was able to pronounce him Rowell with certitude."

"But how?"

"Do you remember the cashier's seat at the London bank, with its projecting grille?"

"Yes."

"Do you remember that the manager told us they had had an unusual quantity of sunshine in London?"

"I do."

"Do you remember that Rowell wore a blue serge suit?"

"Well, what of it?"

"Don't you know blue serge fades?"

"In sunlight?"

"Precisely. And in consequence, since he sat always in the same spot and bent over his counter at the same elevation, the bars of the grille would leave thin stripes of unfaded material in the discolored cloth. Langton, to your eyes Rowell's suit may have looked like any other man's but to mine his breast and shoulders were striped like a zebra's."

"How did you know he would not order a new suit?"

"He had no time. The tailors are rushed at this season."

"But he might have bought one ready-made."

"The ready-made clothing trade is exclusively an American institution," Crewe answered suavely. "No Englishman can ever be persuaded that he will look like anything but a tramp in a suit of ready-made clothes."

MILLIONS TO BE SPENT ON GRAND FALLS PLANT

Amalgamation of Two Companies Completed—Large Amount of Canadian and United States Capital Interested—Work Will Commence Soon

The development and utilization of the water power at Grand Falls, which, chiefly on account of various speculative ventures, have for a long time been practically in a state of suspense, will now be proceeded with as speedily as possible, this being assured by the merger of the Grand Falls Power Company and the Grand Falls Water Power and Boom Company, which it has been learned has taken place within the last few days. The new company will be known as the Grand Falls Company, Limited, and will have a capital of several millions.

American multi-millionaires are the chief financial interests in the new concern, while some of the biggest Canadian capitalists are also interested in this great project

The big deal is not a wild speculation, it is announced, with uncertain intent, but is a sound business proposition, with a definite object, viz: the development of power and manufacture of pulp and paper. The privileges of this great water power, being thus redeemed from speculation, the Province of New Brunswick will be materially benefitted in the development of one of the biggest industries, which will have a plant the cost of which is estimated at between five and seven million dollars. Not only in itself will it mean so much to Grand Falls and the province, but if there is any distribution of power other industries closely allied will spring up.

The president of the amalgamated company is Sir William Van Horne, and the names of the other officers, whose positions at present are only tentative, are for the time being withheld from publication.

It will be remembered that by an act of the local legislature passed in 1911, the Grand Falls Power Company and the Grand Falls Water Power and Boom Company were to be absorbed by the Grand Falls Company, Limited, and this is the amalgamation which has just been effected. The shareholders in the Grand Falls Power Company have dropped out, their places being taken by capitalists in the United States.

The new company is to proceed immediately to revise the plans for the power development, and prepare plans for the construction of its pulp and paper mill, which, obviously, will be situated at Grand Falls. In fact, two of the most eminent hydraulic engineers in the United States, are already engaged in this work and as soon as they have decided upon the scheme of development and plans, the work of construction will immediately begin. The engineers mentioned are of wide experience, having had charge of some of the biggest power development schemes, and pulp and paper mill construction in the country.

The American capitalists who have bought out the Grand Falls Power Company, are men of large means, some worth as much as fifty millions, while the leading Canadian capatalists will include such men as Sir William Van Horne and Mr. Holt, president of the Royal Bank of Canada.

The new shareholders have bought the property solely for the development of power and manufacture of pulp and paper. While the erection of a plant of such magnitude will take some time, the company is determined to rush the work of construction and utilize the full power developed as soon as possible.

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PRESIDENT OF HAYTI BURNED TO DEATH IN BLAZING PALACE

Port Au Prince, Hayti, Aug. 8—General Cincinnatus Leconte, president of the republic of Hayti, perished today in a fire which destroyed the national palace. It was caused by an explosion of the powder magazine attached to the palace.

At a quarter past three this morning a formidable explosion shook violently every house in the city and caused all the population to rush into the streets. Everybody rushed toward the national palace where it was found that the powder magazine had blown up. A few minutes afterwards the palace itself, which was built of wood and had been badly shattered by the shock, caught fire and was destroyed in less than an hour.

During the fire a great number of explosions succeeded one another caused by the enormous quantity of munitions of war which had been stored in the cellars below the palace, and these prevented the large force of firemen, who had been quickly called, and the population which was endeavoring to help, from fighting the flames.

The members of the family of the president, all of whom were in the palace at the time were saved, but President Leconte himself was not seen again, having perished in the flames. Consternation reigns among the population but no disorders have occurred.

Many of the palace attendants were killed and it is estimated that the casualty list will reach 400 persons killed or injured.

Visitor—I want a mourning suit please. Proprietor—What is the bereavement may I ask?

"My mother in law."

"Mr. Brown, show this gentleman into the Light Affliction Department."

Frugal North Britain (in his first experience of a taxi)—Here, mon, stop! I hae a weak heart. I canne stand that wee machine o' yours markin' up thae nickels.

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All druggists guarantee you satisfaction with an O-P-C. No. 2, Lisle, $1.00—No. 3, Silk, $1.50. Mailed direct from 45 W. Twenty-Fifth Street, Chicago, if your druggist will not supply you.

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